Parramatta Leagues Club Hotel

Transport, Parking and Accessibility Assessment
Response to Submissions

Prepared for:

Parramatta Leagues Club

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The Transport Planning Partnership

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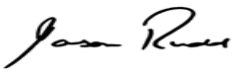
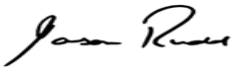
V02	13/05/20	K. Lam & S.Botross	J. Rudd	J. Rudd	
V03	12/04/21	K. Lam & S.Botross	J. Rudd	J. Rudd	
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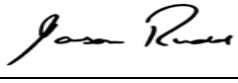
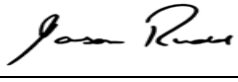
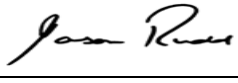
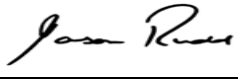
V05	29/09/21	K. Lam & S.Botross	J. Rudd	J. Rudd	
V06	18/10/21	K. Lam & S.Botross	J. Rudd	J. Rudd	
V07	21/10/21	K. Lam & S.Botross	J. Rudd	J. Rudd	
V08	7/12/21	K. Lam & S.Botross	J. Rudd	J. Rudd	

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1 Introduction

In December 2018, the Parramatta Leagues Club (the Club) submitted a State Significant Development (SSD) application for a proposed Hotel building on a site located between the existing Parramatta Leagues Club building and car park and the recently redeveloped then Bankwest Stadium now CommBank Stadium (Stadium) on O'Connell Street, Parramatta.

The application (SSD 8800) was placed on exhibition with supporting documents, including a *Transport and Accessibility Impact Assessment*[1] (November 2018) prepared by The Transport Planning Partnership Pty Ltd (TTPP).

Both agency and public submissions to SSD 8800 have been received and a request for a 'Response to Submissions' issued to the Club by the NSW Department of Planning, Industry and Environment (DPIE) by letter dated 1 April 2019.

With regard to traffic and transport, agency submissions were provided by:

- Parramatta City Council
- NSW Roads and Maritime
- Transport for NSW (TfNSW)

In addition to the agency submissions, consultation between TfNSW and Club representatives have been undertaken to discuss specific issues pertaining to vehicle access arrangements and cumulative traffic implications associated with future operation of the Paramatta Light Rail infrastructure.

This document has been prepared by TTPP in response to submissions relating to traffic, parking and transport aspects of the proposed development.

The response presented herein has benefited from the supplementary discussions between TfNSW and Club representatives regarding specific traffic related issues of the modified development proposal.

It is acknowledged that the proposed Hotel development has been modified in response to submissions, most notably:

- amended vehicle access arrangements in response to TfNSW feedback and lack of landowner's consent from Venues NSW to access the new adjoining southern access road.
- reduction in the Hotel building height

[1] *Parramatta Leagues Club Hotel, 1 Eels Place Parramatta – Transport and Accessibility Impact Assessment*(TTPP, 29 November 2018)

- reduction in the number of Hotel rooms; and
- the removal of the proposed Hotel pool facility.

These modifications will reduce the travel and parking demands of the proposed facility compared with the original proposal as assessed in the *Transport and Accessibility Impact Assessment* (November 2018)[2].

Additionally, in responding to the response to submissions, the following comments have considered the operation of Eels Walk with design amendments to the internal site access arrangements resulting from the approved Eels Pavilion development application (DA/681/2021).

In responding the to the submissions, the assessment presented herein has considered the implications of the 'modified' development proposal.

In preparing this 'Response to Submissions' document, further consultations with Transport for NSW (TfNSW) and stakeholders have been undertaken to refine modifications to the proposal.

Through the agency submissions and consultations, it was identified that a key transport related issue with the Hotel development was the provision of vehicle access to and from the Hotel via Gate 2, namely the access road at O'Connell Street that runs between the Stadium and the Hotel site.

The use of the Gate 2 access has been removed from the proposed Hotel development proposal with all Hotel related vehicle access to be provided via the existing signalised O'Connell Street / Eels Place intersection.

The provision of Hotel related vehicle access via Eels Place was identified by TfNSW as their preferred access arrangement and removes issues raised in submissions pertaining to the design and usage of the Gate 2 access road.

It is also noted that the proposed vehicle access arrangements for the Hotel as presented in the SSD application plans accompanying the Response to Submissions, have taken into consideration the approved development application by the Club for an extension adjoining Eels Walk.

Consultations were also undertaken to better inform the future interaction of the proposal with the activities of the surrounding land uses such as the updated Event Management Plan for the Stadium and the implications of the Parramatta Light Rail Project.

[2] *Parramatta Leagues Club Hotel, 1 Eels Place Parramatta – Transport and Accessibility Impact Assessment*(TTPP, 29 November 2018)

The traffic and transport related issues addressed in this Response to Submissions can be summarised as follows:

- Traffic generation implications of modified development proposal to the operation of the future road network. Specifically, what are the implications with anticipated road network changes resulting from the operation of the Parramatta Light Rail Project
- Modified vehicle access arrangements with all Hotel related traffic to access the site via the signalised O'Connell Street / Eels Pace intersection and the approved Eels Walk arrangements
- Implications for Hotel generated parking demand
- Management of service vehicle internal manoeuvring arrangements and adequacy of on-site loading facilities; and
- Pedestrian access and safety for both non-event and event modes of operation at the Stadium.
- Event mode Hotel traffic management
- Construction pedestrian and traffic management; and
- Workplace Travel Plan.

Each of these issues are addressed in Section 3 of this response to submissions.

2 Overview of Proposed Modifications

With regard to the traffic and transport aspects of the Club's Hotel proposal, a number of modifications have been made to both the physical form of the Hotel building and how the Hotel will operate and interact with its surroundings.

These modifications are summarised below.

Figure 2.1 provides a summary of the proposed location of the Hotel within the surrounding land uses.

2.1 Development Land Uses

As noted above, the height of the proposed Hotel building has been reduced and other modifications to the built form elements undertaken in response to submissions.

The changes to the development yield as a result of the proposed modifications are summarised in Table 2.1.

Table 2.1: Proposed Modified Hotel Uses

Use	SSD Application (December 2018)	Modified SSDA (October 2021)	Net Change
Hotel Rooms	209 rooms	190 rooms	- 19 rooms
Fitness Facilities	Gym Pool	Hotel Gym	-Pool
Hotel Meeting Rooms & Function Rooms	2,128 m2	1,481 m2	- 667 m2
Bicycle Facilities	44 x Secure Bicycle Parking in Car Park for Club + Hotel staff and guests Hotel staff End of Trip Facilities	44 x Secure Bicycle Parking in Car Park for Club + Hotel staff and guests Hotel staff End of Trip Facilities 8 publicly accessible bicycle rails for Club + Hotel use	+ 8 bicycle rails
Car Parking	773 spaces in Club Multi Storey Car Park	773 spaces in Club Multi Storey Car Park	-
	Porte Cochere	Porte Cochere	-
	Loading Dock	Loading Dock	-

Figure 2.1: Proposed Hotel Location

Source: www.nearmap.com

As shown in Table 2.1, the modified proposal will result in a decreased intensity in yield, with some 10 percent of Hotel rooms and the pool removed from the proposed development. The Hotel meeting and function space will also be reduced by some 31 percent.

The Hotel development will continue to utilise the on-site car parking provided within the 773 space multi storey car park on the Club site.

The Hotel would continue to be serviced by proposed on-site porte cochere and a loading dock facility.

2.2 Hotel Site Vehicle Access Arrangements

As described in the *Transport and Accessibility Impact Assessment*[3] (November 2018) the Hotel site and the surrounding precinct will operate in two distinct modes of operations, namely:

- Typical (Non Event mode)
- Event Mode

The typical (Non Event mode) operations will provide for the day to day conditions and the vast majority of time for the proposed hotel facility.

However, when a large event is held at the Stadium, traffic management of the road network of the broader Stadium precinct are implemented. Being located within the Stadium Precinct, vehicle access to the Club's proposed Hotel facility will be incorporated into the broader precinct traffic management as is the existing Club facility.

During event mode at the Stadium, Eels Walk will be closed to non-emergency vehicle traffic flows and operate as a pedestrian link to the stadium.

The proposed vehicle access arrangements for the modified Hotel development during non-event and event modes at the Stadium are summarised in Figure 2.2 and Figure 2.3.

The following provides a summary of the proposed changes to the proposed Hotel's vehicle access arrangements for each of the modes of operation.

Further details regarding the assessment of the operation of the proposed access arrangements with the modified proposal are provided in Section 3.

[3] *Parramatta Leagues Club Hotel, 1 Eels Place Parramatta – Transport and Accessibility Impact Assessment*(TTPP, 29 November 2018)

Figure 2.2: Proposed Typical Vehicle Access Arrangements – Non Event Mode

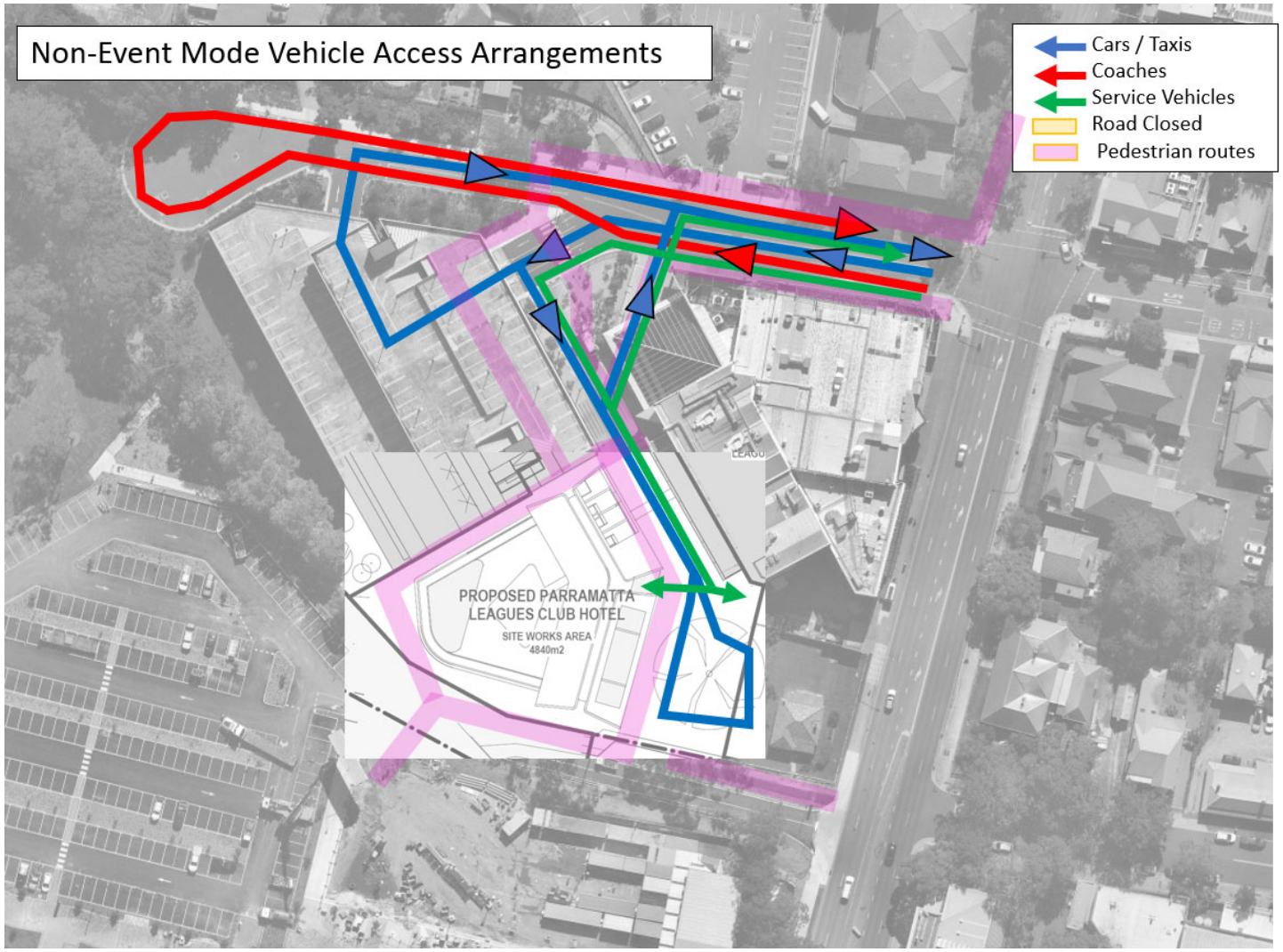
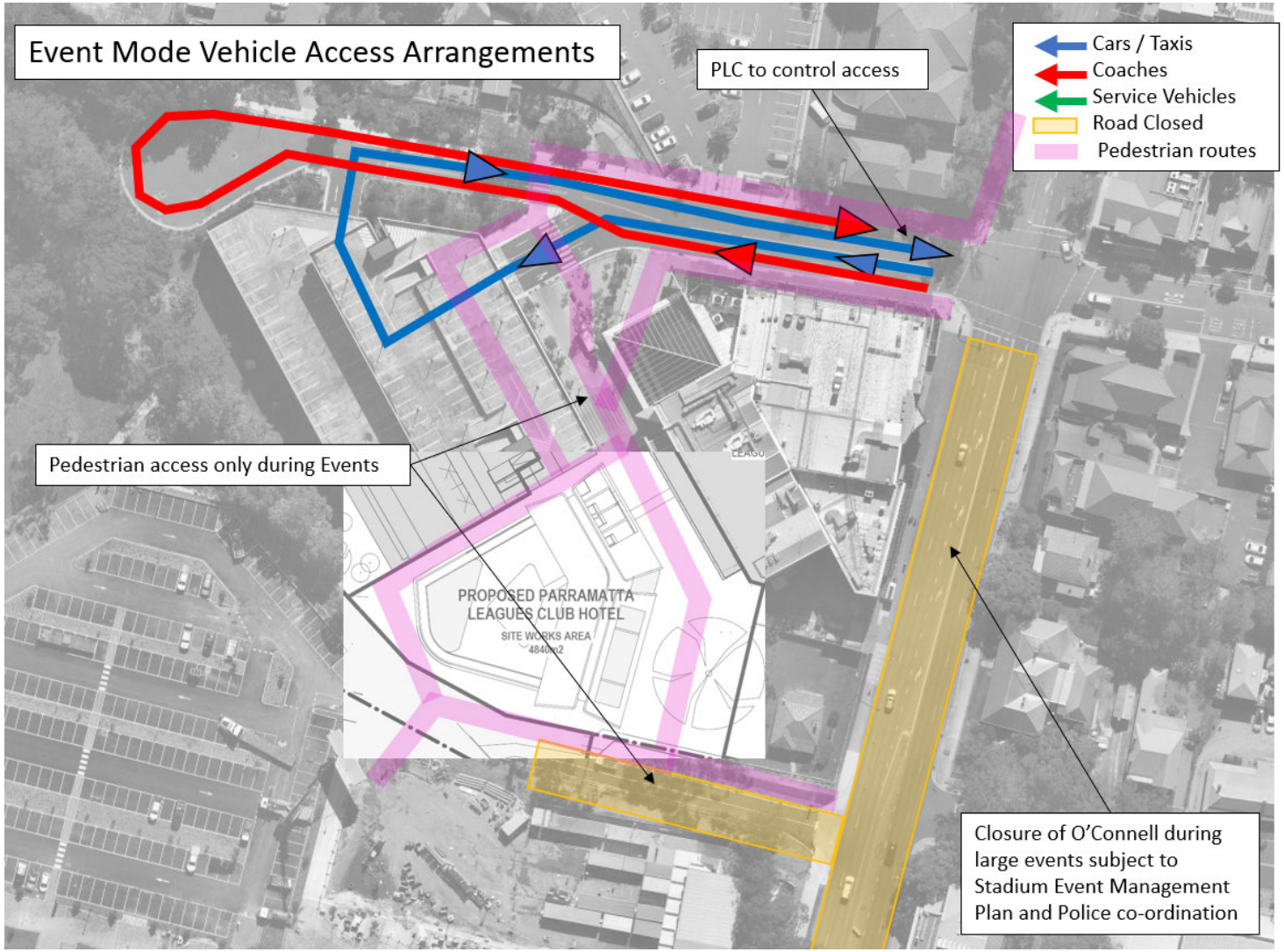


Figure 2.3: Proposed Hotel Vehicle Access Arrangements –Event Mode



2.2.1 Typical (Non-Event Mode) Vehicle Access Arrangements

The SSD application (December 2018) proposed that vehicular access to the Hotel porte cochere and loading dock would be provided via the 'Gate 2' access road located along the southern boundary of the Hotel site, while vehicle access to and from the Hotel car parking within the Club's multi-storey car park would be provided via Eels Place.

The 'Gate 2' access road intersects with O'Connell Street opposite Ross Street and provides vehicle access to the northern car park associated with the Stadium.

Owner's consent from Venues NSW has not yet been obtained by the Parramatta Leagues Club in order to facilitate the use of the 'Gate 2' access road for vehicle access to and from the proposed Hotel site.

Furthermore, through the submission to the SSD application and subsequent consultations, TNSW has identified that TfNSW's preferred position is that all vehicle access to the Hotel be provided via Eels Place and the signalised intersection at O'Connell Street / Eels Place.

As such the proposed vehicle access arrangements for the Hotel have been modified such that all vehicle access is to be provided to and from the proposed Hotel's porte cochere, loading dock and car parking via Eels Place.

For clarity, it is not proposed to use the Gate 2 access road for vehicle access associated with the Hotel.

The modified access arrangements for typical operation are also shown in Figure 2.4.

Vehicle access to the Club's multi-storey car park (including proposed Hotel use) is currently and will continue to be provided via Eels Place.

Vehicle access to and from the proposed Hotel porte cochere and loading dock will be via Eels Place and Eels Walk. Eels Walk is the Club's name for the existing access road that runs between the Club and the multi-storey car park connecting Eels Place to the existing at grade car parking area upon which the proposed Hotel will be developed.

It is noted that bus and coach access for the Hotel will be limited to Eels Place, with these vehicles using the existing turning facilities at the end of the Eels Place cul-de-sac to access the existing bus zone on the northern side of Eels Place.

Figure 2.4: Proposed Modifications to Typical (Non-Event Mode) Hotel Vehicle Access Arrangements

SSDA December 2018

Modified SSDA December 2021

2.2.2 Stadium Event Mode Operations

The *Transport and Accessibility Impact Assessment*[4] prepared for the SSD application included consideration of the Stadium Event Management Plan prepared by BECA in 2017 and including in the SSD application for the Stadium.

Subsequent to the submission of the SSD application for the Parramatta Leagues Club Hotel, the Stadium has opened for events. Additionally, the Stadium Event Management Plan has been updated [5]and will continue to be updated as the Stadium and transport authorities respond to changes in Stadium travel behaviour and in response to lessons learnt from past events.

The modified development proposal for the Parramatta Leagues Club Hotel and its operations has responded to the current traffic and pedestrian management measures implemented during events at the Stadium.

Traffic management measures that are currently implemented include:

- Road closures including O'Connell Street between Eels Place and George Street
- Vehicle access to the Stadium car parks is closed to provide uninterrupted pedestrian flows on footpaths
- Event signage
- Traffic controls at vehicle / vehicle conflict points
- Traffic controls at vehicle / pedestrian conflict points
- Traffic controllers at Eels Place, allowing only pre-booked vehicles to access the Eels car park.

A number of these management measures are illustrated in Figure 2.5 – Figure 2.12.

It is noted that these measures are implemented by the Stadium operators under their Events Management Plan which involves co-ordination with Police, Council and the Club.

