

# TURNER TRAFFIC

## **67-75 Lawford Street, Greenacre NSW** Traffic and Transport Impact Assessment

Prepared for

**Allamcorp Pty Ltd**

18 December 2024

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Project Number 056

67-75 Lawford Street, Greenacre NSW  
**Traffic and Transport Impact Assessment**

TURNER TRAFFIC  
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# DOCUMENT VERIFICATION

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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# 1. INTRODUCTION

Allamcorp Pty Ltd commissioned Turner Traffic to prepare a transport impact assessment for the site located at 67-75 Lawford Street, Greenacre NSW (Lot 125, 126, 127 and 128 DP 10870). A development application is being proposed to redevelop the site from light industrial scrap metal yard to a self-storage development. The area surrounding the site is predominately low density residential and industrial. The site is located within the City of Canterbury Bankstown (Council) local government area (LGA) as shown in Figure 1.

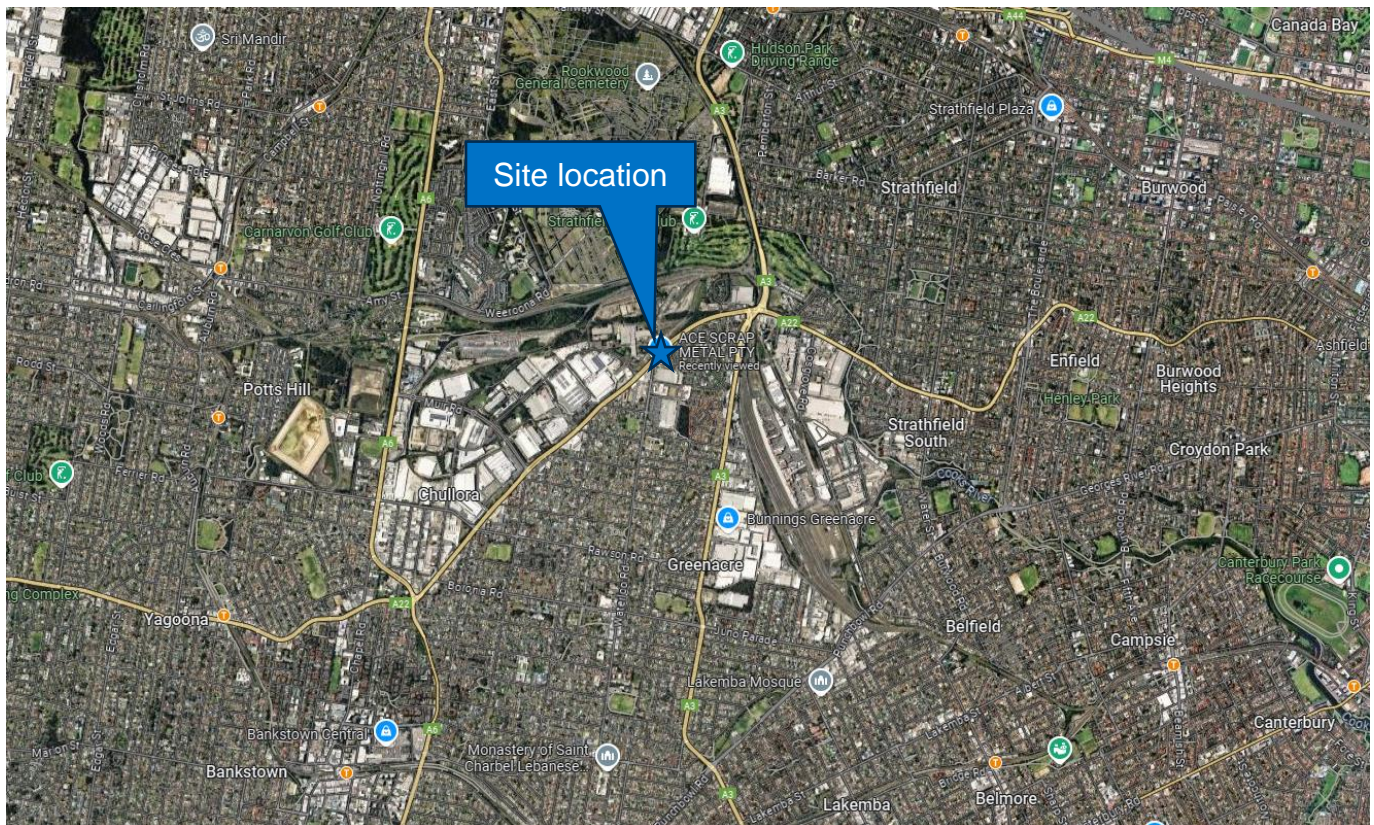


Figure 1: Site location



## 2. EXISTING CONDITIONS

### 2.1 EXISTING ROAD NETWORK

To manage the extensive network of roads for which councils are responsible under the Roads Act 1993, Transport for NSW (TfNSW) in partnership with local government established an administrative framework of State, Regional, and Local Roads. State Roads are managed and financed by TfNSW and Regional and Local Roads are managed and financed by councils.

Regional Roads perform an intermediate function between the main arterial network of State Roads and council controlled Local Roads. Due to their network significance TfNSW provides financial assistance to councils for the management of their Regional Roads. Key State and Regional roads which provide access to the site are illustrated in Figure 2.

