TRAFFIX
TRAFFIC AND TRANSPORT PLANNERS

TRAFFIC IMPACT ASSESSMENT (TIA)

Traffic Engineering Assessment
32 Cavalry Avenue, Rutherford

Reference: 25.037r01v03
Date: June 2025

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DOCUMENT VERIFICATION

Job Number	25.037			
Project	32 Cavalry Avenue, Rutherford			
Client	Swing Factory			
Revision	Date	Prepared By	Checked By	Signed
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TRAFFIX

CONTENTS

1. INTRODUCTION

TRAFFIX has been commissioned by Swing Factory to undertake a traffic impact assessment (TIA) in support of a development application (DA) relating to a golf driving range and mini golf located at 32 Cavalry Avenue, Rutherford. The development is located within the City of Maitland Council Local Government Area (LGA) and has been assessed under that Council's controls.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE) prepared separately.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Discusses access and internal design aspects
- Section 8: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site is known as 32 Cavalry Avenue, Rutherford and is located at the end of Cavalry Avenue, Rutherford. It is located 3.1 kilometres north-west of Telarah Railway Station, 4.7 kilometres north-west of Maitland and 33 kilometres north-west of Newcastle.

The irregularly shaped lot consists of two buildings and is currently being used as a golf driving range. It has a northern frontage to Cavalry Avenue, an eastern boundary to Boundary Street and Grand Parade and nearby residential developments. To the west it is bounded by vacant industrial zoned land and to the south by vacant residential zoned land.

Vehicular access is provided via Cavalry Avenue.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**.

