19 December 2019

Ms Belinda Scott
Planning Officer
Department of Planning, Industry & Environment
320 Pitt Street
SYDNEY NSW 2000

Dear Ms Scott,

RE SUBMISSION TO SYDNEY GATEWAY ROAD PROJECT SSI-9737

1. INTRODUCTION

This submission has been prepared on behalf of Qantas Airways Limited including related bodies corporate of Qantas (**Qantas**) in relation to the State Significant Infrastructure Application (**SSIA**) and preliminary draft Major Development Plan (**MDP**) for the Sydney Gateway Road Project (**Gateway Project**) submitted by Roads and Maritime Services (**RMS**) now known as Transport for NSW (**TfNSW**) and Sydney Airport Corporation Limited (**SACL**).

This submission identifies the potential implications of the Project for Qantas' facilities and operations following an initial review of the combined Environmental Impact Statement (**EIS**) and preliminary draft Major Development Plan (**MDP**) and supporting Technical Working Papers (**TWP**). Qantas is continuing to review the documentation and intends to provide a further submission to the MDP by 21 February 2020. A separate submission has been submitted to the Department of Planning, Industry and Environment (**DPIE**) in relation to the impact of the Gateway Project on the existing and new Qantas Flight Training Centre.

Qantas supports the Government's investment in road and rail infrastructure to improve connectivity at Sydney Airport – Qantas' global hub. However, serious consideration must be given to Qantas' business and operational continuity during the construction and operation of the Gateway Project.

It is our expectation that Civil Aviation Safety Authority (**CASA**) will review the EIS/MDP from a regulatory perspective, and that many of the items raised in this submission will likely be addressed or resolved in that forum. As such Qantas requests full engagement with this process and oversight of the outcomes of this review.

The purpose of this submission is to:

- Reinforce the critical importance of ensuring that the Gateway Project does not impact on Qantas' whole of business operation and performance;
- Highlight the potential wider economic impacts as a result of the Gateway Project's impact on Qantas and its ability to service its passengers and other customers' needs, should appropriate mitigation measures not be in place to control and manage impacts;

- Detail Qantas' position in respect of potential impacts from the Gateway Project such that Qantas' interests are best protected in any approval granted for the Gateway Project; and
- Identify areas where additional information is required by Qantas to consider the potential impact from the Gateway Project on Qantas' interests.

This submission should be read in conjunction with the Traffic Engineers Advice prepared by Colston Budd Rogers & Kafes (**CBRK**) and provided at **Attachment A**.

2. BACKGROUND

Sydney Airport is Australia's biggest airport in terms of passengers and frequencies, The Qantas Group via its airlines Qantas and Jetstar operate regional, domestic and international passenger and freight services.

In FY19 the Qantas Group carried 22.5 million passengers through Sydney and on average will operate 3,100 flights to/from Sydney Airport each week in FY20.

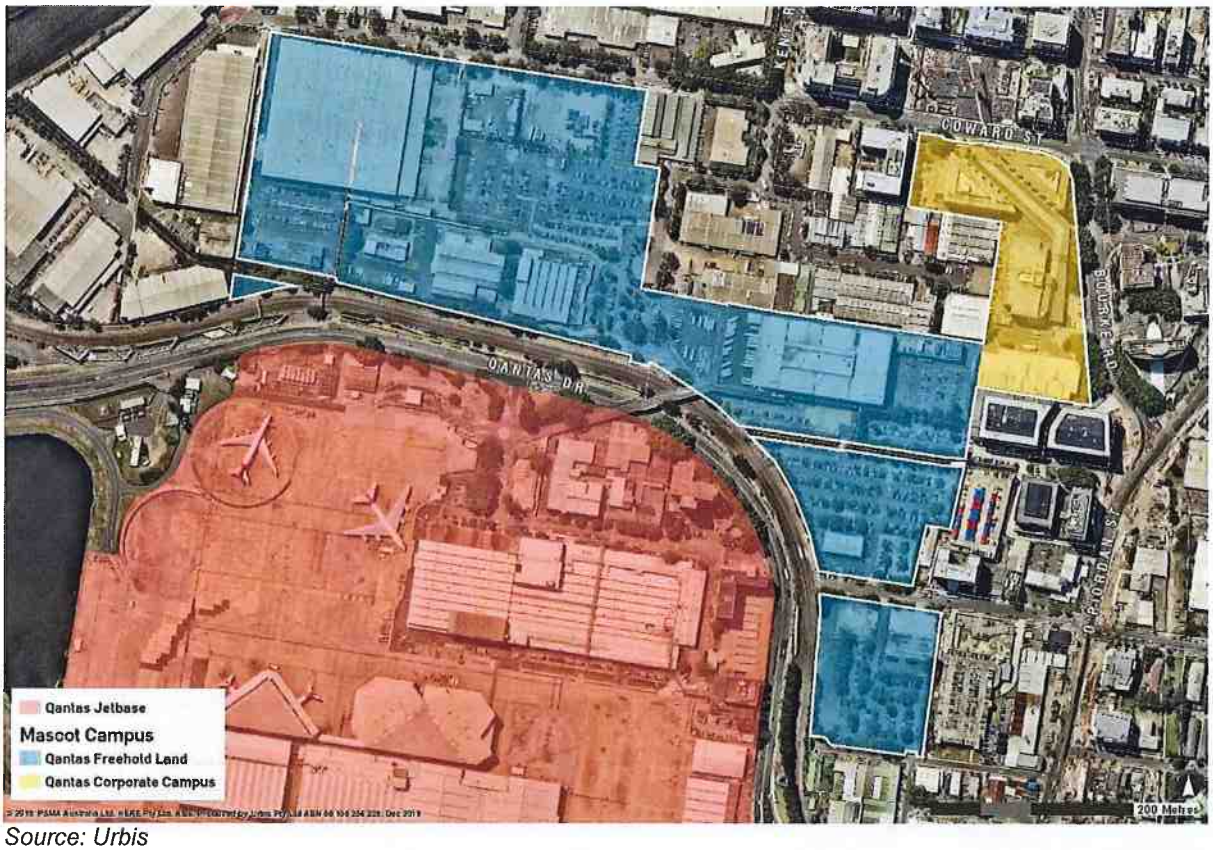
The Qantas Group's annual direct contribution to the NSW economy is $3.06 billion, whilst its total annual contribution (direct and indirect) to the NSW economy is $5.01billion. The Qantas Group's direct contributions to the NSW economy is in the form of spending and purchasing within NSW, a significant proportion of which is conducted at Sydney Airport. The Qantas Group's indirect contributions relate to the economic value facilitated by the services delivered.

The Qantas Group makes a significant contribution to employment in NSW accounting for 10,467 direct full-time equivalent (**FTE**) jobs and an additional 12,593 indirect FTE jobs.

Any grounding of Qantas' fleet due to the Gateway Project will represent a real and significant negative impact to both the NSW and national economy.

Qantas maintains freehold title to over 16.5 hectares of land to the north of the Airport. This is in addition to significant leases within the Airport and Mascot area more broadly that support our operations. All of Qantas' Mascot (non-airside) land and offices is collectively referred to as the Mascot Campus (see **Figure 1**). Qantas notes that it is not feasible for it to move its operations from the Airport, so its operations must always be considered regardless of whether it has formal leases in place.

