



Eastern Creek Speedway Operational Environmental Management Plan

Appendix F: Operational Traffic & Transport Management Plan

Document Control

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Appendix A: Planning Approval Consistency Assessment Form: Sydney International Speedway Amended Access Proposal

Appendix B: Planning Approval Consistency Assessment Form: Sydney International Speedway Operating Hours

Definitions & Abbreviations

Term	Definition
Access Approval	<i>Planning Approval Consistency Assessment Form: Sydney International Speedway Amended Access Proposal 2021</i> prepared by Sydney Metro
AECOM Report	<i>Sydney International Speedway Relocation Package - Engineering Design Services 2020</i> prepared by AECOM
Amendment Report	<i>Sydney International Speedway SSI Amendment Report 2020</i> , prepared by DPIE
BCC	Blacktown City Council
CJP	Customer Journey Planning (within Transport for NSW).
DPIE	NSW Department of Planning, Industry and Environment
The Dragway	Sydney Dragway
Event Plan	Event Management Plan
Emergency Plan	Emergency Response Plan
GSP	Greater Sydney Parklands
Intersection 1	Existing intersection of Ferrers Road and the Speedway access road.
Intersection 2	Future intersection of Ferrers Road and the Pit Area at the southern boundary of the Speedway Site
Intersection 3	Existing intersection of Ferrers Road and the Sydney Motorsports Park access road
Jacobs Report	<i>Sydney International Speedway Environmental Impact Statement Technical Paper 1 Traffic, Transport and Parking 2020</i> prepared by Jacobs
Motorsport Precinct	Eastern Creek Sydney Motorsport Precinct
OEMP	Operational Environmental Management Plan
OMP	Operational Monitoring Program
Operating Hours Approval	<i>Planning Approval Consistency Assessment Form: Sydney International Speedway Operating Hours 2021</i> prepared by Sydney Metro
OTTMP	Operational Traffic & Transport Management Plan
The Proponents	Sydney Metro and Greater Sydney Parklands
The Speedway	Eastern Creek Speedway, previously Sydney International Speedway
Speedway Approval	<i>SSI 00048 Notice of Decision 2020</i> issued by the Minister for Planning & Places
Speedway Conditions	<i>SSI 00048 Instrument of Approval 2020</i> issued by the Minister for Planning & Places
Speedway EIS	<i>Sydney International Speedway Environmental Impact Statement 2020</i> , prepared by the NSW Government and Sydney Metro
SSI 10048	State Significant Infrastructure 10048 Sydney International Speedway
Speedway Submissions Report	<i>Sydney International Speedway Submissions Report 2020</i> , prepared by Department of Planning, Industry & Environment
Sydney Metro	Sydney Metro
TfNSW	Transport for NSW
TMC	Transport Management Centre (within Transport for NSW)
TT OMP	Traffic & Transport Operational Monitoring Program
WSPT	Western Sydney Parklands Trust

1 Introduction

1.1 The Speedway

A State Significant Infrastructure (**SSI 10048**) proposal for the Sydney International Speedway (the **Speedway**) was approved by the NSW Minister for Planning & Public Spaces (Minister for P&PS) in the *SSI 10048 Instrument of Approval*, December 2020 (the **Speedway Approval**).

The former Sydney Speedway site, located on Government-owned land at Clyde, was required to house the future stabling and maintenance facilities for the Sydney Metro West project. As such, the new Speedway is being constructed by Sydney Metro and Greater Sydney Parklands (the **Proponents**) on by Western Sydney Parklands Trust (**WSPT**) and managed by Greater Sydney Parklands (**GSP**) within the Eastern Creek Motorsports Precinct (**Motorsports Precinct**) east of Ferrers Road, Eastern Creek (the **Site**).

The Speedway, now renamed as **Eastern Creek Speedway**, will provide:

- A new world-class clay-based racetrack for speedway cars including sprint, wingless sprint, street stockers, V8 dirt modified and Formula 500 cars;
- A new grandstand and terraced seating accommodating up to 7,000 spectators;
- Public amenities, corporate boxes, food, beverage and merchandise outlets;
- Dedicated on-site parking for Speedway competitors (**Car Park B**) and spectators (**Car Park A** and **Car Park C**) in accordance with a Reciprocal Car Parking Agreement with Sydney Dragway);
- A dedicated competitor pit area to service the speedway; and
- Workshops, garages and trackside support areas.

Full details of the Speedway development are provided in the *Sydney International Speedway Environmental Impact Statement 2020*, prepared by the NSW Government and Sydney Metro (**Speedway EIS**).

1.2 Operational Traffic & Transport Management Plan

1.2.1 Purpose

The Operational Traffic & Transport Management Plan (**OTTMP**) summarises the traffic and transport management and mitigation measures required for the appropriate operation of the Speedway. Traffic and transport was identified as a key environmental issue in the Speedway EIS and Speedway Approval; in this regard, the desired performance outcome is for the Speedway to operate in a manner that minimises traffic and transport impacts, and in turn minimise risks to human health and the internal and external road environment to the greatest extent practicable.

1.2.2 Objectives

Further to the above, the underlying objectives of the OTTMP are to:

- Provide for a safe environment for all road users and pedestrians both within and external to the Site;
- Provide protection to Event participants, organisers and the general public from traffic incidents that may arise as a result of a Speedway event;
- Minimise the disruption, congestion and delays to all road users; and
- Ensure road network performance is maintained at an acceptable level throughout the duration of a Speedway Event.

1.2.3 Scope

The scope of the OTTMP has largely been determined with reference to the Conditions of Consent detailed in the *SSI 00048 Instrument of Approval 2021* issued by the Minister for Planning & Places (the **Speedway Conditions**) and include:

- Identification of the how the OTTMP addresses the requirements of applicable legislation and Speedway Conditions;
- Ensuring to the extent possible the safety and health of the public, Speedway, Event and Marshalling staff, and those that would potentially be impacted by traffic movements during Speedway Events;
- The establishment of a traffic monitoring system to ensure that future Speedway operations are in line with the Speedway Approval;
- The definition of define key roles and responsibilities in the implementation and ongoing review of the OTTMP; and
- The preparation and implementation of a Drivers Code of Conduct for Speedway and Event staff, and competitors, that details access through the Site and safe driving practices.

1.3 Consultation

In accordance with the Speedway Conditions, consultation was undertaken with all relevant authorities, and a draft OTTMP was provided to these authorities for comment. Details of this consultation are provided in Table 1.

Table 1: OTTMP Consultation

Authority	Consultation Dates	Consultation Forum	Draft OTTMP Provided
Transport for NSW and Transport Management Centre	July 2021 - November 2021	Email, Meetings, Presentations and Draft OTTMP	Yes
Customer Journey Planning	29th September 2021	Presentation	Yes
Blacktown City Council	7th November 2021	Email and Draft OTTMP	Yes
	8th November 2021	Presentation	
	9th November 2021	Emails re Draft OTTMP	

The comments subsequently received from these authorities have been reviewed, and where appropriate have been incorporated into the OTTMP prior to submission to the Planning Secretary.

It is noted that extensive stakeholder and community engagement formed an integral part of the development of the Speedway prior to and through the preparation of the Speedway EIS, and included detailed consultation relating to traffic and transport matters as well as broader Speedway operations. A summary of all key stakeholders consulted during the broader Speedway EIS process are identified in Table 2.

Table 2: Key Stakeholder Consultation

Key Stakeholders	Consulted
Existing Leaseholders within the Motorsports Precinct	Sydney Dragway (operated by the operated by the Western Sydney International Dragway) Sydney Motorsport Park (operated by the Australian Racing Drivers' Club)
Existing users of the Western Sydney Parklands and adjoining lands	Eastern Creek International Karting North Shore Sporting Car Club Driver training facilities including MotoDNA and Driving Solutions Pty Ltd Sydney Zoo.
State and Local Government Agencies	NSW Department of Planning, Industry and Environment Western Sydney Parkland Trust NSW Office of Sport National Parks and Wildlife Service Blacktown City Council
Public Utilities, Business and Industry Groups near the Site	Water NSW SUEZ Eastern Creek Recovery Park Global Renewables Austral Bricks
Special Interest Groups	Local Aboriginal Land Councils Aboriginal stakeholders Sporting associations
Racing Industry Bodies	Speedway Australia Sydney Speedway's previous owners Speedway patrons The wider motorsport community

1.4 Reference Documents

Numerous planning and transport reports were prepared in relation to the Speedway as part of the Speedway EIS process. In this regard, the OTTMP references the following reports:

- *Sydney International Speedway Environmental Impact Statement 2020*, prepared by the NSW Government and Sydney Metro (**Speedway EIS**).
- *SSI 00048 Notice of Determination 2021*, authorised by the Minister for Planning & Places (**Speedway Approval**);
- *Sydney International Speedway Environmental Impact Statement Technical Paper 1: Traffic, Transport and Parking 2020*, prepared by Jacobs (**Jacobs Report**);
- *Speedway Relocation Package – Engineering Design Services Concept Design Report 2020*, prepared by AECOM (**AECOM Report**);
- *Sydney International Speedway Submissions Report 2020*, prepared by the NSW Government and Sydney Metro (**Submissions Report**);
- *Sydney International Speedway SSI Assessment Report 2020*, prepared by DPIE (**Assessment Report**);
- *Planning Approval Consistency Assessment Form: Sydney International Speedway Operating Hours 2021*, prepared by Sydney Metro (**Operating Hours Approval**); and
- *Planning Approval Consistency Assessment Form: Sydney International Speedway Amended Access Proposal 2021*, prepared by Sydney Metro (**Access Approval**).

2 Speedway Approval Conditions & Commitments

2.1 Operational Traffic and Transport Management Plan

The requirement for an OTTMP is detailed in Section D of the Speedway Approval under the broader conditioned requirement for an *Operational Environment Management Plan (OEMP)*, which also requires that management plans be prepared in regard to other environmental disciplines such as air quality, noise and vibration.

The relevant traffic and transport Speedway Conditions, and a reference to the section of the OTTMP where each is addressed, are detailed in the following tables:

- Table 3 addresses the **Administrative Conditions** relating to traffic and transport detailed in Section A of the Speedway Approval;
- Table 4 addresses the **Operational Environmental Management Conditions** relating to traffic and transport detailed in Section D of the Speedway Approval; and
- Table 5 addresses the **Key Issue Conditions** relating to traffic and transport detailed in Section E of the Speedway Approval.

Table 3: Speedway Approval Administrative Conditions

Condition #	Section A: Administrative Conditions	Draft OTMP Section
A1	<p><i>The Proponent must carry out the SSI in accordance with the terms of this approval and generally in accordance with the:</i></p> <ul style="list-style-type: none"> a. Sydney International Speedway – Environmental Impact Statement Volume 1 & 2 (the EIS) (dated August 2020); b. Sydney International Speedway – Submissions Report (the Submissions Report, dated November 2020); and c. Sydney International Speedway – Amendment Report (the AR, dated November 2020). 	Section 4.2.2
A2	<p><i>The SSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in in accordance with the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.</i></p>	Section 4.2.2
A3	<p><i>In the event of an inconsistency between:</i></p> <ul style="list-style-type: none"> a. the terms of this approval and any document listed in Condition A1 inclusive, the terms of this approval will prevail to the extent of the inconsistency; and b. any document listed in Condition A1 inclusive, the most recent document will prevail to the extent of the inconsistency. 	Section 4.2.2
A4	<p><i>In the event that there are differing interpretations of the terms of this approval, including in relation to a condition of this approval, the Planning Secretary's interpretation is final.</i></p>	Section 4.2.2
A5	<p><i>The Proponent must comply with all written requirements or directions of the Planning Secretary, including in relation to:</i></p> <ul style="list-style-type: none"> a. the environmental performance of the SSI; b. any document or correspondence in relation to the SSI; c. any notification given to the Planning Secretary under the terms of this approval; d. any audit of the construction or operation of the SSI; e. the terms of this approval and compliance with the terms of this approval (including anything required to be done under this approval); f. the carrying out of any additional monitoring or mitigation measures; and g. in respect of ongoing monitoring and management obligations, compliance with an updated or revised version of a guideline, protocol, Australian Standard or policy required to be complied with under this approval. 	Section 4.3.2

Table 3: Speedway Approval Administrative Conditions (continued)

Condition #	Section A: Administrative Conditions	Draft OTMP Section
A6	<p><i>Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include:</i></p> <ul style="list-style-type: none"> <i>a. documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;</i> <i>b. a log of the dates of engagement or attempted engagement with the identified party and a summary of the issues raised by them;</i> <i>c. documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that they have none or have failed to provide feedback after repeated requests;</i> <i>d. outline of the issues raised by the identified party and how they have been addressed; and</i> <i>e. a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.</i> 	Section 4.3.2
A8	<i>References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.</i>	Section 4.3.2
A9	<i>Any document that must be submitted within a timeframe specified in or under the terms of this approval may be submitted within a later timeframe agreed with the Planning Secretary. This condition does not apply to the immediate written notification required in respect of an incident under Condition A34.</i>	Section 4.3.2

Table 4: Operation Environmental Management Conditions

Condition #	Operational Environment Management Conditions	Draft OTMP Section												
D1	<p>An Operational Environmental Management Plan (OEMP) must be prepared in accordance with the Environmental Management Plan Guideline for Infrastructure Projects (Department Planning, Industry and Environment 2020). The OEMP must detail how the performance outcomes, commitments and mitigation measures made and identified in the documents listed in Condition A1 will be implemented and achieved during operation. This condition (Condition D1) does not apply if Condition D2 of this approval applies.</p> <p>Where an OEMP is required, the Proponent must include the following OEMP Sub-plans in the OEMP:</p> <p>Table 5: OEMP Sub-Plans</p> <table> <tr> <th></th><th>Required OEMP Sub-plan</th><th>Relevant government agencies to be consulted for each OEMP Sub-plan</th></tr> <tr> <td>(a)</td><td>Dust</td><td>Office of Sport and WaterNSW</td></tr> <tr> <td>(b)</td><td>Traffic and Transport</td><td>Relevant Road Authorities</td></tr> <tr> <td>(c)</td><td>Noise and Vibration</td><td>Council</td></tr> </table> <p>Note: the Traffic and Transport sub-plan does not apply to major concurrent events with other venues in the motorsport precinct where a Major Events Operation Plan (or other equivalent document) as required by Condition E8 applies.</p>		Required OEMP Sub-plan	Relevant government agencies to be consulted for each OEMP Sub-plan	(a)	Dust	Office of Sport and WaterNSW	(b)	Traffic and Transport	Relevant Road Authorities	(c)	Noise and Vibration	Council	<p>Section 5</p> <p>Section 5.2.3</p> <p>It is noted that this OTTMP relates to Standard Speedway Events and not Concurrent Major Events at both the Speedway and Dragway.</p> <p>A Major Events Operations Plan is required prior to any such concurrent events.</p>
	Required OEMP Sub-plan	Relevant government agencies to be consulted for each OEMP Sub-plan												
(a)	Dust	Office of Sport and WaterNSW												
(b)	Traffic and Transport	Relevant Road Authorities												
(c)	Noise and Vibration	Council												

Table 4: Operation Environmental Management Conditions (continued)

Condition #	Operational Environment Management Conditions	Draft OTMP Section									
D4	<i>Each of the OEMP Sub-plans must include the information set out in Condition D1 of this approval.</i>	Section 5 and 6									
D5	<i>The OEMP Sub-plans must be developed in consultation with relevant government agencies as identified in Condition D3. Details of all information requested by an agency to be included in an OEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant OEMP Sub-Plan.</i>	Section 4.3									
D6	<i>The OEMP Sub-plans must be submitted to the Planning Secretary as part of the OEMP.</i>	Section 4.3									
D7	<i>The OEMP or EMS or equivalent as agreed with the Planning Secretary, must be submitted to the Planning Secretary for information no later than one (1) month before the commencement of operation.</i>	Section 4.3									
D8	<i>The OEMP or EMS or equivalent as agreed with the Planning Secretary, as submitted to the Planning Secretary and amended from time to time, must be implemented for the duration of operation and the OEMP or EMS or equivalent must be made publicly available before the commencement of operation.</i>	Section 4.3									
D9	<p>OPERATIONAL MONITORING PROGRAM</p> <p><i>The following Operational Monitoring Programs must be prepared in consultation with the relevant authorities identified for each Operational Monitoring Program to compare actual operational performance against predicted performance.</i></p> <p>Table 6: Operational Monitoring Programs</p> <table border="1"> <thead> <tr> <th></th><th>Required Operational Monitoring Programs</th><th>Relevant authority(s) and council(s) to be consulted for each Operational Monitoring Program</th></tr> </thead> <tbody> <tr> <td>(a)</td><td>Dust</td><td>Office of Sport and WaterNSW</td></tr> <tr> <td>(b)</td><td>Traffic and Transport</td><td>Council and the Transport Management Centre</td></tr> </tbody> </table>		Required Operational Monitoring Programs	Relevant authority(s) and council(s) to be consulted for each Operational Monitoring Program	(a)	Dust	Office of Sport and WaterNSW	(b)	Traffic and Transport	Council and the Transport Management Centre	Section 6
	Required Operational Monitoring Programs	Relevant authority(s) and council(s) to be consulted for each Operational Monitoring Program									
(a)	Dust	Office of Sport and WaterNSW									
(b)	Traffic and Transport	Council and the Transport Management Centre									

Table 4: Operation Environmental Management Conditions (continued)

Condition #	Operational Environment Management Conditions	Draft OTMP Section
D10	<p><i>Each operational monitoring program must include:</i></p> <ul style="list-style-type: none"> <i>a) details of baseline data;</i> <i>b) details of all monitoring of the project to be undertaken;</i> <i>c) the parameters of the project to be monitored;</i> <i>d) the frequency of monitoring to be undertaken;</i> <i>e) the location of monitoring;</i> <i>f) the reporting of monitoring and analysis results against relevant criteria;</i> <i>g) details of the methods that will be employed to analyse the monitoring data;</i> <i>h) procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and</i> <i>i) any consultation to be undertaken in relation to the monitoring programs.</i> 	<p>Section 6.2</p> <p>Section 6.4.3</p> <p>Section 6.4.3</p> <p>Section 6.4.4</p> <p>Section 6.4.3</p> <p>Section 6.5</p> <p>Section 6.5.2</p> <p>Section 6.6</p> <p>Section 6.7.2</p>
D11	<i>The Operational Monitoring Program(s) must be submitted to the Planning Secretary at least one month before the commencement of operation.</i>	Section 5.2.5
D12	<i>Operation must not commence until the Planning Secretary has been provided with all of the required Operational Monitoring Programs, and all relevant baseline data has been collected.</i>	Section 5.2.5
D13	<i>The Operational Monitoring Programs must be implemented for the duration identified in the terms of this approval. Where no duration is specified in this approval, they must be implemented for the duration specified in the relevant Operational Monitoring Program or as specified by the Planning Secretary, whichever is the greater.</i>	Section 5.2.5
D14	<i>The results of the Operational Monitoring Programs must be submitted to the Planning Secretary, and relevant regulatory authorities, for information in the form of an Operational Monitoring Report at the frequency identified in the in the terms of this approval. Where no frequency is identified in this approval, the results must be submitted at the frequency identified in the relevant Operational Monitoring Program.</i>	Section 5.2.6
D15	<i>Where a relevant OEMP Sub-plan exists, the relevant Operational Monitoring Program may be incorporated into that OEMP Sub-plan.</i>	Section 5.2.6

Table 5: Speedway Approval Key Issue Conditions

Condition #	Key Issue Conditions	Draft OTMP Section
E8	<p>Events Management</p> <p><i>No concurrent events at the Sydney International Speedway and the Western Sydney International Dragway are permitted to occur until a Major Events Operations Plan (as identified in the documents listed in Condition A1) has been prepared to address traffic management,</i></p>	<p>Section 5.2.3</p> <p>Section 7</p> <p>It is noted that this OTTMP relates to Standard Speedway Events and not Concurrent Major Events at both the Speedway and Dragway.</p> <p>A Major Events Operations Plan is required prior to any such concurrent events.</p>

2.2 Commitments

2.3 Additional Operational Commitments

2.3.1 Management & Mitigation

Table 5.1 of the Speedway Amendment Report details a number of revised **Management & Mitigation** measures to be considered through the operation of the Speedway (the **Speedway Commitments**). The Speedway Commitments relevant to traffic and transport are detailed in Table 6, with a reference to the section of the OTTMP support document where each is addressed.

2.3.2 Desired Performance Outcomes

Table 25.4 of the Speedway EIS outlines the **Desired Performance Outcomes** for the Speedway operations. These Desired Performance Outcomes relevant to traffic and transport are detailed in Table 7, with a reference to the section of the OTTMP where each is addressed.

Table 6: Traffic & Transport Management and Mitigation Commitments

Jacobs Report Reference	Issue	Commitment	Site Location	OTTMP Section
TTP8	Public Transport and Accessibility during Major Events	Opportunities to enhance public transport accessibility to the project would be investigated, including the provision of bus services and bus stop infrastructure to service major events.	All	Section 7.2
TTP9	Property Access for Emergency Vehicles	Access to other properties within Western Sydney Parklands Precinct 5; Eastern Creek Motor Sports for emergency vehicles would be provided at all times.	All	Section 7.3
TTP10	Impacts to road network performance during events at the project site (including concurrent operations)	An operational traffic management plan would be developed by the operator of Sydney International Speedway and would include traffic measures to minimise impacts to road network performance during peak event times. The traffic management plan would consider measures to be implemented to manage the arrival and exit of vehicles to the project site, including traffic marshalling and the use of temporary traffic signals when major events are scheduled at the same time as Sydney Dragway.	All	<p>Section 5.2.3</p> <p>Section 7</p> <p>With reference Speedway Condition E8, this OTTMP relates to standard Speedway Operations and not concurrent Major Events at both the Speedway and Dragway</p> <p>A Major Events Operations Plan is required prior to any such concurrent events.</p>

Table 7: Desired Operational Performance Outcomes

Issue	Desired performance outcome from SEERs	Speedway Performance Outcome	How the Project addresses Performance Outcomes	Reference
Traffic, Transport and Parking	Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts.	Events will be coordinated through a <i>Major Events Operations Plan</i> to minimise the impact of concurrent Major Events on traffic, noise, dust and parking	The EIS parking assessment concludes that sufficient parking capacity is provided for the concurrent operation of the Speedway and Dragway. Concurrent Major Events will not be permitted prior to the preparation of a <i>Major Events Management Plan</i> .	Section 7
		Approximately 2,800 parking spaces are provided across the Speedway and Dragway sites, sufficient to accommodate parking demand for a Major Event at the Speedway on a Saturday evening, and for concurrent minor race events at the Speedway and Dragway on a Friday evening.	<p>Potential impacts on existing Dragway parking have been minimised through the provision new parking across the Speedway and Dragway sites.</p> <p>The Speedway and Dragway operators have entered into a reciprocal car parking agreement which permits the sharing of the Speedway and Dragway parking areas between both the Speedway and the Dragway for major and other events as necessary.</p> <p>Each motorsports operator would have exclusive access to the broader Site on agreed dates during the year in accordance with an events calendar, with other operators not permitted to hold a concurrent event unless with the agreement of the operator who has exclusive access.</p>	
	Impacts on network capacity and the level of service are effectively managed.	Potential operational impacts to local roads are minimised through event scheduling	Impacts to the road network during operation of the project are expected to be minor and manageable with the implementation of approximate traffic management.	

