

19 November 2020

Contact: *Justine Clarke*

Telephone: *02 9865 2402*

Our ref: *D2020/121731*

Daniel Gorgioski
Transport Assessment
Department of Planning, Industry & Environment
4 Parramatta Square
12 Darcy Street
PARRAMATTA NSW 2150

Dear Mr Gorgioski

Sydney Metro Western Sydney Airport – EIS Review (SSD 10051)

Thank you for your email dated 20 October 2020 requesting WaterNSW's advice in relation to the Environmental Impact Statement (EIS) for the proposed Sydney Metro Western Sydney Airport (SMWSA).

WaterNSW owns and manages the Warragamba to Prospect Pipelines corridor, which the proposed metro line will cross at Luddenham. The Pipelines are critical water supply infrastructure, conveying 80-100% of Sydney's drinking water from Warragamba Dam to the Prospect Water Filtration Plant, and are an integral component of the Sydney drinking water supply system. It is essential this water supply and the water supply infrastructure are protected from the potential impacts of development on adjoining land, and infrastructure crossing the corridor.

The key factors for WaterNSW regarding any works or development within or adjacent to the Warragamba pipelines corridor include:

- No intensification of risk applied to State critical infrastructure.
- No damage should occur to the water supply infrastructure at any stage of the development and that all mitigation measures are included in the design, construction and operation of such projects.
- 24-hour all-weather access is retained or provided for WaterNSW staff and contractors, to operate and maintain critical water supply infrastructure.
- For security and safety purposes, there is to be no public access into the corridor at any time. If access is required by the proponent and/or their contractors for any purpose during the development process, written access consent will be required from WaterNSW.

WaterNSW has previously commented on various aspects of the project, and requested the EIS documentation specifically address:

- the key environmental issues outlined in the scoping report and WaterNSW's 'Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines', including vibration impacts, soil and water impacts and heritage values, and
- undertake an assessment of the risks to the integrity and security of the Pipelines corridor, including (but not limited to), access and vehicle movements, protection of water quality and water supply infrastructure, electrical hazards, erosion and sediment deposits, and unauthorised access.

The majority of the key impact areas reported by WaterNSW have been considered in the EIS, and WaterNSW considers the review undertaken by the proponent to be thorough and a good example of impact assessment.

WaterNSW has reviewed the EIS and supporting documents and supports the mitigation measures and commitments made within the EIS documents to safeguard WaterNSW assets from impact.

WaterNSW provides the following comments and requested conditions contained within attachment 1, to be incorporated into any determination that falls in favour of the proponent. These conditions are considered vital to ensure the protection of the critical water supply infrastructure, and WaterNSW's ability to operate and maintain our assets to deliver on our functions and responsibilities as a State corporation.

WaterNSW would appreciate our commentary being addressed within any further response to submissions by the proponent, and requests the Department continue to consult with us on any development that may impact on our assets, infrastructure or land, using the email address Environmental.Assessments@waternsw.com.au

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

Yours sincerely

A handwritten signature in black ink that reads "C. Preshaw". The signature is written in a cursive, slightly slanted style.

CLAY PRESHAW
Manager Catchment Protection

Attachment 1 – WaterNSW comments and requested conditions for SSI-10051

Noise and vibration

Construction and operational vibration has the potential to significantly impact on WaterNSW assets. Noise and vibration impacts should be effectively managed to minimise adverse impacts on the structural integrity of our assets and heritage items.

The EIS adequately considers the potential impacts to the pipelines and the mitigation measures included. WaterNSW accepts vibration limits in accordance with German Standard DIN 4150-3:2016, line 3 of table 1, and depending on the type and frequency of work the required vibration limits vary. As such, WaterNSW suggests the prescribed maximum vibration level of 2.5mm/s PPV be removed from the mitigation requirement, as the velocity limits for construction and operation activities will be agreed (in accordance with the German Standard), when the construction contractor is engaged.

Requested conditions:

- *During construction and operation, specific mitigation measures must be implemented over WaterNSW infrastructure to achieve agreed vibration limits, determined in accordance with German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).*

Flooding, Hydrology and water quality

Developments, especially major construction projects, have the potential to impact on the integrity of the bulk water supply infrastructure. These impacts include changes in drainage and stormwater, that may increase flooding and waterlogging, water velocity and quantity, surface erosion and direct damage to the infrastructure supporting the pipelines. Therefore, WaterNSW cannot accept any changes to current ground conditions (including settlement) or hydrology at the interface between WaterNSW lands and the proposed development.

Adequate mitigation measures that align with the commitment within the EIS Chapter 14 (p 14-22) to not increase surface water flows, are not included. WaterNSW requests that mitigation measures be included to ensure that no increase in surface water flows into or across the pipelines corridor occur.

Requested condition:

- *Final levels and design of the proposal must not result in an increase in overland flow water into the Pipeline 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 and through the Pipelines Corridor, for each storm event up to and including 1% AEP event.*

Utility Protection Measures – Protection of WaterNSW Infrastructure

WaterNSW are agreeable to the utility protection measures prescribed within Chapter 8 of the EIS and agrees that these measures are achievable as long as continues consultation occurs between Sydney Metro and WaterNSW. WaterNSW requires that all practical measures to protect infrastructure within the Warragamba to Prospect Water Supply Pipelines Controlled Area are incorporated into the design, construction and operation plans for the project.