Figure 1 - Qantas' Mascot Campus



Source: Urbis

3. REVIEW OF SSI-9737 AND IMPLICATIONS FOR QANTAS

Having reviewed the combined EIS/MDP and supporting Technical Reports, the potential key issues and impacts for Qantas' whole of company operations and performance are:

a) Stakeholder consultation;

b) Airport and business operations;

c) Traffic impacts;

d) Noise and vibration impacts; and

e) Contamination.

These matters are discussed in more detail below, and we also identify when impacts arise during and after construction, or both.

STAKEHOLDER CONSULTATION

Section 4 of the EIS outlines the stakeholder consultation that was undertaken prior to and during the preparation of the SSIA/MDP. In relation to Qantas, the EIS specifies the following issues raised by Qantas:

- *"Construction impacts, particularly increases in congestion creating potential delays for cabin crew and operations getting to/from and moving between terminals.*
- *Impacts to existing facilities along Qantas Drive and Qantas Flight Training Centre.*
- *Changes to traffic conditions at Lancastrian Road including removal of right turns into/out of the Jet Base, will create confusion and more congestion.*

In our view, the above list does not accurately cover, and materially understates, the critical issues to Qantas' operational capability as discussed in more detail in **Section 3.2** of this submission.

Given the potential wider impacts should Qantas' operational capability be impacted, it is requested that the following measures be implemented through the EIS and approval process for the SSIA/MDP:

a) Condition of consent requiring SACL/TfNSW to engage directly with Qantas on our needs and requirements to ensure that the protection of Qantas' interests is given the highest priority at every level.

b) Condition of consent requiring SACL/TfNSW to protect Qantas' operational capability at all times during construction and operation including but not limited to the acoustic framework as it relates to the existing and new Flight Training Centre dealt with under separate cover.

AIRPORT AND BUSINESS OPERATIONS

It is evident from a review of TWP 3 – Airport Operations and TWP 12 – Business Impact Assessment, that consideration of Qantas and its operations are largely limited to impacts on its facilities including Qantas Freight and the Qantas Flight Training Centre (the latter is addressed under a separate submission). There appears to be limited (if any) consideration given to the impact to Qantas' aircraft movements, noting that the Qantas Group is currently responsible for over 50% of the air traffic into and out of the Airport (both domestic and international). The potential grounding of Qantas and its subsidiary airlines' fleets would have a significant impact on the national economy across a broad range of sectors including: tourism and other business including professional services, finance, freight and logistics.

Qantas Group is continuing to review the EIS documentation, however the following discussion highlights the key impacts to Qantas' airport and business operations. We have also identified key issues where further information is required so Qantas as well as the Department can understand the impacts and mitigations proposed by the Department and the Proponents.

Impacts to Qantas During Construction of Gateway Project

Interference with safe landing and take-off operations

Based on the exhibited documentation, Qantas has identified the following potential impacts to landing and take-off operations during construction of the Gateway Project:

a) Impacts on the Obstacle Limitation Space (**OLS**) are addressed in Section 11.3.1, which states:
"Construction activities involving the use of tall plant and equipment (such as piling rigs used to construct piles and cranes used to lift bridge segments) would likely result in temporary intrusions into the OLS. Where possible, construction would be undertaken in a manner that avoids such intrusions from occurring; however, some intrusions would be unavoidable. …It is proposed to undertake such works during Sydney Airport's curfew (ie between 23:00 and 06:00), staged over a number of nights. While some flights still occur during the curfew hours, there are significantly fewer flights. In addition, during these hours, flights typically arrive from

and depart to the south to minimise impacts on residential areas. This arrangement means that the project is unlikely to impact aviation operations during the curfew hours."

Whilst the above assessment acknowledges that some flights occur during curfew hours, there is limited information to understand how the works will be managed to ensure there is no restriction to Qantas' permitted operations during the curfew including:

- Qantas Freight movements;
- International passenger movements during the curfew shoulder period (23:00-00:00 and 05:00-06:00); and
- Aircraft movements where a Curfew Dispensation has been granted by the Federal Minister for Infrastructure, Transport and Regional Development.

Qantas is seeking clarity on the impact to runway movements by the construction of the Gateway Project and if there will be any restrictions during curfew hours for the flying operations identified above. A communication protocol is required as a mitigation measure to ensure construction works do not prevent aircraft movements especially those that have been granted a dispensation during the curfew. We expect this matter will be assessed by CASA and request to be consulted during the process and informed of the outcome.

b) Section 3.3.1 of TWP 3 – Airport Operations states that a *"3D model of the OLS and HIAL protected surfaces was received from Sydney Airport Corporation and was used to check against all permanent project infrastructure. The same surfaces were also used to identify locations where temporary intrusion by construction plant could occur."* We expect that CASA will wish to examine the model, as such, Qantas requests a copy of the 3D model be made publicly available to consider and verify the potential intrusions into the OLS.

c) Whilst it is acknowledged that construction work affecting approaches to Runway 16R will be undertaken during the Airport's curfew, with cranes and other tall plant and equipment lowered during the day, Qantas is seeking to understand what contingencies will be in place in the event that a crane or other such plant and equipment becomes 'stuck' in the elevated position. Qantas experienced a situation of this nature earlier this year in San Francisco. This situation would not only prevent aircraft from using Runway 16R (Sydney's primary runway for large aircraft) but would also:

- Limit the payload and range of aircraft if Runways 34R and 34L are required for take-off. This would be a particular issue for Qantas' long-range payload capability, with higher take-off weight resulting in more fuel required and consequential passenger offloads required. The additional thrust required to achieve maximum take-off weight for departures on the shorter runways could lead to deterioration of the specific fuel consumption of the engine.
- Limit aircraft movements until problem resolved.

In order to limit any potential adverse impact on or limitation of Qantas's operations, Qantas recommends that the following contingency plan is required for the Gateway Project:

1. A pre-determined alternative aircraft landing zone (displaced threshold) for situations where the full length of runway is not available due to the Gateway project.
2. The ability to mark the temporary displaced threshold with 'v-bars' in accordance with MOS Part 139.
3. Provision of a temporary visual approach slope indicator (i.e. PAPI) to the displaced threshold.

Qantas acknowledges that in addition to this being a commercial matter, however we expect that CASA will seek to be involved in the creation of any contingency plans to ensure safety and compliance with all relevant regulation and legislation.

Protection of Communication and Navigational Aids

As highlighted in Section 4.5 of TWP 3 – Airport Operations, the *"communications, navigation and surveillance infrastructure and facilities at Sydney Airport enable pilot navigation, instrument approach procedures, communication between pilots and air traffic control and monitoring of aircraft locations by air traffic control."*

There is insufficient information to assess whether consultation with Air Services Australia (**ASA**) has identified any major issues in relation to communication and navigational aids, noting Section 5.5 of TWP states that *"Assessment by Airservices Australia would be required to confirm extent of infringements."*

Given Qantas is responsible for over 50% of the air traffic at the Airport, it is necessary that Qantas is also consulted to understand potential impacts on communication and navigation aids for its aircraft and that potential impacts will be managed and mitigated so as to not affect operations.

