



INNER WEST COUNCIL

19 December 2019

Jim Betts
Secretary
Department of Planning, Industry & Environment
GPO Box 39
SYDNEY NSW 2001

Attn: Belinda Scott

Dear Mr Betts

Re: Sydney Gateway Motorway Project

Thank you for providing Council and the Community with the opportunity to provide feedback on the Sydney Gateway Environmental Impact Statement. In response Council provides the following comments, noting that the project will continue to be subject to on-going discussions between Council officers and representatives of the Sydney Gateway Team (TfNSW).

Inner West Council is opposed to the principle of urban motorways and considers that the Inner West is an inappropriate location for any motorway project. Further, Council expresses concern that the State Government's on-going program of urban motorway building:

- is counter to good environmental planning practice;
- encourages increased travel by private cars, particularly noting that each motorway project contributes increased private car use by creating induced demand (travel which would not have happened if the motorway was not built) and in so doing undermines efforts to encourage greater uptake of public transport;
- places a burden on finite treasury resources which could be better directed toward public transport improvements, healthcare and education.

Council's view that the Sydney Gateway Motorway Project is an additional component of the WestConnex Project is based on the original concept of WestConnex being a motorway to provide greater connectivity between Sydney's West and Sydney Airport/Port Botany. It is considered that, as WestConnex has proceeded regardless of Inner West Community and Council opposition, the connections proposed by Sydney Gateway should have been constructed as subterranean links thus avoiding the many issues associated with land acquisitions, environmental impacts, noise, amenity, biodiversity, loss of industrial lands and use of residual lands.

However, as the WestConnex project is continuing regardless of Council's and the community's opposition, it is recognised that the Sydney Gateway Motorway Project will provide benefits to the local area by encouraging WestConnex traffic to remain on the motorway rather than filter through adjacent streets. Additionally, longer term benefits have been identified for access to Sydney Airport and Port Botany.

Given the above considerations, should the Sydney Gateway Motorway Project proceed Council's requests that the following key concerns be addressed:

1. Transport, traffic and infrastructure

a) **Limited scope of traffic and transport assessment area** – the scope of the study area included in the EIS is considered unduly limited. The Study area for the project's transport and traffic assessment is shown in Figure 1 below. It is considered that limiting the western/north-western border of the study area to the T3/T8 Railway line means that traffic impacts on the Inner West LGA have only gained minimal consideration. This rail corridor has only 3 crossing points within the Inner West LGA, consequently all inner west traffic heading to and from the Project, Sydney Airport and Port Botany is funnelled through these three locations:

- Edgeware Road (Bedwin Bridge);
- Gleeson Avenue (Sydenham Station);
- Richardson Crescent (Tempe Station).



Figure 1 – Transport and Traffic Assessment Study Area

Concern is expressed that there is no evidence of the assessment of traffic and transport impacts on these three locations, particularly in relation to construction traffic. In considering these impacts it is essential that the cumulative impact of construction activity in the area be addressed. Construction activity in the area includes:

- WestConnex St Peter's Interchange;
- Sydney Metro south-west;
- Marrickville Metro (Shopping Centre).

Without a broader geographic study area Council considers it is not possible to adequately assess the true impacts of the project:

REQUESTED ACTION:

That the study area be expanded to include, as a minimum, the three inner west crossing points of the T3/T8 heavy rail line:

- Edgeware Road (Bedwin Bridge);
- Gleeson Avenue (Sydenham Station);
- Richardson Crescent (Tempe Station).

- b) General Construction Activity** - during construction, vehicle access to properties are to be retained all the time, obstruction to driveways are to be avoided and minimise temporary loss of on-street parking, impact on road network performance and delays in travel time.

Proposed works has a significant impact on Council's road, traffic and stormwater. Details of construction and restoration methodology are required in advance to permit Council to review prior to the commencement of construction. Council request the project team to liaise and consult with Council throughout the design development and construction stages, in order to ensure that all the restoration works are carried out in a very high standard.

The project includes closure of the existing active transport link along eastern side of Alexandra Canal, with a new link provided on the western side of Alexandra Canal. An active transport strategy is to be developed in consultation with all relevant stake holders including Inner West Council to enhance the active transport opportunities and guide the future provision of active transport infrastructure.

REQUESTED ACTION:

The proponent should develop a detailed construction program, in consultation with Council, which includes community consultation, respite periods and respite arrangements for residents, parking, traffic and transport management plans, temporary active transport management initiatives and contingency planning for "worst case scenarios".

- c) Proposed night works** – night works should be minimised, however should nightworks be unavoidable; the reason for night works should be clearly explained to all affected parties. Adequate notice needs to be given to all residents and business operators affected by works to allow them sufficient time to plan for the consequences. Council to be kept informed of progress well ahead of works. Regular project interface meetings with Council are likely to be needed, and Council to be given the opportunity to be represented on other relevant working groups the project's complaints procedures (including direct points of contact to project staff) to be effective so that complainants don't need to seek Council's support in advocating solutions. The project to make good all affected areas to a high standard, with a process of 'signoff' of all footpaths, Council road, landscape and stormwater drainage works by Council. Opportunities should be taken for the project to go beyond a 'make good' standard to bring about a significant community benefit.

Wherever night works are proposed, enough additional notice should be given to affected residents to enable them to plan for the consequences, and a generous approach to mitigation be adopted, e.g. offer of alternative accommodation. Project workers to be encouraged to be considerate of residents and business owners, e.g. toolbox talks discourage workers from idling their vehicles or making other noise in residential streets, particularly in the early morning period.

REQUESTED ACTION:

The proponent must develop a specific night works construction program which includes details regarding advance notification of residents, limits to the hours of night-time works

and the number of consecutive nights, noise reduction awareness programs for workers and respite management systems to be put in place.

d) Construction Traffic Volumes - As stated previously, the limited geographic scope of the study area means that Council is unable to fully anticipate impacts of project related construction traffic on the Inner West LGA. From the geographically limited information provided, in the EIS, the following concerns are raised:

- Concerns are raised regarding the morning and afternoon peak volumes at access point A8. There appears to be no discussion on how the required low peak volumes of predicted movements will be regulated at access point A8. Further, these low volumes are contradicted by the volumes predicted in Chapter 9.3.1 where 250 vehicles per morning and afternoon peaks are predicted.

Access point A8 provides direct access to the internal carpark and beyond. Council requests further information regarding how this access point is to be managed and how the number of vehicle movements will be limited at critical times.

- Additionally, concerns are raised regarding the number of projected movements at access point A7 during earthworks. Management of these movements will significantly affect the performance of the traffic signals at Bellevue Street and Princes Highway and impact to other properties along Bellevue Street. It is essential that additional information be provided to clarify this matter.

e) Eastern Bridges Compound (C2) - Insufficient detail has been provided regarding use of access to the Eastern Bridges Compound, via Bellevue Street (access point 7). Concern is expressed regarding:

- suitability of the route to accommodate high volumes of construction traffic;
- varying levels of use of Bellevue Street during different phases of construction;
- impact on businesses using Bellevue Street.

f) Western Bridges Compound (C3) - Concerns are raised regarding the use of access point A8 by heavy vehicles. Tempe reserve is primarily used for recreation and sporting activities by the local community, schools, sporting clubs, cyclists, walkers, etc. The introduction of heavy vehicles and a high number of light vehicles into this environment increases risk to the users of the reserve. Consequently, this route is strongly opposed and alternative routes using Nigel Love Bridge in combination with limited use of Bellevue Street should be developed.

The route along Alexandra Canal should be constructed to accommodate the expected heavy vehicle loads and, in a manner, (agreed to by Council) and which would be readily converted to the proposed Alexandra Canal Shared Path, in the longer term.

Due to the nature of Tempe Reserve it is also preferable to limit the use of access point A8 to only limited number of light vehicle movements. For both Access points A7 and A8, SIDRA modelling of the intersections of Holbeach Ave/Princes Highway and Bellevue Street/Princes Highway should be undertaken for each phase of the project.

g) Construction Worker Parking - It is considered unacceptable that there will be a shortfall of on-site worker parking. Council disputes the EIS contention that there will be no impact on Tempe Reserve, as the roads around Tempe Reserve are the most likely locations for worker parking overflow to occur.

As Tempe reserve is already subject to relatively high parking demand any use (either premeditated or inadvertent) for overflow worker parking will force existing demand into adjacent residential areas and also impact on:

- existing users of the reserve;
- local residents;
- local businesses.

Similarly, the predicted parking shortfall also has potential to impact on the Bellevue Street area.

As the peak construction period extends over approximately one year, at least an additional 110 spaces should be found within the compounds/site or within existing commercial off-street car parking areas, connected by reliable shuttle bus services.

Additionally, alternatives in relation to travel to work modes should be encouraged through the provision of shower facilities, bicycle parking and worker tool storage facilities. All of these should be supported by green travel plans to provide alternative travel methods for workers.

REQUESTED ACTION:

The detailed Construction Management Plan should address all of the issues referred to in the sections above with a requirement to demonstrate sufficient worker parking is available.

- h) Operational Traffic Volumes** - As stated previously, the limited geographic scope of the study area means that Council is unable to fully anticipate impacts of project related traffic on the Inner West LGA. From the geographically limited information provided, in the EIS, the following concerns are raised:

- The additional 250 movement (AM and PM peak hours) predicted at Holbeach Avenue conflict with information provided in Chapter 8.6.2. Council requests clarification regarding which predicted traffic volumes are correct.

Further, additional information is requested regarding queuing on the right turn bay on the Princes Highway into Holbeach Ave as well as delays on Holbeach Ave exiting onto the Princes Highway as a result of the additional traffic.

Additional information on this impact is requested, as well as any supporting measures to alleviate any impact.

- There appears to be no comparative analysis of traffic generated from the existing sites and traffic generated once these sites are removed and replaced by the projected construction traffic (particularly during the peak construction period). Such an analysis is essential in order to predict likely impacts on the adjacent road network.

REQUESTED ACTION:

The Proponent should provide responses, and management measures for the above issues.

- i) Enhanced public transport to Sydney Airport** – The Sydney Gateway Motorway Project focuses on the provision of motor vehicle access to Sydney Airport and Port Botany. It also aims to improve rail freight access to Port Botany through its association with the Botany Rail Duplication Project. The Project, however, does not capitalise on its ability to enhance public transport access to Sydney Airport through:

- Provision of bus lanes (possibly bus rapid transit) and other bus priority measures;
- Removal of station access fees and 'non-compete clause' for the Airport Link heavy rail line.

