



Traffic and Parking Impact Assessment 32 Perc Griffith Way, Orange

Prepared for:
NSW Greyhound Breeders Owners and Trainers
Association

21 November 2025

The Transport Planning Partnership

Traffic and Parking Impact Assessment

32 Perc Griffith Way, Orange

Client: NSW Greyhound Breeders Owners and Trainers Association

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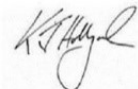
Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	07/11/2025	Ashwini Uthishtran Tim Zhang	Ken Hollyoak	Ken Hollyoak	DRAFT
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Table of Contents

1	Introduction	1
1.1	Background.....	1
1.2	Structure of the Report.....	1
2	Existing Conditions	2
2.1	Site Description	2
2.2	Road Network	3
2.3	Public Transport.....	3
2.4	Pedestrian and Cyclist Infrastructure	3
2.5	Existing Traffic Volumes	4
3	Proposed Development.....	6
3.1	Proposal Description	6
3.2	Proposal Uses.....	7
4	Parking Assessment.....	8
4.1	Car Parking Assessment	8
4.1.1	DCP Assessment.....	8
4.1.2	First Principles Assessment	8
4.2	Accessible Parking	9
4.3	Loading and Waste Collection.....	9
4.4	Car Parking Layout.....	9
5	Traffic Assessment	10
5.1	Development Traffic Generation	10
5.1.1	Greyhound Race Traffic Generation	10
5.1.2	Ancillary Function Traffic Generation.....	10
5.1.3	Summary of Traffic Generation	10
5.2	Traffic Distribution.....	11
5.3	Traffic Impact	11
5.3.1	Intersection Modelling Criteria	11
5.3.2	Modelling Results.....	12
6	Conclusion	13

Tables

Table 3.1: Proposal Uses	7
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Table 4.1: Greyhound Racing Parking Assessment	8
Table 5.1: Traffic Generation Overview	10
Table 5.2: Level of Service Criteria for Intersection Operation	12
Table 5.3: Intersection Operation.....	12

Figures

Figure 2.1: Site Location.....	2
Figure 2.2: Cycling Routes	4
Figure 2.3: Existing PM Peak Hour Volumes	5
Figure 3.1: Proposed Site Layout	7
Figure 5.1: Development Traffic Distribution	11

APPENDICES

- A. CONCEPT LAYOUT
- B. SWEEP PATHS
- C. SIDRA RESULTS

1 Introduction

1.1 Background

This development application (DA) seeks approval to redevelop the former Orange Harness Racing (Trotting) Track located at 32 Perc Griffith Way, Orange to a greyhound facility for NSW Greyhound Breeders Owners and Trainers Association (GBOTA).

The project would involve the reconfiguration of the existing harness racing track to convert it to a greyhound racing track with support elements, construction of a clubhouse and race day kennels, provision of a parking area and other amenities.

The Transport Planning Partnership (TPPP) has prepared this Traffic and Parking Impact Assessment (TIA) report to accompany the DA submission to Council and assess the traffic and parking implications of the proposed development.

1.2 Structure of the Report

The layout of the report is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the site.
- Chapter 3 provides a brief description of the proposed development.
- Chapter 4 assesses the parking implications and requirements.
- Chapter 5 assesses the traffic generation associated with the site and its implications.
- Chapter 6 presents the conclusion of the assessment.

2 Existing Conditions

2.1 Site Description

The subject site is located at 32 Perc Griffith Way, Orange and falls within the local government area of Orange City Council.

The site is bound by Mitchell Highway to the south, Perc Griffith Way to the west, a large lot residential development to the north and undeveloped greenfield land to the east. The existing site is currently accessed via a driveway off Perc Griffith Way.

The site location and its surrounds are shown in Figure 2.1.

Figure 2.1: Site Location



Basemap source: Google Maps.

The site is currently unused; however, it was previously occupied by a horse racing club that held between six and ten race meetings per year, along with daily training activities. The Orange Kart Racing Club is located adjacent to the site and shares the same access from Perc Griffith Way. The Kart Racing Club holds race meetings on approximately seven weekends each year. It is understood that the proposed development will not schedule greyhound racing events during these major kart racing meetings.

2.2 Road Network

Mitchell Highway, a two-way state road, has one lane in either direction and is generally aligned in the north to south direction between Landsborough Highway and Great Western Highway.

The sign-posted speed limit is 80km/h.

Perc Griffith Way, a two-way undivided local road is generally aligned in the north to south direction between Mitchell Highway and a cul-de-sac.

The sign-posted speed limit is 50km/h.

2.3 Public Transport

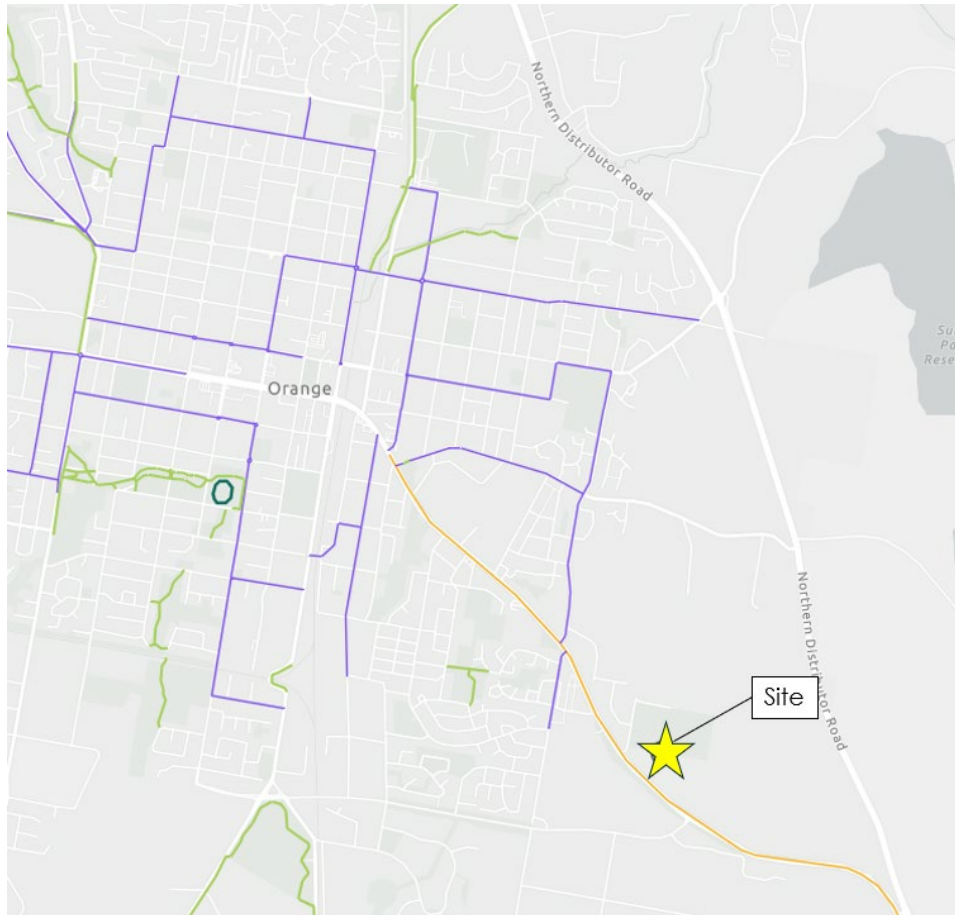
There are bus stops located on Mitchell Highway and Brabham Way within a 15-minute walk from the site which provide services to Bathurst every 1-2 hours.

2.4 Pedestrian and Cyclist Infrastructure

There are no dedicated footpaths surrounding the site; however, a road verge along Perc Griffith Way provides an area that pedestrians can use for walking.

The cycling routes surrounding the site are shown in Figure 2.2.

Figure 2.2: Cycling Routes



Source: Cycleway Finder

2.5 Existing Traffic Volumes

Traffic survey data was collected at the Perc Griffith Way / Mitchell Highway priority intersection on Thursday 10 April 2025 from 5pm to 7pm. The afternoon peak hour volumes are presented in Figure 2.3. The identified PM peak period is 5:00pm – 6:00pm.

