Traffic Impact Assessment

248 Railway Parade, Carlton NSW 2217

November 2019

APEX ENGINEERS

Type of Assessment: Traffic Impact Assessment
Site Location: 248 Railway Parade, Carlton NSW 2217
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APEX ENGINEERS

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1. Introduction

APEX Engineers were engaged by MODERINN Pty Ltd to provide a traffic impact assessment as a part of the development application for the proposed boarding house development at 248 Railway Parade, Carlton NSW 2217.

This report has been structured into following sections:

- **Section 2** Describes the existing transport conditions in the locality and provides an overview of the proposed development;
- **Section 3** Assesses the statutory parking provision requirements applicable to the subject development;
- **Section 4** Provides a review of the proposed car park design in accordance with the relevant Australian Standard requirements;
- **Section 5** Provides an estimate of the traffic impact anticipated to be generated by the proposed development onto the surrounding local road network; and
- **Section 6** Provides the summary and conclusions of the study.

2. Background and Existing Conditions

2.1 Site Description and Local Road Network

The subject site is located at 248 Railway Parade in Carlton, at the corner of Blake Street and Railway Parade (both of which are local roads). It includes a land area of approximately 410 square metres and is located within a Mixed Use (B4) zone. The site is currently occupied by a mechanical repair shop, which obtains vehicle access off Blake Street.

Figure 1 Highlights the site location from an aerial perspective.

Figure 2 Illustrates Blake Street and Railway Parade as seen at the site frontage.

Figure 1: Location of the Subject Site

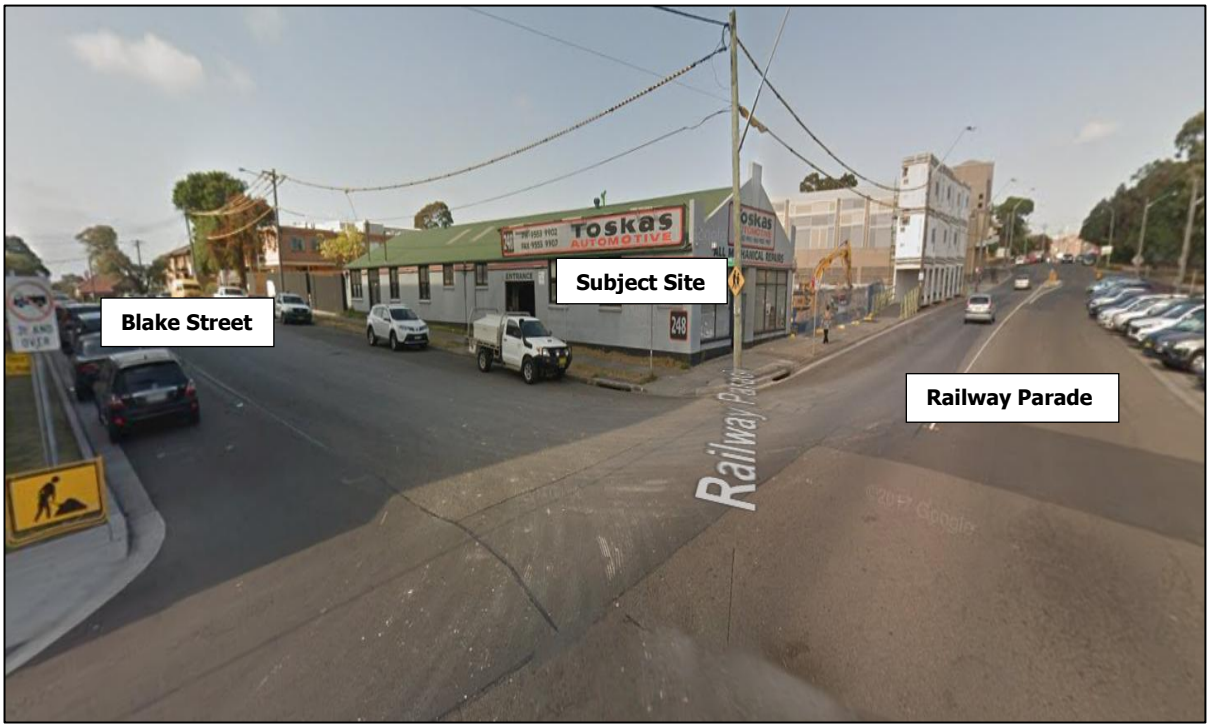


Figure 2: Blake Street and Railway Parade at the Site Frontage

2.2 Details of the Proposed Development

The subject proposal seeks to construct a multi-storey boarding house building within the subject site at 248 Railway Parade in Carlton. The proposed boarding house will consist of 50 boarding rooms and a retail shop (with 80 square metre GFA) at the ground level.

On-site car parking is provided across four basement levels, with vehicle access off Blake Street. A car lift system is proposed to provide access across levels (basement levels and the ground level). The overall car park provides a total of 27 car spaces (including 3 disability accessible car spaces), 1 loading bay, 10 motorcycle spaces and 10 bicycle spaces, as summarised below;

- At ground level – a loading bay (for a small rigid vehicle) and 2 waiting bays for vehicles using the car lift;
- At basement level 1 – 8 car spaces (includes 1 disability accessible space) and 3 motorcycle spaces;
- At basement level 2 – 8 car spaces (includes 1 disability accessible space) and 3 motorcycle spaces;
- At basement level 3 – 8 car spaces (includes 1 disability accessible space) and 4 motorcycle spaces; and
- At basement level 4 – 3 car spaces (includes 1 disability accessible space) and 10 bicycle spaces.

2.3 Public Transport Service Accessibility

The local area was assessed for public transport services that are easily accessible from the subject site. This assessment identified that the site lies within comfortable walking distance to an abundance of bus routes and train services, as listed below.

Following bus service can be accessed within 550m (7-minute walk) of the subject site:

- **Bus route N10 and N11** (night ride bus services operate between Sutherland and City) are accessible from a stop located within a 5-minute walk (350 meters) from the subject site.
- **Bus route 455** (Rockdale Plaza to Kingsgrove via Kogarah, Hurstville and St. George Hospital) is accessible from a stop located within a 5-minute walk (350 meters) from the subject site - this service operates every 30 minutes during weekday day times, every 40 minutes on Saturday and every 50-60 minutes on Sunday and Public Holidays.
- **Bus route 476** (Rockdale to Dolls Point Loop) is accessible from a stop located within a 6-minute walk (500 meters) from the subject site - this service operates every 20-30 minutes on weekdays during daytimes, every 30 minutes on Saturday and every 30-60 minutes on Sunday and Public Holidays during day and night times.
- **Bus route 477** (Rockdale Station to Miranda) is accessible from a stop located within a 6-minute walk (500 meters) from the subject site - this service operates every 20-30 minutes on weekdays during daytimes and night times, every 30-45 minutes on Saturday and every 60 minutes on Sunday and Public Holidays.
- **Bus route 947** (Kogarah to Hurstville via Ramsgate and Dolls Point) is accessible from a stop located within a 6-minute walk (500 meters) from the subject site - this service operates every 20-30 minutes on weekdays during daytimes and night time, every 40 minutes on Saturday and every 40 minutes on Sunday and Public Holidays.

- **Bus route 430** (Kogarah Shuttle service) is accessible from a stop located within a 7-minute walk (550 meters) from the subject site - this service operates every 40-60 minutes on weekdays during daytimes and night time, every 120 minutes on Saturday.
- **Bus route 446** (Roselands to Kogarah via Earlwood, Bardwell Park and Bexley North) is accessible from a stop located within a 5-minute walk (450 meters) from the subject site - this service operates every 30 minutes on weekdays during daytimes, every 60 minutes on Saturday, Sunday and Public Holidays.

Also, Carlton train station is located approximately 450m from the subject site (5-minute walk). Following train services operate through this station:

- **South Coast Line** (SCO) - Bomaderry or Port Kembla to Central and Bondi Junction.
- **Eastern Suburbs and Illawarra Line** (T4) - Waterfall or Cronulla to Bondi Junction.