REQUESTED ACTION:

The Project should provide the significant public transport improvements proposed above.

- j) **Access to residual lands** – While the Project provides a roundabout for access to residual lands, via the new Link Road extension, this access is circuitous and restrictive. Should this land, or a part of it, be used as a Council material depot access from the site to southern sections of the Inner West LGA (particularly Tempe, Sydenham, Marrickville, St Peters, Newtown) would be extremely difficult. Concern is expressed that this, the most usable pocket of residual land will have very limited access to the Inner West and as such will be of only limited use.

Concern is also expressed regarding the proposal to close Swamp Road and the impacts of this action on access to adjacent properties and residual lands.

REQUESTED ACTION:

The Project should address the above-mentioned access limitations.

- k) **Sustainability of infrastructure** - Infrastructure included in the project should be based on Ecologically Sustainable Development Principles and include water sensitive urban design, ecological restoration using endemic species from the Cooks River Valley, mitigation of the urban heat island, and zero or low emission development and operation. The project and its infrastructure should make a positive contribution to the area in the form of water quality improvements, ecosystem services and infrastructure designed as habitat (especially piers over Alexandra Canal).

REQUESTED ACTION:

The Proponent should provide responses, and management measures for the above issues.

- l) **Design of critical elements** – particular attention should be paid to the detail design of key structural element such as the motorway overpasses/flyovers. The Project has the opportunity to pursue high levels of design excellence creating featured sculptural elements rather than simplistic bridge structures. Council requests that a design review panel be established to ensure design excellence for the Project;

REQUESTED ACTION:

The State Government should establish a design review panel to ensure quality of design for the proposed infrastructure.

- m) **Princes Highway** – consideration should be given to opportunities to capitalise on any traffic reductions along the Princes Highway, that may result from the establishment of Sydney Gateway, particularly noting opportunities for public domain, sustainable transport and place making;

REQUESTED ACTION:

Council seeks commitment from TfNSW/RMS that measures to improve local amenity as well as pedestrian and cyclist conditions along the Princes Highway will be pursued in conjunction with the Sydney Gateway Motorway project.

- n) **Access between terminals** - concern is expressed regarding access between the Sydney Airport's terminals, particularly in relation to public and active transport. The proposed removal of Airport Drive will necessitate a diversion to Sydney Gateway in order to move between Sydney Airports T1 and T2/T3 complexes. This diversion will apply to the existing 400 bus service, as well as parking shuttles, pedestrians, cyclists and motorists;

REQUESTED ACTION:

The design will be reviewed to enhance access between airport terminals.

- o) Lighting (construction and operational)** - extreme care should be taken regarding lighting for both construction and operational phases of the project, to ensure that it does not negatively impact on:
- aircraft operations;
 - residential properties;
 - environmentally sensitive areas.

REQUESTED ACTION:

Lighting design and configuration will address the above concerns.

- p) Barrier effect** – the magnitude of the project has potential to create a significant physical and psychological barrier discouraging use of active transport through the site and to new facilities that may be created adjacent to the motorway (eg. possible sporting facilities on residual land). Care should be taken during detailed planning and design to ensure the safety, legibility and user-friendliness of all active transport links in and around the project.

REQUESTED ACTION:

Connectivity and access to and through the site will be ensured through detailed design of active transport and other links associated with the Project.

2. Active transport

It is considered essential that the project include a comprehensive active transport network providing connectivity both through the area and to any relevant facilities that may be created as a result of the project. In recognition that the EIS proposes that a detailed active transport plan will be prepared as part of the project, the following points are highlighted for consideration in this active transport plan with a more detailed assessment of the EIS active transport initiatives following. Enhanced active transport connectivity created by the Project should include (but not be limited to):

- an active transport link along the northern alignment of Alexandra Canal.
- connection between the St Peters Interchange and the Alexandra Canal Cycleway - noting that the Pedestrian and Cycle Implementation Strategy (dated 19 February 2019 and as approved by the Secretary of Planning in the M5 East consent) identifies the active transport gap between the St Peters Interchange and Sydney Airport and states this gap will be delivered by RMS as the proponent of the Sydney Gateway project. These links would ultimately provide access to both Sydney Park and the City of Sydney's bicycle network.
- a direct crossing of Cooks River to the south of the project site. This could be achieved via re-allocation of road space on the Giovanni Brunetti Bridge or by constructing a parallel cycle bridge (or new link) to enable connections to cycleways in the south and east.
- direct connections from the Alexandra Canal Cycleway to Sydney Airport Terminals T1, T2, T3 and beyond to the Bayside Council and City of Sydney cycleway networks;.
- a direct east-west connection between Coward St, Mascot and Sydenham/Tempe Stations.
- cycleways and paths to provide access from Tempe and Sydney Airport to any new facilities created by the project.

- a) **Active transport links (proposed)** - The two active transport links proposed in the EIS (and shown in Figure 2) are supported, however concern is expressed that these two links do not provide sufficient connectivity to the surrounding active transport network. It is considered that the project provides a window of opportunity to significantly enhance active transport throughout the area, including connectivity to the surrounding active transport network, and that this should be capitalised on in the project proposed active transport plan.

Additionally, concern is expressed that the shared path along the Alexandra Canal may be subject to hazardous flooding in the future. Consequently, it is requested that details of the proposed mitigation measures should be provided.

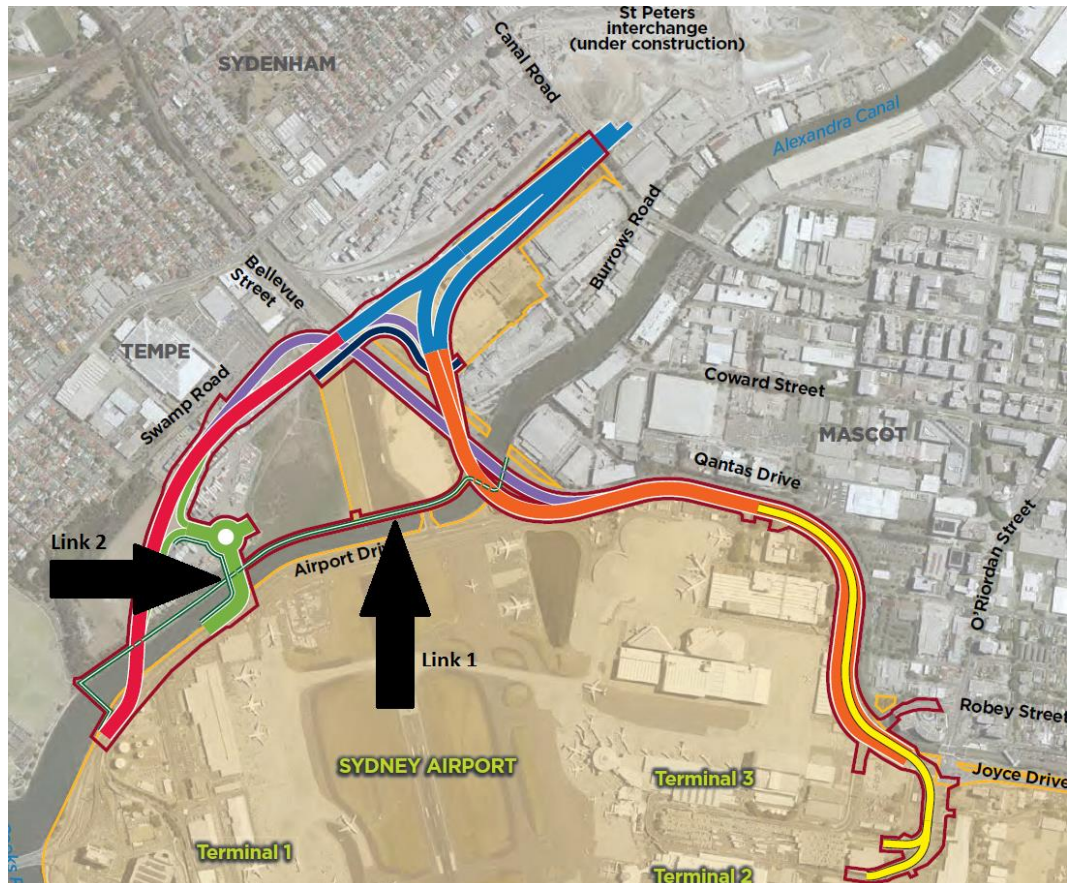


Figure 2 – Sydney Gateway Proposed Active Transport Links (arrows show Link 1 and Link 2)

It is requested that the Project's Active Transport Plan include the following connectivity:

- an active transport link along the northern alignment of Alexandra Canal;
- connection between the St Peters Interchange and the Alexandra Canal Cycleway - noting that the Pedestrian and Cycle Implementation Strategy (dated 19 February 2019 and as approved by the Secretary of Planning in the M5 East consent) identifies the active transport gap between the St Peters Interchange and Sydney Airport and states this gap will be delivered by RMS as the proponent of the Sydney Gateway project. These links would ultimately provide access to both Sydney Park and the City of Sydney's bicycle network.
- a direct crossing of Cooks River to the south of the project site. This could be achieved via re-allocation of road space on the Giovanni Brunetti Bridge or by constructing a parallel cycle bridge (or new link) to enable connections to cycleways in the south and east.
- direct connections from the Alexandra Canal Cycleway to Sydney Airport Terminals T1, T2, T3 and beyond to the Bayside Council and City of Sydney cycleway networks;

- a direct east-west connection between Coward St, Mascot and Sydenham/ Tempe Stations.
- cycleways and paths to provide access from Tempe and Sydney Airport to any new facilities created by the project.
- Direct connection between Alexandra Canal cycleway and T2-T3 (Domestic Terminals) as well as links beyond to Bayside Council and City of Sydney bicycle networks.
- Direct connection with the St Peters interchange. This link is identified as a gap in the Pedestrian and Cycle Implementation Strategy (19 February 2019) approved by the Secretary of Planning as part of the M5 East consent and says it will be delivered by RMS as the proponent of the Sydney Gateway project.
- Direct Wentworth Avenue to Domestic (T2) link from the East (remediating the absence of pedestrian and bicycle provision in the Airport East Access project).
- An improved Cooks River crossing (Cahill Park to Tempe Reserve)
- An Alexandra Canal to Mascot link (Coward/Ricketty Street).
- north-south 'Northern Lands' (Alexandra Canal to Sydney Park) open space link.
- An extended east-west (Mill Pond to Sydenham Metro Station) open space and community link (this is specific to community access sought in both the Sydney Gateway and Botany Rail Duplication).
- A direct east-west connection between Coward Street and Sydenham Station.
- A crossing of Cooks River such as by re-allocating road space on the Giovanni Brunetti Bridge or constructing a new bridge between Tempe Reserve and Cahill Park.