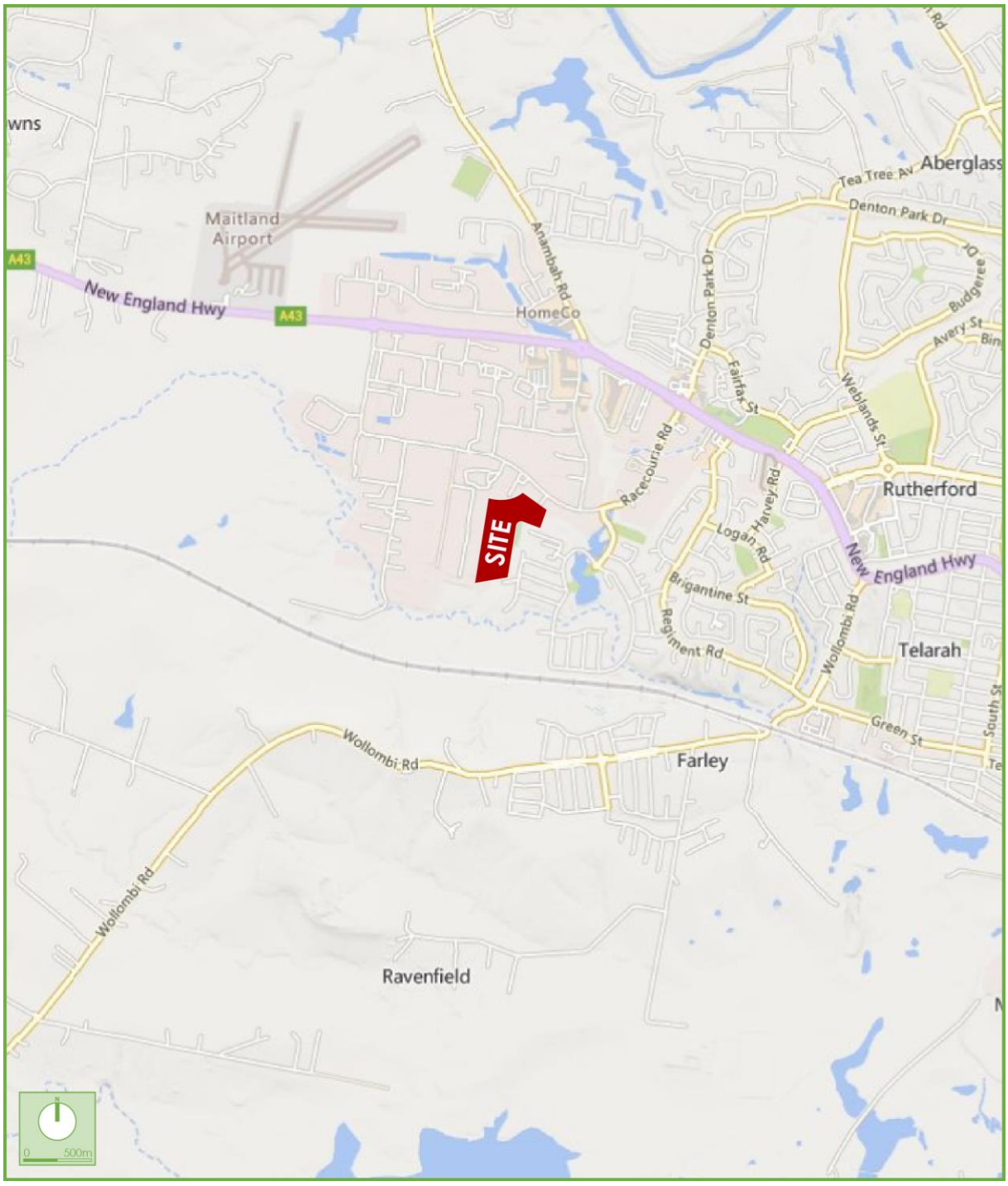


Figure 1: Location Plan

Figure 2: Site Plan

3. EXISTING TRAFFIC CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- Racecourse Road: a local road that traverses in an east-west direction between Kyle Street in the west and the New England Highway in the north-east. It is subject to a 60km/h speed zoning. Racecourse Road generally carries a single lane of traffic in each direction and permits on-street parking along both sides.
- Cavalry Avenue: a local road that traverses in a north-south direction between Racecourse Road in the north and a cul-de-sac in the south. It is subject to a 50km/h speed zoning and carries a single lane of traffic in each direction and permits on-street parking along both sides.

It can be seen in **Figure 3** below that the subject development is located with access to the local and wider road network via Cavalry Avenue and Racecourse Road.