Figure 3 below illustrates the local public transport map for the subject site area.

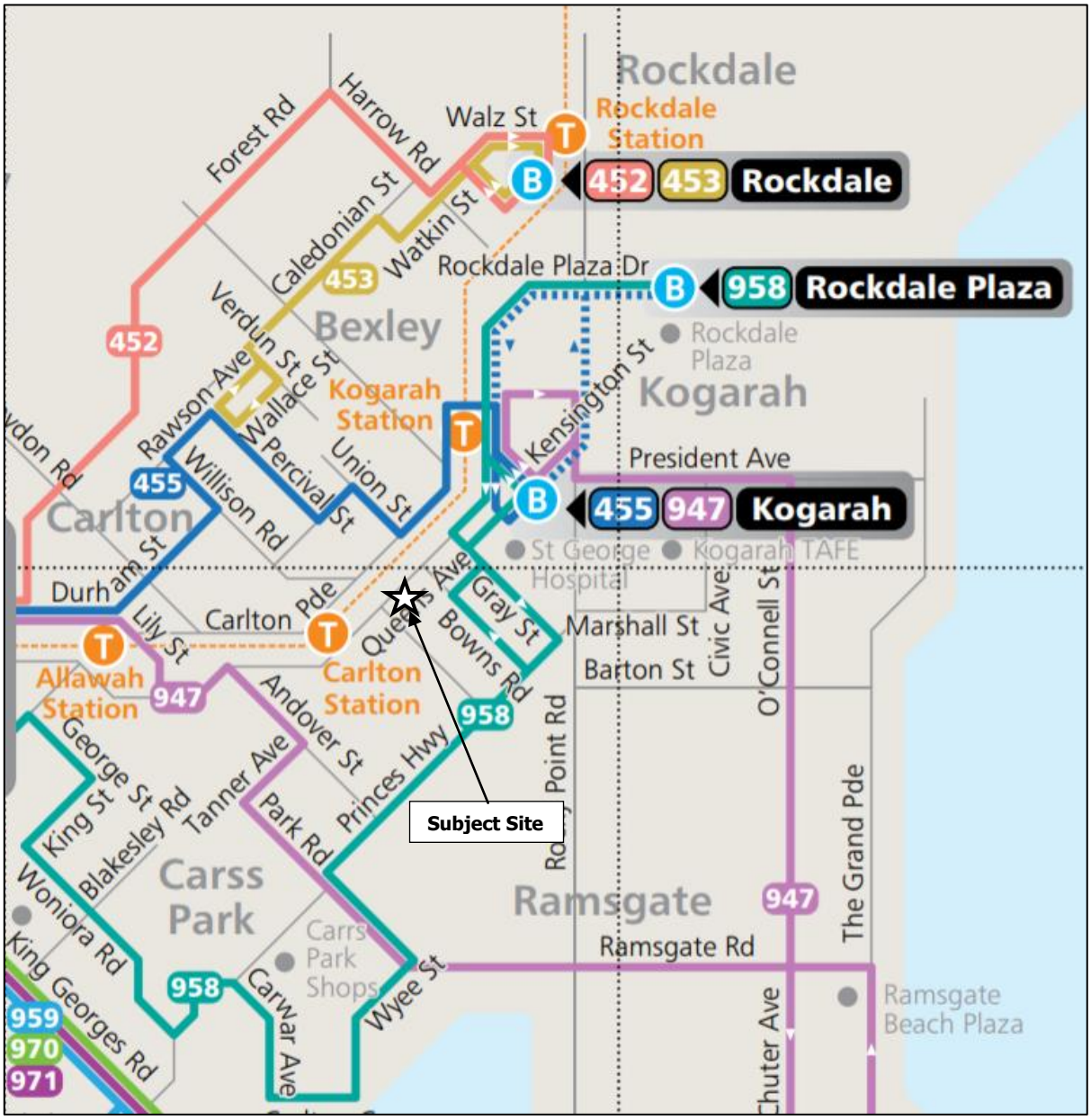


Figure 3: Public Transport Map for the Site Vicinity

As per the above, there is a substantial number of bus and train services that can be accessed within the close vicinity of the subject site. In light of the above, it was concluded that the site has excellent accessibility via public transport. Prospective tenants will be able to carry out most local and non-local trips through these options, thus greatly reducing the propensity to drive.

2.4 Active Transport Infrastructure

The locality was assessed for infrastructure that encourages modes of active travel for prospective tenants. It was identified that the local road network includes footpaths (including Blake Street and Railway Parade within the site vicinity) for convenient pedestrian travel. Furthermore, a number of cycling routes (low/medium difficulty) were noted around the site locality, providing access to much of the surrounding areas. **Figure 4** illustrates the cycling infrastructure available within the site locality.

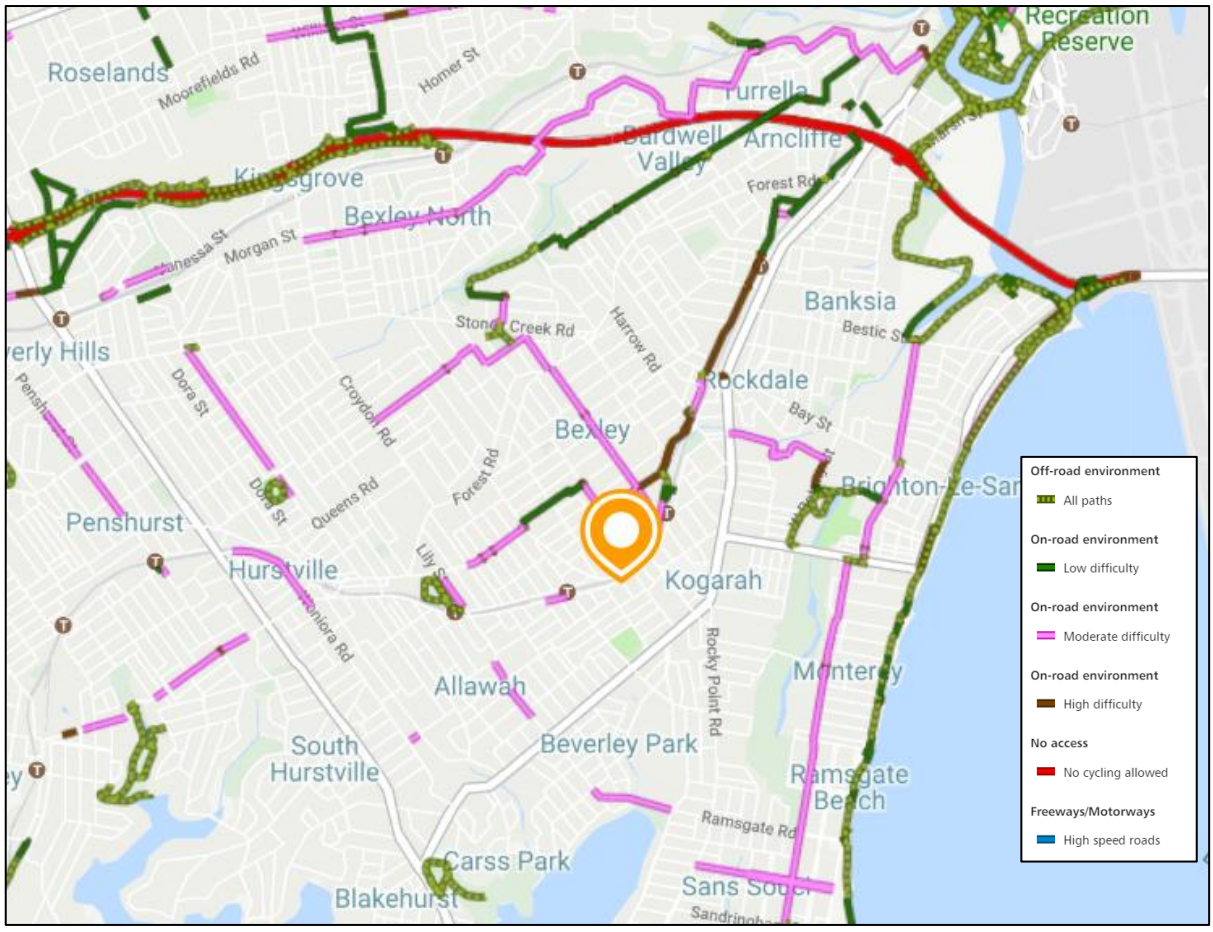


Figure 4: Cycling Network within the Site Locality

3. Parking Provision Review

3.1 Car Parking Provision Requirements

3.1.1 Residential Component

The car parking provision requirements for the proposed development were determined in accordance with the NSW State Environmental Planning Policy (affordable rental housing) 2009. The NSW State Environmental Planning Policy (affordable rental housing) 2009 stipulates the following car parking rate for boarding houses*;