[4] *Parramatta Leagues Club Hotel, 1 Eels Place Parramatta – Transport and Accessibility Impact Assessment* (TTPP, 29 November 2018)
[5] *Bankwest Stadium, Traffic, Transport and Pedestrian Management Plan*, (ARUP, 5 March 2019)

Figure 2.5: Traffic Control of Stadium Car Park Access

Figure 2.6: VMS – Parking Signage

Figure 2.7: Traffic Control at Eels Place

Figure 2.8: Traffic Control at Eels Place

Figure 2.9: Eels Walk towards Stadium

Figure 2.10: Traffic Control at Pedestrian Crossing on Gate 2 Access Road

Figure 2.11: O'Connell Street Road Closure at George Street

Figure 2.12: Pedestrian Movement on Closed O'Connell Street near Stadium

2.3 Pedestrian Access

As part of the modified Hotel development, the proposed pedestrian routes around and through the Hotel site have been strengthened such as to minimise potential conflicts with vehicles.

These routes through the Hotel site have been designed to connect with the surrounding land uses and facilitate improved pedestrian connections between the Stadium, the Club and the Parramatta River foreshore.

It is noted that while vehicle connections to the proposed Hotel site via the Gate 2 access road have been removed by the amended design, the pedestrian connections along and across the Gate 2 access road will be maintained.

The creation of a pedestrian priority "shared" connection along Eels Walk will be enhanced through a reduced trafficable pavement width for vehicles and the provision of a separate adjacent walkway protected with bollard treatments.

The proposed arrangements for Eels Walk are shown in Figure 2.13.

Figure 2.13: Proposed Pedestrian Access Arrangements

Source: Hassell (6/8/21)

3 Assessment of Modified Proposal and Response to Submissions

3.1 Traffic Generation and Road Network Implications

3.1.1 Modified Hotel Development Traffic Generation

The modified development proposal will reduce the estimated traffic generation potential of the Hotel development compared to the development proposal considered as part of the SSD application submitted in December 2018 and considered in the *Transport and Accessibility Impact Assessment* report[6] (December 2018).

The reduction to estimate traffic generation will be associated with the following modified development and reduction in land use yields as shown in Table 2.1, namely:

- Reduction in number of hotel rooms;
- Removal of pool from the proposal
- Reduction in meeting / function floor space area
- Conversion of gym to Hotel guest only use.

The same traffic generation rates used in the *Transport and Accessibility Impact Assessment* report (December 2018) have been applied to the modified development yields. It is noted that the traffic generation rates utilised in the *Transport and Accessibility Impact Assessment* report (December 2018) were not questioned by TfNSW (28/2/19) nor RMS (25/2/19) in their submissions to the application.

A comparison of the estimated traffic generation is provided in Table 3.1.

The traffic generation estimates presented in Table 3.1 represent the non-event mode of operation for the proposed Hotel.

As the Hotel is expected to provide accommodation for people attending events at the Stadium, the traffic generation potential of the Hotel during the event mode is considered to be negligible.

[6] *Parramatta Leagues Club Hotel, 1 Eels Place Parramatta – Transport and Accessibility Impact Assessment* (TTPP, 29 November 2018)

Table 3.1: Peak Period Traffic Generation of Proposed Hotel Development

Peak Hour Period	SSD Application (December 2018) Vehicle trips / Hour	Modified Application (May 2020) Vehicle trips / Hour	Net Change Vehicle trips / Hour
AM Peak			
Taxi / Uber	32	29	-3
Cars	58	33	-25
PM Peak			
Taxi / Uber	14	13	-1
Cars	76	25	-51

The modified vehicle access arrangements will remove all Hotel related vehicle movement from the Gate 2 access road intersection at O'Connell Street. Under the proposed arrangements the movement of Hotel patrons between the check in (porte cochere) and the Club's car park will be via the Club's internal roads (namely Eels Walk). This will reduce the number of Hotel related vehicle movements on the external road network.

It is noted that vehicle access the porte cochere and loading docks will not be permitted during event road closures. Guests seeking to enter or leave the Hotel car park will be able to do so via Eels Place / O'Connell Street which is managed with traffic controllers during periods of road closures on O'Connell Street.

The implications of the reduced Hotel development traffic generation and distribution are assessed below.

3.2 Future Road Network Operation with Parramatta Light Rail

3.2.1 Overview

In the course of preparing this response to submissions, consultation with TfNSW and the Parramatta Light Rail (PLR) delivery team was undertaken to confirm the future road network conditions surrounding the Parramatta Leagues Club site once the PLR project is operational.

It has been confirmed that the future traffic flows presented in the Parramatta Light Rail EIS are appropriate for use in the re-assessment of the modified Parramatta Leagues Club Hotel proposal.

It is noted that with the implementation of the PLR project and the capacity reductions from traffic lane removal in George Street, O'Connell Street will become the principle north – south traffic route accessing the western side of the Parramatta CBD.

It is also noted that the Parramatta Light Rail is planned to be completed and operational prior to the construction and / or operation of the proposed Parramatta Leagues Club Hotel development.

3.2.2 Traffic Assessment Scenarios

In order to consider the potential operational traffic impact of the proposed Hotel development on the surrounding local road network with the operation of the PLR project, an assessment of road network operation for the following scenarios have been undertaken:

- **Future Base CASE Road Network Operation (S4)**
    - This scenario represents the future road network operation in 2026 with the operation of the Parramatta Light Rail.
    - The traffic flows for this scenario have been sourced from the Parramatta Light Rail – Operational Traffic and Transport Technical Assessment Report (GTA, 15/8/2017).
- **Future Base with Hotel Development (S5)**
    - this scenario includes S4 plus the development traffic associated with the proposed Hotel development.
    - In this scenario, the modelled cycle times and phase arrangements are the same as modelled in S4.
- **Future Base with Hotel Development (S6)**
    - this scenario includes S4 plus the development traffic associated with the proposed Hotel development.
    - In this scenario, the modelled cycle times and phase arrangements are optimised for S6 traffic conditions of the road network.

The road network traffic volumes assessed as part of each scenario (S4, S5 and S6) are presented in Appendix A.

3.2.3 Intersection Capacity Assessment

The operation of key intersections have been reassessed for the 'with PLR' scenarios using SIDRA INTERSECTION 8 NETWORK (SIDRA). SIDRA is a computer-based modelling package which assesses intersection performance under prevailing traffic conditions.

The key intersections assessed were as follows:

- Eels Place/ O'Connell Street/ Grose Street intersection; and
- Victoria Road/ O'Connell Street intersection.

The analysis results for traffic conditions are presented in Table 3.2.

Table 3.2 indicates that the anticipated Level of Service for the modelled intersections will be same with and without the proposed Hotel development once the Parramatta Light Rail is operational.

The intersection of Victoria Road and O'Connell Street would operate at LoS F with delays during the AM and PM peak hour periods as a result of traffic diversions from Church Street to O'Connell Street following the operation of the Parramatta Light Rail and reduced capacities on with reduced capacity in Church Street.

Table 3.2: Future Intersection Operating Conditions with Modelled Development Scenarios

Scenario	Intersection	AM Peak Level of Service (LoS)	PM Peak Level of Service (LoS)
S4 Future Base with PLR	Eels Place/ O'Connell Street/ Grose Street	D	F
	Victoria Road/ O'Connell Street	F	F
S5 S4 + Hotel Traffic	Eels Place/ O'Connell Street/ Grose Street	D	F
	Victoria Road/ O'Connell Street	F	F
S6 S5 with Optimised Network	Eels Place/ O'Connell Street/ Grose Street	C	F
	Victoria Road/ O'Connell Street	F	F

As reported in the Parramatta Light Rail EIS, the O'Connell Street / Victoria Street intersection will experience a significant decrease in level of service once Parramatta Light Rail is operational.

Table 3.2 indicates that with modifications to the cycle time and phase times, some improvements to the operation of the O'Connell Street / Eels Place intersection can be achieved in the AM peak period.

The intersection analysis undertaken for the modified Hotel development has indicated that modelled queues lengths along O'Connell Street with the Parramatta Light Rail operational in 2026 will not be adversely affected with additional traffic flows associated with the Hotel.

Furthermore, the modelled 95th percentile vehicle queuing along Eels Place for the right turn movement to O'Connell Street with the proposed Hotel is estimated to be 52 metres and 82 metres in the AM and PM peak hours respectively. These queue lengths would not impact on the internal operation or access to the Club car park or Hotel porte cochere.

It is proposed that a Travel Plan will be developed and implemented as part of the proposed Hotel development for both staff and guests. The successful implementation of a Travel Plan for the Hotel will reduce the overall traffic generation of the site and improve the level of service for the Eels Place intersection.

Once operational the PLR will provide an attractive alternative to private vehicle travel for access to and from the Hotel site and the broader Stadium and Parramatta Leagues Club precinct.

3.2.4 Summary of Traffic Implications with Parramatta Light Rail

The analysis presented above has indicated that operation of the Parramatta Light Rail project is expected to increase traffic flows on O'Connell Street past the proposed Parramatta Leagues Club Hotel site.

The analysis has indicated that while there will be future traffic congestion on O'Connell Street associated with the Parramatta Light Rail project, the additional traffic generation of the proposed modified Hotel development would not have a significant adverse impact on the future operation of the road network.

3.3 Car Parking Demand

Car parking for the proposed Hotel development will be provided within the existing 733 space multi-storey Club car park.

As documented in the EIS Transport Report7 the approval for the multi storey car park by Parramatta City Council considered future development of the proposed Hotel site in determining the number of spaces provided in the multi-storey car park.

In approving multi storey car park development, Council required the provision of car parking spaces to be reduced from approximately 1,000 spaces as proposed by the Parramatta

[7] Parramatta Leagues Club Hotel, Transport and Accessibility Impact Assessment (TTPP, 29 November, 2018).

Leagues Club to 733 spaces on the basis that 1,000 spaces would be an excessive provision for existing and future development on the Parramatta Leagues Club site.

The car parking demand for the proposed Hotel uses will be reduced by the proposed development by the reduction in hotel rooms (less 19 rooms), removal of the pool facility and reduction of the Hotel meeting and function room floor area (less 667m2).

Hotel guest car parking will be pre-arranged through the booking process and as such the daily demand for guests known and, if necessary, parking could be allocated within the multi-storey car park.

However, generally parking would be unallocated within the multi storey car park and as such there will be the opportunity for co-utilisation of the same spaces by different uses at different times of the day. This has the effect of reducing the total site parking demands compared to individual uses being allocated individual spaces.

Notwithstanding the above, the potential parking demands of I individual uses of the modified proposal have been re-estimated using Parramatta City Council DCP and RMS parking rates. These individual demands are set out in Table 3.3.

Table 3.3: Parking Provision Requirements of Existing Multi-Storey Car Park

Use	DCP Parking Requirement for Stand Alone Development	Car Parking Requirements SSD Application (December 2018)	Car Parking Requirements Modified Application (October 2021)
Existing Parramatta Leagues Club Facilities (non-event mode)	Demand based on previous survey	274 spaces-	274 spaces
Hotel	1 space / 4 rooms	52 spaces	48 spaces
Wellness & Fitness Centre (Pool + Gym) for Proposed Hotel Development	4.5 spaces / 100m2	166 spaces	100 spaces
Function & Meeting Room	15 spaces / 100m2	319 spaces	222 spaces
Total		**811 spaces**	**644 spaces**

As shown in Table 3.3, the modifications to the proposed Hotel land uses will significantly reduce the demand for car parking associated with the Hotel.

Furthermore, Table 3.3 indicates that the existing 733 parking spaces in the multi storey car park would accommodate the total individual peak parking demands of each use for the proposed hotel and the Parramatta Leagues Club building.

Furthermore, both the fitness & wellness and function facilities will be ancillary to the proposed hotel and Leagues Club and thus generate parking demand in isolation of the other uses.

Thus, it is considered that the provision of 733 on-site parking spaces will adequately accommodate the Club precinct's future parking demand in a manner which is consistent with the approval for multi storey car park the anticipated future Precinct development and broader transport policies which seek to reduce private vehicle travel in favour of public and active transport.

3.4 Vehicle Access Arrangements

3.4.1 Design Vehicle Dimensions

In responding to the issues raised in the submissions regarding the proposed vehicle access and the internal vehicle circulation arrangements, it should be noted that the design vehicle used in the assessment, namely the largest vehicle to access the proposed Hotel site via Eels Place, is a 12.5m long bus / coach.

Under the modified vehicle access arrangements, bus and coach access for the Hotel will be limited to Eels Place, with these vehicles using the existing turning facilities at the end of the Eels Place cul-de-sac to access the existing bus zone on the northern side of Eels Place.

The existing bus zone on the northern side of Eels Place would be utilised as a pick up / drop off facility only with coaches not permitted to park within Eels Place.

The Hotel loading dock has been designed to accommodate a Medium Rigid Vehicle (MRV – 8.8m long) while the Club's existing loading dock will continue to be utilised by a variety of vehicle sizes up to a Heavy Rigid Vehicle (HRV - 12.5m long).

Swept path analysis of a HRV, MRV and a B99 passenger car shows the design vehicle turning paths for access to the loading docks and Porte Cochere facility via Eels Place and that the modified Eels Walk arrangements. Copy of the swept paths are provided in Appendix D.

3.4.2 Event Mode Vehicle Access

During event mode, vehicle access to and from the proposed Hotel car parking will continue to be provided via Eels Place.

Vehicle access to the Club's multi-storey car park will remain accessible and managed during event mode as per the existing event mode traffic arrangements implemented for the broader Stadium precinct (see Section 2).

The closure of the Gate 2 access road would not change the vehicle access arrangements on Eels Place for the proposed Hotel.

It is envisaged that during Stadium events generating pedestrian movements between the Stadium and the Club, that Eels Walk will be pedestrianised and closed to non-emergency vehicle traffic.

During event mode at the Stadium, it is envisaged that the Stadium, the Hotel and the Club will operate as combined precinct with parking on the periphery and strong vehicle free pedestrian connections between the uses within this combined precinct during periods when pedestrian activity is expected to be high.

Notwithstanding the above, all service vehicle deliveries for proposed Hotel will be known and can be scheduled to occur prior to or following the event mode closures. Guests using the Hotel during events would typically be attending the event and hence will have arrived and depart outside of the event mode road closures.

Furthermore, information regarding check in / check arrangements generally and specifically during event mode can be communicated to guests prior to arrival on site. This information could be incorporated into the Workplace Travel Plans and Travel Access Guides (see Section 3.9).

As described above, Venues NSW has developed an Event Management Plan (EMP) for the Stadium. Indeed, various iterations of the EMP have been developed as the plan evolves over time to reflect lessons learnt post the opening of the Stadium. This evolution process will continue and the plan updated to reflect the changing conditions and travel demands.

It is understood that Parramatta Leagues Club management has provided inputs to the EMP as a significant stakeholder and liaises with Venues NSW on an event by event basis.

The development of the modified development proposal for the Club's Hotel has incorporated the traffic, pedestrian and transport measures set out in the current EMP, most notably the closure of the Gate 2 access road and O'Connell Street.

It is recommended that consultation and liaison between Venue NSW and the Club continue such that a co-ordinated EMP is developed and implemented for events at the Stadium.

Notwithstanding the above, it is noted that the ability to allow emergency vehicle access via the Gate 2 access road will be maintained at all times, whether it be for access to the proposed Hotel or the Stadium.

As described in Section 2, traffic controllers, temporary barriers and advisory signage is currently and will continue to be utilised during event modes.

3.4.3 Internal Service Vehicle Manoeuvring

The modified Club Hotel development proposes to retain an on-site porte cochere and a loading dock facility. Both these facilities will be accessed via Eels Place and Eels Walk.

The proposed Hotel loading dock has been designed to accommodate an 8.8 metre long Medium Rigid Vehicle (MRV) while the existing Club loading dock is known to infrequently accept a 12.5 metre long heavy rigid vehicle.

The vehicle swept paths for these vehicle's satisfactorily accessing the Hotel and Club docks are shown in Appendix D.

Loading Dock Access

Access for the MRV to the on-site loading dock will require a reverse manoeuvre from the internal circulation road off Eels walk into the dock.

While the volume of vehicles accessing the loading dock is expected to be low and service vehicle movements will not occur during high pedestrian activity (i.e. event mode), the reverse movement would cross one of the potential pedestrian routes between the Hotel lobby and the Club.

To address this potential conflict it is recommended that:

- All reverse movements into the dock be undertaken with the aid of a spotter (i.e. someone who stands outside of the vehicle and directs the vehicle in while controlling pedestrian movements). This would be either a loading dock manager or Hotel staff.
- Temporary barriers to be erected to stop pedestrian movements while the vehicle is reversing into the dock.

It is noted that Hotel staff, would be on duty during delivery periods and hence can provide the spotter role.

The measures and procedures to facilitate service vehicle access to the Hotel load dock are set out in the Hotel Loading Dock Management Plan (see Appendix E). It is intended that this Loading Dock Management Plan be reviewed and updated prior to commence of operations at the Hotel.

Coach / Bus Access

Coach and bus access will be restricted to the existing coach arrangements namely access to and from Eels Place via the O'Connell Street intersection.

Coaches entering Eels Place will utilise the cul-de-sac turning area at the end of Eels Place to access the existing coach / bus parking area on the northern side of Eels Place before exiting via the Eels Place / O'Connell Street intersection.

It is noted that no Hotel related coach parking would be permitted in Eels Place, with the existing bus zone on the northern side of Eels Place to be used for passenger set down and pick up only.

3.5 Eels Walk Vehicle and Pedestrian Management

Pedestrian flows through the Hotel Site and generally in the precinct will be significant during events at Stadium.

During event mode, the closure of Eels Walk to vehicle will address potential conflicts by creating a vehicle free path of travel between the Hotel, Club and Club car parking area and the Stadium.

It is noted that Eels Walk is currently closed to vehicles with temporary barriers installed during large events at the Stadium.

During non-event mode, pedestrian flows along Eels Walk will be significantly less than event mode conditions. However, the proposed strong pedestrian linkages through the site will create pedestrian friendly and prioritised pathways.

This will be achieved through the different pavement types, kerbing, landscaping and physical barriers. The pedestrian pathways follow the key pedestrian desire lines to reduce potential use of alternate (or more direct) routes.

Under the recently approved development application for the Eels Pavilion (DA/681/2021) Eels Walk will be configured as a two-way single traffic lane with an adjacent pedestrian only walkway.

The proposed set out for Eels Walk is shown in Figure 3.1 and Appendix C.