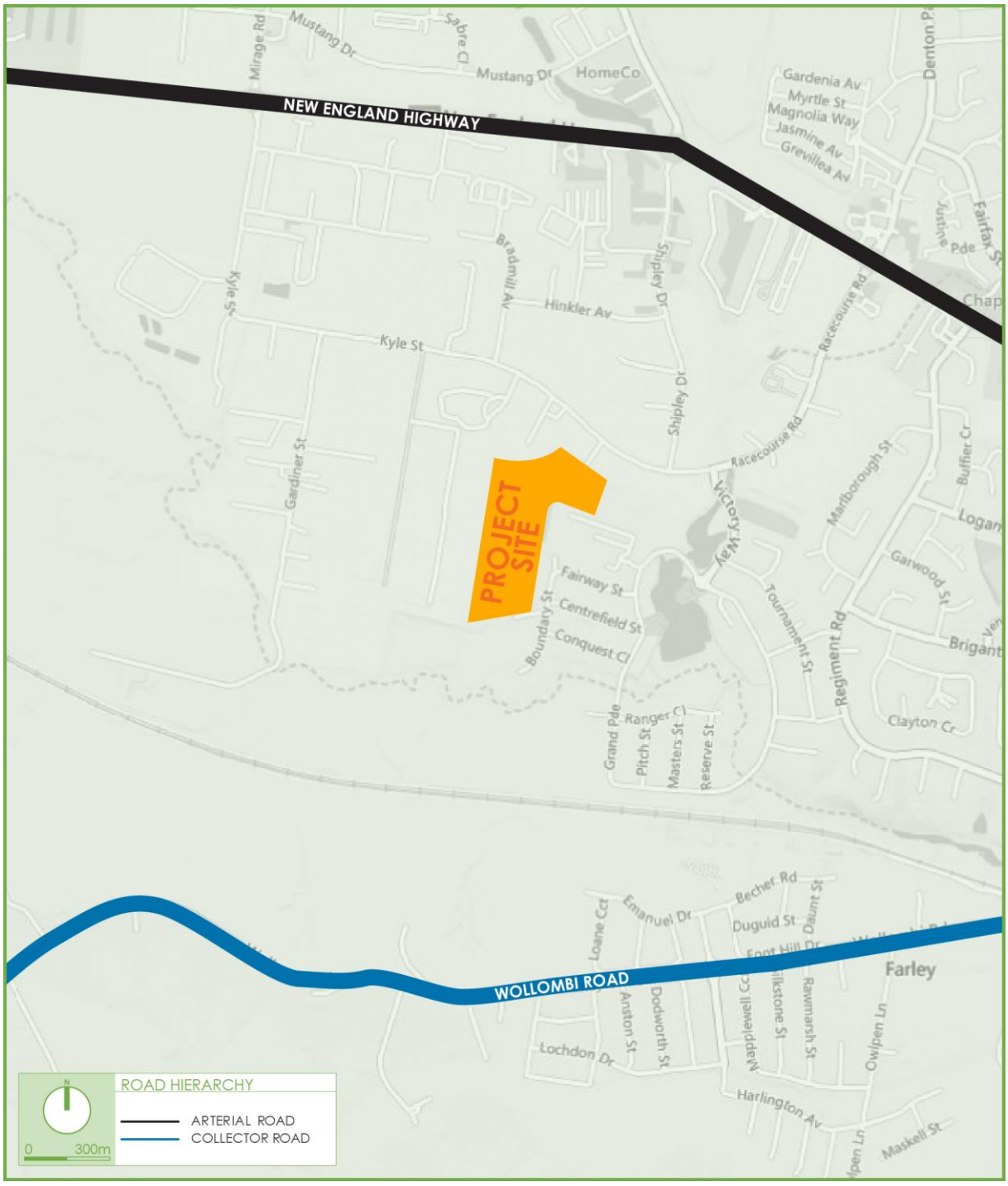


Figure 3: Road Hierarchy

3.2 Public Transport

Public transport options in the vicinity of the subject site are extremely limited noting there are no public transport services within walking distance (400 metres) of the subject site.

4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the Statement of Environmental Effects. In summary, the development for which approval is now sought is for a golf driving range and mini-golf facility with an ancillary club house comprising of the following components:

- 26 Hitting Bays with associated netting.
- 2,000m^2 mini golf course with a maximum capacity of 54 persons.
- Ancillary club house building (approx. 250m^2 GFA).
- Internal access driveway from Cavalry Avenue to the at-grade parking area.
- At-grade carpark providing:
  - 40 car spaces including two (2) accessible spaces, and
  - Two (2) service bays.

The parking and traffic impacts arising from the development are discussed in **Section 5** and **Section 6**. Reference should be made to the plans submitted separately to Council provided in **Figure 5** and also presented in **Appendix A**.

5. PARKING REQUIREMENTS

5.1 Car Parking

5.1.1 Council Controls

The Maitland Development Control Plan (DCP) 2011, Appendix 1 – Car Parking Requirements does not provide carparking rates for golf driving ranges or minigolf facilities. Therefore, a parking assessment based on first principles was undertaken as discussed in more detail below.

5.1.2 First Principles Assessment

The *TfNSW Guide to Transport Impact Assessment (GTIA)* does not provide parking rates for golf driving ranges or minigolf facilities. As such, parking rates have been determined based on a first principles assessment having regard for extensive operator experience at other driving ranges/mini golf facilities under management.

As such, a site-specific parking rate has been derived having regard for the following:

- 1 parking space / driving bay.
  The above rate has been derived from the assumption that all driving bays are likely to be occupied during peak times and each driving bay will generate demand for one (1) parking space since all individuals or groups are likely to arrive in one vehicle.

- 1 parking space / 2 staff members.
  This rate is based on extensive operator experience at other sites under management whereby approximately 50% of staff arrive and park onsite and 50% are dropped off and picked up or car share with other staff members.