3 Proposed Development

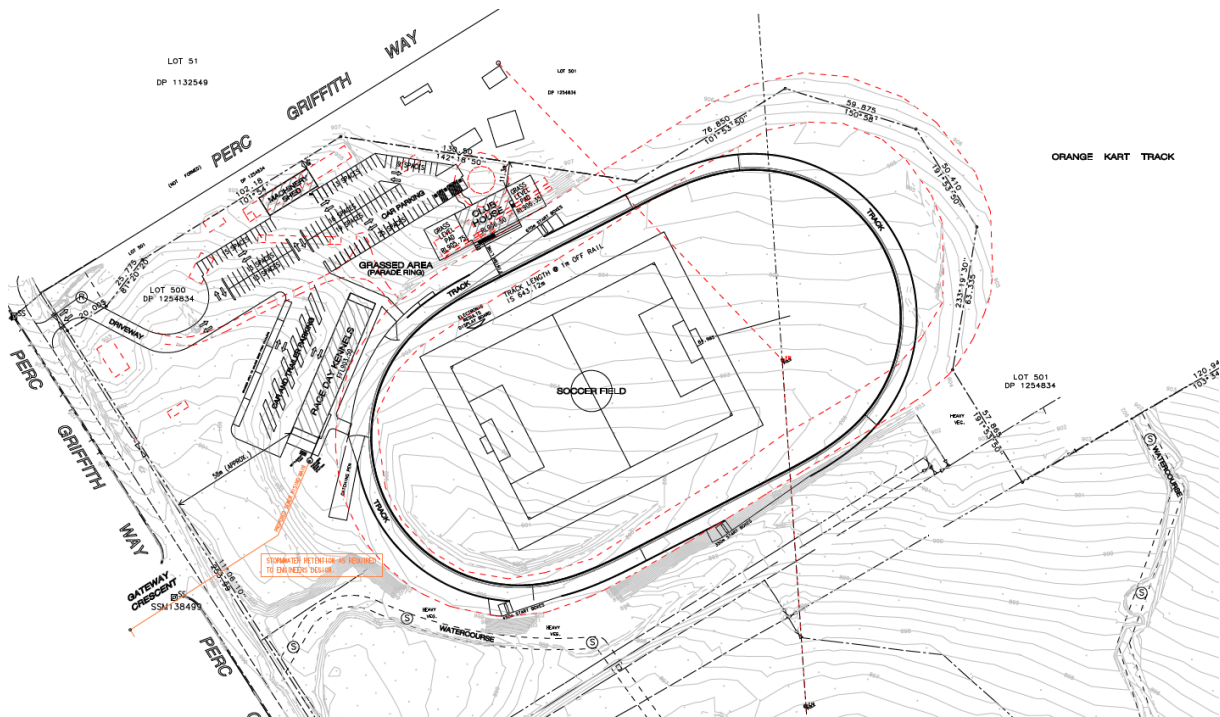
3.1 Proposal Description

A greyhound complex is to be developed at 32 Perc Griffith Way, Orange including the following:

- Reconfiguration of the existing harness racing track to convert it to a greyhound racing track with support elements including railing, track lighting, and results display board.
- Construction of a clubhouse including:
 - › Lounge/function room
 - › Kitchen and bar facilities and associated cool room and dry store
 - › Office and tote room
 - › Male, female and unisex accessible toilets
 - › External viewing platform
 - › Steward, photo finish, camera and call spaces on first floor
- Raceday kennels building comprising:
 - › 112 kennels (14 stalls of 8 greyhounds per race)
 - › Swab kennels
 - › Holding kennels
 - › Marshalling and weighing room
 - › Steward office, vet office, swab room, laundry and accessible WC
- Machinery Shed with lunchroom/office and accessible WC.
- Vehicle parking including 123 space car park and 16 space car-and-trailer parking area.

The proposed site layout is shown in Figure 3.1 with architectural plans provided in Appendix A.

Figure 3.1: Proposed Site Layout



The proposed development will be accessed via the existing two-way driveway from Perc Griffith Way.

3.2 Proposal Uses

The typical operation intended to be accommodated by the proposed development is outlined in Table 3.1.

It is anticipated that only one of these uses will operate at any given time.

Table 3.1: Proposal Uses

Event	Timing	Attendees
Greyhound races	3:00pm – 6:30pm Once a week	30 – 35 trainers 20 ground staff 100 – 120 patrons
Greyhound trial sessions	Once a week	15 – 30 people
Ancillary Functions	Up to once a week and usually on weekends	150 people

4 Parking Assessment

4.1 Car Parking Assessment

4.1.1 DCP Assessment

The Orange Development Control Plan 2004 (DCP) does not specify car parking rates for greyhound facilities and ancillary function rooms. Therefore, a first principles' assessment has been undertaken as discussed below.

4.1.2 First Principles Assessment

As outlined in Section 3.2, the proposed uses will not operate concurrently. The greyhound race meetings and functions which are expected to attract a higher number of attendees have been assessed separately below. To reiterate, these two uses will not operate at the same time.

4.1.2.1 Greyhound Race Meetings

The weekly greyhound race meetings are expected to attract a mix of visitors, staff, and trainers. Visitors are assumed to carpool, as they are likely to attend in groups. With a car occupancy rate of 1.5 persons per vehicle, the 120 anticipated visitors are expected to generate a demand for 80 parking spaces. Staff and trainers are assumed to travel in individual vehicles, resulting in a parking requirement of 20 spaces for staff and 35 spaces for trainers. Most trainers are expected to arrive in vans, with a smaller number using car-and-trailer vehicles.

The proposed development is to provide parking in two separate areas. One area consists of 123 car spaces, and the other area consists of 16 car-and-trailer spaces.

The proposed parking provision is sufficient to accommodate the development uses. Table 4.1 provides a summary of the parking generated by the weekly greyhound races.

Table 4.1: Greyhound Racing Parking Assessment

Type	Yield	Car occupancy rate	Parking requirement	Proposed
Visitors	120	1.5 visitors per vehicle	80 car spaces	123 car spaces 16 car-and-trailer spaces
Staff	20	1 staff per vehicle	20 car spaces	
Trainers	35	1 trainer per vehicle	23 car spaces 12 car and trailer spaces	
Total			135 spaces	139 spaces

Therefore, a total parking requirement of 123 car spaces and 12 car-and-trailer spaces is estimated. The proposed provision of 123 car spaces and 16 car-and-trailer spaces meets this parking requirement.

4.1.2.2 Ancillary Functions

It is anticipated that up to 150 visitors will attend ancillary functions. Again, visitors are assumed to carpool, as they are likely to attend in groups. Based on a car occupancy rate of 1.5 persons per vehicle (although TTPP experience is that car occupancy at function centres is often above 2 persons per car), this is expected to generate a demand for 100 parking spaces. The proposed development provides 123 car spaces, which is sufficient to accommodate this demand.

4.2 Accessible Parking

Council's DCP does not specify a parking rate for accessible parking spaces. Accordingly, reference has been made to the National Construction Code (NCC), which recommends that Class 9b developments provide one accessible parking space for every 50 car parking spaces or part thereof. Based on a total provision of 123 car spaces, the development is therefore required to provide three accessible spaces. The proposal includes three accessible parking spaces, which are compliant with the NCC requirements.

4.3 Loading and Waste Collection

Loading and waste collection will take place on-site within the car park, outside of operating hours.

4.4 Car Parking Layout

The proposed car park and associated access arrangements have been designed in accordance with Australian Standard requirements, namely AS2890:2004.

All car parking spaces are designed as Australian Standard Class 2 car parking spaces (which have minimum dimensions of 2.5m wide by 5.4m long with aisle width of 5.8m).

The accessible parking spaces are designed as per AS2890.6:2009 (with dimensions of 2.4m wide by 5.4m long and an adjacent shared space of equal dimensions).

The car-and-trailer parking spaces have been designed with a length of 12.5 m and a width of 2.6 m. This is sufficient to accommodate a B99 vehicle with a trailer that is anticipated to use the site, which has a total length of 9.2 m.

Swept path analysis has been conducted and is presented in Appendix B.

5 Traffic Assessment

5.1 Development Traffic Generation

Weekday evening traffic generation has been assessed below, as evening traffic volumes on the road network are typically higher on weekdays than on weekends.

5.1.1 Greyhound Race Traffic Generation

The weekly greyhound races are anticipated to generate 135 vehicle trips -entering the site before the event and exiting the site after the event (that is, 1 vehicle trip per parking space required – Section 4.1.2.1). The duration of the greyhound races (3pm – 6:30pm) suggests that most patrons, staff and trainers would leave after 6:30pm, beyond the network weekday evening peak of 5pm – 6pm. This assessment assumes that most attendees stay for all the races, resulting in only 25% of all outbound trips associated with the greyhound race use occurring during the network evening peak, resulting in a site traffic generation of 34 vehicles per hour.

5.1.2 Ancillary Function Traffic Generation

Functions are expected to generate 100 vehicle trips upon entering before the event and upon exiting after the event (that is, 1 vehicle trip per parking space required – Section 4.1.2.2). This assessment assumes that 80% of all inbound trips associated with functions would occur during the weekday network evening peak of 5pm – 6pm, resulting in a site traffic generation of 80 vehicles per hour. If functions are to occur on weekend evenings, the traffic on the road network would be lower than a weekday evening. Therefore, the modelling assessment represents a worst-case scenario.

5.1.3 Summary of Traffic Generation

Table 5.1 presents an overview of the estimated traffic generation for the weekly greyhound race meeting and functions. These two events will not occur simultaneously.

