

Traffic Technical Memorandum

To	Frank Developments Pty Ltd	Date	3 August 2026
Prepared by	Casey Schackow, Velocity, Director	Approved by	Harj Singh, Traffic Engineering Advisor (RPEQ 22364)
Location	22-40 Wyandra Street, Newstead		
Status	Final	Attachments	Appendix A: Development Plans Appendix B: Swept Path Assessment

1 Introduction

1.1 Overview

Velocity has been commissioned by Frank Developments Pty Ltd to provide traffic and transport advice in relation to the proposed multiple dwelling located at 22-40 Wyandra Street, Newstead.

1.2 References

- ▶ Brisbane City Council (BCC), Transport, Access, Parking and Servicing Planning Scheme Policy, 2021 (BCC TAPS)
- ▶ BCC, Refuse Planning Scheme Policy, 2022 (BCC RPSP)
- ▶ BCC City Plan, 2014 (CP)
- ▶ AS2890.1 Australian Standards (AS) Parking Facilities Part 1: Off Street Car Parking (AS2890.1)
- ▶ AS2890.2 Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities, 2002 (AS2890.2)
- ▶ Roads and Traffic Authority, Guide to Traffic Generating Developments, 2013 Update, (RTA GTGD)

1.3 Limitations

This traffic report was prepared with the usual care and diligence of the consulting profession. It follows accepted traffic engineering practices and standards that were in place at the time of the assessment. However, Velocity cannot be held responsible for any changes to project planning or road conditions that may happen after the assessment is completed.



2 Existing Conditions

2.1 Site Location

The development site is located at 22-40 Wyandra Street, Newstead and is bound by Wyandra Street to the south and Wyatt Street to the north. The lot currently contains various commercial uses including offices and restaurants.

The site is identified within the BCC CP as a Mixed use (Inner city) zone and is surrounded by similar zones in all directions.

Figure 2-1 and Table 2-1 outline characteristics of the existing road network surrounding the site.

Figure 2-1 Site Location



Source: Nearmap

Table 2-1 Key Road Characteristics

Road	Hierarchy	Speed Limit	Typical Form
Wyandra Street	Neighbourhood Road	40km/h	Two lanes, undivided
Wyatt Street	Neighbourhood Road	50km/h	Two lanes, undivided
Masters Street	Neighbourhood Road	40km/h	Two lanes, undivided

2.2 Active Transport Network

The local streets surrounding the site have continuous off-road paths along both verges of all of the surrounding roads. On-road cycling is provided within the road carriageways and via a Bicycle Awareness Zone (BAZ) along Wyandra Street.

At a strategic level, Wyandra Street is identified on Council's Bicycle Network as a Primary route given the connection to the nearby transport links such as Commercial Road and Skyring Terrace. The site is also in close proximity to high quality routes such as the New Farm Riverwalk and Lores Bonney River Walk.

2.3 Public Transport Network

There are 10 bus stops and one ferry terminal located within a comfortable 400m walking radius of the site. The nearest stop is directly adjacent the site along the frontage.

Key characteristics including the bus schedule is shown in Table 2-2.

Table 2-2 Bus Route Key Characteristics

Route	Destinations	Peak Frequency
60	West End to Teneriffe via Brisbane CBD	5 minutes
309	RBWH station to Brisbane CBD via Fortitude Valley	20 minutes
199	West End to Teneriffe via Brisbane CBD	10 minutes
F1	Northshore Hamilton to UQ through the Brisbane River	15 minutes

2.4 Existing Access Arrangements

The existing sites feature 4 crossovers on both Wyandra Street and Wyatt Street, for a total of 8 existing crossovers. These crossovers permit all vehicle movements in all directions.

3 Proposed Development

3.1 Proposed Yield

The development proposes to construct 147 apartments, consisting of 2x 1-bed, 80x 2-bed units, 58x 3-bed units, 6x 4-bed units and 1x 5-bed unit. Four ancillary tenancies are also proposed with a total GFA of 703 sq.m. The total yield is provided in Table 3-1.

Figure 3-1, Figure 3-2, Figure 3-3 and Figure 3-4 illustrates the proposed development plans, a copy of the development plans can be found at **Appendix A**.

Table 3-1 Total Development Yield

Land use	Yield
Multiple Dwelling	2x 1-bedroom apartments
	80x 2-bedroom apartments
	58x 3-bedroom apartments
	6x 4-bedroom apartments
	1x 5-bedroom apartment
Retail/Shop	2x tenancies - 229 sq.m
Commercial	287 sq.m
F&B	184 sq.m

Figure 3-1 Development Plans – Ground Floor



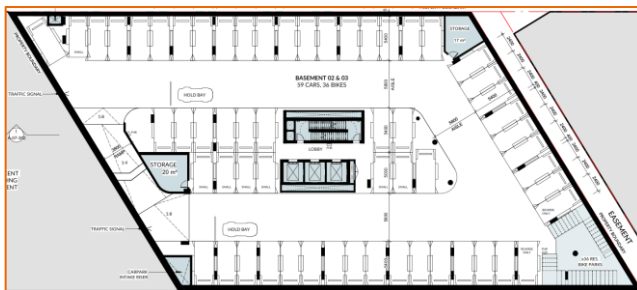
Source: Cavill, DWG NO.A-07-104, Ground, REV.15 03.08.26

Figure 3-2 Development Plans – Basement 1



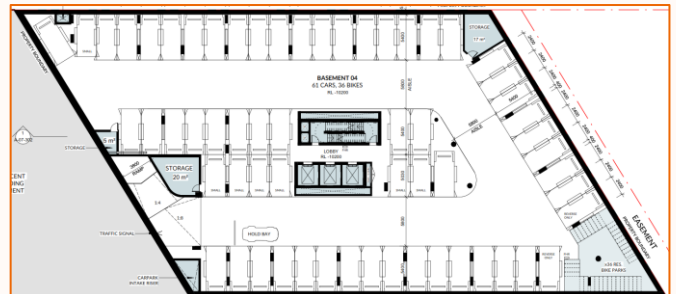
Source: Cavill, DWG NO.A-07-103, B1, REV.16 03.08.26

Figure 3-3 Development Plans – Basement 2



Source: Cavill, DWG NO.A-07-102, B2, REV.13 03.08.26

Figure 3-4 Development Plans – Basements 3-4



Source: Cavill, DWG NO.A-07-101, B3-4, REV.12 03.08.26

3.2 Design Considerations

3.2.1 Access Arrangement

Vehicle access is proposed via a single consolidated entry / exit crossover to Wyatt Street. The access will accommodate resident, visitor, refuse and servicing vehicles, accessed via the internal driveway and ramp system.