Additionally, the following elements need to be addressed:

- The canal path needs to provide safety and amenity for people walking and cycling with the installation of lighting, landscaping and CCTV.
- Pedestrian crossings to be provided on all approaches of all proposed signalised intersections as specified by the RMS Traffic Signal Design guide. Failure to implement this would impose unacceptably long time and distance costs on pedestrians.
- This project aims to increase capacity for Sydney Airport's forecast growth and the proposed paths need to cater for future growth in active transport by providing path widths of at least 5 metres and painted or physical separation between walkers and riders.
- The proposed shared paths must remain open for use at all times. The future shared path beside canal (Link 1 in description above) is proposed to be used for future road maintenance and this is unacceptable because maintenance can take place without notice and for extended periods of time. All ongoing road maintenance needs to be carried out without closure of the canal shared path because the impacts of diversions are significantly higher on walkers/riders than drivers.
- The proposed traffic signals at the intersection of Terminal 1 Connection and Freight Terminal Access must include bicycle lanterns to ensure people on bicycles will not be crossing the road illegally.
- The existing walk/cycle link on the eastern side of the canal (beside Airport Drive) will be closed in late 2020. One of two temporary routes will be provided throughout construction resulting in an increased travel distance of about 580 metres.
- The temporary links would cross Alexandra Canal via the existing pedestrian/cycle bridge at Tempe Reserve, then follow the existing road in Tempe Reserve and travel uphill (city bound) above the wetlands before turning eastwards and running beneath proposed construction areas before crossing the Canal again at Nigel Love bridge to re-

join the existing path on the eastern side. Box culverts would be used to travel beneath construction areas.

- A grade-separated pedestrian bridge over Qantas Drive from O’Riordan Street that provides local access between Mascot Station town centre and the Domestic Terminal (and future ground transport interchange).

Additionally, it is requested that where possible, that a 5m at-grade verge is allowed for adjacent the footings and supports of bridges, ramps, and overpasses to enable future open space and green-grid connections and passageway.

b) Temporary Active Transport Links (during construction and shown in Figure 3) - the points are raised for consideration, based on the temporary active transport measures proposed during the project’s construction:

- There’s a section of one-way road in Tempe Reserve which would need to be changed to two-way traffic (with a potential loss of parking) to ensure south-bound riders aren’t breaking the law. Changes to local traffic and parking arrangements as a result of these major infrastructure projects end-up consuming council resources and the Proponent needs to fund the costs of these resources.
- Any conditions of consent associated with active transport links during construction must specify the provision of routes which are safe, direct, with no additional time or distance burdens and with maximum gradients of 5 per cent. The wording of conditions on major infrastructure now under construction in the Inner West LGA, have resulted in people walking significantly longer distances with delays at signalised intersections and with cyclists being diverted through narrow, steep, winding, indirect paths mixing with heavy vehicles.
- In order to adequately assess potential conflict along the temporary routes significantly greater detail should be provided. Of particular concern is the operational viability of the cycleway during the lifespan of the construction works and interaction of the cycleway and worksite traffic.

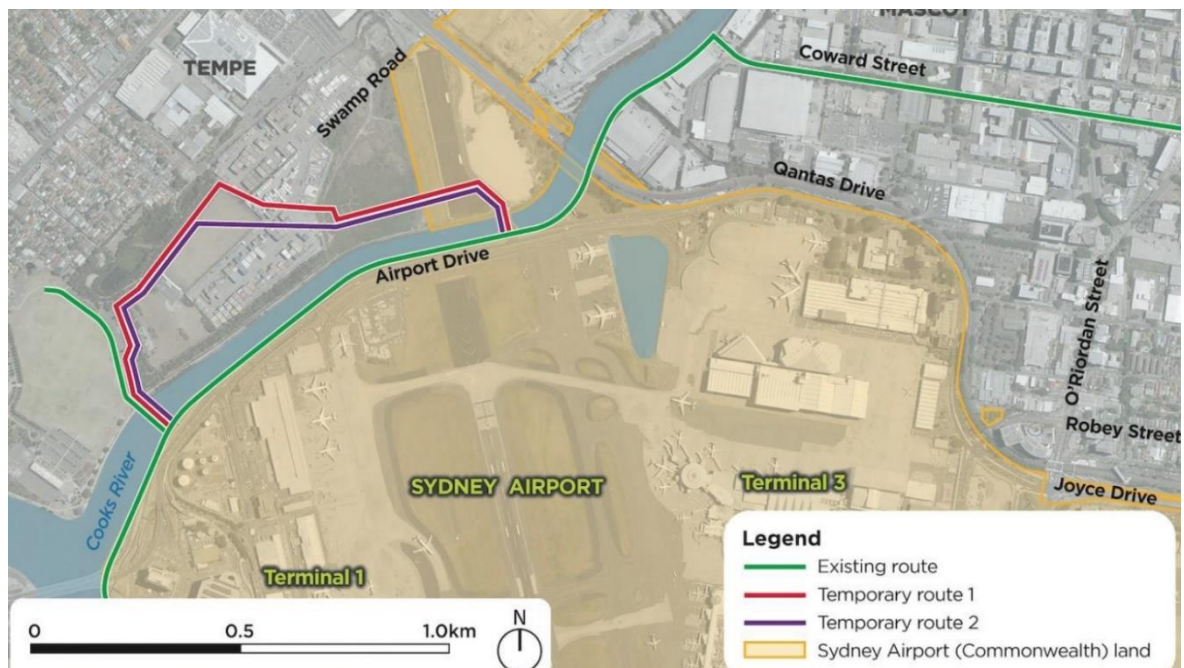


Figure 3 – Temporary Alexandra Canal Active Transport Link (during construction)

REQUESTED ACTION:

The proposed Active Transport Plan will be prepared in consultation with all adjacent Councils, the local Community and local bicycle user groups to ensure all construction and operation issues above are addressed. These issues will particularly include enhanced connectivity, additional links and improved staging of construction.

3 Industrial Lands

Concern is expressed over the significant loss of industrial land resulting from the Sydney Gateway Motorway project. There is already strong competition for land in the Eastern City District from non-urban services industries seeking the proximity to the Sydney CBD, Sydney Airport and Port Botany. Industrial and urban services land in this District is highly constrained due to competing pressures, such as residential and large retail development, and the lack of opportunities for new supply. Adding to this is the impact of losing the Tyne Container Services facility and the inability to replace this facility because of the lack of suitably large sites in proximity to Port Botany.

The *Greater Sydney Region Plan* (Region Plan) and *Eastern City District Plan* (District Plan) includes the principle to 'retain and manage' existing industrial and urban services land in the Eastern City District. This means all existing industrial and urban services land must be safeguarded for economic and employment purposes to achieve a mix of economic outcomes.

Additionally, Council's draft Employment and Retail Land Strategy (ERLS) identifies a shortfall of capacity in the employment precincts in the Inner West. This limits Council's industrial land supply and the ability to respond to future demand generated by population growth and emerging industries. The draft ERLS responds to the 'retain and manage' principle and outlines the need for Council to retain and manage a diversity of employment space in the Inner West that can be adapted and repurposed in the future.

It is considered that the EIS lacks consideration of Objective 23 of the Region Plan and Planning Priority 12 of the District Plan in relation to the 'retain and manage' principle and that the impacts on existing industrial land in proximity to the 'trade gateway' need to be acknowledged.

Also, of concern is the absence of any assessment relating to the Project's impacts on the industrial lands, including those to be returned to Council (under the Proposed Acquisition Notice). This land is surrounded on 3 sides by the future road and is significantly impacted by air and noise pollution with no mitigation measures proposed. Additionally, there is:

- a swale across the front of the land;
- no downstream easement rights to Alexandra Canal;
- loss of connectivity to other Council land by way of easement rights over RMS land;
- no certainty on future height of the land where there are severe limitations placed on development of the sites by Sydney Airport's Obstacle Limitation Surface (OLS).

While Council acknowledges the permanent land requirements of the Gateway Project, in particular the industrial land in the Inner West LGA containing Tyne Container Services and Council's storage depot. Council reiterates that it is essential any land returned to Council is in useable form with self-sufficient access and easement rights, and that any future design amendments to the project must minimise the permanent acquisition of industrial land.

REQUESTED ACTIONS:

- EIS should consider the project's impacts in relation to the 'retain and manage' principle of industrial land under the Eastern City District Plan, particularly in the context of the

Inner West LGA. The EIS does not explain why all of the land to be resumed is required when a comparison is made of the road plans and the acquisition plans.

- Any future design amendments to the project must minimise permanent acquisition of industrial land.

4 Noise and vibration

The EIS noise assessment focuses on residential receivers and does not include consideration of users of Tempe Reserve park, playing fields, wetlands or other elements of the reserve. Nor does the assessment consider future users of the residual lands (much of which may be limited to open space because of access and development limitations). There is an absence of significant noise management measures proposed for Tempe Reserve (and the wetlands) other than a noise barrier, which would only benefit the area near the former golf driving range. Further, this noise barrier will only provide a reduction of 5dBA while the anticipated rise in noise will be up to 13dBA.

It is recognised that further measures will be proposed to manage noise and it is requested that particular care should be taken to protect Tempe residents from noise associated with:

- construction of the project;
- operational traffic;
- reduced noise attenuation of ground-borne aircraft noise - noting that Tyne Container Services currently acts as a noise barrier between Tempe and Sydney Airport.

Additionally, it is requested that future noise mitigation measures include the establishment of permanent monitoring stations in Tempe Residential Area and in Tempe Reserve. These stations should provide real-time information which will prompt a series of agreed mitigation measures should noise exceed mutually agreed levels (established through consultation with the local Community and Council).