Provide 0.5 parking spaces / boarding room (1 space/ 2 boarding rooms)

*Car parking standards for boarding houses, except where provided by a Social Housing Provider, are now 0.5 spaces per room in all locations. This standard is contained at Clause 29(2)(e) of the ARHSEPP, and remains a 'standard which cannot be used to refuse consent'. This means councils cannot refuse a boarding house proposal if it meets this standard, but that they may consider a lower car parking rate if appropriate. The new car parking provisions for boarding houses were effective from the day they were notified on the NSW Legislation website. The amendments were notified on 1 June 2018. https://www.planning.nsw.gov.au/policy-and-legislation/state-environmental-planning-policies-review/draft-amendment-to-parking-provisions-for-boarding-houses

Applying the above parking rate to the proposed development comprising 50 boarding rooms, a parking provision requirement of 25 car spaces is obtained.

3.1.2 Retail Component

The proposed development includes 80 square metres of gross floor area (GFA) on ground floor which is allocated for retail use. Based on Part B4 of the Kogarah DCP 2013, Bulky goods premises (the assumed land use of the proposed retail area at the subject site) should provide 1 car space for every 40 square metres of gross leasable area. Accordingly, the proposed development should provide 2 car spaces for the retail component.

3.1.3 Overall Development

The subject proposal includes provision for 27 on-site car parking spaces, which satisfies the above identified relevant statutory parking provision requirements (i.e. 25 spaces for the residential component + 2 spaces for the retail component).

3.2 Bicycle and Motorcycle Parking Provision Requirements

3.2.1 Residential Component

Bicycle and motorcycle parking is to be provided for boarding house development in accordance with the requirements of State Environmental Planning Policy (Affordable Rental Housing) 2009. These requirements are at least 1 space for bicycle and 1 space for motorcycle per 5 boarding rooms. Accordingly, the proposed development which includes a total of 50 rooms, requires 10 bicycle and 10 motorcycle parking spaces.

3.2.2 Retail Component

The proposed retail component does not include bicycle and motorcycle parking provision requirements.

3.2.3 Overall Development

The proposed car park includes 10 bicycle spaces (within basement level 4) and 10 motorcycle parking spaces (within basement levels 1, 2 and 3), which satisfies the above identified relevant statutory requirement for the residential component. Note that the proposed retail component does not include any bicycle and motorcycle parking requirements.

4. Parking Design Review

This section will carry out the necessary checks to certify whether the car parking area (provided within basement and ground floor with access across level through a car lift system) has been designed to satisfy the minimum requirements outlined by the Australian Standards. Reference is made to AS 2890.1 and AS 2890.6 for compliance. This section shall be read in conjunction with the complete site layout plans submitted as a part of the Development Application lodgement.

4.1 Regular Car Space Dimensions

Based on AS 2890.1:2004, 90-degree car spaces which are categorised under user class 1A (residential, domestic and employee parking) are required to be 2.4m wide by 5.4m long (with 5.8m aisle width). It is noted that all the regular car spaces within the proposed development can be categorised under user class 1A as they will be used either by residents or employees at the retail shop.

The proposed 2 waiting bays at the ground level and the 2 car spaces within basement level 4 are designed to satisfy the 2.4m width (with 300mm clearance when located adjacent to walls), 5.4m length and 5.8m aisle width. These spaces are therefore compliant against the AS 2890.1 requirements in relation to user class 1A spaces.

All other regular car spaces within basement levels 1, 2 and 3 are designed at 3m width and 5.4m length, with an aisle width of 5.5m. It is noted that the aisle width at these spaces fall short by 300mm against the required 5.8m dimension. However, this shortfall in aisle width has been compensated for by making these spaces wider (3m width provided against the minimum requirement of 2.4m width). While AS 2890.1 does not provide a trade off between the car space width and the aisle width, Clause 52.06-9 of the Victorian Planning Provisions, which is adopted in VIC, does provide such a trade-off (excerpt shown in **Figure 5** below). As per this standard, the proposed aisle width and car space width is considered a workable alternative

solution for the proposed development (5.2m aisle width is required for car spaces which are 3m wide – whereas in the proposed design, the 3m wide car spaces include a 5.5m wide aisle), as the site is too narrow to provide the required 5.8m aisle width. Note that the anticipated manoeuvrability conditions of the vehicles, in the proposed parking layout, is presented through swept path analysis in **Section 4.7** (Vehicle Manoeuvrability Assessment).

Angle of car parking spaces to access way	Accessway width	Car space width	Car space length
Parallel	3.6 m	2.3 m	6.7 m
45°	3.5 m	2.6 m	4.9 m
60°	4.9 m	2.6 m	4.9 m
90°	6.4 m	2.6 m	4.9 m
	5.8 m	2.8 m	4.9 m
	5.2 m	3.0 m	4.9 m
	4.8 m	3.2 m	4.9 m

Figure 5: Aisle Width and Car Space Width Trade-Off (VIC Clause 52.06-9)

4.2 Disability Accessible Parking Spaces

The disability accessible parking spaces shall be designed in accordance with AS 2890.6:2009, as follows;

- The disablity accessible car parking space should be designed at 2.4m width and 5.4m length (with a minimum of 5.8m aisle width);
- A shared space of equal dimensions shall be provided adjacent to the car parking space; and
- Both the car parking space and the shared space should indicate appropriate line markings. The shared space should include a bollard in order to prevent motorists parking at this location.

It is noted that the proposed 4 disability accessible spaces (one within each basement level), comply with the above requirements.

4.3 Gradients within Parking Modules

AS 2890.1 stipulates that parking modules, at maximum, should have a grade of 1 in 16 (measured in any direction other than parallel to the angle of parking). In addition, AS 2890.6 stipulates that the disability accessible car parking space and the shared area shall not exceed the grade of 1:40 in any direction. The proposed grades in the car parking areas comply with the above requirements.

4.4 Gradient of Access Driveway

In relation to the gradient of the access driveway, AS 2890.1 requires the first 6m into the car park to include a maximum grade of 5% (1 in 20). The first 6m into the proposed car park has been graded less than the maximum allowable grade requirement stipulated above.

4.5 Headroom Requirements

The headroom requirements at each level of the car park is governed by the design vehicle for that car parking area, as stipulated below;

- For the ground car parking area – the design vehicle is a small rigid vehicle. Based on AS 2890.2, a small rigid vehicle requires a headroom clearance of 3.5m. Therefore, the ground level parking area includes a 3.5m headroom clearance.
- For the four basement levels – the design vehicle is a disability accessible passenger vehicle. This vehicle requires a minimum headroom of 2.5m above the car space (a minimum headroom clearance of 2.2m is required along the path of the vehicle to and from the disability accessible car space). These required vertical clearances are available throughout the proposed basement level car parking areas, including within the proposed car lift.