Table 5.1: Traffic Generation Overview

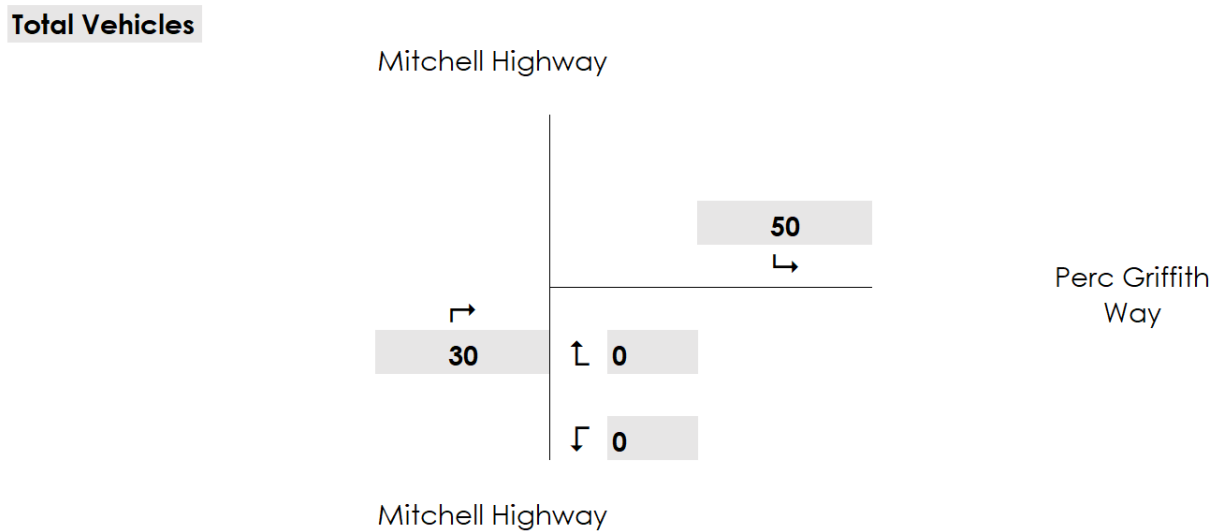
	Development Use	
	Weekly Greyhound Race Meeting	Functions
Network peak site traffic generation	34 vehicle trips	80 vehicle trips

The following analysis has been conducted based on functions being the more intensive use.

5.2 Traffic Distribution

Traffic generated by the development (80 trips generated by the functions) has been distributed at the Perc Griffith Way / Mitchell Highway intersection according to the existing traffic distribution observed from the traffic survey data. As mentioned in Section 5.1.2, only inbound trips associated with functions would occur during the weekday network evening peak of 5pm – 6pm. Based on existing traffic volumes (shown in Figure 2.3), along Mitchell Highway approximately 62% of traffic are travelling from the north and 38% of traffic are travelling from the south. Applying the same distribution to inbound traffic associated with the development, the distribution of the estimated traffic generation is shown in Figure 5.1. The functions are expected to generate 50 vehicles turning left from the north and 30 vehicles turning right from the south.

Figure 5.1: Development Traffic Distribution



5.3 Traffic Impact

5.3.1 Intersection Modelling Criteria

Intersection capacity analysis has been undertaken using the computer-based modelling package SIDRA Intersection 10. Transport for NSW uses the performance measure Level of Service to establish the efficiency of an intersection under given prevailing traffic conditions.

Level of service (LoS) is directly related to the delays experienced by traffic traversing the intersection. Level of service indicators range from A (indicating good intersection operation) to F (indicating over-saturated conditions with long delays and queues). LoS D is the long-term desirable level of service.

At signalised intersections, the average delay is the volume weighted average of all movements. For roundabouts and priority (give way and stop sign) controlled intersections, the average delay relates to the worst movement.

Table 5.2 shows the criteria that SIDRA Intersection adopts in assessing the LoS.

Table 5.2: Level of Service Criteria for Intersection Operation

LoS	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity; at signals incidents would cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	Greater than 70	Unsatisfactory, requires additional capacity	Unsatisfactory, requires other control mode or major treatment

5.3.2 Modelling Results

The modelling results for the existing Year 2025, with and without development, is presented in Table 5.3.

Table 5.3: Intersection Operation

Intersection	Evening Peak (5:00PM – 6:00PM)			
	2025 Existing		2025 Existing + Development	
	Ave. Delay (s)	LoS	Ave. Delay (s)	LoS
Perc Griffith Way – Mitchell Highway	10	A	11	A

The above table indicates that the Perc Griffith-Mitchell Highway intersection is operating satisfactorily with LoS A in the existing scenario. With the proposed development traffic, the increase in average delay is expected to be 1 second. Therefore, the proposed development is not anticipated to have an adverse impact on the performance of the surrounding road network.

6 Conclusion

This Traffic and Parking Impact Assessment report relates to a proposed greyhound complex at 32 Perc Griffith Way, Orange. The key findings of this report are listed below:

- The project would involve the reconfiguration of the existing harness racing track to convert it to a greyhound racing track with support elements, construction of a clubhouse and race day kennels, provision of a parking area and other amenities.
- The proposed development will be accessed via the existing two-way driveway from Perc Griffith Way.
- A first principles assessment determined that the proposed development would require provision of 123 car parking spaces and 16 car-and-trailer spaces. It is proposed to comply with this requirement.
- The proposed parking layout is generally consistent with the dimensional requirements as set out in the AS2890 series.
- The development is expected to generate up to 80 vehicle trips during the weekday PM peak hour.
- The traffic generation associated with the proposed development is not anticipated to have an adverse impact on the performance of the intersections in the surrounding road network.

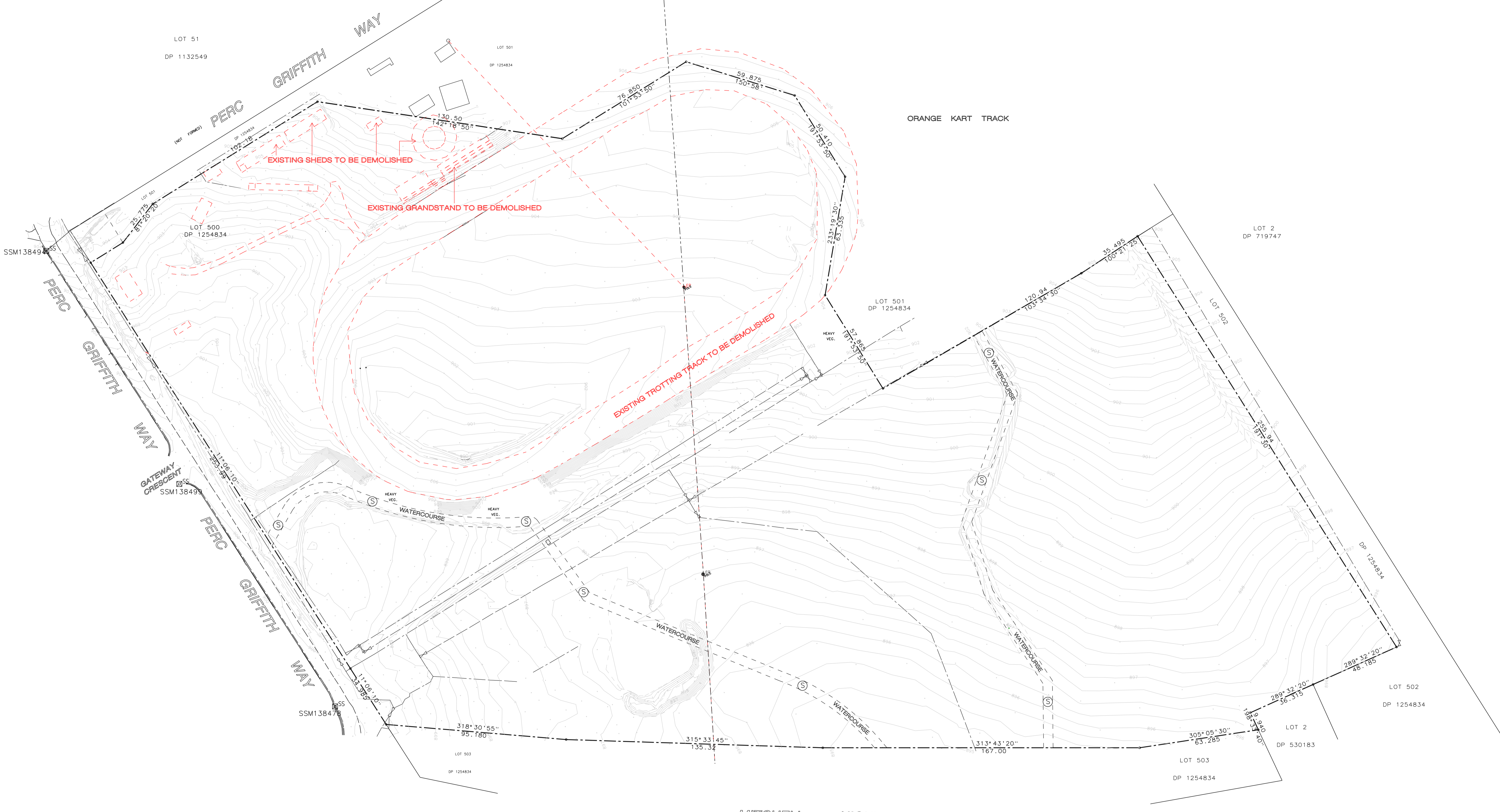
Overall, the traffic and parking aspects of the proposed development are considered to be satisfactory.