The existing eight crossovers across the Wyandra Street and Wyatt Street frontages will be removed and the kerb reinstated where redundant crossovers are removed. This will reduce vehicle conflict points along the site frontages and improve pedestrian continuity, frontage legibility and kerbside management.

The removal of redundant crossovers may also improve kerbside parking and loading flexibility, subject to Council's final kerbside allocation.

3.2.2 Access Crossover

For a Multiple Dwelling land use, *BCC TAPS* defines the service vehicles to be a Large Rigid Vehicle (LRV) for occasional furniture delivery and a rear loading Refuse Collection Vehicle (RCV) for waste. However, the largest commercial servicing vehicle proposed will be the Medium Rigid Vehicle (MRV). The servicing activities are further outlined in **Section 3.4 Servicing Arrangements**.

Both the MRV and RCV are proposed to access the site to conduct their respective servicing activities. A loading hardstand has been provided within the crossover which will be used by refuse vehicles to access bulk bins and for MRVs to load/unload, past this loading area the access driveway will only be trafficked by private vehicles.

The proposed access driveway design is outlined in Table 3-2.

Table 3-2 Crossover and Driveway Design Compliance

Vehicle Type	Design Item	Design Criteria	Proposed Design	Compliant
RCV / MRV	Crossover	Type B2 Min. 6.5m wide	Modified Type B2 12.25 wide	✓*

*Although the development doesn't propose standard B2 tapers, the proposed design is considered adequate and fit-for-purpose based on the following.

BCC TAPS/AS2890.2 states the driveway width will depend on the design vehicle requiring ingress/egress to the site. As such, to confirm the adequacy of the proposed crossover and driveway, a swept path assessment has been conducted for the RCV which confirms the vehicle can safely and efficiently manoeuvre on/off the site using the modified Type B2 driveway proposed. Any wider tapers would impact the amenity and pedestrian crossing safety with no additional vehicle movement benefit.

On this basis, the modified crossover arrangement is considered acceptable and fit-for-purpose.

A copy of these swept paths can be found at **Appendix B**.

3.2.3 Sight Distance

Wyatt Street has posted speed of 50km/h. The sight distance required by *BCC TAPS* and *AS2890.1* in both directions, and what the site achieves is detailed in Table 3-3.

It is noted sight distance is required to be measured 3.5m from the kerb for *BCC TAPS* and 2.5m for *AS2890.1*. As such, the worst-case of 3.5m has been used.

Table 3-3 Sight Distance at the Access Driveway

BCC TAPS	AS2890.1 Req.	Proposed Sight Distance	Compliant	
		Left	AS2890.1	BCC TAPS
90m	69m	67m	✓*	✓*

*The available sight distance to the west is approximately 67m, measured to the Masters Street intersection. This is marginally below the *AS2890.1* desirable sight distance of 69m for a 50km/h frontage road and below the *BCC TAPS* desirable value of 90m. The arrangement is therefore assessed as a performance outcome rather than a strict deemed-to-comply outcome.

The available sight distance is considered acceptable in this instance having regard to the following:

- ▶ The sight line extends to the adjacent Masters Street intersection;
- ▶ Vehicles approaching from that direction are expected to be travelling at moderated speeds due to the local street environment and intersection proximity;
- ▶ Wyatt Street operates as a low-speed neighbourhood road;
- ▶ Several nearby access locations are located within a similar location
- ▶ The access consolidates the existing multiple site crossovers into a single access point; and
- ▶ The proposed access arrangement reduces the number of vehicle / pedestrian conflict points along the site frontages.

Sight distance to the east, toward the Wyatt Street cul-de-sac, is unobstructed and is considered suitable for the low-speed traffic environment. On this basis, the available sight distance is considered acceptable on a performance basis.

3.2.4 Access Location

Council's Planning Scheme defines Wyatt Street as a Minor Road. As such, *BCC TAPS* requires 3m between adjacent driveways.

Additionally, *AS2890.1* indicates that access driveways should not be located within 6m of the tangent points from adjacent intersections.

Site Access

- ▶ 1.5m to the adjacent crossover of 18 Wyandra Street to the south
- ▶ 41m to the adjacent crossover of 42 Wyandra Street to the north.

It is acknowledged that the location does not meet the separation requirements of *BCC TAPS* with respect to the neighbouring property access, however, Velocity Traffic is of the opinion that the proposed driveway location is safe and fit-for-purpose based on the following:

- ▶ *Point 1b)* of *Section 4.2 Location* within *BCC TAPS* considers the provision of adequate sightlines. As detailed in **Section 3.2.4 Sight Distance**, adequate sight distance in all directions is sufficient.
- ▶ There are several existing access locations within the surrounding network which do not provide the required driveway separation requirements in accordance with *BCC TAPS*. It is noted that all these locations achieve the separation distance required by *AS2890.1*. A subset of these includes the following:
 - 18-20 Wyandra Street, Newstead
 - 22 Wyandra Street, Newstead
 - 10 Masters Street, Newstead
 - 20 Masters Street, Newstead
 - 24-28 Masters Street, Newstead
- ▶ The existing southernmost site access along Wyatt Street is located in majorly the same location and currently also doesn't provide 3m separation.

Based on the above, Velocity Traffic is of the opinion that the proposed access location is safe, functional and does not compromise the performance of the transport network.

3.3 Car Parking

3.3.1 Parking Requirements

The subject site was previously located within the City Frame and would have been subject to the applicable minimum parking rates for multiple dwellings. Following the 2025 Inner-City Affordability Initiative amendment, the site is now located within the City Core, where maximum parking rates apply.

For the multiple dwelling component, strict application of the City Core maximum resident parking rates is considered overly restrictive having regard to the nature of the proposal. The development is a boutique, high-end residential product where a higher level of resident parking is proposed to support the expected ownership profile and amenity expectations of future residents. Providing residential parking generally in accordance with the former City Frame minimum rates is considered appropriate in this instance, as it better reflects the intended residential offering and will mitigate reliance on constrained on-street parking within Newstead.

For visitor parking, the City Core rates are considered appropriate given the site's inner-city location, proximity to the CBD, and strong access to active and public transport. In this context, it is not expected that a significant majority of visitor trips will rely on private vehicle travel. The proposed assessment has therefore applied the City Core visitor parking rates.