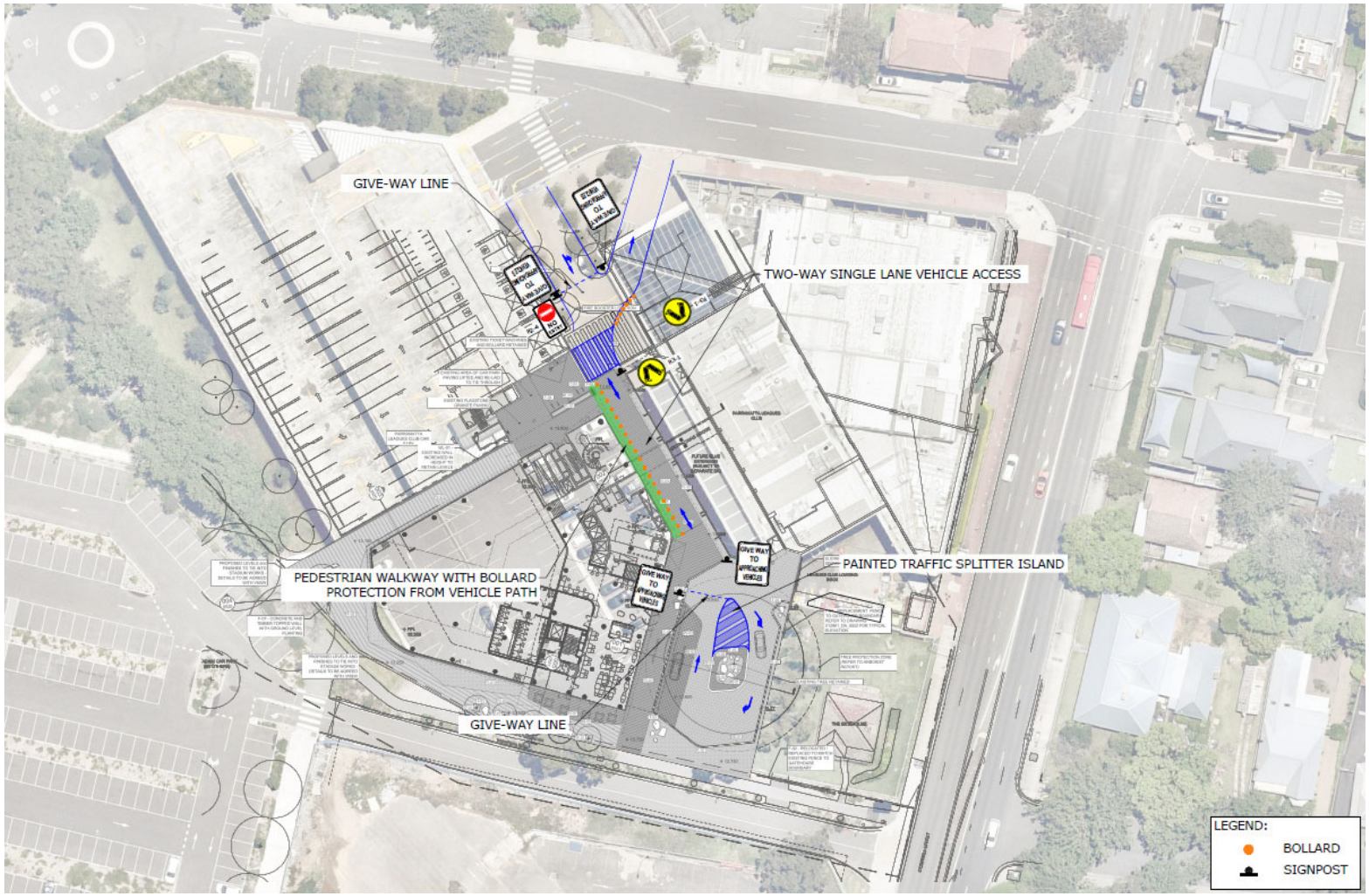
As shown in Figure 3.1 there is a distinctive pavement change indicating a change of traffic environment namely a two-way one lane section of the internal road connection.

The flat and straight alignment of the one lane section of Eels Walk will allow vehicles to observe a vehicle approaching in the opposite direction prior to leaving the passing opportunity at either end of the one lane section.

The line marking configurations with hold lines on the approaches to the one lane section of Eels Walk as shown in Figure 3.1 indicate the waiting areas for vehicles should they arrive at the hold point and encounter a vehicle approaching in the opposite direction.

The location of hold points and the sight alignment is such that vehicles can observe and stop if necessary prior to entering the one lane section to allow an approaching vehicle to pass and then entering the one lane section once it is observed to be clear of approaching vehicles.

Figure 3.1: Eels Walk - Proposed Vehicle and Pedestrian Access Arrangements



Source: Hassell (6/8/21)

The proposed arrangements are similar to a "shared zone" environment with low traffic volumes and vehicle speeds interacting with pedestrian movements.

As shown in Figure 3.1 it is recommended that signage be erected at either end of the one lane section advising vehicles to give way to approaching vehicles.

During non-event mode of operation, a separate pedestrian path will be provided along the Hotel's frontage to Eels Walk to provide a pedestrian only pathway between the Hotel and the Club / car park.

Also shown in Figure 3.1 is the provision of the dedicated and protected pedestrian walkway along Eels Walk which is separate and additional to the one lane vehicle section.

3.6 Service Vehicle Demands

As described above, the proposed modification Hotel development will provide a single loading dock facility with the ability to accommodate a Medium Rigid Vehicle (MRV). The Leagues Club is serviced by a dock with the ability to accommodate a Heavy Rigid Vehicle (HRV).

It is understood through discussions with the Club that the proposed Hotel would generate regular service vehicle movements associated with the following activities:

- Waste collection
- Food and beverage deliveries for functions and Hotel eateries
- General Hotel / office supplies.

The proposed Hotel development will include an on-site laundry facility and hence linen from Hotel rooms and function rooms will be cleaned on site thereby avoiding the need for deliveries to off locations.

The pool which was proposed as part of the original SSD application has been removed from the modified proposal and hence removes the need for pool chemical deliveries.

Waste collections for the Hotel are expected to occur 5-6 times per week.

The frequency of food and beverage deliveries will vary depending upon the frequency and nature of functions held in the Hotel. The frequency for food and beverage is expected to vary between 1 to 5 vehicles per day.

General Hotel / office supplies deliveries are expected to be in the order of 4-5 per week.

It is expected that the Hotel loading dock would accommodate up to 6 service vehicle movements per day. The provision of a single loading dock would be able to accommodate this level demand.

It is noted that TfNSW has indicated that the TfNSW Freight and Servicing team have indicated that they would expect a demand for the Hotel loading dock of some 28 service vehicles per weekday and 15 vehicles per weekend day.

This is higher than the service vehicle demands for the Hotel loading dock provided to TTPP by the Club.

Notwithstanding the above variations it is noted that for the delivery task to the Hotel all suppliers and deliveries will be known and will be pre-arranged prior to vehicle dispatch. As such the servicing requirements, namely the size of truck to be used along with the access route arrangements and arrival timeframe can be specified to suppliers.

The ability to schedule arrive times will enable deliveries to be spread across the day and minimise peak activity associated with a single dock for the Hotel.

However, it is acknowledged that a single loading dock would be unlikely to be able to accommodate a servicing demand of 28 service vehicles per day without an incidence of a vehicle arriving to find the Hotel loading dock occupied. It is recommended that in incidences when the loading dock is occupied that the existing Club dock be utilised for deliveries or as a waiting area.

The Club loading dock can accommodate multiple vehicles simultaneously.

With regard to Hotel waste collection, it is anticipated that a combined collection with the Club from the Leagues Club dock could be arranged subject to contract arrangements with the waste collector. A combined collection would obviously reduce the number of service vehicles accessing the site.

Notwithstanding the above, the Hotel can be serviced independently from the Leagues Club by a private waste collector with an MRV.

The demand for coach access to the Hotel will largely be driven by events at Stadium including player and supporter coaches staying at the Hotel or large groups associated with Hotel / function use.

During events there may be up to 4-5 coaches per day. The arrival of coaches would be pre booked so as to manage the internal manoeuvring area. Passenger drop off and pick up will be facilitated via the existing bus turning area and bus stop in Eels Place. Pedestrian connections to the Hotel would be provided by the existing and proposed pedestrian pathways.

3.7 Bicycle Parking and End of Trip Facilities

A secure bicycle parking storage cage is currently provided on the ground floor within the Club's multi-storey car parking facility. Access to the secure bicycle parking facility is available to visitors. The facility will also be available for both staff and guests of the proposed Hotel. Hotel guests would obtain access through Hotel reception.

The secure bicycle parking area is conveniently located on the ground floor of the car park within close proximity to the car park entrance as shown in Figure 3.2.

The modified proposed development for the Hotel would also provide bicycle parking rails for site visitors / staff. These bicycle parking rails are located opposite the car park pay machines and adjacent to the Club and Hotel gym entries (see Figure 3.3).

End of trip change and shower facilities are provided in the Hotel gym (ground floor) and staff change rooms (basement) in the Hotel. Guests of the Hotel will be able to utilise their hotel rooms for end of trip facilities.

Figure 3.2: Existing Secure Bicycle Parking Facility within the Club Car Park

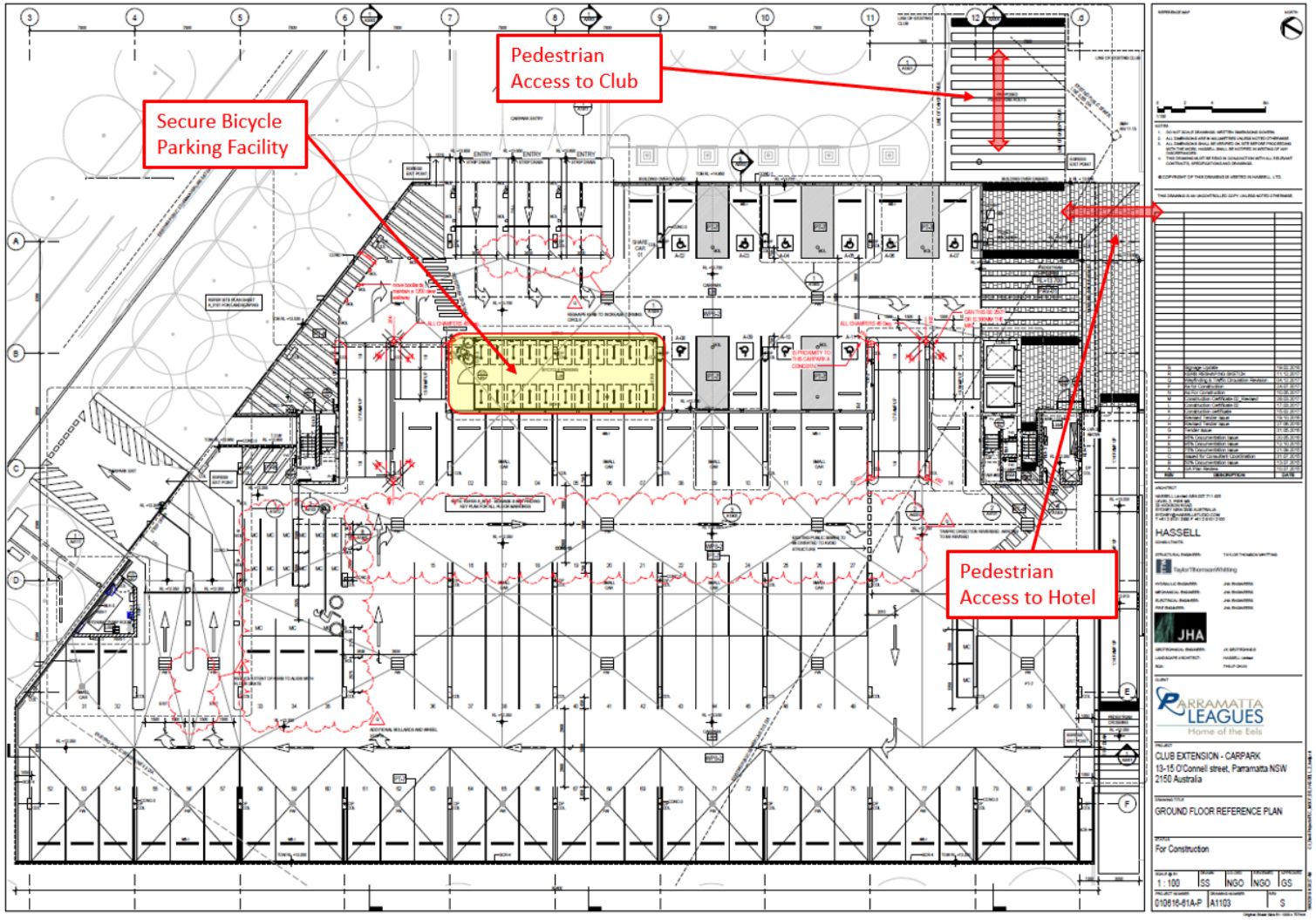
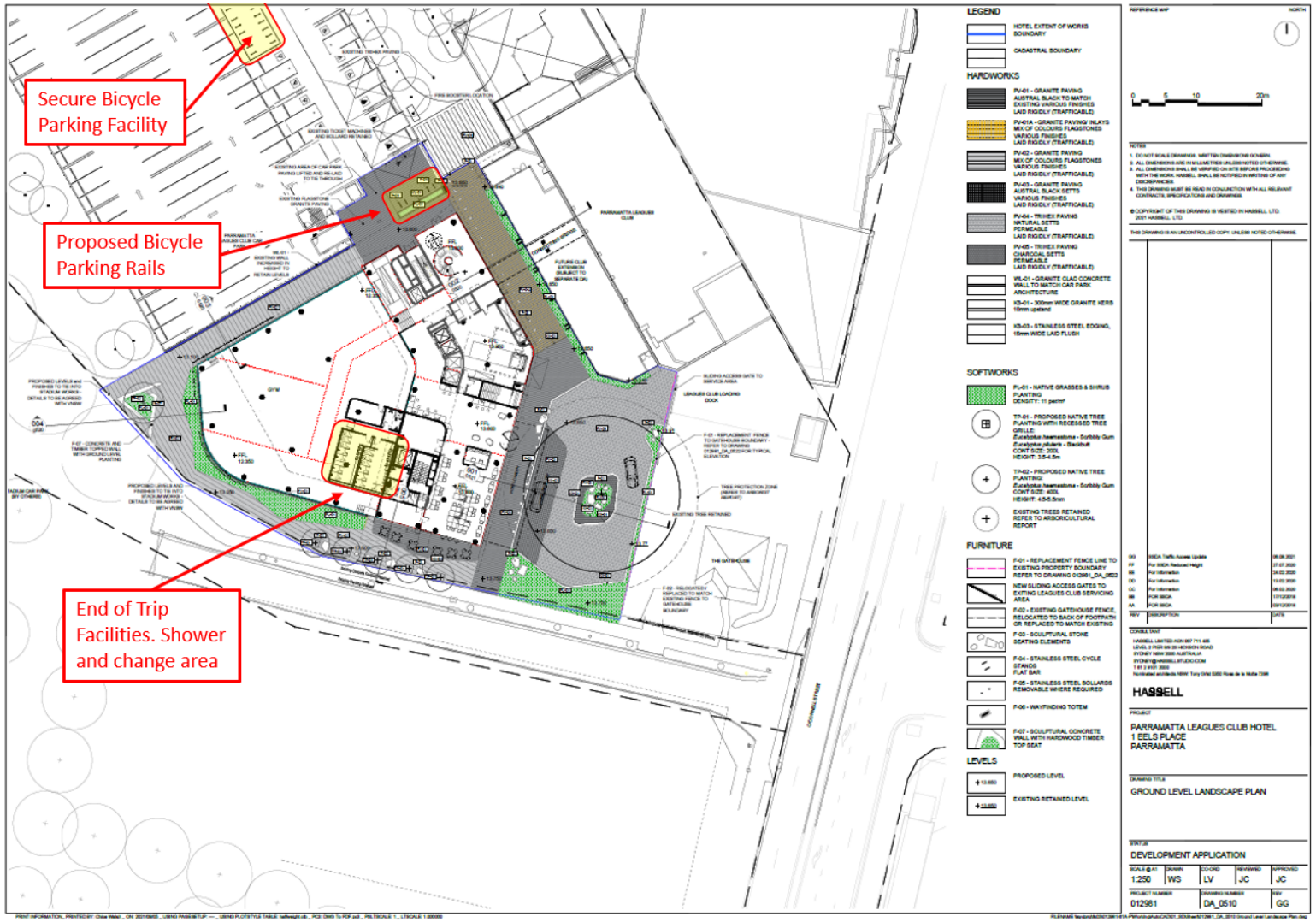


Figure 3.3: Proposed Bicycle Parking Rails



3.8 Construction Traffic and Pedestrian Management

The *Transport and Accessibility Impact Assessment* report submitted with the SSD application for the proposed Club Hotel included a draft or framework Construction Traffic Management Plan (CTMP). This draft CTMP was prepared to establish general guiding principles for the management of construction vehicles during construction activities on the club's Hotel site.

Subject to project approval, the commencement of construction on the Hotel site is yet to be determined. However, it is understood that the earliest that works could commence from the Club's perspective is late 2021. Duration of works is estimated to be between 18-24 months.

Discussions with the TfNSW's PLR design suggested that it would be premature to prepare detailed CTMP documentation without knowledge of the construction timetable. It was agreed that to ensure that construction activities on the Club's Hotel site would need to consider any works or indeed operation of the PLR project at the time of construction.

It is noted that the TfNSW submission has identified a number of matters to be considered as part of a detailed CTMP to be prepared as part of any condition of consent. Many of these matters were identified in the draft CTMP.

It is recommended that the matters identified in the TfNSW submission regarding construction pedestrian and traffic management be adopted as a condition of consent.

Furthermore, it is recommended that consultation with TfNSW / PLR and Venues NSW be undertaken in the preparation of the detailed CTMP for the Club's Hotel development.

3.9 Workplace Travel Planning

The Club's proposed Hotel development located adjacent to a major sporting facility, a Club facility and recreational facilities (i.e. Parramatta Park) with an improved public transport access via the to be constructed Parramatta Light Rail service, offers significant opportunities to achieve real mode share shifts away from private vehicle travel for both staff and guests of the Hotel. The co-use of Hotel and Stadium and Hotel – function space will also assist with the reduction in travel demand generally to / from the precinct.

The preparation of a Workplace Travel Plan (WTP) and Travel Access Guide (TAG) are supported by TTPP. It is recommended that the preparation and maintenance of a WTP and TAG be conditioned as part of the consent for the proposed Hotel.

3.10 Summary of Response to Agency Submissions

As noted above, agency submissions relating to transport aspects of the SSD application (December 2018) for the Parramatta Leagues Club Hotel were received from the following agencies:

- NSW Roads and Maritime Services (RMS) dated 25 February 2019
- Transport for NSW (TfNSW) date 28 February 2019
- City of Parramatta (Council) dated 21 March 2019

Supplementary discussions have also been undertaken with TfNSW who have provided additional comments to the Club in relation to the modified vehicle access arrangements arising from the modified development proposal for the Hotel and as represented in a draft *Transport, Parking and Accessibility Assessment – Response to Submissions* (October 2021).

The supplementary TfNSW comments were provided in an email dated 12 November 2021.

Table 3.4 provides a summary of the how the modified development proposal addresses each of the transport related comments raised in the agency submissions and supplementary comments.

Table 3.4: Summary of Response to Agency Submission Comments

Agency Comment	Modified Development Response
RMS Submission - 25 February 2019	
Concern raised with vehicle access for porte cochere and loading dock via new driveway connection to Stadium access. Preference for vehicle access via signalised Eels Place / O'Connell Street intersection.	The modified development incorporates the preferred RMS access arrangement, namely al Hotel related vehicle access will be via Eels Place / O' Connell Street. The modified development vehicle access arrangements align with the preferred RMS option for access arrangements
Safety concern regarding vehicle access for design vehicle (HRV or Coach) via Stadium access road / O'Connell St intersection.	All Hotel vehicle access to be provided via Eels Place. The revised access arrangements remove the concern about HRV / Coach access via Gate 2 access road as an issue.
Loading dock access and vehicle manoeuvring with potential conflicts with pedestrian movements.	Vehicle access to the Hotel loading dock has been improved with increased manoeuvring area. Separation of pedestrian access and vehicle paths has been clearly defined and protected. Implementation of a Loading Dock Management Plan is included in the response to submissions.
Parramatta Light Rail construction may be occurring simultaneously with the Hotel construction. Co-ordination with TfNSW Sydney Co-ordination Office is required during the preparation of the detailed Construction Pedestrian Traffic Management Plan (CPTMP).	It is noted that the bulk of works associated with the Parramatta Light Rail project will be completed prior to the commencement of construction works for the Hotel. As such it is unlikely that Hotel construction works will impact on the Parramatta Light Rail construction. Notwithstanding the above, a detailed CPTMP for Hotel shall be prepared in consultation with TfNSW Sydney co-ordination Office to minimise implications to Parramatta Light Rail construction and operation. A detailed CPTMP would be prepared prior to issue of any Construction Certificate.