It is also suggested that arrangements with ASA and Qantas should be agreed and consistent regarding impacts on and communications regarding navigation aids.

Construction Management Practices

Qantas requests clear and timely communication and consultation from TfNSW and SACL on the staging of work, Method of Works Plans, Aeronautical Information Circular and Aeronautical Information Package Supplements where applicable, with a focus on impact to aviation operations. We expect that CASA will be involved in the preparation of the aforementioned documentation, and we request to be informed of the outcome.

It is noted that this was not Qantas' previous experience with the Airport East Road Upgrades conducted by TfNSW in March 2017. In this instance, Qantas received second-hand advice from Sydney Airport of construction works commencing on the same day that involved runway closures. This affected Qantas' operations as an A380 had to land on runway 16L due to a pavement failure on runway 16R. Runway 16L is to be used by A380 aircraft in extraordinary circumstances only. In addition, runway 07/25 was not available as construction works had already commenced without communication and pre-dated the expected runway closure that had been planned and communicated.

Further, Qantas considers that the Construction Environmental Management Plan (**CEMP**) should include requirements around safety during high wind, such as tethering or securing items to prevent negative impacts on airport operations. The CEMP must also include details on how works (including excavation and construction) will not impact on Qantas operations and staff. This includes but is not limited to managing wind generated dust from stockpiles/pits and the management of foreign object debris at worksites.

For example, during runway construction works at Brisbane Airport, a water tank was dislodged and carried by high winds which damaged two aircraft. This resulted in one aircraft being offline for over 150 days as the required repairs were made. This sort of significant imposts must be avoided at all costs.

Impacts to Qantas Following Operation and Completion of Gateway Project

Windshear and Turbulence

We expect this matter will be assessed by CASA and request to be consulted and informed of the outcome. Having regard to the assessment of windshear and turbulence, Qantas outlines the following key issues associated with the operation of the Gateway Project:

a) Section 7.10 of the EIS indicates that the Gateway Project would involve the re-emplacement of a portion of the excavated waste material in the form of mounds, located as follows:

- One mound is proposed in the area bounded by the Terminal 1 connection, the freight terminal access and the western side of Alexandra Canal; and
- Two options are being considered for the location of another mound – either north of the freight terminal access or west of the Terminal 1 connection.

Qantas understands that the preferred location, heights, shapes, landscaping and future uses for the emplacement mounds would be subject to detailed design and consultation with SACL, aviation stakeholders and relevant Australian, NSW and local government agencies. It is requested that Qantas be consulted as a stakeholder for the purposes of developing the design and location of the mounds.

b) In relation to the effects of windshear and turbulence on aircraft as a result of the emplacement mounds, the following comments are made in relation to the assessment.
TWP3 Section 6.4.2 states *"The road infrastructure and final landforms (including the mounds) would be reviewed and refined during detailed design to* (amongst other things)*:*

- *Address aviation matters according to the "as low as reasonably practicable" principle"*

To be true to this principle, modelling of the mounds/roadway should be considered against a 'clean' environment with no shipping containers, not against the already less than ideal situation with stacked shipping containers located adjacent to the approach path.

As indicated in the Wind Tunnel Tests Report that accompanies TWP 3, operating requirements at the Airport limit a gust cross-wind component to 20kt before it is necessary to close a runway. Given that current aircraft have the capacity to operate at 40kt crosswinds, the design of the Gateway Project, including the emplacement mounds and roadway, must not restrict future potential operating capacities. It should be noted that proposals are currently being developed to increase the cross-wind tolerance above the 20kt value.

In addition to this, there are occasions where currently the crosswind component is higher than the 20 knots (**kt**) for both the main runway and the cross runway. This would occur when the wind direction was diagonal to the direction of both runways (around 211° True North) and based on capability of current aircraft (40kt for B738/B787) could land in windspeeds of up to 58kt. We are seeking clarification of whether these factors have been included in the assessment

It is critically important that the Gateway Project does not impose new limitations on the current and future operations of the Airport. Any runway on the Airport should continue to be able to operate to allow the maximum capabilities of all aircraft.

c) Qantas has commissioned its own assessment of wind directions, which has determined that wind directions in the vicinity of the Airport have changed in the past 12 months. It is requested that the Project Team review the modelling of turbulence and windshear based on the findings of Qantas' assessment.

Distraction of Pilots by Headlights

Section 6.3 of TWP3 – Airport Operations highlights that *"Light glare from vehicle headlights has the potential to distract or confuse pilots as they are arriving at Sydney Airport."* The assessment goes on to state that a risk assessment by CASA and SACL is necessary to determine the required shielding to diffuse the headlight glare. This assessment is required prior to determination of the SSIA/MDP so that impacts and mitigation is quantified. Qantas requests a copy of this risk assessment to understand the potential risk for its pilots.

Management of Wildlife During Construction and Following Completion of Gateway Project

Qantas has concerns with regards to the potential management of wildlife associated with the construction and operation of the Gateway Project:

a) Section 5.1 of TWP 3 – Airport Operations highlights that the temporary site drainage measures and excavation and re-emplacement of waste from the former Tempe landfill may attract additional birds to the area. The Gateway Project proposes to minimise wildlife attraction and potential incidents of bird strike through the implementation of measures as part of a CEMP and states:

   "Provided there is no failure to implement such practices, the risk of attracting wildlife is considered small and manageable. A measure should also be implemented to routinely monitor birds visiting these areas and consult with Sydney Airport Corporation regarding any necessary harassment measures to ensure swift management of any issues."

   It is unclear based on the limited information available what these measures are and if they will be sufficient to avoid the risk of increasing bird strike to aircraft.

b) The disruption to local flora and fauna may lead to displaced fauna and insects, such as wasps and microbats, finding new homes in pitot tubes of aircraft and other equipment. The documentation does not appear to have addressed these potential impacts or identify suitable mitigation measures to avoid these risks.

Qantas therefore requests sufficient information regarding the mitigation measures to understand the potential risk for its operations. We expect this matter will be assessed by CASA and request to be informed of the outcome.

Impacts to Freight Operations During Construction and Following Completion of Gateway Project

In order to understand the potential impacts of the Gateway Project on Qantas Freight, the following information is required to be prepared and made available to Qantas:

a) Defined turning circles for multi-combination and heavy-combination vehicles. It is noted that the road design should incorporate a view to improve environmental benefits and efficiencies through increased use of multi-combination vehicles in the future.

b) Details of weight and height limits that will apply to the new freight bridge over Alexandra Canal. In addition, Qantas requests confirmation if the freight terminal access will support B-double trucks.

c) TfNSW modelling to support peak hour demand for the freight terminal precinct and details as to how the new road network will support this demand.

d) The possible segregation of freight/heavy vehicles from passenger and other vehicles (such as dedicated lanes or transit lanes) to increase throughput of time sensitive commodities.

e) Table 6.1 of TWP 12 – Business Impact Assessment identifies that the parking configuration and number of car spaces available for the Qantas Freight facility will be altered during construction and nine car spaces will be permanently removed following completion of the Gateway Project. Ongoing consultation with Qantas is required to ensure that suitable replacement parking for employees and customers is made available.