The ground floor retail/shop, commercial and food and drink tenancies are expected to operate as local-serving uses for the development and surrounding residential catchment. Maximum parking rates apply to these uses.

The car parking requirements have been summarised in Table 3-4.

Table 3-4 Car Parking Requirements

Land use	Yield	Car Parking Rate	Car Parking Required
Multiple Dwelling	2x 2-bedroom units 80x 2-bedroom units 58x 3-bedroom units 6x 4-bedroom units 1x 5-bedroom unit	0.9 per 2-bedroom unit 1.1 per 2-bedroom unit 1.3 per +3-bedroom unit Max. 1 visitor per 20 per units	Resident: 182 spaces Visitor: Max. 8 spaces
Retail/Shop	229 sq.m	Max 1 space per 200 sq.m	Max. 3 spaces
Commercial	287 sq.m	Max 3 space per 200 sq.m	Max. 2 spaces
F&B	184 sq.m	Max 12 space per 100 sq.m	Max. 28 spaces

As shown in Table 3-4, the proposed development requires 182 resident spaces. The applicable maximum parking rates identify up to 8 residential visitor spaces, 3 retail/shop spaces, 2 commercial spaces and 28 food and drink spaces. One PWD space with accompanying shared space is required within the visitor parking provision.

3.3.2 Parking Compliance

The development proposes 222 resident parking spaces and 7 visitor parking spaces, including one PWD space with accompanying shared space. As such, the adopted resident parking requirement is met. Compliance with PO13 is discussed below.

The resident parking provision equates to approximately 1.5 spaces per unit. This is considered reasonable for a boutique, high-end residential development in Newstead, where a material proportion of future residents are expected to own private vehicles despite the site's City Core designation.

The proposed unit mix includes a high proportion of 2-bedroom and larger apartments. In practical terms, a 2-bedroom apartment typically accommodates two adult occupants/couples, and it is realistic that a proportion of these households will own two vehicles. By way of example, if half of the 2-bedroom units possessed two vehicles with the remaining half containing one vehicle, the resulting parking demand for those units would be approximately 1.5 spaces per unit, compared with the prescribed rate of 1 space per 2-bedroom unit. On that basis, the proposed overall provision of approximately 1.5 spaces per unit reflects a practical ownership profile and reduces the likelihood of resident parking demand being displaced onto the constrained surrounding street network.

It is also relevant that the City Core designation has only recently been expanded into this part of Newstead. Existing market expectations, apartment ownership profiles and household vehicle ownership patterns are not expected to immediately shift to a substantially lower car ownership model solely because of the recent planning scheme change. A moderate resident parking provision is therefore appropriate.

Council has also recently accepted materially higher resident parking rates within the same City Core context. The approved 47 Skyring Terrace development (BCC Ref: A006870288) comprises 241 units and provides 500 parking spaces, including 486 resident spaces, equating to approximately 2 spaces per unit. By comparison, the proposed resident parking provision is materially lower and represents a balance outcome.

The City Core visitor parking rate identifies a maximum provision of 8 residential visitor spaces. The proposal provides 7 visitor spaces, which is below this maximum allowance and is considered acceptable having regard to the site's inner-city location, proximity to the CBD, and strong public transport accessibility.

While no spaces are formally assigned to the retail, commercial or food and drink uses, the proposed 7 visitor / short-stay spaces will operate as a flexible parking pool capable

of accommodating incidental visitor and customer parking demands across the residential and ground floor uses. This is considered appropriate given maximum parking rates apply to these uses and the ground floor tenancies are expected to operate as local-serving uses for the development and surrounding residential catchment.

Overall, the proposed parking allocation satisfies PO13 on a performance basis. The resident parking provision is sufficient to cater for the expected resident vehicle ownership profile without representing an excessive City Core supply, while the visitor / short-stay parking pool assists in reducing reliance on constrained on-street parking within this busy inner-city location.

3.4 Bicycle Parking

3.4.1 Bicycle Parking Provision

In accordance with Table 21 within of BCC TAPS, the bicycle parking requirements have been summarised in Table 3-5.

Table 3-5 Bicycle Parking Requirements

Land use	Yield	Bicycle Parking Rate	Bicycle Parking Required
Multiple Dwelling	147 apartments	Resident: 1 per unit Visitor: 1 space per 4 units	Residents: 147 spaces (Class B) Visitors: 37 spaces (Class C)
TOTAL			Residents: 147 spaces Visitors: 37 spaces

In accordance with BCC TAPS, the proposed development requires a total of 147 resident spaces, and 37 visitor spaces bicycle spaces.

However, Velocity believes the visitor parking rates prescribed within the City Plan are excessive and overestimate the expected active transport uptake for visitors.

As an alternative, Velocity proposes to adopt the rates detailed within Austroads Guide to Traffic Management, Bicycle Parking Facilities. These bicycle parking requirements have been summarised in Table 3-6.

While active transport uptake is expected given the location's context, the Austroads rates are expected to more realistically cater for the expected demands of visitor parking.

Table 3-6 Bicycle Parking Requirements

Land use	Yield	Bicycle Parking Rate	Bicycle Parking Required
Multiple Dwelling	147 apartments	Visitor: 1 space per 12 units	Visitors: 12.3 spaces (Class 3)
TOTAL			13 visitor spaces

As detailed in Table 3-6, the proposed development requires a total of 13 visitor spaces bicycle spaces when adopting the Austroads rates.

3.4.2 Bicycle Parking Compliance

The development proposes 153 resident bicycle parking spaces located within locked enclosures and 13 lockable visitor spaces which are conveniently located adjacent the loading area and 2x spaces on the basement level within close proximity to the lifts. All spaces have been provided using the appropriate security level and are proposed in accordance with the dimensions and orientation requirements of AS2890.3.

Also, less than 20% of the resident bicycle spaces are vertically presented.

As such, the minimum parking requirements have been met. Velocity believes the proposed resident and visitor parking spaces are sufficient to cater for the expected demands of the development.

3.5 Carpark Design

Velocity has completed a comprehensive design review of the parking layout for the proposed development. The car park design compliance is outlined in Table 3-7.