TfNSW Submission – 28 February 2019	
TfNSW requires the applicant to provide evidence that the access road (ie. Gate 2 access) would be available for use, including formal confirmation of owner's consent from Venues NSW to the Parramatta Leagues Club.	The revised vehicle access arrangements (ie. all Hotel vehicle access via Eels Place) removes the need for owner's consent from Venues NSW.
TfNSW recommended that the applicant further investigate alternate vehicle access via Eels Place and the eels Place / O'Connell Street intersection.	Under the revised vehicle access arrangements of the modified development proposal, all vehicle access for the proposed Hotel will be via the Eels Place / O'Connell Street signalised intersection as recommended by TfNSW.
Operation of Hotel during Stadium events. There is a need for ongoing consultation between Parramatta Leagues Club and Venues NSW.	The revised vehicle access arrangements will remove the reliance on the Gate 2 access road owned by Venues NSW. The event mode vehicle and pedestrian arrangements for the Hotel and the Club precinct generally can be effectively managed by the Club. However, ongoing event mode planning and co-ordination between the Club and Venues NSW along with other stakeholders (ie. Council/ Police) for the broader Stadium Precinct will be required on an ongoing basis.
Traffic assessment and Eels Place / O'Connell Street intersection operation with Parramatta Light Rail operation.	Consultation with Parramatta Light Rail was undertaken regarding future road network operation. Feedback obtain has been incorporated into the revised Traffic Assessment presented in this Response to Submissions. In summary with the modified development proposal, the Hotel would have a reduce impact on road network operation compared with the development uses and yields proposed in the December 2018 application. It is noted that any traffic signal phasing adjustments would be subject to TfNSW approval.
Freight and Servicing – management of servicing between Hotel and Club	The revised design will accommodate a HRV to the Club loading dock as per the current arrangements. Should a HRV be required to service the Hotel, the Club dock could be utilised. Co-ordination of waste collection would also be undertaken.
Construction traffic management and Parramatta Light Rail implications	As noted above, the bulk of works associated with the Parramatta Light Rail project will be completed prior to the commencement of construction works for the Hotel. As such it is unlikely that Hotel construction works will impact on the Parramatta Light Rail construction. Notwithstanding the above, the CPTMP for Hotel shall be prepared in consultation with TfNSW Sydney co-ordination Office to minimise implications to Parramatta Light Rail construction and operation. A detailed CTMP would be prepared prior to issue of any Construction Certificate.
Work Place Travel Plan prior to Occupation Certificate.	The preparation of a Work Place Travel Plan as recommended by TfNSW is noted and supported. It is anticipated that a condition would be included in the consent requiring the preparation of a Work Place Travel Plan prior to Occupation Certificate.

City of Parramatta - 23 March 2019	
Pedestrian safety and detail design for pedestrian crossing of Ross Street (Gate 2 access road).	The vehicle access arrangements for the revised Hotel proposal have been amended such that no Hotel vehicle access will be provided via the Venues NSW Gate 2 access road. As potential safety concerns associated with Hotel traffic use of Gate 2 access road have been removed.
Cycle Path Network requirements along the Gate 2 (northern) Access Road	Any works within the Gate 2 access road to accommodate Council's proposed extension of the O'Connell Street shared path will need to be undertaken by Venues NSW and the land owner of the Gate 2 access road.
Green Travel Plan to be prepared for the proposed Hotel	It is noted that both Council and TfNSW recommend and support the implementation of a Green or Work Place Travel Plan. Such a plan would be provided via consent conditions prior to Occupation Certificate.
Bike Parking	Bicycle parking for both Hotel staff and guests will be available within the multi-storey car park on the Club site. End of trip facilities will be provided within the Hotel development.
Construction Traffic Management Plan	It is noted that Council has requested that Council be nominated as a review authority for the CPTMP. It is recommended that Council be consulted in the preparation of the CPTMP and as part of the Sydney Co-ordination Office approval process.
TfNSW – Email 12 November 2021 **Comments provided to Draft Response to Submissions**	
Please submit electronic SIDRA files for TfNSW review.	Noted. The electronic SIDRA files have been submitted via email to TfNSW (8/12/21).
It is noted that the proponent has inputted optimised phasing and timing into SIDRA to produce a better Level of Service. Optimisation cannot be guaranteed and SCATS will adjust itself according to demands and priority will always be given to the major movements especially, O'Connell Street. Publicly available PLR data for O'Connell St/Victoria St TCS should be used in SIDRA modelling to assess the cumulative impact of the Parramatta Light Rail on nearby signalised intersections. Modelling should assess forecast impacts on road safety and capacity of the road network, including consideration of cumulative traffic impacts at key intersections for the scenarios of baseline year, year 2026, 2031, 2036 and the year until the facility ceases operation.	The SIDRA modelling analysis presented in this Transport, Parking and Accessibility Assessment Response to Submissions (December 2021) has utilised the same traffic modelling scenarios and arrangements as presented in the Parramatta Light Rail EIS. This was undertaken to ensure that, as required in response to previous TfNSW / RMS comments, that the potential cumulative road network implications of the Hotel development with the operation of the PRL have been considered. The PRL EIS road network analysis only considered or at least only presented a 2026 with PRL future scenario. Thus to model a 2031, 2036 and the year the facility ceases operation (?) would not provide a realist (ie. with PRL) or comparable assessment. Notwithstanding the above, the road network assessment presented in this Response to Submissions has considered a future scenario with PRL operational and with the Hotel development where the TCS (ie. signal phase timings) as presented in the PRL EIS were utilised. These phases timings were then allowed to be 'optimised' for the with PRL Operational and with Hotel development to determine if road network performance could be improved through phase timing optimisation.

	Thus the Response to Submissions traffic analysis considers a future (2026) scenario with PRL operation and Hotel development with both the PRL EIS phase timing configurations and an optimised configuration. It is noted that the optimisation of the signal timings was utilised in the PRL EIS traffic analysis when assessing the implications associated with traffic diversions to O'Connell Street during PRL operation. Additionally it is noted that the generation of Hotel related traffic to the future surrounding road network will maintain the same level of service at the key nearby intersections as indicated by the PRL EIS traffic analysis.
Eels Walk is a two-way single lane vehicle access with a pedestrian zebra crossing with no waiting area for vehicles exiting Eels Walk while another vehicle approaches on the single lane access. TfNSW raises concerns that conflict between motorists and pedestrians may arise because this is a conflict and decision making point for motorists. Details regarding the management of two-way access and pedestrian movements is to be submitted for review.	The proposed arrangements and controls for the one lane section of Eels Walk have been updated to include vehicle hold lines and waiting bays at either end of the one lane section. The introduction of the hold lines and associated signage will define priority of movement at the one lane section. Pedestrian movements across Eels Walk will be defined by a marked pedestrian crossing. Pedestrian movements along Eels Walk will be facilitated by a designated and separate pedestrian pathway along the Hotel's façade.
It is noted that non-emergency vehicles will not be permitted on Eels Walk during event times to function as a pedestrian only link. TfNSW is seeking details regarding management and enforcement of the Eels Walk closure during event modes.	As set out in Section 2, during major events access to Eels Place is controlled as part of the broader Stadium precinct event management plan. General vehicle access to Eels Place is restricted with the use of traffic controllers, temporary barriers and signage. Vehicle access to Eels Walk is currently restricted with temporary barriers installed at the northern end of Eels Walk such that access to the car park for authorised users is maintained. These existing management features will continue to be implemented as part of the Stadium precinct event management plan.
Loading dock access by MRV will require a reverse manoeuvre from the internal circulation road into the loading dock. TfNSW raises concerns that reversing vehicles can conflict with pedestrians despite proposed temporary pedestrian barriers imposed during loading dock manoeuvres. It is requested that reverse manoeuvres are minimised and MRV enter and exit the loading dock in a forward direction for pedestrian safety.	Forward entry AND forward exit movements by vehicles are not practical with the design of the proposed Hotel development. The loading dock management plan has been developed with the inclusion of management measures to control and protect pedestrian (and other vehicle) movements at periods when service vehicles are to be reversing into the Hotel loading dock from the internal road network.
The applicant has not demonstrated how Coaches will be managed for event days aside from where the vehicles will have access to drop-off and pick-up. TfNSW has also completed an assessment for coach, taxi and private vehicles that currently enter the Parramatta Leagues Club. The analysis completed as part of the Transport, Parking and Accessibility Impact (TPAI) Statement seems to show a significantly lower number of vehicles	Coaches access to the site will be limited to Eels Place as per the existing arrangements for the Club. Coaches will utilise the existing bus zone on the northern side of Eels Place for passenger drop off and pick up only. No parking or layovers of coaches within Eels Place is to be permitted for Hotel related coaches. The traffic generation rates utilised in this Response to Submissions is consistent with the traffic generation rates used in the Transport and Accessibility Impact Assessment (December 2018).

using the facilities available including the Porte Cochere. There is a concern that inaccurate traffic modelling could lead to significant delays on the road network.	It is noted that no comments were provided by TfNSW nor RMS regard in inappropriateness of the traffic generation rates used in the transport and Accessibility Impact Assessment (December 2018). Without specific TfNSW comments as to which rates are inappropriate and why, TTPP considers that the rates utilised in the Response to Submissions are appropriate for use in considered the traffic implications of the proposed Hotel development. Notwithstanding the above, it is noted that periods of peak traffic generation of the proposed Hotel uses are likely to occur at different times to the peak periods of operation on the surrounding road network.
It is noted that the Transport, Parking and Accessibility Impact (TPAI) Statement states that "As described above, the proposed modification Hotel development will provide a single loading dock facility with the ability to accommodate a Medium Rigid Vehicle (MRV). The Leagues Club is serviced by a dock with the ability to accommodate a Heavy Rigid Vehicle (HRV). " The TPAI also states "It is expected that the Hotel loading dock would accommodate up to 6 service vehicle movements per day. The provision of a single loading dock would be able to accommodate this level demand." However, TfNSW Freight and Servicing team have completed their own analysis and have found the following: It is therefore noted that one loading dock space will likely not be sufficient.	Further commentary regarding the design vehicle type, frequency of service vehicles and management measures to address potential over flow demand of service vehicles is provided in Section 3.4.1, 3.4.3 and 3.6 of this Response to Submissions.

	Total	Delivery	Servicing
Weekday (average)	28	18	10
Weekend (average)	15	7	8

4 Conclusions and Recommendations

As set out above, it is concluded that the modified development proposal for the Parramatta Leagues Club Hotel has responded to submissions in a manner which provides an improved outcome for the site and the surrounds.

Specifically, the revised modifications to the vehicle access arrangements where all vehicles accessing the site will be off Eels Place addresses both non-event and event periods for the precinct. The modified development vehicle access arrangements are consistent with the preferred access arrangements as set out in the submissions by TFNSW (and then RMS) and Parramatta City Council.

However, careful management of vehicles and pedestrians generated by the Hotel site and the precinct generally will need to be implemented, maintained, reviewed and adjusted over time to ensure that implemented management measures continue to address the changing nature of the use of the precinct.

With regard to the proposed Hotel, this would include:

- Preparation of an Event Management Plan in consultation with Venues NSW.
- Preparation of and maintaining a detailed Loading Management Plan; and
- Preparation of and maintaining a Hotel Travel Plan (and Travel Access Guide).

