

LETTER

Transport Engineering

REF: N165280

DATE: 18 October 2019

APP

Level 7, 116 Miller Street
NORTH SYDNEY NSW 2060

Attention: Ms Laura Goodall

Dear Laura,

RE: ROYAL HALL OF INDUSTRIES, MOORE PARK – RESPONSE TO SUBMISSIONS

A State Significant Development (SSD) application has been submitted for the proposed adaptive re-use of the Royal Hall of Industries (RHI) for a high-performance sport and community facility. The development will maintain the structural integrity and façade of the RHI, whilst re-purposing the interior of the building to support a number of compatible uses and utilise the space effectively. GTA Consultants (GTA) completed a transport assessment dated 5 May 2019 to support the SSD application.

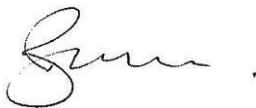
Subsequent to the SSD application being lodged, stakeholders have requested additional information in relation to several aspects related to traffic and transport. This letter has been prepared to specifically provide a response to submissions in this regard. The relevant stakeholder submissions are reproduced in Attachment 1 together with relevant detailed responses.

Transport for NSW provided commentary post receipt of the response to submission, with it agreed that Sydney Swans would consult with Moore Park Events Operations Group (MEOG) when planning for events to be held at the RHI.

Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

GTA CONSULTANTS



Rhys Hazell
Director

encl.

Attachment 1 – Response to Submissions

ATTACHMENT 1

Response to Submissions

Centennial Park and Moore Park Trust comments

Comment 1: The Shared Use of Driver Avenue

The Moore Park Master Plan 2040 calls for the management of Driver Avenue during event days as a primarily pedestrian space. Day-to-day access and parking requirements of the proposal for RHI must not preclude this important objective.

GTA response: This comment is noted and agreed. Vehicle access to the site is proposed via Errol Flynn Boulevard, with some use of the Entertainment Quarter multi-storey car park expected. This ensures Driver Avenue is able to be retained as the primary pedestrian space on event days.

Sydney Swans headquarters is currently located in the Basil Sellers Centre (part of the SCG) and staff surveys indicate that the majority of staff that drive to work currently park in the Entertainment Quarter multi-storey car park. While some of this activity will continue following the relocation, it is also important to note that current staff parking incentives (permanent company funded parking) will soon be removed. This will further incentivise staff to change their day-to-day travel mode with an expected shift away from the single occupant private car. This is further strengthened by the imminent commencement of Sydney light rail services.

Comment 2: Construction Vehicle Management

To maintain ongoing operational capacity in Moore Park, the Trust is concerned for cumulative impacts resulting from a number of major construction projects in the precinct, and expects Driver Avenue will not be used for staging vehicles waiting to access the construction site. All construction vehicles should be accommodated within a defined construction works zone and not overflow into Driver Avenue or surrounding streets and roads.

This matter appears to be addressed in the Environmental Construction Management Plan, but the Trust seeks clarification that no construction vehicle marshalling or vehicle holding will occur in Driver Avenue.

GTA response: This comment is noted and agreed. In support of the Environmental, Construction and Management Plan prepared by Douglas Partners (dated May 2018), queuing or marshalling of construction vehicles will not be permitted on the surrounding road network, including on Driver Avenue. Appropriate scheduling of deliveries will be in place as part of construction vehicle activity and approach/ departure routes. Construction vehicle arrivals will be managed appropriately.

City of Sydney comments

Comment 3: Transport and Access

The Transport Assessment Report, prepared by GTA Consultants, includes traffic modelling that confirms that Lang Road/Driver Avenue and the Lang Road/Errol Flynn Boulevard intersections will perform at an acceptable Level of Service (LOS B) for the proposed development. LOS B means that the traffic signals, roundabouts, give way and stop signs would be good with acceptable delays and spare capacity.

Notwithstanding the above, the Green Travel Plan (GTP) contained in the Transport Assessment Report does not demonstrate targets to reduce private vehicle use to access the site. The proponent is reasonably expected to clearly demonstrate their efforts to encourage a behavioural shift in staff, players and visitors travelling to the site to use more sustainable transport modes as opposed to private vehicles necessitating car parking on the site.

The City requires an annual performance report to be submitted for 5 years as a minimum as well as details of the bicycle parking and end of journey facilities layout to be provided in the GTP. These details are lacking and the monitoring of the GTP is unclear. As a requirement in the SEARs, the proposal must include the measures to promote sustainable travel choices for employees and visitors through the implementation of a location-specific travel plan and provision of end of journey facilities. The proposal does not adequately address these requirements.