Appendix A

Concept Layout

DRAFT

RIGHT OF ACCESS 20 WIDE (DP 1254834)



MITCHELL HIGHWAY

SITE PLAN 1:1000

no.	description	date

amendments

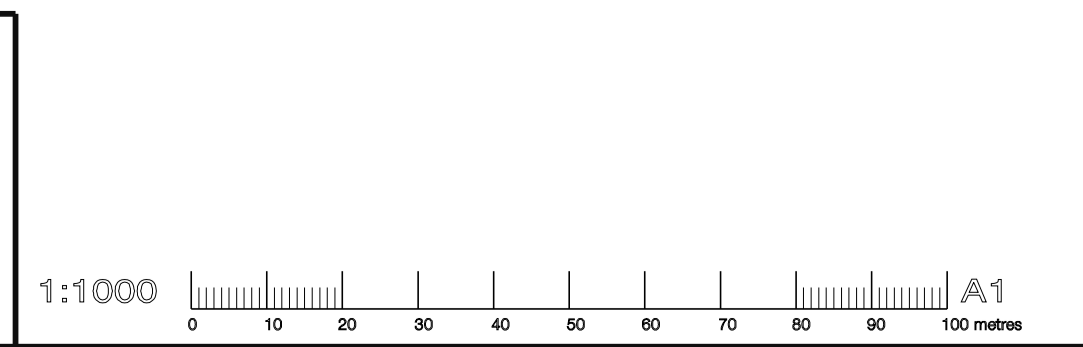
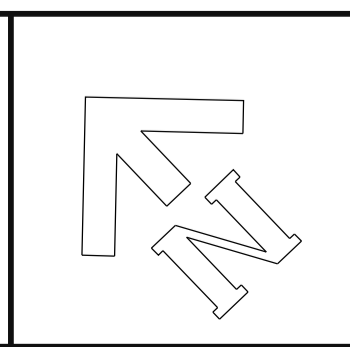
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DO NOT SCALE

GENERAL NOTES:

- All dimensions shown in millimeters unless noted otherwise.
- DO NOT SCALE from drawing. If in doubt ask.
- All dimension and levels are to be confirmed on site prior to construction.
- Concrete slab & footings to be designed in accordance with AUSTRALIAN STANDARD 2870 - 1996.
- All structural elements to be designed by a practicing structural engineer.
- All timber used in the building shall be strictly in accordance with the provisions of AUSTRALIAN STANDARD 1684-1992, NATIONAL TIMBER FRAMING CODE, unless a certificate from a practicing

- structural engineer is submitted to council certifying that the building has been designed to withstand the most adverse combination of loads to which it will be subjected.
- Construction of any stairways and balustrades shall comply with the requirements of the BUILDING CODE OF AUSTRALIA.
- All plumbing and drainage work is to comply with the requirements of AUSTRALIAN STANDARD 3500-NATIONAL PLUMBING AND DRAINAGE CODE and THE NEW SOUTH WALES CODE OF PRACTICE PLUMBING AND DRAINAGE.
- Protection of the building from attack by termites is to be carried out in accordance with the provisions of THE BUILDING CODE OF AUSTRALIA and or AUSTRALIAN STANDARD 3660.1-1995 PROTECTION OF BUILDINGS FROM SUBTERRANEAN TERMITES.



project:

PROPOSED NEW GREYHOUND RACING TRACK AND FACILITIES LOT 500 (D.P. 1254834) no. 32 PERC GRIFFITH WAY ORANGE, N.S.W.

client:

NSW GBOTA

title:

DEMOLITION PLAN

P 02 6363 1780

162 KITE STREET, PO BOX 1809 ORANGE NSW 2800

E info@mckinnondesign.com.au

CORNWOOD PTY LTD ABN 24 074 428 798

scale: AS NOTED

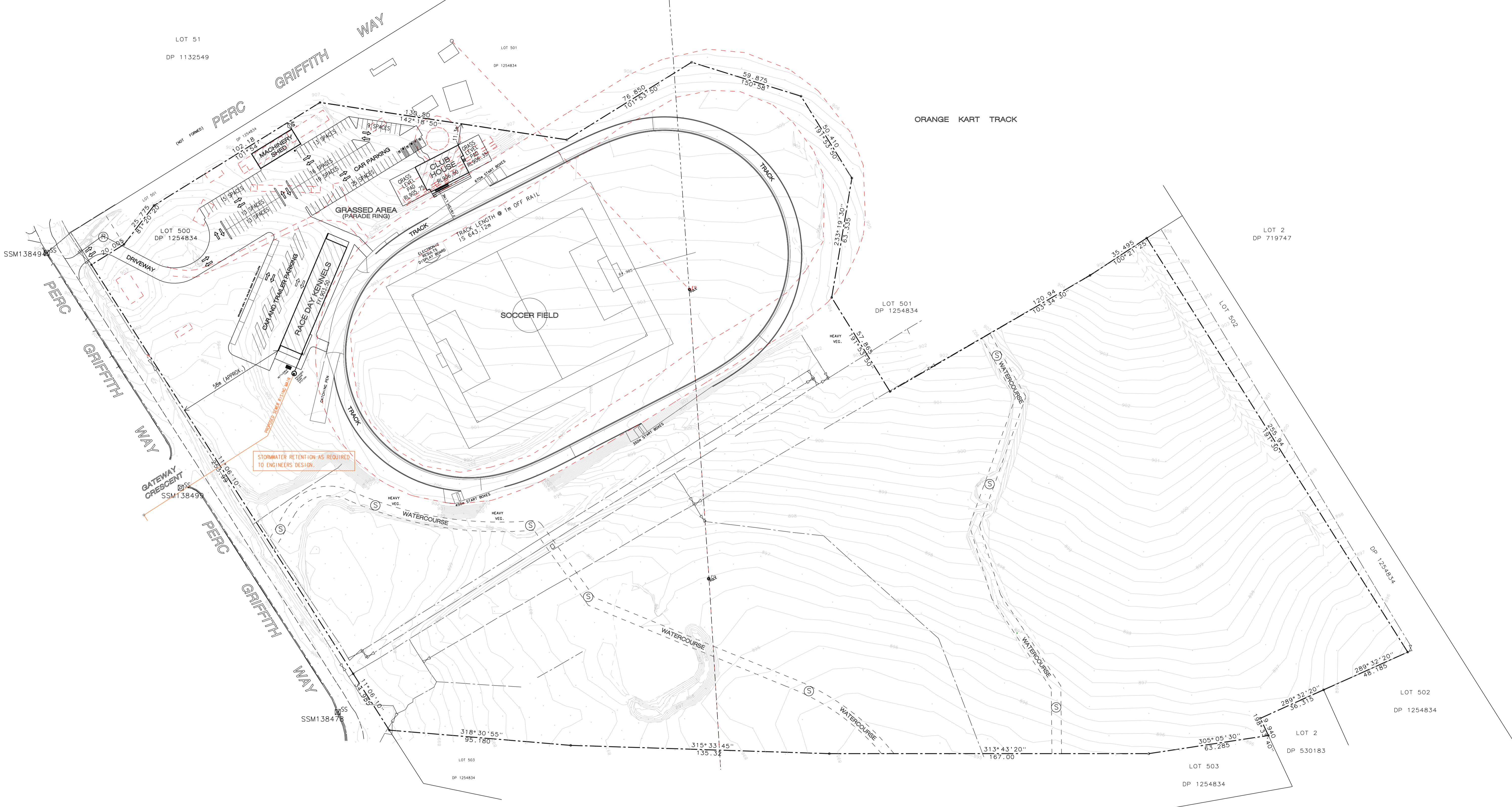
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job no: **24030**

drp no: **00** issue:

DRAFT

RIGHT OF ACCESS 20 WIDE (DP 1254834)



MITCHELL HIGHWAY

SITE PLAN 1:1000

no.	description	date

amendments

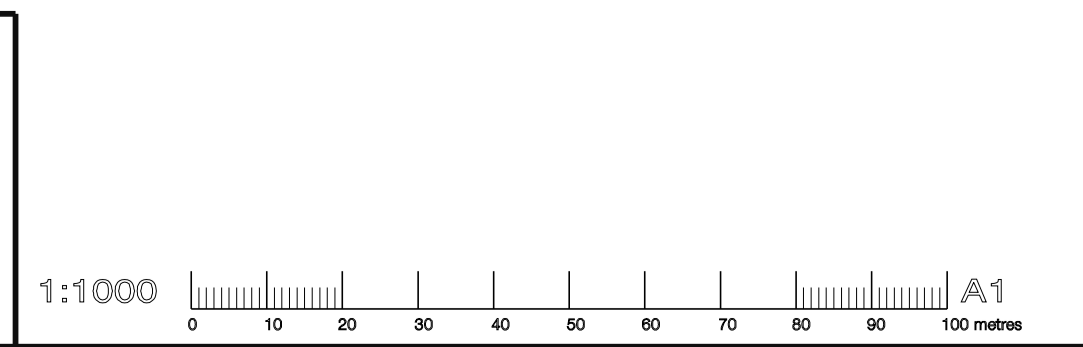
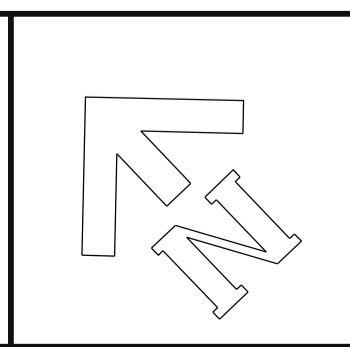
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PROPOSED SITE PLAN