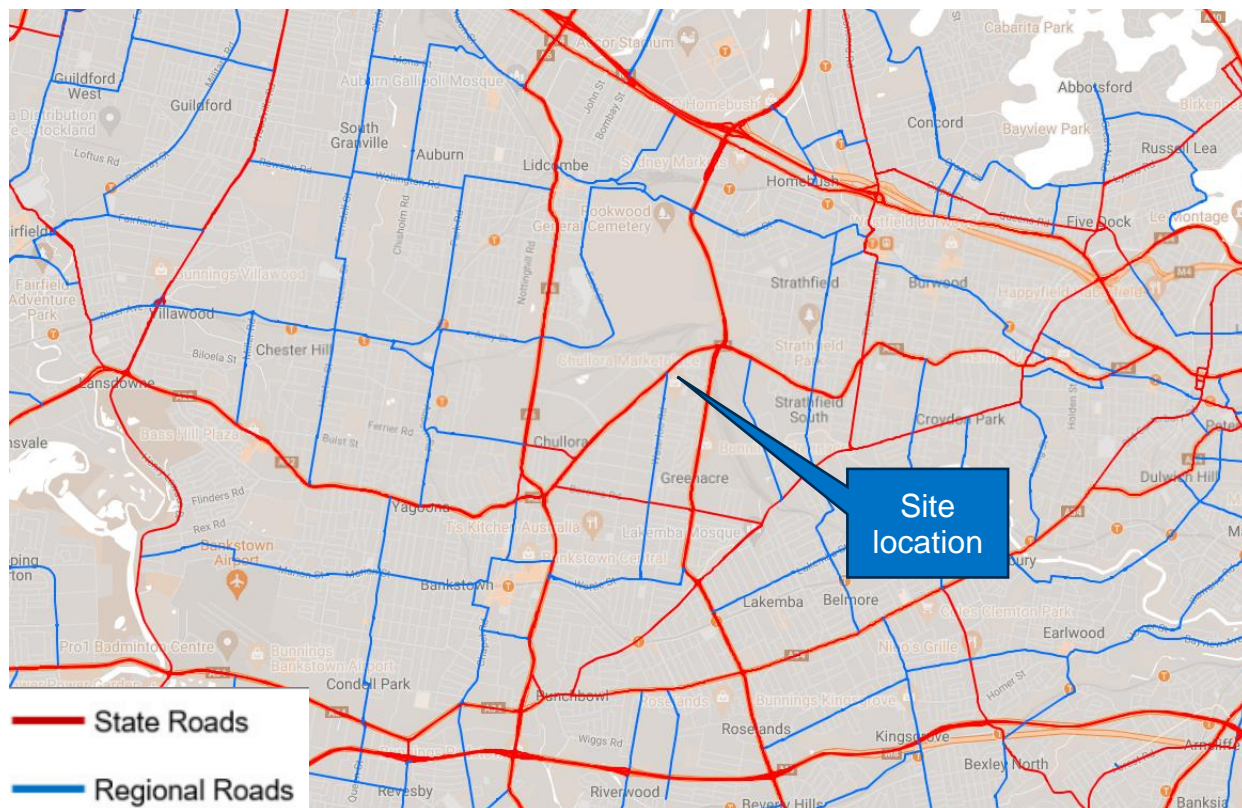


Figure 2: Classified Roads surrounding the site

The site is located on Lawford Street, a two-way local street that terminates before Hume Highway (A22) and Roberts Road (A3), connecting to the surrounding local road network. Robinson Street is the next connecting local street that provides left in, left-out access to Hume Highway (A22). Further east, Rebecca Road provides left in, left-out access to Roberts Road (A3).

## 2.2 PUBLIC TRANSPORT

The nearest bus stops are located on Waterloo Road west of the site (stop IDs 2190113 eastbound and 2190147 westbound) within 400m (or 5 minutes' walk) of the site. Buses surrounding the site are serviced by Transit Systems as part of the R3 Western network contract area, with the local network shown in Figure 3. Buses operate every 10 minutes throughout the day and connects between Burwood and Liverpool via Bankstown.