REQUESTED ACTIONS:

- permanent noise monitoring stations should be established, as proposed above;
- improved noise attenuation should be provided as discussed above;
- further assessment of noise and vibration impacts on open space and residual lands should be carried out.

5 Urban ecology and biodiversity

In addition to the various urban ecology and biodiversity issues raised in the EIS, Council requests that the following be considered and addressed:

- Any loss of vegetation must be replaced in a mutually agreed (Council and the proponent) form and location, as soon as the replacement site is available with lost trees being replaced at a ratio of 4 to 1, generally using the advanced trees with container sizes of at least 75L.
- The saltmarsh community on the naturalised section of Alexandra Canal, at Tempe Reserve, adjoining the project site should be given special attention to ensure that it is not disrupted;
- While the small linear patches of vegetation fringing Alexandra Canal appear as regrowth on fill material (associated with construction of the bentonite wall at the former Tempe landfill site) they act as habitat stepping stones. This function is considered significant due to the highly urbanised nature of the surrounding area, which means habitat and foraging opportunities are limited. Specific attention should be given to ensure that this community is not disrupted;

- The highly disturbed areas (exotic grassland and weeds) referred to in Table 22.3 of the EIS are considered locally significant and should be protected;
- The naturalised section of Alexandra Canal has restored saltmarsh areas which should be preserved and/or enhanced as part of the project;
- Impacts on the Coastal Wetlands Area must be managed by ensuring contaminated runoff does not reach this area and no stockpiles or construction activities are nearby. Measures to assist in managing this could include stormwater treatment features in the design, such as sedimentation ponds, biofilter swales, and rain gardens.
- Construction should be managed to ensure that there is no disturbance to Grey-headed flying fox flyways and to ensure light spill does not disturb them. Additionally, care should be taken to ensure operation of the motorway does not impact on the flying foxes (eg lights and noise);
- Council's microbat monitoring programs have found that several species of microbats consistently forage in areas along the Cooks River. Care should be taken to ensure microbats are not disturbed, both during construction and operation of the project;
- It should be noted that, in the urban context, any areas of vegetation can provide habitat. Consequently, any impacts on vegetation should be minimised and vegetation should be replaced after construction (with suitable local native species, especially in riparian areas);
- All bridges/overpasses should be designed in a manner which provides viable microbat habitat areas;
- This loss of foraging habitat (indicated in Table 22.4 of the EIS) is considered significant due to limited alternative areas in the surrounding urban context, consequently any potential impact on foraging areas must be minimised and any lost foraging areas must be replaced in a suitable form and at an appropriate location, in consultation with Council;
- The areas of native vegetation (referred to in Table 22.4 of the EIS) are connected by weedy habitats. The weedy links referred to are considered critical in maintaining connectivity between the native habits. Fragmentation of habitats is a significant issue, and it is essential that any vegetation lost should be replaced immediately construction in that area has ceased. Environmental replacement should not wait until the overall project has been completed;
- Council contests the statement in Table 22.4 that the impacts on habitat are minimal. It is considered that the impacts are significant due to the urban context of the sites, with habitat and foraging being highly constrained within this urban context;
- Concern is expressed that there is a possibility of contaminated runoff (or sub-surface water) reaching Tempe Wetlands. Stormwater management and control must aim to (as a minimum) achieve BBWQIP targets and stormwater must be treated appropriately;
- The project will increase edge effects, especially lighting, noise and potential for contamination through stormwater runoff. It is considered essential that any barriers (physical or otherwise) to fauna movement, created by the Project, must be mitigated against;
- In addition to the construction impacts of light, noise and vibration, there will also be impacts during operations and the cumulative effects of noise and light must be considered. The project must include measures to mitigate noise and light spill, through buffer plantings, light fittings and warmer spectrum lights.
- Wherever possible heat island effect/embodied energy (due to the increased hard surfaces) must be minimised through materials choice, detailed design, use of water sensitive urban design, increased tree canopy and similar measures;

- Consideration should be given to the impact of traffic/movement as a disturbance factor for the grey-headed flying fox and the possibility of vehicle strikes;
- Sydney Airport lands - Some of these areas have been identified in the SSROC Biodiversity Corridors Mapping as Priority Habitat. It is important to note that non-native vegetation can provide important habitat and act as stepping stones for wildlife movement in urban areas. Replacement habitat must be created in the Project area. Impacts on both non-native and native vegetation needs to be minimised to ensure that impact on all habitats are minimised;
- Due to loss of habitat the mitigation measures should include creation of vegetated buffer zones through planting of local native species within the project site and surrounding areas;
- Consideration of cumulative impacts on the threatened Eastern Bentwing Bat should be considered, as roosting habitats have also been affected by the WestConnex Rozelle Interchange project;
- Council should be consulted on the preparation of the Project's Biodiversity Management Plan and the CEMP;
- Areas of vegetation removed must be replaced with new local native plantings in the Tempe, Cooks River, Alexandra Canal area (ideally with mature vegetation);
- Residual impacts have been understated, as they do not appear to have taken into consideration the higher value of vegetation loss in a highly urbanised context (where there is so little vegetation).
- Heat island implications – the heat island impact of a surface motorway of between 8 and 10 lanes is significant and it is essential that appropriate measures should be taken to minimise these impacts through treatments such as the use of new technology materials, extensive use of planting and water sensitive urban design, introduction of tree coverage/canopies, acoustic barriers that also reduce heat absorption;
- Tempe Wetlands - is an important local wildlife habitat and part of the Cooks River Wildlife Corridor (Marrickville LEP) with some 100+ bird species known to occur at this site. Development of the project must avoid impacts on Tempe Wetlands and existing ecological restoration sites. Impacts considered should include both direct and indirect impacts during construction and operation; such as damage to vegetation, creation of obstructions to wildlife movement, hydrological changes, shading/shadowing, light spill etc;
- This locality has areas of exotic vegetation that are valuable wildlife habitats (including reptiles, small mammals and for small birds). These areas should be preserved and/or enhanced.
- Opportunities to maintain and expand adjacent coastal wetlands should be capitalised on, noting that associated ecological restoration/rehabilitation areas should be examined, particularly due to the Project's proximity to areas mapped as coastal wetlands under the Coastal Management SEPP re Coastal Management Act 2016;
- Particular care should be taken during construction of the project to ensure that existing fauna is afforded sufficient time to relocate to adjacent areas;
- Opportunities for integrated ecologically sustainable place-making should be explored including improvements to and integration of; active transport, public domain, public art, indigenous and contemporary heritage, while simultaneously protecting and enhancing biodiversity/ecological areas;
- Noting that capped contaminated fill limits the amount of deep soil tree planting which can occur on the site, it is essential that detailed landscape design include opportunities to provide specific deep soil spaces for trees in order to mitigate impacts of the Project.

- Current biodiversity management practices at Sydney Airport predominantly relate to managing the Sydney Airport Wetlands and do not directly apply to the project, as the wetlands are located well outside the project site. The Project may impact fig trees on Sydney Airport land (eg along Qantas Drive), however these are not located in the South East Sector where fig trees are being managed in accordance with the EIS. To ensure consistency with this management action within the project site, amenity trees (including fig trees) removed to construct the Project should be replaced in accordance with the tree management strategy for the Project (see section 21.6.1). Such trees may include fig trees and other food trees that provide foraging resources for the threatened Grey-headed Flying-fox, where there would be no increase in the risk of wildlife strike;
- Specific consideration should be given to:
 - Key fish habitats;
 - Grey-headed flying fox and micro-bats habitats and flyways;
 - Green and Golden Bell Frog habitats;
 - Migrating and threatened bird habitats;
 - Key vegetation communities.

REQUESTED ACTION:

Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council.

6 Environment and amenity

a) Air Quality

- Concern is expressed that increased traffic resulting from the project may result in reduced air quality, both localised and across the Sydney Region;
 - General advice from organisation such as the AQCCC indicates that air quality reduces in proximity to surface roads and that new roads, attracting additional traffic (induced demand), result in reduce air quality. This is reflected in EIS Figures 12.6 – 12.11, which indicate reduced air quality on, and immediately adjacent to, the motorway.

Further, concern is expressed that much of the residual land (with some to be used for open space) will be subjected to reduced air quality because of its proximity to the motorway;
 - Permanent air quality monitoring stations should be installed in adjacent residential areas and lands owned by Council particularly the open space;
 - Experience with recent sites, such as the St Peter's interchange, has created concern amongst Council and the local Community that once excavation occurs on the site potential exists that adjacent residents will be subjected to unacceptable odours emanating from exposed land fill. While there is an undertaking by the proponent, to ensure such issues will be reacted to in a timely manner Council requests that a detailed response program be prepared in consultation with both Council and the local Community.

b) Water quality

- Water quality assessment should be carried out for surface water entering the Cooks River and Alexandra Canal during construction and post construction (during the operation of the road) and permanent water quality monitoring station established. Particular consideration should be given to the Botany Bay Water Quality Improvement Targets and the Cooks River Alliance goals for swimming in the river, in addition to

ANZECC Guidelines. Urban Design Principles (i.e. “Beyond the pavement”) that include water as a key element should also be included in design and management.

c) Landscape character and visual amenity

- It is estimated that about 1,300 trees would need to be removed during construction, including 573 trees within Sydney Airport land. A total of about 1,367 trees could be retained (subject to the measures provided in section 21.6 of the EIS) with 420 of these located within Sydney Airport land. The EIS’s tree retention numbers assume that the cabbage tree palms would be transplanted within the project site. All other trees were identified as not being suitable for transplanting. It is consequently requested that tree removal should be minimised and a replacement ratio of no less than 4 to 1 is recommended;
- Rather than replacing trees (unable to be replanted within the project footprint) on Airport land – these trees should be planted in adjacent streets and on residual land devoted to open space. Council should be consulted regarding identification of suitable locations for replanting;

d) Tree canopy and the urban heat island effect

Council currently has a strategy in place to significantly increase the tree canopy cover of the Inner West. This is in line with the NSW government initiative to plant five million trees throughout Sydney to increase tree canopy coverage from 16.8% to 40%. The objectives of this are to decrease the dangers of extreme heat with more shade, create wildlife habitats and increase property values.