P 02 6363 1780

162 KITE STREET, PO BOX 1809 ORANGE NSW 2800

E info@mckinnondesign.com.au

CORNWOOD PTY LTD ABN 24 074 428 798

scale: AS NOTED

drawn: C. MCK & H.A. MCK

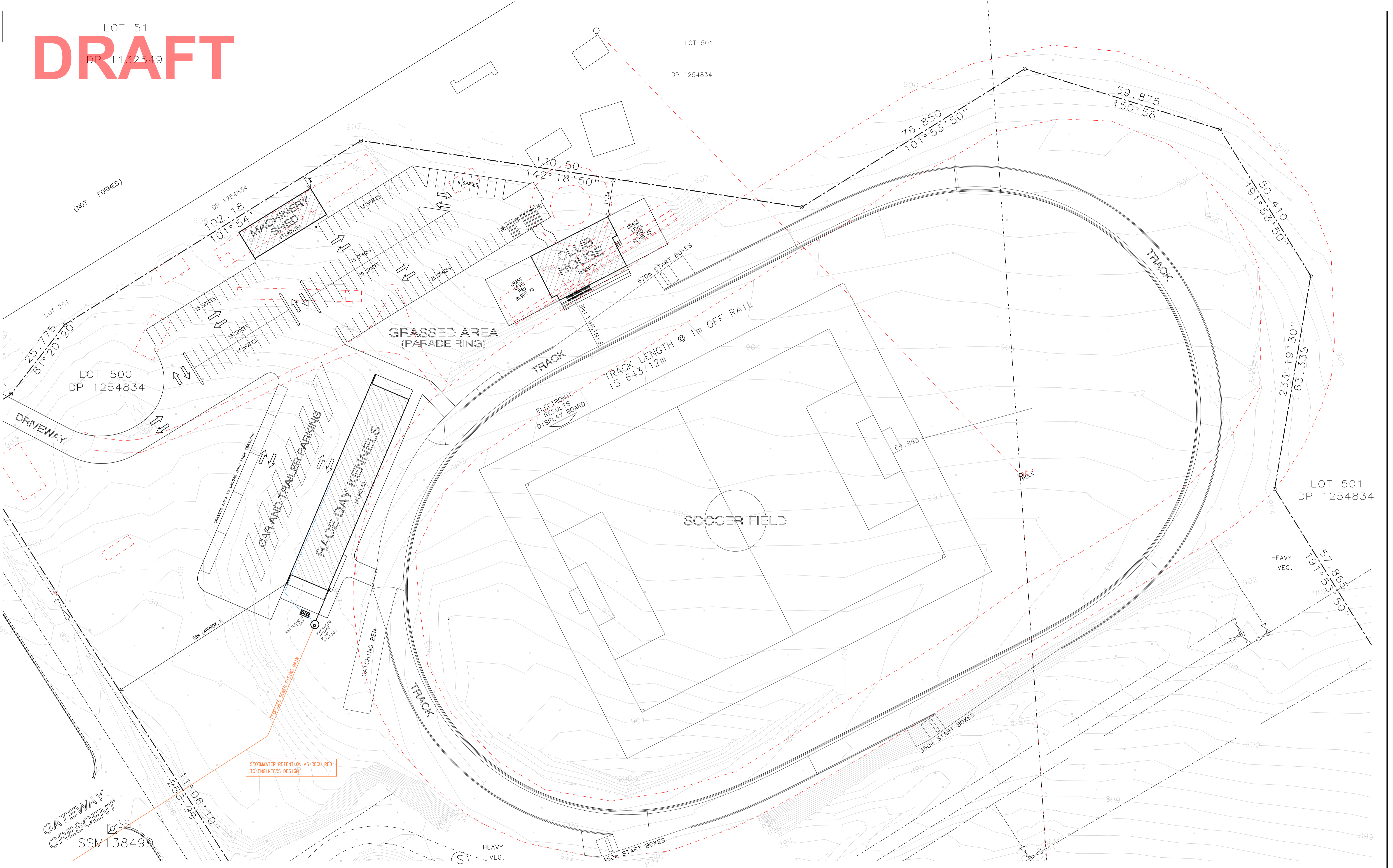
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job no: **24030**

drp no: **01**

issue:

LOT 51
DRAFT
 DP 1132549



SITE PLAN 1:500

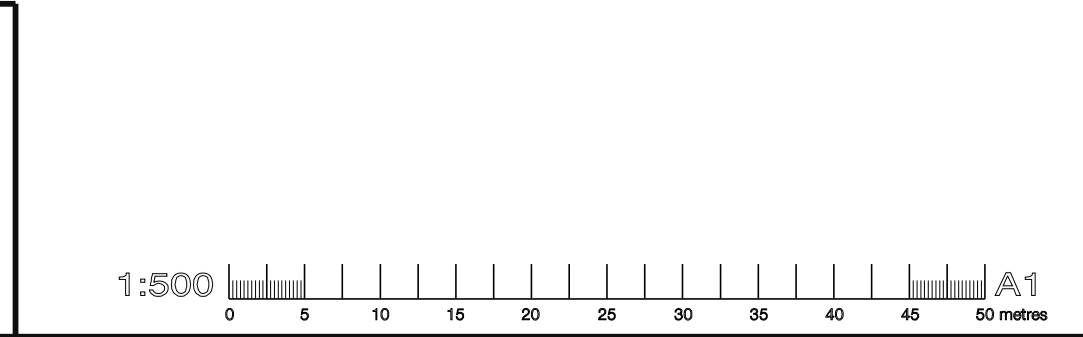
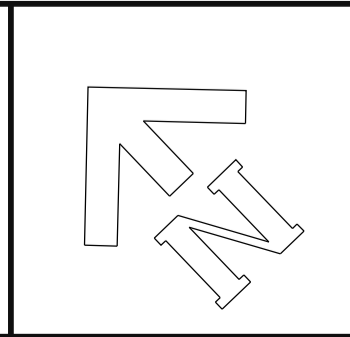
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 no. 32 PERC GRIFFITH WAY ORANGE, N.S.W.

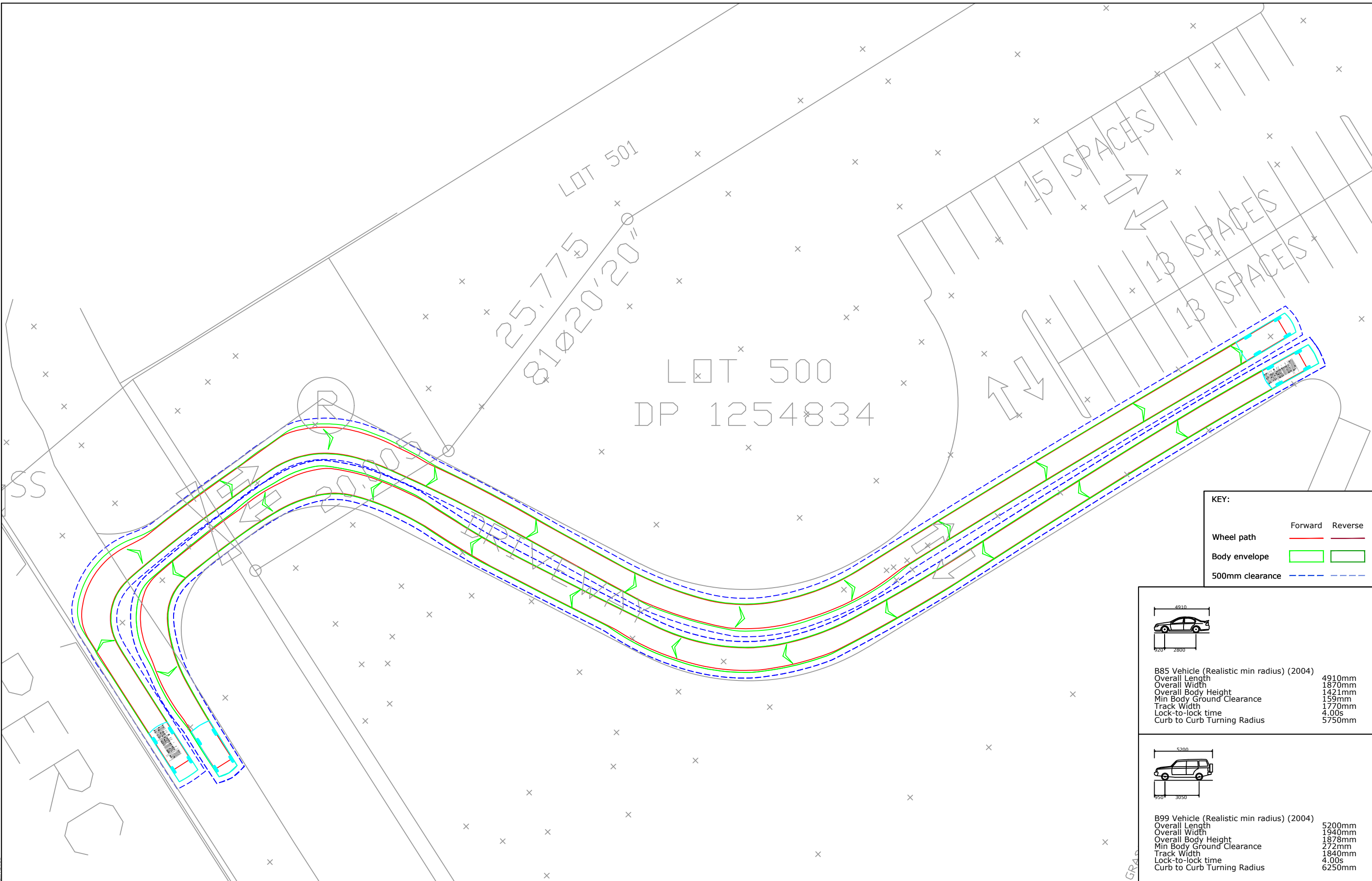
client:
NSW GBOTA

title:
PROPOSED PART SITE PLAN

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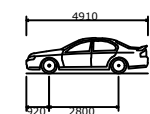
Appendix B