Appendix A

Traffic Assessment Scenarios – Road Network Flows

Figure A.1: S4 AM Peak Hour Traffic Volumes

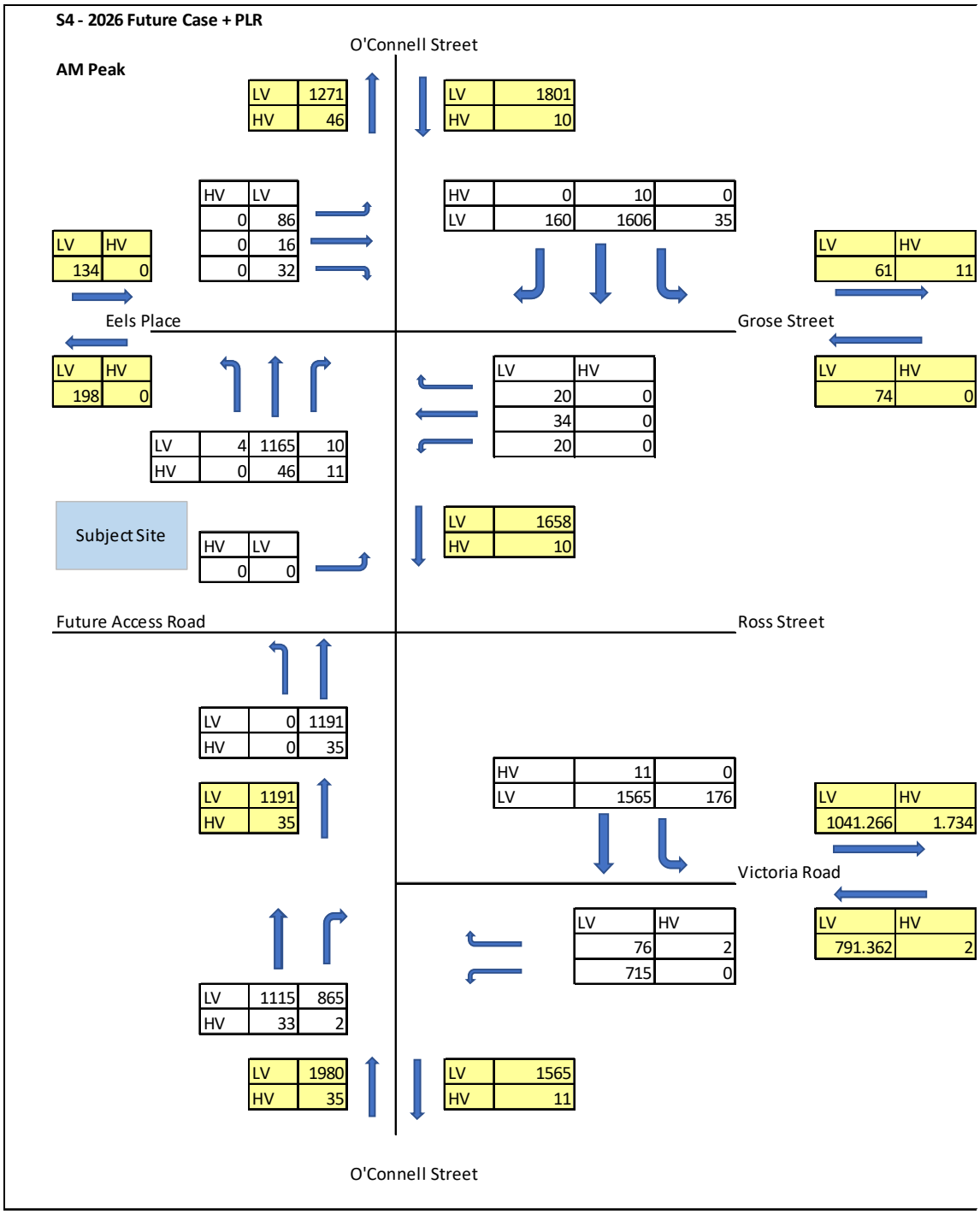


Figure A.2: S4 PM Peak Hour Traffic Volumes

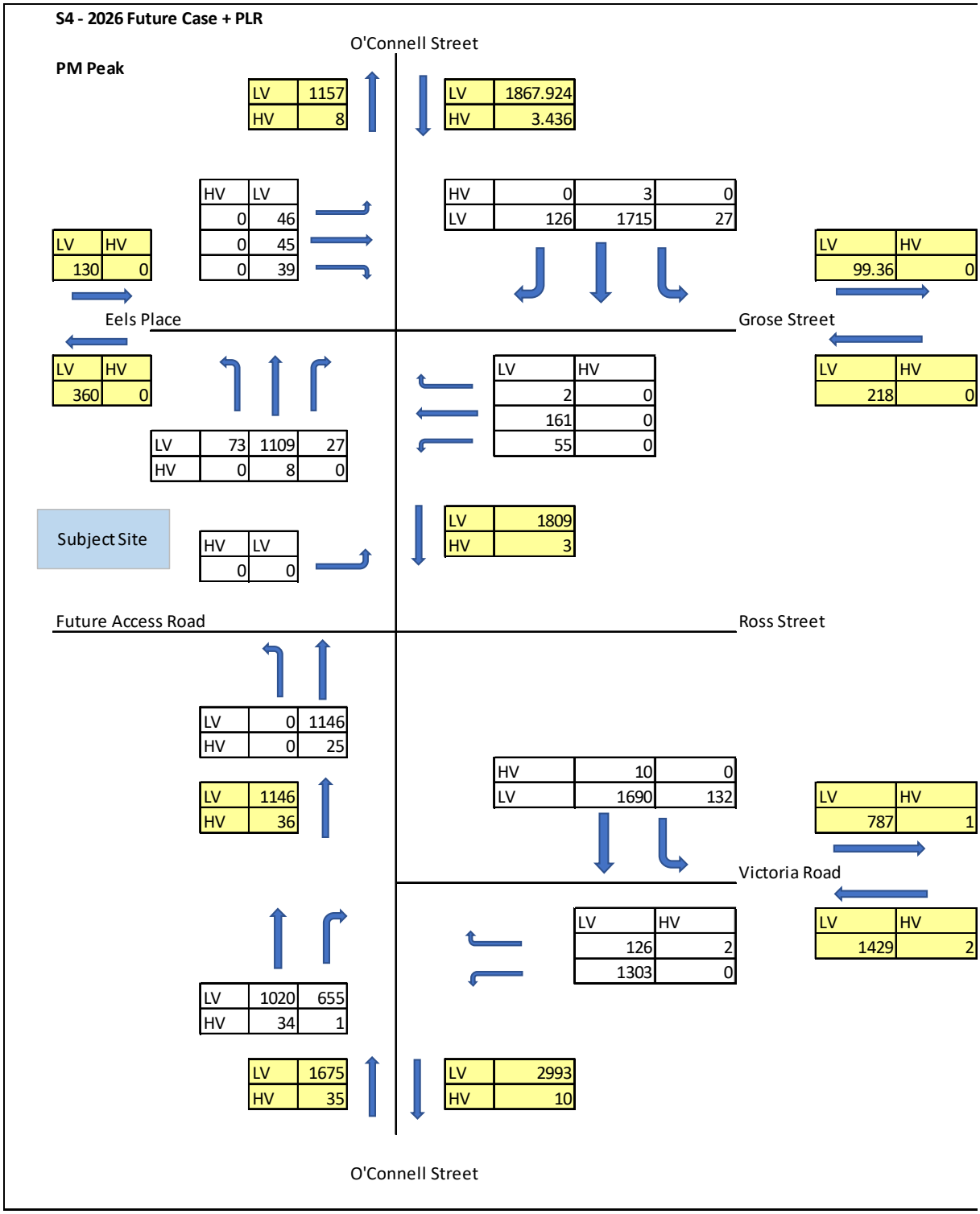


Figure A.3: S5 & S6 AM Peak Hour Traffic Volumes

S5 - 2026 Future Case + PLR + Hotel Development

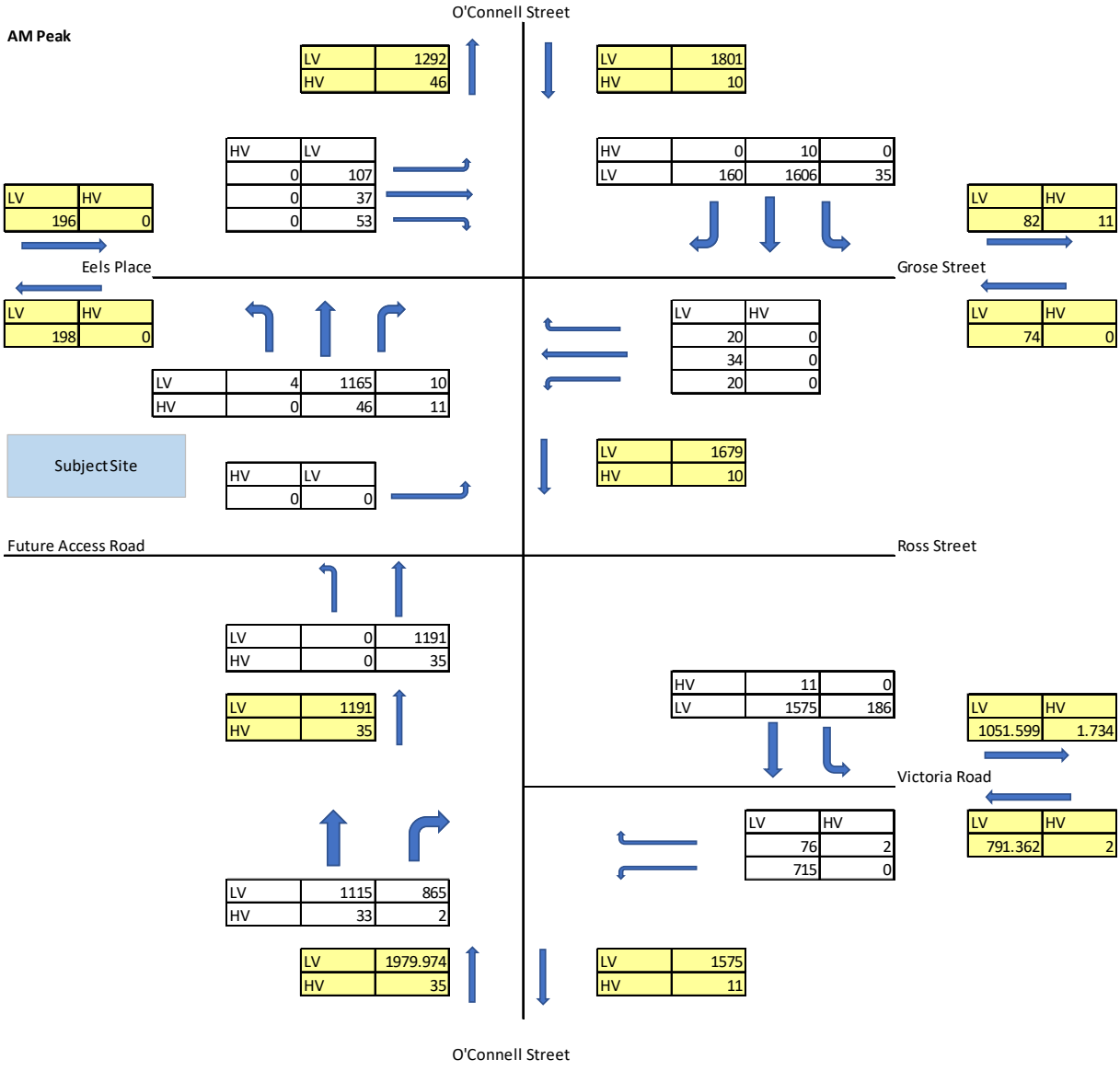
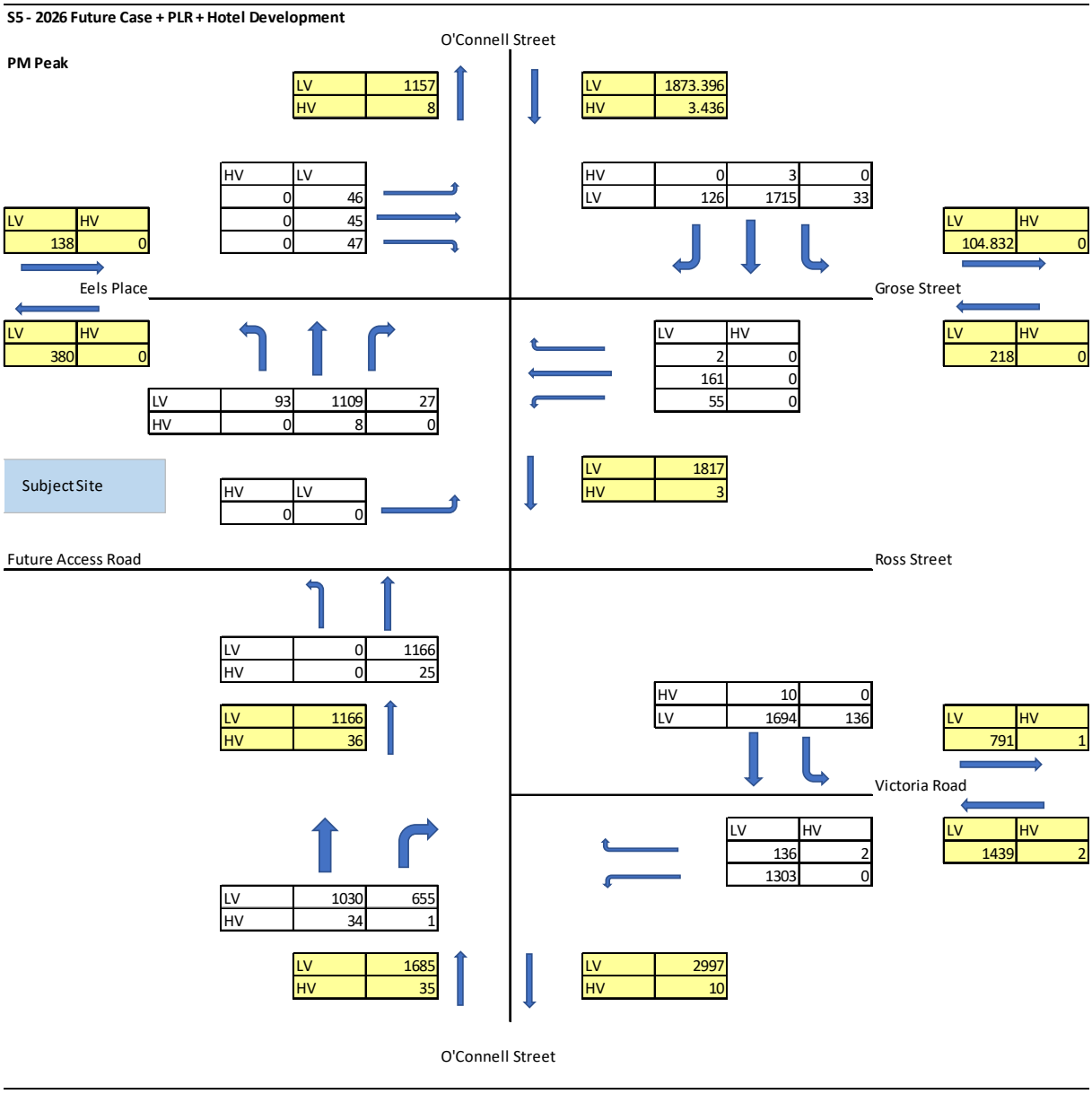


Figure A.4: S5 & S6 PM Peak Hour Traffic Volumes



Appendix B

Sidra Modelling Results

MOVEMENT SUMMARY

Site: 101 [S4 Eels Pl/O'Connell St/Grose St - AM Peak 2026 Future Case + PLR]

Network: N101 [S4 - AM Peak 2026 Future Case + PLR]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 117 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	4	0.0	4	0.0	0.498	18.5	LOS B	23.4	169.4	0.70	0.64	0.70	44.7
2	T1	1275	3.8	1275	3.8	0.498	12.2	LOS A	23.4	169.4	0.67	0.61	0.67	46.7
3	R2	21	52.6	21	52.6	0.166	45.1	LOS D	1.0	9.7	0.96	0.69	0.96	27.9
Approach		1300	4.6	1300	4.6	0.498	12.8	LOS A	23.4	169.4	0.68	0.61	0.68	46.2
East: Grose Street														
4	L2	21	0.0	21	0.0	0.481	67.4	LOS E	2.6	18.4	1.00	0.74	1.00	19.5
5	T1	36	0.0	36	0.0	0.481	62.9	LOS E	2.6	18.4	1.00	0.74	1.00	28.9
6	R2	21	0.0	21	0.0	0.481	70.1	LOS E	2.1	14.5	1.00	0.73	1.01	28.0
Approach		78	0.0	78	0.0	0.481	66.1	LOS E	2.6	18.4	1.00	0.74	1.00	26.6
North: O'Connell Street														
7	L2	37	0.0	37	0.0	0.999	72.7	LOS F	111.6	785.0	1.00	1.24	1.38	28.1
8	T1	1701	0.6	1701	0.6	0.999	73.4	LOS F	111.6	785.0	0.90	1.19	1.35	17.8
9	R2	168	0.0	168	0.0	0.613	17.6	LOS B	4.9	34.6	0.75	0.79	0.75	45.5
Approach		1906	0.5	1906	0.5	0.999	68.5	LOS E	111.6	785.0	0.89	1.15	1.30	19.9
West: Eels Place														
10	L2	91	0.0	91	0.0	0.485	61.1	LOS E	5.1	35.6	0.99	0.78	0.99	29.6
11	T1	17	0.0	17	0.0	0.548	60.3	LOS E	3.0	21.1	1.00	0.78	1.04	29.3
12	R2	34	0.0	34	0.0	0.548	65.9	LOS E	3.0	21.1	1.00	0.78	1.04	19.6
Approach		141	0.0	141	0.0	0.548	62.1	LOS E	5.1	35.6	0.99	0.78	1.01	27.6
All Vehicles		3425	2.0	3425	2.0	0.999	47.0	LOS D	111.6	785.0	0.82	0.92	1.05	27.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		211	52.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S4 Victoria Rd/O'Connell St - AM Peak 2026 Future Case + PLR]

Network: N101 [S4 - AM Peak 2026 Future Case + PLR]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 117 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1208	2.9	1208	2.9	0.434	6.3	LOS A	13.1	94.2	0.42	0.38	0.42	49.7
3	R2	913	0.2	913	0.2	1.519	505.8	LOS F	165.3	1158.9	1.00	1.91	3.78	6.1
Approach		2121	1.7	2121	1.7	1.519	221.3	LOS F	165.3	1158.9	0.67	1.04	1.87	9.4
East: Victoria Road														
4	L2	753	0.0	753	0.0	0.454	6.1	LOS A	3.9	27.0	0.19	0.63	0.19	53.0
6	R2	82	2.1	82	2.1	0.278	52.6	LOS D	4.2	29.8	0.92	0.77	0.92	22.2
Approach		835	0.2	835	0.2	0.454	10.7	LOS A	4.2	29.8	0.26	0.65	0.26	49.4
North: O'Connell Street														
7	L2	185	0.0	185	0.0	0.284	27.5	LOS B	6.2	43.8	0.57	0.70	0.57	36.0
8	T1	1659	0.7	1659	0.7	1.422	418.3	LOS F	46.3	326.4	0.97	2.76	3.35	5.5
Approach		1844	0.6	1844	0.6	1.422	379.0	LOS F	46.3	326.4	0.93	2.55	3.07	6.0
All Vehicles		4800	1.0	4800	1.0	1.519	245.3	LOS F	165.3	1158.9	0.70	1.55	2.05	9.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	52.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S4 Eels Pl/O'Connell St/Grose St - PM Peak 2026 Future Case + PLR]

Network: N101 [S4 - PM Peak 2026 Future Case + PLR]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 111 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	77	0.0	77	0.0	0.751	27.2	LOS B	17.1	120.1	0.96	0.90	1.05	38.4
2	T1	1176	0.7	1176	0.7	0.751	19.6	LOS B	17.8	125.2	0.95	0.88	1.02	41.0
3	R2	28	0.0	28	0.0	0.115	51.7	LOS D	1.5	10.2	0.97	0.73	0.97	26.7
Approach		1281	0.6	1281	0.6	0.751	20.7	LOS B	17.8	125.2	0.96	0.88	1.02	40.4
East: Grose Street														
4	L2	58	0.0	58	0.0	0.401	54.4	LOS D	4.6	32.2	0.96	0.77	0.96	22.3
5	T1	169	0.0	169	0.0	0.401	44.3	LOS D	6.8	47.3	0.93	0.75	0.93	34.6
6	R2	2	0.0	2	0.0	0.401	48.8	LOS D	6.8	47.3	0.92	0.75	0.92	34.6
Approach		229	0.0	229	0.0	0.401	46.9	LOS D	6.8	47.3	0.94	0.76	0.94	32.0
North: O'Connell Street														
7	L2	28	0.0	28	0.0	1.279	305.9	LOS F	197.0	1381.5	1.00	2.47	2.94	9.9
8	T1	1808	0.2	1808	0.2	1.279	304.2	LOS F	197.0	1381.5	1.00	2.43	2.98	5.4
9	R2	133	0.0	133	0.0	0.591	56.7	LOS E	7.0	49.3	0.99	0.80	0.99	30.6
Approach		1969	0.2	1969	0.2	1.279	287.6	LOS F	197.0	1381.5	1.00	2.32	2.84	6.1
West: Eels Place														
10	L2	48	0.0	48	0.0	0.235	30.4	LOS C	2.5	17.4	0.89	0.73	0.89	40.2
11	T1	47	0.0	47	0.0	0.997	57.4	LOS E	4.9	34.1	0.93	0.88	1.39	30.0
12	R2	41	0.0	41	0.0	0.997	107.3	LOS F	4.9	34.1	1.00	1.09	2.07	13.7
Approach		137	0.0	137	0.0	0.997	62.8	LOS E	4.9	34.1	0.94	0.89	1.42	27.0
All Vehicles		3617	0.3	3617	0.3	1.279	169.3	LOS F	197.0	1381.5	0.98	1.66	2.02	11.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	22.6	LOS C	0.1	0.1	0.89	0.89
All Pedestrians		211	43.0	LOS E			0.93	0.93

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S4 Victoria Rd/O'Connell St - PM Peak 2026 Future Case + PLR]

Network: N101 [S4 - PM Peak 2026 Future Case + PLR]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 111 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1109	3.2	1109	3.2	0.427	8.2	LOS A	13.2	94.7	0.48	0.43	0.48	47.3
3	R2	691	0.2	691	0.2	1.425	420.8	LOS F	110.6	775.3	1.00	1.83	3.61	7.1
Approach		1800	2.0	1800	2.0	1.425	166.5	LOS F	110.6	775.3	0.68	0.97	1.68	11.4
East: Victoria Road														
4	L2	1372	0.0	1372	0.0	0.832	6.9	LOS A	16.1	112.8	0.46	0.72	0.46	52.2
6	R2	135	1.6	135	1.6	0.356	46.6	LOS D	6.3	44.9	0.90	0.79	0.90	23.9
Approach		1506	0.1	1506	0.1	0.832	10.5	LOS A	16.1	112.8	0.50	0.72	0.50	49.4
North: O'Connell Street														
7	L2	139	0.0	115	0.0	0.236	20.2	LOS B	4.3	30.0	0.47	0.59	0.47	41.0
8	T1	1789	0.6	1479	0.7	1.182	191.3	LOS F	46.4	326.4	0.89	1.86	2.23	10.8
Approach		1928	0.6	1593 N1	0.6	1.182	179.0	LOS F	46.4	326.4	0.86	1.77	2.10	11.4
All Vehicles		5235	1.0	4900 N1	1.0	1.425	122.6	LOS F	110.6	775.3	0.68	1.15	1.45	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	49.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S5 Eels Pl/O'Connell St/Grose St - AM Peak 2026 Future Case + PLR + Development]

Network: N101 [S5 - AM Peak 2026 Future Case + PLR +Development]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 117 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	4	0.0	4	0.0	0.593	23.4	LOS B	25.3	183.2	0.76	0.69	0.76	41.2
2	T1	1275	3.8	1275	3.8	0.593	17.7	LOS B	25.3	183.2	0.75	0.68	0.75	42.5
3	R2	21	52.6	21	52.6	0.166	42.1	LOS C	0.9	9.1	0.90	0.68	0.90	28.9
Approach		1300	4.6	1300	4.6	0.593	18.1	LOS B	25.3	183.2	0.75	0.68	0.75	42.2
East: Grose Street														
4	L2	21	0.0	21	0.0	0.481	67.4	LOS E	2.6	18.4	1.00	0.74	1.00	19.5
5	T1	36	0.0	36	0.0	0.481	62.9	LOS E	2.6	18.4	1.00	0.74	1.00	28.9
6	R2	21	0.0	21	0.0	0.481	70.1	LOS E	2.1	14.5	1.00	0.73	1.01	28.0
Approach		78	0.0	78	0.0	0.481	66.1	LOS E	2.6	18.4	1.00	0.74	1.00	26.6
North: O'Connell Street														
7	L2	37	0.0	37	0.0	0.989	66.2	LOS E	105.2	740.3	1.00	1.21	1.33	29.6
8	T1	1701	0.6	1701	0.6	0.989	67.0	LOS E	105.2	740.3	0.90	1.16	1.31	18.9
9	R2	168	0.0	168	0.0	0.384	17.9	LOS B	4.9	34.4	0.74	0.79	0.74	45.3
Approach		1906	0.5	1906	0.5	0.989	62.6	LOS E	105.2	740.3	0.89	1.12	1.26	21.1
West: Eels Place														
10	L2	113	0.0	113	0.0	0.290	47.4	LOS D	5.4	38.0	0.88	0.77	0.88	33.2
11	T1	39	0.0	39	0.0	0.966	92.0	LOS F	7.4	51.7	1.00	1.10	1.82	23.4
12	R2	56	0.0	56	0.0	0.966	97.5	LOS F	7.4	51.7	1.00	1.10	1.82	14.8
Approach		207	0.0	207	0.0	0.966	69.2	LOS E	7.4	51.7	0.94	0.93	1.31	25.8
All Vehicles		3492	2.0	3492	2.0	0.989	46.5	LOS D	105.2	740.3	0.84	0.94	1.07	27.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		211	52.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S5 Victoria Rd/O'Connell St - AM Peak 2026 Future Case + PLR + Development]

Network: N101 [S5 - AM Peak 2026 Future Case + PLR +Development]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 117 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1208	2.9	1208	2.9	0.434	6.3	LOS A	13.1	94.2	0.42	0.38	0.42	49.7
3	R2	913	0.2	913	0.2	1.519	505.8	LOS F	165.3	1158.9	1.00	1.91	3.78	6.1
Approach		2121	1.7	2121	1.7	1.519	221.3	LOS F	165.3	1158.9	0.67	1.04	1.87	9.4
East: Victoria Road														
4	L2	753	0.0	753	0.0	0.454	6.1	LOS A	3.9	27.0	0.19	0.63	0.19	53.0
6	R2	82	2.1	82	2.1	0.278	52.6	LOS D	4.2	29.8	0.92	0.77	0.92	22.2
Approach		835	0.2	835	0.2	0.454	10.7	LOS A	4.2	29.8	0.26	0.65	0.26	49.4
North: O'Connell Street														
7	L2	196	0.0	196	0.0	0.288	27.6	LOS B	6.3	44.3	0.57	0.71	0.57	35.9
8	T1	1669	0.7	1669	0.7	1.439	435.2	LOS F	46.3	326.4	0.97	2.82	3.43	5.3
Approach		1865	0.6	1865	0.6	1.439	392.4	LOS F	46.3	326.4	0.93	2.60	3.13	5.8
All Vehicles		4821	1.0	4821	1.0	1.519	251.0	LOS F	165.3	1158.9	0.70	1.58	2.08	8.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	52.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	52.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S5 Eels Pl/O'Connell St/Grose St - PM Peak 2026 Future Case + PLR + Development]