Table 3-7 Car Park Design Compliance

Design Criteria	AS2890/ TAPS Reqs.	Proposed Design	Compliance
End Aisle Extension	1m	Generally 1m <1m in locations	PO
Parking Aisles	5.8m	5.8m	✓
Ramp Width – Two-way	6.1m	6.1m	✓
Ramp Width – One-way	3.6m	3.8m	✓
Grade (MRV/RCV)	Max. 1 in 20 (5%)	1 in 20 (5%)	✓
Grade Parking Bays	Max. 1 in 20 (5%)	Max. 1 in 20 (5%)	✓
Bay length – Resi	5.4m	5.4m	✓
Bay width – Resi	2.4m	Min. 2.4m	✓
Bay length – Resi (SC)	5m	Min. 5m	✓
Bay width – Resi (Small Car)	2.3m	Min. 2.3m	✓
Tandem length (Small Car)	10m	Min. 10m	✓
Small Car Quantum	Max. 20%	14%	✓
Bay Width Adjacent Obstruction >150mm	+0.3m	+0.3m	✓
Ramp Grades			
Primary Ramp Grade (Max.)	<20m: 1:4 (25%)	<20m: 1:4 (25%)	✓
	>20m: 1:5 (20%)	>20m: 1:5 (20%)	✓
Ramp Grade Changes (Max.)	Summit: 1:8 (12.5%) Sag: 1:6.67 (15%)	Summit: 1:10 (10%) Sag: 1:6.67 (15%)	✓
Min. Successive Ramp Lengths	3m	3m	✓
Ramp Transition Length	Min. 2m	2m	✓
Visitor Parking Areas			
Parking Aisles	5.8m	5.8m	
Bay length – Visitor	5.4m	5.4m	✓
Bay width – Visitor	2.5m	2.5m	✓
Bay Width Adjacent Obstruction >150mm	+0.3m	+0.3m	✓
Bay length – PWD	5.4m	5.4m	✓
Bay width – PWD	2.4m + 2.4m shared	2.4m + 2.4m	✓

As such, the proposed car park design meets the minimum requirements with the exception of various end aisles, this performance solution has been detailed below.

3.6 Performance Outcomes

3.6.1 End Aisle Extensions

A number of parking spaces within the internal car park layout do not achieve the full 1m end aisle extension for the full length of the parking aisle, due to the geometry of the site footprint.

A swept path assessment has been undertaken for a B85 design vehicle to confirm the functionality of these spaces. The swept paths confirm that each affected space can be safely and effectively accessed, with vehicles able to enter and exit the spaces without encroaching into the adopted 300mm clearance buffer to obstructions in accordance with AS2890.1 and while adjacent vehicles are parked. It is noted that three-point entry and exit manoeuvres are permissible for the resident user class within AS2890.1.

On this basis, the reduced end aisle extension arrangement is considered functionally acceptable and suitable for the intended residential parking operation.

It is noted that no tires reverse on grades steeper than 1:8 as per AS2890.1.

The swept path assessment is provided at **Appendix B**.

3.7 Other Considerations

3.7.1 Visitor Turnaround Area

A formal visitor turnaround bay has been provided within the visitor parking area prior to the security gate. The arrangement includes a 1m end aisle to the security gate and allows vehicles to turn around before entering the secured resident parking area, including where access through the gate is not available or visitor spaces are fully occupied.

A swept path assessment has been undertaken for a B85 vehicle to confirm the functionality of the turnaround arrangement. The assessment confirms that a visitor vehicle can safely and effectively use the turnaround bay and depart the site in a forward gear while maintaining the adopted 300mm clearance buffer to obstructions in accordance with AS2890.1.

The swept path shows a minor use of the end portion of the PWD shared area prior to the bollard. This is considered acceptable as the movement does not impact a vehicle parked within the PWD space, does not require use of the PWD bay itself, and remains clear of fixed obstructions.

The swept path assessment is provided at **Appendix B**.

3.7.2 Queuing Provision

In accordance with BCC TAPS and AS2890.1 for a car park with 201-300 parking spaces, a minimum queuing storage length equivalent to 6 cars, being 36m, is required between the property boundary and the first internal conflict point (being the first visitor parking space).

The design provides 43m from the property boundary to the first visitor parking space on Basement 1 parking space. Accordingly, the available queuing provision is considered compliant, and no queuing is expected to occur onto Wyatt Street.

3.7.3 Intercom System

Resident access to the secured parking area will be managed by remote access control, with backup FOB access provided near the secure line. Visitor parking is located outside the secured residential parking area.

The access control system is to be designed so that residents are not required to stop on ramp grades steeper than 1 in 20 where avoidable, and so that exiting vehicles are detected before reaching the ramp interface.

The final gate, intercom, FOB and detector arrangement should be confirmed prior to operation and should be coordinated with the one-way ramp signal system.

3.8 One-way Ramp Operations

From Basement 1 to the further basement levels, the development site adopts one-way ramp operation. To manage this movement, the layout provides:

- ▶ A hold point at Basement 1 prior to the descending ramp to Basement 2
- ▶ Matching hold points on the remainder of ramps descending into the further basement levels
- ▶ Hold points on each of the basement ramps prior to the ascending ramps out of the site and matching locations on each floor.

Indicative traffic lantern locations have been shown on the plans for each hold point.

The operational intent is for arrivals to face a green light by default, with basement exit movements given priority when the hold points are activated. This provides a simple and intuitive operation for inbound vehicles while maintaining safe passage for vehicles ascending from the basement levels.

To manage vehicles in close proximity to the hold points, one or both of the following measures will be adopted:

- ▶ For spaces that can directly manoeuvre into the hold bay area, departing vehicles will move into the hold point and wait for the relevant signal phase; or
- ▶ For the remaining spaces immediately in front of the hold point locations, in-bay sensors will be provided such that a departing vehicle can call the signal phase from within the bay and remain clear of the ramp interface until the relevant movement is permitted.

In practical terms, residents will be repeatedly exposed to these controls and are expected to quickly understand the intended operation. On that basis, operational or safety issues are not anticipated.

Swept Path Assessment of Hold Points

Swept path assessment has been undertaken for the hold point interactions associated with the one-way ramp system in accordance with the requirements of AS2890.1.

This has been assessed as:

- ▶ A B85 vehicle travelling down the ramp system past a stationary B99 vehicle at the proceeding hold point location
- ▶ The B99 then departing the hold point to continue up the ramp system and pass a parked B85 on the next floor.

The swept path assessment confirms that these movements can be undertaken while maintaining the adopted 300mm clearance to obstructions and adjacent stationary vehicles in accordance with AS2890.1. On that basis, the proposed hold point locations and associated one-way ramp operation are considered functionally suitable and capable of safely accommodating the intended vehicle movements.

These swept paths are provided at **Appendix B**.