4.6 Motorbike Spaces

AS 2890.1 stipulates a requirement of 2.5m length and 1.2m width for motorcycle spaces. The proposed 10 motorcycle spaces, within basement levels 1-3, comply with the above identified minimum dimensional requirements.

4.7 Vehicle Manoeuvrability Assessment

In order to investigate the anticipated manoeuvrability conditions of vehicles using the proposed car parking area, swept path assessments were undertaken using AutoTURN software (the industry standard vehicle swept path assessment software). In the swept path tests, a B85 vehicle template dimensioned as per AS 2890.1, has been used (as shown in the figure below).

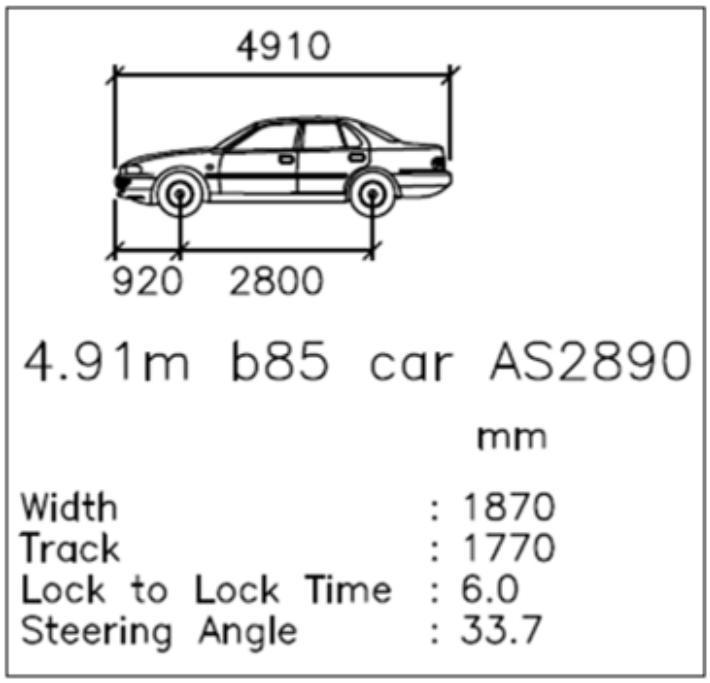


Figure 6: Template of B85 Vehicle

The following figures indicate the swept path results obtained for various movement scenarios. It is noted that the Blue and Cyan colour lines in the swept paths indicate the front and rear tyre tracks of the vehicle, respectively, while the Black colour of the swept paths indicate the vehicle body envelop (the Green arrows indicate the

centreline of the vehicle travel path while the Red lines indicate the 300mm body clearance envelop for the vehicle).