3 The Speedway Approval

3.1 Location

The Speedway is located on land east of Fullers Road, and immediately north of the Warragamba Pipeline. The Speedway is shown in its local context in Figure 1 and regional context in Figure 2.

Figure 1: Site Location Local Context

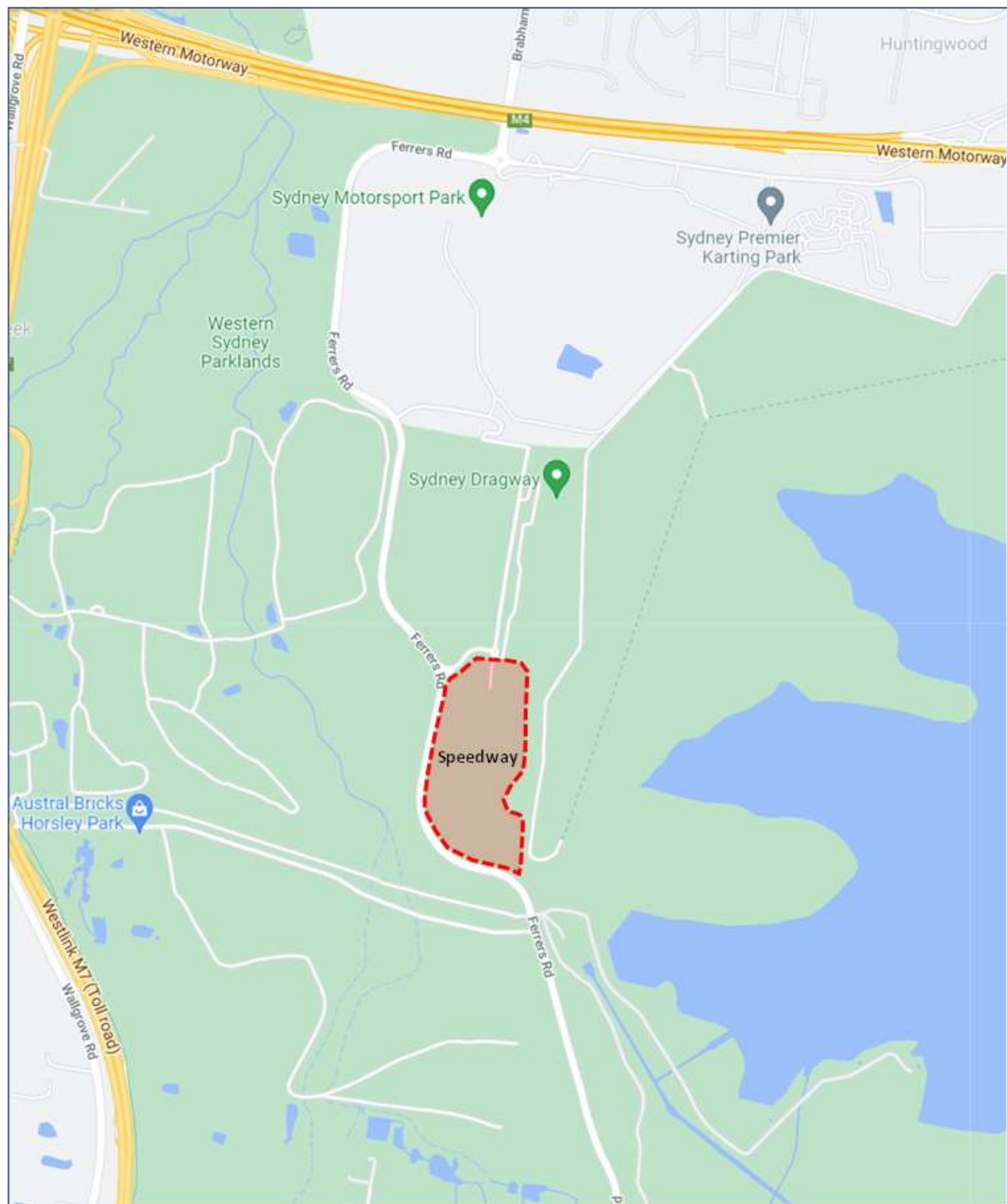
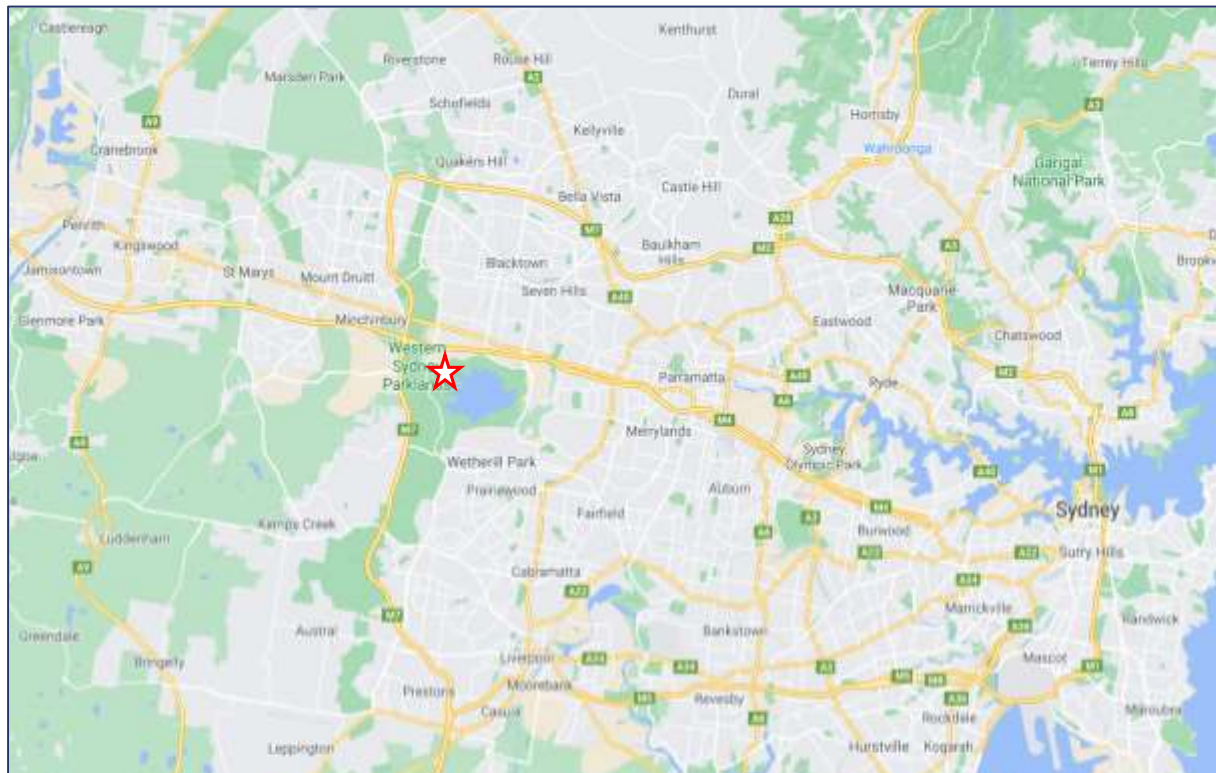


Figure 2: Site Location Regional Context



3.2 The Speedway

As discussed, the Speedway will provide:

- A new world-class clay-based racetrack for speedway cars including sprint, wingless sprint, street stockers, V8 dirt modified and Formula 500 cars;
- A new grandstand and terraced seating accommodating up to 7,000 spectators;
- Public amenities, corporate boxes, food, beverage and merchandise outlets;
- Dedicated on-site parking for Speedway competitors (Car Park B) and spectators (Car Park A and Car Park C);
- A dedicated competitor Pit Area to service the speedway, including workshops, garages and trackside support areas;
- All entry to the Speedway via the existing Site intersection with Ferrers Road (**Intersection 1**); and
- All departures from the Speedway's spectator car parks via Intersection 1, and all departures from the Pit Area and Car Park B via a new intersection to Ferrers Road at the southern end of the Site (**Intersection 2**).

The Speedway Site Plan is provided in Figure 3, which also indicates the location of the existing intersection of Ferrers Road and the Motorsports Precinct to the north of the Site (**Intersection 3**).

Figure 3: Speedway Site Plan



Source: Sydney Metro

3.3 Approved Speedway Operations

The Speedway Approval allows the Speedway to be operational year-round, though most Speedway Events are to be held during the typical speedway racing season (September to May). The Speedway has the ability to be used for a variety of dirt track racing events, including those previously held at the Sydney Speedway at Clyde.

On average, it is expected that the Speedway will host:

- 10 Major Events per year, attracting approximately 4,000 to 6,000 spectators;
- 30 – 35 Average Events per year, attracting approximately up to 3,000 spectators;
- 10 Minor Events per year, attracting approximately up to 1,500 spectators; and
- Practice sessions, typically for competitors and teams, across the year.

Major Events will typically be held on Saturdays, and Minor Events will typically be held on weekends (Saturdays and Sundays); for all Events, gates will open to spectators at 1:00pm, with racing occurring between 4:00pm and 11:00pm. It is noted that the Speedway EIS assessment was based on races being completed by 10:00pm, but the extension of race hours to 11:00pm was recently approved in the *Planning Approval Consistency Assessment Form: Sydney International Speedway Operating Hours 2021* prepared by Sydney Metro (**Operating Hours Approval**).

There are generally 60 to 120 competitors per Event, with each competitor to be provided with parking for their racing vehicle(s), and for larger vehicles transporting the racing vehicle(s) to and from the Speedway (see [Section 3.5](#)).

The typical schedule for a Speedway Event Day is shown in [Table 8](#).

Table 8: Speedway Event Day Schedule

Speedway Event Item	Schedule
Competitor Access	1:00pm – 4:00pm
Event Staff Arrival	Prior to 1:00pm
Car Parks Open to Public	1:00pm
Pre-Event Entertainment	1:00pm – 4:00pm
Pre-Event Races	4:00pm - 6:00pm
Main Race Events	6:00pm - 11:00pm
Spectator Departures	11:00pm - 12:00pm
Speedway Close	12:30pm

Source: Speedway Promotions

3.4 Public & Active Transport

3.4.1 Public Transport

No bus services currently operate along Ferrers Road, and no bus routes (or stops) are available within approximately 2.0km of the Site.

While the analysis of public transport provided in the Speedway EIS *Technical Paper 1 Traffic, Transport and Parking 2020* prepared by Jacobs (the **Jacobs Report**) assumes that 100% of spectators (and competitors) will arrive and depart by private vehicle (due to the limited public transport available), it notes that:

Opportunities to enhance public transport accessibility to the project would be investigated, including the provision of bus services and bus stop infrastructure to service major events.

The potential for bus services in Ferrers Road – being either general daily services or charter services for Events – is examined further in [Section 7.2](#), noting that the greatest potential for the introduction of public transport services would be for concurrent Major Events at both the Speedway and Dragway.

3.4.2 Active Transport

While the broader Western Sydney Parklands (**WSP**) in which the Site lies provides extensive cycling and pedestrian infrastructure, there are no pedestrian facilities along Ferrers Road linking the Site to that infrastructure, and, as for public transport, the Jacobs Report assumes no pedestrian or cycle access to the Site.

3.5 Vehicle Access

3.5.1 Site Access

All entry to the Site will be provided via the existing Speedway access road running east from Intersection 1, which in turn provides access to all car parks and to the Pit Area and Car Park B in the southern portion of the Site.

All departures from the Speedway's spectator car parks will be via Intersection 1, while all departures from the Pit Area and Car Park B will be via Intersection 2.

3.5.2 Competitor Access

All competitor access to the Site will be via Intersection 1, through Car Park A and then **Pit Road** which runs between Car Park A and the Pit Area; all departures from the Pit Area and Car Park B will be via Intersection 2, i.e. no competitors will depart to the north via Pit Road to Intersection 1.

With reference to the *Planning Approval Consistency Assessment Form: Sydney International Speedway Amended Access Proposal* prepared by Sydney Metro (**Access Approval**), any large competitor vehicles (over 10m) arriving at the Site after 4:00pm will enter the Site via Intersection 2 (under Speedway staff supervision) to maximise the safety of spectators (vehicles and pedestrians).

The number of competitors arriving after 4:00pm is anticipated to be very minor, and as such there is little if any potential for these vehicles to generate a queue in Ferrers Road.

3.5.3 Staff Access

Parking for Speedway administrative staff is to be provided along Pit Road adjacent to the Speedway administration buildings; additional parking for Speedway works and maintenance staff parking is provided adjacent to the maintenance shed in the southern part of the Site.

With reference to the Access Approval, Speedway staff will be able to use Pit Road for two-way vehicles movements, but these are expected to be minimal during competitor entry periods.

3.5.4 Emergency Vehicle Access

Emergency vehicle access will be available to all parts of the Site at all times; this will include two-way access in Pit Road.

3.6 Event Traffic Characteristics

3.6.1 Trip Generation

The trip generation of the Speedway during an Event is detailed in Section 5.2 of the Jacobs Report, and was determined further to consideration of spectator numbers, the arrival and departure profile of spectators, and the anticipated car occupancy of spectator vehicles. The results of this assessment are summarised in Table 5-1 of the Jacobs Report, which is reproduced below.

Table 9: Speedway Trip Generation

Speedway Event	Sydney International Speedway		
	Spectators	Vehicle Occupancy	Trip Generation
Friday Evening Minor Event	1,200	2.5	480
Saturday Evening Major Event	4,500	4.0	1,125

Source: Jacobs Report

3.6.2 Arrival and Departure Distribution

The distribution of arrival and departure trips prior to and following an Event indicates that the peak hourly generation of the Speedway would occur in the hour immediately prior to Speedway races commencing, and the hour following the completion of Speedway races.

3.6.3 Directional Distribution

The Jacobs Report and *Sydney International Speedway Relocation Package - Engineering Design Services Report 2020* prepared by AECOM (the **AECOM Report**) reference the following directional distribution profile:

➤ **Friday Event:**

- 67% from the north and 33% from the south in the Pre-Event peak; and
- 61% to the north and 39% to the south in the Post-Event peak.

➤ **Saturday Event:**

- 54% from the north and 46% from the south in the Pre-Event peak; and
- 63% to the north and 37% to the south in the Post-Event peak.

3.7 Traffic Assessment

3.7.1 Traffic Surveys

The traffic surveys used in the Jacobs Report were undertaken in February 2020 at the key intersections identified as potentially being impacted by Speedway operations, and included Thursday and Saturday Event peak periods. These surveys have been provided by Sydney Metro/Jacobs for reference in future Traffic & Transport Monitoring Programs (**TT OMPs** - see also [Section 6](#)).

3.7.2 Modelling Scenarios

The modelling scenarios for the key intersections are detailed in Table 2-2 of the Jacobs Report, and include:

- 2020 Friday and Saturday base intersection operations without a Speedway or Dragway Event;
- 2022 Friday and Saturday intersection operations with and without a Speedway/Dragway Event; and
- 2032 Friday and Saturday intersection operations with and without a Speedway/Dragway Event.

These same modelling scenarios for Intersection 1 are detailed in Appendix D of the AECOM Report.

3.7.3 Modelling Results

The detailed results of the SIDRA modelling of the local and sub-regional intersections providing access for the Speedway are summarised in the following Jacobs Report tables:

- **Table 3-2:** 2020 Friday and Saturday Base intersection operations.
- **Table 5-3:** 2022 Saturday intersection operations with and without an Event.
- **Table 5-4:** 2032 Saturday intersection operations with and without an Event.
- **Table 6-2:** 2032 Friday intersection operations with and without Speedway and Dragway Events.

The SIDRA modelling results for Intersection 1 are detailed in Appendix D of the AECOM Report.

Further to the SIDRA analysis, the Jacobs Report and AECOM Report conclude that all intersections will operate at an acceptable Level of Service under all modelling scenarios, with only minor increases in average delays and queue lengths, particularly during the Pre-Event peaks when background traffic volumes are higher.

Importantly, neither the Jacobs Report or AECOM Report recommend any road network or intersection upgrades to accommodate the traffic generated by the Speedway (and Dragway).

Electronic SIDRA files have been provided by Sydney Metro for reference in the future TT OMPs (see also Section 6).

3.7.4 Revised Operating Hours

As discussed in Section 3.3, the Operating Hours Approval provides for racing to continue until 11:00pm, rather than 10:00pm as previously assessed in the Speedway EIS. Importantly, the operation of the key intersections during what will now be a later departure peak (after all races are completed) is anticipated to be better than forecast in the Jacobs Report and Aecom Report as background traffic volumes are lower at 11:00pm than they are at 10:00pm.

3.8 Parking

3.8.1 Parking Demand

Parking demand is detailed in Section 5.2 and Section 6.2 of the Jacobs Report for an Event and concurrent Speedway Dragway Events respectively, and has been determined further to consideration of spectator numbers and the anticipated car occupancy of spectator vehicles.

3.8.2 Parking Provision

The total number of parking spaces to be provided for Speedway competitors, and Speedway and Dragway spectators, is detailed in Table 5-2 of the Jacobs Report, which is reproduced below.

Table 10: Speedway and Dragway Car Parks

Car parking area	Competitor parking spaces	Spectator parking spaces
A	-	600
B	150	-
C	-	460
D	-	1760
Total car parking spaces	150	2820

Source: Jacobs Report

The Speedway and Dragway operators have entered into a Reciprocal Car Parking Agreement which permits the sharing of the Speedway and Dragway parking areas between both the Speedway and the Dragway for major and other events as necessary.

3.8.3 Parking Arrival and Departure Profile

The arrival and departure profile of parking demand prior to and following a Major Event, and prior to and following concurrent Speedway and Dragway Events, is summarised in Table 5-5 and Table 6-4 of the Jacobs Report respectively. These tables are reproduced below.

Table 11: Parking Profile Major Speedway Event

Hour commencing	Vehicles entering per hour	Vehicles exiting per hour	Cumulative parking demand
3pm	55	-	55
4pm	169	-	224
5pm	788	-	1012
6pm	113	-	1125
7pm	-	-	1125
8pm	-	112	1013
9pm	-	900	113
10pm	-	113	0

Source: Jacobs Report

Table 12: Parking Profile Concurrent Speedway Event and Dragway Event

Hour commencing	Vehicles entering per hour	Vehicles exiting per hour	Cumulative parking demand
3pm	104	25	324
4pm	163	15	472
5pm	457	59	870
6pm	136	51	955
7pm	52	226	781
8pm	27	272	536
9pm	5	456	85
10pm	2	78	9

Source: Jacobs Report

3.8.4 Adequacy of Parking

With reference to the tables above, parking demand for a Major Event would exceed the capacity of Car Park A; however, the use of Car Park C and/or Car Park D for overflow parking would provide a total of some 2,840 parking spaces, and therefore capacity in excess of peak demand. Moreover, the reciprocal car parking arrangement agreed between the Speedway and Dragway operators will permit the sharing of the Speedway and Dragway parking areas between them for major and other events.

4 Speedway Conditions: Administrative

4.1 Overview

This section provides a response to the Administrative Conditions detailed in Section A of the Speedway Approval, and specifically responds to Conditions A1 – A9 inclusive as detailed in Table 3.

4.2 General Administrative Conditions

4.2.1 Relevant Speedway Conditions

The operation of the Speedway in accordance with the key EIS documentation and the Speedway Approval is required per Conditions 1A – A3 inclusive of the Speedway Approval.

4.2.2 Compliance With Speedway Approval and EIS Documents

The Speedway will operate in strict accordance with the Speedway Approval, and in turn referencing the Speedway EIS, Submissions Report and Amendment Report; and in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures detailed in these same documents.

With reference to Condition A3, it is acknowledged that should there be any inconsistencies between the Speedway Approval and the Speedway EIS documents noted above, the terms of the Speedway Approval will prevail; and that the most recent version of the Speedway EIS documents noted above will prevail to the extent of any inconsistency.

Should there be any question in regard to potential inconsistencies, the Speedway operators will consult with the relevant authorities to clarify the prevailing condition, and not continue any operations relating to that condition prior to obtaining such clarification. It is acknowledged that the Planning Secretary's interpretation in regard to such clarifications would be final.

4.3 Written Requirement Conditions

4.3.1 Relevant Speedway Conditions

The requirement to appropriately comply with and respond to the written requirements or directions of the Planning Secretary throughout the operation of the Speedway are detailed in Condition A5, A6, A8 and A9 of the Speedway Approval.

4.3.2 Compliance With Written Requirements and Directions

The Proponent and Speedway operators will comply with and respond to all written requirements and directions of the Planning Secretary. Through the Speedway operational period, key documents to be provided to the Planning Secretary – either being a conditioned document or requested document – are anticipated to include:

- Environmental Assessment reports, such as this OTTMP and the broader OEMP;
- Compliance Reports;
- Audit Reports;
- OMPs (such as those detailed in [Section 6](#)); and
- Evidence of compliance with Australian Standards or other relevant guidelines in all reporting.

A response to all written requests will be provided in a timely manner, to be determined in consultation with the Planning Secretary, with appropriate consideration of the time required to provide an appropriate response.