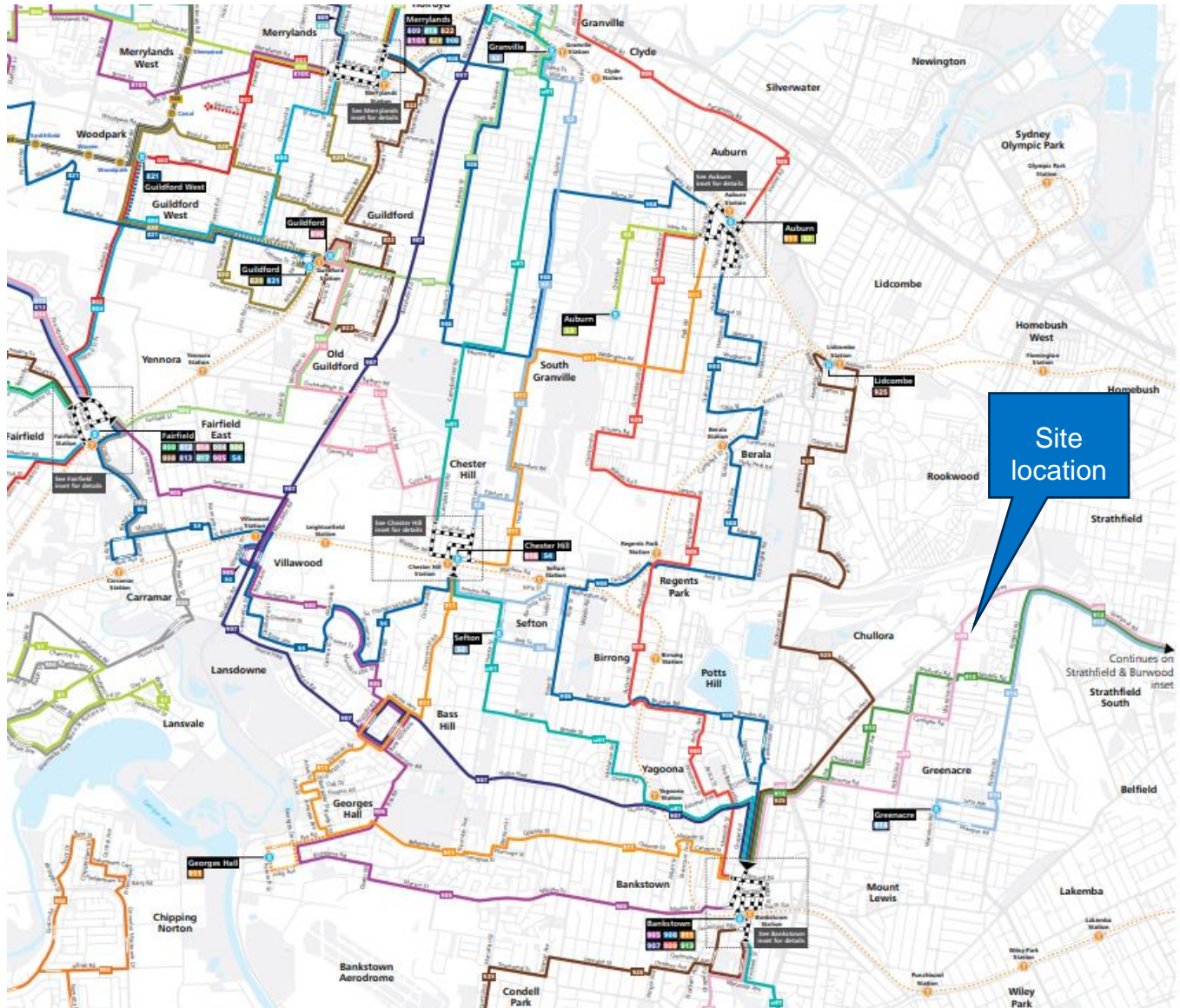


Figure 3: Public transport (source: TfNSW)

## 2.3 WALKING AND CYCLING

The footpath on Lawford street is located on the northern side of the road. This connects to local footpath network, including Hume Highway footpaths and signalised crossings of Hume Highway and Waterloo Road west of the site. Pedestrians therefore have a relatively adequate network of footpaths to connect to the surrounding amenities given the low-density residential nature of the area.

Cycling in the area is mostly a combination of on-road cycle routes with minimal marked lanes.



# 3. PROPOSED DEVELOPMENT

## 3.1 DEVELOPMENT DESCRIPTION

The proposed development located at 67-75 Lawford Street, Greenacre NSW involves the redevelopment of the current light industrial uses into approximately 211 self-storage units of mixed sizing. The self-storage gross floor area (GFA) will be approximately 2,494 sqm, allowing up to over four levels, including a basement level with up to 13 car parking spaces across the site. The development surrounds an existing communication and services easement existing in the centre of the site with direct access to the street.

The site plan is shown in Figure 4, which shows the proposed ground floor plan including the frontage to Lawford Street. This shows up to three driveways which increases the vehicle access driveways by one onto Lawford Street. Figure 5 shows the proposed basement plans inclusive of the car parking. It is proposed to retain the vehicle bay for the communications easement.