Potential traffic impacts on Qantas' freight operations are discussed in Section 3.3 of this submission.

Impacts to Jetbase Operations During Construction and Following Completion of Gateway Project

To ensure Qantas' key operations in the Jetbase are able to continue then dust, noise and vibration during construction must not disrupt those operations. The potential impacts to the Jetbase as a result of the construct Gateway Project are outlined as follows:

a) The Jetbase includes layover and operational parking for Qantas Group aircraft in close proximity to the buildings to be demolished along Qantas Drive. Section 5.4 of TWP 3 – Airport Operations recognises that *"During construction there is a risk of excessive dust production from spoil handling associated with large scale earthworks."* Impacts associated with dust or smoke generation are limited to visibility and safety issues. The assessment has not considered the potential implications for operation and ongoing maintenance costs if dust, dirt or foreign object debris (**FOD**) settles on aircraft or the airports hardstand (tarmac) areas. Noting that this is the primary location worldwide where we are able to wash our aircraft.

b) Section 5.6 of TWP 3 – Airport Operations states: *"The project encroaches into the Qantas Jet Base and several buildings are to be removed to accommodate the project. These include administration buildings and Building 167 which was formerly used for air cargo (but is now vacant). No aircraft movement areas would be impacted by the project."*

   Further details of the construction footprint surrounding the buildings to be demolished, including the location of the proposed shipping containers, is required to demonstrate that the Project will not impact on aircraft movement areas or roads used to service operational aircraft by passenger access buses.

   It should be noted that there is a technical error in the EIS; Building 167 is not vacant as it is currently used by Qantas Link. Any proposed change to Building 167 will require consultation between Qantas and TfNSW/SACL to agree on a suitable relocation plan and timeline.

c) The Qantas buildings on the Jetbase that are proposed to be demolished provide a noise buffer so that the Qantas Link turboprops do not affect residents and other businesses in the surrounding area. If after building demolition a replacement noise buffer is required, Qantas' and the airline community should not be expected to pay for this measure and it must be fit for purpose to protect both on and off airport users.

d) It is unclear from TWP 2 – Noise and Vibration, what impact the placement of the shipping containers along Qantas Drive will have in terms of noise reverberating off the containers into Qantas' aircraft hangers.

e) Apron lighting is attached to a number of the buildings to be demolished. It is unclear where the new lighting will be installed to ensure regulatory requirements are met. These details are required prior to determination of the SSIA/MDP. We expect this matter will be assessed by CASA and request to be consulted with, and informed of the outcome.

Additional Financial Costs to Qantas During Construction

The Gateway Project has the potential to result in a number of financial implications for Qantas including:

a) Increased maintenance costs associated with keeping aircraft clean of construction related debris;
b) Increased costs related to extended travel times associated with getting staff to and from the airport; and
c) Delayed or cancelled flights due to tech and cabin crew being unable to access airport terminals as a result of construction related congestion.

It is unreasonable if these costs are incurred by or imposed on Qantas because of the Gateway Project. Further consultation is required to determine if any of these costs will arise and how Qantas will be compensated.

TRAFFIC IMPACTS

The potential traffic impacts to Qantas' operations as a result of the Gateway Project are outlined below and in the Traffic Advice from CBRK (**Attachment A**).

The Benefits of the Gateway Project Must be Demonstrated

Given the increased motor vehicle traffic from WestConnex that will be introduced to an already congested Airport and Ports precinct, Qantas expects that there is traffic modelling that demonstrates that the solution being proposed will improve traffic conditions around the Airport and Ports, rather than cause them to deteriorate further. This should be demonstrated.

Qantas has been advised that the scope of the Project is limited, so the ground transport impacts to Robey Street and Link Road are not known. The airline community must not be expected to fund ground transport problems that have not been considered by, and arise from, the Gateway Project.

The Gateway Project must not limit the future development of the Airport, in particular the co-location of international and domestic operations and future terminal expansion. Similarly, the development of Qantas' freehold land must not be limited by the Gateway Project.

Traffic Modelling

Having reviewed the data provided in TWP 1 – Transport, Traffic and Access, Qantas has identified the following key issues for the operation of the Gateway Project:

a) It is difficult to reconcile the travel times under the different scenarios as these are referenced against the 2022 baseline and not the 2018 data. It is also difficult to reconcile level of service (LoS) data for the different scenarios as these are spread across different tables. Using just one example however, Robey Street/O'Riordan Street currently performs at LoS B with an average delay of 26 seconds. During scenario 3 this intersection decreased to LoS F with 109 second delay (increase of over 400%). The EIS needs to be amended for clarity and consistency, to ensure that the actual impact is quantified and appropriate mitigation measures are proposed and conditioned.

b) The EIS and TWP 1 are deficient in the following respects:

- It is not clear what aviation growth assumptions were used for the traffic modelling. Did the modelling assume that 2 million domestic passengers would relocate to Western Sydney Airport as per Sydney Airports Master Plan?
- Does the modelled traffic volumes assume the co-location of International and Domestic services has occurred in the T2/T3 precinct?
- Average weekday volumes were used however, heavy traffic around the Airport is also currently experienced on Sundays. In addition, fewer trains operate on Sundays so may not be a suitable alternative. The construction scheduling needs to take this into consideration.
- It is unclear what assumptions are being made with the use of the new M5 which opens in 2020. What happens if this traffic shift doesn't occur?

Impact to Surrounding Intersections

Having reviewed the data provided in TWP 1 – Transport, Traffic and Access, Qantas is concerned that the Gateway Project will negatively impact the operation of surrounding intersections and does not propose to mitigate this impact.

The EIS indicates that once the Project is completed the intersections of O'Riordan Street/Joyce Drive, Qantas Drive/Seventh Street, O'Riordan Street/Robey Street and O'Riordan Street/King Street would operate at level of service (LoS) F (unsatisfactory, requiring additional capacity) during one or both weekday peak periods in 2026; and during one or both weekday peak periods in 2036.

The advice from CBRK (refer **Attachment A**) indicates that the poor operation of these intersections would affect access to and from the Qantas facilities. As noted above, it would result in permanently longer travel distances and travel times for a number of staff and vehicles associated with Qantas' operations.

This is unacceptable and the Gateway Project needs to be revised to include measures to improve the operation of the intersections of O'Riordan Street/Joyce Drive, Qantas Drive/Seventh Street, O'Riordan Street/Robey Street and O'Riordan Street/King Street in order to mitigate the impacts of the Project.

Furthermore the intersection of Coward Street/Bourke Street will go from a LoS F with an average delay in the AM peak of 78 seconds to LoS F with an average delay in the AM peak of 180 seconds in 2036 'with project' or a -48% change. The Qantas Group relies on the road network surrounding the Mascot Campus for the movement of staff, passengers and goods. Any impact to the quality of the road network will have a negative impact on Qantas' operations. This intersection already provides safety issues for our staff and further traffic is likely to make things worse. A key objective of the Gateway Project is to *"improve the liveability of Mascot town centre by reducing congestion and heavy vehicle movements on the local road network."* We question how this objective will be achieved if all of the surrounding intersections are forecast to degrade.