GTA response: SEARs 9627 defined the need to identify measures to promote sustainable travel choices for staff and visitors. The transport assessment included as part of the SSDA (GTA, 8 May 2019) included details necessary to cover an overview GTP (in Section 8.2). A final and detailed GTP will naturally be developed and agreed prior to issue of an occupation Certificate.

A location-specific travel plan will be prepared prior to occupation with a range of measures available to promote sustainable travel choices for all users. The most important of these relates to staff travel mode especially given historical and current staff parking incentives (namely permanent company funded parking). It is understood that this staff benefit will soon be removed, thus inevitably incentivising staff to change their day-to-day travel mode. This is further strengthened by the imminent commencement of Sydney light rail services. In combination, an initial 5-year plan could be to implement a travel mode target of 60 per cent by private vehicle. Based on the existing staff travel mode share, this would result in a 30 per cent shift to sustainable travel modes (public transport, walking and cycling).

Other location-specific measures may include:

Action	Implementation
Implementation	
Identify a staff member to complete travel coordinator duties in this plan for up to one year at a time	At year of opening
Provide a welcome pack for each staff when relocating to the new premises and for new staff member. This includes a Travel Access Guide (TAG) and information on how to become involved in a staff car-pool system	At year of opening and with each new staff
Cycling	
Establish an internal Bicycle Users Group (BUG). BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	At year of opening with regular check-ins
Develop a 'bike buddy' scheme for inexperienced cyclists	At year of opening
Organise a breakfast for cyclists to incentivise staff to cycle as well as promoting cycling	Once a month
Review bicycle parking regularly to meet peak needs, upgrade as required	Regularly, annually or biannually
Provide bicycle parking for visitors	At year of opening
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	At year of opening
Review condition of existing bicycle routes regularly and upgrade as required	Regularly, annually or biannually
Supply a workplace toolkit consisting of puncture repair equipment, a bike pump, a spare lock and lights	At year of opening with regular review
Provide an on-site bicycle maintenance service (either as a special one-day event or on a regular basis)	Annually or biannually
Produce a map showing more leisurely bicycle routes to work	At year of opening, as part of TAG
Participate in annual events such as 'Ride to Work Day'	Annually
Walking	
Implementation	

Action	Implementation
Identify employees living near work that may be interested in walking to work	At year of opening and as part of regular updates to the GTP
Produce a map showing safe walking routes to and from your site showing times rather than distances, to local facilities, such as shops and public transport stops	At year of opening as part of Travel Access Guide (TAG)
Have branded umbrellas available in the office for rainy days	At year of opening
Review condition of existing footpaths onsite regularly and upgrade as required	At year of opening and regularly as part of updates to the GTP
Take part in 'National Walk to Work Day'	Every year
Introduce new staff to end of trip facilities as part of their induction	Every time a new staff member begins
Cycling	
Develop a map showing public transport routes to work	At year of opening, as part of TAG
Put up a notice board with leaflets and maps showing the main public transport routes to and from work	At year of opening, as part of TAG
Place information on the work intranet with links to appropriate external websites e.g. transportnsw.info	At year of opening
Provide leaflets or timetables with electronic payslips	At year of opening
Carpooling and car parking	
Remove company funded parking scheme to limit incentive to drive to work	At year of opening
Introduce formal carpooling scheme to encourage staff to share rides	At year of opening
Set up a carpooling database that is updated regularly and used to inform staff	At year of opening
Organise postcode lunches to familiarise staff with each other	At year of opening
Identify priority users of on-site parking (e.g. people with disabilities and car-poolers)	At year of opening

Overall, the applicant is committed to implementing a range of measures to promote sustainable travel choices for all users and for this to be monitored over time as part of a GTP.

South Eastern Sydney Local Health District (SESLHD) comments

Comment 4: [7.4 Transport and Accessibility – page 65](#)

SESLHD commends the consideration of the NSW Planning Guidelines for Walking and Cycling in your proposal. SESLHD stresses the importance of supporting pedestrians and walkers to the venue by providing comprehensive wayfinding in line with Walking Sydney Strategy and Action Plan. The strategy encourages legible consistent and easily understood signage. Walking is linked to lower incidences of poor mental health and may help alleviate stress and anxiety related disorders.

GTA response: This comment is noted. Legible signage is provided within the broader Moore Park precinct and will be delivered in collaboration with the CSELR, whilst the immediate site supports walking as a viable mode of transport through legible footpaths and lighting.

Comment 5: 7.5.2 Parking – page 66

SESLHD would recommend the allocation of drop off parking spaces for people with a disability and as recommended in the Disability Access Report/Access Impact Statement (Appendix Y), the allocation of at least one accessible car parking space and one accessible bicycle parking space. This will enable equity of access to the facility. Despite the results of the Staff Travel Survey, the facility is in an area open to an extended number of visitors during special events.