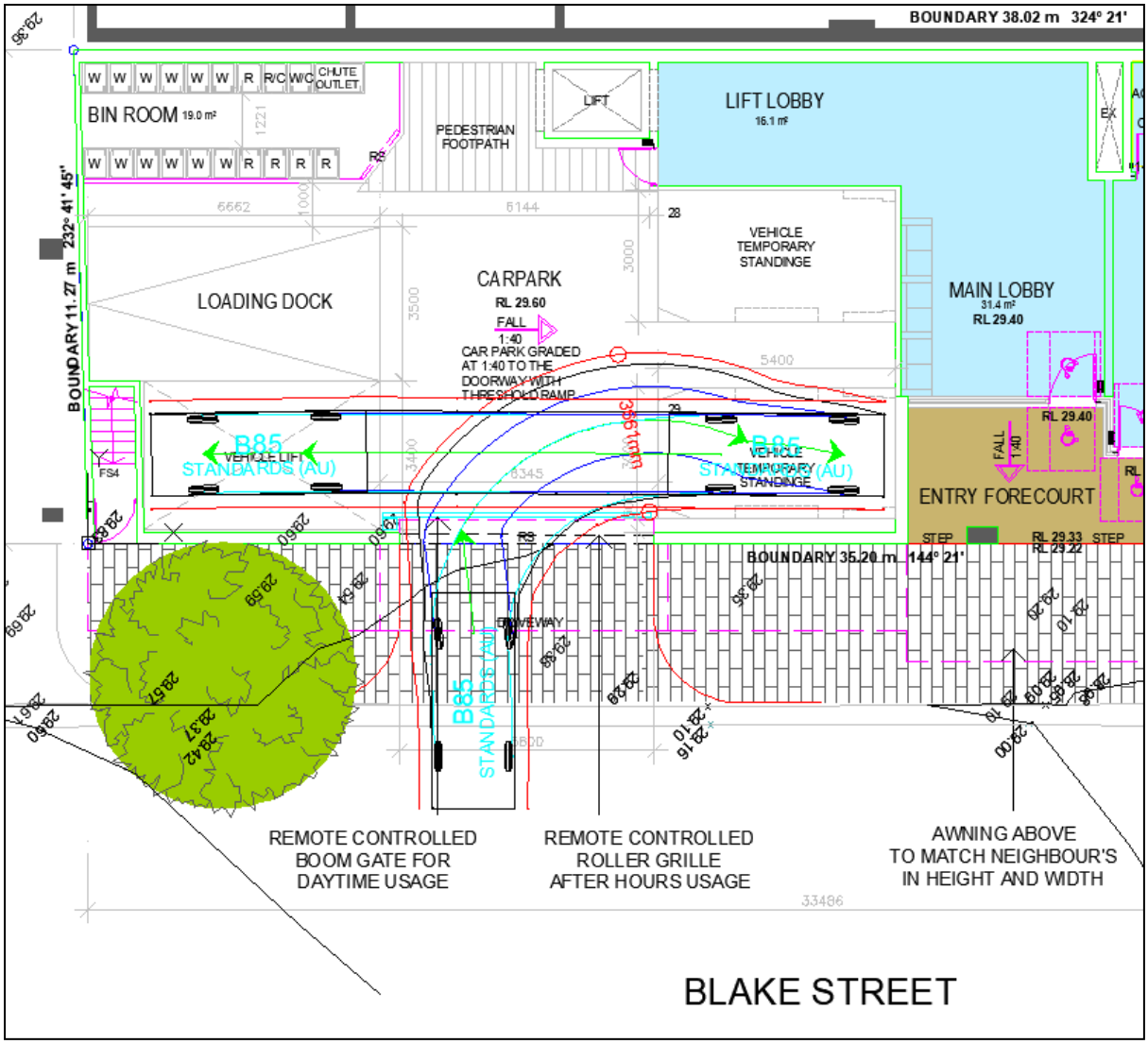


Figure 7: Swept Path Result – Scenario 1

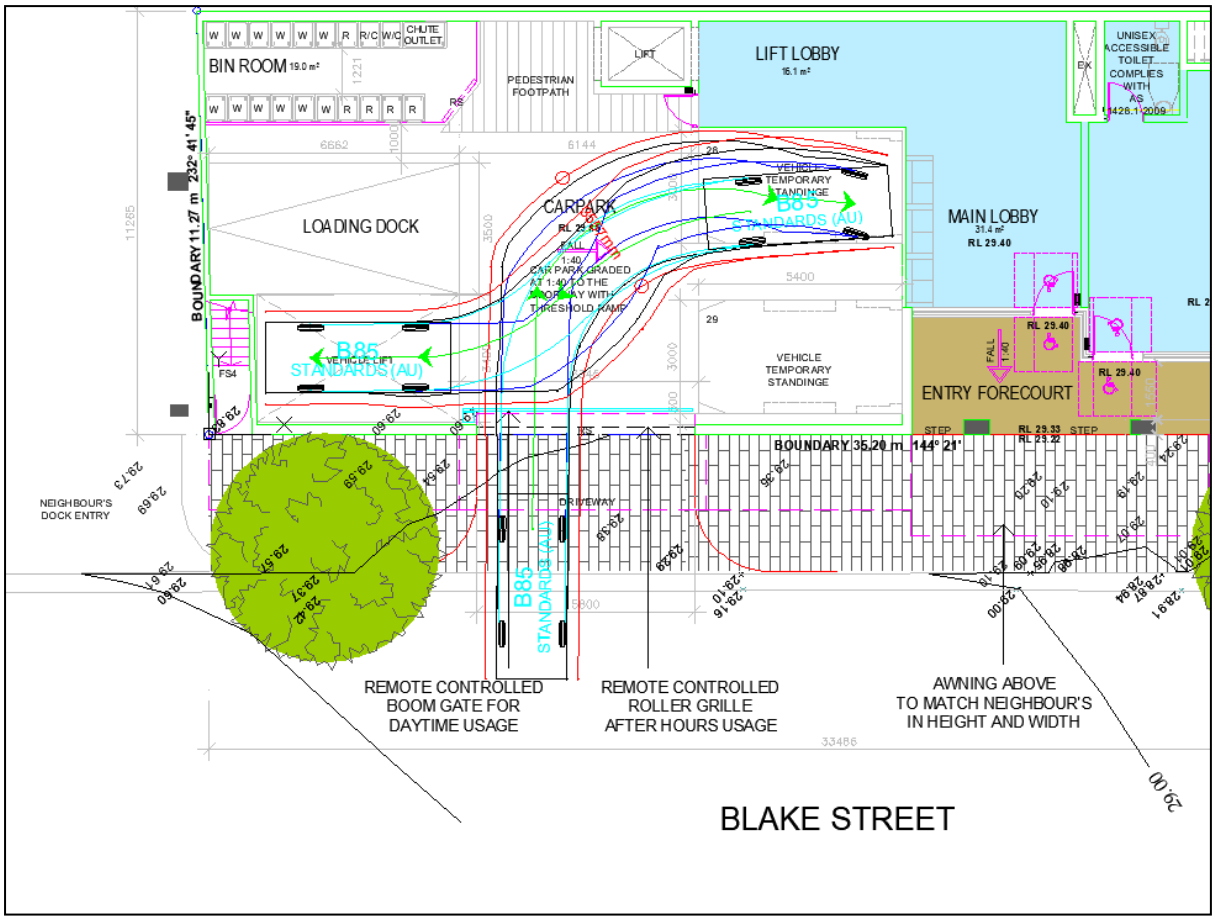


Figure 8: Swept Path Result – Scenario 2

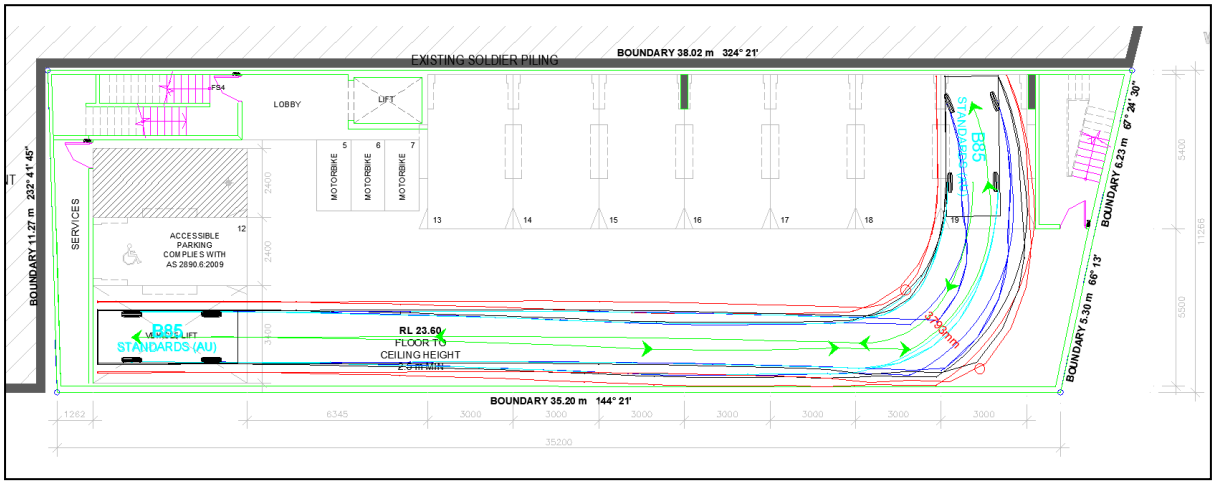


Figure 9: Swept Path Result – Scenario 3

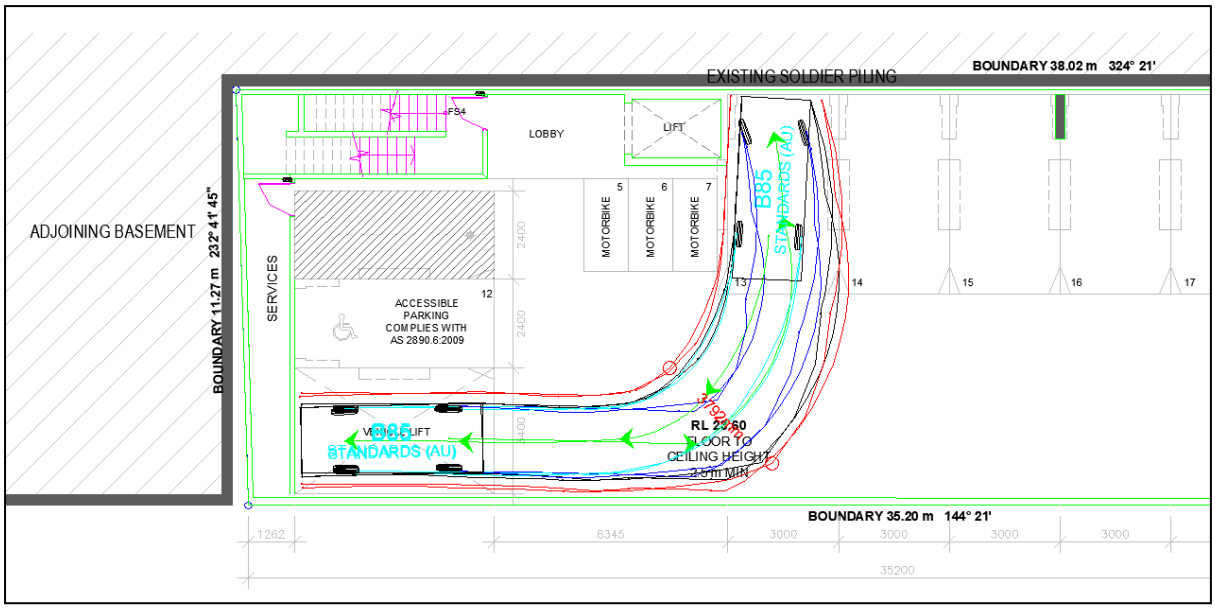


Figure 10: Swept Path Result – Scenario 4

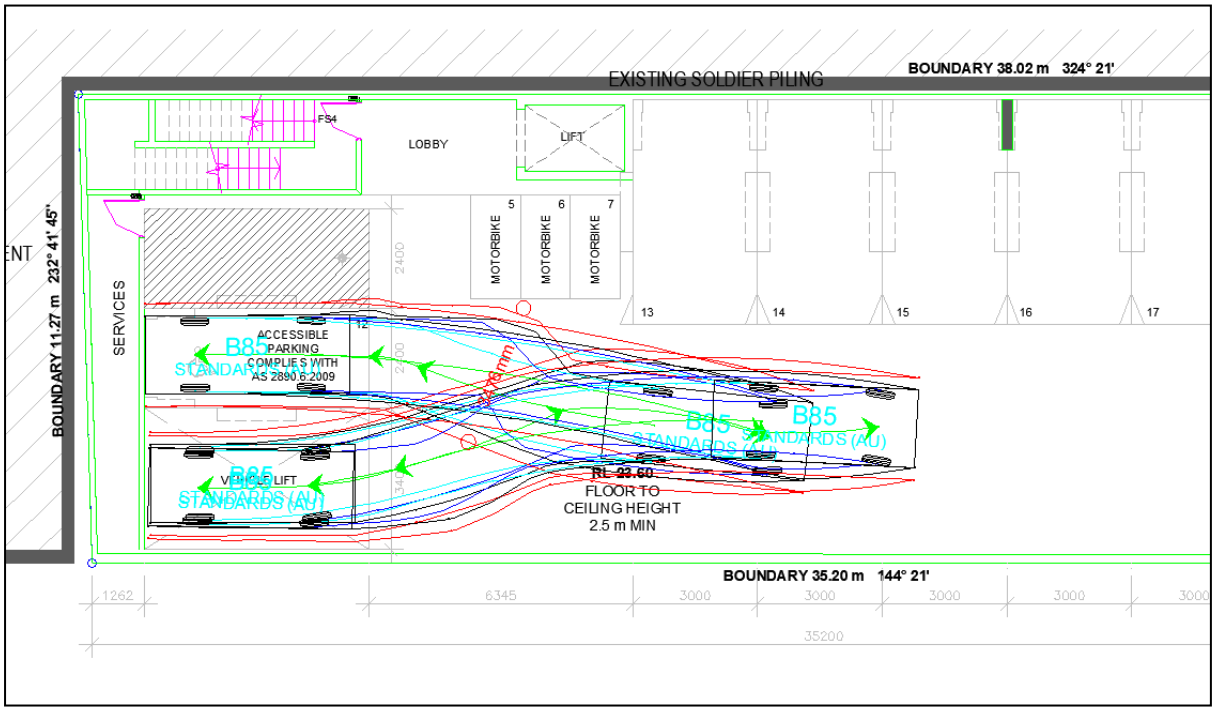


Figure 11: Swept Path Result – Scenario 5

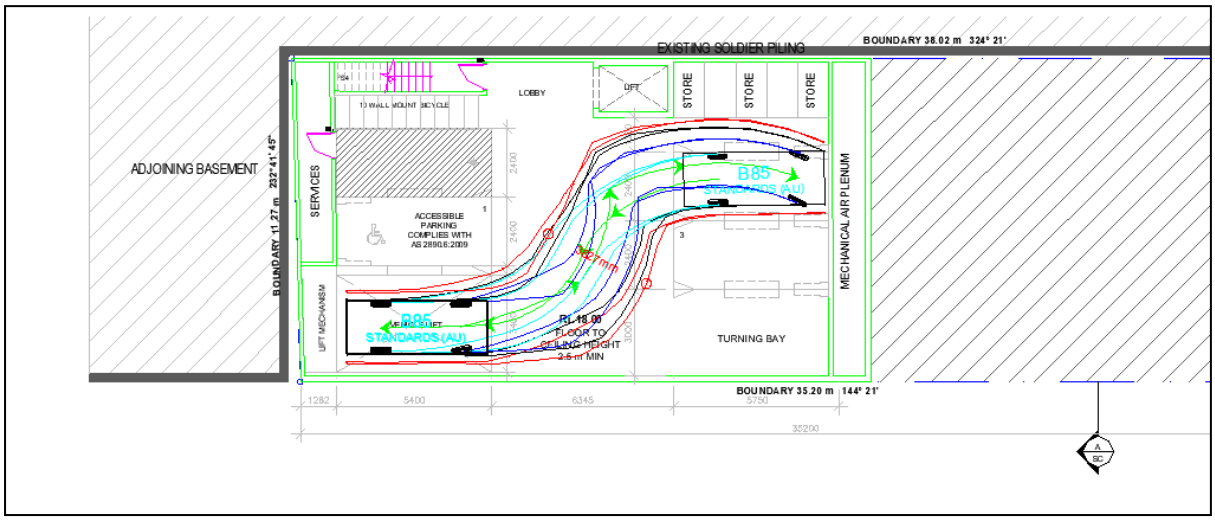


Figure 12: Swept Path Result – Scenario 6

It is noted that the proposed ground level car lift should be sign posted to alert the drivers that entering into the car lift is by reversing in only (so that all vehicles entering the lift from ground level can exit onto basement levels in forward gear and vice versa).

From the above figures, the following are evident;

- **Figure 7** – Scenario 1: a vehicle entering the ground level waiting bay 1 and reversing into the proposed car lift.
- **Figure 8** – Scenario 2: a vehicle entering the ground level waiting bay 2 and reversing into the proposed car lift.
- **Figure 9** – Scenario 3: a vehicle using a basement level space will exit the car lift in forward gear (since the vehicle enters the car lift by reversing in at ground level) to enter the car space. When exiting the car space, this vehicle will reverse out and enter into the car lift in reverse gear (from the basement level).
- **Figure 10** – Scenario 4: a vehicle using a basement level space will exit the car lift in forward gear (since the vehicle enters the car lift by reversing in at ground level) to enter the car space. When exiting the car space, this vehicle

will reverse out and enter into the car lift in reverse gear (from the basement level).

- **Figure 11** – Scenario 5: a vehicle using a disability accessible car space within a basement level will enter the car space by reversing in. When exiting, the vehicle will move forward and reverse into the car lift from each basement level.