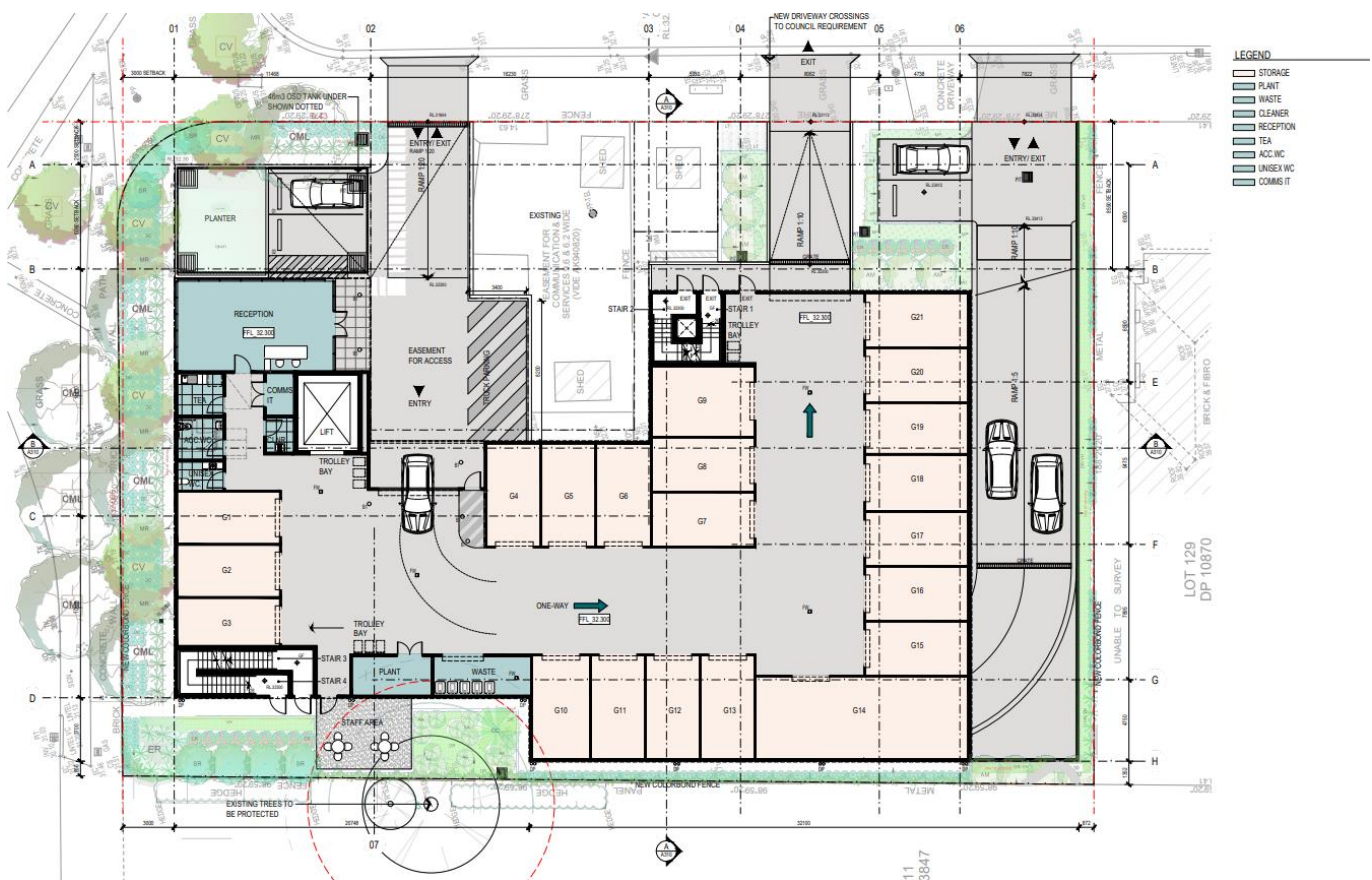


Figure 4: Site plan (source: crawford)

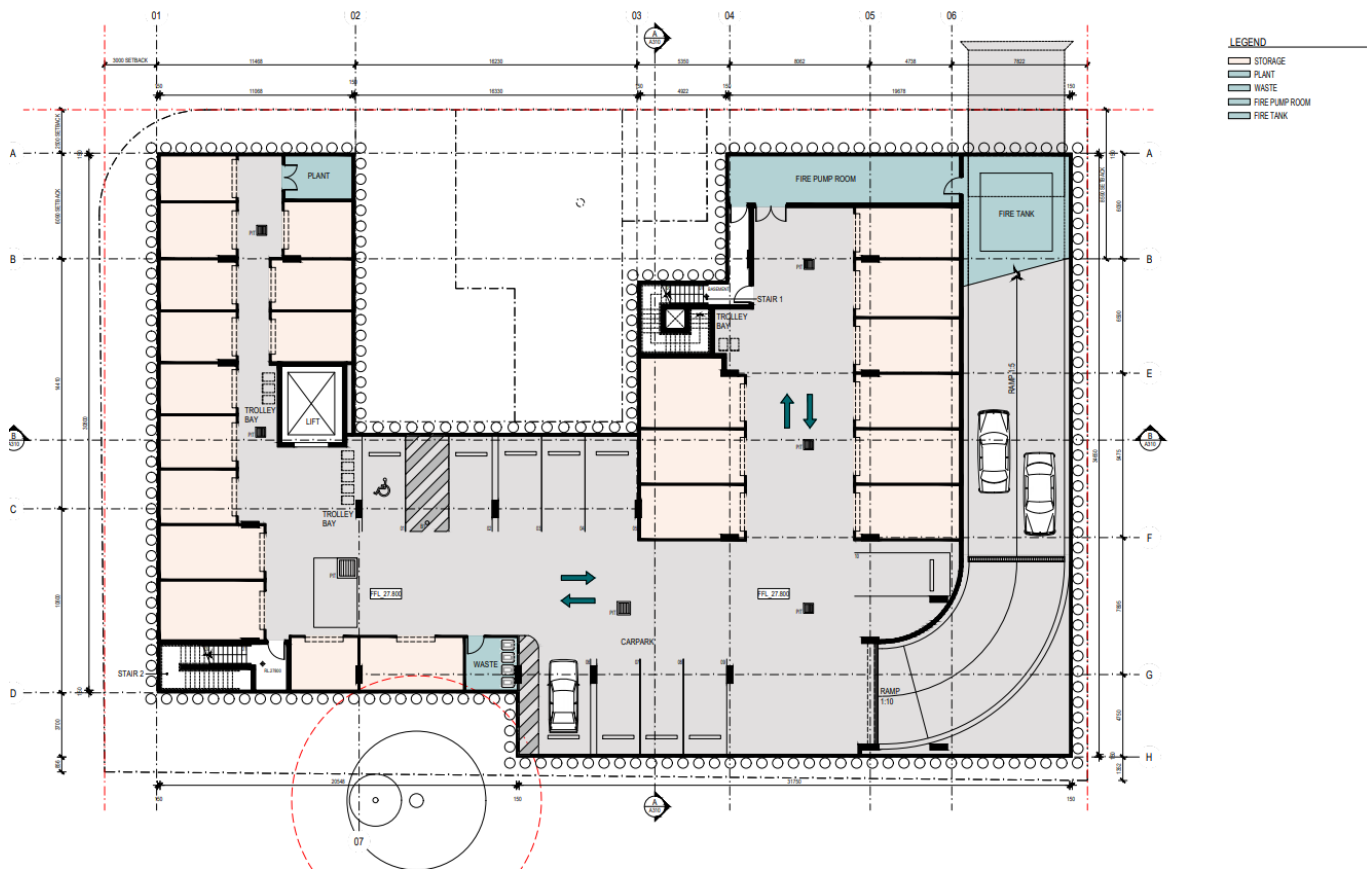


Figure 5: Basement level 1 (source: crawford)

## 3.2 PROPOSED SITE ACCESSSES

The site has two existing vehicle access driveways accessing the site from the south side of Lawford Street. It is proposed to remove these driveways and provide three vehicle driveways as shown on Figure 4. Two driveways will be one-way, and the eastern driveway will be two-way. As such, it is proposed to have a one-way circulation on the ground floor, with a separated ramp to the basement on the east side of the site. Given Lawford Street is a relatively quiet local road with up to four traffic lanes of width available, the arrangement is considered manageable. Swept paths of the arrangement are contained within Appendix A – Swept paths.