3.9 Servicing Arrangements

3.9.1 Design Vehicles Required

In accordance with *BCC TAPS* and conversations with the client, the servicing requirements are as follows:

Refuse Collection

- ▶ Rear Loading RCV

Commercial Servicing

- ▶ MRV – Occasional Use

3.9.2 Servicing Provision

Refuse Collection

Refuse rooms have been provided within close proximity to the frontage of the site to house the 1,100L wheeled bins

On collection day, the respective RCV will reverse into the site, within two body lengths, park within the dedicated loading area where bins will be brought from the refuse room to the rear of the vehicle for collection. The RCV will then depart the site in a forward gear.

Bins can be transported from the enclosure to the rear of the vehicle within less than 10m.

The separate driveway sections provide sufficient room for entering private vehicles to continue into the site and remain separated from the dedicated refuse area.

The proposed loading area has minimum measures 11.75m by 3.5m with a minimum height clearance of 4.5m for the 9m MRV bay and 3.6m for the RCV bay including bin lifting space.

Refer to the waste consultant report for detailed Refuse PSP response.

Commercial Servicing

The MRV will undertake the same access arrangements as the RCV, reversing into the site, utilising the dedicated loading area for loading/unloading and departing the site in forward gear.

The MRV (and smaller vehicles) are anticipated to be used for deliveries such as furniture and white goods. Although there are not expected to be any impacts due to servicing based on the above, the following is noted:

- ▶ It is recommended to implement a servicing management plan which acts to limit servicing outside of the weekday AM and PM development peak periods

where the ingress/egress traffic movements are the highest. This plan should include additional traffic management measures such as convex mirrors, signage, line marking and an alarm system for departing vehicles.

- ▶ According to the 2021 Census data, only 14.3% of Australians moved within the previous year. Adopting this moving rate to the 147 proposed units, this correlates to approximately 21 move-ins and 21 move-outs each year, for a total of 42 MRV trips. This equates to only 42 days per year an MRV is expected to access the site which is considered infrequent. Also, servicing by an SRV for smaller servicing requirements is also expected for frequently.

3.9.3 Service Vehicle Swept Paths

A swept path assessment has been undertaken for the RCV to determine the suitability of the proposed loading area, crossover and driveway. The swept path indicates that both vehicles can safely access the proposed crossover, use the loading area, and exit the site safely. Given the cul-de-sac nature of the site, it is expected the RCV and other service vehicle will turn at the cul-de-sac to approach the site from east. This approach is anticipated to be the most comfortable, safe and preferred by waste contractors. Use of the area in front of the neighbouring crossover will also improve the swept path.

It is expected the adjacent buildings at 42 Wyandra Street and 18 Wyandra Street are serviced in this manner. The swept path can be found at **Appendix B**.

3.10 Pedestrian Access

The pedestrian path along the frontage has been maintained and will be reinstated where the previous crossovers have been removed. The internal path connects to the external network at several locations to activate the frontage.

3.11 Pedestrian Sight Lines

BCC TAPS requires pedestrian sight splays of 2m x 2m at the site access to assist exiting drivers in observing pedestrians along the frontage. This is particularly relevant in this location given the inner-city environment, continuous frontage footpath and expected pedestrian activity along Wyatt Street.

The current plans do not provide the required pedestrian sight splay due to the location of the gas meter within the splay area. As such, the current arrangement does not comply with the BCC TAPS pedestrian sight splay requirement.

It is recommended that this item be investigated and resolved during the Information Request stage. The plans should be amended to provide the required 2m x 2m pedestrian sight splay at the site access, with the splay area kept clear of obstructions to maintain visibility between exiting vehicles and pedestrians approaching from either direction along the frontage.

4 Traffic Generation

To determine the traffic demand for the high-density residential tower development, reference has been made to both the RTA GTGD 2002 and the August 2013 update.

For the residential component, per-bed rates of 0.21 trips per bed in the AM peak and 0.15 trips per bed in the PM peak have been adopted in accordance with the GTGD 2013 high-density residential rates.

The ground floor retail/shop, food and drink and commercial tenancies are expected to operate as ancillary, local-serving uses for residents of the development and the surrounding high-density catchment. These uses are not expected to generate material standalone vehicle trips, particularly given no dedicated parking is proposed for these tenancies and the site is located within a highly connected inner-city public transport environment.

The existing and proposed traffic generation has therefore been compared to determine the net traffic impact of the residential development on the surrounding road network. Existing traffic generation has been calculated based on the recognised GFA listed on sales / leasing listings for each of the existing office buildings, assessed as commercial uses under the RTA GTGD 2002.

This has been summarised in Table 4-1.

Table 4-1 Traffic Generation

Land Use	Yield	Peak Hour Rate		Peak Hour Demand (vph)	
		AM	PM	AM	PM
Existing Use					
Commercial Premise	1,537 sq.m	2 trips for 100 sq.m		30.7 vph	30.7 vph
Proposed Use					
High density Residential	365 beds	0.21 trips per bed	0.15 trips per bed	76.7 vph	54.8 vph
NET INCREASE				45.9 vph	24 vph

As such, the proposed development is expected to have a net increase of ~46 vph compared with the existing scenario during the AM and 24 vph in PM peak periods.

4.1 Internal Trip Distribution

Table 4-2 and Table 4-3 shows the peak hour traffic directional distribution and the resulting directional trips for the proposed development. For residential land uses, this typically follows the pattern of people leaving for work in the morning and arriving home from work in the evening. Office uses are typically split in the opposite manner.

Table 4-2 Directional Distribution

Land Use	AM		PM	
	IN	OUT	IN	OUT
Commercial Premise	50%	50%	50%	50%
High density Residential	30%	70%	70%	30%

Table 4-3 Directional Trips

Land Use	Yield	AM		PM	
		IN	OUT	IN	OUT
Existing Use					
Commercial Premise	1,537 sq.m	15.4 vph	15.4 vph	15.4 vph	15.4 vph
Proposed Use					
High density Residential	366 beds	23 vph	53.7 vph	38.3 vph	16.4 vph
NET INCREASE		7.6 vph	38.3 vph	23 vph	1.1 vph
		45.9 vph		24 vph	

As indicated in Table 4-3, the proposed development is anticipated to generate a net increase of up to ~8 vph entering and ~38 vph exiting the development in the AM, and 23 vph entering and ~1 vph and exiting in the PM peak period.

4.2 External Directional Trip Distribution

To determine the external distribution of trips, the surrounding road hierarchy, local street grid and likely residential / commercial catchments have been reviewed. The subject site is located within an established inner-city mixed-use area, with immediate access to Wyatt Street and direct connection to Masters Street.