- **Figure 12** – Scenario 6: a vehicle using a basement level 4 space will exit the car lift in forward gear (since the vehicle enters the car lift by reversing in at ground level) to enter the car space. When exiting the car space, this vehicle will reverse out and enter into the car lift in reverse gear (from the basement level 4).

Based on the above swept path results, all vehicles are capable of entering the car lift, by reversing in, at each level of the proposed car park. In particular, all vehicles are capable of exiting the site in forward gear, from the ground level.

As per the above, although the aisle width falls short for the regular car spaces within the basement levels 1, 2 and 3, the vehicles can manoeuvre in and out of the car spaces in these levels, without requiring any additional correctional manoeuvres (while preserving the 300mm clearance envelop of any obstructions). This level of manoeuvrability is achieved due to provision of additional width for the car spaces which compensates for the aisle width shortfall (as discussed in **Section 4.1**).

4.8 Proposed Loading Area

Based on Part B4 of the Kogarah DCP 2013, for retail premises with floor areas between 15-500m^2, 1 loading bay is required. Accordingly, 1 loading bay is provided within the ground level car parking area.

The largest vehicle anticipated within the proposed ground level car parking area is a Small Rigid Vehicle (SRV). Based on AS 2890.2, an SRV loading bay should be designed at 3.5m width and 6.4m length. The proposed loading bay at the ground level is 6.6m long by 3.5m wide.

A swept path assessment was carried out for the proposed loading bay using the template of a 6.4m long and 2.3m wide Small Rigid Vehicle (SRV). **Figure 13** illustrates the swept path result along with the SRV template used. As can be seen, a typical SRV can be conveniently accommodated within the proposed loading area. This vehicle can manoeuvre within the ground level parking area (by reversing into one of the two available waiting bays) and exit the site in forward gear without requiring any additional correctional manoeuvres.