5 Speedway Conditions: OEMP

5.1 Overview

This section provides a response to the Operational Environmental Management Conditions detailed in Section D of the Speedway Approval, and specifically responds to Conditions D1 – D15 inclusive as detailed in Table 4.

5.2 General OEMP Conditions

5.2.1 Relevant Speedway Conditions

The preparation of an overarching OEMP to ensure that the Speedway operates in accordance with the key EIS documentation, and the Speedway Approval is required per Conditions D1 – D8 inclusive of the Speedway Approval.

5.2.2 The OEMP

In accordance with Condition D1, an OEMP has been prepared in accordance with the EMP Guidelines, and was submitted to the relevant authorities for review prior to finalisation.

With reference to Condition D2, it is noted that it is not proposed that an Environmental Management System or equivalent be prepared for the Speedway, and as such the OEMP will be the controlling management document.

5.2.3 OEMP Sub-Plans

Condition D3 requires that the OEMP include Sub-Plans examining the environmental components of the Speedway operations, including Air Quality (Dust), Noise & Vibration, and Traffic & Transport; this OTTMP serves to fulfil the requirement for the Traffic & Transport Sub-Plan.

Importantly in regard to the OTTMP, the note to Table 5 of Condition D3 states the following:

The Traffic and Transport sub-plan does not apply to major concurrent events with other venues in the motorsport precinct where a Major Events Operation Plan (or other equivalent document) as required by Condition E8 applies.

In accordance with Condition E3 (and Condition E8), the OTTMP does not apply to concurrent Major Events, most likely at the Speedway and Dragway; rather, a Major Events Operation Plan (**MEOP**) will be developed by the Proponent to examine the operational characteristics of concurrent Major Events should they be scheduled, and will undergo the same preparation and review process as that required for the OEMP, and be approved by the Planning Secretary prior to concurrent Major Events taking place.

5.2.4 Sub-Plan Preparation

In accordance with Conditions D4 – D8 inclusive, the OTTMP has been developed in accordance with the EMP Guidelines, and been reviewed by the relevant authorities to submission to the Planning Secretary; the OEMP and all Sub-Plans will be submitted to the Planning Secretary at least one month prior to the commencement of Speedway operations.

5.2.5 Operational Traffic & Transport Monitoring Program

In accordance with Condition 9 and Condition 10, a TT OMP has been developed to provide ongoing assessment of traffic and transport conditions relevant to Speedway operations. The TT OMP is detailed in Section 6.

5.2.6 Operational Monitoring Program Submission

In accordance with Conditions D11 – D15 inclusive, the TT OMP will be submitted to the Planning Secretary at least one month before the commencement of Speedway operations, and Speedway operations will not commence until the Planning Secretary has been provided with the relevant TT OMP baseline data (detailed in Section 6.3).

The TT OMP will be implemented for the duration of Speedway operations or as specified by the Planning Secretary, and the results of the TT OMP will be submitted to the Planning Secretary and relevant authorities in the form of a Traffic & Transport Monitoring Report (**TT MR**).

As provided for by Condition D15, the TT OMP has been incorporated into this OTTMP.

6 Traffic & Transport Operational Monitoring Program

6.1 Overview

This section provides details of the proposed monitoring, assessment and reporting processes to be implemented in the preparation of future TT OMPs, and specifically responds to Condition 9 and Condition D10 (a – h) as detailed in Table 4.

6.2 Traffic & Transport Operational Monitoring Program

Condition D9 and Table 7 of the Speedway Approval required that a TT OMP be prepared by the Proponent in consultation with the relevant authorities to compare actual operational performance against predicted performance (i.e. as forecast in the EIS). Sections below provide details of the proposed TT OMP.

6.3 Traffic & Transport Operational Monitoring Program: Baseline Data

6.3.1 Relevant Speedway Condition

The identification of appropriate baseline data for use as a reference in future TT OMPs is requested in Condition D10(a) of the Speedway Approval.

6.3.2 Baseline Traffic Volumes

Traffic surveys of the intersections potentially impacted by Speedway operations were undertaken by Jacobs in 2020, with those traffic volumes then factored to provide Base 2022 and Base 2032 forecast traffic volumes. These surveys and forecast traffic volumes provide the most appropriate **Baseline Traffic Data** for reference in future TT OMPs.

6.3.3 Baseline Speedway Traffic Profile

As discussed, the assessment of future road network operations and parking demands was based on:

- The arrival and departure profile of competitors and spectators prior to, during, and following an Event;
- General competitor and spectator attendance numbers at an Event; and
- The car occupancy of spectators attending an Event.

Consideration of these same factors provides the most appropriate **Baseline Traffic Profile** for reference in future TT OMPs.

6.3.4 2020 Baseline Intersection Operations

The Jacobs Report and AECOM Report provide SIDRA analysis of the operation of intersections potentially impacted by Speedway operations, as well as by concurrent minor Speedway and Dragway events. These SIDRA files provide the most appropriate **Baseline Intersection Operations** for reference in future TT OMPs.

6.4 Traffic & Transport Operational Monitoring Program: Survey Data

6.4.1 Overview

Sections below provided details in regard to the development of future TT OMPs.

6.4.2 Relevant Speedway Condition

The identification of appropriate data for reference in TT OMPs is requested in Conditions D10(a) – D10(e) inclusive of the Speedway Approval.

6.4.3 Traffic and Parking Surveys

With reference to Condition D10(b), D10(c) and D10(e), given that the Jacobs Report and AECOM Report state that all intersections will operate at an appropriate Level of Service through all Event scenarios (other than concurrent Major Events at the Speedway and Dragway, which as discussed will not occur prior to the approval or a MEOP), the only intersections where monitoring will be required are Intersection 1 and Intersection 2. This was agreed with the relevant authorities during the OTTMP consultation process

While the AECOM Report states that these intersections will operate with very minor delays, the forecast operation of these intersections may vary due to differences between the through traffic volumes in Ferrers Road, arrival and departure profiles or car occupancies and the Baseline Traffic Profile detailed in the AECOM Report and Jacobs Report.

As part of the TT OMPs, traffic surveys at Intersection 1 and Intersection 2 would be undertaken prior to, during and after:

- A Friday combined Speedway and Dragway event; and
- A Saturday Speedway major event.

On each of these days, the traffic surveys would be undertaken during the same broad peak periods as those identified (and assessed) in the Jacobs Report, and are anticipated to include:

- Intersection movement surveys at Intersection 1 and Intersection 2;
- Classifier (Tube) Counters in Ferrers Road north and south of Intersection 1, and in the Speedway access road; and
- Surveys of on-site parking demand.

The Proponent's consultant undertaking each TT OMP would also observe the extent of queuing in Ferrers Road and the Speedways' internal roads, which would then be referenced in the SIDRA analysis of queue lengths. They would also observe the general operation of the spectator car parks to determine if there are any significant safety or efficiency issues.

6.4.4 Frequency of TT OMPs

It is important that operations at the Speedway “settle” prior to commencing the initial TT OMP, and particularly prior to the commencement of traffic surveys, so that they are better representative of future standard Speedway operating conditions.

As such, and in accordance with Condition D10(d), it is proposed that the surveys will commence no sooner than three months after the Speedway commences operations, and no later than six months after the Speedway commences operations.

A second TT OMP would then commence within two years of the first TT OMP being submitted to the Planning Secretary; the schedule of the TT OMP after this time would be determined further to consultation with the Planning Secretary and relevant authorities.

It is acknowledged that should any significant issues be identified through the TT OMP, or be observed by the Proponent, Speedway operators or relevant authorities, this schedule may need to be revised; a determination in this regard would be made by the Proponent in consultation with the Planning Secretary.

6.4.5 COVID Considerations

Further to the above, Greater Metropolitan Sydney has only recently emerged from *stay at home orders* (issued by the NSW Government) due to the COVID pandemic. The potential exists that some level of COVID restrictions may still be in place (or be reintroduced) after Speedway operations commence, such that background traffic volumes during the recommended initial TT OMP traffic survey period (as recommended in Section 6.4.5) are lower than standard volumes, and indeed Speedway attendance similarly below anticipated numbers.

As such, the Proponent will consult with the relevant authorities prior to the commencement of any TT OMP traffic surveys to ensure that they will be representative of standard conditions. Should the TT OMP traffic surveys not be undertaken during the recommended period, the Proponent will consult monthly with TfNSW until such time as accurate TT OMP traffic surveys can be undertaken.

6.5 Traffic & Transport Operational Monitoring Program: Analysis

6.5.1 Relevant Speedway Condition

The identification of appropriate means of analysing the TT OMP data is requested in Condition D10(f) and D10(g) of the Speedway Approval.

6.5.2 Traffic & Transport Monitoring Program Analysis Scope of Work

Each TT OMP is to be prepared by a suitably qualified consultant, with the scope of work and assessment process to closely resemble that provided in the Jacobs Report. As such, the TT OMP will include the following:

➤ **Speedway and Dragway Operations:** Details of the Speedway and Dragway operations at the time of the TT OMP traffic surveys, including:

- Date of Events;
- Competitor and spectator numbers at each Event; and
- Speedway, Dragway, Event and other staff in attendance during each Event.

Records of this information will be kept by the Speedway and Dragway operators and made available to the consultants undertaking the TT OMP and relevant authorities on request.

➤ **Intersection Assessment:** Assessment of the operation of Intersection 1 and Intersection 2 during the arrival and departure peaks of an Event, and concurrent weekday Speedway and Dragway Events, including:

- Factoring of the Baseline Traffic Data to the relevant TT OMP assessment year in accordance with the forecast methodology detailed in the Jacobs Report;
- SIDRA analysis of the Baseline Intersection Operations based on the factored Baseline Traffic Data and Baseline Traffic Profile (i.e. as reported in the Jacobs Report);
- Review of the TT OMP traffic survey data at Intersection 1 and Intersection 2;
- Assessment of the Speedway and Dragway Event traffic profiles based on Speedway and Dragway attendance data.
- SIDRA modelling of Intersection 1 and Intersection 2 for both Event scenarios during the same periods as modelled in the Jacobs Reports; and
- Comparison of the operation of Intersection 1 and Intersection 2 as determined for Baseline (2022 and then 2032) Intersection Operations and operations at the time of the TT OMP.

6.6 Traffic & Transport Operational Monitoring Program: Mitigation Assessment

6.6.1 Relevant Speedway Condition

The identification of appropriate means of identifying and mitigating any potential issues arising from the TT OMP is requested in Condition D10(g) and D10(h) of the Speedway Approval.

6.6.2 Significant Traffic Mitigation Measures

Based on discussions with the Proponent and relevant authorities, the potential exists that Intersection 1 may operate differently than identified in the AECOM Report; as discussed in [Section 6.4.3](#), this may be a result of spectator numbers, Ferrers Road traffic volumes, or the spectator arrival and departure profiles, being different to those reported in the Jacobs Report and AECOM Report.

The Proponent has confirmed that should the TT OMPs (or other information or observations) indicate that Intersection 1 (or other intersections) are not operating to the standard detailed in the AECOM Report and Jacobs Report, but rather impacting safety at the intersection, the Proponent will investigate appropriate mitigation measures to provide safe and efficient intersection operations. The Speedway operator will not be liable/responsible for the ongoing mitigation of any such operations.

6.6.3 On-Site Traffic Mitigation Measures

As discussed above, the Proponent accepts responsibility for mitigating safety impacts at the Speedway access intersection to Fullers Road should they arise in the future. As such, the Speedway operator will only be required to manage general traffic and parking within the Site.

In this regard, and with reference to the Event Management Plan (**Event Plan**) and Speedway Work Health & Safety Management System (**Speedway WHSMS**), both of which are both provided in the broader OEMP documentation, these measures would include:

- Competitor access via the routes detailed in [Section 3.5.2](#) prior to the opening of all of Car Park A to spectators;
- Speedway staff supervision of the entry point to Pit Road from Car Park A, and at the entry point to the Pit Area, to ensure competitor access only to these areas;
- Competitor access for large vehicles via Intersection 2 after all of Car Park A has been opened to spectators;
- Event and marshalling staff supervision of vehicles at the internal Site roundabout to direct spectators to the appropriate car parks; and
- Event and marshalling staff supervision of key pedestrian paths through the Site to assist in wayfinding and general safety.

6.6.4 On-Site Parking Mitigation Measures

As discussed in [Section 3.8](#), the analysis of parking demand and provision provided in the Jacobs Report concludes that there is enough parking across the broader Speedway and Dragway sites to accommodate peak events. Notwithstanding, it will be important to also review the operation of the car parks as part of the TT OMP to ensure that they operating as safely and efficiently as possible, including providing Speedway spectators with parking closer to the Speedway, and similarly Dragway spectator parking near the Dragway, as far as possible.

Potential mitigation measures to be investigated should there be parking constraints, inefficiencies or safety concerns are anticipated to include:

- Additional marshalling staff within the car parks directing vehicles into parking aisles/spaces in an orderly manner;
- Designation of specific car parks to either Speedway or Dragway spectators depending on the size of an Event;
- Providing additional overflow parking areas (the responsibility of the Proponent); and/or
- Further improving pedestrian connections and wayfinding given that some spectators may be required to walk further between some car parks and the Speedway (and/or Dragway) itself.

If parking impacts are identified, the Speedway operator will consult with the Proponent to determine the most appropriate mitigation measures for implementation.

6.7 Traffic & Transport Operation Monitoring Program: Consultation

6.7.1 Relevant Speedway Condition

The identification of the consultation to be undertaken during the TT OMP is noted in Condition D10(i) of the Speedway Approval.

6.7.2 Consultation

As noted in Table 6 of the Speedway Approval, the relevant authorities to be consulted during each TT OMP are TfNSW and BCC; consultation with other authorities such as DPIE and/or the Planning Secretary may also be required should issues arise within their purview.

7 Key Issue Conditions

7.1 Overview

This section provides details of the response to the Key Issues Conditions and specifically responds to Condition TTP8 – TTP10 inclusive as detailed in Table 5.

7.2 Public Transport

7.2.1 Relevant Key Issue Condition

An assessment of the potential for public transport opportunities is detailed in Condition TTP 8 of the Jacobs Report.

7.2.2 Public Transport Provision

As discussed in Section 3.4, there are currently no public transport services that operate in the vicinity of the Speedway, and TfNSW has indicated that there is little if any potential to introduce services into the area, nor provide the pedestrian infrastructure need to support such services. The most likely opportunity to provide bus services would arise during concurrent Major Events, and would as such be considered in the future development of a MEOP.

7.3 Emergency Services Access

7.3.1 Relevant Key Issue Condition

The provision of emergency service vehicle access to all parts of the Site is detailed in Condition TTP 9 of the Jacobs Report.

7.3.2 Emergency Access

As detailed in Section 3.5, emergency vehicle access will be available to all parts of the Site, and emergency vehicles will be permitted to travel in both directions in Pit Road; and enter the Site via Intersection 2 if required. Further details in regard to emergency management are provided in the Event Plan, the Emergency Response Plan (included in the Event Plan) and Speedway WHSMS, all of which are provided as appendices to the OEMP.

7.4 Operational Traffic Management Plan

7.4.1 Relevant Key Issue Condition

The preparation of an Operational Traffic Management Plan is detailed in Condition TTP 10 of the Jacobs Report.

7.4.2 Operational Traffic & Transport Management Plan

This OTTMP responds fully to Condition TTP 10.

8 Desired Operation Performance Outcomes

8.1 Overview

This section provides details of the response to the Speedway Commitments and Desired Operational Performance Outcomes as detailed in Table 6 and Table 7 respectively.

8.2 Managing Road Network and Parking Impacts

8.2.1 Concurrent Major Events Traffic

Major Events (i.e. a concurrent Speedway Event and Drag Event) will be coordinated through a MOEP to minimise the impact of traffic on the local road network. As discussed in regard [Section 5.2.3](#), the OTTMP does not apply to concurrent Major Events; rather, a MEOP will be developed by the Proponent to examine the operation characteristics of concurrent Major Events should they be scheduled, and will undergo the same preparation and review process as that required for the OTTMP, and be approved by the Planning Secretary prior to concurrent Major Events taking place.

8.2.2 Parking Capacity

The parking assessment provided in the Jacobs Report concludes that sufficient parking capacity is provided for concurrent Major Events, and as discussed, the Reciprocal Car Parking Agreement permits the sharing of the Speedway and Dragway parking areas between both the Speedway and the Dragway for major and other events as necessary. Notwithstanding, the issue of parking capacity for concurrent Major Events would also be examined in an MEOP.

8.2.3 Event Scheduling

Potential operational traffic and parking impacts will be minimised to a large extent through Event scheduling (for the Speedway and Dragway) and are expected to be manageable with the implementation of appropriate traffic and parking management. Any additional management measures required to accommodate concurrent Major Events would be detailed in the MEOP.

Appendix A

Planning Approval Consistency Assessment Form: Sydney International Speedway
Amended Access Proposal



Planning Approval Consistency Assessment Form

SM-17-00000111

Metro Body of Knowledge (MBoK)

Assessment name:	Sydney International Speedway – Operational hours
Prepared by:	Jacobs / Arcadis / Ethos Urban
Prepared for:	Sydney Metro and Speedway Promotions
Assessment number:	SIS06
Status:	Final
Version:	1
Planning approval:	SSI 10048
Date required:	October 2021
iCentral number:	SM-21-00417424
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For information – do not alter:

Applicable to:	Sydney Metro
Document Owner:	Director, Environment, Sustainability & Planning
System Owner:	Deputy Chief Executive, Operations, Customer & Place-making
Status:	Final
Version:	3.0
Date of issue:	27 November 2020
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The Planning Approval Consistency Assessment Form should be completed in accordance with [SM-17-00000103 Planning Approval Consistency Assessment Procedure](#).

1. Existing Approved Project

Planning approval reference details (Application/Document No. (including modifications)):

- SSI 10048 Sydney International Speedway

Date of determination:

- SSI 10048: 23 December 2020

Type of planning approval:

- State significant infrastructure (Division 5.2)

Description of existing approved project you are assessing for consistency:

- Construction and operation of the Sydney International Speedway including:
 - A new world-class clay-based racetrack for both speedway cars and motorcycles, including sprint, wingless sprint, street stockers, V8 dirt modified and Formula 500 cars
 - A new grandstand and terraced seating to accommodate up to 7000 spectators
 - Public amenities, corporate boxes and food, beverage and merchandise outlets
 - Dedicated parking for speedway competitors and spectators
 - Additional overflow parking with flexibility to be used for dragway events
 - Dual access to the precinct by creating new vehicle access to the speedway pit area via a new intersection built off Ferrers Road
 - A dedicated competitor pit area to service the speedway
 - Workshops, garages and trackside support services.

Based on the Sydney Speedway 2019-2020 season schedule (45 racing events per year) it is anticipated that there would be an average of one event at the Sydney International Speedway per week across the racing season (generally September to May), with a number of midweek events (typically Wednesday and Friday nights) across the Christmas and early January period. On average, it is expected that

there would be about four major events held at the speedway each year, attracting around 4000 to 6000 people per event, with smaller events spread frequently across the racing season expected to attract around 500 to 1500 spectators per event.

The racing events would typically be held on Saturdays with gates opening about 2 pm and racing occurring in the early evening between 6 pm and 10 pm. During events some incidents or track maintenance activities may result in racing extending beyond 10 pm. Such racing beyond 10 pm is expected to occur infrequently, for a relatively short duration and would not carry on through to the late night time period. Some events might then conclude with firework displays.

There is no Condition of Approval that specifies hours of operation.

Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

- *Sydney International Speedway Environmental Impact Statement* including accompanying technical papers (August 2020)
- *Sydney International Speedway Submissions Report* (November 2020)
- *Sydney International Speedway Amendment Report* (November 2020)
- Instrument of Approval (dated 23 December 2020).

The above documents are available on the NSW planning portal: <https://www.planningportal.nsw.gov.au/major-projects/project/30111>

All proposed work identified in this assessment would be undertaken in accordance with the mitigation measures identified in the EIS, Submissions Report and Amendment Report and the conditions of approval.

2. Description of proposed development/activity/work

Describe ancillary activities, duration of work, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used.

This proposal comprises an amendment of typical operating hours for the approved Sydney International Speedway to enable racing to occur more frequently until 11 pm. Whilst the *Sydney International Speedway Submissions Report* (November 2020) provides clarification that incidents or track maintenance activities may result in infrequent racing extending beyond 10 pm, this proposal would formalise the operating hours to be one additional hour later than the approved project as described by the *Sydney International Speedway Environmental Impact Statement* (August 2020) and allow racing to occur up to 11 pm on a frequent basis.

3. Timeframe

When will the proposed change take place? For how long?

The proposed change to typical operating hours would be implemented from opening of the operational Sydney International Speedway (anticipated to be December 2021) and would continue for the duration of the operation.

4. Site description

Provide a description of the site on which the proposed work are to be carried out, including, Lot and Deposited Plan details, where available. Map to be included here or as an appendix. Detail of land owner.

The Sydney International Speedway is being developed on land owned by the NSW Government, managed by Greater Sydney Parklands (previously known as the Western Sydney Parklands Trust). The Sydney International Speedway is located on the following lots:

- Lot 1, deposited plan (DP) 1077822
- Lots A, B & C DP 408966
- Lot 2 DP 1062965.

No changes to the approved project area are required for the proposal. The approved project area as per the Amendment Report is shown in Appendix A.

5. Site Environmental Characteristics

Describe the environment (i.e., vegetation, nearby waterways, land use, surrounding land use), identify likely presence of protected flora/fauna and sensitive area.

The proposal would be consistent with the approved project area, as described in Section 3 of the Amendment Report. The approved project, which is currently under construction, is located within the Western Sydney Parklands. The new speedway is located alongside the existing Sydney Dragway to the north and east and the Sydney Motorsports Park (operated by the Australian Racing Drivers' Club) to the north.

The existing land uses bounding the project area are commercial/industrial to the south and west, with major road corridors further to the west (M7 Motorway) and north (M4 Motorway). Prospect Reservoir is located to the east of the approved project. Existing sources of noise in the study area include existing commercial/industrial facilities, road traffic noise and noise from existing motorsport events at Sydney Motorsport Park and Sydney Dragway.

The nearest residential receivers are around one kilometre to the south of the project area along Chandos Road and about one kilometre to the north-west, beyond the Lighthorse (M4/M7) Interchange. Residential receivers are sparsely distributed on either side of the M7 Motorway.