Council’s own mapping and data of the Council area estimate our tree canopy coverage at 20.1% of the Council area (2020 Vision Report, 2016). However, when looking at individual suburbs, St Peters and Tempe have the lowest tree canopy coverage with less than 10% coverage. This is more than half the Council wide average and significantly less than the NSW Governments 2030 aim of 40% coverage.

Section 21.3.3 of the EIS estimates that 1,300 trees will need to be removed for the Sydney Gateway Motorway Project. It also recognises that the removal of trees will have an impact on visual amenity and screening of unsightliness. It does not however recognise the correlation between the lack of tree canopy and the urban heat island effect.

It is well established that trees have a positive role in lowering the urban heat island effect by shading built surfaces, deflecting radiation from the sun and releasing moisture into the atmosphere. Urban heat imagery obtained by Council indicates that the St Peters and Tempe areas, specifically tracts of land where the gateway is proposed, suffer from some of the worst urban heat island effects in the Council area.

Section 26.2.1 of the EIS recognises the urban heat island effect and that the Project is expected to result in a minor change. It is not however clearly stated if this change will be for the better or worse, nor is there any definitive quantification of the change or analysis of its impacts. Motorway projects create surface areas which exacerbate the urban heat island effect including road surfaces, ancillary buildings and ancillary structures. Impacts however can be mitigated through a number of measures, including but not limited to the following:

- using road surface materials which deflect the radiation of the sun;
- reducing the overall surface area of the project;
- designing breezeway areas to encourage cooling of hard surfaces;
- providing extensive landscaping with sustainable irrigation built in; and
- planting appropriate trees to increase tree canopy coverage.

Council recognises that provision of vegetation needs to be balanced with the needs to minimise the likelihood of wildlife strikes to planes operating out of Sydney Airport, however it is considered that a practical balance can be achieved in the positioning and type of vegetation to be provided.

Additionally, dry non-irrigated landscaped surfaces such as grass have similar surface heat implications to concrete. Therefore, a sustainable irrigation solution would need to be in place to ensure landscaped areas have an adequate water supply.

To assist in reducing heat island impacts Council requests that for every tree lost, a tree with the mature canopy similar to that one lost is replaced at a ratio of 4 to 1 (meaning four trees are planted in place of every tree lost). Further, this should generally involve the planting of advanced trees with container sizes of at least 75L.

REQUESTED ACTIONS:

- Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council;
- Additionally, specific consideration should be given to the following:
 - Trees are to be replaced at a ratio of four new trees planted for every tree lost (4 to 1);
 - Replacement trees are to be advanced in containers of at least 75L volume;
 - Measures should be put in place to limit the urban heat island effect;
 - Road surfaces which deflect the sun's radiation should be incorporated;
 - A sustainable means for irrigating landscaped areas is to be built into the project.

7 Contamination

Works within a former landfill create substantial risks

The Sydney Gateway project will partially excavate and re-profile the former Tempe Tip. If poorly managed, this work has the potential to cause significant health and environmental impacts in the local area and ongoing liability issues for Council. The risk is unpredictable and unquantifiable and the EIS largely summarises the history and provides simplistic or generic assessments and responses and lacks detail and certainty as to outcomes.

Council is mentioned as an interested party, but it does not have any control over this issue and the ultimate results, including risk allocation. The EIS contemplates that the approach to management of solid waste, leachate, ground gas and general contamination will be detailed subsequently such as during the development of management plans and during detailed design and construction phases. Council may have little if any input to this and possibly no advance knowledge of it. Once construction is finished, the leasehold land will be handed back to Council. Council has no certainty as to the status of the returned land but it is likely it will include a requirement to comply with a management plan. Council will probably have no input into the preparation of this document. Whilst it is anticipated that the SSI approval may impose some constraints it is likely, based on review of other approvals, that the finalisation will be left to the construction contractor and its consultants, overseen by a site auditor with Council only consulted. The contractor will seek to minimise costs whenever possible and to the maximum extent allowed by the approval. The approval must therefore be robust with a clear allocation of responsibility to TfNSW in circumstances where the project changes the status quo by excavating within a remediated tip and seeks to return part of that land to Council. Council should not be burdened by contamination issues that arise as a result of the project.

Background Information

The Tempe Tip operated as Council landfill for many decades (approximately 1910 to 2004). In its later years, it was identified by the EPA as a [Declared Contaminated Site](#) under the Contaminated Land Management Act 1997. This was primarily due to high ammonia levels in the leachate potentially affecting the Alexandria Canal and downstream Cooks River. There are still relatively high concentrations of ammonia in the leachate.

The remediation order issued to the former Marrickville Council required that a Remediation Action Plan (RAP) be prepared. Council provided a Voluntary Remediation Proposal (VRP) to the EPA which was accepted and forms an enforceable commitment under the Contaminated Land Management Act 1997. The VRP required:

- Installation of a barrier wall to prevent leachate/groundwater entering the Cooks River. Leachate was collected in a network of sumps and pipes to a leachate treatment plant for pre-treatment prior to discharge to sewer. Discharge to sewer is subject to the terms of a Trade Waste Agreement between Council and Sydney Water.
- Placement of a relatively impermeable cap over the landfill area to prevent exposure of waste and to prevent rainwater infiltration (which would increase the amount of leachate).
- Ongoing monitoring of leachate and groundwater quality to assess potential impacts on waterways.
- Ongoing monitoring of landfill gas (LFG) to ensure that any LFG does not migrate outside the landfill area as this would create a risk to public health.

The installation of infrastructure was completed between 2004 and 2006. Off-site migration of landfill gas was noted in the mid-2000s to be occurring through the north-western site boundary. Landfill gas has health and safety implications for neighbours. A passive interception and venting trench was installed along the impacted boundary to address this issue. The trench extends into Ikea's site.

An Environmental Management Plan (EMP) was developed for the Tempe Lands in 2006 to control future development and manage residual contamination. A formal Site Audit Statement was prepared in 2009 that documents the completeness of the voluntary remediation agreement and certifies the suitability of the area for various land uses, subject to the implementation of the EMP.

In addition, in its later years, the Tempe Tip was subject to the terms of an Environment Protection Licence issued by the EPA under the Protection of the Environment Operations Act 1997. This set out the requirements for operation of the tip. As with all landfills, once the tip closed, Council notified the EPA, who issued a conditional Surrender Notice for the Environment Protection Licence. In effect, the Surrender Notice sets additional ongoing requirements for management of the closed landfill.

EIS Inadequacies

There should have been more emphasis on the landfill gas issue, which is at least as significant as landfill leachate, and which could generate problems during and after construction. Concern is expressed that insufficient details have been provided regarding land fill gas management including:

- management of landfill gas at the site during and after construction;
- emergency procedures that will be put in place to prevent landfill gas migration during landfill excavation;

- emergency response procedures, in the case of land fill gas escape, in relation to adjacent residents and businesses.

Examples are:

Section 13.1.3 could have included:

- Interaction with landfill gas as a result of disturbance of the capping layer, leachate and gas management systems at the former Tempe landfill
- Release of landfill gas where construction activities such as piling and trenching intercept gas-bearing landfill materials or the landfill gas management system

Figure 13.5 (CSM) should have included landfill gas migration across the north-western boundary

Table 13.7 – should have rated the potential for ground disturbance to damage the gas collection system along the north-western boundary as at least moderate, if not high. Similarly, some types of piling have the potential to create pathways for gas migration, as discussed in the new edition of the ground gas guidelines. In Table 13.9, SC8 to CS14 are reasonable options, but the approach actually implemented will be subject to further review and detailed design and may differ substantially from what is listed.

Technical Working Paper 5: is very generic and provides little insight into site-specific detail and solutions.

Noting that, as landfills do not have consistent fill, it is common to find significant variation and “hot spots” throughout the landfill, and it is unlikely that all conditions have been identified. Many contamination issues including, but not limited to, the following should be addressed in greater detail:

- Soil:
 - Elevated concentrations of contaminants were encountered across the site at varying depths, in particular:
 - Hotspots of TRH, PAHs and heavy metals in fill materials were found to exceed relevant criteria
 - Low levels of PFAS compounds were detected in most soil samples tested. All PFAS concentrations were below the PFAS NEMP health criteria for recreational users and commercial workers
 - Potential asbestos containing materials were identified
- Groundwater:
 - Concentrations of ammonia and heavy metals exceeded assessment criteria
 - Low levels of hydrocarbons and PFAS were reported
- Landfill gas concentrations were recorded across the assessment area:
 - Maximum gas screening value recorded within the site falls into ‘characteristic gas situation 2’ low risk conditions (NSW EPA, 2012)
 - High concentrations of methane and carbon dioxide were detected
 - Ongoing operation of gas collection and leachate collection system during operation. The former landfill should be managed as one parcel and by one entity during and post construction, otherwise overlapping responsibilities may cause gaps in responsibilities and unintended consequences of pollution release. The current management proposal post construction appears to involve operational hand back to council, but retention of land title in part by RMS. This could cause conflict of

purpose and financial responsibility between operator and landholder. Consideration should be given to RMS to retain responsibility of the landfill.

- The OH&S and Environmental Management risks identified have identified potential risks and impact for the construction phase, controls are less certain, relying on venting, procedure & PPE in the main. Improved leachate removal and gas collection would be better controls in the first instance.
- The current management proposal for the construction phases assumes no harm to existing assets else if harm occurs it will be remedied as part of the project. Whilst practical in application, it would be better to assume disruption/harm to the landfill is unavoidable (though consequences manageable/controllable) and that the landfill will be further remediated as part of the works, in response to that unavoidable disruption. This should include commitments to:
 - Re-stabilise, re-grade and recap the landfill – apparent commitment made
 - Install new gas and leachate collection systems – apparent commitment made
 - Install improved/upgraded leachate treatment system – no apparent commitment
 - Install new gas management system — no apparent commitment identified
- Construction management of the landfill is focused on waste relocation, management/storage, and cap re-establishment:
 - Exposure and management of waste movement is described in accordance with regulation/law, with little detail on actual methodology
 - Protection of the landfill base is almost silent
 - Protection of the bentonite wall is restricted to taking care not to damage, but if it is damaged it will be fixed
 - Cap will be re-established but how cap penetrations will be plugged to eliminate the ingress pathway is unstated – the details should be expressed.
 - No remediation or contingency plans documented, except as broad concepts.
- The project relies on the bentonite wall with no detailed analysis of its functionality and ability to cope with the demands of the project:
 - Improved dewatering should be undertaken to reduce the risk of a breach during construction at least and there should be a contingency for improvement of the wall.
 - Its location and extent is not well surveyed (acknowledged by RMS) and impacts may not have been appropriately considered as a consequence;
 - The wall is at risk, because of its longitudinal construction, of being damaged or breached in multiple places by the proposed works, particularly Canal Bridge works and to a lesser extent finishing works such as bike and foot paths. This needs to be acknowledged more deeply and practical positive controls offered. Controls are documented, but they are more of a generic nature.
- Leachate volume control is the only apparent active control for leachate level management. Passive controls need to be stated with more detail/acknowledgment:
 - Whilst increased leachate generation is acknowledged as a consequence of opening the cap, increased gas generation due to increased waste mass moisture may need to be more fully considered and mitigated.