Network: N101 [S5 - PM Peak 2026 Future Case + PLR +Development]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 111 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	98	0.0	98	0.0	0.745	25.9	LOS B	16.8	117.8	0.96	0.88	1.03	39.1
2	T1	1176	0.7	1176	0.7	0.745	17.2	LOS B	17.4	122.2	0.94	0.85	0.98	42.6
3	R2	28	0.0	28	0.0	0.108	50.6	LOS D	1.4	9.8	0.93	0.72	0.93	27.0
Approach		1302	0.6	1302	0.6	0.745	18.5	LOS B	17.4	122.2	0.94	0.85	0.98	41.8
East: Grose Street														
4	L2	58	0.0	58	0.0	0.475	58.0	LOS E	4.6	31.9	0.98	0.77	0.98	21.3
5	T1	169	0.0	169	0.0	0.475	47.4	LOS D	7.2	50.6	0.96	0.77	0.96	33.6
6	R2	2	0.0	2	0.0	0.475	52.0	LOS D	7.2	50.6	0.95	0.77	0.95	33.6
Approach		229	0.0	229	0.0	0.475	50.1	LOS D	7.2	50.6	0.97	0.77	0.97	31.0
North: O'Connell Street														
7	L2	28	0.0	28	0.0	1.236	268.2	LOS F	184.5	1293.7	1.00	2.30	2.73	11.1
8	T1	1808	0.2	1808	0.2	1.236	266.8	LOS F	184.5	1293.7	1.00	2.28	2.77	6.1
9	R2	133	0.0	133	0.0	0.551	55.5	LOS D	6.9	48.6	0.98	0.80	0.98	30.9
Approach		1969	0.2	1969	0.2	1.236	252.6	LOS F	184.5	1293.7	1.00	2.18	2.65	6.9
West: Eels Place														
10	L2	48	0.0	48	0.0	0.364	33.6	LOS C	3.4	23.5	0.94	0.75	0.94	39.1
11	T1	47	0.0	47	0.0	0.364	28.0	LOS B	3.4	23.5	0.94	0.75	0.94	39.9
12	R2	49	0.0	49	0.0	1.715	693.8	LOS F	11.7	81.6	1.00	1.52	4.69	2.5
Approach		145	0.0	145	0.0	1.715	256.6	LOS F	11.7	81.6	0.96	1.02	2.22	9.6
All Vehicles		3646	0.3	3646	0.3	1.715	156.4	LOS F	184.5	1293.7	0.97	1.57	1.93	11.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	22.9	LOS C	0.1	0.1	0.89	0.89
All Pedestrians		211	43.1	LOS E			0.93	0.93

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S5 Victoria Rd/O'Connell St - PM Peak 2026 Future Case + PLR + Development]

Network: N101 [S5 - PM Peak 2026 Future Case + PLR +Development]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 111 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1120	3.2	1120	3.2	0.432	8.3	LOS A	13.4	96.0	0.48	0.44	0.48	47.3
3	R2	691	0.2	691	0.2	1.425	420.8	LOS F	110.6	775.3	1.00	1.83	3.61	7.1
Approach		1811	2.1	1811	2.1	1.425	165.6	LOS F	110.6	775.3	0.68	0.97	1.67	11.5
East: Victoria Road														
4	L2	1372	0.0	1372	0.0	0.832	6.9	LOS A	16.1	112.8	0.46	0.72	0.46	52.2
6	R2	145	1.6	145	1.6	0.384	46.9	LOS D	6.9	48.7	0.91	0.79	0.91	23.9
Approach		1517	0.2	1517	0.2	0.832	10.7	LOS A	16.1	112.8	0.50	0.73	0.50	49.2
North: O'Connell Street														
7	L2	143	0.0	118	0.0	0.237	20.2	LOS B	4.3	30.1	0.47	0.60	0.47	40.9
8	T1	1794	0.6	1483	0.7	1.187	196.3	LOS F	46.4	326.4	0.89	1.88	2.27	10.6
Approach		1937	0.6	1601[N1]	0.6	1.187	183.3	LOS F	46.4	326.4	0.86	1.79	2.13	11.2
All Vehicles		5264	1.0	4928[N1]	1.0	1.425	123.7	LOS F	110.6	775.3	0.68	1.16	1.46	16.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	49.8	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	49.8	LOS E			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S6 Eels Pl/O'Connell St/Grose St - AM Peak 2026 Future Case + PLR + Development OCT]

Network: N101 [S6 - AM Peak 2026 Future Case +PLR + Development OCT]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	4	0.0	4	0.0	0.583	24.4	LOS B	28.8	208.4	0.66	0.60	0.66	40.5
2	T1	1275	3.8	1275	3.8	0.583	19.4	LOS B	28.8	208.4	0.68	0.62	0.68	41.3
3	R2	21	52.6	21	52.6	0.212	54.2	LOS D	1.2	12.5	0.94	0.73	0.94	25.4
Approach		1300	4.6	1300	4.6	0.583	20.0	LOS B	28.8	208.4	0.69	0.62	0.69	40.9
East: Grose Street														
4	L2	21	0.0	21	0.0	0.414	79.0	LOS F	4.1	28.8	0.99	0.76	0.99	17.5
5	T1	36	0.0	36	0.0	0.414	73.5	LOS F	4.1	28.8	0.99	0.76	0.99	26.8
6	R2	21	0.0	21	0.0	0.675	98.9	LOS F	1.8	12.6	1.00	0.75	1.23	22.7
Approach		78	0.0	78	0.0	0.675	81.8	LOS F	4.1	28.8	0.99	0.75	1.05	23.5
North: O'Connell Street														
7	L2	37	0.0	37	0.0	0.972	52.0	LOS D	113.4	797.9	1.00	1.08	1.15	33.5
8	T1	1701	0.6	1701	0.6	0.972	54.6	LOS D	113.4	797.9	0.88	1.02	1.11	21.7
9	R2	168	0.0	168	0.0	0.388	18.9	LOS B	6.0	42.0	0.71	0.79	0.71	44.8
Approach		1906	0.5	1906	0.5	0.972	51.4	LOS D	113.4	797.9	0.87	1.00	1.08	23.9
West: Eels Place														
10	L2	113	0.0	113	0.0	0.265	55.9	LOS D	6.7	47.0	0.86	0.77	0.86	30.8
11	T1	39	0.0	39	0.0	0.960	108.8	LOS F	9.0	63.0	1.00	1.08	1.66	21.2
12	R2	56	0.0	56	0.0	0.960	114.4	LOS F	9.0	63.0	1.00	1.08	1.66	13.0
Approach		207	0.0	207	0.0	0.960	81.6	LOS F	9.0	63.0	0.92	0.91	1.22	23.4
All Vehicles		3492	2.0	3492	2.0	0.972	42.2	LOS C	113.4	797.9	0.81	0.85	0.94	28.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		211	69.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S6 Victoria Rd/O'Connell St - AM Peak 2026 Future Case + PLR + Development OCT]

Network: N101 [S6 - AM Peak 2026 Future Case +PLR + Development OCT]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1208	2.9	1208	2.9	0.393	1.9	LOS A	8.5	61.2	0.21	0.19	0.21	56.5
3	R2	913	0.2	913	0.2	1.483	473.9	LOS F	173.8	1218.5	1.00	1.63	3.09	6.2
Approach		2121	1.7	2121	1.7	1.483	205.0	LOS F	173.8	1218.5	0.55	0.81	1.45	9.7
East: Victoria Road														
4	L2	753	0.0	753	0.0	0.443	6.0	LOS A	4.1	28.8	0.15	0.62	0.15	53.2
6	R2	82	2.1	82	2.1	1.010	128.3	LOS F	8.1	57.7	1.00	1.08	1.80	11.6
Approach		835	0.2	835	0.2	1.010	18.0	LOS B	8.1	57.7	0.23	0.66	0.31	44.7
North: O'Connell Street														
7	L2	196	0.0	196	0.0	0.246	20.6	LOS B	6.4	44.5	0.39	0.62	0.39	40.1
8	T1	1669	0.7	1669	0.7	1.231	255.5	LOS F	46.3	326.4	0.87	1.79	2.11	8.4
Approach		1865	0.6	1865	0.6	1.231	230.8	LOS F	46.3	326.4	0.82	1.66	1.93	9.2
All Vehicles		4821	1.0	4821	1.0	1.483	182.6	LOS F	173.8	1218.5	0.60	1.12	1.44	11.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	69.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [S6 Eels Pl/O'Connell St/Grose St - PM Peak 2026 Future Case + PLR + Development OCT]

Network: N101 [S6 - PM Peak 2026 Future Case +PLR + Development OCT]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
1	L2	98	0.0	97	0.0	0.682	23.3	LOS B	18.7	131.2	0.88	0.79	0.88	40.7
2	T1	1176	0.7	1166	0.7	0.682	15.7	LOS B	18.7	131.2	0.83	0.74	0.83	43.7
3	R2	28	0.0	28	0.0	0.096	57.1	LOS E	1.6	11.1	0.80	0.71	0.80	25.3
Approach		1302	0.6	1291 N1	0.6	0.682	17.1	LOS B	18.7	131.2	0.83	0.75	0.83	42.8
East: Grose Street														
4	L2	58	0.0	58	0.0	0.443	72.3	LOS F	6.5	45.5	0.97	0.78	0.97	18.4
5	T1	169	0.0	169	0.0	0.443	62.3	LOS E	9.0	63.1	0.95	0.77	0.95	29.5
6	R2	2	0.0	2	0.0	0.443	66.7	LOS E	9.0	63.1	0.95	0.77	0.95	29.6
Approach		229	0.0	229	0.0	0.443	64.8	LOS E	9.0	63.1	0.96	0.77	0.96	27.1
North: O'Connell Street														
7	L2	28	0.0	28	0.0	1.192	239.6	LOS F	197.0	1381.1	1.00	1.83	2.12	12.1
8	T1	1808	0.2	1808	0.2	1.192	239.6	LOS F	197.0	1381.1	1.00	1.85	2.16	6.7
9	R2	133	0.0	133	0.0	0.466	67.8	LOS E	8.9	62.4	0.96	0.80	0.96	28.0
Approach		1969	0.2	1969	0.2	1.192	228.0	LOS F	197.0	1381.1	1.00	1.78	2.07	7.5
West: Eels Place														
10	L2	48	0.0	48	0.0	0.296	42.2	LOS C	4.0	27.7	0.92	0.74	0.92	35.7
11	T1	47	0.0	47	0.0	1.254	101.2	LOS F	10.4	72.6	0.94	0.88	1.34	21.6
12	R2	49	0.0	49	0.0	1.254	317.2	LOS F	10.4	72.6	1.00	1.30	2.70	5.1
Approach		145	0.0	145	0.0	1.254	155.1	LOS F	10.4	72.6	0.96	0.98	1.66	14.3
All Vehicles		3646	0.3	3635 N1	0.3	1.254	139.9	LOS F	197.0	1381.1	0.93	1.32	1.55	12.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P4	West Full Crossing	53	33.1	LOS D	0.1	0.1	0.92	0.92
All Pedestrians		211	60.2	LOS F			0.95	0.95

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.

MOVEMENT SUMMARY

Site: 101 [S6 Victoria Rd/O'Connell St - PM Peak 2026 Future Case + PLR + Development OCT]

Network: N101 [S6 - PM Peak 2026 Future Case +PLR + Development OCT]

New Site
Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 150 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: O'Connell Street														
2	T1	1120	3.2	1120	3.2	0.349	2.6	LOS A	8.7	62.3	0.24	0.21	0.24	55.3
3	R2	691	0.2	691	0.2	1.122	159.4	LOS F	73.2	513.3	1.00	1.20	1.90	13.7
Approach		1811	2.1	1811	2.1	1.122	62.4	LOS E	73.2	513.3	0.53	0.59	0.87	20.7
East: Victoria Road														
4	L2	1372	0.0	1372	0.0	0.807	6.9	LOS A	20.7	144.9	0.34	0.71	0.35	52.5
6	R2	145	1.6	145	1.6	1.084	174.7	LOS F	17.3	123.0	1.00	1.19	1.97	8.8
Approach		1517	0.2	1517	0.2	1.084	23.0	LOS B	20.7	144.9	0.40	0.75	0.51	41.9
North: O'Connell Street														
7	L2	143	0.0	125	0.0	0.232	19.4	LOS B	5.1	35.6	0.35	0.52	0.35	41.7
8	T1	1794	0.6	1563	0.7	1.158	185.2	LOS F	46.4	326.4	0.75	1.44	1.69	11.1
Approach		1937	0.6	1687[N1]	0.6	1.158	173.0	LOS F	46.4	326.4	0.72	1.37	1.59	11.7
All Vehicles		5264	1.0	5015[N1]	1.0	1.158	87.7	LOS F	73.2	513.3	0.55	0.90	1.01	19.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P2	East Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
P3	North Full Crossing	53	69.3	LOS F	0.2	0.2	0.96	0.96
All Pedestrians		158	69.3	LOS F			0.96	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Appendix C

Signage and Line Marking of Eels Walk

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	07/12/21

ttpp transport planning

PROJECT: PARRAMATTA LEAGUES CLUB HOTEL

TITLE: SIGNAGE PLAN

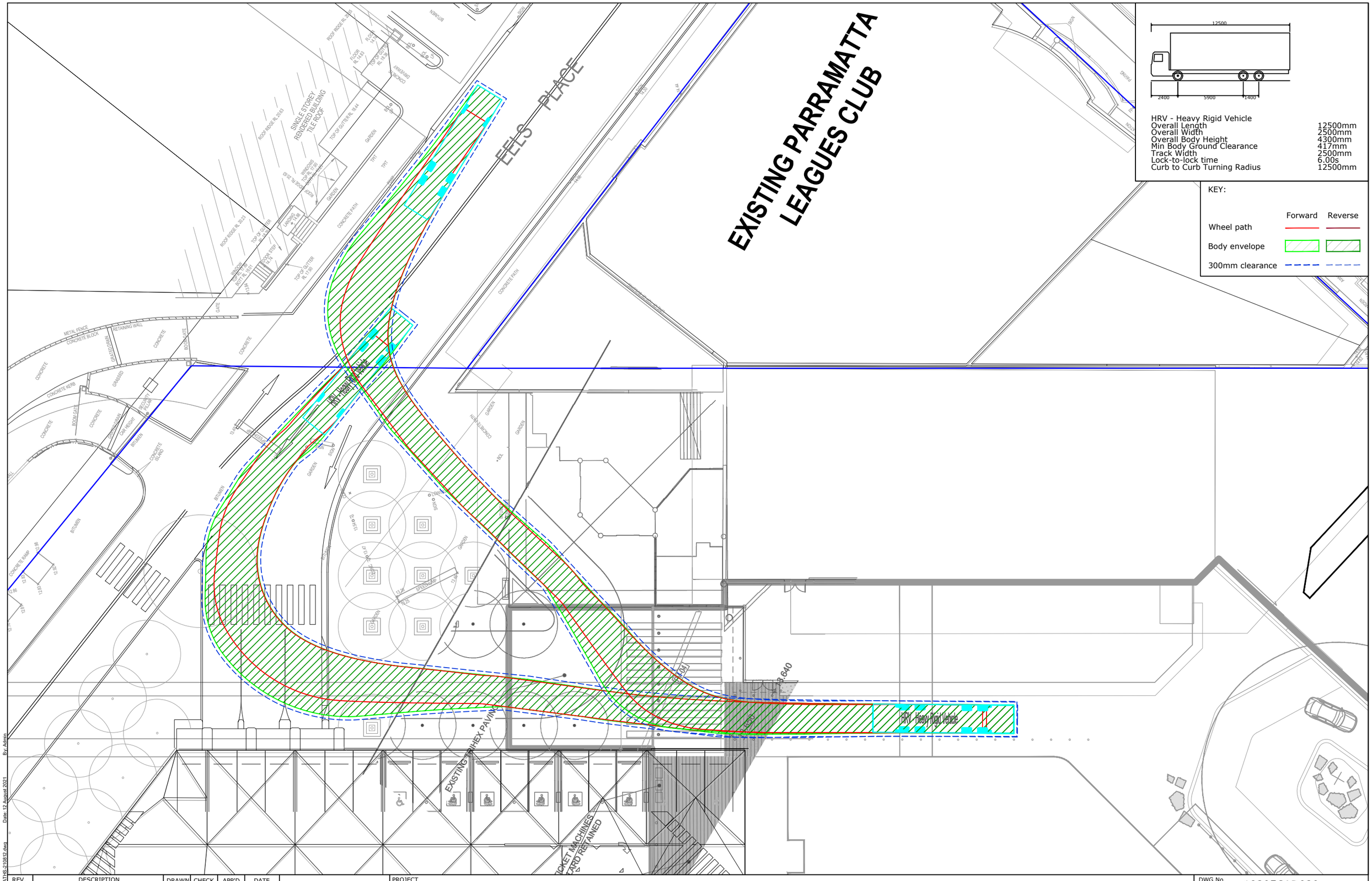
DWG No. 18305CAD022 FIGURE 1

DATE STAMP 07 DECEMBER 2021

PROJECT No. 18305 | SCALE 1:600 @ A3 | REV. A

Appendix D

Swept Path Analysis



HRV - Heavy Rigid Vehicle

Overall Length	12500mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT: PARRAMATTA LEAGUES CLUB HOTEL

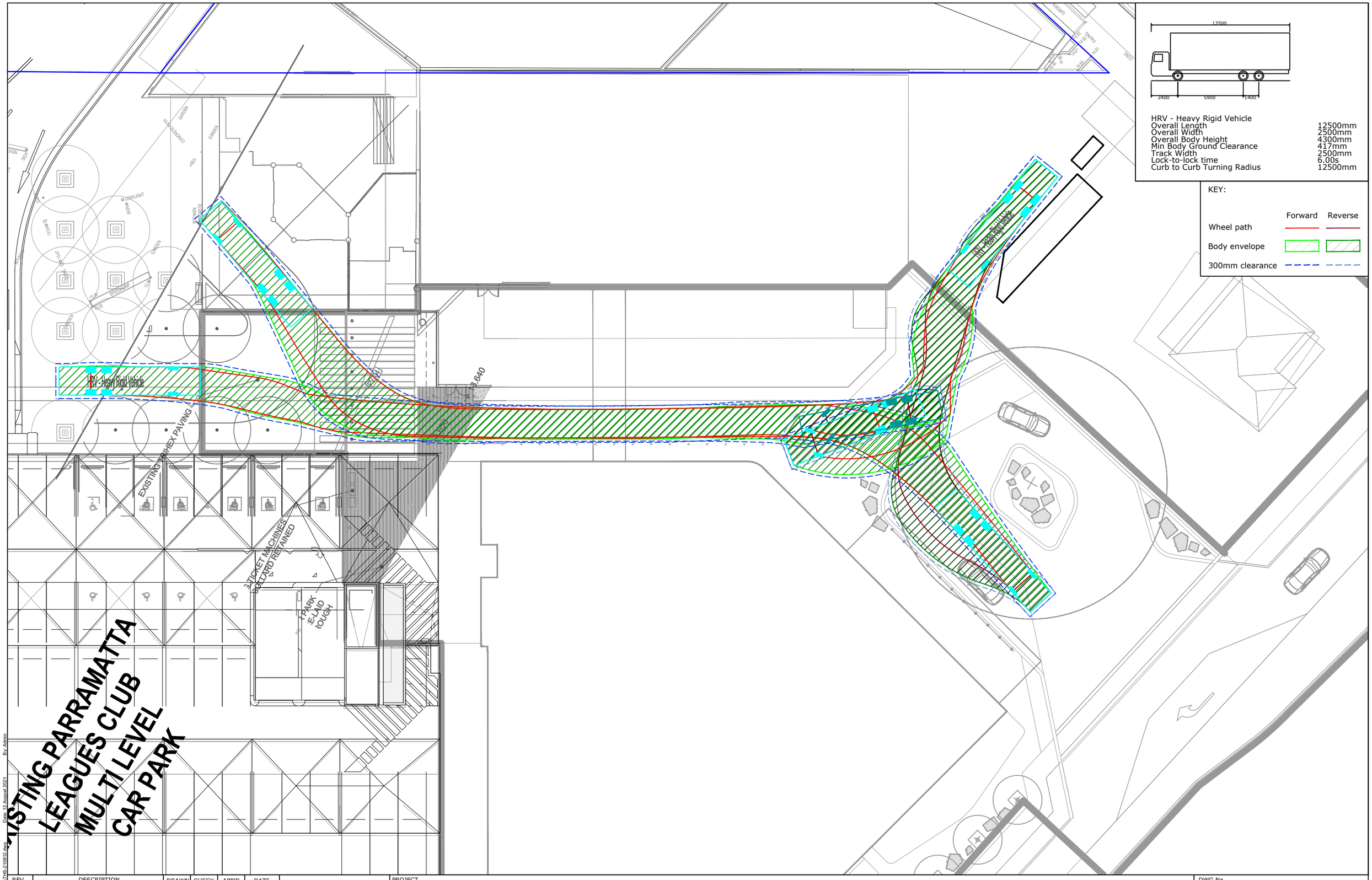
TITLE: SWEPT PATH ANALYSIS - VEHICLE COMING TO/FROM EELS PLACE
AS2890.2 12.5m HEAVY RIGID VEHICLE