Masters Street provides the key local distribution function, allowing vehicles to travel north to Longland Street or south to Commercial Road. Both Longland Street and

Commercial Road then provide east-west connections to the wider Newstead, Teneriffe, Fortitude Valley, New Farm and Brisbane CBD network.

In broad terms, trips are expected to be drawn from and distributed to the following catchments:

- ▶ The western / south-western catchment via Commercial Road, including Fortitude Valley, James Street, Ann Street, Wickham Street and the Brisbane CBD.
- ▶ The eastern / north-eastern catchment via Longland Street, Skyring Terrace, Gasworks, Teneriffe and the Newstead riverfront precinct.
- ▶ The southern / south-eastern catchment via Commercial Road and surrounding streets, including New Farm.
- ▶ The local Newstead catchment through the surrounding neighbourhood road grid, including Wyandra Street, Wyatt Street, Masters Street, Helen Street and surrounding local connections.

Based on this network, development traffic is not expected to be assigned to a single external intersection or movement. Trips will disperse through the surrounding street grid before reaching the higher order road network, with vehicle movements distributed between Masters Street, Longland Street and Commercial Road depending on the relevant origin / destination.

Accordingly, the proposed external distribution is considered appropriate for the site context and is expected to result in a broad dispersion of peak-hour trips across the surrounding road network.

4.3 Traffic Generation Summary

The proposed development is expected to generate a net increase of ~46 vph in the AM peak and 24 vph in the PM peak compared with the existing site use. Directionally, this equates to a net increase of ~8 vph entering and ~38 vph exiting the site in the AM peak, and ~23 vph entering and ~1 vph exiting the site in the PM peak.

The highest net directional movement is therefore ~38 vph exiting the site in the AM peak. This equates to approximately one additional vehicle every two minutes before any external route distribution is applied. Once distributed through Wyatt Street, Masters Street, Longland Street and Commercial Road, the additional traffic assigned to any individual external intersection movement is expected to be insignificant compared to existing volumes.

The adopted traffic generation is also expected to be conservative having regard to the site's strong public transport accessibility, as detailed in **Section 2.3 Public Transport Network**. The site is located within 400m of 10 bus stops and the Teneriffe ferry

terminal, with high-frequency services including Route 60 at 5-minute peak frequencies, Route 199 at 10-minute peak frequencies and the F1 ferry service at 15-minute peak frequencies. The site is also supported by continuous footpaths, Wyandra Street's Primary cycle route function, and nearby connections to the New Farm Riverwalk and Lores Bonney River Walk.

Given this level of connectivity, actual private vehicle demand is expected to be lower than the adopted traffic generation estimates, particularly for daily commuter trips and local inner-city trips that are typically well served by bus, ferry, walking and cycling options in this location.

The proposed access strategy also removes the existing multiple access points along Wyandra Street and Wyatt Street and consolidates access to a single Wyatt Street crossover. This reduces the number of vehicle conflict points on the external road network and removes direct access activity from Wyandra Street, improving the operation of the higher used frontage while maintaining effective local distribution through the lesser utilised Masters Street.

Having regard to the net increase in peak-hour trips, the immediate dispersal available through the local grid, the multiple route options to Longland Street and Commercial Road, and the strong public transport alternatives, the development is not expected to result in material increased delay on any approach of the surrounding major intersections with Commercial Road or Longland Street.

On this basis, the proposed development traffic is expected to be safely and efficiently accommodated within the surrounding road network without causing a material degradation to intersection performance.

5 Summary

Findings for the development at 22-40 Wyandra Street, Newstead are as follows:

Item	Findings
Existing Conditions	The site is located within the Mixed use (Inner city) zone and is bound by Wyandra Street and Wyatt Street. The site is well serviced by active and public transport, including continuous footpaths, Wyandra Street's Primary cycle route function, nearby riverwalk connections, 10 bus stops and the Teneriffe ferry terminal within 400m. The existing site contains commercial uses with 8 existing crossovers across the two frontages.
Proposed Development	The proposal comprises 147 apartments, consisting of 2x 1-bedroom units, 80x 2-bedroom units, 58x 3-bedroom units, 6x 4-bedroom units and 1x 5-bedroom unit. Four ancillary tenancies are also proposed with a total GFA of 701 sq.m.
Access Arrangement	Access is proposed via a single consolidated entry/exit crossover to Wyatt Street. The existing 8 crossovers will be removed and replaced with one crossover, resulting in a net reduction of 7 crossovers and improved frontage conditions. The proposed 12.25m wide modified Type B2 crossover has been tested for the RCV and MRV design vehicles and is considered suitable for the intended access and servicing function.
Sight Distance and Access Location	The Wyatt Street access provides 67m sight distance to Masters Street and unobstructed sight distance toward the cul-de-sac. While the western sight distance and driveway separation are assessed on a performance basis, the arrangement is considered acceptable having regard to the low-speed neighbourhood road environment, intersection proximity, existing access pattern and consolidation of 8 existing crossovers into one access point.
Parking Provision	The development provides 222 resident spaces and 7 visitor / short-stay spaces, including one PWD space with accompanying shared area. The adopted resident parking requirement is met. The resident provision equates to approximately 1.5 spaces per unit and is considered suitable for the expected ownership profile without representing an excessive City Core supply. The visitor / short-stay spaces will operate as a flexible parking pool for residential visitors and incidental customer demands associated with the ancillary ground floor uses, assisting in reducing reliance on constrained on-street parking within Newstead.
Bicycle Parking	The development provides 153 resident bicycle spaces and 13 visitor bicycle spaces. Resident bicycle parking meets the BCC TAPS requirement and is provided within secure enclosures. Visitor bicycle parking is provided in convenient frontage locations and is considered suitable having regard to the adopted Austroads visitor bicycle parking rate.
Car Park Design	The car park layout generally complies with AS2890.1 and BCC TAPS requirements. Where reduced end aisle extensions are provided, B85 swept path assessment confirms the affected spaces can be safely and effectively accessed while maintaining the adopted 300mm clearance buffer. The visitor turnaround bay, PWD space manoeuvre and one-way ramp hold point arrangements have also been confirmed by swept path assessment.