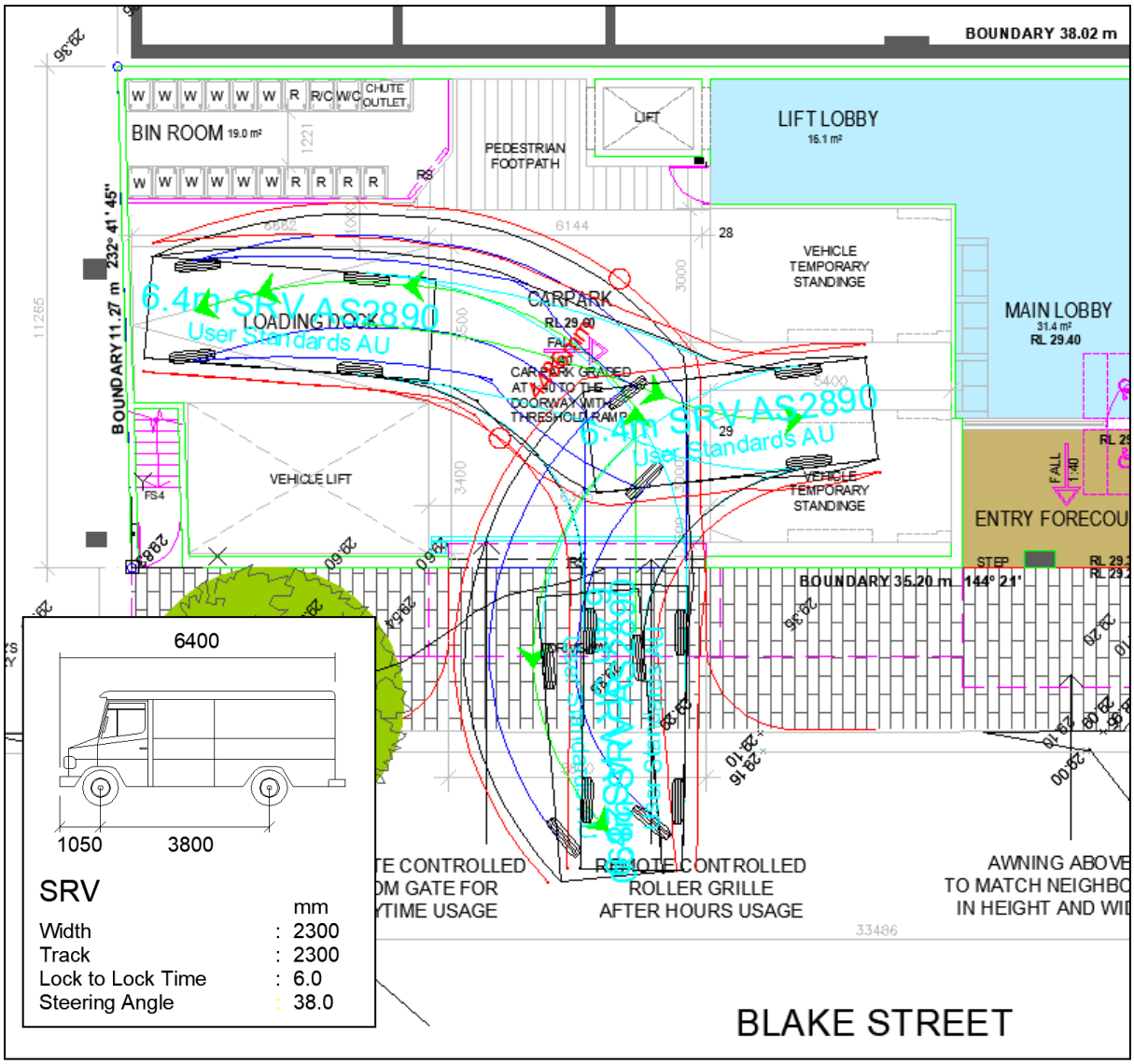


Figure 13: Swept Path Result – SRV

4.9 Proposed Car Lift System

A car lift is proposed to move the vehicles across the floor levels of the car park. This car lift is 5.4m long by 3.4m wide and includes an aisle width of >5.8m at ground floor level. **Appendix A** of this report provides the manufacturer's specifications for this proposed car lift system.

The car lift system includes a flashing light at each level, which is activated when the lift is in motion. The maximum speed achievable by the proposed car lift is 0.3m per second (see the email confirmation received from the manufacturer in **Appendix A**). Based on this speed, the following one-way travel times between each car parking level can be calculated;

Table 1: Car Lift Travel Times (Seconds)

		From				
		Ground level	**B1**	**B2**	**B3**	**B4**
To	**Ground level**	0	11	20	30	39
	B1	11	0	10	19	28
	B2	20	10	0	10	19
	B3	30	19	10	0	10
	B4	39	28	19	10	0

Note – the above travel times between floor levels have been calculated using a speed of 0.3 m/s and the vertical distances between the floor levels (based on the below RLs);

- Ground level RL 29.60
- Basement level 1 RL 26.40
- Basement level 2 RL 23.60
- Basement level 3 RL 20.80
- Basement level 4 RL 18.00

As per the above table, the worst case delay occurs when the car lift has to make a return trip from ground level to basement level 4. This operation requires a minimum of 78 seconds (39 seconds each way) plus some additional time considering the time it takes a vehicle to board and alight the system. It is noted that the ground level includes 2 waiting bays – which can accommodate 2 vehicles, waiting to use the car lift, within the subject site.

4.10 Car Park Access Control

Access to the proposed car parking area at the ground level will be controlled as follows;

- During the day time – a remote controlled boom gate will be operational.
- After hours – a remote controlled roller grille will be used.

It is noted that the proposed car park will only be used by the residents and the staff members at the subject site (the car park is not open to public). As such, all users can be provided with remote controllers for the boom gate and the roller grille. Also, the boom gate use during the day time will ensure that vehicles can quickly enter the site without waiting on Blake Street.

5. Traffic Impact Assessment

A traffic impact assessment was undertaken to determine the potential impacts arising from the proposed development upon the local road network. According to the *Guide to Traffic Generating Developments (RMS, TDT 2013/04)*, a **high-density residential building** will generate, approximately:

- 0.19 trips per unit in the AM peak;
- 0.15 trips per unit in the PM peak; and
- 1.52 trips per unit, daily.

The proposed boarding house development is assumed to be a high-density residential building. Applying the above rates to the proposed 50 room boarding house development leads to the following trip generation levels:

- 10 AM peak hour trips;
- 8 PM peak hour trips; and
- 76 daily trips.

Further to the above trips, the proposed retail component at the subject site will also generate some peak hour traffic (by the staff members working on-site). Since 2 car spaces are allocated for the retail component, it can be reasonably assumed that there will be 2 trips during each peak period (2 in trips during AM peak and 2 out trips during PM peak). Note that the retail component is not expected to generate any traffic other than for the staff members (and occasional delivery traffic) as it will generally serve the local neighbourhood. Also, since no car parking is provided on-site for the visitors to the retail component, any visitor traffic generation levels will be dispersed across the surrounding local road network, away from the vehicle access point at the subject site. As per the above, the overall proposal will generate;

- 12 AM peak hour trips;
- 10 PM peak hour trips; and
- 80 daily trips.

The above trip figures are likely to represent the realistic situation at the subject site. These low levels of trip generation are relevant for the proposed development since there is great variance between boarding houses and typical residential flat buildings. The subject boarding house will cater largely to non-car owners. Furthermore, the excellent active and public transport options afforded to the site is likely to reduce the peak hour vehicle trips entering and exiting the subject site.

The above trip figures are insignificant, and would not be expected to generate any noticeable impacts of the existing local road network. As such, no ramifications to the existing traffic and pedestrian conditions are anticipated to result from any traffic generated by the proposed development.

6. Conclusions

APEX Engineers were engaged by MODERINN Pty Ltd to provide a traffic impact assessment as a part of the development application for the proposed 50 room boarding house development at 248 Railway Parade in Carlton NSW 2217.

The subject site is well serviced by a number of bus routes and train services that operate within 550m radius of the subject site. As such, it was concluded that prospective tenants can carry out most trips via public transport, thus eliminating the need for driving trips.

A parking provision assessment was undertaken in accordance with the NSW SEPP (affordable rental housing) 2009 and Part B4 of the Kogarah DCP 2013, leading to a total requirement of 27 car spaces (25 for the residential component + 2 for the retail component), 10 motorcycle spaces (all for the residential component) and 10 bicycle spaces (all for the residential component). The overall development provides a total of 27 car spaces, 10 motorcycle spaces and 10 bicycle spaces, which satisfies the above identified statutory parking provision requirement.