The Council Development Control Plan (DCP) 2023 was consulted for other provisions across the site. The site will maintain compliant access in consideration of the DCP parts reviewed by providing access via a local street, providing for off-street car parking and meeting the requirements of the relevant provisions. Access, car parking and manoeuvring for the development will also comply with the following Australian Standards:

- AS2890:1:2004 Parking facilities Part 1: Off-street car parking
- AS2890.2:2018 Parking facilities Part 2: Off-street commercial parking facilities
- AS2890.3:2015 Parking facilities Part 3: Bicycle facilities
- AS2890.6:2022 Parking facilities Part 6: Car parking for people with disabilities

Access control is proposed to make the site secure within the basement and on ground floor. All control points are provided well within the site to cater for queuing and will not impact on the street. Generally patrons will be provided with access remotes to minimise any need for intercoms and card readers, however the staffed office will be provided near the entry to allow for visitation if required.

### 3.3 PARKING ARRANGEMENTS

The site is defined as a storage premises land use from Councils Local Environment Plan 2023. Consulting the DCP, Part 3.2 was consulted for car parking rates. The closest use to fit the storage definition was “*industries*” which has a rate of 1 space per 100 sqm GFA. Given storage premises do not include warehouse or distribution centre which is a rate of 1 per 300 sqm GFA, there were no parking rates that reasonably provided for the storage premises use which would case an overprovision.

A study titled “*Study Results and Findings | Self Storage Facility Traffic and Parking Study*” by Aurecon in 2009 and 2012 underwent a comprehensive assessment of over 32 self-storage businesses across Australia. It took data from operating sites, including what parking and traffic generation occurs across these sites. Focusing on the parking provision, self-storage provides for two distinct areas including office (administration) and retail function) and the storage areas made up of the various sized units. This development accounts for both functions and will need to provide parking accordingly. Therefore, the recommendation from the study for the proposed size of the site is based on 95<sup>th</sup> percentile parking accumulation as follows:

- Office parking – 1 car parking space
- Storage parking area – 2 car parking spaces
- Staff parking – 2 car parking spaces
- Trailer/ute parking – 1 car parking space

The site provides for four ground level car parking spaces and up to 9 basement car parking spaces. The ground level car parking would be used by visitors and retail functions as they are provided outside the secure zone.

Accessible parking needs to be provided based on calculating the total number of parking spaces as per Table D3.5 in the National Construction Code. Disability Discrimination Act (DDA) notes compliance with AS2890.6:2022 for accessible parking. On the basis of the class of facility, one parking space will be required which has been provided as accessible car parking as required.

Given the operating characteristics of the site, other rates like motorcycle parking and bicycle parking are not considered for the site. If required, a bicycle parking space could informally be provided for staff within the secure area of the site near the office. End of trip facilities including an accessible toilet is provided.

### 3.4 SERVICING AND LOADING/UNLOADING

The Aurecon 2012 study notes that medium trucks up to 14.5m long trucks should be provided to access the site. Given that 14.5m long vehicles are generally coaches and long rigid buses, it is assumed that 8.8m medium rigid vehicles (MRVs) should be provided for the site access which are the common service rigid truck types and commensurate with Pantechnicons that are commonly used by removalist companies. A 12.5m Heavy Rigid Vehicle (HRV) can be provided on street if required. The 8.8m MRV can manoeuvre in the one-way clockwise direction through ground floor. The vehicle would likely stop near the goods lift and use trolleys that will be distributed throughout the levels if required.

A waste room is also provided within the secure area on ground floor. Waste collection will likely occur by private contractor that can access the site as required given an 8.8m MRV can traverse the ground floor. See the waste management report for further details.



# 4. TRAFFIC ASSESSMENT

## 4.1 TRAFFIC GENERATION

Consulting the Guide to Transport Impact Assessment (GTIA) by TfNSW 2024, traffic generation was reviewed for the proposed uses. The closest use was large format warehousing, which again is not particularly relevant to storage uses. Therefore, the Aurecon 2012 report was also consulted. It found that the site has quite unique characteristics. As described in Section 3.3 Parking arrangements, the site has two main function areas. Assuming the standard operating hours are 8am to 6pm Monday to Saturday, and 10am to 4pm Sunday (no out of hours access), then the following rates in Table 1 was ascertained from the dataset combining office and storage access:

*Table 1: Reference vehicle trip generation rates (Source: Aurecon 2012)*

Type	Average	Median	95 <sup>th</sup> percentile
AM Weekday Peak Hour	6	4	15
PM Weekday Peak Hour	7	6	19
Weekday Daily	58	56	132
Weekend Peak Hour	14	10	30
Weekend Daily	52	42	100

Utilising the 95<sup>th</sup> percentile peak hours, it is estimated that the site could generate up to 30 peak hour vehicle trips on the weekend and up to 19 vehicle peak hour trips in the weekday peak hour. The study noted it was likely that the site would be accessed by vehicles instead of active transport trips, therefore the site has been designed to accommodate this as the peak person trips as well.