GTA response: The site is in close proximity to many accessible parking spaces provided as part of the Entertainment Quarter precinct. This includes within the multi-deck car park opposite the site. Accessible parking is also typically required as a proportion of all on-site parking (usually at the rate of one space for every 50 parking spaces as per the BCA). However, recognising the sites location and importance to provide convenience for all users, provision of one accessible parking space will be accommodated on-site. This will reduce the on-site angled parking provision by one space given the need to provide a shared area (with bollard) in accordance with AS2890.6:2009. A further parking space has been removed to allow an 8.8 metre medium rigid vehicle to enter and exit the site (this is an Ausgrid access requirement). This has resulted in a reduction in the on-site parking supply from 11 spaces to nine spaces.

These spaces will be restricted during major special events through the use of removable bollards, as discussed further in response to Comment 6. Bicycle parking is provided within rails adjacent to the building and façade for use by visitors. With the end rails remaining open and free of obstruction, there is adequate available space for any such accessible bicycle parking demand. Separate rails are provided adjacent to the NSW Swifts structure for use by staff.

TfNSW comments

Comment 6: Passenger Pick Up and Drop Off and Event Traffic and Transport Coordination

The Transport Assessment report prepared to support the development application states the following:

- *Approximately 350 children will visit the proposed facility between January and October (Monday to Thursday) to train;*
- *Special events at the site could include club night events for staff and players such as awards nights and club anniversaries; and*
- *Some minor set-down/ pick-up activity can be accommodated on-site (under prior agreement) or on-street on Driver Avenue and Errol Flynn Boulevard. Game day scenarios would not be expected to materially change as a result of the proposed development.*

It is not clear how passenger pick up and drop off associated with the proposed development would be accommodated and what the subsequent impact to the traffic and transport network would be, including during simultaneous events within the Moore Park Precinct when traffic arrangements surrounding the site are altered.

It is also advised that the applicant needs to consult with the Moore Park Events Operations Group (MEOG) which TfNSW is part of, when planning special events at the development site to ensure that the traffic and transport arrangements for an event at the site and those of simultaneous events within the Moore Park Precinct are coordinated.

It is requested that as part of the Response to Submissions, the applicant provide the following:

- *Details of the proposed passenger pick up and drop off arrangements for the proposed development, including point to point transport, kiss and ride and coaches and how the operation of the facilities would be managed; and*
- *Details of measures to mitigate traffic impacts on a typical weekday and weekend (event day) with consideration of simultaneous events within the Moore Park Precinct.*

It is also requested that the applicant be conditioned to consult with the MEOG when planning special events at the site to ensure that the traffic and transport arrangements for an event at the site and those of simultaneous events within the Moore Park Precinct are coordinated (see Attachment A for details).

GTA response: The Transport Assessment (GTA, 8 May 2019) included details on the intended operation of the site. This included quantifying the known travel mode for Swans Academy children. Given that the primary function is to accommodate the Sydney Swans and NSW Swifts head office and day-to-day staffing requirements, formal set-down/ pick-up facilities are not essential.

During Swans Academy periods when up to 100 children will access the site to train and learn, some level of on-site set-down/ pick-up activity is expected. As detailed in the Transport Assessment, approximately 40 per cent of Swans Academy children travel to site by private vehicle, with a resultant moderate demand. Use of the area at these times will be managed by Swans Academy staff to ensure the area operates safely and efficiently. Alternatively, children would also be dropped off in the adjacent multi-storey car park, with pedestrian connections already provided between the multi-storey car park and the site to ensure safe crossing of Errol Flynn Boulevard.

Travel by coach is also not common given the wide catchment of Swans Academy children across NSW. With the site access able to accommodate vehicles up to 8.8 metres long, minibuses (such as Toyota Coaster or similar) will be able to access the site, set-down or pick-up passengers and depart the site. In the rare event that larger coaches require access, use of the designated bus zones on Errol Flynn Boulevard opposite the site will be required.

For general day-to-day (including visitors to the Blood Bank) drop-off/ pick-up activity will not generally require on-site management. Planned events will be managed by Swans staff as required, and in consultation with MEOG. For major events in the Moore Park precinct, public access to the site will be banned and enforced by removable bollards. If required, authorised vehicle access would be permitted under prior agreement and managed by Swans staff and/ or traffic control as part of the broader Entertainment Quarter major event measures. Visitors to the precinct arriving by car would continue to use the surrounding available public parking, including the multi-storey car park. This is consistent with existing conditions.