6. Justification for the proposed work

Address the need for the proposed work, whether there are alternatives to the proposed work (and why these are not appropriate), and the consequences with not proceeding with the proposed work.

The amendment of typical operating hours until 11 pm would accommodate any delays to the completion of racing, to allow the full program of racing to take place. Typically, incidents during racing result in minor delays to proceedings, but it is not unusual that an incident results in an extended delay. Such delays are unlikely to be accommodated within the 6 pm and 10 pm typical racing hours identified in the Environmental Impact Statement without requiring a reduction in the number of programmed race classes, number of races, or number of laps for each race. These programming changes would adversely impact the number of racing entrants and the experience for spectators, which may in turn impact on entrants and spectators returning for other events. The proposed extension to typical operating hours until 11 pm would therefore allow the operator of the Sydney International Speedway to confidently program a racing schedule that includes all classes, races and laps, and is value for money for both competitors and spectators as a result, encouraging continued patronage and ensuring financial feasibility of the Sydney International Speedway operations.

An earlier start time for racing to accommodate delays has been considered as an option. However, track lighting and race control is designed for dusk and night time racing. Running speedway cars on the clay racetrack during daylight hours could create dust and debris hazards. In addition to being a hazard for drivers, such excessive dust would lessen the spectator experience and increase the likelihood of dust impacting on nearby receivers (including Sydney Dragway). Therefore, racing commencing earlier than 6 pm has been discounted as a viable option.

7. Environmental Benefit

Identify whether there are environmental benefits associated with the proposed work. If so, provide details:

There would be no environmental benefits associated with the proposed change to operating hours.

8. Control Measures

Will a project and site specific EMP be prepared? Are appropriate control measures already identified in an existing EMP?

As per the approved project, an Operational Environmental Management Plan would be prepared and implemented by the operator of the Sydney International Speedway. The plan would provide the overarching framework for the management of all potential environmental

impacts resulting from the operation of the project. The scope of the plan would be confirmed by the operator, but would likely contain noise management measures, including:

- Establishing vehicle noise control limits for events and monitoring to verify compliance with these limits
- Managing the use of the public address system to minimise noise
- Coordination with other motorsports operators to minimise noise from concurrent events
- Establishment of a complaints handling and response procedure.

The following conditions which are most specifically relevant to the proposed change in operating hours include:

Condition D1

An Operational Environmental Management Plan (OEMP) must be prepared in accordance with the Environmental Management Plan Guideline for Infrastructure Projects (Department Planning, Industry and Environment 2020). The OEMP must detail how the performance outcomes, commitments and mitigation measures made and identified in the documents listed in Condition A1 will be implemented and achieved during operation. This condition (Condition D1) does not apply if Condition D2 of this approval applies.

Condition E29

At-property treatment must be provided to the properties identified in Table 38 of the Noise and Vibration Technical Paper (dated July 2020), unless otherwise agreed by the Planning Secretary.

9. Climate Change Impacts

Is the site likely to be adversely affected by the impacts of climate change? If yes, what adaptation/mitigation measures will be incorporated into the design?

Climate change adaptation impacts from this proposal would be consistent with those assessed in the Environmental Impact Statement.

10. Impact Assessment – Construction

The proposed change relates only to operation of the project, so no changes to the approved project would occur during construction.

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from the approved project.	No additional measures required.	Y	Y	
Water	No change from the approved project.	No additional measures required.	Y	Y	
Air quality	No change from the approved project.	No additional measures required.	Y	Y	
Noise and vibration	No change from the approved project.	No additional measures required.	Y	Y	
Indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from the approved project.	No additional measures required.	Y	Y	
Traffic	No change from the approved project.	No additional measures required.	Y	Y	
Waste	No change from the approved project.	No additional measures required.	Y	Y	
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Visual	No change from the approved project.	No additional measures required.	Y	Y	
Urban design	No change from the approved project.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	No change from the approved project.	No additional measures required.	Y	Y	
Climate Change	No change from the approved project.	No additional measures required.	Y	Y	
Risk	No change from the approved project.	No additional measures required.	Y	Y	
Other	No change from the approved project.	No additional measures required.	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures required.	Y	Y	

11. Impact Assessment – Operation

Attach supporting evidence in the Appendix if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/work, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from the approved project.	No additional measures required.	Y	Y	
Water	No change from the approved project.	No additional measures required.	Y	Y	
Air quality	No change from the approved project.	No additional measures required.	Y	Y	
Noise and vibration	<p>Operational motorsport noise</p> <p>The operational noise assessment for the approved project considered the potential impacts of operational motorsport noise up to 10 pm. It predicted that worst-case noise levels from motorsport events for neutral and adverse weather conditions were below existing background levels for most receiver locations, in the absence of mitigation measures. Where noise levels at receivers were predicted to exceed background noise levels (RBL) by more than 5 dB, at-property treatment would be provided at each affected property to mitigate the impact (mitigation measure NV02).</p> <p>A quantitative operational noise assessment has been carried out for motorsport noise up to 11 pm (see Appendix B). The assessment identified that, in the absence of mitigation measures, the worst-case noise levels during neutral weather conditions are predicted to exceed background levels at the nearest receivers while racing is underway during events for certain race classes. Residential receivers to the south of the project are expected to be most affected due to</p>	No additional measures required – the control measures identified for the approved project would be applied to the additional receivers identified in this assessment as required (see Appendix B).	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/work, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>receivers in this catchment being the closest to the approved project. There would be no additional receivers affected and generally, the predicted noise impacts from 10 pm to 11 pm would be within 1 dB of the predicted noise impacts up to 10 pm for the approved project. Therefore, these potential impacts are consistent with the approved project.</p> <p>Due to the potential occurrence of temperature inversions during the night time period in winter months, this assessment has also considered the effects of temperature inversions on the prediction of noise levels to represent the potential worst case during adverse weather conditions. Assessment in accordance with the <i>Noise Policy for Industry</i> (EPA, 2017) requires temperature inversions to be considered for night time impacts only. Therefore, temperature inversions were not previously considered for the typical operating hours of the approved project (which were limited to the evening period).</p> <p>It is unlikely that these adverse weather conditions would coincide with speedway events, as temperature inversions only occur during the winter months (June to August), which is generally outside of the speedway racing season (September to May).</p> <p>The assessment concluded that for worst case potential impacts during a temperature inversion, 24 receivers additional to those that were identified for the worst case predictions for the approved project would experience predicted average noise levels of more than 5 dBA above the background level. Further information, including the locations of these receivers, is provided in Appendix B.</p> <p>The approved project included a specific mitigation measure for operational motorsport noise impacts</p>				

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/work, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>(NV02) that states that at-property treatment will be provided for residential receivers which were predicted to have average noise level exceedances of more than 5 dB above the background level. Whilst events are not planned to be scheduled during winter months, should events regularly occur between June and August past 10pm, at-property treatment for the additional receivers identified in this assessment would be further investigated and implemented in accordance with mitigation measure NV02. This would reduce both the likelihood and consequence of potential impacts, consistent with the approved project.</p> <p>Sleep disturbance</p> <p>A quantitative sleep disturbance assessment was not required for the approved project, given the typical operating hours were limited to the evening period (up to 10 pm). However, a qualitative sleep disturbance assessment was provided in <i>Sydney International Speedway Submissions Report</i> (November 2020) to consider potential impacts of racing occurring after 10 pm due to minor delays.</p> <p>As the proposed extension of typical operating hours would result in racing during the night time period (10 pm to 11 pm), a quantitative sleep disturbance assessment has been carried out (see Appendix B). While exceedances of the <i>Noise Policy for Industry</i> (EPA, 2017) screening levels are predicted at some of the nearest residential receivers, the exceedances are considered relatively minor. Existing noise monitoring data shows that existing maximum noise levels above those predicted for the proposed change to typical operating hours are a regular feature of the area. These exceedances are not likely to result in sleep disturbance when compared against <i>Road</i></p>				

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/work, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p><i>Noise Policy</i> (Department of Environment, Climate Change and Water NSW, 2011) advice on assessing noise impacts and are therefore consistent with the conclusions of the qualitative sleep disturbance assessment of the approved project in the <i>Sydney International Speedway Submissions Report</i> (November 2020).</p> <p>Operational traffic noise</p> <p>Operational traffic from the project (including after 11 pm) is predicted to result in an increase in road traffic noise levels of less than 2 dB, which does not trigger the requirement to consider additional noise mitigation and is consistent with the impacts of the approved project.</p>				
Indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from the approved project. Additional consultation has been carried out with Greater Sydney Parklands and the Office of Sport on the proposed change.	No additional measures required.	Y	Y	
Traffic	No change to traffic volumes or the peak arrival hour from the approved project. The proposed change would result in change of peak departure hour from between 9 pm and 10 pm as per the approved project, to 10 pm to 11 pm, with some departures also taking place between 11pm and 12am. Traffic impacts are expected to be minor given the likelihood of less vehicles on the existing network at this later time, and would be consistent with the approved project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/work, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Waste	No change from the approved project.	No additional measures required.	Y	Y	
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	
Visual	No change from the approved project.	No additional measures required.	Y	Y	
Urban design	No change from the approved project.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	No change from the approved project.	No additional measures required.	Y	Y	
Climate Change	No change from the approved project.	No additional measures required.	Y	Y	
Risk	No change from the approved project.	No additional measures required.	Y	Y	
Other	No change from the approved project.	No additional measures required.	Y	Y	
Management and mitigation measures	No change from the approved project	No additional measures required.	Y	Y	

12. Consistency with the Approved Project

Based on a review and understanding of the existing Approved Project and the proposed modifications, is there is a transformation of the Project?	No. The proposed change to typical operating hours would not transform the approved project.
Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?	Yes. The proposed change to typical operating hours would be consistent with the objectives and functions of the approved project.
Is the project as modified consistent with the objectives and functions of elements of the Approved Project?	Yes. The proposed change to typical operating hours would be consistent with the objectives and functions of elements of the approved project.
Are there any new environmental impacts as a result of the proposed work/modifications?	All risks would be adequately addressed through the application of the mitigation measures for the approved project relevant to the assessment in this document, and the required OEMP, including any sub-plans. There would be no new environmental risks as a result of the proposed work.
Is the project as modified consistent with the conditions of approval?	Yes. The proposed change to typical operating hours would be consistent with the conditions of approval.
Are the impacts of the proposed activity/work known and understood?	Yes. The impacts of the proposed change to typical operating hours are understood and will be accounted for by implementing the control measures within this document and the OEMP, including any sub-plans.
Are the impacts of the proposed activity/work able to be managed so as not to have an adverse impact?	Yes. The impacts of the proposed change to typical operating hours can be managed so as to avoid an adverse impact.

13. Other Environmental Approvals

Identify all other approvals required for the project:


N/A

Author certification

To be completed by person preparing checklist.

I certify that to the best of my knowledge this Consistency Checklist:

- Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and
- Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information.

Name:	Carys Scholefield	Signature:	
Title:	Senior Environmental Planner		
Company:	Jacobs	Date:	22/10/2021

This section is for Sydney Metro only.

Application supported and submitted by

Name:	Yvette Buchli	Date:	25/10/2021
Title:	Associate Director Planning Approvals	Comments:	
Signature:			

Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

- Yes ☒ The proposed activity/work are consistent and no further assessment is required.
- No ☐ The proposed work/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.

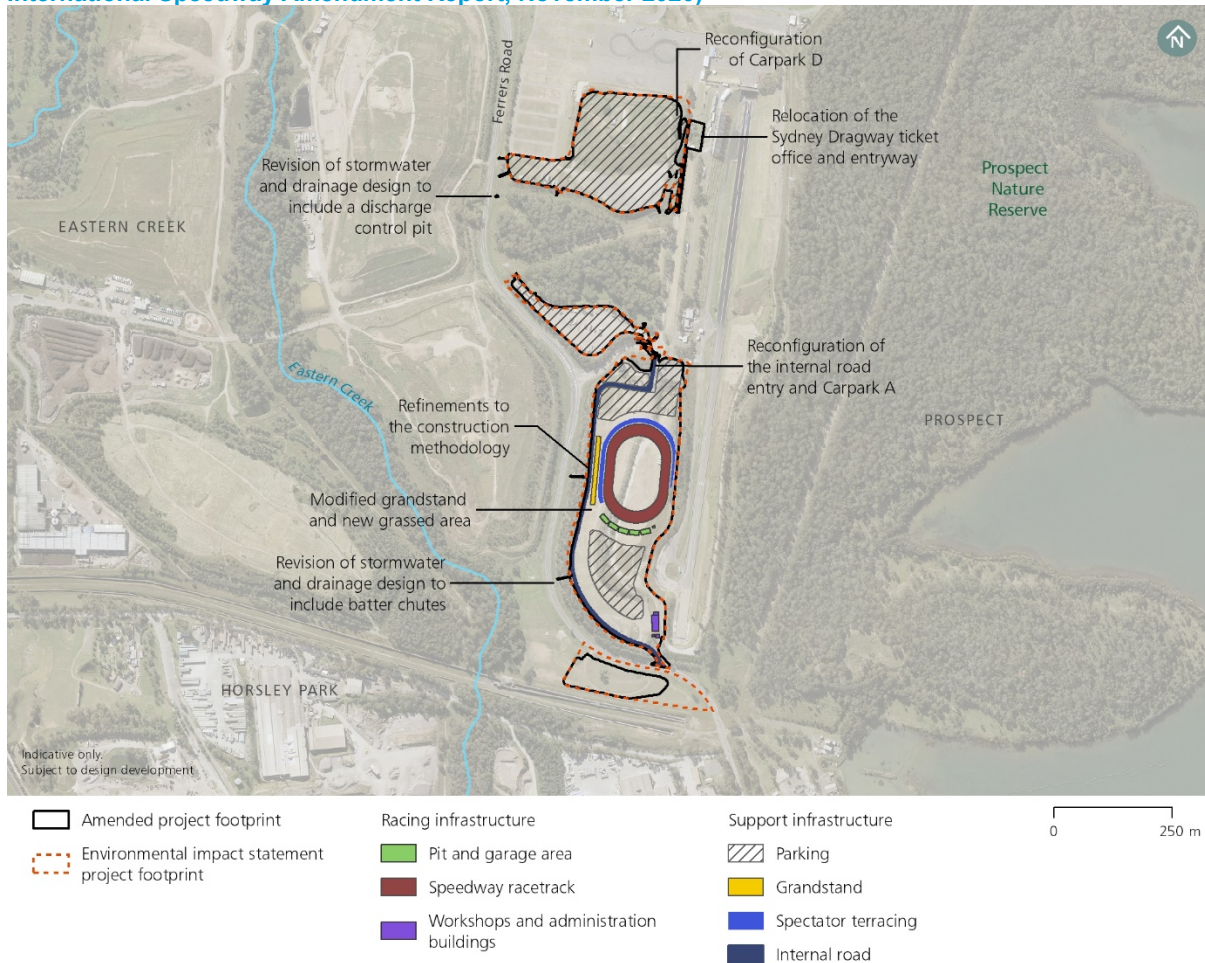
Endorsed by

Name:	Stuart Hodgson	Date:	25/10/2021
Title:	Director ESP Sydney Metro West	Comments:	None
Signature:			

Appendix A Sydney International Speedway approved project area

The approved project area is shown as the amended project footprint in Figure A1, taken from the Sydney International Speedway Amendment Report (November, 2020). There is no change to the approved project area as part of this proposed change.

Figure A1 The approved project area, labelled as the Amended project footprint (Source: Sydney International Speedway Amendment Report, November 2020)



Appendix B Noise and vibration memorandum

To:	Carys Scholefield	At:	Jacobs
From:	Aaron McKenzie	At:	SLR Consulting Australia Pty Ltd
Date:	22 October 2021	Ref:	610.18331-M13-v1.1-20211022.docx
Subject:	Sydney International Speedway Night-time Operations - Noise Assessment		

1 Introduction

This technical memorandum has been prepared to assess the potential noise impacts associated with the proposed extension of operating hours for the Sydney international speedway from 10pm till 11pm.

The Sydney international speedway is being relocated from Rosehill to a new location within Western Sydney Parklands' Precinct 5: Eastern Creek Motor Sports. This assessment has been prepared with reference to the *Sydney International Speedway EIS noise and vibration technical paper* (SLR Consulting 2020) referred here on as the EIS NVIA, which previously assessed operation of the speedway between the hours of 7am and 10pm.

The scope of this investigation includes:

- Describe the existing acoustic environment with respect to the extended hour of operation and establish noise criteria for the extended hour of operation till 11pm
- Determine noise impacts including sleep disturbance impact potential during the extended hour of operation
- Identify feasible and reasonable noise mitigation and management measures to be incorporated in the detailed design and operational planning stage of the project.

2 Existing Environment

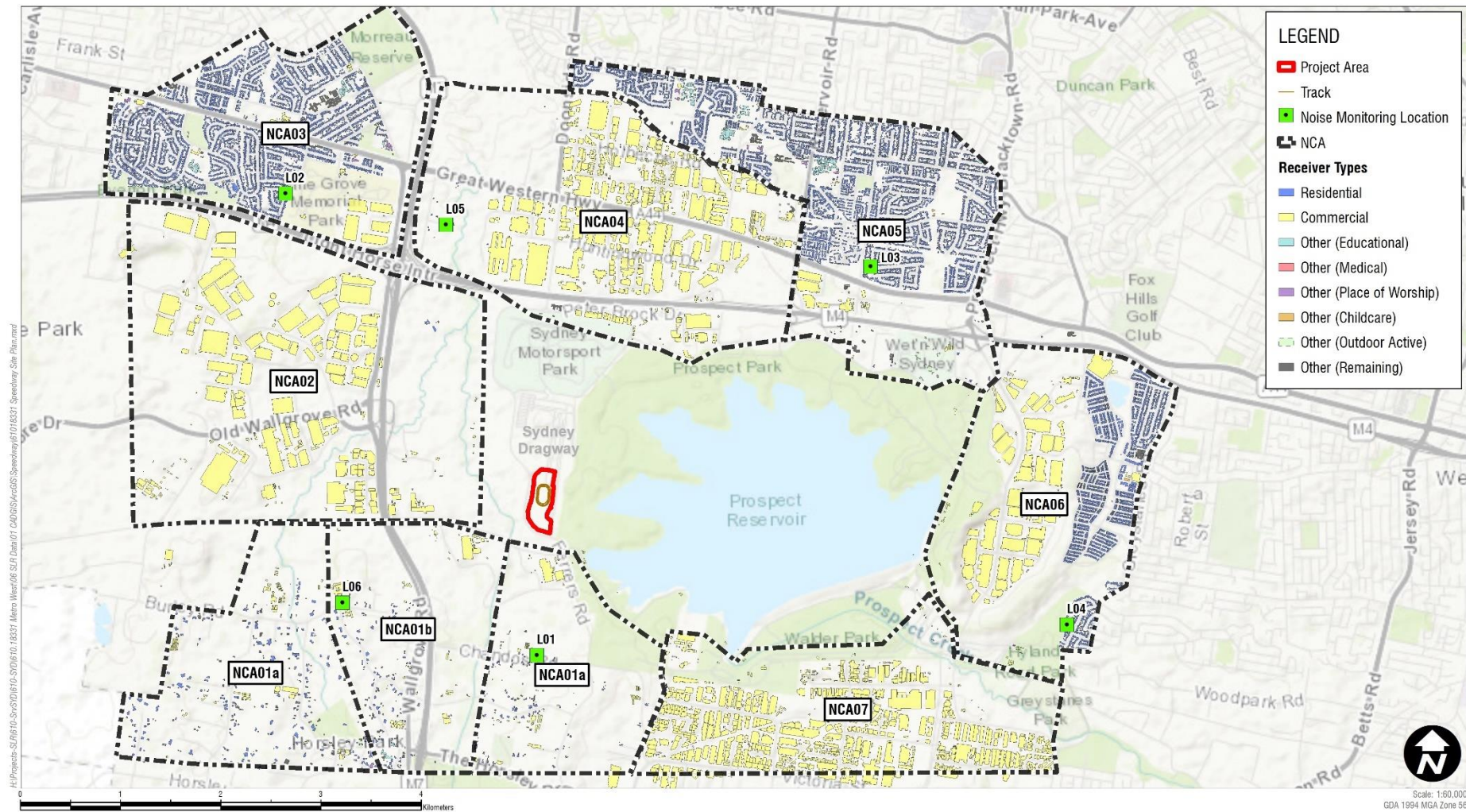
The project is located in the Blacktown Local Government Area (LGA) within the Western Sydney Parklands Precinct 5: Eastern Creek Motor Sports. The existing land uses near the site are commercial/industrial to the south and west, with major road corridors being further to the west (M7 Motorway) and north (M4 Motorway). Prospect Reservoir is located to the east of the project. The nearest residential receivers are located to south beyond the existing industrial area and to the northwest beyond the Lighthorse (M4/M7) Interchange.

Ambient noise monitoring was completed in the study area in January and February 2020 as part of the EIS NVIA. The measured noise levels have been used to determine the existing noise environment and to set criteria to assess the potential impacts from the project. This assessment for the extended hours of operation has reviewed the monitoring data with further consideration of the 10pm to 11pm night-time shoulder period.

A review of publicly available monitoring data measured at receivers near the M7 Motorway south west of the project area was conducted to quantify representative background levels. This resulted in an additional noise catchment area (NCA) representative of these receivers (NCA 01b) when compared to the EIS NVIA.

The study area, NCAs and noise monitoring locations are shown in **Figure 1**.

Figure 1 Study Area



The monitoring results are summarised in **Table 1**. Descriptions of each monitoring location together with graphs of the daily measured noise level are included in Appendix B of EIS NVIA.