Considering the existing uses as a light industry scrap metal yard, 0.5 trips per 100sqm GFA could be generated across a site area of up to 2,200 sqm. This accounts for approximately 10-11 peak hour vehicle trips. Discounting the existing site's 11 vehicle trips, the site could conceivably generate an additional 19 vehicle trips in the site's peak hour.

## 4.2 TRAFFIC DISTRIBUTION

As noted in Section 2.1, the local road network is likely primarily accessed via Robinson Street and Rebecca Road given that it connects back to the state road network. It is assumed all development vehicles will continue to access these routes to enter and exit the site.

## 4.3 ROAD NETWORK ASSESSMENT

Provided the existing site assessment operates with a good level of service; it can be assumed that the development will continue to show this. The analysis indicates minimal additional peak hour traffic generation during the critical commuter peak hours. This level of vehicle activity is considered to have a negligible impact given the following factors:

- The additional traffic movements are considered negligible in the context of surrounding existing traffic volumes; and
- As previously noted in Section 3.2 of this document, the site has appropriate levels of parking and a traffic management solution for vehicle movements.

In the above context the road network impacts of the proposal are minor and would not impact the operation of the adjacent road network and therefore there is no impact or negligible impact.

## 4.4 CONSTRUCTION RELATED ASPECTS

A separate construction traffic management plan will be prepared at later stages of the project when a construction contractor is appointed. It will detail the peak construction traffic movements and staging associated with the development, including both demolition and construction aspects. It is likely that the impacts of construction will be less than the operational impacts and follow similar local routes as per the operational distribution back to the classified road network.

## 5. SUMMARY AND CONCLUSIONS

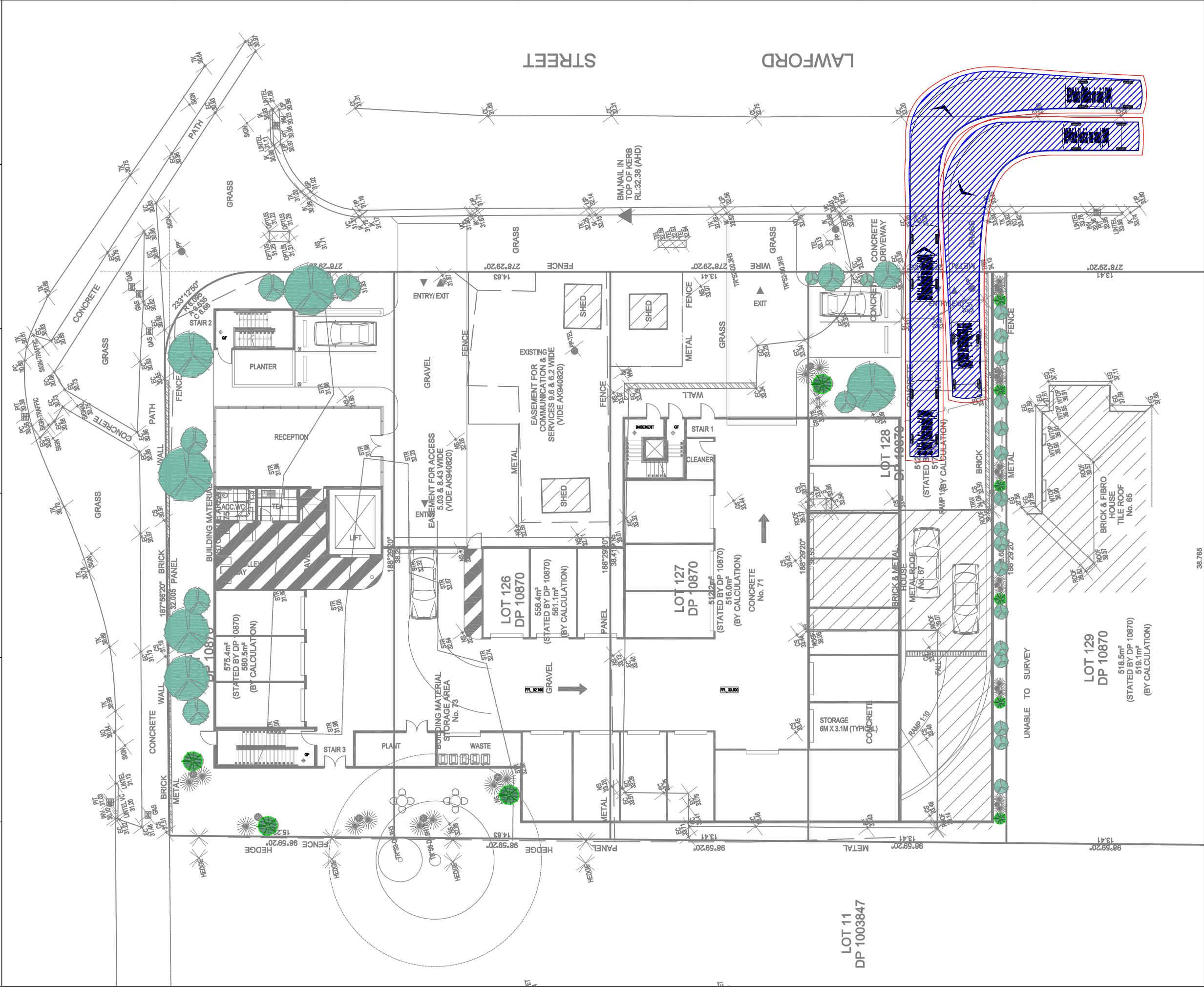
This review has described the potential traffic and transport impacts of the proposed redevelopment at 67-75 Lawford Street, Greenacre NSW. Key findings of the review are as follows:

- The site is located in an established urban area with a good network of public and active transport options if required;
- A total of 13 off-street car parking spaces (with accessible parking provision) and compliant accessible car parking are proposed;
- The site can accommodate appropriate levels of visitor and staff parking, and are compliant with relevant standards;
- Waste and large vehicle servicing will operate from within the site via a managed one-way loop, which is wide enough to cater for 12.5m Heavy Rigid Vehicles;
- The development will be responsible minimal increase in peak hour traffic generation, with minimal impact on the surrounding network;
- The site's access driveways are appropriate for the development with minimal traffic movements, compliant with relevant standards and the DCP;
- A Construction Traffic Management Plan can be prepared in future stages to further demonstrate that the site can minimise transport impacts to the surrounding area.