- 9 mini golf parking spaces
  This level of provision is considered appropriate for the mini golf component based on extensive operator experience with other centres under management whereby mini golf typically operates at 20% capacity and well under 40% capacity. The mini golf has a maximum capacity of 54 patrons although as discussed, this level of patronage is never reached. In addition, the mini golf primarily attracts families with children that arrive in groups and a vehicle occupancy rate of 2.5 mini golf patrons per vehicle has been

applied to other centres. Therefore, mini golf would attract a parking demand of nine (9) parking spaces (54 patrons x 0.4 capacity / 2.5 patrons per vehicle).

Based on the above, the following parking spaces are required:

- 26 driving bay parking spaces
- 5 staff parking spaces
- 9 mini golf parking spaces

Based on the first principles assessment undertaken above, 40 parking spaces are required and 40 parking space have been provided, thereby ensuring that all parking demands will be accommodated onsite.

5.2 Accessible Parking

The accessible parking requirements to be assessed and signed off by the Accessibility Consultant. All accessible parking spaces to be designed in accordance with AS 2890.6-2022. Reference is to be made to the Accessibility Consultant report prepared separately.

5.3 Bicycle Parking

Council's DCP does not specify any bicycle parking requirements for golf driving ranges / mini golf facilities, and none are provided which is considered appropriate in the circumstances given the nature of the subject development.

5.4 Refuse Collection and Servicing

An at-grade servicing area has been provided on the site adjacent to the clubhouse with access provided via Cavalry Avenue. The servicing area accommodates vehicles up to a 10.1m long heavy rigid waste collection vehicle and has been provided in accordance with AS2890.2 (2018). Reference should be made to the swept path analysis provided in **Appendix B** showing the satisfactory operation of the service vehicle loading arrangements.

6. TRAFFIC AND TRANSPORT IMPACTS

The TfNSW Guide does not provide vehicle trip rates for golf driving ranges or mini-golf establishments. However, it is noteworthy that the subject developments' peak operating times do not coincide with the weekday morning commuter peak (7:30am-9:30am) or evening commuter peak (4:00pm-6:00pm). Morning peak arrivals will comprise staff and some golfers, and the driving range evening peak typically occurs after 6:00pm on weekdays outside of office hours and after the network commuter peak. Therefore, any traffic impacts generated by the subject development are considered minor and will not adversely impact the operation of surrounding streets or intersections.

7. ACCESS AND INTERNAL DESIGN ASPECTS

7.1 Site Vehicular Access

The subject development contains 40 parking spaces with access via Cavalry Avenue, a local road. It therefore requires a Category 1 driveway under AS2890.1 (2004), being a combined entry/exit width of 6.0 metres. In response, a combined 6.0-metre-wide access is provided sufficient to accommodate all vehicle movements to and from the subject site, including the largest service vehicle required to access the subject site being a 10.1m rigid vehicle.

7.2 Internal Design

The internal car park complies with the requirements of AS 2890.1 (2004), AS 2890.2 (2018) and AS 2890.6 (2022), and the following characteristics are noteworthy:

7.2.1 Parking Modules

- All standard car parking spaces have been designed in accordance with User Class 2 being for medium-term parking. These spaces are provided with a minimum space length of 5.4m, a minimum width of 2.5m and a minimum aisle width of 5.8m
- All spaces located adjacent to obstructions of greater than 150mm in height are provided with an additional width of 300mm.
- All accessible parking spaces have been designed in accordance with AS 2890.6 (2022), being 2.4m wide, 5.4m long and situated immediately adjacent to a dedicated shared area or the circulating aisle.

7.2.2 Clear Head Heights

- A minimum clear head height of 4.5m is provided for all areas accessed by the service vehicle as required by AS 2890.2 (2018).
- A minimum clear head height of 2.5m is provided above all accessible spaces in accordance with AS 2890.6 (2022).

7.2.3 Loading

- A minimum bay width of 3.5m and length of 10.1m is provided for the largest service vehicle required to access the subject development being a 10.1m HRV as required under AS 2890.2 (2018).

7.2.4 Other Considerations

- All vehicles are able to enter and exit the subject site in a forward direction.
- Swept path analysis has been undertaken of all critical vehicle movements as presented in **Appendix B**.