The proposal is not expected to generate new trips on major event days with visitors already in the precinct having travelled there on game days etc. The only new trips will be associated with new Swans and NSW Swifts staff however given the removal of allocated staff parking in the multi-deck car park, only minor demand is expected. Staff will be instructed to avoid (where feasible) travel by private car on game days. This detail will form part of the GTP.

The precinct has been designed for and long accommodated a significant influx of people on game days (for both the Sydney Cricket Ground and former Sydney Football Stadium), with special event management measures in place at such times. Overall, additional trips associated with the site will be negligible and unlikely to occur during peak event periods.

The Applicant will liaise with Moore Park Events Operations Group (MPEOG) when planning special events on-site. This could include club night events for staff and players such as awards nights and club anniversaries.

While these events will be limited in size, no overlap with major events will occur and a commitment made to implement specific management measures to limit impacts on the surrounding precinct should this be required following consultation with MPEOG. This is likely to include formal set-down/pick-up arrangements on-site and management vehicle arrival and departure to avoid impacts on the surrounding road network.

Comment 7: Proposed Vehicle Exit on Errol Flynn Boulevard

The Environmental Impact Statement (EIS) prepared to support the development application states the following:

- *The proposed development includes the retention of the existing driveway entrance and inclusion of an additional vehicle exit on Errol Flynn Boulevard; and*
- *This arrangement would allow for the provision of a new one-way loading and parking zone along the eastern boundary of the site, including 11 angled car spaces for operational requirements and visitor spaces.*

It is advised that during some events within the Moore Park Precinct, the traffic arrangements on Errol Flynn Boulevard are altered to allow passenger pick up and drop along the western kerb of the roadway. It is not clear how the operation of the proposed one-way zone and additional vehicle exit would impact the event traffic arrangements.

TfNSW requests that as part of the Response to Submissions, the applicant investigates if the operation of the proposed one-way loading and parking zone along the eastern boundary of the site and additional vehicle exit would have any impacts to the event related altered traffic arrangements on Errol Flynn Boulevard and provide details of measures to mitigate any impacts.

GTA response: There is on-site capacity for approximately 13 vehicles to queue without affecting Errol Flynn Boulevard. With the exit driveway proposed at the northern end of the site, north of the multi-deck car park access, exit movements will be relatively unconstrained. In addition, during major event periods, site access will be restricted to authorised vehicles only through the use of removable bollards, thus minimising any such impact on existing major event traffic management measures in the area.

Comment 8: Loading Facilities

The EIS states that the proposed development includes a single loading bay suitable of accommodating small rigid vehicles up to 6.4 metres in length while the Transport Assessment report states that the loading bay would be suitable for all vehicles up to 6.8 metres. Nevertheless, the proposed loading bay size might limit future servicing of the site.

The EIS also states that the swept path analysis for service vehicles is contained within the Transport Assessment however it is not evident that such information has been included.

Notwithstanding the need to clarify the discrepancy between the two documents; an assessment of the size of vehicles likely to access the loading bay should be undertaken as part of the Response to Submissions with consideration of the future loading demand in relation to the proposed sport and community facilities.

Swept path analysis for service vehicle access should also be included in the Response to Submissions.

GTA response: Sydney Swans has advised that the largest size vehicle that currently services the Sydney Swans Headquarters is a 6.8 metre Volkswagen Crafter Runner. A swept path assessment has been

completed which confirms this vehicle is able to manoeuvre in and out of the site, including the loading dock.

Ausgrid also requires access to the site by vehicles up to 8.8 metre medium rigid trucks. These swept paths have been completed and the design modified to ensure all vehicles are able to enter and exit the site via Errol Flynn Boulevard in a forward direction. This also ensures seven to eight metre long minibuses will be able to access the site, if required.

Comment 9: Green Travel Plan

The EIS states the following:

- *A survey of Sydney Swans staff to determine modes of travel to work identified that 78% of staff travel to the site via private vehicle, utilising parking in the surrounding streets and the Entertainment Quarter car park; and*
- *Provision of drop off facilities and coach parking is not required on the site as players and visitors are expected to travel to the site individually in private motor vehicles, consistent with the existing travel arrangements as identified in the Staff Travel Survey.*

It is also noted that the Transport Assessment report includes an overview of a Green Travel Plan and states that the plan would seek the following:

- *Advise staff and visitors on the wider travel choices available to them and encourage use of sustainable travel modes; and*
- *Aim to reduce congestion on the surrounding road network by causing mode shift from private vehicles or encourage higher vehicle occupancy to reduce private vehicle trips.*

It is requested that the applicant be conditioned to prepare a Green Travel (see Attachment A for details) for TfNSW's endorsement.