In summary, the proposed development is considered to have a minimal impact on the local transport network.

# APPENDIX A – SWEPT PATHS





TURNER TRAFFIC

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Client  
ACE Development

Job Title  
67-75 Lawford Street  
Greenacre

Drawing Title  
B99 paths  
Ground Level  
Basement access

Scale at A3 1:250

Discipline Transport

Drawing Status  
Draft

Job No  
056

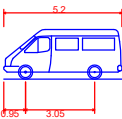
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SKT001

Issue  
B

Legend

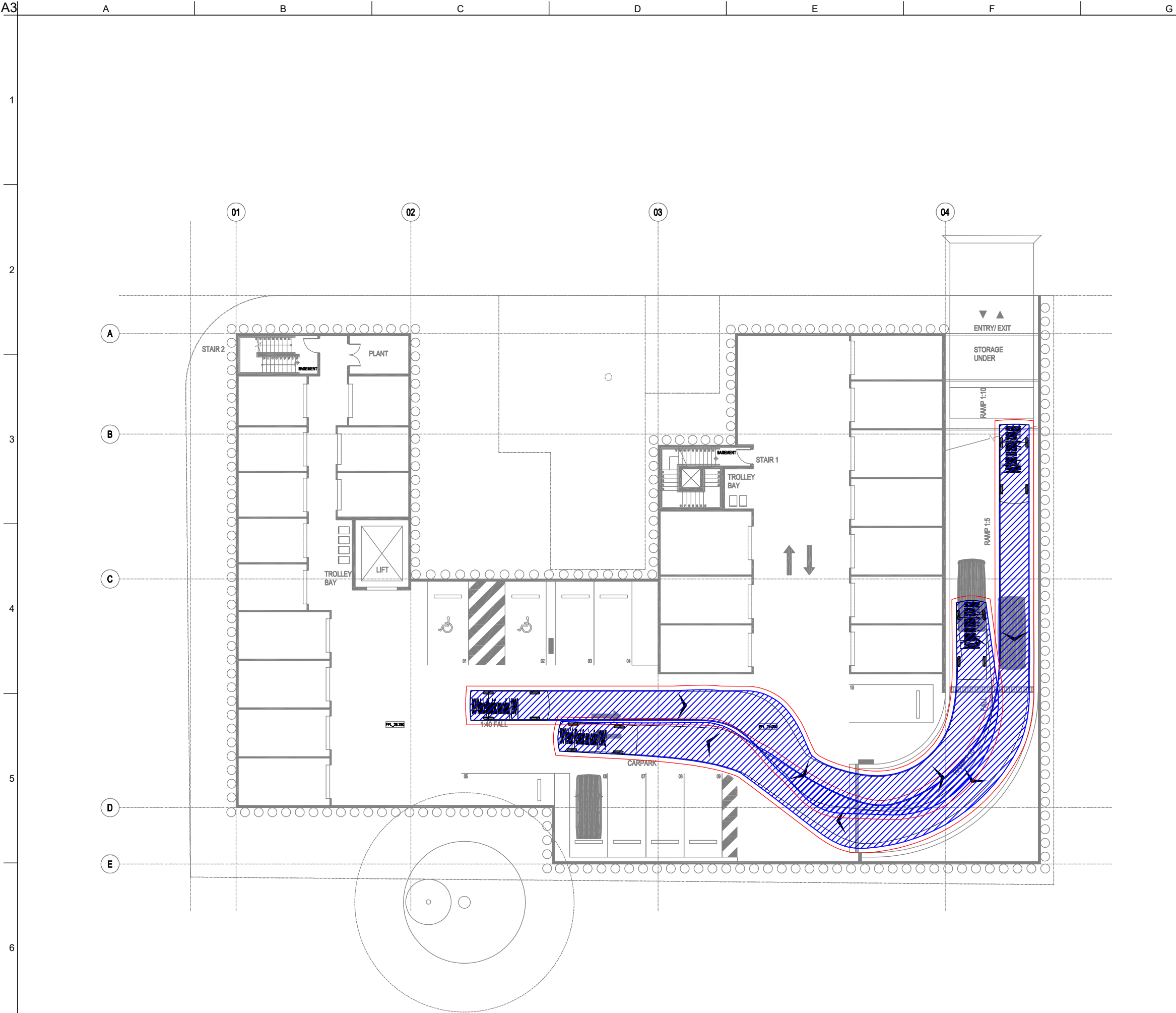
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- 300mm Envelope
- Wheel Envelope
- Redesign

Design Vehicle(s)



B99 Vehicle  
Overall Length 5.200m  
Overall Width 1.940m  
Overall Height 2.200m  
Min Body Height 0.312m  
Track Width 1.840m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 6.250m

B	18/12/24	JRT	JRT	JRT
A	28/11/24	JRT	JRT	JRT
Issue	Date	By	Chkd	Appd



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Client  
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Job Title  
67-75 Lawford Street  
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Drawing Title  
B99 paths  
Basement Level