7.3 Summary

In summary, the internal configuration of the car park has been designed in accordance with AS 2890.1 (2004), AS 2890.2 (2018) and AS 2890.6 (2022). It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

8. CONCLUSIONS

In summary:

- The proposal seeks approval for a golf driving range and minigolf with an ancillary clubhouse.
- The proposed development makes provision for a total of 40 spaces, including two (2) accessible parking spaces and two (2) service bays. The first principles assessment is deemed acceptable for the reasons outlined in this report and will satisfactorily accommodate the operational parking demands of the proposed. As such, all normal parking demands will be readily accommodated on-site.
- Traffic impacts are considered minor given the subject developments' peak operating times do not coincide with the morning or afternoon commuter peaks and impacts on surrounding roads and intersections will be negligible in this regard.
- The proposed at-grade car park has been assessed to comply with the requirements of AS 2890.1 (2004), AS2890.6 (2022) and AS 2890.2 (2018), thereby ensuring safe and efficient operation.
- Waste collection and servicing will be accommodated onsite and all service vehicles can enter and exit the subject development in a forward direction.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds. .

APPENDIX A

Architectural Plans

ISSUE	DATE	DESCRIPTION
A	26/02/2025	FOR INFORMATION
B	07/03/2025	FOR INFORMATION
C	14/03/2025	FOR INFORMATION
D	19/03/2025	FOR INFORMATION
E	27/03/2025	FOR INFORMATION
F	09/04/2025	CO-ORDINATION ISSUE
G	12/05/2025	CO-ORDINATION ISSUE

RENOVATION LEGEND:

- EXISTING BUILDING FABRIC TO BE DEMOLISHED
- EXISTING BUILDING FABRIC TO BE RETAINED (WHEN CUT IN PLAN OR SECTION)
- NEW BUILDING FABRIC WHEN CUT IN PLAN OR SECTION

HATCH LEGEND:

- EXTENT OF CLUB CARPARK
- EXTENT OF NEW BUILDING WORKS
- EXTENT OF MINI GOLF & DRIVING RANGE WORKS
- LANDSCAPE AREAS
- PROPOSED TREES
- WATER FLOW - GRADE TO CARPARK LANDSCAPING / TREES

1 **PROPOSED GROUND FLOOR PLAN**
Scale: 1 : 200

DRAFT ONLY

CLIENT: SWING FACTORY

PROJECT: SWING FACTORY - RUTHERFORD

ARCHITECT: ALTIS ARCHITECTURE

DRAWING TITLE: PROPOSED GROUND FLOOR PLAN

NOTES:
Nominated architect: Andrew O'Connell: 9018

Use only figured dimensions.
All discrepancies to be referred to Altis Design Pty Ltd prior to construction.
Ensure compliance with the Building Code of Australia and all relevant Australian Standards and Authority requirements.