- Tighter controls on cap integrity during construction should be built into the construction plan, particularly monitoring and control of settlement and cracking due to new loadings and heavier construction traffic on the cap.
- Improved management of excavation penetrations for foundations should be stated, including wet weather covers, active pumping of excavations, inundated by rainfall etc.
- The leachate treatment system is not well documented. Whilst the EIS acknowledges that the current system will be operated at 450kL/day, there is no assessment as to its current operation/condition or future condition on hand back.
- The construction plan for the project does not appear to reasonably address the risks of and to the old landfill – construction techniques appear to be standard green-field site practices, without any special arrangements documented for construction activities and works over and in the old but still active landfill:
 - Road bridge foundations are shown to be piles to bedrock and this risks puncturing the restraining underlying clay that overlays the sandstone aquifer. The foundation details for the Tempe Landfill are essentially silent otherwise and it is unknown what special arrangements are being made to protect the integrity of the base of the landfill (albeit potentially inundated with groundwater already) or to deal with differential settlement as the land fill waste mass is loaded by the roadway foundations.
 - The foundation arrangements may well be different but if piling is relied on there is no assessment of how the groundwater will be protected from leachate release following piling through the clay layer to the underlying sandstone bedrock. The EIS only indicates management according to law with no demonstrated details or concept drawings/diagrams.
 - There is significant loading proposed over the top of the landfill for carparks, laydown areas etc and little detail as to the risk of inducing increased settlement, consequential cap failure, storm water ingress save statements that standard storm water and sediment and erosion control measures will be taken. The EIS acknowledges that the Tempe Landfill will require special treatment/measures to ensure containment of waste is managed and leachate disturbance minimized but does not provide any details as to how except for broad brush principles.
- Whilst the risk of landfill gas on hot works is acknowledged, the controls proposed are unarticulated.
- NSW EPA Environmental Guidelines: Solid waste landfills have not been referenced in the project outline, nor construction plan. It is referenced in the Technical Working Paper 16. The principles and control concepts for the portion of the project over the landfill should be informed by the principles and concepts for construction and post closure management of solid landfill in NSW. The statements made in the headline EIS do not appear to acknowledge this in the treatment/management of the landfill cap and bentonite wall during construction and beyond.
- The impacts are to be managed via a yet to be developed EMP under the CLM Act and a yet to be developed landfill management plan. The concept plans for both these should be developed now to inform the construction of the raised roadway, particularly its interaction with foundation geology, the waste mass and the bentonite wall. This could have significant implications, particularly with the Canal crossings – bridge abutment inaction with the bentonite wall.

- The location of the Bentonite wall respective to the proposed works is yet to be determined and this is to be left to detailed design. Whilst important at that stage, construction concepts are presently assuming there will be no conflict with the wall. It is likely that the bridge abutments will conflict with the wall and it will need to be either relocated or special construction arrangements made for the bridge foundations to avoid it. This increases risk of the containment system being breached and it would be prudent to assume the conflict and have construction plans drawn up that accommodate the wall from the start, rather than deal with it through redesign during detailed design. Impact risk and mitigation can be assessed now not latter along with the attendant construction costs.
- The post landfill management is being left to the development of a RAP latter in the project rather than assessing the critical elements now:
 - The cap re-establishment whilst stated is short on detail. The cap detail provided whilst generic appears to be a hybrid phytocap system, relying on deep vegetated mulch over a 200mm geo-synthetic clay layer. This latter layer would more typically be a composite layer of clay 500-1000mm thick with a geo-synthetic liner over and 200mm of top soil as growth medium for grass to protect against desiccation and erosion of the cap layer.
 - The reuse of the top of the landfill for large open essentially flat spaces increases the risk and likelihood of rainwater/storm water ingress.
 - The slope limit proposed of 4H:1V is unlikely to be achieved on the perimeter of the landfill and steep slope cap design will be needed to be considered in the main, rather than as an exception as indicated presently.
 - The sealing and drainage of the cap around the road foundations and the linear ancillary works foundations, such as the noise barrier that are to be constructed within the C&D landfill mass, is poorly described and delayed to detailed design. The concept design for the cap re-establishment and sealing against the point and linear cap penetrations should be developed as part of this EIS. There should also be a mitigation/management plan response to demonstrate that the cap can be reasonably and practically resealed to minimize future leachate generation volumes.
- There is very little detail provided on active management measures both during construction and post construction, save very general statements of intention. Detail including some basic contingency plans covering critical risks such as unintended breach of the Bentonite Wall, the unintended overtopping of the Bentonite Wall with Leachate, the damage and penetration of the underlying clay feature and contamination of ground water should be documented now and not left for detailed design. These plans will need to be adaptive and responsive to detailed design, with detailed design improving rather than formulating these control plans.

Council's leachate plant – The project will disturb the entire landfill site and system, resulting in significant changes to existing conditions, in both the short and longer terms. The Project will change the contamination risk profile by opening up a landfill that had been remediated by Council. Council should not be burdened with additional costs or EMP requirements beyond what it had before the Project. Further, the VRP is not still in place and has lapsed and so contrary to the EIS statements, TfNSW cannot rely on the VRP as it is not a party to the VRP and it has lapsed. The EIS implies that RMS will follow the requirements in the existing EMP, however these requirements are unlikely to have taken into account the types of risks that might arise as a result of the Gateway project.

The proponent is severing Council land from other land over which it had responsibilities to manage the remediated landfill. The proponent must ensure that those issues continue to be managed during the construction of the project and during operation, put Council in no worse a position because of such severance and road works.

Removal or reinstatement of contaminated materials - There does not appear to be any definitive statement regarding the volume of land fill to be excavated during construction, consequently it is not possible to determine how effective mitigation and remediation measures will be. In particular the number and nature of haulage movements from the site cannot be determined, nor can the site's ability to accommodate stockpiles awaiting transfer or reinstatement. Additionally, there is no reference apparent to interim management techniques carried out to ensure stockpiled landfill material will not impact on neighbouring residential properties and Tempe Lands (eg air, water and vermin).

The EIS identifies potential impacts on Tempe Tip but indicates that mitigation measures will be identified in management plans to be prepared at a later stage. Many of the risks are therefore currently unresolved. In addition, as specific mitigation measures have generally not been identified, they cannot be enforced by the State Government through project approval conditions.

As a general consideration all contaminated soil and materials must be disposed of off-site, failing this, much of the site contains contaminated soil and materials, and it is essential that all relevant safety measures be taken including safe removal of the soil, capping of any remaining soil and mitigation measures to ensure there are no impacts on groundwater or adjacent watercourses; and that land be left in a manner that is useful, accessible and low maintenance.

Risks That Require Management at Tempe Tip

Some of the potential risks associated with works at the former Tempe Tip are:

- Potential damage to the bentonite wall due to piling in the vicinity, and consequent potential release of contamination to Alexandra Canal
- Changes to the volume and nature of leachate through the treatment plant, and consequent potential challenges for compliance with the Trade Waste Agreement including after construction.
- Potential changes in the path of travel of contaminated groundwater due to excavation to the north-east of Tempe Tip, and consequent need for additional remedial infrastructure on additional boundaries
- Potential changes in the path of travel of landfill gas, and consequent need for additional remedial infrastructure
- Changes to leachate volumes and flow pathways due to the weight of the mounds, requiring changes in leachate collection system (or potential overtopping of the bentonite wall)
- Potential for works to draw significantly contaminated groundwater from the airport and other areas towards Council land and the broader LGA
- Land settlement due to groundwater drawdown and potential for structural damage to Council buildings, landfill infrastructure and residents
- Identification of new issues at Tempe Tip due to additional investigation
- Release of landfill gas and hazardous materials during excavation, and consequent health risks for the community

Robust Approval Conditions Are Required

All risk associated with construction activities and post-construction changes to the landfill infrastructure should belong to RMS/TfNSW. Council submits that there is no way of segregating Tempe Tip based on who has operational control of the surface. Any impact on RMS-managed land at Tempe Tip will also affect Council-managed land. Responsibility must therefore be assumed by RMS for the entire former landfill area, not just the part subject to excavation or other Gateway activities. Part of the landfill surface is managed by SACL and RMS will also need to assume responsibility for this area in order to properly manage landfill risk.