Increased Congestion During Construction of Gateway Project

Qantas is very concerned about the operational implications of increased travel times as a result of congestion during the construction phase of the Gateway Project. Key issues are outlined as follows:

a) The EIS indicates that two vehicle lanes in each direction along Qantas Drive will be available during operating hours of the Airport. This fails to acknowledge that both employees and customers travel to the Airport prior to the terminal opening hours and therefore two vehicle lanes (in each direction) must be made available from at least 4am. This is reflected in Figure 9.8 of TWP 1 – Transport, Traffic and Access, which identifies that traffic volumes begin to rise steeply from 4am, due to operation of the Airport. Construction traffic associated with the Project must not overlap with the airport peak and commuter peak.

b) The EIS identifies that the majority of construction will be undertaken during curfew hours. However, Qantas' key operations such as catering and aircraft maintenance is undertaken 24 hours a day for seven days of the week. In addition, the peak time for freight is in the lead up to the Airport curfew commencing. Qantas therefore requests that the Gateway Project construction program and changes to access and transport accommodate this.

c) Increased traffic delays as a result of the construction congestion may have a negative impact on Qantas employees that commute from the south, south-west and west of Sydney. The mitigation strategies proposed will require careful consideration, discussion and approval from Qantas to ensure their appropriateness.

d) Restrictions on access and egress to Link Road (or alternative locations during the Gateway Project) will need to be considered for both customers and employees to ensure there is no adverse disruption to Qantas' freight operations.

e) Simply advising staff and customers to 'leave more time' to access the Airport is not an appropriate mitigation measure as evidenced by the severe traffic congestion associated with the Airport East Project, involving the intersection upgrades at O'Riordan Street, Sir Reginald Ansett Drive and Joyce Drive. Qantas therefore requests a condition of consent requiring TfNSW and SACL to consult with relevant stakeholders, including Qantas, to ensure lane closures and restrictions to airport access are avoided during peak travel periods.

f) The EIS should be amended to identify opportunities for new public transport measures are considered, such as new bus services, shuttle buses from Mascot Railway Station and waiving the Sydney Airport station access fee to support increased train patronage.

Cumulative Impacts from the Construction of Botany Rail Duplication

The cumulative impacts from the concurrent construction of the Botany Rail Duplication and Gateway Project has not been adequately addressed. There is no detail or discussion of mitigation measures proposed to ensure that the Airport is still able to fulfil its core function of transporting freight and passengers during the construction period.

Qantas requests that a condition of consent is imposed requiring SACL/TfNSW to engage directly with Qantas during the preparation of the traffic management strategy to ensure that the protection of Qantas' operation and interests are given the highest priority at every level.

Access Between Qantas' Freehold Land and the Airport Must be Maintained During Construction and Following Completion of Gateway Project

Qantas has many significant parts of its operations that rely on access between its freehold land and the Airport. This includes its catering operations, engineering maintenance and crew transfers. Therefore, access from the Qantas freehold land to the Airport must be maintained and the following access routes must not be impacted by any Gateway Project solution:

- The Qantas Catering Bridge from Qantas freehold land to the Jetbase on Airport; and
- Access from Qantas Drive at Lancastrian Road to Qantas' freehold land.

Qantas Catering Bridge

It is requested that the EIS is amended to assess and confirm that there will be no impact to the existing operations of the Qantas Catering Bridge (including the pedestrian bridge suspended underneath it).

Should the Qantas Catering Bridge be accidentally damaged and rendered unsafe during construction of the Gateway Project, Qantas may not be able to effectively operate. It is unclear what mitigation measures have been proposed to minimise risk of damage to the Qantas Catering Bridge during construction.

Qantas requests a condition of consent that prohibits TfNSW/SACL from undertaking any actions or works that would impact the accessibility and usability of the Qantas Catering Bridge, without prior written consent from Qantas to ensure that the protection of Qantas' interests is given the highest priority at every level.

Change to Qantas Drive / Lancastrian Road Intersection

Qantas has many significant parts of its operations that rely on access between its freehold land and the Airport. The Qantas Drive/Lancastrian Road intersection is a critical access point used for crew transfers and must be maintained.

Qantas understands that the Gateway Project would include the removal of the existing traffic signals at the intersection of Qantas Drive/Lancastrian Road. As a result, access which facilitate left in/left out and right in/right out turning movements by virtue of the signalised intersection.

Qantas objects to the removal of the existing traffic signals at the intersection of Qantas Drive/Lancastrian Road as they are critical for facilitating Qantas' time-critical operations that rely on efficient access to and from the Airport and Mascot Campus.

Qantas requests further information and assessment of the impact that the changes to the Lancastrian Road/Qantas Drive intersection will have on broader traffic flow to/from the Qantas Mascot Campus. This is to include SIDRA models clearly showing that SSD_10154 as approved has been factored into all modelling, and demonstrating how changes to this intersection will impact Qantas' entire operationsShould the Gateway Project still propose to close this intersection, this must not occur before a suitable alternative is provided to manage Qantas' access requirements as agreed by Qantas and must not occur during the construction of Qantas' new Flight Training Centre.

Construction Traffic Management

Section 5.3 of the TWP 2 - Transport, Traffic and Access outlines the indicative construction traffic management for the Project. It is anticipated that the Project would be delivered in phases where traffic would be diverted onto new sections of road at the end of each phase. The EIS states that: *"During all phases, two traffic lanes would generally be maintained along Airport Drive, Qantas Drive and Joyce Avenue (as per existing conditions) during the Sydney Airport terminals operating hours."*

Notwithstanding this, short-term lane and carriageway closures are proposed to facilitate (amongst other things), modifying the Lancastrian Road/Qantas Drive intersection. Whilst these short-term closures are expected to be undertaken during night-time hours as far as possible, there is the potential for these closures to restrict access to the Jetbase and Qantas Catering Bridge.

It is expected that construction traffic will be using existing Airport roads. It is unclear how the Gateway Project will ensure that all damage is repaired, especially roads that will be retained by the Airport, such as Qantas Drive/Airport Drive.

As indicated previously, Qantas requests that a condition of consent is imposed requiring SACL/TfNSW to engage directly with Qantas during the preparation of the traffic management strategy to ensure that the protection of Qantas' interests is given the highest priority at every level.

Closure of Qantas Drive Bus Stops During Construction and Following Completion of Gateway Project

Qantas objects to the proposed closure of the two bus stops near the intersection of Qantas Drive / Lancastrian Road. There has been no assessment of the socio-economic profile of the patrons of those stops and the EIS fails to identify a suitable alternative. To remove them without understanding the implications may unreasonably impact vulnerable individuals who rely on them.

Active Transport Link Following Completion of Gateway Project

A new active transport link is proposed along the western side of Alexandra Canal in the form of a shared pedestrian and cycle path. As shown in Figure 7.3 of the EIS, the proposed cycle path terminates at Canal Road at the northern end. It is considered that the active transport link should be extended to Mascot Station as part of the Gateway Project to encourage and facilitate an alternative mode of transport for commuters in the area. It is considered that the Project should include an active transport connection to the Terminals 2/3 precinct from Coward Street.