Swept Paths



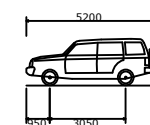
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Wheel path	Forward	Reverse
Body envelope		
500mm clearance		



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4910mm
Overall Width	1870mm
Overall Body Height	1421mm
Min Body Ground Clearance	159mm
Track Width	1770mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5750mm



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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
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B	ISSUE FOR DISCUSSION	TZ	AU	PC	03/11/25

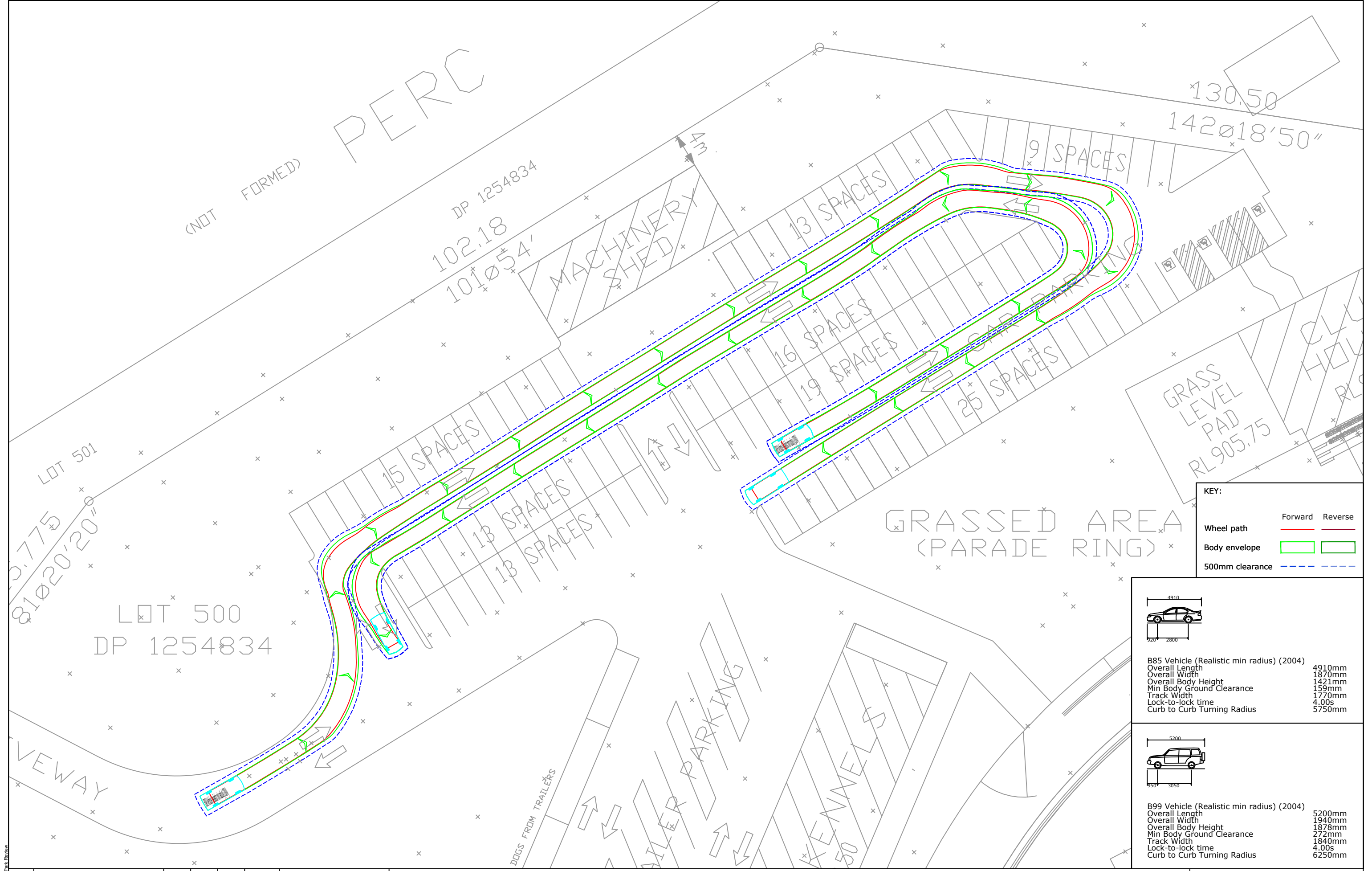


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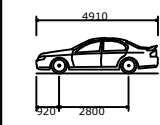
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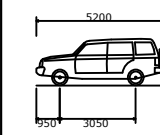
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Overall Body Height	1421mm
Min Body Ground Clearance	159mm
Track Width	1770mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5750mm



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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	TZ	AU	PC	30/10/25
B	ISSUE FOR DISCUSSION	TZ	AU	PC	03/11/25

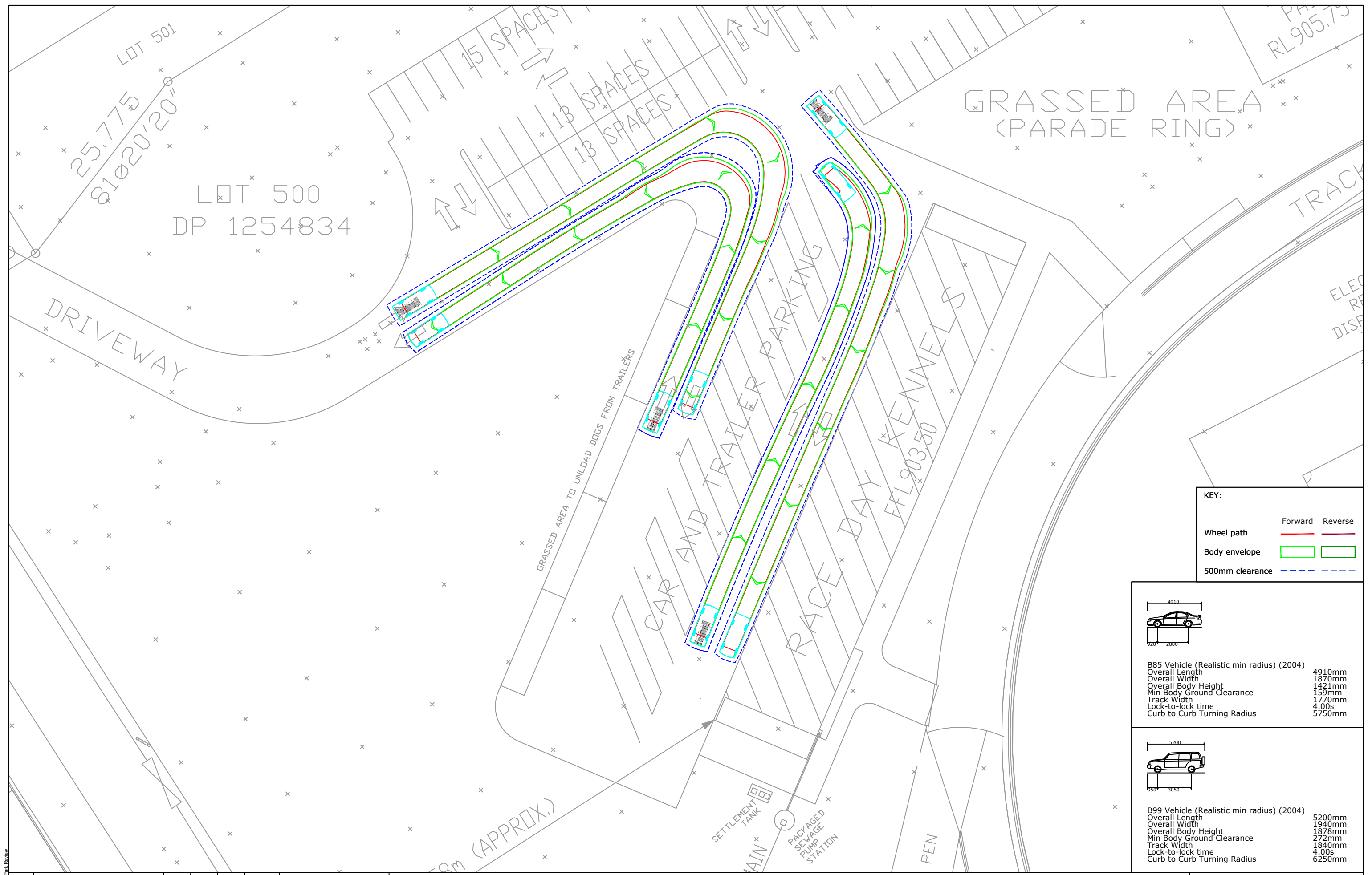


PROJECT: 32 PERC GRIFFITH WAY, ORANGE

TITLE: SWEPT PATH ANALYSIS
AS2890.1 4.91m B85 VEHICLE, 5.2m B99 VEHICLE

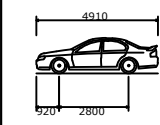
DWG No.	24027CAD002	
	FIGURE 2	
DATE STAMP	03 NOVEMBER 2025	
PROJECT No.	SCALE	REV.
24027	1:400 @A3	A