In particular conditions should be imposed in relation to the following:

- Council currently has responsibility for compliance with regulatory requirements relating to the former landfill, but **during construction** will have no ability to control whether these are met. Responsibility for compliance should be adopted by RMS/TfNSW for instruments such as:
 - Voluntary Remediation Agreement with EPA (current or updated) and associated Environmental Management Plan
 - Conditional Surrender Notice with EPA
 - Trade Waste Agreement between Council and Sydney Water
 - All obligations under environmental legislation such as the Protection of the Environment Operations Act 1997 and Contaminated Land Management Act 1997
- Any land handed back to Council should meet the following criteria under the conditions of approval:
 - Physical site investigation by RMS following construction (according to EPA requirements for investigation)
 - Development of a new Remediation Action Plan (RAP) by RMS
 - Review of the RAP by an independent Site Auditor (agreed by all parties)
 - Acceptance of the RAP by the EPA (and acknowledgement by Council)
 - Implementation of the RAP by RMS until such time as all requirements other than long term monitoring are complete and accepted by the Site Auditor and EPA
 - Handover to Council provided monitoring and management costs are not and will not go beyond those in the existing VMP
- Council's requested leachate plant conditions:
 - Results of the testing and reports on the impacts of the construction and operation of the future Sydney Gateway on the leachate management system to be provided to Council;
 - The proponent to operate the leachate treatment plant during construction and operation of the future Sydney Gateway particularly where it has emplaced contaminated fill in an elevated mound;
 - Detailed information including project planning, design and implementation for the treatment of the landfill and leachate treatment to be agreed by Council;
 - Council to be given access to all information regarding current conditions of the landfill and treatment system as well as testing of soil and excavated fill from the site for PFAS and other contaminants;
 - The Proponent to provide details regarding how long the project will run and the proposed management and maintenance for the contaminated spoil to avoid impact on residents and the local ecology from erosion (wind, water);

- If the leachate treatment plant is to be returned to Council it must be a functioning leachate treatment plant that meets the Sydney Water TWA criteria and water balance needs and RMS is to fund that maintenance and operation for at least 2 years to ensure that these objectives are being met. Any new leachate treatment plant that will be returned to Council on Council land must have appropriate and leading treatment technology / systems for ecologically sustainable treatment outcomes and associated infrastructure, including pits and pipework and provide a cost-effective solution. Otherwise, to the extent the leachate treatment plant is not on Council land, the proponent must ensure that Council will be able to access the infrastructure sufficient for it to continue to manage leachate and landfill gas on its residual land and other land over which it has obligations;
 - The proponent to investigate options and advise Council of alternatives that treat leachate without the treatment plant (passive treatment) that satisfies the requirement of Sydney Water and the EPA.
 - Additional information and assurances from the proponent that during construction the leachate plant will operate effectively (including for the benefit of land not owned or leased by RMS) and in accordance with all legislation, licenses and agreements;
 - Additional groundwater and gas monitoring during construction to avoid unexpected finds/ fill storage/ contamination/ gas leaks.
- Site audit statements are required regarding the suitability of land for use when returned to Council and considering adjacent contaminated land impacted by road works. Such site audit statements should not require implementation of an EMP any greater or more burdensome to Council than before the road works
 - The proponent to replace and create any necessary gas monitoring wells and access there to
 - Post completion dilapidation surveys to be conducted to confirm the integrity of the bentonite wall and other leachate collection and pumping systems underground
 - Post completion monitoring to confirm acceptability for at least 2 years for gas, leachate migration (for integrity of bentonite wall) and leachate treatment plant
 - As potential has been identified for leachate from the Tempe Tip to migrate to the new M5 due to drawdown impacts associated with the new M5, which in turn could increase groundwater levels in Tempe landfill; a condition should be imposed ensuring there is to be no increase in leachate migration, whether due to the Sydney Gateway Motorway Project, or because of cumulative impacts associated with new M5
 - Given the above, there should also be a condition that the proponent should carry out operational monitoring for at least 2 years, to confirm there are no ongoing impacts. This should not be the responsibility of Council (as proposed in the EIS) as any changes would not be the result of actions by Council
 - Council must not be responsible for increased management and maintenance costs resulting from the Project removing capping, exposing waste and changing the existing management measures and groundwater and surface water levels and controls. Any EMP prepared for long term management should have an objective not to increase the burden on Council and should be approved by Council.

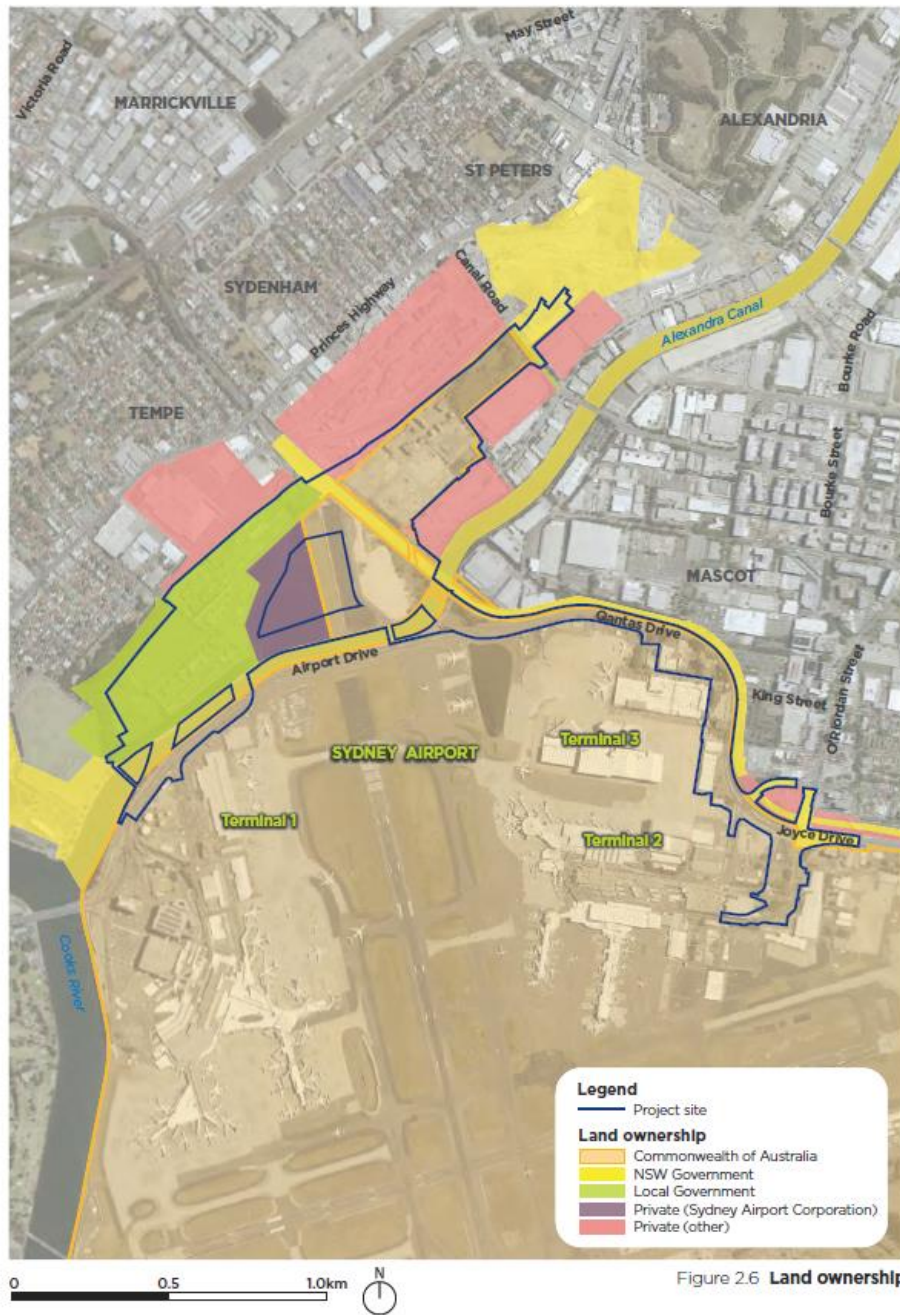


Figure 2.6 Land ownership

Figure 4__ – Land Ownership

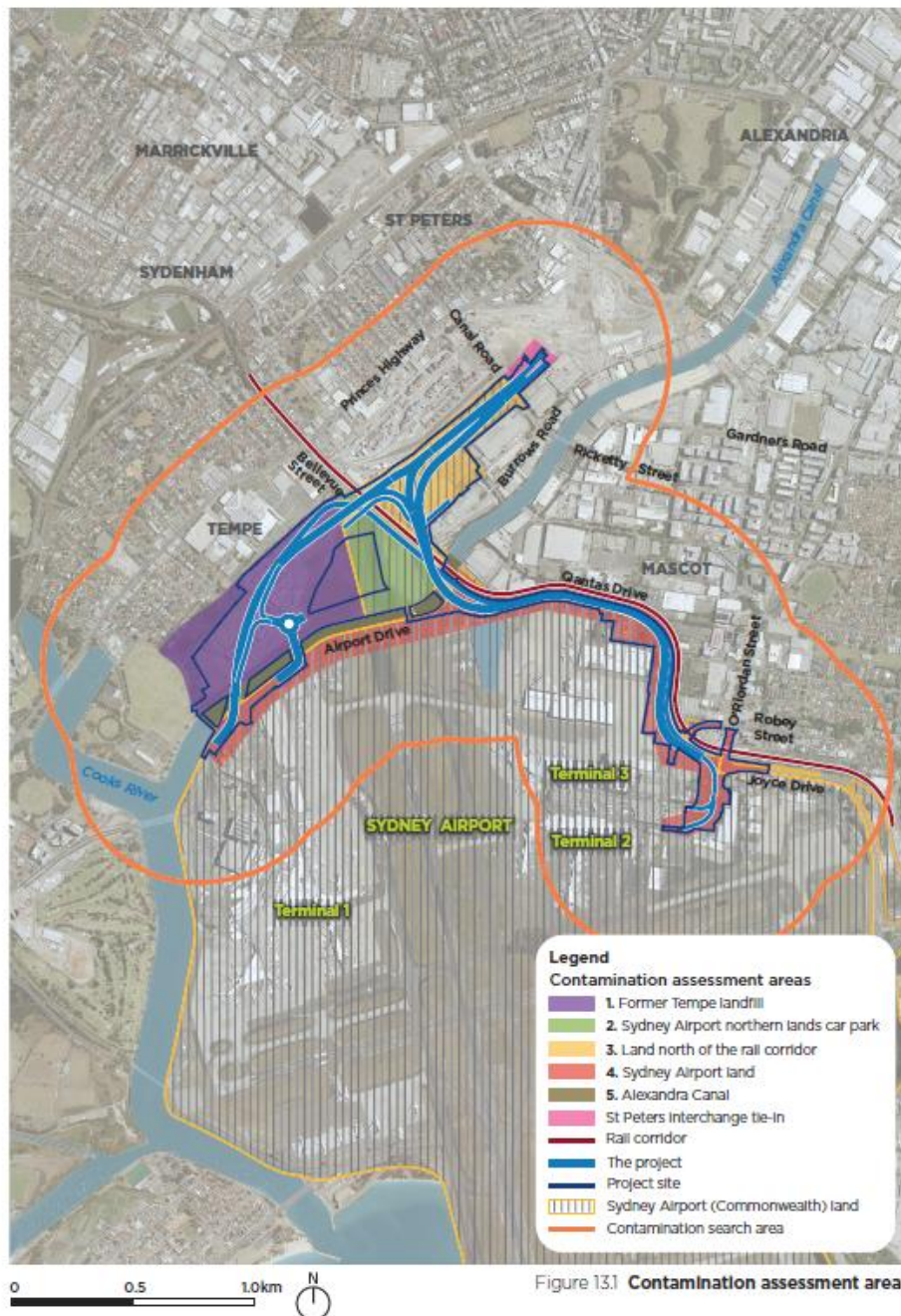


Figure 13.1 Contamination assessment areas

Figure 5 – Contamination assessment areas

REQUESTED ACTIONS:

Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council.