End of Trip (EOT) facilities may have increased utilisation in the event that more people use active transport to avoid traffic congestion. The opportunity to increase EOT facilities at the Airport for both staff and customers should therefore be investigated.

NOISE AND VIBRATION IMPACTS

Potential noise and vibration impacts to Qantas' operations are generally restricted to a discussion of the current Qantas Flight Training Centre, and Qantas' response to this is addressed in a separate submission.

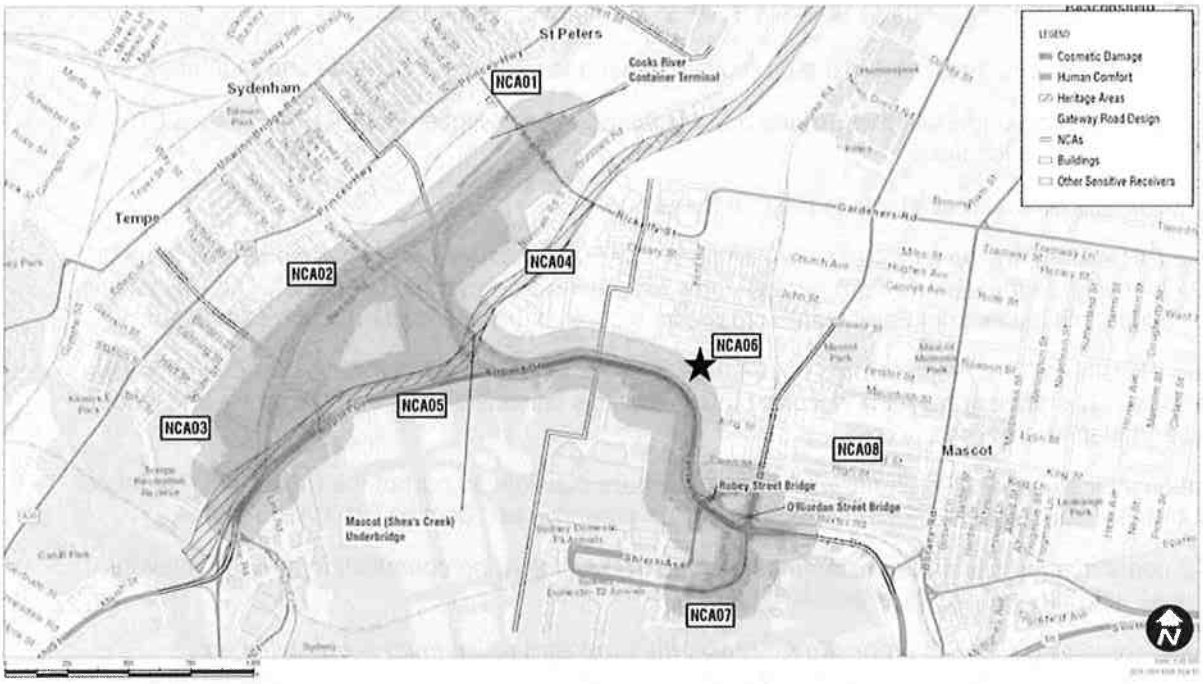
It should be noted however, that other buildings across Qantas' leasehold and freehold areas may be susceptible to cosmetic damage by the use of vibration intensive equipment during construction of the Gateway Project. The Qantas Catering Building for example, was constructed in 1970, prior to the introduction *of Australian Standard for The Design of Earthquake Resistant Buildings AS2121-1979' (Standards Australia 1979).*

Figure 2 indicates that some buildings and structures, including the Catering Building (refer red star) are within the recommended minimum working distances for cosmetic damage and human comfort. This includes but is not limited to) the following Qantas buildings on freehold land: Catering Building, Catering Bridge, Joy Building, Leo Building, Archive Building and Engine Test Cell; and the following buildings on the Jetbase: Security Building, Building 147, Fifth Street Car Park, Domestic Freight Terminal, and various aircraft Hangars . In addition, Section 5.10.1 of TWP 2 – Noise and Vibration states:

"Impact piling would be required at bridges and can generate high vibration levels. The CNVG does not provide a cosmetic damage minimum working distance for this activity. Vibration levels from impact piling depend on the weight of the hammer and drop height which is currently unknown, however, given the proximity of certain buildings and structures to the bridges, particularly near the new Qantas Drive viaduct to Sydney Airport Terminal 2/3, there is potential for cosmetic damage impacts from this activity."

In light of the above, Qantas requests a condition of consent requiring SACL/TfNSW to undertake a dilapidation survey for all of Qantas buildings to ensure that any damage caused by construction works are repaired at the cost of the Gateway Project.

Figure 2 - Construction Vibration Assessment



Source: TWP 2 – Noise and Vibration

As highlighted in Figure 2 and stated in Section 5.10.2 of TWP 2 – Noise and Vibration:

"Certain receivers in the study area are within the human comfort minimum working distance … occupants of affected buildings may be able to perceive vibration impacts at times when vibration intensive equipment is in use. Where impacts are perceptible, they would likely only be apparent for relatively short durations when equipment such as rockbreakers or vibratory rollers are nearby."

It is not clear from this limited discussion what the true impact to Qantas' staff, particularly at the Jetbase and Mascot Campus, will be from the use of vibration intensive equipment.

Further investigation on this issue is required together with mitigation measures.

CONTAMINATION

The Jetbase is listed a number of times in the EIS and TWP 5 – Contamination and Soils as a contaminated site, such as on page 13.14 of the EIS:

> "*There are a number of known contaminated groundwater plumes located in land within Qantas's lease areas within Sydney Airport, including the Jet Base.*
>
> *Site investigations identified a number of contaminants in the soil and/or groundwater, including hydrocarbons, PAHs, PFAS, and heavy metals*".

To further understand the potential impacts on Qantas' operations in terms of contamination associated with construction of the Gateway Project, Qantas highlights the following:

a) The EIS relies on previous investigations as noted in TWP 5 - Contamination and Soils:

- Existing investigation reports relevant to the project site (as made available by Roads and Maritime)
- Results for investigations undertaken by Roads and Maritime between November 2018 and May 2019 completed at 66 soil bore locations.

These documents should be made available to the Qantas Group.

b) Table 13.8 of the EIS states *"additional assessment and groundwater monitoring is required adjacent to the airport boundary to delineate the extent of groundwater impacts associated with the Jet Base"*. The EIS should be amended to include this assessment and Qantas requests a copy of this assessment once completed.

c) Table 13.8 of the EIS states *"The project would not impede remediation of existing groundwater contamination beneath the Jet Base."* It is unclear from the documentation how this conclusion has been reached and what assurance has been placed on this.

d) The documentation indicates that fill material will be reused where possible as part of the Project. In relation to Per- and polyfluoroalkyl substances (PFAS) impacted soil and groundwater, Section 9.1 TWP 5 states:

"Reuse of PFAS-contaminated soil and/or water must be undertaken following consultation with the relevant regulators, as reuse activities may require specific approval.