Table 1 Summary of Unattended Noise Monitoring Results

Location ID	NCA	Address	Noise Level (dBA) ^{1,2}							
			Background Noise (RBL)				Average Noise Level (LAeq)			
			Day	Evening	Night	Night shoulder	Day	Evening	Night	Night shoulder
L01	NCA01a & NCA02	150-151 Chandos Road, Horsley Park	39	39 ³ (actual 40)	39 ³ (actual 40)	39 ³ (actual 42)	49	49	48	47 (46 no insects)
L02	NCA03	8 Farrington Street, Minchinbury	41	41 ³ (actual 45)	41	41 (actual 45)	55	57	49	52
L03	NCA05	94 Ollier Crescent, Prospect	43	43	38	42	54	54	49	50 (49 no insects)
L04	NCA06	48 Munro Street, Greystanes	35	35 ³ (actual 36)	35 ³ (actual 39)	35 (actual 43)	48	48	47	49 (45 no insects)
L05 ⁴	NCA04	51 Pikes Lane, Eastern Creek	47	47	41	44	52	51	52	52
L06 ⁵	NCA01b	58 Burley Road, Horsley Park	42	42 ³ (actual 47)	42 ³ (actual 43)	42 ⁶	52	57	51	51 ⁶

Note 1: The RBL and LAeq noise levels have been determined with reference to the procedures in the Noise Policy for Industry

Note 2: Daytime is 7.00am to 6.00pm, evening is 6.00pm to 10.00pm and night-time is 10.00 pm to 7.00am, Night-time shoulder 10:00pm – 11:00pm.

Note 3: RBL for evening set at no greater than the daytime, and RBL for night-time set no greater than the day or evening following principles outlined in the NPfI.

Note 4: Data from noise monitoring undertaken by SLR in December 2018 as part of a nearby project.

Note 5: Data obtained from monitoring conducted by Arup between 6 February to 17 February 2020, Western Sydney Energy and Resource Recovery Centre, Chapter 13 Noise and Vibration, 2020.

Note 6: The publicly available data could not be recalculated for the night shoulder period, hence the night time level was adopted.

The unattended noise monitoring results indicate existing daytime background noise levels (RBL) are dominated by road traffic noise from distant major roads, including the M7 Motorway, M4 Motorway and Great Western Highway. Nearby insect noise is considered likely to have influenced the evening and night-time measurements during the survey which is common during warmer months. The EIS NVIA used guidance from the Noise Policy for Industry (NPfI) (NSW EPA 2017) to determine the RBLs for the day, evening and night-time periods at each location.

The noise monitoring data was re-analysed to determine RBL and average noise levels for the night-time shoulder period from 10pm to 11pm. The analysis indicated that the measured background noise levels during this shoulder period were typically higher than the night-time (10pm to 7am) period and at two locations (L01 and L04) higher than the evening period. As shoulder period noise levels are likely to have been influenced by insect noise at certain locations, the evening period RBL has been used for the night-time shoulder period in NCA01a, NCA01b, NCA02, NCA03 and NCA06. This is consistent with the approach in the EIS NVIA.

2.1 Meteorology

An assessment of meteorological data during the night-time shoulder period has been undertaken to determine the occurrence of seasonal noise enhancing weather conditions. Weather data from the Bureau of Meteorology Horsley Park Equestrian Centre #67119 weather station between 2016 and 2020 was reviewed.

The results of the analysis indicated noise enhancing winds (0.5 – 3m/s) from the south west occurred for 30% of the night-time shoulder period during the autumn and winter months. As per the EIS NVIA temperature inversion conditions were also considered a feature of the area during the winter months which would typically occur during calm conditions and very light winds. As such the following weather conditions have been assessed:

- Calm conditions with Neutral Class D atmospheric stability
- Noise enhancing (3m/s) south west winds with Neutral D atmospheric stability
- Noise enhancing temperature inversion Stable Class F atmospheric stability.

3 Noise Guidelines

3.1 Assessment Criteria

The EIS NVIA provides a summary of relevant noise guidelines for the assessment of noise impacts from motor sport events being held at the facility.

The assessment of the night-time shoulder period has been undertaken on the basis of the predicted exceedance of the background noise level. This is consistent with the EIS NVIA.

3.2 Sleep Disturbance

Guidance for assessing the potential for sleep disturbance impacts on nearby residences is provided in Section 2.5 of the NPfI, which states:

Where the subject development/premises night-time noise levels at a residential location exceed:

- $L_{Aeq,15min}$ 40 dBA or the prevailing RBL plus 5 dB, whichever is the greater, and/or
- L_{AFmax} 52 dBA or the prevailing RBL plus 15 dB, whichever is the greater,

a detailed maximum noise level event assessment should be undertaken.

The night-time sleep disturbance L_{Amax} screening noise levels for the residential areas near the development are shown in **Table 2**.

Table 2 Night-time Sleep Disturbance Screening Noise Levels

Residential Receiver Area	Noise Level (dBA)	
	Night-time Shoulder RBL	Sleep Disturbance Screening Noise Level (LA _{max})
NCA01a & NCA02	39	54
NCA01b	42	57
NCA03	41	56
NCA04	44	59
NCA05	42	57
NCA06	35	52

The NSW *Road Noise Policy* (RNP) contains the following additional advice relating to potential sleep disturbance impacts:

“From the research on sleep disturbance to date it can be concluded that:

- maximum internal noise levels below 50–55 dB(A) are unlikely to awaken people from sleep*
- one or two noise events per night, with maximum internal noise levels of 65–70 dB(A), are not likely to affect health and wellbeing significantly.”*

It is generally accepted that internal noise levels in a dwelling with windows open for ventilation are 10 dB lower than external noise levels. This equates to external noise events of 60 dBA to 65 dBA being unlikely to cause awakening reactions.

3.3 Operational Road Traffic Noise

When traffic related to the project is on the public road network, vehicle movements are regarded as ‘additional road traffic’ (rather than as part of the site operations) and are assessed under the RNP.

The RNP recognises that fewer opportunities generally exist to reduce the noise impacts from new land use developments generating additional traffic on existing roads and suggests that any increase in the total traffic noise level resulting from the project should be limited to 2.0 dB above the existing level.

The RNP criteria applicable to the Project is reproduced below in **Table 3**.

Table 3 Road Noise Policy Criteria for Assessing Additional Vehicles on Public Roads

Road Category	Type of Project/Land Use	Assessment Criteria (dBA)	
		Daytime (7 am - 10 pm)	Night-time (10 pm - 7 am)
Freeway/ arterial/ sub-arterial roads	Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments	LA _{eq} (15hour) 60 (external)	LA _{eq} (9hour) 55 (external)
Local roads	Existing residences affected by additional traffic on existing local roads generated by land use developments	LA _{eq} (1hour) 55 (external)	LA _{eq} (1hour) 50 (external)

4 Methodology

The noise modeling approach, parameters and assumptions in the EIS NVIA have been used in this assessment. Weather conditions during the night-time shoulder period have also been considered (see **Section 2.1**).

Publicly available reports have been reviewed to determine the likely maximum noise emissions from sprint car racing at speedways locally and internationally. This review concluded that an L_{Amax} sound power level (SWL) of around 139 - 142 dB is appropriate sprint car racing. This noise source has been modelled as a single point emission at any location around the track circuit to provide an estimate of maximum noise emissions during racing.

5 Speedway Noise Assessment

5.1 Night-time Shoulder Period Motorsport Noise Levels Relative to Existing Background Level

A summary of the modelling results for motorsport noise emissions during the night-time shoulder period is shown in **Table 4** for neutral weather and **Table 5** for adverse weather conditions. To indicate the extent of the predicted impacts, noise contours for the highest noise events (i.e. sprint cars) have been generated. The predicted noise levels are shown in for **Figure 2** neutral weather conditions and in **Figure 3** for adverse weather conditions. The figures show the location of the potentially affected residential receivers.

The assessment shows the following at residential receivers:

- The predicted noise impacts during the night-time shoulder period are generally the same (ie within 1 dB) as was predicted in the EIS NVIA for the daytime/evening period. This is due to the background levels in the study area being relatively constant. Where shoulder period background levels were found to be higher than the daytime/evening they were reduced to equal the evening level as per NPfI requirements.
- Due to the occurrence of temperature inversions during the night times period in winter months, this assessment has considered these effects on the prediction of noise levels for the night-time shoulder period.
- The following impacts, which are consistent with the EIS NVIA, are predicted:
 - In the absence of mitigation measures, the worst-case noise levels are predicted to exceed background levels at the nearest receivers while racing is underway during certain events. Residential receivers to the south of the project in NCA01a are expected to be most affected due to receivers in this catchment being the closest to the project.
 - During neutral weather conditions (see **Table 4**), exceedances of up to 12 dB above existing background level are predicted in NCA01a while racing is underway during the noisiest sprint car events. Noise levels in NCA01a during lower noise events, such as V8 modifieds and other events, are predicted to result in exceedances of up to 8 dB. The average exceedance of the background level in NCA01a is predicted to be 7 dB during neutral weather, consistent with the average exceedance of 7dB predicted in the EIS NVIA. During adverse weather conditions (see **Table 5**) noise levels are predicted to increase by 3 dB with exceedances of up to 15 dB during the noisiest sprint car events. The average exceedance in NCA01a is predicted to be 10 dB during adverse weather.
 - Residential receivers in NCA01b have higher background noise levels due to their proximity to the M7 Motorway. Worst-case noise levels during neutral weather conditions are predicted to exceed background levels by up to 6 dB while racing is underway during sprint car events in NCA01b, with levels during lower noise events generally being below background level. The average exceedance of the background level in NCA01b during neutral conditions is predicted to be 3 dB. During adverse weather conditions noise levels are predicted to increase by 2 dB in NCA01b.

- Residential receivers in NCA02 and NCA06 are further away from the project site and less affected. Worst-case noise levels during neutral weather conditions are predicted to exceed background levels by up to 7 dB and 8 dB while racing is underway during sprint car events in NCA02 and NCA06 respectively, with levels during lower noise events generally being below background level. The average exceedance of the background level in NCA02 during neutral conditions is predicted to be 2 dB, with NCA06 predicted to be 3 dB, consistent with the EIS NVIA. While NCA06 receivers are further away than NCA02, differing ground type and screening effects from intervening structures / buildings likely causes the differences between these NCAs. During adverse weather conditions noise levels are predicted to increase by 4 dB in NCA02 and 2 dB in NCA06 with exceedance of up to 11 dB and 10 dB, respectively.
- It is noted that the exceedance in NCA02 is at an isolated property to the north-west of the project site (165 Wallgrove Road, Eastern Creek). This receiver is situated within the project area of the approved Lighthorse Interchange Business Hub and identified as unoccupied and therefore unlikely to currently be noise sensitive. No other residential receivers in NCA02 are predicted to have noise levels above background.
- Noise levels in NCA03, NCA04 and NCA05 during neutral weather conditions are generally predicted to be below background during most events. During adverse weather conditions noise levels during the loudest events are predicted to exceed background by 2 dB in NCA03 and NCA04. Average exceedances are generally below background during adverse weather conditions in all three NCAs. This is consistent with noise levels predicted in the EIS NVIA.

Table 4 Worst-case Predicted Motorsport Noise Levels, Night-time Shoulder Period – Neutral Weather

NCA	Distance to Nearest Residential	Event	Assumed Number of Events	Noise Level LAeq(15minute) (dBA)		
				Predicted	Exceedance of Background ¹	Average Exceedance ²
NCA01 a	1200 m	Sprint cars	17	51	12	7
		Wingless Sprints	4	42	3	
		Formula 500s	4	40	1	
		Street stocks	4	42	3	
		V8 Dirt modifieds	4	47	8	
		Motorcycles	4	40	1	
NCA01 b	1500 m	Sprint cars	17	48	6	3
		Wingless Sprints	4	39	-	
		Formula 500s	4	36	-	
		Street stocks	4	39	-	
		V8 Dirt modifieds	4	43	1	
		Motorcycles	4	36	-	
NCA02	1900 m	Sprint cars	17	46	7	2
		Wingless Sprints	4	37	-	
		Formula 500s	4	34	-	
		Street stocks	4	37	-	
		V8 Dirt modifieds	4	42	3	
		Motorcycles	4	34	-	
NCA03	3700 m	Sprint cars	17	39	-	<0
		Wingless Sprints	4	30	-	
		Formula 500s	4	26	-	
		Street stocks	4	30	-	
		V8 Dirt modifieds	4	34	-	
		Motorcycles	4	26	-	
NCA04	2800 m	Sprint cars	17	42	-	<0
		Wingless Sprints	4	33	-	
		Formula 500s	4	30	-	
		Street stocks	4	33	-	
		V8 Dirt modifieds	4	37	-	
		Motorcycles	4	30	-	
NCA05	3400 m	Sprint cars	17	44	2	<0
		Wingless Sprints	4	35	-	
		Formula 500s	4	31	-	
		Street stocks	4	35	-	
		V8 Dirt modifieds	4	39	-	
		Motorcycles	4	31	-	
NCA06	3200 m	Sprint cars	17	43	8	3
		Wingless Sprints	4	35	-	
		Formula 500s	4	31	-	
		Street stocks	4	35	-	

NCA	Distance to Nearest Residential	Event	Assumed Number of Events	Noise Level LAeq(15minute) (dBA)		
				Predicted	Exceedance of Background ¹	Average Exceedance ²
		V8 Dirt modifieds	4	37	2	
		Motorcycles	4	31	-	
NCA07	n/a – no residential receivers identified in this NCA					

Note 1: Background levels during the night-time shoulder period (see **Table 1**).

Note 2: Arithmetic average weighted by the proposed number of events.

Table 5 Worst-case Predicted Motorsport Noise Levels, Night-time Shoulder Period – Adverse Weather

NCA	Distance to Nearest Residential	Event	Assumed Number of Events	Noise Level LAeq(15minute) (dBA)		
				Predicted	Exceedance of Background ¹	Average Exceedance ²
NCA01a	1200 m	Sprint cars	17	54	15	10
		Wingless Sprints	4	46	7	
		Formula 500s	4	43	4	
		Street stocks	4	46	7	
		V8 Dirt modifieds	4	50	11	
		Motorcycles	4	43	4	
NCA01b	1500 m	Sprint cars	17	51	9	5
		Wingless Sprints	4	42	-	
		Formula 500s	4	39	-	
		Street stocks	4	42	-	
		V8 Dirt modifieds	4	46	4	
		Motorcycles	4	39	-	
NCA02	1900 m	Sprint cars	17	50	11	6
		Wingless Sprints	4	41	2	
		Formula 500s	4	38	-	
		Street stocks	4	41	2	
		V8 Dirt modifieds	4	45	6	
		Motorcycles	4	38	-	
NCA03	3700 m	Sprint cars	17	43	2	1
		Wingless Sprints	4	34	-	
		Formula 500s	4	30	-	
		Street stocks	4	34	-	
		V8 Dirt modifieds	4	38	-	
		Motorcycles	4	30	-	
NCA04	2800 m	Sprint cars	17	46	2	<0
		Wingless Sprints	4	36	-	
		Formula 500s	4	33	-	
		Street stocks	4	36	-	
		V8 Dirt modifieds	4	41	-	
		Motorcycles	4	33	-	

NCA	Distance to Nearest Residential	Event	Assumed Number of Events	Noise Level LAeq(15minute) (dBA)		
				Predicted	Exceedance of Background ¹	Average Exceedance ²
NCA05	3400 m	Sprint cars	17	47	5	<0
		Wingless Sprints	4	38	-	
		Formula 500s	4	34	-	
		Street stocks	4	38	-	
		V8 Dirt modifieds	4	42	-	
		Motorcycles	4	34	-	
NCA06	3200 m	Sprint cars	17	45	10	5
		Wingless Sprints	4	37	2	
		Formula 500s	4	33	-	
		Street stocks	4	37	2	
		V8 Dirt modifieds	4	40	5	
		Motorcycles	4	33	-	
NCA07	n/a – no residential receivers identified in this NCA					

Note 1: Background levels during the night-time shoulder period (see **Table 1**).

Note 2: Arithmetic average weighted by the proposed number of events.

Figure 2 Noise Contours – Predicted Average Noise Level from Sprint Cars, Night-time Shoulder Period – Neutral Weather

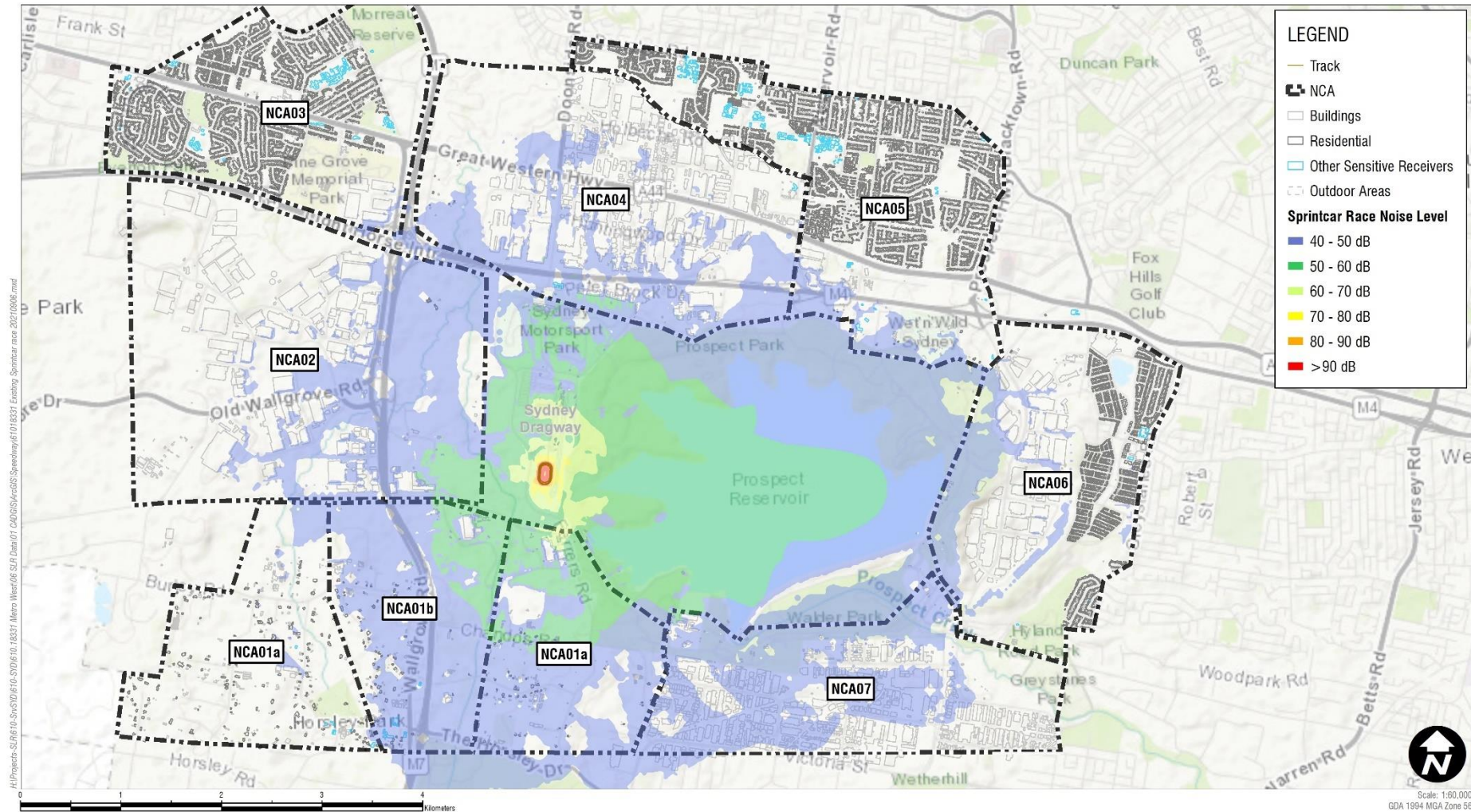
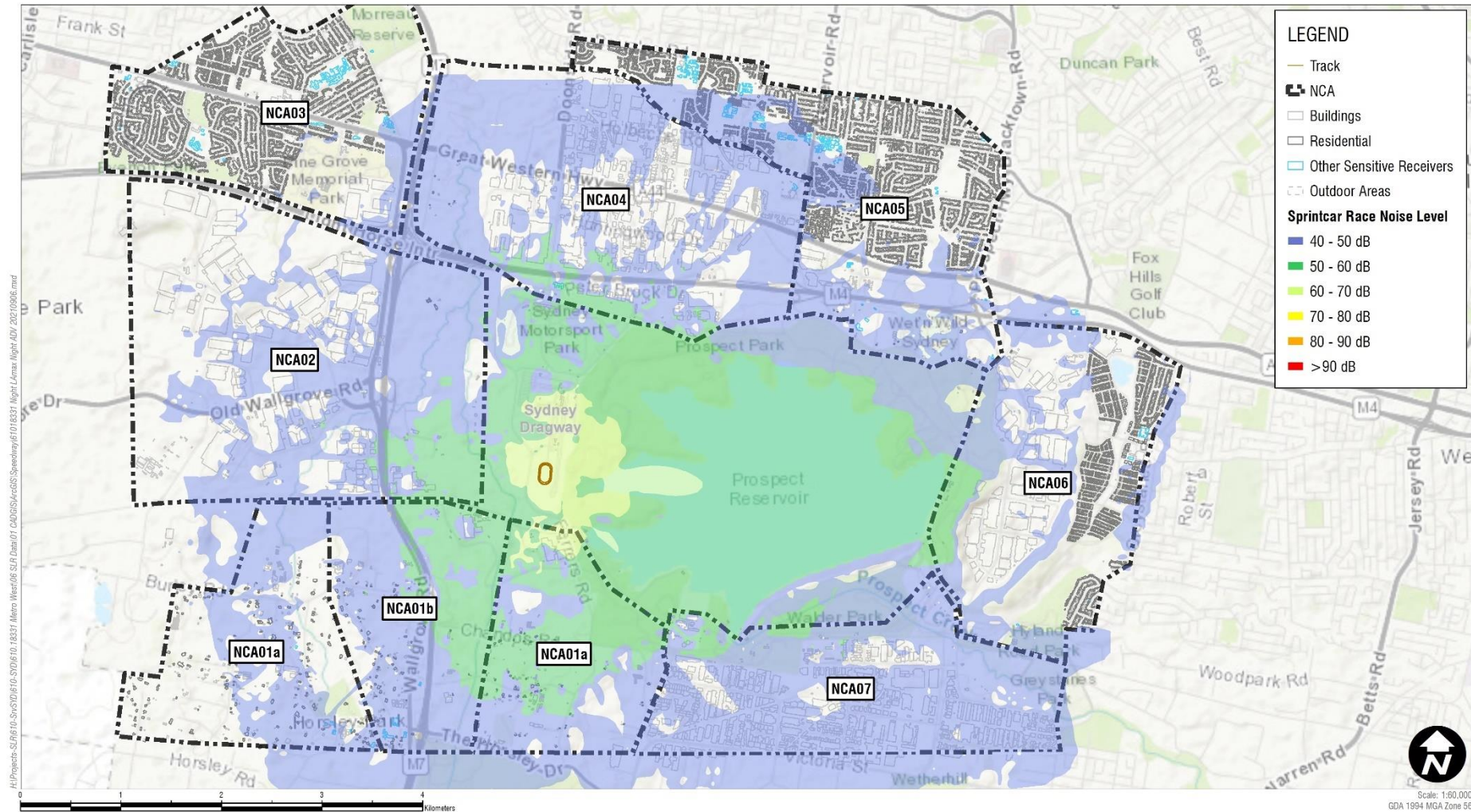


Figure 3 Noise Contours – Predicted Average Noise Level from Sprint Cars, Night-time Shoulder Period – Adverse Weather (Temperature Inversion)



5.2 Sleep Disturbance Noise Assessment

A summary of the modelling results for maximum noise emissions during the night-time shoulder period is shown in **Table 6** for both neutral weather and adverse weather conditions.