Filename: 24027CAD002-241103_Cur Path_Review



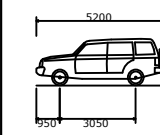
KEY:

	Forward	Reverse
Wheel path		
Body envelope		
500mm clearance		



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4910mm
Overall Width	1870mm
Overall Body Height	1421mm
Min Body Ground Clearance	159mm
Track Width	1770mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5750mm



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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	TZ	AU	PC	30/10/25
B	ISSUE FOR DISCUSSION	TZ	AU	PC	03/11/25



PROJECT: 32 PERC GRIFFITH WAY, ORANGE

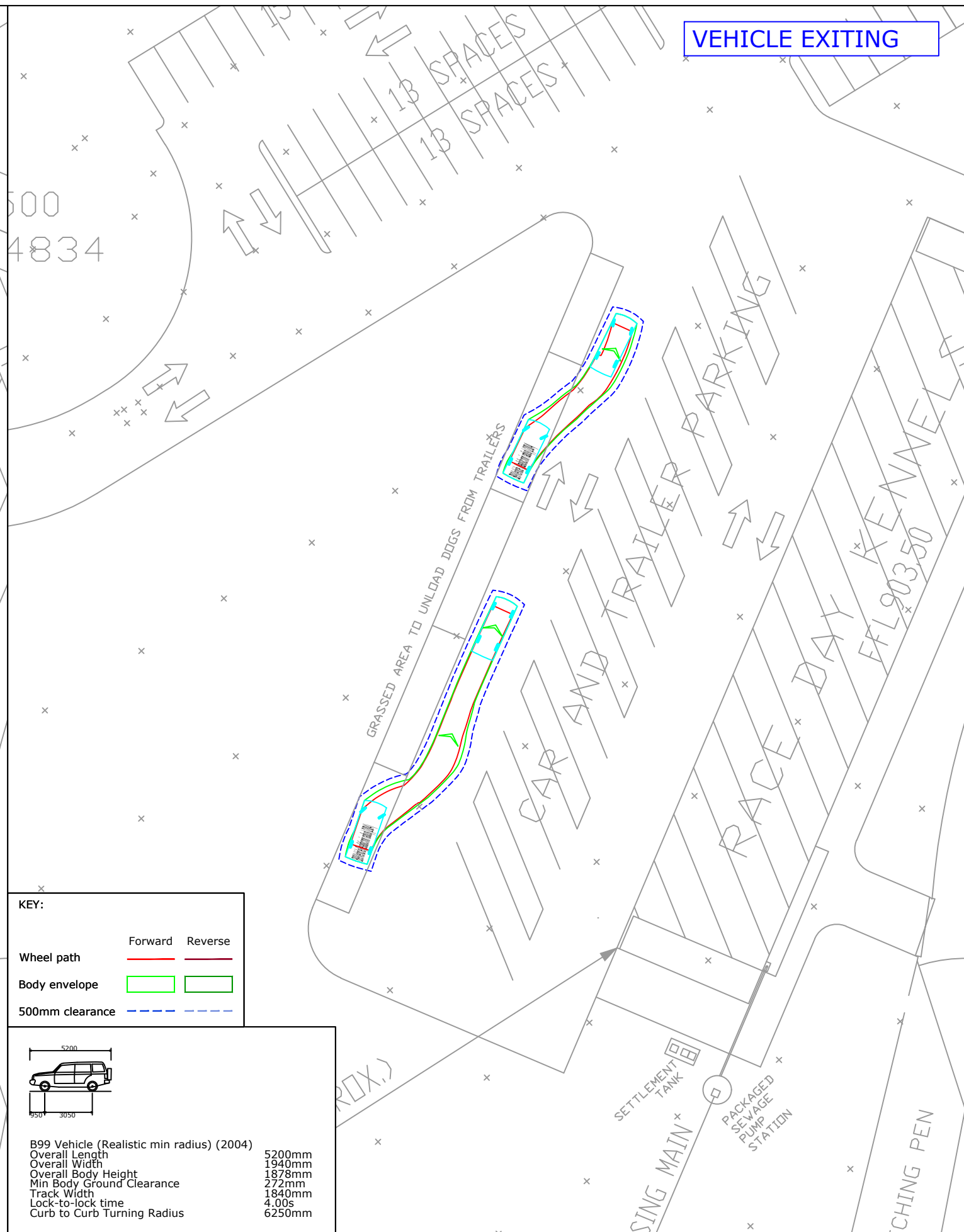
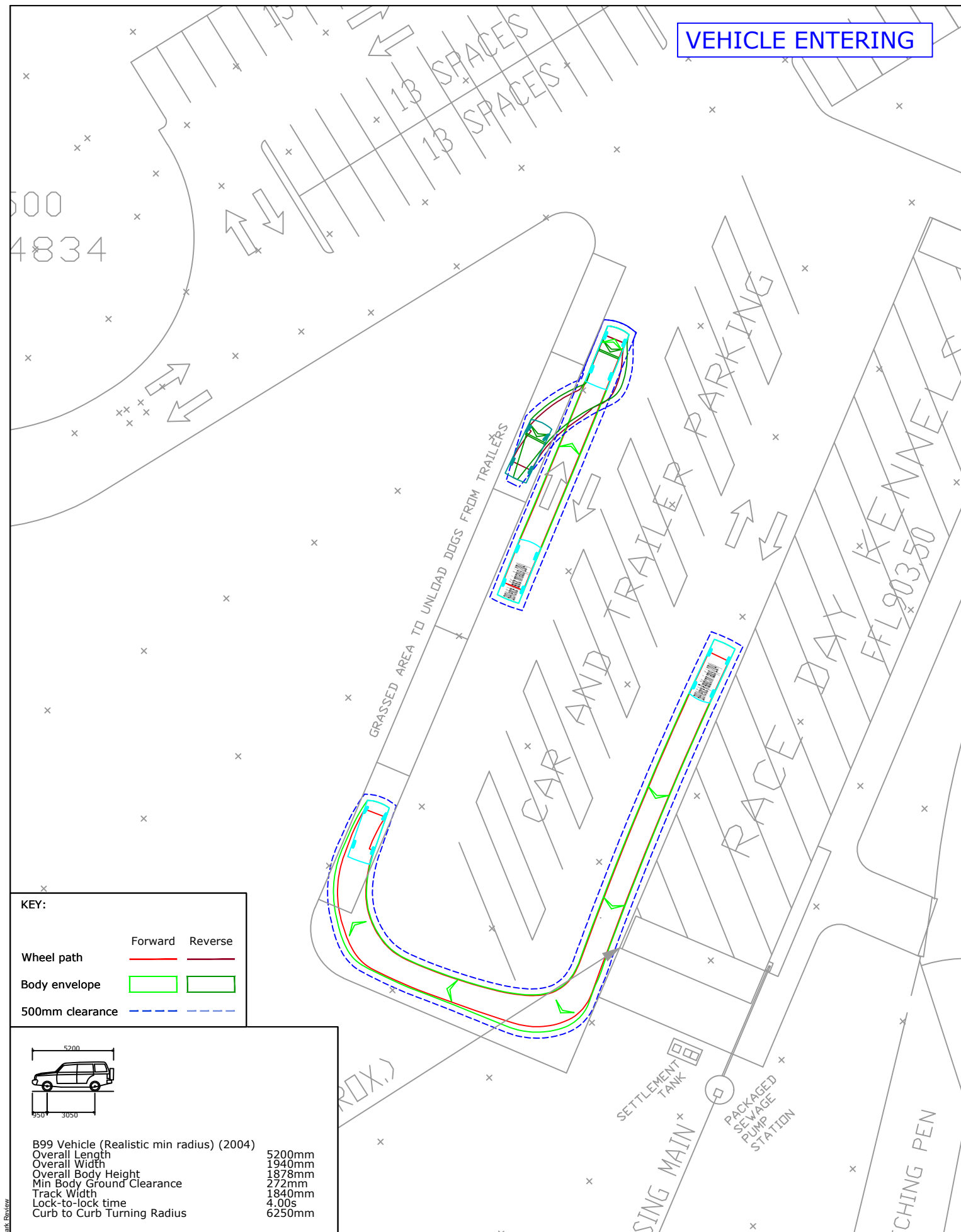
TITLE: SWEPT PATH ANALYSIS
AS2890.1 4.91m B85 VEHICLE, 5.2m B99 VEHICLE

DWG No.	24027CAD002	
	FIGURE 3	
DATE STAMP	03 NOVEMBER 2025	
PROJECT No.	SCALE	REV.
24027	1:400 @A3	A

Filename: 24027CAD002-241103_Car Park_Review

VEHICLE ENTERING

VEHICLE EXITING



KEY:

Wheel path	Forward	Reverse
Body envelope		
500mm clearance		

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:

Wheel path	Forward	Reverse
Body envelope		
500mm clearance		

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	TZ	AU	PC	30/10/25
B	ISSUE FOR DISCUSSION	TZ	AU	PC	03/11/25