If soil and/or water containing PFAS is proposed for reuse, the proposed reuse must not result in an unacceptable or increased risk to human health and/or the environment. A health and environmental risk assessment (HERA) would be required for any project reuse."

The EIS should be amended to assess potential impacts and mitigation, and Qantas requests further details of where PFAS-contaminated fill may be re-used in relation to the Gateway Project and a copy of the HERA once completed.

4. CONCLUSION

We understand that TfNSW/SACL have requested that the Minister for Planning and Public Spaces declare the project as critical SSI. Given that third party appeal rights are not available in relation to critical SSI or to an MDP, and to protect Qantas' interests, Qantas requests the following:

- An amended EIS be prepared that includes the details that are presently missing together with mitigation measures.
- Conditions of consent requiring TfNSW/ARTC to engage directly with Qantas on our needs and requirements to ensure that the protection of Qantas' operations and interests is given the highest priority at every level.
- Conditions of consent requiring TfNSW/ARTC to protect Qantas' operational capability at all times during construction and operation.
- Request that any approval granted for the Gateway Project implement the recommended mitigation measures and conditions outlined in this submission. A summary of the mitigation measures and conditions is provided at **Attachment B**.
- Further information regarding changes to Lancastrian Road/Qantas Drive intersection and specific impacts to Qantas' traffic arrangements be included in an amended EIS.

- Further information regarding how the Gateway Project's negative impact on surrounding intersections LoS will be mitigated by the project to be included in an amended EIS.
- The Proponent is to provide explicit commitment for the protection of the Qantas Catering Bridge and suspended pedestrian bridge underneath during construction and operation of the Gateway Project.
- The Qantas Group requests further clarity and detail on how traffic congestion during construction will be managed to minimise the impact to staff, operations and passengers.
- The EIS needs to be amended to discuss in greater detail how FOD and dust will be managed and mitigated to ensure that they don't jeopardise operations at the Airport.
- The Qantas Group is going to experience significant disruption during the construction phase of the Gateway Project. The Proponent must be required to mitigate and ameliorate this where possible to reduce the impost that the construction of the Gateway Project will have on the Qantas Group.
- Many of the proposed impacts to take off and landing operations are the result of proposed works that will occur on State land (e.g. the location and design of the proposed emplacement mounds). The Airport must not be jeopardised or undermined by works occurring across jurisdictional boundaries.
- As the primary user of the Airport, Qantas is in a unique position to provide valuable insights into design constraints, issues and mitigation measures. Qantas supports the Government's investment in infrastructure; however, we feel strongly that this investment should not come at the expense of the Airport's operational viability. Furthermore, any investment should be rigorously investigated to ensure that the best outcome is delivered for all users to ensure ongoing primacy of the Airport as Australia's biggest and busiest airport.

Qantas is continuing to review the documentation and intends to provide a further submission to the MDP by 21 February 2020. Further comments may come as a result of further information being provided as detailed in this submission

Should you have any queries regarding this matter please contact me on 0405 072 440.

Yours sincerely,

pp

Michael Penman

Head of Group Property

ATTACHMENT A Traffic Engineers Advice from CBRK

Colston Budd Rogers & Kafes Pty Ltd
as Trustee for C & B Unit Trust
ABN 27 623 918 759

Our Ref: TR/11146/jj

Transport Planning
Traffic Studies
Parking Studies

13 December, 2019

Qantas Airways Limited
B Wing, Level 1, 10 Bourke Road
Mascot NSW 2020

Attention: Charlie Westgarth
Email: charlie.westgarth@qantas.com.au

Dear Sir,

RE: PROPOSED SYDNEY GATEWAY ROAD PROJECT

1. As requested, we are writing to set down our comments in relation to the Sydney Gateway Road Project which is currently on exhibition. The project will provide new road connections from the St Peters interchange of WestConnex, to and from Sydney Airport.

2. Our comments are set down through the following sections:

   - background information;
   - proposed Sydney Gateway Road Project;
   - traffic effects of proposed changes affecting Qantas; and
   - further traffic analyses required in EIS.

Background Information

3. Qantas has significant investment, infrastructure and facilities at Sydney Airport. Its headquarters are adjacent to the airport, and the airport is its main hub.

4. Qantas has approval (SSD-10154) to relocate its flight training centre from the airport to 297 King Street, on land that forms part of its "Corporate Campus" in Mascot, adjacent to the airport.

5. The Corporate Campus generally extends between Qantas Drive to the west, Ewan Street to the south, Coward Street to the north and Bourke Road/O'Riordan Street to the east. There is a road connection (overpass of Qantas Drive) between the Qantas facilities on the airport and its adjacent facilities to the north and east.

Suite 1801/Tower A, Zenith Centre, 821 Pacific Highway, Chatswood NSW 2067
P.O. Box 5186 West Chatswood NSW 1515 Tel: (02) 9411 2411 Fax: (02) 9411 2422
Directors - Geoff Budd - Stan Kafes - Tim Rogers - Joshua Hollis ACN 002 334 296
EMAIL: cbrk@cbrk.com.au

6. The main access to the Qantas facilities on the airport side is provided by a signalized intersection on Qantas Drive, at Lancastrian Road. There are right and left turn bays on Qantas Drive for turns into Lancastrian Road. All turning movements are permitted at the intersection. The intersection carries significant traffic volumes associated with Qantas' operations.

7. The WestConnex project is currently under construction. This project widens and extends the M4 Motorway, extends the M5 Motorway and provides a connection between the M4 and M5. The extended M5 will connect to the M4-M5 link at the St Peters interchange.

Proposed Sydney Gateway Road Project

8. The Sydney Gateway Road Project is part of the larger Sydney Gateway which will provide upgraded road and rail connections to the airport and Port Botany. The road component of Sydney Gateway will connect the Sydney Motorway Network with the airport and Port Botany, via the St Peters interchange.

9. The project includes the following:

- St Peters interchange connection; a new elevated road from the St Peters interchange to the Botany Rail Line, including an overpass of Canal Road;
- Terminal 1 connection – a new road connecting Terminal 1 with the St Peters interchange connection, including a bridge and overpass of Alexandra Canal and the Botany Rail Line respectively;
- an upgrade to and extension of Qantas Drive to connect the St Peters interchange connection with Terminals 2 and 3, including a bridge over Alexandra Canal;
- terminal link roads to connect Terminal 1 with Terminals 2 and 3, including a bridge over Alexandra Canal;
- Terminals 2/3 access; a new viaduct and overpass connecting the terminals with Qantas Drive;
- new roads to connect to other Sydney Airport land north of the airport; and
- other associated infrastructure and measures.

10. In association with the Qantas Drive works, the traffic signals at the intersection of Qantas Drive with Lancastrian Road are proposed to be removed. Turns at the intersection would be restricted to left in/left out.

Traffic Effects of Proposed Changes Affecting Qantas

11. In broad terms, the upgrades and new connections to the airport will have a positive effect on the ability of the airport to cater for future growth in travel.