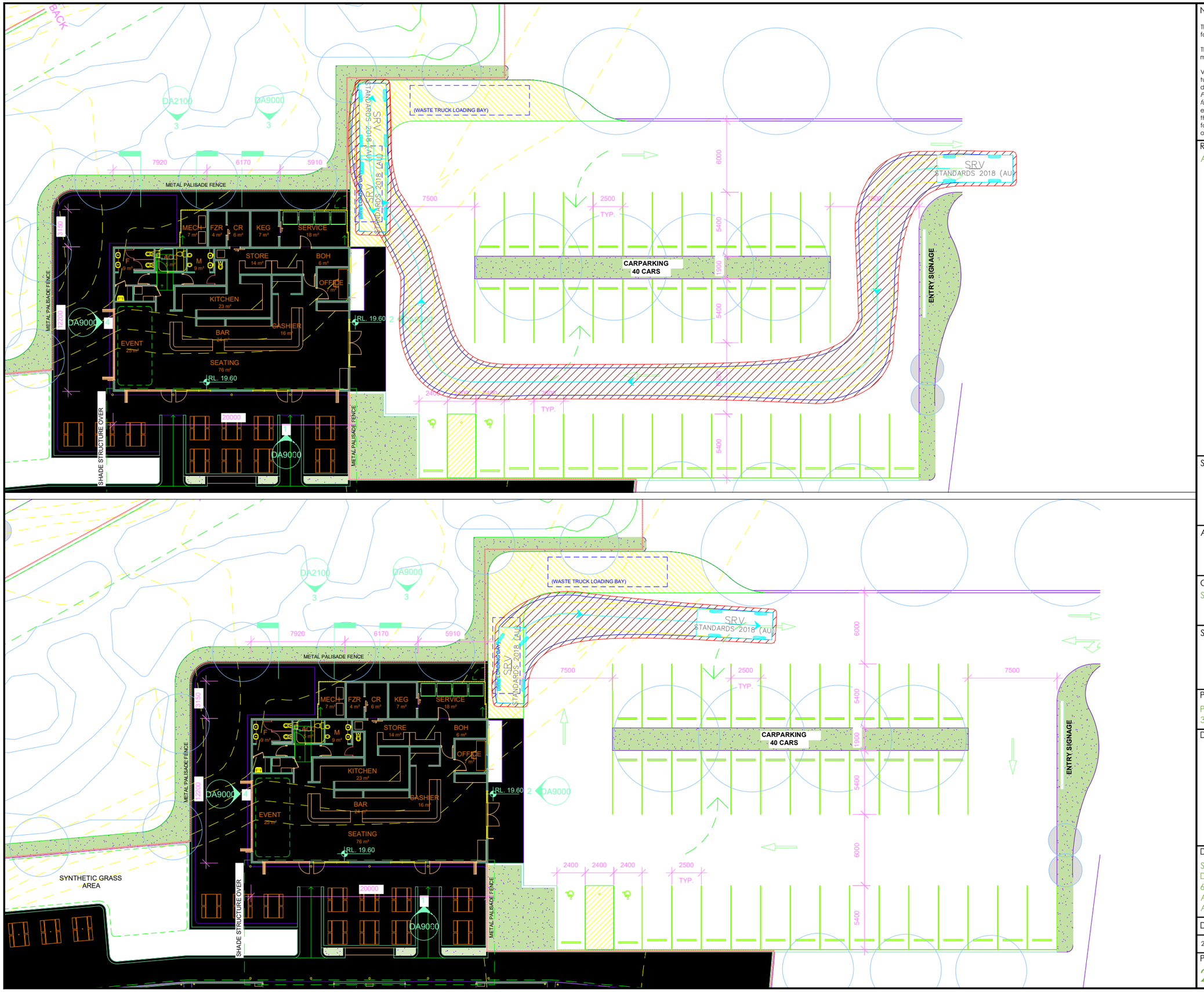
NORTH

SCALE: As indicated @ A1
DATE: 14/03/2025
DRAWN BY: HG
CHECKED BY: DF
PROJECT NO: 3406.01
DRAWING NO: DA1100
ISSUE: G
CAD FILE: 3406.01 Swing Factory Rutherford-RD_R24.rvt

12/05/2025 6:15:06 PM

APPENDIX B

Swept Path Analysis



Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards *(AS/NZS 2890.1:2004 Parking facilities - Off-street car parking,* and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