PROJECT: 32 PERC GRIFFITH WAY, ORANGE

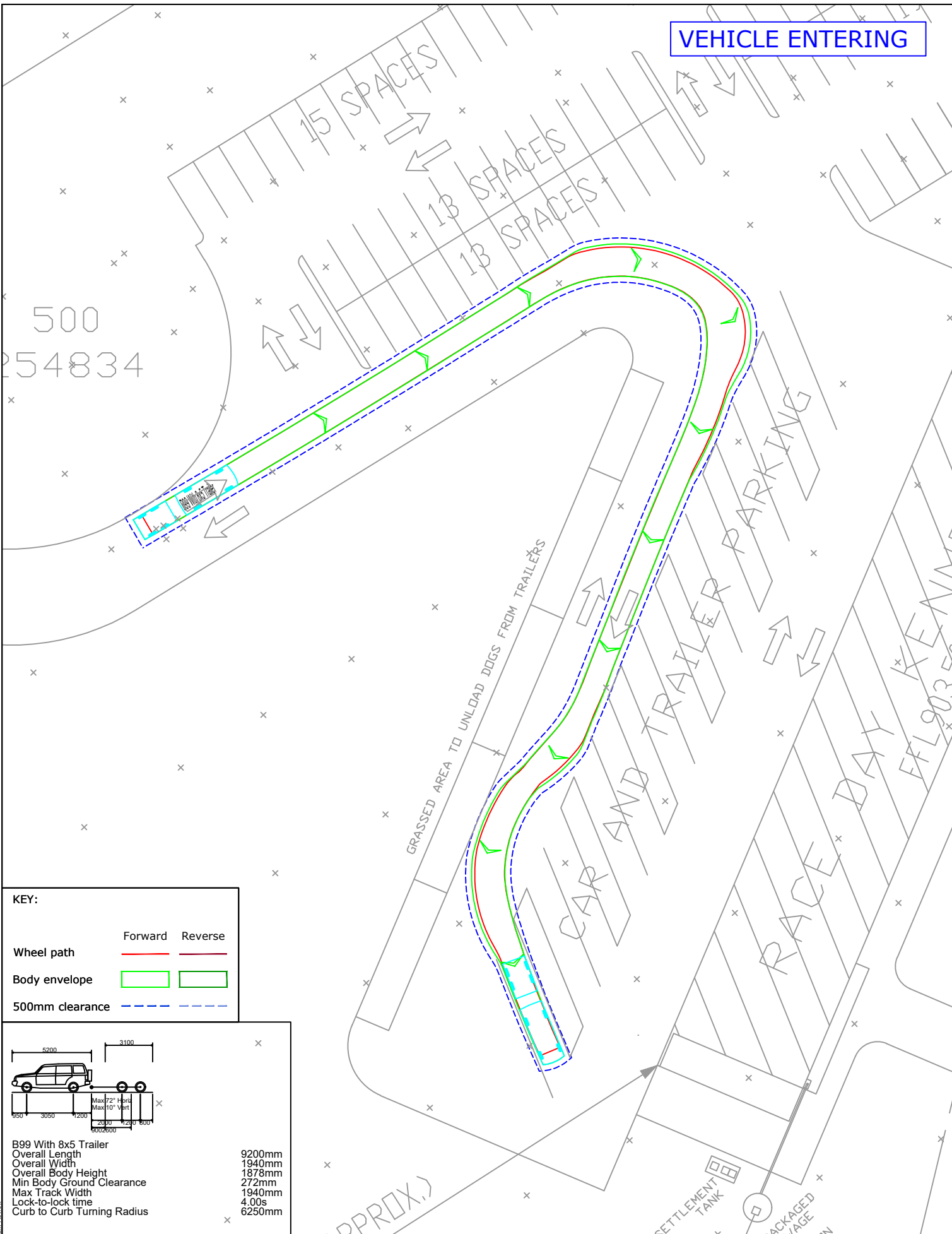
TITLE: SWEEP PATH ANALYSIS
AS2890.1 5.2m B99 VEHICLE

DWG No.	24027CAD002	
	FIGURE 4	
DATE STAMP	03 NOVEMBER 2025	
PROJECT No.	SCALE	REV.
24027	1:400 @A3	A

Filename: 24027CAD002-241103_Car Park_Review

VEHICLE ENTERING

VEHICLE EXITING



KEY:

Wheel path	Forward	Reverse
Body envelope		
500mm clearance		

B99 With 8x5 Trailer
 Overall Length 9200mm
 Overall Width 1940mm
 Overall Body Height 1878mm
 Min Body Ground Clearance 272mm
 Max Track Width 1940mm
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 6250mm

KEY:

Wheel path	Forward	Reverse
Body envelope		
500mm clearance		

B99 With 8x5 Trailer
 Overall Length 9200mm
 Overall Width 1940mm
 Overall Body Height 1878mm
 Min Body Ground Clearance 272mm
 Max Track Width 1940mm
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 6250mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	TZ	AU	PC	30/10/25
B	ISSUE FOR DISCUSSION	TZ	AU	PC	03/11/25



PROJECT
 32 PERC GRIFFITH WAY, ORANGE

TITLE
 SWEEP PATH ANALYSIS
 AS2890.1 5.2m B99 & TRAILER

DWG No.	24027CAD002		
	FIGURE 5		
DATE STAMP	03 NOVEMBER 2025		
PROJECT No.	SCALE	REV.	
24027	1:400 @A3	A	

Filename: 24027CAD002-241103_Cur Path_Review

Appendix C

SIDRA Results

MOVEMENT SUMMARY

Site: [101] Mitchell Hwy/Perc Griffith Way - PM EX 2025
(General)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	[Dist]		Rate		km/h
			veh/h		veh/h					veh	m				
South: Mitchell Highway															
2	T1	All MCs	220	2.9	220	2.9	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	4	25.0	4	25.0	0.004	7.3	LOS A	0.0	0.1	0.44	0.57	0.44	45.3
Approach			224	3.3	224	3.3	0.115	0.2	NA	0.0	0.1	0.01	0.01	0.01	59.6
East: Perc Griffith Way															
4	L2	All MCs	33	0.0	33	0.0	0.059	6.8	LOS A	0.2	1.6	0.48	0.66	0.48	46.9
6	R2	All MCs	18	0.0	18	0.0	0.059	9.9	LOS A	0.2	1.6	0.48	0.66	0.48	38.1
Approach			51	0.0	51	0.0	0.059	7.9	LOS A	0.2	1.6	0.48	0.66	0.48	44.7
North: Mitchell Highway															
7	L2	All MCs	4	0.0	4	0.0	0.189	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	53.6
8	T1	All MCs	360	1.5	360	1.5	0.189	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach			364	1.4	364	1.4	0.189	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles			639	2.0	639	2.0	0.189	0.7	NA	0.2	1.6	0.04	0.06	0.04	58.4

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

SIDRA INTERSECTION 10.0 | Copyright © 2000-2025 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: TTPP - THE TRANSPORT PLANNING PARTNERSHIP | Licence: NETWORK / 1PC | Processed: Friday, 9 May 2025 10:46:02 AM

Project: C:\Users\TimZhang\OneDrive - TTPP\24027 32 Perc Griffith Way, Orange\07 Modelling Files\Model\24027-250414.sipx

MOVEMENT SUMMARY

Site: [101 (2)] Mitchell Hwy/Perc Griffith Way - PM EX + DEV
2025 (General)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	[Dist]		Rate		km/h
			veh/h		veh/h					veh	m				
South: Mitchell Highway															
2	T1	All MCs	220	2.9	220	2.9	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	36	2.9	36	2.9	0.031	7.0	LOS A	0.1	0.9	0.46	0.63	0.46	49.0
Approach			256	2.9	256	2.9	0.115	1.0	NA	0.1	0.9	0.06	0.09	0.06	58.1
East: Perc Griffith Way															
4	L2	All MCs	33	0.0	33	0.0	0.062	6.8	LOS A	0.2	1.6	0.49	0.67	0.49	48.8
6	R2	All MCs	18	0.0	18	0.0	0.062	10.6	LOS A	0.2	1.6	0.49	0.67	0.49	40.8
Approach			51	0.0	51	0.0	0.062	8.1	LOS A	0.2	1.6	0.49	0.67	0.49	46.9
North: Mitchell Highway															
7	L2	All MCs	57	0.0	57	0.0	0.217	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	52.1
8	T1	All MCs	360	1.5	360	1.5	0.217	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	58.9
Approach			417	1.3	417	1.3	0.217	0.8	NA	0.0	0.0	0.00	0.08	0.00	58.3
All Vehicles			723	1.7	723	1.7	0.217	1.4	NA	0.2	1.6	0.06	0.12	0.06	57.4

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Vehicle movement LOS values are based on average delay per movement.
 Minor Road Approach LOS values are based on average delay for all vehicle movements.
 NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
 Two-Way Sign Control Capacity Model: SIDRA Standard.
 Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
 Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
 Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

The Transport Planning Partnership
Suite 402 Level 4, 22 Atchison Street
St Leonards NSW 2065

P.O. Box 237
St Leonards NSW 1590

02 8437 7800

info@tpp.net.au

www.tpp.net.au