12. However, there are a number of local effects which should be taken into consideration in the assessment of the project. The removal of the traffic signals at Qantas Drive/Lancastrian Road, and the associated removal of the ability for traffic accessing the Qantas facilities to turn right to or from Lancastrian Road, will result in this traffic using the intersections of Qantas Drive/Robey Street, O'Riordan Street/Robey Street, O'Riordan Street/King Street and O'Riordan Street/Joyce Drive. This route involves increased travel distances and times for a significant number of vehicles.

13. It is also unclear whether the approved flight training centre has been considered in the traffic modelling undertaken for the Sydney Gateway Road Project.

14. As noted above, there are significant traffic volumes, particularly during the morning peak, using the Qantas Drive/Lancastrian Road intersection to access the Qantas facilities. The transfer of this traffic to the other intersections noted above should be assessed in association with the Sydney Gateway Road Project, with any consequently required upgrades to these intersections included as part of the project.

15. Chapter 9 of the EIS notes that:

- the intersections of O'Riordan Street/Joyce Drive, Qantas Drive/Seventh Street and O'Riordan Street/King Street currently operate at levels of service E or F (at capacity or unsatisfactory, requiring additional capacity) during one or both weekday peak periods; and

- the intersection of O'Riordan Street/Robey Street currently operates at level of service D (near capacity) during the weekday morning peak period.

16. During construction, the EIS notes that:

- the operation of the intersections of O'Riordan Street/Joyce Drive and O'Riordan Street/Robey Street would deteriorate; and

- the operation of the intersection of Qantas Drive/Seventh Street would improve (although we do not understand how or consider this is likely).

17. The EIS does not consider the traffic effects during construction on the operation of the intersection of O'Riordan Street/King Street.

18. Once the project is completed, the EIS notes that:

- the intersections of O'Riordan Street/Joyce Drive, Qantas Drive/Seventh Street, O'Riordan Street/Robey Street and O'Riordan Street/King Street would operate at level of service F (unsatisfactory, requiring additional capacity) during one or both weekday peak periods in 2026; and

- the above intersections would also operate at level of service F (unsatisfactory, requiring additional capacity) during one or both weekday peak periods in 2036.

19. The poor operation of these intersections would affect access to and from the Qantas facilities. As noted above, it would result in permanently longer travel distances and travel times for a significant number of vehicles associated with Qantas' operations.

<u>Further Traffic Analyses Required in EIS</u>

20. It is considered that the EIS required further traffic analyses to include the following:

- the approved Qantas flight training centre;

- the traffic effects during construction on the operation of O'Riordan Street/King Street;

- appropriate measures to provide improved travel times and/or shorter travel distances for Qantas employees and visitors affected by the proposed removal of access from Lancastrian Road; and

- this should include measures to improve the operation of the intersections of O'Riordan Street/Joyce Drive, Qantas Drive/Seventh Street, O'Riordan Street/Robey Street and O'Riordan Street/King Street.

21. We trust the above provides the information you require. Finally, if you have any queries, please do not hesitate to contact us.

Yours faithfully,
COLSTON BUDD ROGERS & KAFES PTY LTD

T. Rogers
Director

ATTACHMENT B Summary of Mitigation Measures and Conditions

CONDITIONS REQUESTED TO BE IMPOSED

- The following mitigation measures and conditions are requested to ensure that the protection of Qantas' operations is given the highest priority at every level:
- Condition of consent requiring SACL/TfNSW to engage directly with Qantas on our needs and requirements.
- Condition of consent requiring SACL/TfNSW to protect Qantas' operational capability at all times during construction and operation including but not limited to the acoustic framework as it relates to the existing and new Flight Training Centre dealt with under separate cover.
- Condition of consent requiring SACL/TfNSW to consult with relevant stakeholders, including Qantas, to ensure lane closures and restrictions to airport access during construction are avoided during peak travel periods.
- Condition of consent requiring SACL/TfNSW to engage directly with Qantas during the preparation of the Traffic Management Strategy.
- Condition of consent that prohibits SACL/TfNSW from undertaking any actions or works that would impact the accessibility and usability of the Qantas Catering Bridge, without prior written consent from Qantas.
- Condition of consent requiring SACL/TfNSW to undertake a dilapidation survey for all of Qantas buildings to ensure that any damage caused by construction works are repaired at the cost of the Gateway Project.
- **MITIGATION MEASURES REQUESTED TO BE IMPOSED**
- The following initial mitigation measures are requested to ensure that the protection of Qantas' interests is given the highest priority at every level:
- Preparation of a communication protocol is required to ensure construction works do not prevent aircraft movements especially those that have been granted a dispensation during the curfew.
- Preparation of a pre-determined alternative aircraft landing zone (displaced threshold) for situations where the full length of runway is not available in the event of a crane becoming stuck in the elevated position due to the Gateway Project.
- Preparation of a temporary displaced threshold and ability to mark the temporary displaced threshold with 'v-bars' in accordance with MOS Part 139 for situations where the full length of runway is not available in the event of a crane becoming stuck in the elevated position due to the Gateway Project.
- Preparation and provision of a temporary visual approach slope indicator (i.e. PAPI) to the displaced threshold for situations where the full length of runway is not available in the event of a crane becoming stuck in the elevated position due to the Gateway Project.
- TfNSW/SACL need to propose appropriate mitigation measures to ensure that the crew are not exposed to elevated levels of fatigue risk as a result of increased traffic congestion. The mitigation strategies proposed will require careful consideration, discussion and approval from Qantas to ensure their appropriateness.

- TfNSW/SACL need to propose appropriate mitigation measures to manage cumulative construction impacts from Gateway Project and the Botany Rail Project to ensure that the Airport is still able to fulfil its core function of transporting freight and passengers during the construction period.
- Qantas is to be consulted to understand potential impacts on communication and navigation aids for its aircraft and to ensure that potential impacts will be managed and mitigated so as to not affect operations. It is also suggested that arrangements with ASA and Qantas should be consistent regarding impacts on and communications regarding navigation aids.
- Qantas requests clear and timely communication and consultation from TfNSW/SACL on the staging of work, Method of Works Plans, Aeronautical Information Circular and Aeronautical Information Package Supplements where applicable, with a focus on impact to aviation operations.
- Qantas is to be consulted on the preferred location, heights, shapes, landscaping and future uses for the emplacement mounds.
- Any proposed change to Building 167 will require consultation between Qantas and TfNSW/SACL to agree on a suitable relocation plan and timeline.
- Any financial costs incurred by or imposed on Qantas because of the Gateway Project are to be borne by the Gateway Project. Further consultation is required to determine if any of these costs will arise and how Qantas will be compensated.
- Table 6.1 of TWP 12 identifies that the parking configuration and number of car spaces available for the Qantas Freight facility will be altered during construction and nine car spaces will be permanently removed following completion of the Gateway Project. Ongoing consultation with Qantas is required to ensure that suitable replacement parking for employees and customers is made available.

The CEMP should include requirements around safety during high wind, such as tethering or securing items to prevent negative impacts on airport operations. The CEMP must also include details on how works (including excavation and construction) will not impact on Qantas operations and staff. This includes but is not limited to managing wind generated dust from stockpiles/pits and the management of