Table 6 Maximum Noise Levels – Sprint car race

NCA	Event	Sleep Disturbance Guideline Level RBL +15	Predicted Noise Level (LAmax)		Exceedance of Sleep Disturbance Screening Level
			Neutral Weather	Adverse Weather	
NCA01a	Sprint cars	54	58	61	4 to 7
NCA01b		57	56	59	0 to 2
NCA02		54	54	58	0 to 4
NCA03		56	47	52	-
NCA04		59	51	55	-
NCA05		57	50	54	-
NCA06		52	50	54	0 to 2

The assessment shows the following at residential receivers:

- In the absence of mitigation measures, the worst-case maximum noise levels are predicted to exceed the sleep disturbance screening level at the nearest receivers while racing is underway during Sprintcar and V8 dirt modified events. Residential receivers to the south of the project in NCA01a are expected to be most affected due to receivers in this catchment being the closest to the project.
- During neutral weather conditions exceedances of up to 4 dB above screening level are predicted in NCA01. This increases to 7 dB above the screening level during adverse weather.
- In NCA01b noise levels up to 2 dB above the screening level occur during adverse weather.
- In NCA02 noise levels up to 4 dB above the screening level occur during adverse weather.
- In NCA06 noise levels up to 2 dB above the screening level occur during adverse weather.
- No exceedances of the screening levels were predicted in NCA03, NCA04 or NCA05.
- While exceedances of the screening levels are predicted at some of the nearest residential receivers, the exceedances are considered relatively minor. Reference to the noise monitoring data in the EIS NVIA shows that existing maximum noise levels in the region of 65 to 70 dB are a regular feature of the area during the night-time shoulder period, which is higher than the maximum noise levels predicted from the proposed extension of operating hours. The predicted maximum noise levels in all NCAs are also below the levels outlined in the RNP that would be considered to have potential to cause sleep disturbance.
- Based on the above, the predicted sleep disturbance exceedances are considered of relatively low significance. Worst-case impacts are predicted to occur during temperature inversion conditions typical of winter months, which is typically outside of the speedway racing season.

To indicate the extent of the predicted impacts, noise contours for the highest maximum noise events (i.e. sprint cars) have been generated. The predicted noise levels are shown in for **Figure 4** neutral weather conditions and in **Figure 5** for adverse weather conditions.

Figure 4 Noise Contours – Predicted Maximum Noise Level from Sprint Cars, Night-time Shoulder Period – Neutral Weather

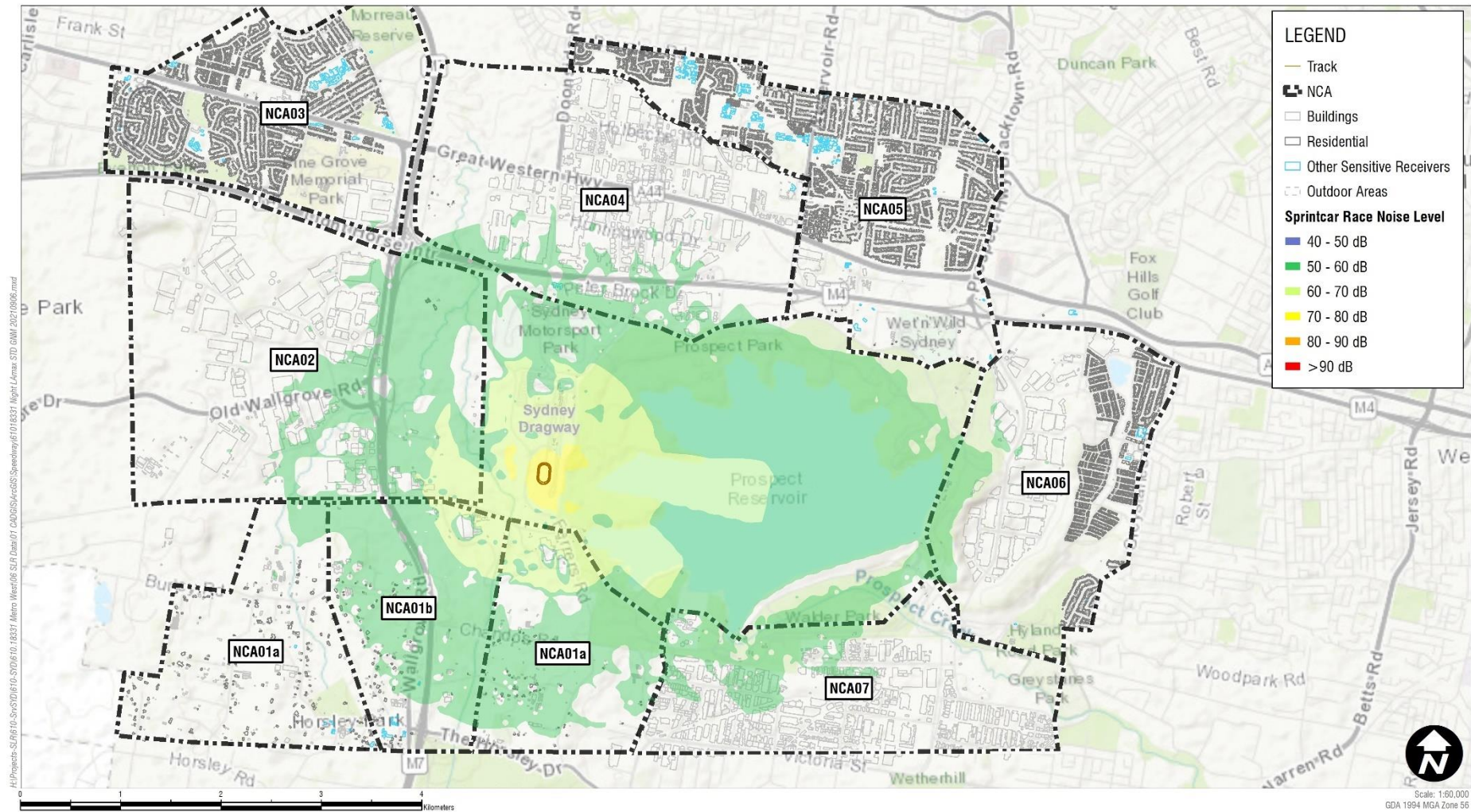
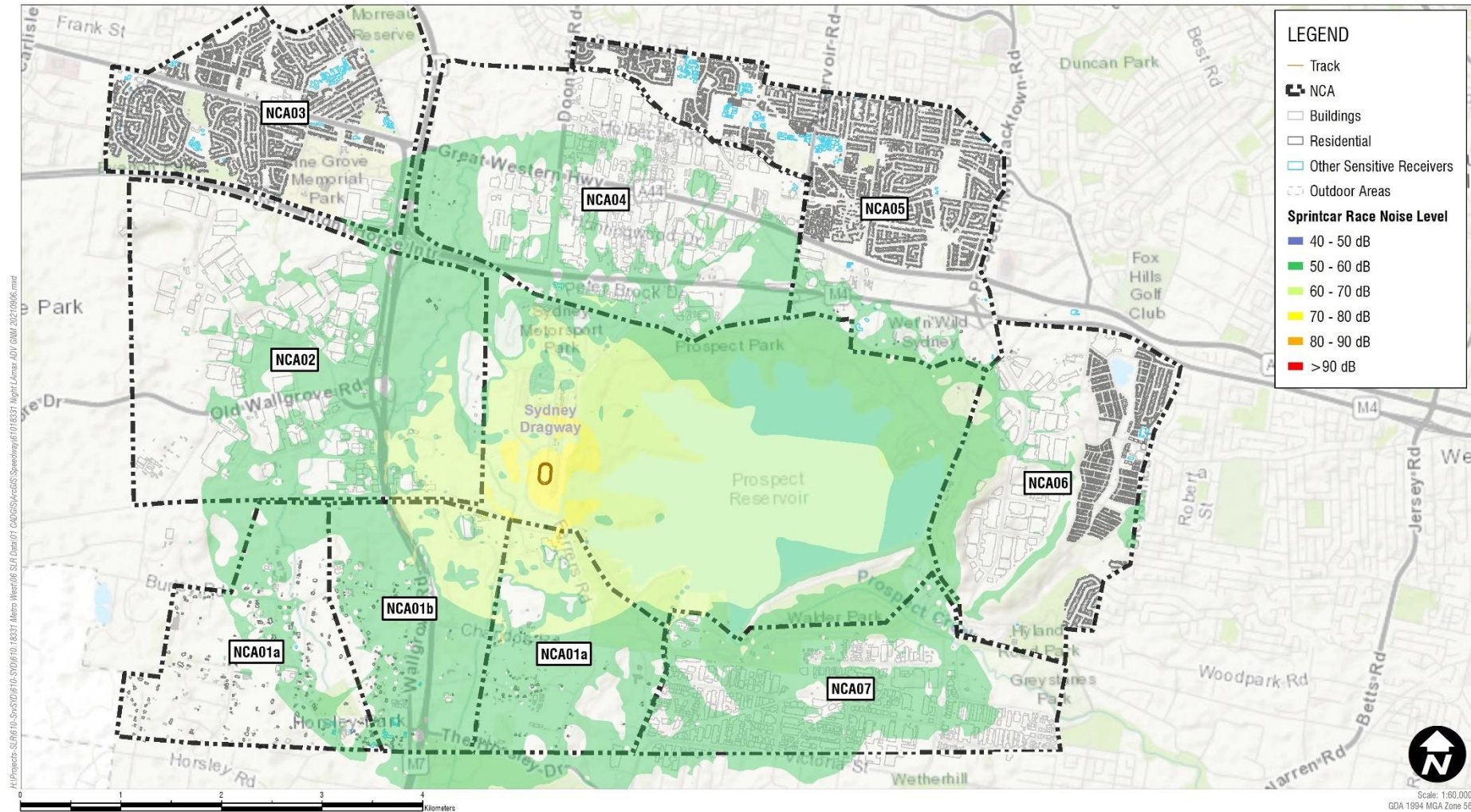


Figure 5 Noise Contours – Predicted L_{Amax} Noise Level from Sprint Cars – Adverse Weather (Temperature Inversion)



5.3 Operational Road Traffic Noise

The predicted road traffic noise levels at residential receivers on Ferrers Road are summarised in **Table 7**. No residential receivers are identified adjacent to Ferrers Road north of the project site.

The assessment shows that operational traffic from the project is predicted to result in an increase in road traffic noise levels of less than 2.0 dB which does not trigger the requirement to consider additional noise mitigation.

Table 7 Predicted Speedway Operational Road Traffic Noise Level Increase

Location	Scenario	Minimum distance to nearest trafficable lane	Predicted Increase (dBA) ¹
			Night-time LAeq(9hour) 10 pm – 7 am External Noise Level
Ferrers Road residential receivers south of the project site	Saturday Major Speedway event	15-20m	1.5

Note 1: Existing road traffic noise levels are estimated based on existing (no event) traffic volumes on Ferrers Road south of the project site presented in the Traffic Impact Assessment Report

6 Mitigation Measures

6.1.1 At-property Noise Treatment

The EIS NVIA proposed at-property treatment be considered for residential receivers which were predicted to have average noise level exceedances of more than 5 dB above the background level.

The night-time shoulder period motorsport noise levels (see **Section 4.2**) are predicted to exceed the background level +5 dB noise goal at 37 receivers to the south in NCA01a. Two exceedances are also predicted at receivers in NCA02 which are not believed to be occupied and are situated within the project area of the approved Lighthorse Interchange Business Hub and therefore would not be considered noise sensitive.

A total of 39 receivers have been identified with predicted average noise levels of more than 5 dB above the background level, with 24 of these additional to the EIS NVIA. These receivers are shown in **Figure 6** and **Table 8**.

The additional receivers are triggered due to the noise enhancing effect of night-time temperature inversions during the winter months. It is noted, however, that the typical speedway racing season occurs between September to April, with race events not typically scheduled for winter months.

No additional properties are predicted to exceed the background level by more than 5 dB under neutral weather conditions. As racing events are not proposed during the 10pm to 11pm night-time period in winter months there is no requirement to considered additional mitigation from what was recommended in the EIS NVIA. In future, however, if events are regularly scheduled to occur past 10pm during winter months then at-property treatments would need to be further investigated and provided in accordance with mitigation measure NV02 of the EIS NVIA.

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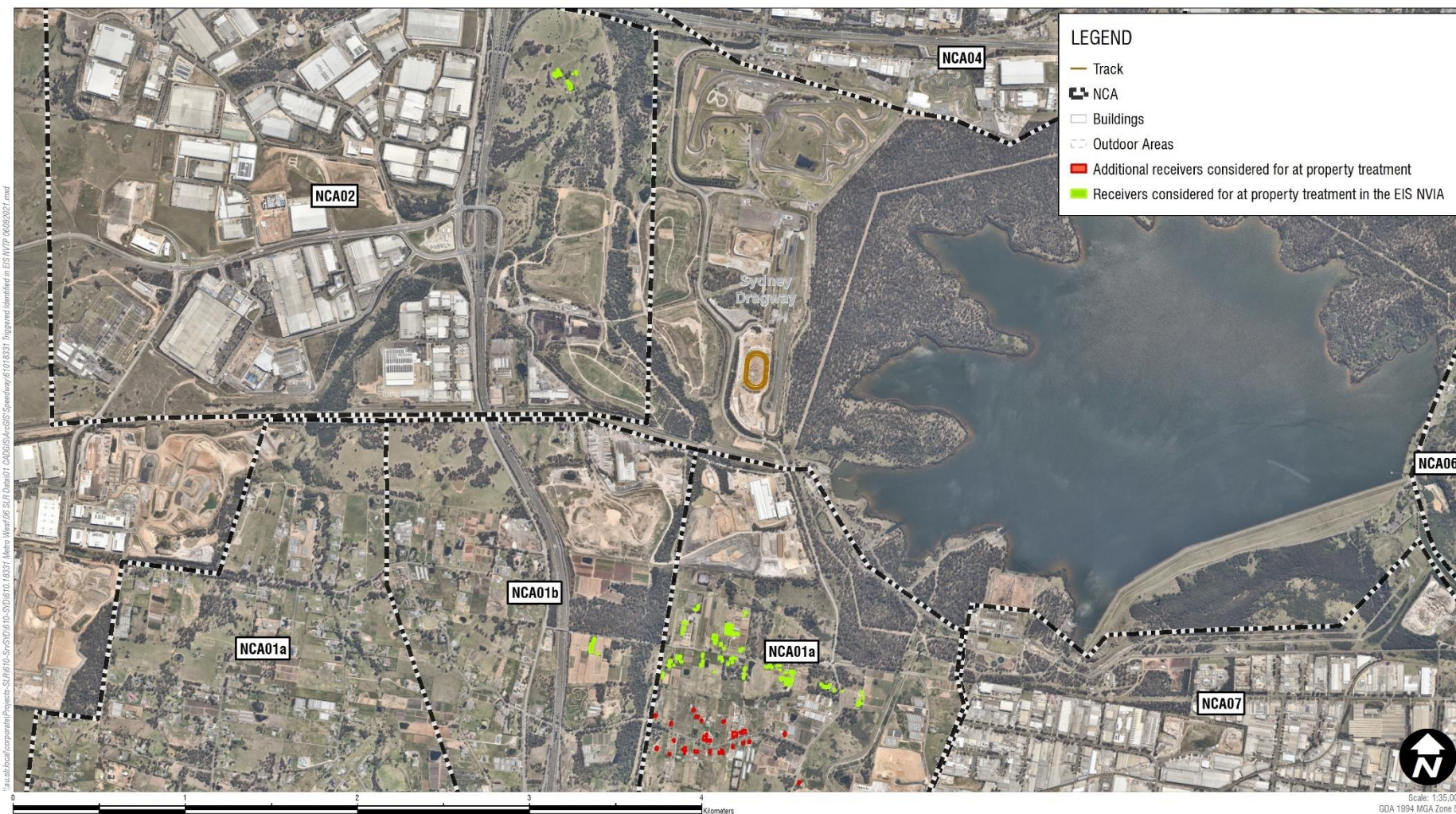


Table 8 **Addresses of Identified Receivers**

Number	NCA	Address	Predicted Noise Level (LAeq 15minute)		Average Exceedance of Background ²	
			Standard Weather	Adverse Weather	Standard Weather	Adverse Weather
1	NCA01a, Identified in EIS NVIA	203-209 Chandos Road, Horsley Park	50	53	6	9
2		137-153 Chandos Road, Horsley Park	50	53	6	9
3		117 Chandos Road, Horsley Park	50	53	6	9
4		150-154 Chandos Road, Horsley Park	51	54	7	10
5		126-130 Chandos Road, Horsley Park	51	54	7	10
6		259-273 Chandos Road, Horsley Park	48	51	1	4
7		171-185 Chandos Road, Horsley Park	50	53	6	9
8		121-135 Chandos Road, Horsley Park	51	54	7	10
9		187-201 Chandos Road, Horsley Park	50	53	6	9
10		155-169 Chandos Road, Horsley Park	51	54	7	10
11		105-119 Chandos Road, Horsley Park	51	54	7	10
12		168-174 Chandos Road, Horsley Park	50	53	6	9
13		211-217 Chandos Road, Horsley Park	50	53	6	9
14	NCA02, Identified in EIS NVIA	165 Wallgrove Road, Eastern Creek ¹	44	48	0	4
15		165 Wallgrove Road, Eastern Creek ¹	44	48	0	4
16	NCA01a, Additional Receivers	215-223 Redmayne Road, Horsley Park	48	51	4	7
17		144-150 Redmayne Road, Horsley Park	47	50	3	6
18		182-190 Redmayne Road, Horsley Park	47	51	3	7
19		195-201 Redmayne Road, Horsley Park	47	50	3	6
20		143-155 Redmayne Road, Horsley Park	48	51	4	7
21		185-193 Redmayne Road, Horsley Park	48	51	4	7
22		152-170 Redmayne Road, Horsley Park	47	50	3	6
23		195-201 Redmayne Road, Horsley Park	47	50	3	6
24		203-213 Redmayne Road, Horsley Park	48	52	4	8
25		208-220 Redmayne Road, Horsley Park	47	51	3	7
26		225-245 Redmayne Road, Horsley Park	48	51	4	7
27		167-183 Redmayne Road, Horsley Park	48	51	4	7
28		172-180 Redmayne Road, Horsley Park	46	50	2	6
29		162-166 Chandos Road, Horsley Park	49	52	5	8
30		200-206 Redmayne Road, Horsley Park	47	51	3	7
31		247-263 Redmayne Road, Horsley Park	48	51	4	7
32		136-142 Redmayne Road, Horsley Park	47	50	3	6
33		136-142 Redmayne Road, Horsley Park	46	50	2	6
34		127-131 Ferrers Road, Horsley Park	49	53	5	9

Number	NCA	Address	Predicted Noise Level (LAeq 15minute)		Average Exceedance of Background ²	
			Standard Weather	Adverse Weather	Standard Weather	Adverse Weather
35		120-134 Redmayne Road, Horsley Park	47	50	3	6
36		185-193 Redmayne Road, Horsley Park	47	51	3	7
37		222-230 Redmayne Road, Horsley Park	48	51	4	7
38		157-165 Redmayne Road, Horsley Park	47	51	3	7
39		70-84 Ferrers Road, Horsley Park	46	50	2	6

Note 1: Currently assumed to be unoccupied and situated within the project area for the approved Lighthorse Interchange Business Hub.

Note 2: Arithmetic average weighted by the proposed number of events.

Typical treatment may consist of mechanical ventilation to allow windows to be kept closed on affected facades while providing adequate ventilation. Other options may include window upgrades to glazing and/or acoustic seals. The extent and type of treatment would be confirmed during detailed design following inspection of the properties.

6.1.2 Operational Environmental Management Plan

Consistent with the recommendations in the EIS NVIA, an Operational Environmental Management Plan (OEMP) would be prepared by the operator, once appointed. The OEMP would contain an Operational Noise Management Plan (ONMP) which confirms the following aspects of the assessment, including any refinements made during detailed design:

- All major noise sources from the development
- The facilities operating hours and types of events
- The predicted numbers of light and heavy vehicle traffic created by the operation as well as the likely routes to be taken to and from the site to the main thoroughfares
- Any noise sensitive locations with the potential to be affected by activities at the site
- Site specific noise criteria
- Prevailing weather conditions applicable to the project site
- Predicted noise impacts from the project
- Mitigation measures to address any exceedances of the noise criteria
- Complaints handling and response procedure.

Community feedback received as part of the planning approvals process for this project would be incorporated into the ONMP to address concerns and expectations of the community. The aim of the ONMP should be to minimise noise impact from the venue where feasible and reasonable without unduly constraining operation of the various venues. This would likely incorporate detailed event planning informed by assessment of noise emissions from each site.

It is recommended that Blacktown City Council are consulted as part of the OEMP process.