Additionally, Council seeks conditions of approval to confirm there will be no short, medium or long term contamination impact as per the above.

8 Flooding and Drainage

The following comments are raised with regard to potential flooding and drainage issues associated with the project:

- There is an absence of information regarding overland flow passing through the site from upstream properties, as noted in Council's Alexandra Canal Flood Study (WMA, 2017).

Noting that the EIS does not include this study as a reference document, nor is the City of Sydney Alexandra Canal Catchment Flood Study (Cardno, 2014) or the Flood Risk Management Plan (Cardno, 2014) referred to. Concern is expressed that unless the information in these documents and models has been used potential exists for significant gaps in the EIS's examination peak flood levels within the catchment area.

- There appears to be a discrepancy between the EIS and Council's Alexandra Canal Flood Study (which identifies land within the proposed Sydney Gateway site as subject to overland flows within the container yard, within the lands adjacent to the new airport northern parking lot, and within the industrial lands adjacent to the Port Botany rail line). Clarification is sought regarding the level of affectation of properties associated with and adjacent to the project.
- In relation to the impact of works, the EIS notes that there are no conditions for flooding under the Major Development Plan and seeks to limit flooding to 20-50mm impacts. This is larger than considered acceptable in other similar projects (eg WestConnex and Sydney Metro). These projects were required to demonstrate no increase greater than 10mm in areas already affected by flooding and an increase no greater than 50mm in areas without over floor flooding. Consequently the 20-50mm limit is considered inappropriate and it is requested that this be revised to reflect the "no greater than 10 mm" limit.
- Further analysis is required to demonstrate that overland flows from the areas upstream of the site, within Inner West Council, are not being blocked, redirected, or otherwise increased in depth or hazard.

REQUESTED ACTION:

Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council.

9 Surface water

Due to the changing environment created by the Project Council raises the following concerns regarding surface water:

- It is essential to consider the potential for contaminated water to reach Tempe Wetlands;
- BBWQIP targets must be met, as per Marrickville DCP. In order to achieve this consideration should be given to additional water treatment measures such as biofilter swales, wetlands and rain gardens;
- Stormwater quality targets should address pollutant loads and minimising stormwater runoff volume and velocity, through additional measures such as biofilter swales, rain gardens and wetlands.
- Council should be consulted on detailed design related to stormwater quality and quantity, and the Construction Soil and Water Management Plan;
- Consult with IWC on mitigation measures through CEMP and detailed design;
- Council requests extensive use of WSUD which incorporates green infrastructure;
- Full-time water quality monitoring should be introduced to ensure all impacts on the Cooks River and Tempe Wetlands are controlled;
- Council should be consulted on all proposed treatment solutions as no reduced water quality through pollutants acceptable, particularly considering Council and the Community's aspirations (see Cooks River Alliance, The Cooks River People's Plan, Strategic Plan 2018-2021) for our waterways to have improved water quality and ultimately be swimmable.

REQUESTED ACTION:

Prior to approval of the Project all the concerns raised in the section above should be addressed to the satisfaction of Council.

10 Residual Land

The permanent land requirements of the project impacts Council owned land and ceases the operation of Council's depot and land leased by Council to Tyne Container Services and Tempe Golf Range and Academy. Council notes residual land not required as part of the project's operational footprint, may be available for other uses. It should also be noted that Council will not be responsible for cessation of the lease with Tyne, as this cessation will be a consequence of the Project the proponent must undertake to negotiate cessation of this lease.

Any remaining land that was previously owned by Council should be fully returned and delivered to Council at no cost and should be delivered in a form that is both usable and viable to Council, without delay (to minimise any periods of vacancy).

All residual land delivered should be suitably treated to accommodate open space, industrial and other relevant uses, as determined through consultation with Council and it should be unburdened by contamination and the need for further maintenance and excavation works (ie. removal of fill).

Council also raise concerns with the potential isolation of residual land pockets, as shown in the EIS and requests that all residual land should be made readily accessible.

This is of particular concern with the proposed closure of Swamp Road, as this will mean that parts of adjacent residual land will only be accessible through use of the Sydney Gateway Motorway, with poor connections to the local street network. Such isolated access would severely limit the potential to accommodate uses such as a new Council Depot or other employment or industrial uses.

Concern is expressed that the proposed alignment will create a series of isolated pockets of residual land. It is essential that any residual land be readily accessible both for access by users and Council maintenance teams. Council requires future investment lands to replace the loss of the associated investment lands, to continue to support Council's sustainability.

Additionally, Council will not accept responsibility for land which cannot be adequately accessed for maintenance or safely accessed by the community. It is also considered essential that the usability and sustainability of residual lands be considered noting elements such as access, soil contamination, aircraft noise and Sydney Airport's prescribed Obstacle Limitation Surface (OLS) constraints. Further, no residual land should be returned at a height (AMSL) greater than its original height or so high that it prohibits development due to the OLS or hydraulic wind effect on the runaway. Residual lands should also be of a gradient suitable for its proposed future uses.

Specific concern is expressed regarding access to the largest pocket of residual land (access via the Link road extension). While the Project provides a roundabout for access to residual lands, via the new Link Road extension, this access is circuitous and restrictive. Should this land, or a part of it, be used as a Council material depot access from the site to southern sections of the Inner West LGA (particularly Tempe, Sydenham, Marrickville, St Peters, Newtown) would be extremely difficult. Concern is expressed that this, the most usable pocket of residual land will have very limited access to the Inner West and as such will be of only limited use.

It should also be noted that any changes to the Reduced Level (RL) (eg. in the form of mounding or similar) of any property is likely to alter the potential usability of the location. This

alteration may be in relation to the Sydney Airport OLS limiting the size of structures, structures altering the dynamic flow of wind across the runway and aircraft noise levels.

REQUESTED ACTIONS:

- Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council.
- Additionally, the following key points should be specifically addressed:
 - Residual land must be adequately remediated and be in useable condition prior to being handed back to Council.
 - Residual land must be well integrated with the local road network and not be isolated;
 - Condition is to be placed on any consent requiring RMS to engage with Council and collaborate on the future use of residual land in accordance with Council's priorities.

11 Heritage Impacts

Careful consideration should be given to indigenous and post-colonial heritage aspects of the area, particularly in relation to Cooks River and Alexandra Canal. Council and the Community should be consulted extensively, and a Heritage Management Plan prepared to guide future activities and minimise the Project's impacts.

REQUESTED ACTION:

A detailed Heritage Management Plan should be prepared in consultation with all adjacent Councils, the local community and arboriculture experts/advisor.

12 Additional considerations

- Council land that is now not adjoining a road, Alexandra Canal or other Council land containing infrastructure that that land relies on should be given easement rights for stormwater and access rights to and across public roads.
- In planning and managing this Project consideration must be given to the:
 - Recreation Study (Inner West Council 2018) and Recreation Strategy currently under development;
 - Tempe Reserve Masterplan which is currently being developed by Council;
 - Cooks River Alliance Management Plan;
 - Biodiversity Strategy (Marrickville Council).
- Figure 6.1 of Technical Working Paper 8 indicates drainage outlets and swales on either side of the road, which could be on Council land. This infrastructure should be on Project land and Council should be granted easement rights to allow it to drain over the road where it has interfered with the flow regime.
- Any stormwater measures e.g. swales and noise barrier structures should be on RMS land and not returned to Council.
- Port Botany and Cooks River Intermodal Freight Terminal Access - The Sydney Gateway Motorway Project does not appear to include the provision for a Cooks River Intermodal freight access ramp. The absence of this access is critical to the future 'Place' planning for the town centres of Mascot, Wolli Creek and the emerging 'growth centre' of Arncliffe that line the Princes Highway.

Council requests that a link be provided to the Cooks River Intermodal Freight Terminal provided with a dedicated Canal Road (or equivalent) motorway on/off-ramp;

- Geotechnical issues in the EIS are of a very generalised nature which is of concern as the proposal involves excavating and building on top of a former landfill site. This very generalised review makes it very difficult for Council to assess the impacts on and arising from the project. Council notes the following based on the information available:
 - It seems likely that TNSW will be constructing most of the road at a lower level than the existing levels although this is not confirmed and is left open. One cross section shows the road with batter slopes of about 20 degrees. If the road batters extend up to the boundary with a development site where the surface will be loaded, such as by containers or structures, the stability of the batter slopes may be weak such that it is possible RMS will dictate that no loads can be placed within a certain distance of the crest of the batter. The plans contained within the EIS do not sufficiently indicate this potential restriction or where the crest will be in relation to site boundaries. Conditions should be imposed preventing such a consequence on the future development of adjoining land.
 - There is no definitive solution proposed to deal with settlement, but one option seems to be building a heavily reinforced soil structure to help bridge uneven settlements that may occur in future. RMS should be obliged to refine the design and confirm that the road and associated infrastructure can cope with the settlement without substantial maintenance costs.
 - Various options have been proposed for the location of future fill mounds that are proposed to store excavated fill on site. Any increase in load on the surface of the fill will initiate a new cycle of consolidation settlement that will take many years to complete. Council requests that no mounds be placed on land to be returned to Council. Furthermore, Council considers that any mounds placed adjacent to Council land will further limit potential future uses of the land because the zone of influence of settlement will extend a significant distance laterally from the edge of the loaded area. This needs to be investigated as part of the impact assessment and no limitations should be placed on Council land.

REQUESTED ACTION:

Prior to approval of the Project all of the concerns raised in the section above should be addressed to the satisfaction of Council.

Should you have any questions regarding this submission please contact Council's Strategic Transport Planner, Ken Welsh, on (02) 9392 5731.

Yours sincerely



Elizabeth Richardson
Chief Operating Officer, Director Development and Recreation