

21 December 2020

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

Reference: SSI-10051 Sydney Metro – Western Sydney Airport

Sydney Water has reviewed its initial submission to the Department of Planning, Industry and Environment, and wishes to provide the following clarification to the initial response.

Sydney Water strongly supports the SSI Sydney Metro Western Sydney Airport ('SMWSA') Project ('Project'), which contributes to the Western Parkland City and Aerotropolis core. Sydney Water commends the vision of the Project, and appreciates the challenge to deliver by 2026.

Sydney Water is also working to help realise the vision of the Western Parkland City - through an integrated water management approach. We will soon deliver new and upgraded integrated water infrastructure, to service future growth.

As part of this integrated servicing plan, Sydney Water will deliver the Upper South Creek Advanced Water Recycling Centre. This facility will be co-located, to deliver a productive, sustainable and liveable Western Sydney, with potential for local recycling and energy generation. We are planning to complete an EIS by mid-2021, for delivery by 2025.

To help facilitate the delivery of the SMWSA Project, and better coordinate interfaces, we encourage early consultation between Sydney Metro and Sydney Water. Understanding Project scopes and delivery timeframes will ensure success.

Sydney Water operates under an Operating Licence and a Customer Contract. To support this regulatory obligation, we must apply strict requirements. This will ensure that Sydney Water continues to provide services for existing and future customers – protecting existing assets, and respecting the location of future assets and infrastructure.

Sydney Water has reviewed the proposed corridor for the SMWSA Project (between St Marys and Aerotropolis Core), and recommends that SMWSA considers the following:

Sydney Water wastewater and drinking water assets

- Sydney Water owns and operates existing trunk and reticulation assets, located within and outside the SMWSA corridor. This network of assets provides wastewater and drinking water services to the region. Sydney Metro must ensure that during the planning, construction and post implementation of the SMWSA Project, that Sydney Water can continue to provide these services, in line with the Operating Licence.
- Sydney Water encourages early and ongoing consultation and discussion with Sydney Metro for this SSI Project. Sydney Water requires that all existing and future assets be identified early, and highly recommends the compilation of an asset impact risk register, listing all potentially-impacted assets in risk priority. Sydney Water's assigned Account Manager can assist Sydney Metro team with all necessary information, plans, needs specifications for these assets as requested.
- As a valuable resource, Sydney Water recommends the efficient use of drinking water. In response to the recent drought, Sydney Water highly recommends that the Project develops a coherent water-use balance for the lifecycle of the Project; that best practice is adopted in the use of drinking water, and alternative water sources be fit for purpose.
- Sydney Water reserves the right to assess, based on final Project layout and construction designs prepared by the Project team and or their contractors, the impacts on our assets located within the Project scope, and the potential needs for adjustments funded by the Project, to accommodate accessibility of our pipes for operational and maintenance purposes, new pavement locations and changes to structures.
- Sydney Water requires safe unrestricted access to our assets throughout the life of the Project. We need to ensure these assets are fully operational at all times to ensure we meet our Operating Licence requirements and continuity of supply to our customers.
- Sydney Water recommends early consideration for staging and timing design work and delivery of the Project. This is critical, to allow sufficient time for Sydney Water to schedule and program shutdowns and reconnections of our assets. This ensures that Sydney Water continues to meet its Operating Licence, and most importantly maintain services to customers. We recommend a Water Service Coordinator is engaged to assist you with this process.
- The environmental approval needs to meet the discharge protocols of chlorinated water due to watermain shutdown and reconnection of live Sydney Water assets that will require adjustment.
- Asset amplification may be required, to facilitate future growth along the development corridor. This will be assessed as adjustment applications are referred to Sydney Water for review. Sydney Water consultation is required early, to ensure necessary amplifications are identified, planned and confirmed.
- Please refer to the following:
 - The Asset Adjustment Process should be adhered to for the relocation, adjustment and or protection of Sydney Water assets. Additionally, if assets

are required to be changed, the environmental approval will need to cover any works identified which may fall outside of the Project boundary, but result from the Project works.