7 Conclusion

The assessment of noise impacts from the proposed extension of operating hours for the Sydney international speedway from 10pm till 11pm has identified the following:

- Temperature inversions during winter months result in noise impacts being increased by between 2 – 4 dB at sensitive receivers surrounding the project, with a 3 dB increase at the nearest receivers to the south and south-west. It is noted, however, that the typical speedway racing season occurs between September to April, with race events not typically scheduled for winter months. No additional properties are predicted to exceed the background level by more than 5 dB under neutral weather conditions, when compared to the EIS NVIA.
- As racing events are not proposed during the 10pm to 11pm night-time period during the winter months there is no requirement to considered additional mitigation from what was recommended in the EIS NVIA. In future, however, if events are regularly scheduled to occur past 10pm during winter months then at-property treatments would need to be further investigated and provided in accordance with mitigation measure NV02 of the EIS NVIA.
- Maximum noise events during the night-time period are likely to exceed the L_{Amax} screening level at the nearest receivers to the south and south-west by up to 4 dB during neutral conditions and 7 dB during temperature inversions. However, are not likely to result in sleep disturbance when compared against RNP advice on assessing noise impacts.
- Noise management and mitigation measures as identified in the EIS NVIA remain the recommended approach to control the potential impacts.

Checked/
Authorised by: AW

Appendix B

Planning Approval Consistency Assessment Form: Sydney International Speedway
Operating Hours Proposal



Planning Approval Consistency Assessment Form

SM-17-00000111

Metro Body of Knowledge (MBoK)

Assessment name:	Sydney International Speedway Amended Access Proposal
Prepared by:	arc traffic + transport
Prepared for:	Sydney Metro
Assessment number:	SIS05
Status:	Final
Version:	1.0
Planning approval:	SSI 10048
Date required:	September 2021
iCentral number:	SM-21-00293889
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For information – do not alter:

Applicable to:	Sydney Metro
Document Owner:	Director, Environment, Sustainability & Planning
System Owner:	Deputy Chief Executive, Operations, Customer & Place-making
Status:	Final
Version:	3.0
Date of issue:	27 November 2020
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The Planning Approval Consistency Assessment Form should be completed in accordance with [SM-17-00000103 Planning Approval Consistency Assessment Procedure](#).

1. Existing Approved Project

Planning approval reference details (Application/Document No. (including modifications)):

- SSI 10048 – Sydney International Speedway

Date of determination:

- SSI 10048: 23 December 2020

Type of planning approval:

- SSI (Division 5.2)

Description of existing approved project you are assessing for consistency:

Construction and operation of the Sydney International Speedway including:

- A new world-class clay-based racetrack for both speedway cars and motorcycles including sprint, wingless sprint, street stockers, V8 dirt modified and Formula 500 cars
- A new grandstand and terraced seating to accommodate up to 7000 spectators
- Public amenities, corporate boxes, food, beverage and merchandise outlets
- Dedicated parking for speedway competitors and spectators
- Additional overflow parking with flexibility to be used for dragway events
- Dual access to the precinct by creating new vehicle access to the speedway pit area via a new intersection built off Ferrers Road
- A dedicated competitor pit area to service the speedway
- Workshops, garages and trackside support services.

The approved project has dedicated parking for Sydney Dragway to replace the existing spectator parking areas which would form part of the Sydney International Speedway project site. A summary of the carparks at the site are as follows, with a figure shown in Appendix A:

- Carpark A – Speedway parking
- Carpark B – Competitor parking which forms part of the operational speedway site
- Carpark C – Sydney Dragway parking available for use by other motorsport operators by agreement
- Carpark D (D1 and D2) – Sydney Dragway parking available for use by other motorsport operators by agreement
- The Site is provided with access to the road network at Ferrers Road via the main existing intersection to the Site (Intersection 1) and via a new intersection to Ferrers Road at the southern end of the Site (Intersection 2). All public access to/from the car parks will be via Intersection 1, while all competitor access to Car Park B and the Pit Area will be an entry via Intersection 1 and departure via Intersection 2.
- An access road (termed the Southern Access Road) links between Car Park A and Car Park B and the Pit Area. With reference to the Environmental Impact Assessment, Southern Access Road has a width of 7.3 but provides only for one-way (southbound) movements.

The proposal would provide for the section of Southern Access Road between Car Park A and the Speedway staff parking, workshop and maintenance areas to allow for two-way movements for Speedway staff and emergency vehicles only. All competitor movements (and specifically departures) would remain via Intersection 2 in line with the Speedway Approval.

Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

- Sydney International Speedway Environmental Impact Statement including accompanying technical papers (August 2020)
- Sydney International Speedway Submissions Report (November 2020)
- Sydney International Speedway Amendment Report (November 2020)
- Instrument of Approval (dated 23 December 2020).

The above documents are available on the NSW planning portal here: <https://www.planningportal.nsw.gov.au/major-projects/project/30111>

All proposed works identified in this assessment would be undertaken in accordance with the mitigation measures identified in the EIS, Submissions Report and Amendment Report and the conditions of approval.

2. Description of proposed development/activity/works

Summary of the proposal

The proposal subject of this Consistency Assessment would provide for two-way access for Speedway staff and emergency vehicles as required only in Southern Access Road, which runs along the western boundary of the Speedway site, during the operation of the Sydney International Speedway (the proposal). Details include:

1. The proposal would not require any change to the design profile/environmental footprint of the Southern Access Road. The section of Southern Access Road that would be subject of the proposal has been approved to provide a sealed road with a width of approximately 7.3 metres. The proposal would not require any changes to the design profile/environmental footprint of Southern Access Road, but rather simply provide changed line-marking, including a centre-line between Car Park A and the barrier gate to the competitors Pit Area so as to provide two-way access for Speedway staff and emergency vehicles as required only.
2. Two-way access would strictly be for Speedway staff and emergency vehicles as required only.
3. The provision of barrier gates at both the entrance to Southern Access Road from Car Park A, and at the southern end of Southern Access Road separating the competitor Pit Area, will ensure that two-way movements are provided for Speedway staff and emergency vehicles as required only
4. The provision of a 'waiting bay' in Southern Access Road south of Car Park A; this will allow northbound Speedway staff vehicles and emergency vehicles as required to wait in a location that would not impact the swept path of a large competitor vehicle turning into Southern Access Road from Car Park A. The waiting bay will be clearly marked on the carriageway (hatched) and signposted.
5. No members of the public will be permitted to either drive or walk within Southern Access Road at any time; this will be controlled by Speedway/Event staff controlling access to Southern Access Road during events, by a barrier fence and by No Access signage.

A detailed description and assessment of the Proposal is provided in the Revised Access Proposal Transport Assessment which is provided in Appendix A.

3. Timeframe

The proposal does not include any changes to the construction timeframes required for the approved project. The proposal would be in place for the duration of Speedway operations.

4. Site description

The Sydney International Speedway (SIS) is being developed on land owned by the NSW Government, managed by the Western Sydney Parklands Trust (WSPT).

No changes to the approved project area or the approved footprint of Southern Access Road are required for the proposal.

Refer to Appendix A for further details in regard to the proposal.

5. Site Environmental Characteristics

The proposal would be consistent with the approved project area as described in section 3 of the Amendment Report. The project is located within the Western Sydney Parklands which is managed by the Western Sydney Parklands Trust pursuant to the provisions of the *State Environmental Planning Policy (Western Sydney Parklands) 2009* (Western Sydney Parklands SEPP). The objective of the Western Sydney Parklands SEPP is to implement planning controls that will enable the Western Sydney Parklands Trust to develop the Parklands into a multi-use urban parkland for Western Sydney.

Refer to Appendix A for further details in regard to the proposal.

6. Justification for the proposed works

Southern Access Road as described in the Environmental Impact Assessment for the approved project would require Speedway staff to enter the staff parking and maintenance areas from Car Park A and the Southern Access Road, then depart the Site via Intersection 2. It has since been identified that Speedway staff would require access to all parts of the Site. Under the existing one-way design, Speedway staff would be required to undertake a significant round trip using sub-regional roads to return to the Site and enter via Intersection 1.

This is not a viable or sustainable access strategy for Speedway staff and emergency vehicles

The proposal would allow Speedway staff and emergency vehicles as required to travel both northbound and southbound in the section of Southern Access Road between Car Park A and the staff parking and maintenance areas, and the barrier gate to the competitors Pit Area. It is estimated that 5 - 10 northbound vehicle trips could be generated in Southern Access Road daily rather than 5 - 10 vehicle trips that would otherwise be generated to Intersection 2.

Refer to Appendix A for further details in regard to the proposal.

7. Environmental Benefit

There is a need for Speedway staff to be able to efficiently access all parts of the Site on both event and non-event days. Restricting access for northbound movements in Southern Access Road for Speedway staff would require them to left out (only) of the Site at Intersection 2 and travel south along Ferrers Road to the Chandos Road roundabout and then return to the north to enter via Intersection 1.

As such, the Proposal would reduce Vehicle Kilometres Travelled (VKT) for staff, and in turn vehicle omissions. It would also provide significantly improved accessibility for emergency vehicles as required

Refer to Appendix A for further details in regard to the proposal.

8. Control Measures

Measures to ensure that Speedway staff and emergency vehicles as required only are permitted to use Southern Access Road for two-way movements include:

- Barrier gates at both the entrance to Southern Access Road from Car Park A, and at the southern end of Southern Access Road separating the competitor Pit Area such as to allow two-way movements for Speedway staff and emergency vehicles as required only
- Supervision of both barrier gates during events by Speedway/Event staff
- No Access (Vehicle and Pedestrian) signage at the entrance to Southern Access Road from Car Park A for members of the public
- A maximum posted speed limit of 20km/h in Southern Access Road (consistent with all internal roads and car parks across the Speedway site).
- The preparation and implementation of an overriding Traffic Management Plan that provides guidance in regard to the use of Southern Access Road for two-way movements for Speedway staff only.

Refer to Appendix A for further details in regard to the proposal.

9. Climate Change Impacts

The Proposal would significantly reduce Vehicle Kilometres Travelled (VKT) for staff, and in turn reduce vehicle emissions, and as such provide benefits with regard to climate change.

Refer to Appendix A for further details in regard to the proposal.

10. Impact Assessment – Construction

Attach supporting evidence in the Appendices if required. Make reference to the relevant Appendix if used.

Importantly, construction works to support the proposal would be limited to line marking and the installation of access gates. No changes to the location and construction of the Southern Access Road are proposed. As such, no construction related impacts are anticipated.

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from the approved project.	No additional measures required.	Y	Y	
Water	No change from the approved project.	No additional measures required.	Y	Y	
Air quality	No change from the approved project.	No additional measures required.	Y	Y	
Noise vibration	No change from the approved project.	No additional measures required.	Y	Y	
Indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from the approved project.	No additional measures required.	Y	Y	
Traffic	No change from the approved project.	No additional measures required.	Y	Y	
Waste	No change from the approved project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	
Visual	No change from the approved project.	No additional measures required.	Y	Y	
Urban design	No change from the approved project.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	No change from the approved project.	No additional measures required.	Y	Y	
Climate Change	No change from the approved project.	No additional measures required.	Y	Y	
Risk	No change from the approved project.	No additional measures required.	Y	Y	
Other	No change from the approved project.	No additional measures required.	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures required.	Y	Y	

11. Impact Assessment – Operation

Attach supporting evidence in the Appendix if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from the approved project.	No additional measures required.	Y	Y	
Water	No change from the approved project.	No additional measures required.	Y	Y	
Air quality	No change from the approved project.	No additional measures required.	Y	Y	
Noise vibration	No change from the approved project.	No additional measures required.	Y	Y	
Indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Community and stakeholder	The Proposal has been discussed with both Sydney Metro and Western Sydney Parklands Trust who have both provided input in regard to the Proposal to ensure all potential impacts arising from the Proposal have been appropriately addressed and mitigated where required.	No additional measures required.	Y	Y	

Traffic	<p>The Transport Assessment provided in Appendix A specifically addresses the key characteristics of the proposal, including:</p> <ul style="list-style-type: none"> • Potential safety impacts (Section 3.5) • Potential pedestrian impacts (Section 3.5.2 and Section 3.5.3) • Potential intersection operation impacts (Section 3.3) • Potential traffic benefits (Section 3.2.1 and Section 3.3) • Proposed impact mitigation measures (Section 3.5) <p>It concluded that:</p> <ul style="list-style-type: none"> • There is a need for Speedway staff (approximately 5 staff on non-event days) and emergency vehicles to be able to efficiently access all parts of the Site on both event and non-event days • The approved one way road means that vehicles would likely be via Chandos Road, Wallgrove Road, Great Western Highway Brabham Drive and then Ferraers Road to Intersection 1 which is inappropriate, unsustainable and problematic for emergency vehicles • Parking for Speedway staff is to be provided in the Staff Car Park north of, and separated from, the Pit Area and Car Park B. Event staff would park in the spectator car parks, therefore no parking impacts are anticipated • The minor trip redistribution arising from the Proposal would have no potential to impact the operation of the Site intersections (or broader road network) • All of the key intersections in the vicinity of the Site would operate at an acceptable Level of Service even during peak events at the Speedway (and during combined events with the Dragway) both mid-week and on weekends • the Proposal would have no impact on general access, safety or the operation of the Site intersections and broader road network • the provision for two-way movements for Speedway staff would be detailed in the Operational Traffic Management Plan for the approved project. 	<p>The overarching Operational Traffic Management Plan for the approved project will include the following traffic management measures in accordance with Appendix A:</p> <ul style="list-style-type: none"> • Barrier gates • Holding bay • Supervision of key locations during events • Maximum speed limit of 20km/h in all internal roads and car parks • Appropriate signage and supervision to restrict access to the Southern Access Road by members of the public 	Y	Y	
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Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Waste	No change from the approved project.	No additional measures required.	Y	Y	
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	
Visual	No change from the approved project.	No additional measures required.	Y	Y	
Urban design	No change from the approved project.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	No change from the approved project.	No additional measures required.	Y	Y	
Climate Change	The proposal would provide climate change benefits by reducing vehicle emissions, due to the reduction in the vehicle kilometres travelled by staff to access areas of the Speedway site.		Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Risk	<p>Impact and risk management measures are proposed in Appendix A. On the majority of days Speedway staff would be the only people on-site, while during an Event there are anticipated to be few if any Speedway staff vehicle movements in Southern Access Road.</p> <p>No members of the public would be provided with either vehicular or pedestrian access to Southern Access Road. During Events, Speedway/Event staff would be stationed at both the barrier gates to ensure access to the Southern Access Road is provided for competitors and Speedway staff only, and No Spectator Access (Vehicle or Pedestrian) signage will be prominently displayed at the intersection of Car Park A & Southern Access Road, and along Southern Access Road itself.</p>	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Other	No change from the approved project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Management and mitigation measures	One additional mitigation measure as outlined above.	One additional mitigation measure as outlined above.	Y	Y	

12. Consistency with the Approved Project

Based on a review and understanding of the existing Approved Project and the proposed modifications, is there is a transformation of the Project?	No. The design profile and environmental footprint of Southern Link Road will be unchanged, and moreover the only time the small number of Speedway staff are anticipated to require two-way vehicle access will be on non-event days. On event days, it is estimated that there would be fewer than 5 northbound staff vehicle movements
Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?	Yes. The proposal would be consistent with the objectives and functions of the approved project. The proposal would provide significant benefits with regard to vehicle kilometres travelled for Speedway staff, and in turn a reduction in vehicle emissions.
Is the project as modified consistent with the objectives and functions of elements of the Approved Project?	Yes. The changes identified in this assessment are consistent with the objectives and functions of the elements of the approved project. The proposal provides for more efficient access to all areas of the Site for Speedway staff and emergency vehicles as required.
Are there any new environmental impacts as a result of the proposed works/modifications?	No, but rather the proposal provides significant benefits with regard to vehicle kilometres travelled for Speedway staff, and in turn a reduction in vehicle emissions. No changes in the construction of the approved project are required, with the only works required to accommodate the proposal being changes to the line-marking in Southern Access Road
Is the project as modified consistent with the conditions of approval?	Yes, the proposal would be consistent with the conditions of approval.
Are the impacts of the proposed activity/works known and understood?	Yes, the impacts of the proposed works are understood and will be accounted for by implementing the control measures detailed in document.
Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?	Yes, the impacts of the proposed works can be managed so as to avoid an adverse impact.

13. Other Environmental Approvals

Identify all other approvals required for the project:

N/A

Author certification

To be completed by person preparing checklist.

I certify that to the best of my knowledge this Consistency Checklist:

- Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and
- Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information.

Name:	Anton Reisch	Signature:	
Title:	Director		
Company:	arc traffic + transport	Date:	3/07/2021

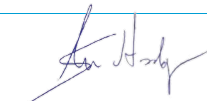
This section is for Sydney Metro only.

Application supported and submitted by

Name:	Yvette Buchli	Date:	01/09/2021
Title:	Associate Director Planning Approvals	Comments:	
Signature:			

Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

- Yes ☒ The proposed activity/works are consistent and no further assessment is required.
- No ☐ The proposed works/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.

Endorsed by			
Name:	Stuart Hodgson	Date:	2 Spetember 2021
Title:	Director ESP Sydney Metro West	Comments:	
Signature:			

Appendix A

Please refer to attached P0214r2v2 Sydney International Speedway Amended Access Proposal Traffic Assessment for further detail in regard to the Proposal.



Sydney International Speedway
Revised Access Proposal
Transport Assessment
for
Speedway Promotions Pty Ltd

Document Control

Project No: 0214

Project: Sydney International Speedway Southern Revised Access Proposal TA

Client: Speedway Promotions Pty Ltd

File Reference: P0214r2v4 Sydney International Speedway Revised Access Proposal TA

Revision History

Revision	Date	Details	Approved by
v1	20/07/2021	Draft 1	A. Reisch
v2	21/07/2021	Draft 2	A. Reisch
V3	30/07/2021	Draft 3	A. Reisch
v4	30/08/2021	Final 1	A. Reisch

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1 Introduction

1.1 The Speedway

A State Significant Infrastructure (**SSI 10048**) proposal for the Sydney International Speedway (the **Speedway**) was recently approved by the NSW Minister for Planning & Public Spaces in December 2020 (the **Speedway Approval**).

The former speedway site, located on Government-owned land at Clyde, was required to house the future stabling and maintenance facilities for the Sydney Metro West project. As such, the new Speedway is being constructed on land owned and managed by Western Sydney Parklands Trust (**WSPT**) east of Ferrers Road, Eastern Creek (the **Site**). The Speedway will provide:

- A new world-class clay-based racetrack for speedway cars including sprint, wingless sprint, street stockers, V8 dirt modified and Formula 500 cars;
- A new grandstand and terraced seating accommodating up to 7,000 spectators;
- Public amenities, corporate boxes, food, beverage and merchandise outlets;
- Dedicated on-site parking for speedway competitors and spectators; 2,200 dedicated dragway parking spaces and additional overflow parking for major dragway events;
- Dual egress from the precinct via a new southern exit from the raceway pit area via a new intersection to Ferrers Road;
- A dedicated competitor pit area to service the speedway; and
- Workshops, garages and trackside support areas.

Full details of the Speedway development are provided in the Speedway EIS.

1.2 Southern Access Road

The Southern Access Road runs along the western boundary of the Site, providing access between the Intersection 1 and key Site components in the southern portion of the Site, including:

- The competitor pit area (the **Pit Area**);
- The competitor car park (**Car Park B**);
- Administration offices;
- Works and maintenance buildings; and
- A small parking area for administration, works and maintenance staff.

Importantly, and with reference to the Speedway EIS, Southern Access Road is currently designated as a **one-way southbound** road, providing access **from** Intersection 1 **to** the southern portion of the Site through Car Park A.

1.4 Revised Southern Access Road Proposal

arc traffic + transport has been engaged by Speedway Promotions to examine the Speedway Conditions relating to the one-way restriction in Southern Access Road, as well as the access, traffic and safety characteristics of the proposed **provision of two-way access for Speedway staff and emergency vehicles as required only**.

The Proposal will not result in any material changes from the approved project; specifically:

- The Proposal does not provide for any changes to the existing access restrictions for competitors accessing the Pit Area and Car Park B;
- The Proposal does not provide any changes to the existing access restrictions for public movements (pedestrian and vehicle) in the Southern Access Road;
- The Proposal does not provide for any changes to the design profile/environmental footprint of Southern Access Road, and as such would have no impact on flora and fauna, noting that Southern Access Road location was previously changed (to its currently approved location) so as to minimise impacts on flora and fauna; and
- The Proposal provides significant impact mitigation measures to maximise the safety of all Speedway staff, competitors and spectators.

This Transport Assessment will accompany a Planning Approval Consistency Assessment Form, which will be submitted to Sydney Metro and Transport for NSW (**TfNSW**) for review and approval.

1.5 Assessment of the Proposal

arc traffic + transport has been engaged to prepared a Transport Assessment to examine the merits of the Proposal, with specific consideration of the Speedway Approval Conditions of Consent (**Speedway Conditions**) as well as broader access, traffic and safety issues arising from the Proposal.

1.6 Reference Documents

The following documents have been referenced in the preparation of this Transport Assessment:

- *Sydney International Speedway Environmental Impact Statement 2020*, prepared by the NSW Government and Sydney Metro (**Speedway EIS**);
 - *Sydney International Speedway Environmental Impact Statement Technical Paper 1: Traffic, Transport and Parking 2020*, prepared by Jacobs (**Traffic Report**);
 - *Sydney International Speedway SSI Assessment Report 2020*, prepared by DPIE (**Assessment Report**);
 - *Sydney International Speedway Submissions Report 2020*, prepared by the NSW Government and Sydney Metro (**Submissions Report**); and
- State Significant Infrastructure 10048 Notice of Approval 2020, approved by the Minister for Planning and Public Spaces (**Speedway Approval**).