GTA response: This comment is noted and agreed. The response to comment 3 above is also relevant in this regard.

Comment 10: Active Transport

It is noted that the proposed development involves the permanent removal of the fence along the Errol Flynn Boulevard frontage of the site and that this may alter the way pedestrians and cyclists circulate through the precinct within the vicinity of the site.

It is advised that measures should be taken to ensure that pedestrian safety is considered in this regard, including around the proposed one-way loading and parking zone and potential waste collection activities on the internal road (not internal loading bay).

Further, limited information has been provided in the Transport Assessment report regarding bicycle parking and end of trip facilities.

It is requested that the applicant:

- *Review and provide clarification in the Response to Submissions on how pedestrian and cyclist safety would be considered; and*
- *Ensure that any bicycle parking facilities should be located either within the development or close to it, to support and encourage active transport access to the site.*

GTA response: the site access arrangement and one-way circulation have been well designed and all users considered as part of design development. While the boundary fences are proposed to be removed, landscaping and designated footpaths will ensure pedestrians remain on the identified paths of travel. The building itself in this area does also not promote easy through access by pedestrians, hence pedestrians will likely remain on the periphery and as part of the generous public domain immediately to the north. The one-way circulation of the access also reduces the complexity of traffic movements through the site with manoeuvring vehicles afforded high visibility to pedestrians generally. The site access driveways ensure existing and new structure do not inhibit sightlines to pedestrians in any locations, including when vehicles exit the site to Errol Flynn Boulevard.

Section 6.1 of the Transport Assessment report (GTA, 08/05/19) calculates the bicycle parking requirements based on Green Star Design and As Built v1.2 guidelines as 22 spaces for staff and six spaces visitors. The development plans indicate a total of 16 bicycle racks on the eastern side of the building, suitable of accommodating up to 32 bicycles which meets the green star guidelines. Other existing facilities within the broader Entertainment Quarter precinct would also be available should there be any unexpected 'spikes' in demand. The GTP will also monitor use over time to ensure appropriate provision.

Comment 12: Construction Pedestrian and Traffic Management Plan

The construction activities of the proposed development could conflict with the Sydney Football Stadium and Sydney Light Rail project construction activities and there is a need to ensure that construction activities do not impact general traffic and bus operations, as well as the safety of pedestrians and cyclists particularly during commuter peak periods and during event days.

It is requested that the applicant be conditioned to prepare a Construction Pedestrian and Traffic Management Plan (see Attachment A for details) for TfNSW's endorsement.

TfNSW requests that the applicant consults with the Sydney Coordination Office within TfNSW in relation to the above issues. TfNSW would be pleased to consider any further material forwarded from the applicant.

GTA response: This comment is noted and agreed.

Saving Moore Park Inc. comments

Comment 13: Transport and access

We are concerned that the proposal makes no genuine effort to minimise the impact on the demand for parking and traffic flows in the surrounding streets.

While potential measures and initiatives are identified (a so-called Green Travel Plan) that might encourage more sustainable travel modes, the assessment's lame conclusion – that it's difficult to predict what measures might be achievable – suggests little will change, except that car numbers will grow. 78% of staff drive to work (more than twice the existing mode share to the surrounding Moore Park area). Staff numbers are expected to rise so that daily parking demand will rise from 120 to 225 spaces. This is despite the fact that the area is well serviced by buses and, before long, by light rail. The proposed development includes provision for 11 on-site parking spaces – most of the rest will use the EQ carpark.

The impact on traffic flows looks to be understated. Turning left from Driver Avenue into Lang Road and left or right from Errol Flynn Drive into Lang Road is already tortuous, with quick light changes and lengthy delays. The extra car numbers will aggravate this situation.

These considerations underline why a much stronger Green Travel Plan is required with clear target outcomes, and with the Swans required to report annually on progress against these targets.

GTA response: These comments are noted. In this regard, reference to the responses to comment 1 and comment 3 is relevant. Most importantly, the applicant is committed to removing company funded staff parking in the multi-deck car park. This will further incentivise staff to change their day-to-day travel mode with an expected shift away from the single occupant private car. This is further strengthened by the imminent commencement of Sydney light rail services.

SIDRA modelling has been completed to understand the impacts on typical weekday peak periods. While some congestion is recognised in the area, including along Lang Road, the modelling confirms that the proposal will present a nominal impact to overall traffic conditions in the immediate vicinity. An overall intersection LOS B represents an acceptable level of intersection operation. Further, with the removal of the staff parking incentive, it is expected that proportional travel by private vehicle will reduce, further limiting the traffic related impacts associated with the proposal.