- Building over and adjacent to Sydney Water Assets.
- Trade waste requirements – all trade waste licence requests need to meet Sydney Water’s requirements.
- Chapter 4.1: *Planning and Statutory Requirements* – **Sydney Water Act 1994**.
- Chapter 8 Project Description – Construction: Section 8.9.11 – *Utility Protection, Adjustment and Relocation* – the proponent **must** consult with and **obtain approval** from Sydney Water before commencement of works.
- Sydney Water recommends that the existing Interface Deed agreement signed between Sydney Water and Transport for NSW extends to the proposed Sydney Metro alignment at the future Western Sydney Airport. This agreement will ensure that any future works does not impact on Sydney Water’s ongoing operation and maintenance activities within the construction area and Sydney Metro corridor.

Future assets

Sydney water will be delivering over \$3 billion in assets, to service the Western Parkland City. Over the next five years we will be delivering drinking water, wastewater and recycled water infrastructure, which will include the delivery of the Advanced Water Recycling Centre. We recommend Sydney Metro work closely with Sydney Water’s Account Manager to ensure there is clear line of sight of potential interfaces, crossing and adjustments.

Piling adjacent to Sydney Water assets

- It is recommended that further work is required to assess the impact of the proposed SMWSA Project, especially the bridges over Sydney Water assets. Such may include, but not limited to, the following:
 - Detailed geotechnical investigations;
 - Settlement and ground movement predictions from various activities (piling, excavating, fill embankments, etc.) that may impact Sydney Water assets;
 - Dilapidation surveys of Sydney Water assets, and
 - Vibration limits and trigger levels.

Recycled Water

- Sydney Water is investigating the opportunities for recycled water use in Western Sydney. We strongly recommend that recycled water is considered an alternative source, for servicing future stations for irrigation, cooling, toilet and urinal flushing. This can be incorporated into the water balance model, in consultation with Sydney Water.

Stormwater assets

- Sydney Water does not own or operate stormwater assets along the proposed SMWSA corridor. Sydney Water is seeking, to become the Waterway Manager for the South Creek Catchment – this will be decided by the NSW Government soon. We recommend working closely with the Department of Planning, Industry and Environment, and Penrith and Liverpool Councils, to ensure that stormwater assets are protected.
- Ensure that satisfactory measures be taken to protect existing stormwater assets, such as avoiding building over and/or adjacent to stormwater assets, and building bridges over stormwater assets.

Flooding and waterway health

- The Project should consider taking measures to minimise or eliminate potential flooding, degradation of water quality, and adverse impacts on heritage items. And, in consultation with respective councils, create pipeline easements where required.
- Sydney Water recommends that existing flood models are adopted, to ensure the SSI does not impact on flooding. Sydney Water also recommends that Sydney Metro works closely with the Western Sydney Planning Partnership Office on the stormwater/waterway health technical teams to support precinct planning for the Aerotropolis Area and waterway health.
- The Project needs to demonstrate compliance with the NSW Water Quality Objectives including a range of water quality indicators: A risk-based framework for considering waterway health outcomes in strategic land-use planning decisions.

Soils and Contamination

- Impact to any Sydney Water waterways sediments may require stringent compliance under the NSW EPA's Remediation Order.
- Sydney Water would like further information on future action Sydney Water would take if tests indicate existence of contamination in groundwater.
- The construction of the proposed Western Sydney Airport will undertake earthworks, which are likely to establish significant catchment runoff redirections. While this may reduce flood impacts to some waterway's, others may also experience increased impact. The detail of this needs to be understood, and emerging equity issues for landholders addressed.
- The assessment of runoff from development areas focuses principally on runoff water quality. Runoff impacts should be evaluated against the DPIE Risk Based Assessment Framework, which would identify mean annual runoff volume from impervious surfaces (and other catchment hydrology characteristics), as crucially important in terms of receiving water health and stability. The Project impact assessment and mitigation proposals need to be better formulated in this context.

Groundwater

- Sydney Water recommends that any proposed discharge of groundwater or detained runoff to local waterways should be evaluated against Sydney Water & DPIE frameworks. The evaluation should reflect not just the existing nature of degraded local waterways but a vision future naturally functioning waterways which meet community's environmental expectations.

Biodiversity

- The proposal indicates that there will be proposed culverts and crossings within creek catchments. Further details of methodologies around proposed construction of any culverts and crossings must be raised with DPIE, respective council and Sydney Water, to identify risks which may adversely affect local biodiversity and water quality.

Overall, Sydney Water supports the proposed SMWSA Project, and strongly recommends early consultation, to help meet the Project needs.

If you wish to better understand this submission, please do not hesitate to contact Arthur Andronopoulos on 0447 677 946.

Yours sincerely,



Ira Williams
Manager, Infrastructure Development