DWG No. 18305CAD020
FIGURE 1

DATE STAMP: 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

By: Admin
Date: 12 August 2021
Filename: 18305CAD020-SWEPT PATHS-210812.dwg



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT: PARRAMATTA LEAGUES CLUB HOTEL

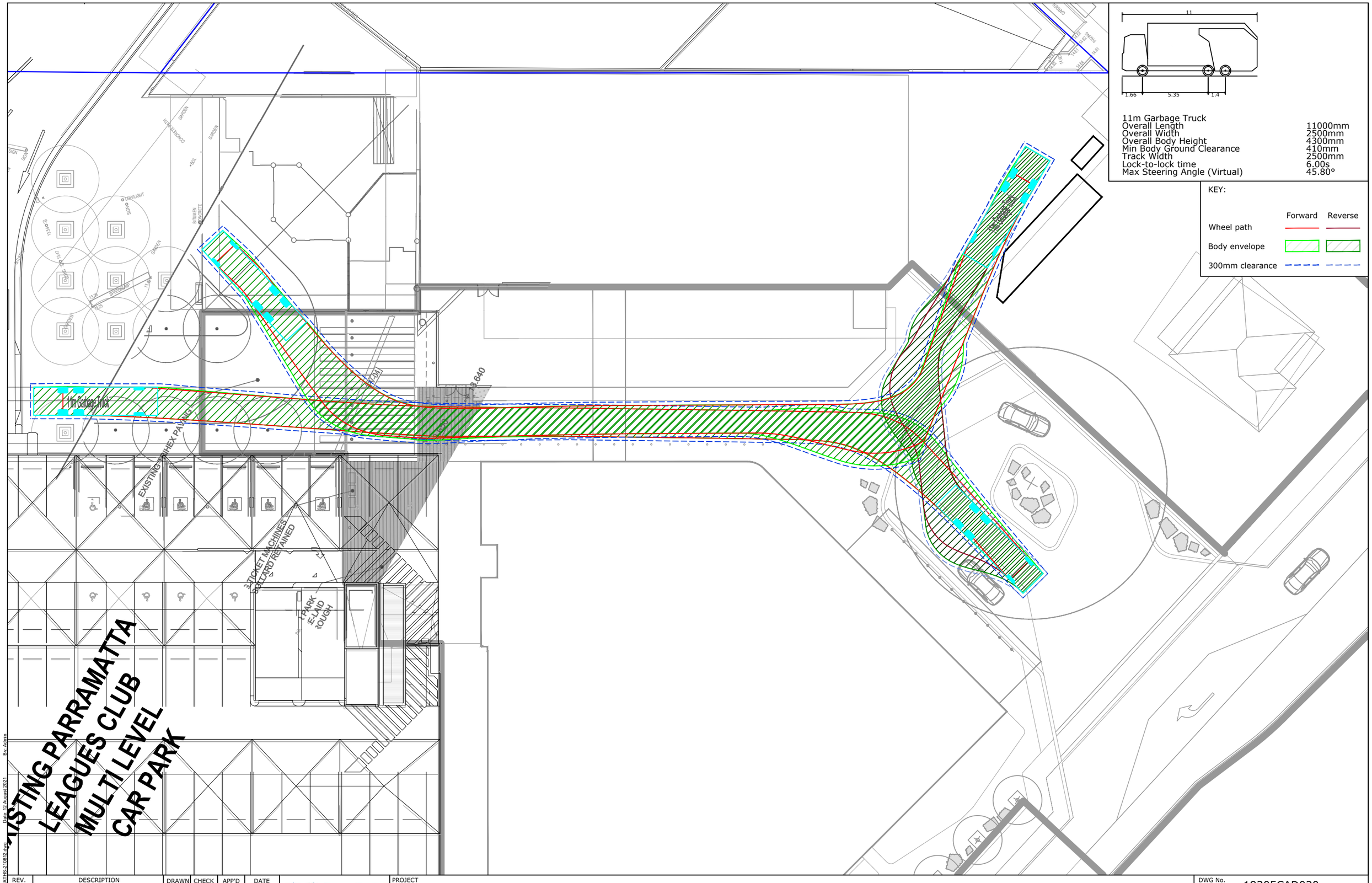
TITLE: SWEPT PATH ANALYSIS - VEHICLE REVERSING INTO CLUB DOCK
AS2890.2 12.5m HEAVY RIGID VEHICLE

DWG No. 18305CAD020
FIGURE 2

DATE STAMP 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

Filename: 18305CAD020-SWEPT PATHS-210812.dwg
Date: 12 August 2021
By: Admin



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT: PARRAMATTA LEAGUES CLUB HOTEL

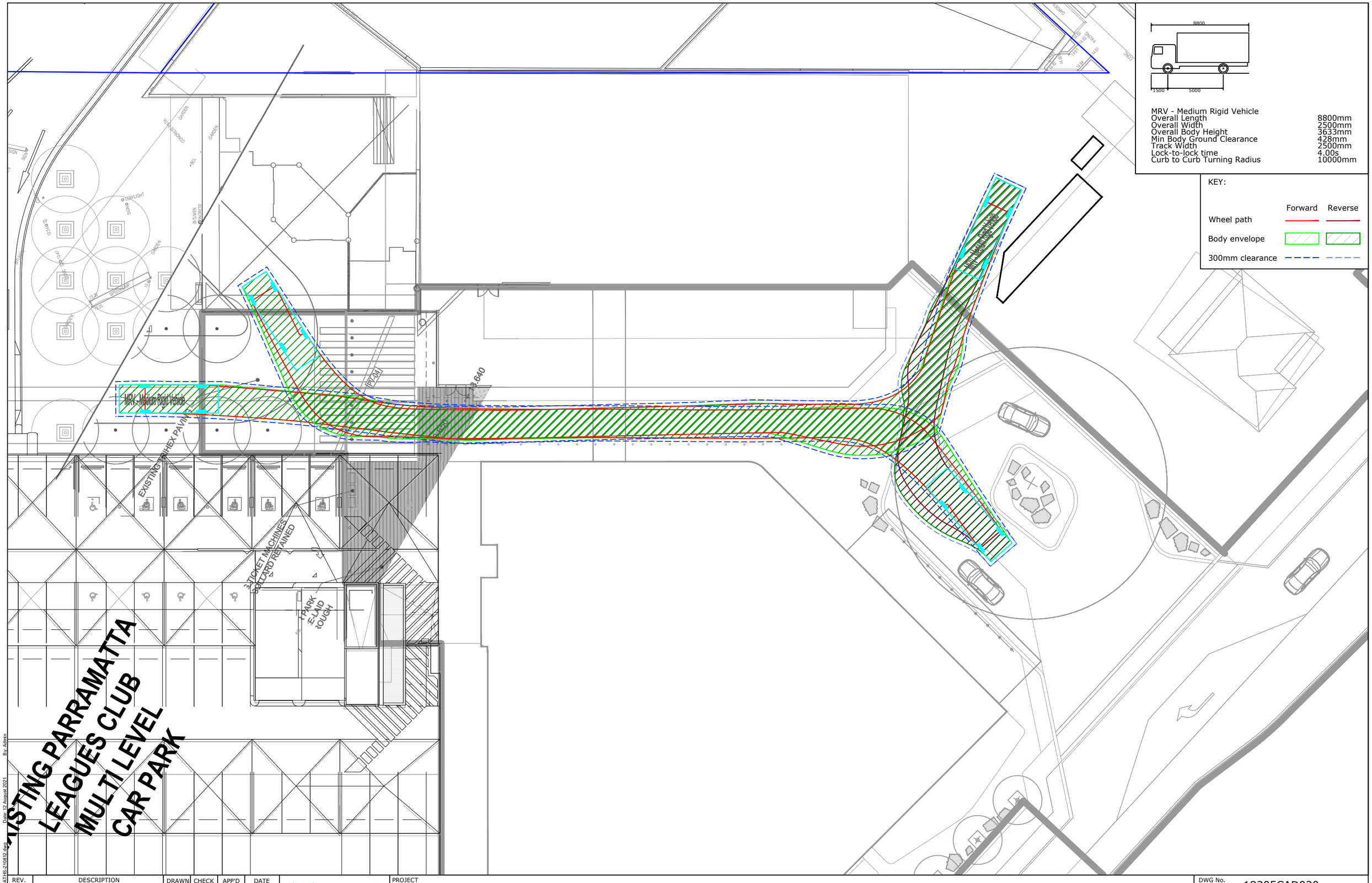
TITLE: SWEPT PATH ANALYSIS - VEHICLE REVERSING INTO CLUB DOCK
11m WASTE TRUCK

DWG No. 18305CAD020
FIGURE 4

DATE STAMP 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

Filename: 18305CAD020-SWEPT PATHS-210812.dwg Date: 12 August 2021 By: Admin



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT: PARRAMATTA LEAGUES CLUB HOTEL

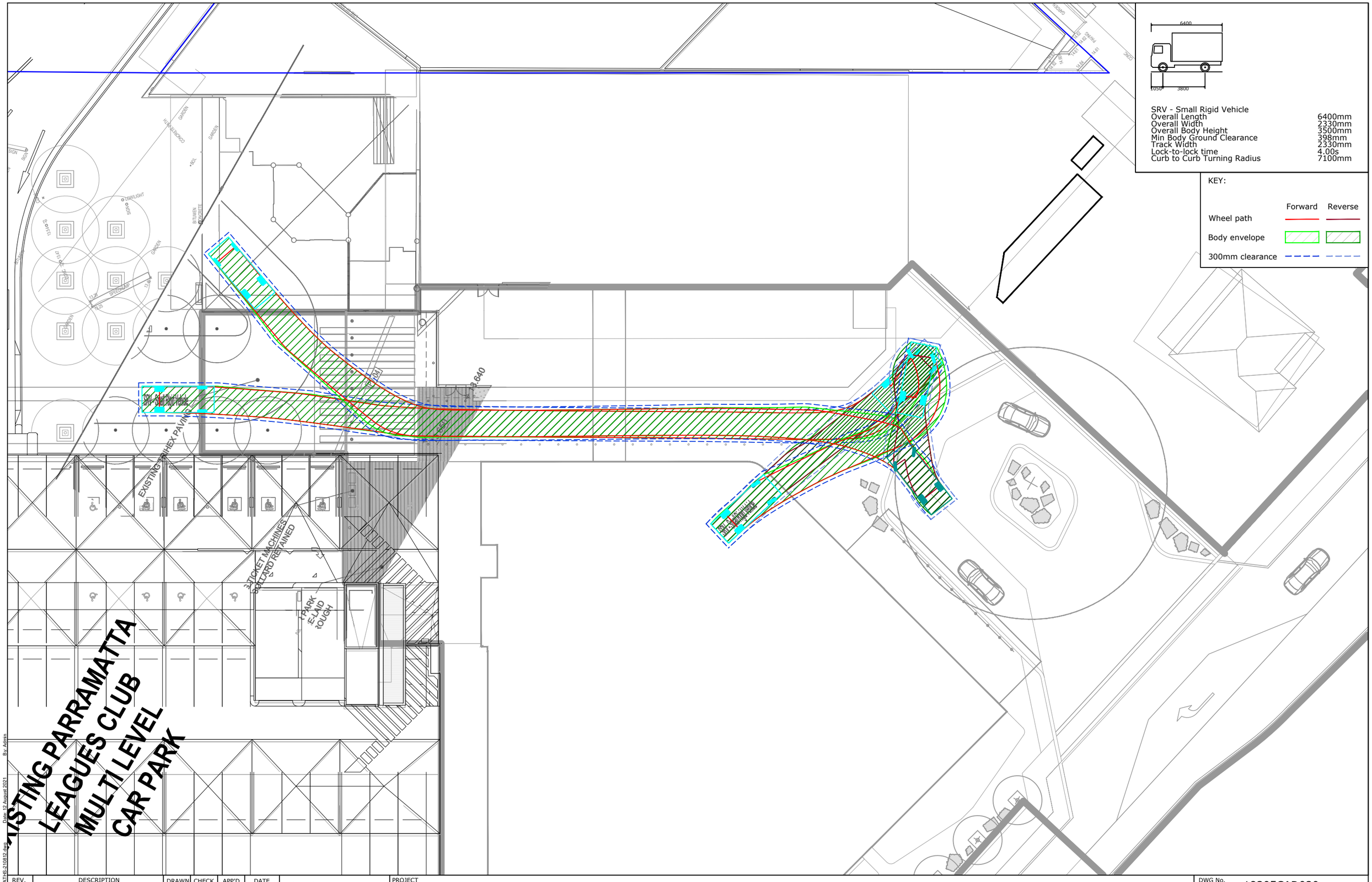
TITLE: SWEPT PATH ANALYSIS - VEHICLE REVERSING INTO CLUB DOCK
AS2890.2 8.8m MEDIUM RIGID VEHICLE

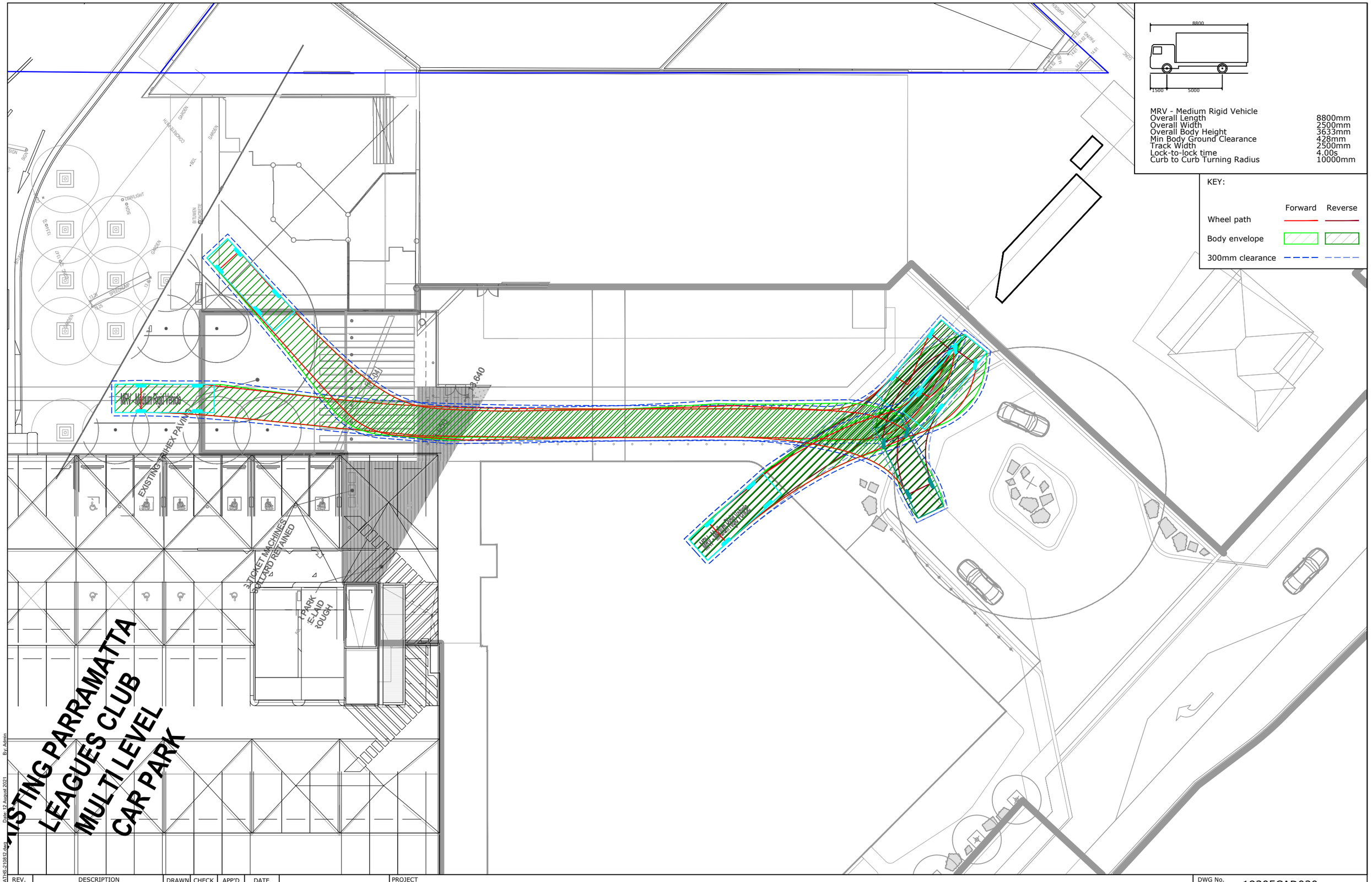
DWG No. 18305CAD020
FIGURE 5

DATE STAMP 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

Filename: 18305CAD020-SWEPT PATHS-210812.dwg
Date: 12 August 2021
By: Admin


6400
2330
1050
3800
SRV - Small Rigid Vehicle
Overall Length 6400mm
Overall Width 2330mm
Overall Body Height 3500mm
Min Body Ground Clearance 398mm
Track Width 2330mm
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7100mm
KEY:
Forward
Reverse
Wheel path
Body envelope
300mm clearance
EXISTING PARRAMATTA LEAGUES CLUB MULTI LEVEL CAR PARK
EXISTING HEX PAVING
3 TICKET MACHINES BOLLARD RETAINED
PARK ELAND ROUGH
RAMP
GARDEN
GRASS
BITUMEN CONCRETE
CONCRETE PATH
SIGN
HIGHLIGHT
TREE
LIGHT POLE
GRATED DRAIN
KERB
RL 6.640
RL 6.640
RL 6.640