2 Approved Southern Access Road Operations

2.1 Amendment Report

Further to a review of the Speedway EIS submissions, the Amendments Report includes a number of controls relative to the operation of Southern Access Road between Car Park A and the Pit Areas (including Car Park B). Section 3.3.1 of the Amendments Report states the following:

*Vehicle access to the main operational site as included in the Environmental Impact Statement was via a single connection to the existing roundabout located along the site access road. From the roundabout, the access road separates into two roads; one providing access to Carpark A, and one forming the internal one-way road along the western boundary of the main operational site, **to provide access to the competitor pit area, Carpark B and the new left-only exit in the south of the main operational site.***

*Further design development since the preparation of the Environmental Impact Statement has included **reconfiguration of the internal access road design to minimise the environmental impacts of this proposed amendments**, namely through a reduction in the amount of clearance of native, protected vegetation near the entry to the main operational site.*

*All vehicles accessing the main operational site would continue to do so via a single connection with the existing roundabout along the site access road. However, all vehicles would then travel into Carpark A to either park (if visitors/spectators to the Sydney International Speedway), or would travel through Carpark A to access the internal access road via a gate at the western end of Carpark A **to travel along the internal one-way access road along the western boundary of the project site to the competitor pit area, Carpark B and the new exit in the south.***

The Amendments Report does not suggest that the amendments to the Southern Access Road intersection to Car Park A, or the introduction on one-way southbound only movements in Southern Access Road, relate in any way to traffic or safety issues, but rather *to minimise the environmental impacts of this proposed amendments, namely through a reduction in the amount of clearance of native, protected vegetation near the entry to the main operational site.*

2.2 One-Way Movements

As discussed, the Speedway Approval (and final Speedway EIS documentation) provides for southbound arrival movements only in Southern Access Road for all vehicles travelling to the southern portion of the Site, and then departure movements to Intersection 2 only for all vehicles departing the southern portion of the Site.

arc traffic + transport acknowledges that limiting competitor vehicle movements in this way is appropriate, as generating heavy vehicle trips through Car Park A to depart the Site would likely have safety and general traffic movement impacts.

However, the application of the same southbound only restriction to Speedway staff using the Staff Car Park north of the Pit Area does not appear to have been given any separate consideration.

3 The Proposal

3.1 The Proposal

Speedway Promotions proposes allowing two-way movements in Southern Access Road between the Car Park A and Speedway staff parking, works and maintenance areas for Speedway staff and emergency vehicles as required. This will allow Speedway staff and emergency vehicles to access the northern part of the Site without being required to divert through the external road network.

The Proposal does not provide for any changes to the existing access restrictions for competitors accessing the Pit Area and Car Park B as detailed in the Speedway EIS and supporting documents, nor for any spectator access (vehicular or pedestrian) to be permitted in Southern Access Road.

Further to the above, and further to our consultations with Sydney Metro, [arc traffic + transport](#) has determined that the Proposal would have no impact on any other aspects of the Speedway Approval, including:

- Flora and fauna;
- Water;
- Air quality;
- Noise vibration;
- Indigenous heritage;
- Non-indigenous heritage;
- Waste;
- Social;
- Economic;
- Visual;
- Urban design;
- Geotechnical;
- Land use;
- Climate Change; or
- Risk

The proposed physical works to be provided in Southern Access Road as part of the Proposal are shown in the figures below, while further discussion of the measures proposed to minimise the potential impacts of the Proposal are detailed further in [Section 3.5](#).

Figure 1: Access Amendment Proposal Northern Section

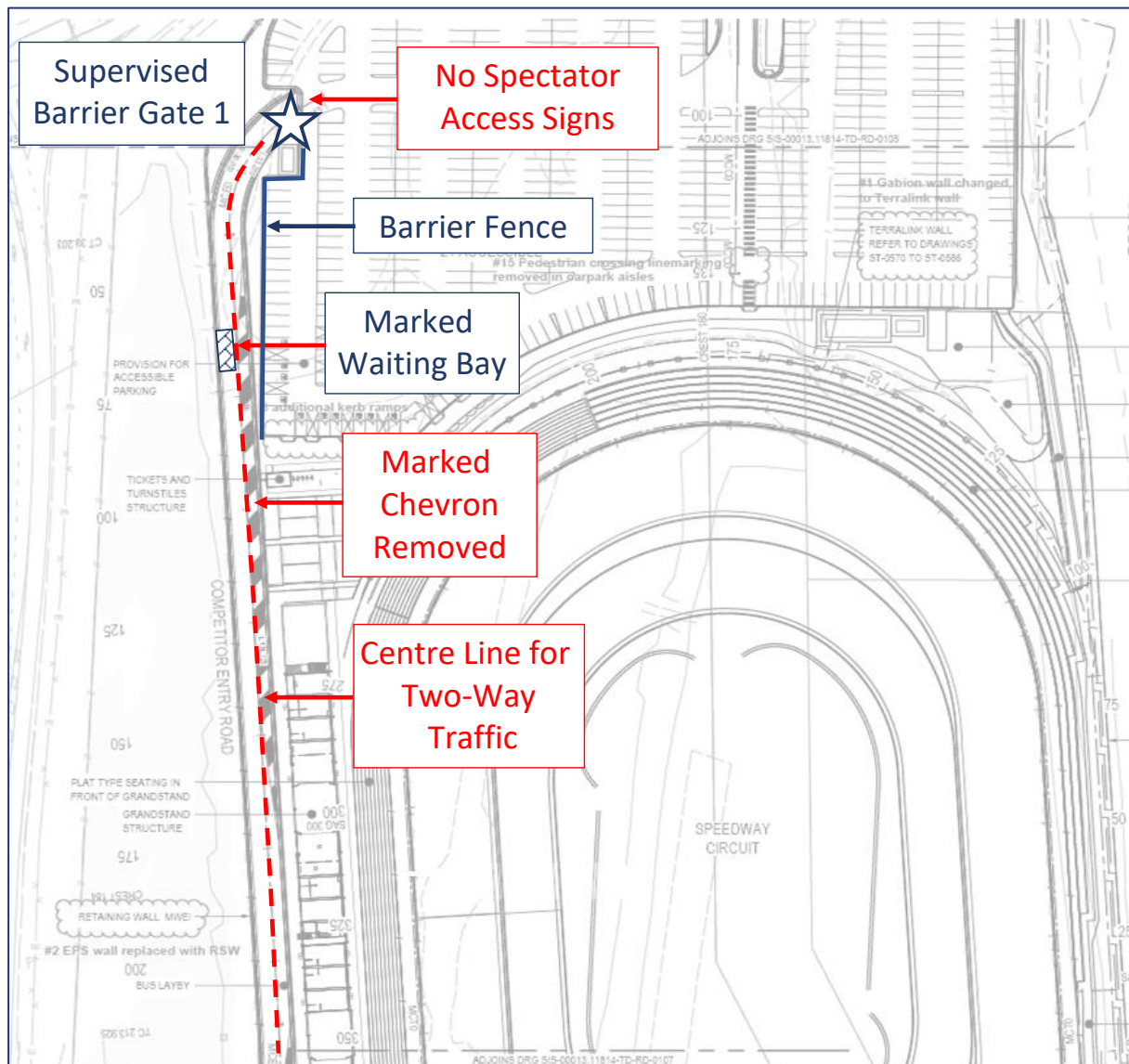


Figure 2: Access Amendment Proposal Central Section

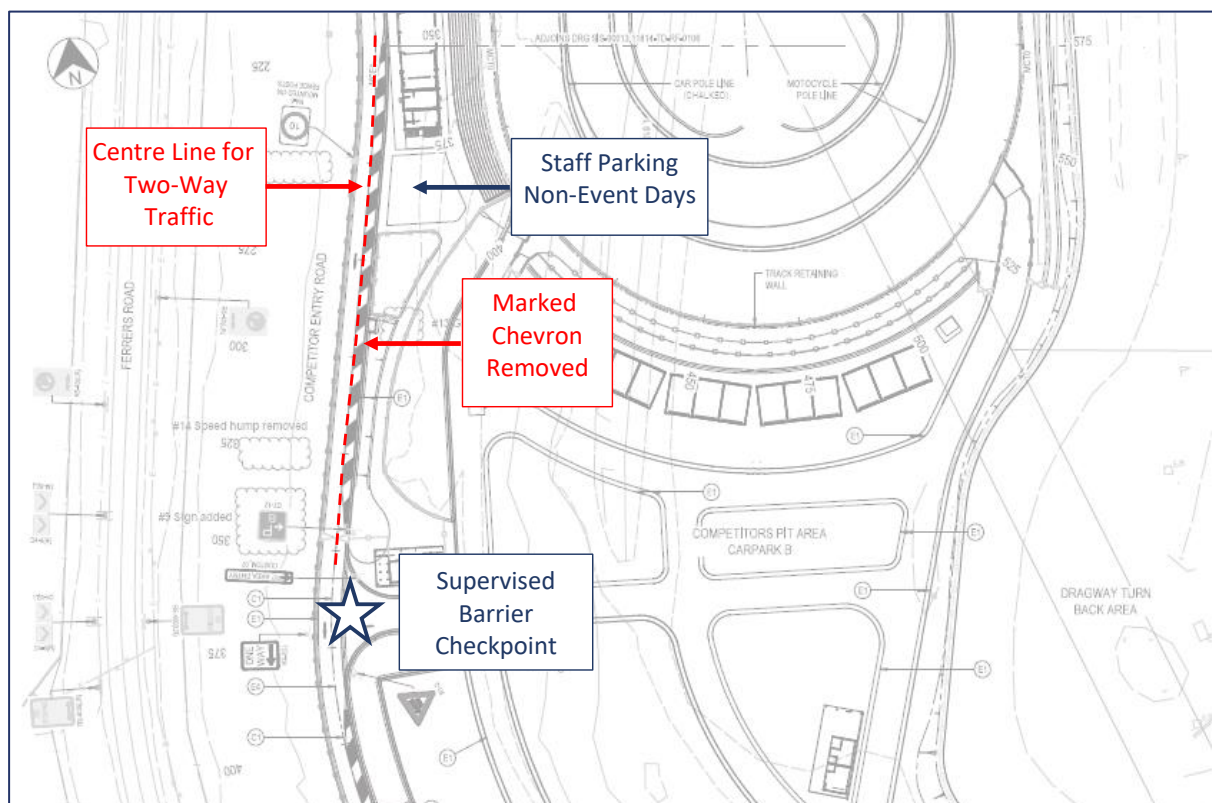
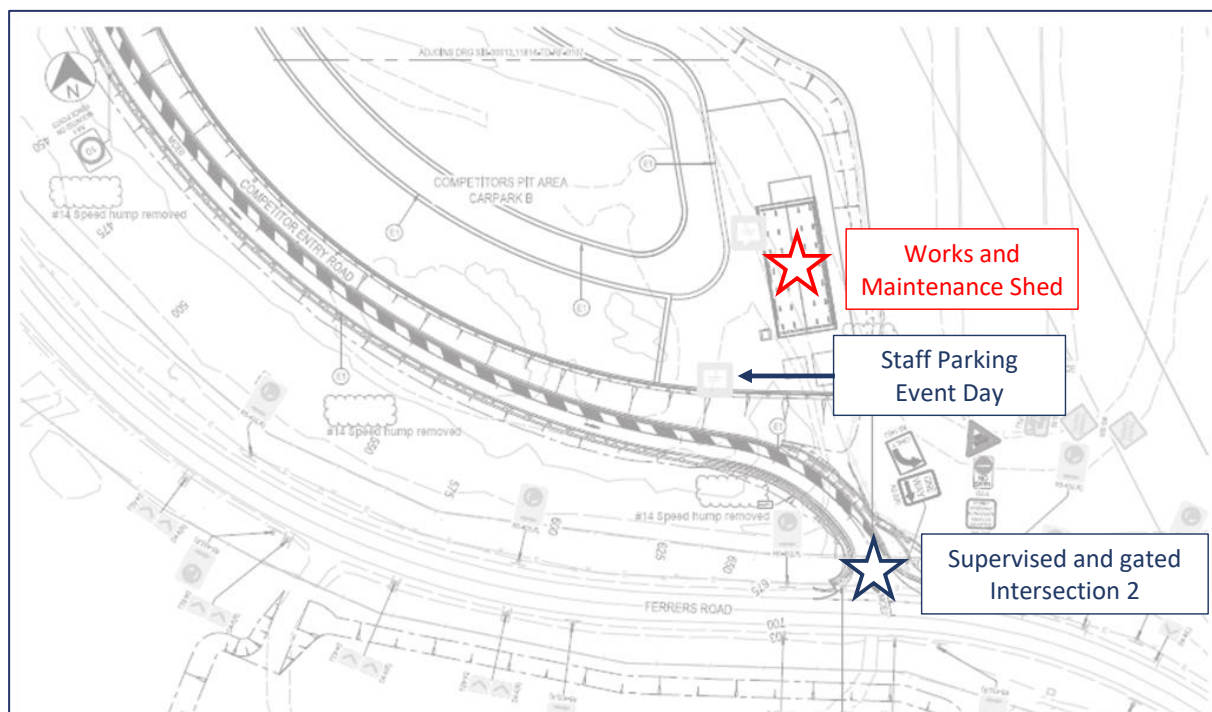


Figure 3: Access Amendment Proposal Southern Section



3.2 Speedway Staff Characteristics

3.2.1 The Need for Two-Way Speedway Staff Movements

There is a need for Speedway staff and emergency vehicles to be able to efficiently access all parts of the Site on both event and non-event days; restricting access for Speedway staff and emergency vehicles to left out only at Intersection 2 means that they would be required to depart the Site via Intersection 2 and then travel south along Ferrers Road to the Chandos Road roundabout and then return to the north to enter via Intersection 1.

Further, based on our recent work on the Horsley Drive Upgrade and numerous large industrial developments in the area, it is anticipated that the intersection of Ferrers Road & Chandos Road will be upgraded to a signalised intersection in the short-medium term. As such, the route to return to the Site would likely be via Chandos Road, Wallgrove Road, Great Western Highway Brabham Drive and then Ferrers Road to Intersection 1.

Such a route is patently inappropriate, unsustainable and with regard to emergency vehicles a potentially serious health issues, and as such the use of Southern Access Road for two-way movements by Speedway staff and emergency vehicles is supported, noting also that it would provide Speedway staff the opportunity to efficiently depart the Site to key roads to the north.

3.2.2 Speedway Staff Characteristics

- **Staff Numbers:** Based on information provided in Section 17.7.1 of the Speedway EIS (and confirmed by Speedway Promotions) it is estimated that an average of 5 Speedway staff would be on-site during a standard non-event weekday. These numbers would be augmented by additional Event staff during events, but these Event Staff will utilise the spectator car parks, not the Speedway staff parking area.
- **Working Hours:** On a standard non-event day, Speedway staff are anticipated to be on-site during normal business hours (generally 8:00am to 5:00pm). On an Event day, the hours for many Speedway staff would extend until the completion of an event, while additional Event staff would arrive during the afternoon prior to an event, and also then depart after the event.
- **Parking:** As discussed, parking for Speedway staff is to be provided in the Staff Car Park north of, and separated from, the Pit Area and Car Park B. Event staff would park in the spectator car parks.

3.3 Traffic Assessment

3.3.1 Speedway Traffic Report

Quite appropriately, the Traffic Report provides a detailed assessment of road network conditions based on the peak event operations of the Speedway (and of a combined event with the Dragway).

As such, there is no analysis of the potential impact of non-event Speedway operations on the road network; this is of course equally appropriate, given the very minor trip generation of the Site outside of event periods generated by Speedway staff and occasional visitor and servicing trip demands.

Notwithstanding, it is important to note that the Traffic Report determined that the Site intersections and indeed all of the key intersections in the vicinity of the Site would operate at an acceptable Level of Service even during peak events at the Speedway (and during combined events with the Dragway) both mid-week and on weekends. This provides a high degree of certainty in regard to the available capacity of these intersections, as discussed further below.

3.3.2 Trip Generation and Distribution

The trip generation of the Site during the AM and PM (commuter) peak periods is based on the number of Speedway staff working at the Site and their general arrival and departure times. In this regard, based on the Speedway staff characteristics outlined in [Section 3.2.2](#), it is anticipated that the Site would generate up to 5 vehicle trips in both the AM and PM peak hours.

While all Speedway staff would arrive at the Site via Intersection 1, the Proposal would allow Speedway staff to also depart the Site to the north via Intersection 1, noting that Speedway staff departing to the south would likely use the more direct Intersection 2.

Based on the distribution profile provided in the Concept Report, approximately 60% and 40% of spectators trips are to/from the north and south respectively, and there is no information to suggest that Speedway staff would not have a similar distribution profile.

As such, it is estimated that 3 vehicles and 2 vehicles would arrive at the Site in the AM peak from the north and south respectively; and 3 vehicles and 2 vehicles would depart the Site in the PM peak to the north and south respectively.

This means that the only change to Site traffic arising from the Proposal is an additional 3 trips turning to the north at Intersection 1 during the PM peak, and 3 fewer trips travelling south at Intersection 2 in the PM peak.

3.3.3 Traffic Impacts

Clearly, the minor trip redistribution arising from the Proposal would have no potential to impact the operation of the Site intersections (or broader road network), which as discussed above have the capacity to accommodate the significantly larger peaks generated before and after events.

3.4 Access Design

3.4.1 Southern Access Road

Southern Access Road has a carriageway width of approximately 7.3m, more than adequate width to provide 2 traffic lanes (for two-way movement).

As heavy vehicles will be travelling southbound only to the Pit Area and Car Park B, the potential exists to provide a wider southbound lane (say, 4.0m) to better accommodate these large vehicles, which would still provide a more than appropriate width for the northbound lane.

It is again noted that the Proposal will not result in any changes to the design profile/environmental footprint of Southern Access Road, but only requires simple line-marking to indicate two-way movements through the provision of a marked centre-line, and the removal of the marked chevrons previously proposed in the Speedway EIS and supporting documentation.

3.5 Management Measures

A number of operational management measures will be implemented to ensure that movements between Car Park A and along Southern Access Road to both the Speedway staff parking, works and maintenance areas, and the Pit Area, are undertaken in the safest and most efficient manner possible.

3.5.1 Intersection of Car Park A & Southern Access Road

Speedway/Event staff will supervise the intersection of Southern Access Road & Car Park A through the entire duration of an Event, from the start of competitor arrivals until the Site is closed when all spectators and competitors have departed, to ensure that only authorised vehicles travel into the southern portion of the Site through the duration of an event.

3.5.2 Barrier Fence

A barrier fence is provided along the western boundary of Car Park A which restricts any pedestrian access between Car Park A and Southern Access Road.

3.5.3 Restricted Public Access

As discussed, no members of the public will be provided with either vehicular or pedestrian access to Southern Access Road. During Events, Speedway/Event staff will be stationed at both the barrier gates to ensure access to the Southern Access Road is provided for competitors and Speedway staff only, and No Spectator Access (Vehicle or Pedestrian) signage will be prominently displayed at the intersection of Car Park A & Southern Access Road, and along Southern Access Road itself.

3.5.4 Waiting Bay

The potential exists that larger competitor vehicles will require the use of the full width of the intersection Car Park A & Southern Access Road as they turn left from Car Park A to Southern Access Road.

As such, a waiting bay for northbound Speedway staff vehicles and emergency vehicles will be provided south of the intersection at a point where a larger vehicle has manoeuvred to be entirely within the southbound lane.

Based on the available plans, the sight distance between this waiting bay and the intersection (and indeed across Car Park A to the entry lane from the internal roundabout) is good, such that there is no potential for the northbound Speedway staff vehicle to conflict with an arriving vehicle.

We also note that on an Event day the intersection would be operating under the supervision of Speedway/Event staff so as to ensure that access to Southern Access Road is available to Speedway staff, competitors and emergency vehicles only. These staff would all be required to obtain the appropriate Traffic Controller qualifications, and as such also be able to supervise northbound vehicle movements and movements from the waiting bay in a safe and efficient manner.

3.5.5 Line-Marking

The Proposal provides for the removal of the chevron markings in Southern Access Road, and the provision of a new marked centre-line.

3.5.6 Internal Southern Access Road Checkpoint

Speedway/Event staff will supervise an internal checkpoint in Southern Access Road to ensure the separation of vehicles travelling to the Pit Area, and Speedway staff vehicles accessing the staff parking, works and maintenance areas. Speedway/Event staff at this checkpoint will also ensure that all competitors depart the Site only via Intersection 2.

3.5.7 Competitor Arrival Times

To the extent possible, all competitors will be required to arrive at the Site prior to the opening of Car Park A for spectator parking. On the rare occasion that a competitor arrives after Car Park A has opened, any large competitor vehicles (over 10.0m) will be required to use Intersection 2 to access the Pit Area and Car Park B. It is noted that only a small number of competitors are anticipated to arrive after the gates are opened to spectators, and as such there is little if any potential for vehicles entering via Intersection 2 to generate a queue in Ferrers Road.

4 Conclusions & Recommendations

4.1 Conclusions

Based on a detailed assessment of the Proposal, **arc traffic + transport** has determined that the Proposal would not result in any material changes from the approved project, and as such there is no need for a Modification or the like to implement the Proposal; rather, the provision for two-way movements for Speedway staff should simply be detailed in the future Operational Traffic Management Plan and other relevant Speedway management documentation.

In addition, **arc traffic + transport** has determined that the Proposal would have no impact on general access, safety or the operation of the Site intersections and broader road network.

4.2 Recommendations

To further maximise the efficiency and safety of vehicle movements in the Southern Access Road, **arc traffic + transport** provides the following recommendations, which have been agreed by Speedway Promotions:

- A speed limit of no more than 20km/h be provided in Southern Access Road.
- Northbound Speedway staff movements in Southern Access Road be limited to the extent possible during the competitor arrival peaks prior to an event.
- Speedway/Event staff supervision of the intersection of Southern Access Road & Car Park A to ensure that only authorised vehicles travel into the southern portion of the Site through the duration of the event.
- Speedway/Event staff supervision of an internal checkpoint in Southern Access Road to ensure the separation of competitor vehicles and Speedway/event staff, and to ensure that all competitors depart the Site only via Intersection 2.
- A requirement that to the extent possible, competitors arrive at the Site prior to the opening of Car Park A for spectator parking.
- A requirement that any large (over 10.0m) competitor vehicle arriving at the Site after the car parks are opened to spectators (anticipated to be at 3:00pm) will be required to use Intersection 2 to access the Pit Area and Car Park B. It is noted that only a small number of competitors are anticipated to arrive after the gates are opened to spectators, and as such there is little if any potential for vehicles entering via Intersection 2 to generate a queue in Ferrers Road.

With reference to the Conclusions and Recommendations outlined above, it is the opinion of **arc traffic + transport** that the provision of two-way access in Southern Access Road for Speedway staff and emergency vehicles only will not result in any material changes from the approved project, and is entirely supportable based on the existing Speedway Conditions, and further to our review of access, traffic and safety considerations.