The proposed car parking design was also assessed with reference to AS 2890.1 and AS 2890.6. It was found that the proposed design was compliant with the relevant design requirements except for the aisle width shortfall in the basement level car spaces. In particular, the aisle widths at the basement level (1, 2 and 3) car spaces fall short by 300mm against the required 5.8m dimension. However, this shortfall in aisle width has been compensated for by making these spaces wider (3m width provided against the minimum requirement of 2.4m width). While AS 2890.1 does not provide a trade-off between the car space width and the aisle width, Clause 52.06-9 of the Victorian Planning Provisions, which is adopted in VIC, does provide such a trade-off. As per this standard, the proposed aisle width and car space width is considered a workable alternative solution for the proposed development (5.2m aisle width is required for car spaces which are 3m wide – whereas in the proposed

design, the 3m wide car spaces include a 5.5m wide aisle), as the site is too narrow to provide the required 5.8m aisle width. The anticipated manoeuvrability conditions of the vehicles, in the proposed parking layout, was assessed with swept path tests. The results of these swept path tests indicate generally satisfactory levels of manoeuvrability.

The daily and peak hour trip generations for the proposed development were estimated to be – 12 trips in the AM peak, 10 trips in the PM peak and 80 trips daily. This level of traffic generation is considered minor and is unlikely to eventuate into any adverse impacts on the local road network.

In light of the above, the proposed development is expected to accommodate its own parking demand and will impose generally negligible traffic impacts to the local road network.

APEX ENGINEERS

Appendix A: Manufacturer's Specifications for the Proposed Car Lift

HERCULES
CARPARKING SYSTEMS

IRIS
THE HIGH RISE TWO COLUMN CAR LIFT

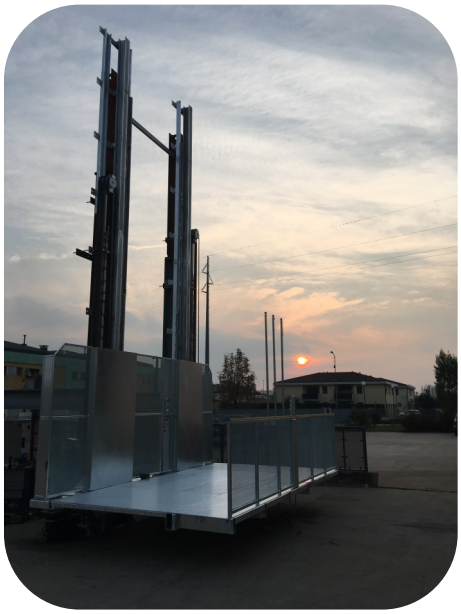
The Hercules Iris is a High rise vehicle lifting platform with a capacity of 3000kgs. It is designed for lifting vehicles or other loads to different levels.

It features two lateral lifting columns fitted with hydraulic lifting cylinders for rise and descent.

Columns are to be anchored to a side bearing wall. Bearing structures are made of S275JR steel. The anti-skid platform is recessed into the ground. It can be either installed indoor or outdoors.

In case of outdoors use the whole structure can be zinc coated for a long lasting protection against the elements.

The system is pre-set for connecting landing doors at parking levels. Mesh plate side protections for platform and shaft are also available *(200cm high, to provide protection to any passengers).*



Safety stop valves prevent any falls whereas on-floor electric mechanic actuators give the platform stability.

The on floor button board controls make the platforms extremely easy to operate.

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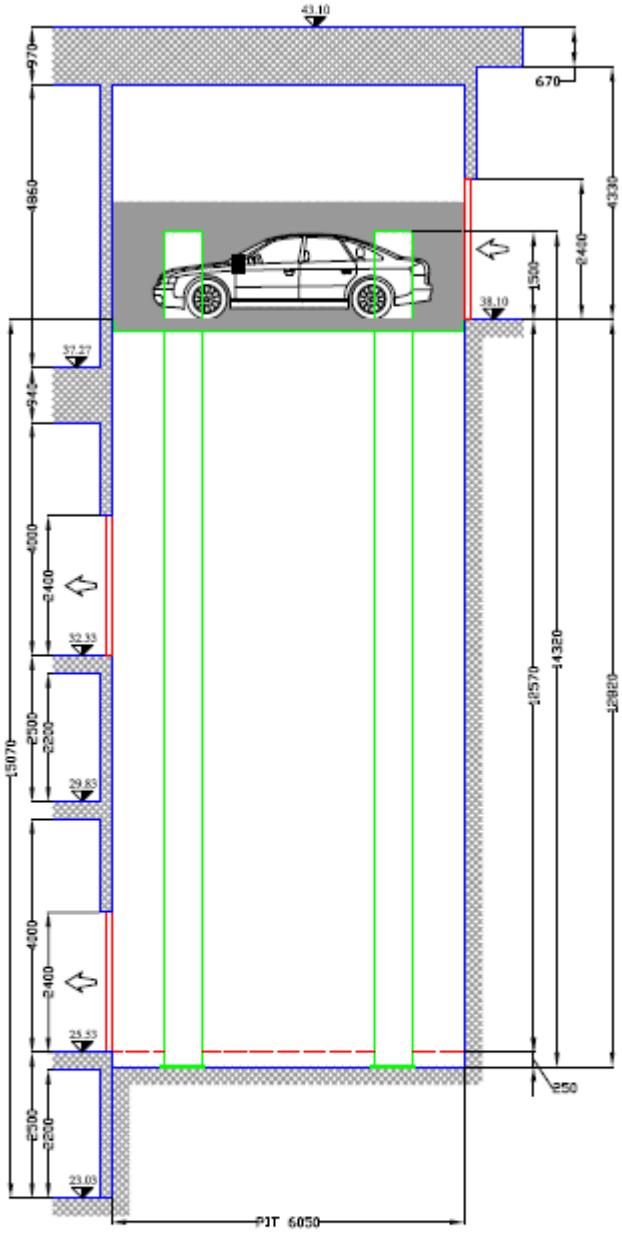
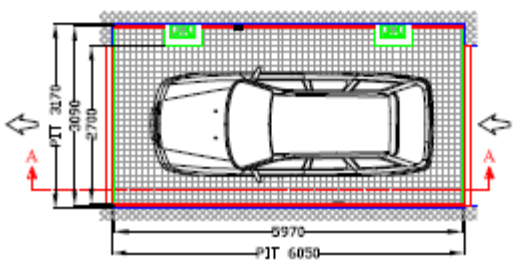
THE HIGH RISE TWO COLUMN CAR LIFT



PRELIMINARY DRAWING: DIMENSIONS ARE SUBJECT TO ADJUSTMENTS.
PROTECTION TO BE DEFINED.



Specifications	
Shaft	5400 x 2600 mm
Platform	5340 x 2500 mm.
Pit depth	1000 mm
Travel	3000 mm. – 12000 mm
Capacity	2500kgs
Frame work/platforms	Epoxy powder coating (RAL grey colours 7016 e 9006)
Speed:	5 cm/sec.
Motor	5.5 kw
Tension	400V triphase
Hydraulic unit	400×600 H 1000 mm. (to be placed in the machine room)
Control panel	200×400 H 500 mm.
Button boards	100×100 H 200 mm.
Safety	Emergency Stop
platform in motion	On floor flashing light
Warranty	12 months on parts

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ARTARMON NSW 2064

Gmail **Info APEX <apexengineersau@gmail.com>**

Hercules 2 post cantilevered hydraulic car lifts

2 messages

Phil Elsley <phil@hercules.com.au> Thu, Nov 21, 2019 at 10:01 AM
To: APEX Engineers <info@apexengineers.com.au>
Cc: Robert <robert@hercules.com.au>

Sam,

We can provide a faster car lift rated at 0.3m/sec and have a certificate of plant design registration by Worksafe.

The car lift will still be classified under AS1418-part 8 of the hoisting code.

Let me know if you need anything further?

Best regards,

Phil

Phil Elsley

National General Manager

Hercules Carparking Systems

T:(02)9966 5600

F:(02)9966 5622

M:0416 388 963

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