Scale at A3  
1:250

Discipline  
Transport

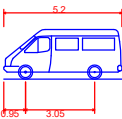
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Job No	Drawing No	Issue
056	SKT002	B

Legend

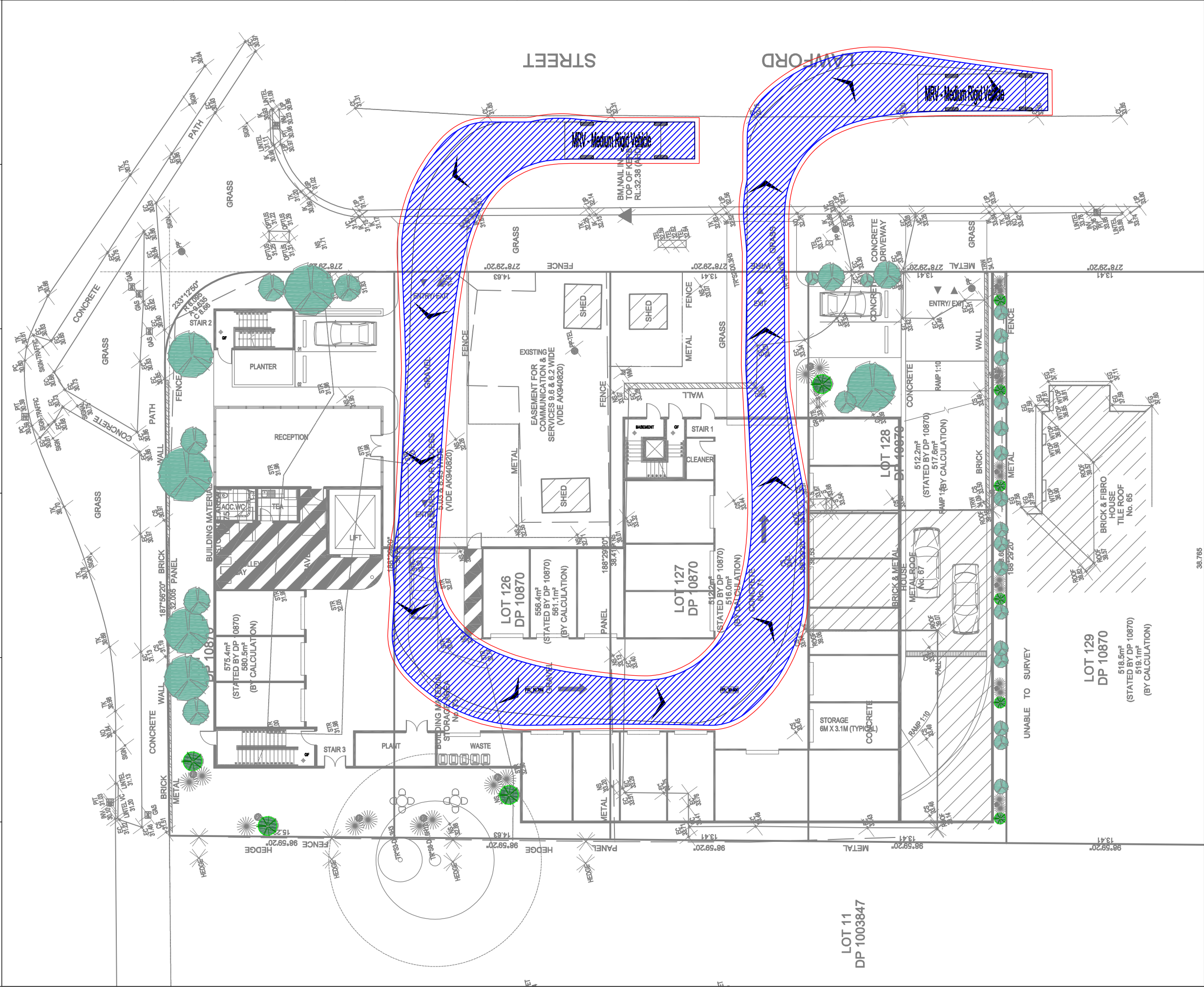
- Body Envelope
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- Wheel Envelope
- Redesign

Design Vehicle(s)



B99 Vehicle  
Overall Length 5.200m  
Overall Width 1.940m  
Overall Body Height 2.200m  
Min Body Ground Clearance 0.312m  
Track Width 1.840m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 6.250m

B	18/12/24	JRT	JRT	JRT
A	28/11/24	JRT	JRT	JRT
Issue	Date	By	Chkd	Appd



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Client

ACE Development

Job Title

67-75 Lawford Street  
Greenacre

Drawing Title

MRV paths  
Ground Level

Scale at A3

1:250

Discipline

Transport

Drawing Status

Draft

Job No

056

Drawing No

SKT003

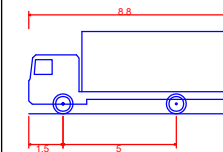
Issue

B

## Legend

- Body Envelope
- 300mm Envelope
- Wheel Envelope
- Redesign

## Design Vehicle(s)



MRV - Medium Rigid Vehicle  
Overall Length 8.800m  
Overall Width 2.500m  
Overall Body Height 3.633m  
Min Body Ground Clearance 0.428m  
Track Width 2.500m  
Lock-to-lock time 4.00s  
Curb to Curb Turning Radius 10.000m

B	18/12/24	JRT	JRT	JRT
A	28/11/24	JRT	JRT	JRT
Issue	Date	By	Chkd	Appd