Requested conditions:

- *Consultation with WaterNSW during detailed design and construction activities within and adjacent to the Warragamba to Prospect Water Supply Pipelines Controlled Area.*

- *Construction planning and approaches to minimise risks of damage or rupture of the Warragamba to Prospect Water Supply Pipelines must be developed in consultation with WaterNSW, and in accordance with the Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines.*
- *Prior to construction, the proponent must prepare a dilapidation report identifying the condition of all infrastructure within the water pipelines corridor, that is within the construction footprint area of the Metro crossing.*
- *WaterNSW must be consulted on the final Construction Environmental Management Plans (CEMP), to allow for assessment of design and related works procedures and revisions as required.*
- *A construction schedule must be prepared and approved by WaterNSW for construction works over and within the water pipelines corridor. This schedule must form part of the Construction Environmental Management Plan (CEMP).*
- *The proponent must implement all practical measures to protect the Warragamba to Prospect Water Supply Pipelines infrastructure, as required by WaterNSW and comply with the requirements of WaterNSW for any works adjacent to, within, or over, the water pipelines corridor.*
- *Prior to the commencement of operation of the Sydney Metro Western Sydney Airport, the proponent must provide works-as-executed drawings to WaterNSW for the structure crossing the water supply pipelines corridor.*
- *No materials are to be lifted over the Warragamba Pipelines, unless written approval is obtained by WaterNSW.*

Heritage

The design, construction and operation of the project must facilitate the long-term protection, conservation and management of items of known heritage significance. The non-aboriginal heritage chapter (12) and technical paper (4), do not discuss or consider archaeological potential. WaterNSW requests that archaeological potential be discussed for all identified significant non-aboriginal heritage items.

WaterNSW access and security

The Warragamba pipelines corridor is a Controlled Area under the *Water NSW Act 2014* and associated Regulation, and access is prohibited unless written consent is obtained from WaterNSW.

Due to the operational nature of the pipelines corridor, it is critical that entry is restricted, the site remains secure and that vehicle access is retained in order to maintain the pipelines and service the corridor. All works within the Controlled Area corridor and adjacent to must not inhibit WaterNSW from undertaking its function to supply drinking water to Sydney. As such, all development related activities must be designed, constructed and operated in such a way that does not restrict WaterNSW from operating and maintaining the Pipelines corridor.

Further, the proponent must ensure that no contractors or site workers enter the pipelines corridor during any stage of the development process unless they have obtained a written access consent from WaterNSW.

Requested conditions:

- *24-hour all-weather access to the WaterNSW Pipelines corridor shall be retained or provided for WaterNSW staff and contractors.*
- *Access to the WaterNSW pipelines corridor is prohibited unless written consent has been obtained from WaterNSW.*

- *The proponent must:*
 - *comply with the requirements of WaterNSW for any works adjacent to or over, the water pipelines corridor; and*
 - *advise WNSW of any proposed amended or modified encroachment into the water pipelines corridor.*
 - *obtain from WaterNSW, an access consent and construction licence to work within the water pipelines corridor, prior to the commencement of construction.*
- *Any damage to the Controlled Area and or associated infrastructure caused at any stage by the shall be repaired by the consent holder, or shall pay all reasonable costs associated with repairing the damaged water supply infrastructure, in a timely manner and to the satisfaction of WaterNSW.*
- *Appropriate and secure boundary identification (such as temporary construction fencing), must be installed prior to works commencing and must be maintained throughout the construction period.*
- *Any existing security fencing that is damaged during the development process shall be repaired or replaced by the proponent at the proponent's expense, in a timely manner and to the satisfaction of WaterNSW.*
- *Any changes to existing fencing must be reinstated on completion of the construction component.*
- *Upon completion, security fencing must be installed along the boundary of the WaterNSW Pipelines corridor (within the project construction footprint), in accordance with WaterNSW requirements. The fencing must be chain mesh to 2.1 metres high with three strands of barbed wire on top (for a total height of 2.4 metres), unless otherwise agreed by WaterNSW.*

Erosion and sediment control

It is critically important that the bulk earthworks are designed and undertaken in a manner that does not impact on the Pipelines corridor. Effective erosion and sediment control must be installed prior to construction.

Requested Conditions:

- *Appropriate and adequate dust suppression measures must be undertaken to prevent dust blowing from the project site.*
- *Effective erosion and sediment controls must be installed prior to construction and be regularly maintained and retained until works have been completed and the ground surface stabilised or groundcover re-established,*
- *Erosion and sediment controls are to be designed, installed and maintained in accordance with the 'Blue Book', Landcom (2004) Managing Urban Stormwater; Soils and Construction.*

Notification of incidents

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 WaterNSW Pipelines 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.

Requested condition:

- *All incidents that affect or could affect the WaterNSW Pipelines corridor shall be reported to WaterNSW on the 24-hour Incident Notification Number 1800 061 069 as a matter of urgency.*