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT

PARRAMATTA LEAGUES CLUB HOTEL

TITLE

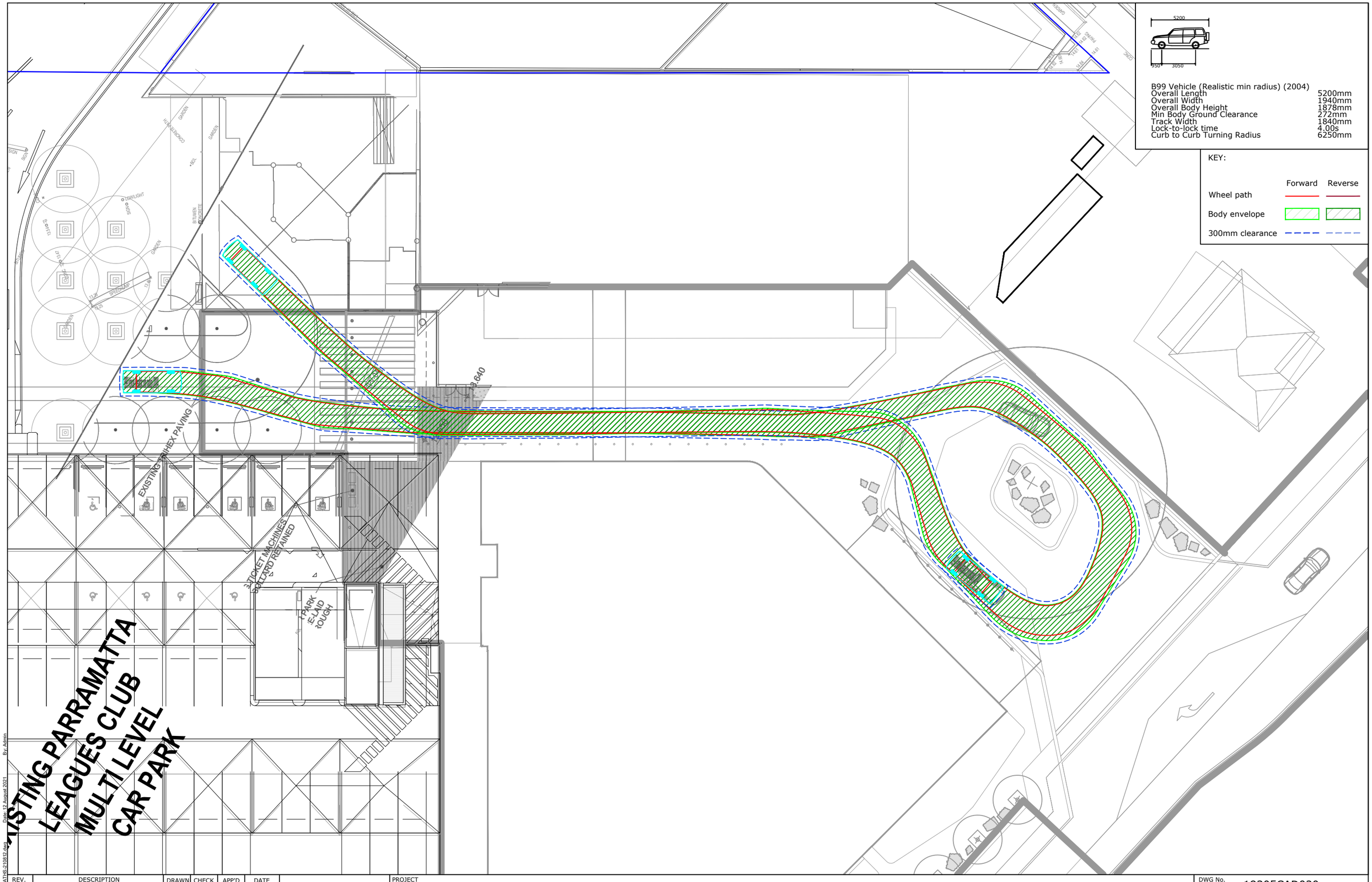
SWEPT PATH ANALYSIS - VEHICLE REVERSING INTO HOTEL DOCK
AS2890.2 8.8m MEDIUM RIGID VEHICLE

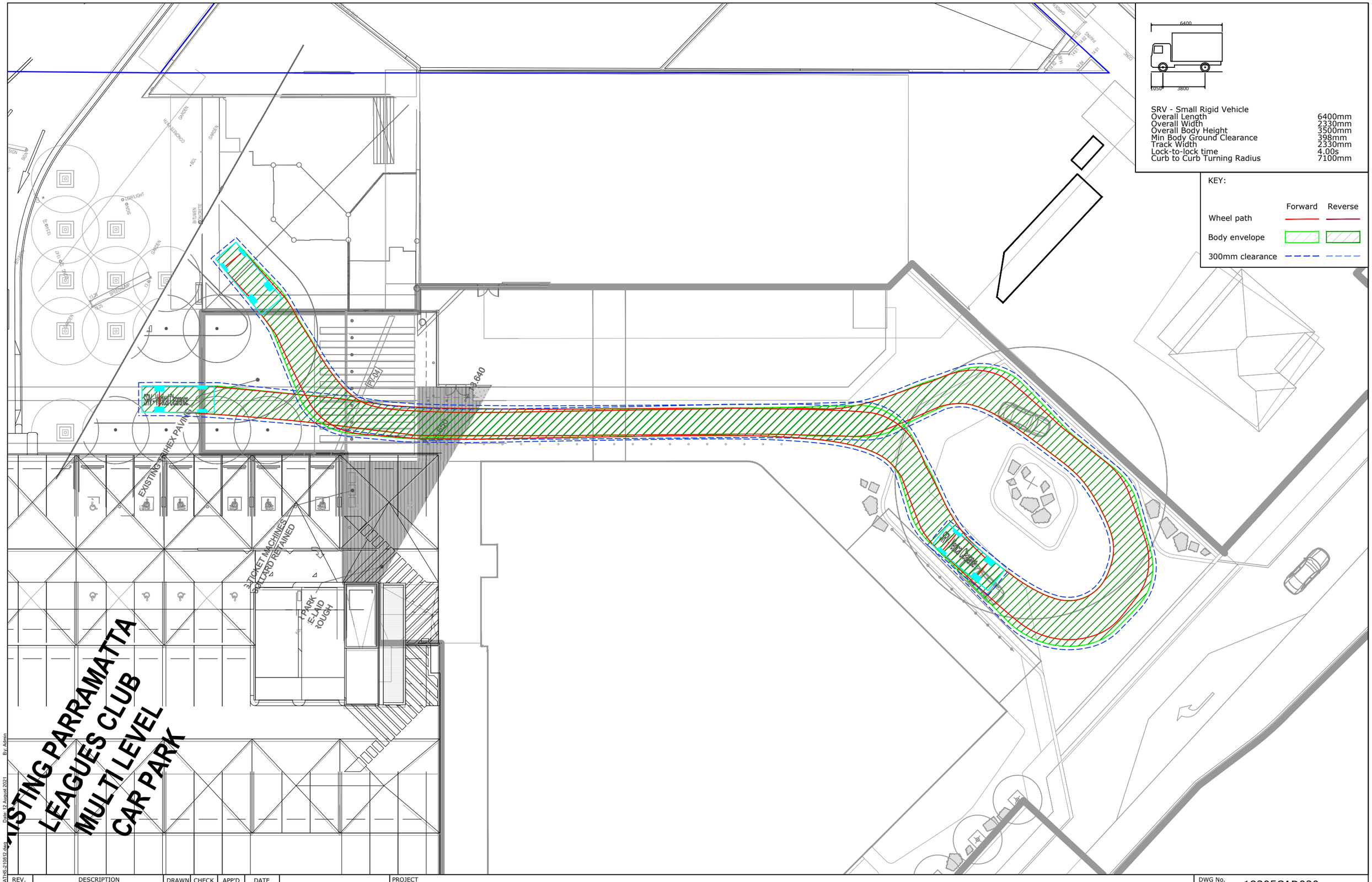
DWG No. 18305CAD020 FIGURE 7

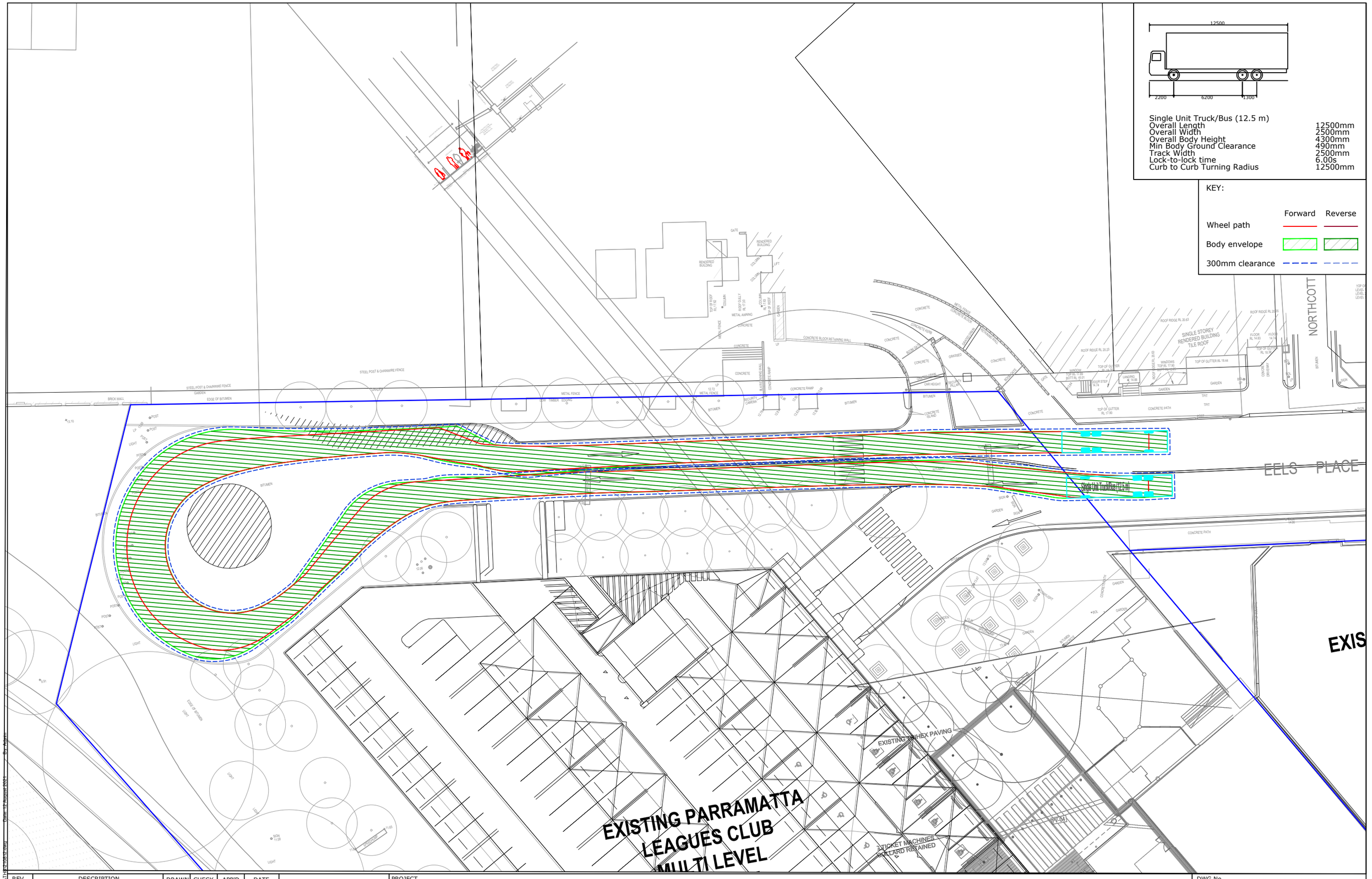
DATE STAMP 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

Filename: 18305CAD020-SWEPT PATHS-210812.dwg Date: 12 August 2021 By: Admin


5200
950
3050
B99 Vehicle (Realistic min radius) (2004)
Overall Length 5200mm
Overall Width 1940mm
Overall Body Height 1878mm
Min Body Ground Clearance 272mm
Track Width 1840mm
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 6250mm
KEY:
Forward
Reverse
Wheel path
Body envelope
300mm clearance
EXISTING PARRAMATTA LEAGUES CLUB MULTI LEVEL CAR PARK
EXISTING HEX PAVING
3 TICKET MACHINES BOLLARD RETAINED
1 PARK RELAID ROUGH
R3.640
R3.640
R3.640


6400
1050
3800
SRV - Small Rigid Vehicle
Overall Length 6400mm
Overall Width 2330mm
Overall Body Height 3500mm
Min Body Ground Clearance 398mm
Track Width 2330mm
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7100mm
KEY:
Forward
Reverse
Wheel path
Body envelope
300mm clearance
EXISTING PARRAMATTA LEAGUES CLUB MULTI LEVEL CAR PARK
EXISTING THEX PAVING
3 TICKET MACHINES BOLLARD RETAINED
1 PARK RELAID ROUGH
GRASS
GARDEN
CONCRETE PATH
BITUMEN CONCRETE
SIGN
LIGHT POLE
TREE
GRATED DRAIN
RAMP
STEPS
LIFT
LIFT OVERRUN
SKYLIGHT
SRV - Heavy Rigid Vehicle
SRV - Medium Rigid Vehicle
RL 13.640
RL 13.640
RL 13.640



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	JR	JR	12/08/21

ttpp transport planning

PROJECT

PARRAMATTA LEAGUES CLUB HOTEL

TITLE

SWEPT PATH ANALYSIS - VEHICLE ACCESSING BUS STOP
12.5 SINGLE UNIT TRUCK/BUS

DWG No. 18305CAD020
FIGURE 12

DATE STAMP 12 AUGUST 2021

PROJECT No.	SCALE	REV.
18305	1:250 @ A3	A

Filename: 18305CAD020-SWEPT PATH-210812.dwg Date: 12 August 2021 By: Admin

Appendix E

Loading Management Plan

Preamble

This Loading Management Plan (Plan) has been prepared to document how the loading arrangements are to be managed for the Parramatta Leagues Club Hotel.

The Parramatta Leagues Club Hotel site is located at 1 Eels Place, Parramatta.

Vehicle access to the Loading Dock will be via the O'Connell Street / eels Place and Eels Walk.

The Hotel Loading Dock will provide an enclosed loading bay with the dimensions able to accommodate vehicle sizes up a Medium Rigid Vehicle (MRV 8.8m long) as defined by AS2890.2.

Scope and Application of the Loading Management Plan

This Plan is (will be) subject to relevant conditions of the development consent that apply to the Parramatta Leagues Club Hotel at 1 Eels Place Paramatta.

It is the intent of this Plan to outline the ongoing operation and management of the Parramatta Leagues Club Hotel Loading Dock and associated service vehicle facilities.

The Plan provides details of the operation of the loading dock and its interaction with other users of the site and of proposed management procedures.

The Plan recognises that these procedures may need to adapt to changing circumstances on the site or its surrounds.

Therefore, the Plan may be varied from time to time in order to account for changes to the Hotel development, altered traffic conditions and/or on or off site operational imperatives.

Responsibility for Plan Implementation

The Hotel's service vehicle area will be under control of a designated Loading Dock Manager. This position will be responsible for maintenance of the loading dock to a standard suitable for use, rectification of any safety issues, avoidance of adverse impacts on external roads due to traffic entering or leaving the site and general management of the loading dock.

The Loading Dock Manager contact details will be displayed at the entrance to the loading dock.

Operational Management

The onsite management of the loading dock will consist of a combination of a manned dock management office and a dock management system (DMS). The DMS will enable the onsite management team to scheduled truck delivery times and monitor arrival / departures of service vehicles.

Service vehicles intending to use the dock will not be permitted to access the dock without making a booking.

The major benefit of the implementation of such a system is the ability to moderate demand throughout the day. The allocation of deliveries to timeslots (with strict length of stay limits) reduces the risk of multiple vehicles seeking to access the loading dock at the same time.

Additionally, the booking system will allow the Hotel Dock manager to ensure that deliveries are not attempted to be undertaken during the Bankwest Stadium's event mode road closures. During event mode road closures, service vehicles will not be able to access the Gate 2 access road and thus not able to access the loading dock.

Waste collection will also be managed through the dock management system to avoid conflict and congestion with peak operational times.

With regard to waste collection, it is anticipated that a combined collection with the Leagues Club from the Leagues Club dock could be arranged subject to contract arrangements with the waste collector. A combined collection would reduce the number of service vehicles accessing the site.

Notwithstanding the above, the Hotel can be serviced independently from the Leagues Club by a private waste collector with an MRV.

Pedestrian Safety Management

Access for the MRV to the on-site loading dock will require a reverse manoeuvre from the internal circulation road into the dock.

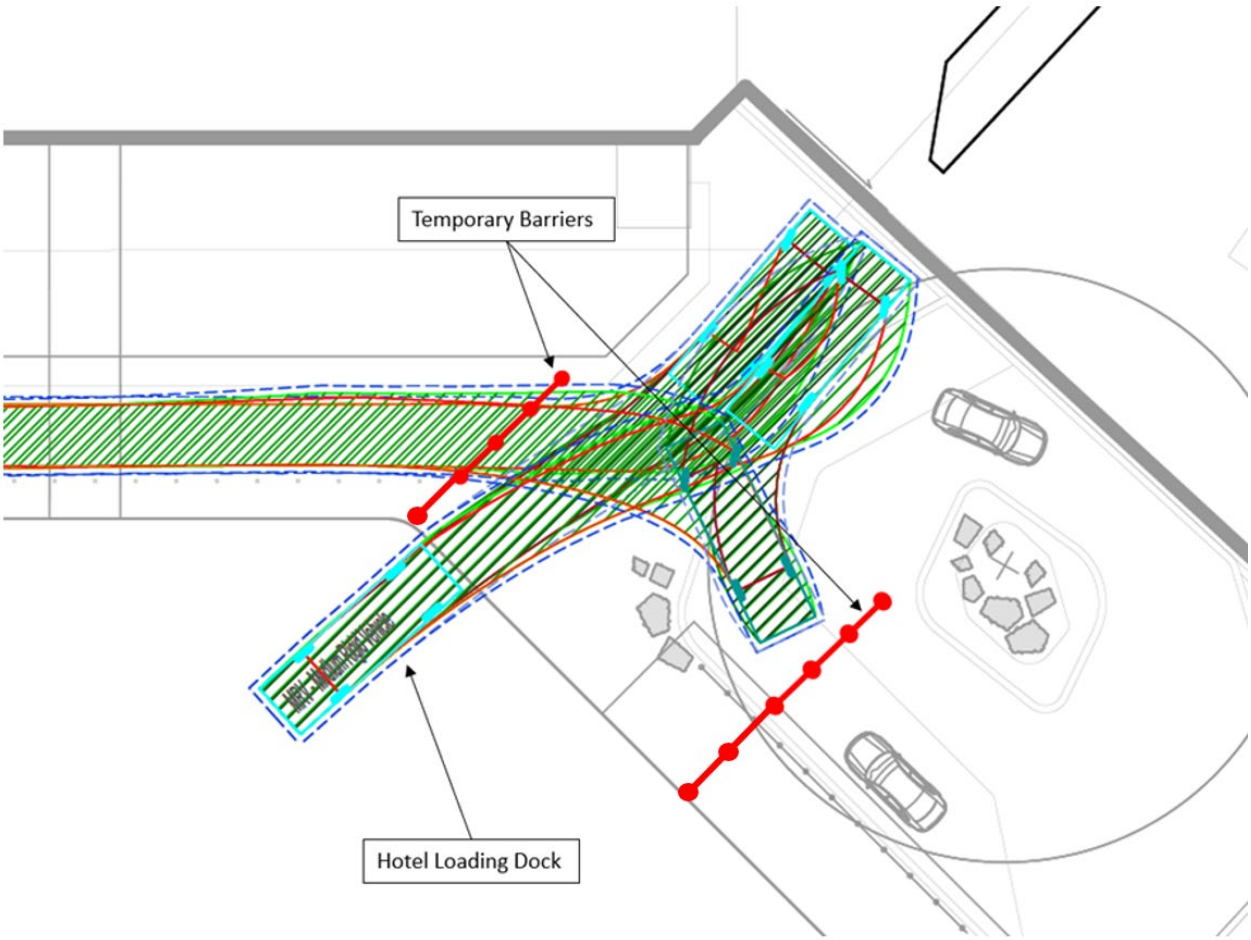
The reverse movement would cross one of the potential pedestrian routes between the Hotel lobby and the Club.

To address this potential conflict it is recommended that:

- The loading dock roller door shutter is to remain closed when the dock is not in use;
- Video cameras to be installed allowing Loading Dock Manager to be alerted to the arrival of a service vehicle;

- Temporary barriers to be erected to stop pedestrian movements while the vehicle is reversing into the dock;
- The roller door is to be opened by the Loading Dock Manager once temporary pedestrian barriers are placed in position; and
- All reverse movements into the dock be undertaken with the aid of a spotter (i.e. Loading Dock Manager who stands outside of the vehicle and directs the vehicle in while controlling pedestrian movements). This would be either a loading dock manager or hotel staff.

The set out of the temporary barriers are set out below.



Event Mode of Operation

During major event periods at Bankwest Stadium, the Eels Walk access road will be closed to all vehicles except for emergency vehicles.

During these periods, no service or loading vehicles will be able to access the Hotel's loading dock nor porte cochere facilities. All service vehicle deliveries will be scheduled to occur prior to or following the event mode closures.

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