Rev.	Revision Note	By.	Date
A	Initial Design Review	TM	19-05-25

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect

Client
Swing Factory

Scale / Plan Orientation
0 2 4 6 8m
1:200 @ A3

Project Description
Proposed Golf Driving Range
32 Cavalry Ave, Rutherford

Drawing Prepared By

TRAFFIX
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Surry Hills, NSW 2010
PO Box 1124
Strawberry Hills, NSW 2012
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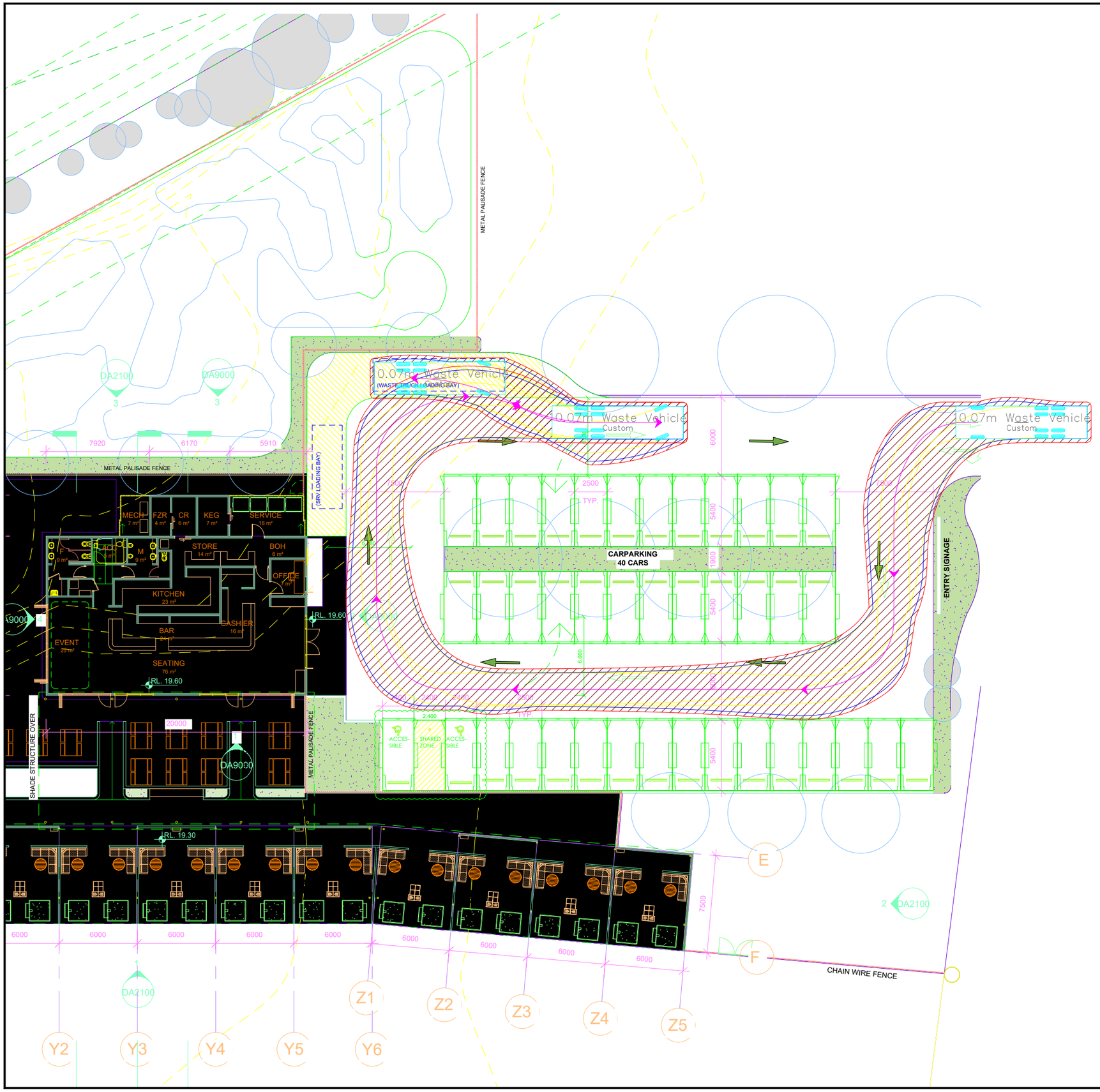
Drawing Title
Site Plan
Design Review & Swept Path Analysis
6.4m Small Rigid Vehicle
Access To Loading Bay (Ingress/Egress Manoeuvres)
Above: Ingress Below: Egress

Drawn:	Checked:	Date:
TM	JP	19-05-2025

25.037d02v01 TRAFFIX [250513 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
25.037	DA	TX.02	A



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Architect

Client
Swing Factory

Scale / Plan Orientation
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1:200 @ A3

Project Description
Proposed Golf Driving Range
32 Cavalry Ave, Rutherford

Drawing Prepared By

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Drawing Title
Site Plan
Design Review & Swept Path Analysis
10.07m Waste Vehicle
Access To Loading Bay (Ingress/Egress Manoeuvre)

Drawn:	Checked:	Date:
TM	JP	19-05-2025

25.037d02v01 TRAFFIX [250513 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
25.037	DA	TX.01	A