Servicing	Refuse collection and commercial servicing will occur from the dedicated loading area at the site frontage. The rear-loading RCV and MRV will reverse into the site within two body lengths, undertake servicing from the loading area and exit in a forward gear. Swept path assessment confirms the proposed servicing arrangement is suitable.
Pedestrian Access and Safety	Existing pedestrian paths along the frontage will be retained or reinstated where redundant crossovers are removed. BCC TAPS requires pedestrian sight splays of 2m x 2m at the site access. The current plans do not provide the required pedestrian sight splay due to the gas meter location and this item should be investigated and resolved during the Information Request stage. The plans should be amended to provide the required sight splay, with the splay area kept clear of obstructions.
Traffic Generation	The development is expected to generate a net increase of approximately 46 vph in the AM peak and 24 vph in the PM peak compared with the existing site use. The highest net directional movement is approximately 38 vph exiting in the AM peak. Given the immediate dispersal available via Wyatt Street, Masters Street, Longland Street and Commercial Road, and the strong public and active transport context, the development is not expected to result in a material increase in delay on any approach of the surrounding major intersections with Commercial Road or Longland Street.

Velocity is of the opinion the proposed is compliant with relevant codes and standards.

Author:

Casey Schackow
Director

Effective Date 3/08/2026

C. Schackow

Approved By:

Harj Singh
Transport Advisor RPEQ 22364

Date Approved 3/08/2026

H. Singh

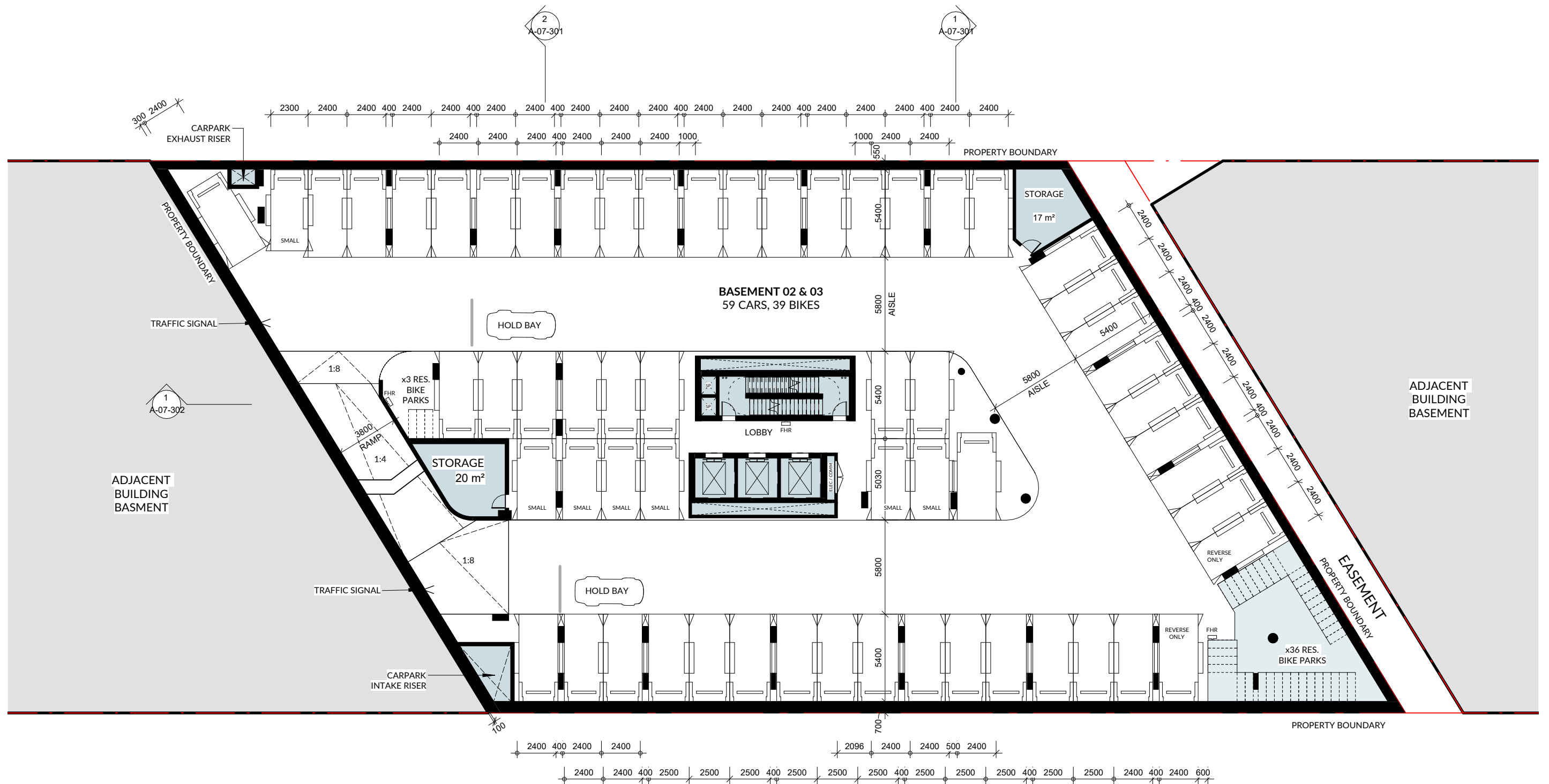


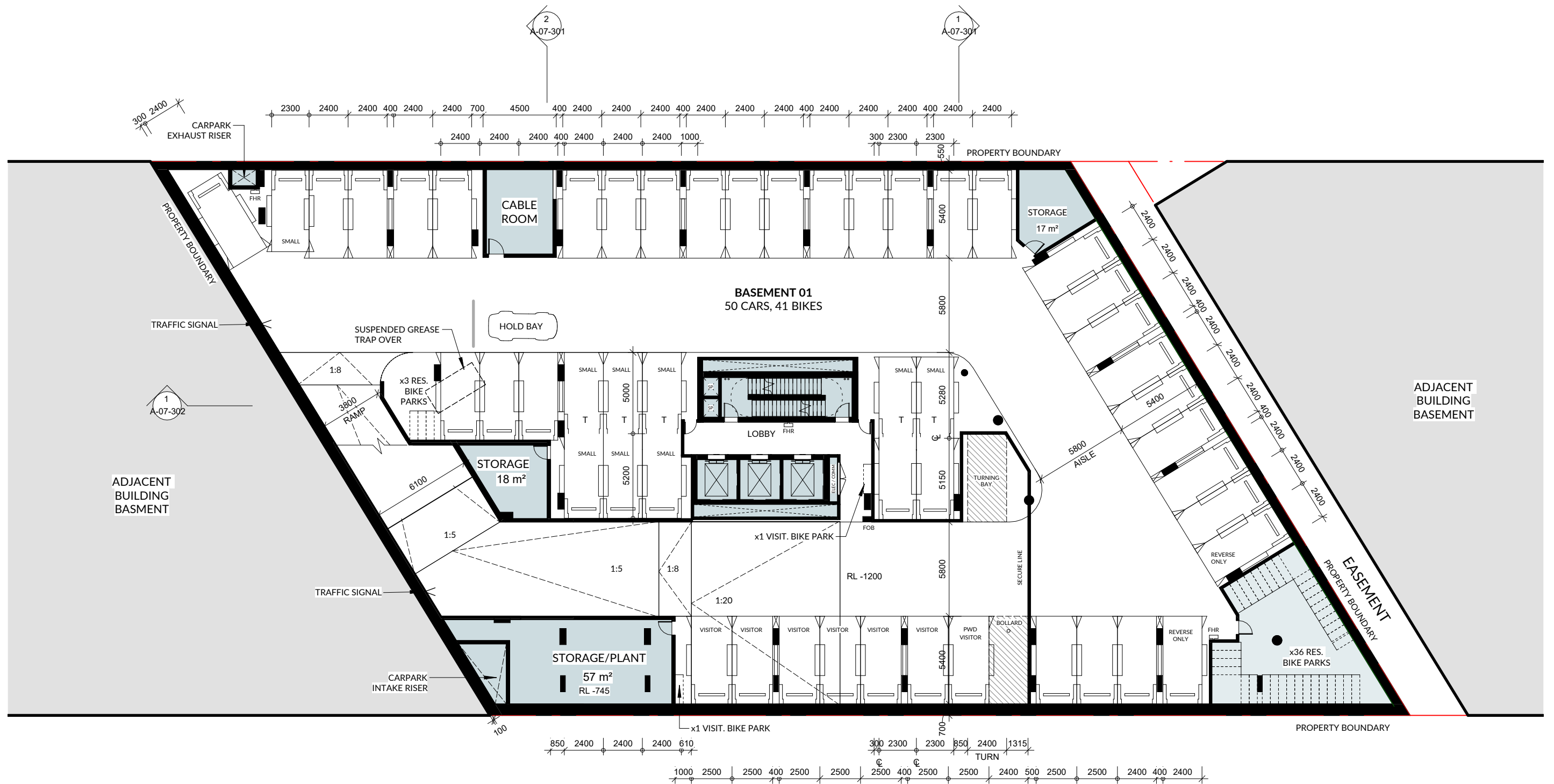
VELOCITY
TRAFFIC
ENGINEERING

APPENDIX A

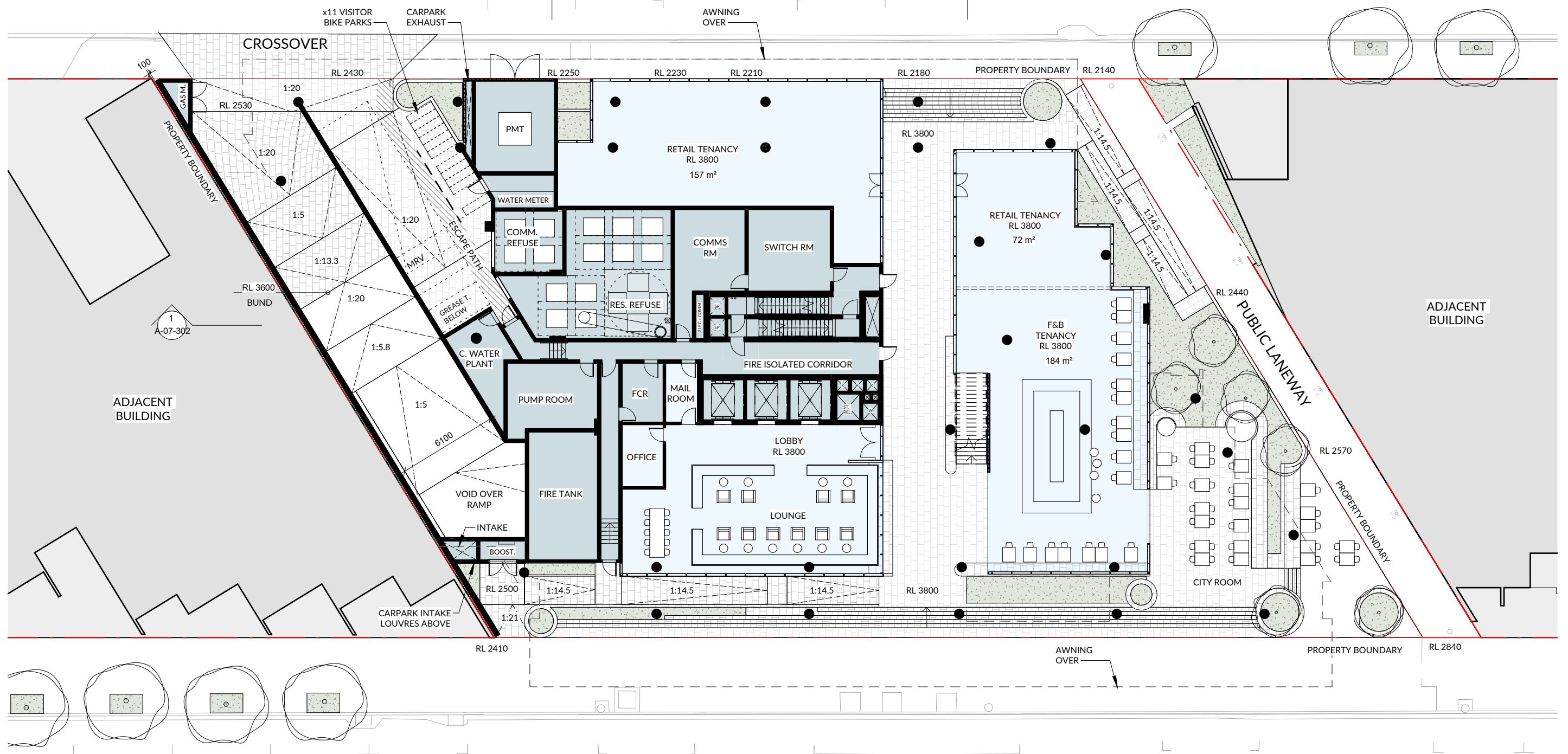
CONCEPT PLANS







WYATT STREET



WYANDRA STREET

1 : 250 @ A3

DWG NO.A-07-104 REV.15 03.08.26

GF GA PLAN



VELOCITY
TRAFFIC
ENGINEERING

APPENDIX B

SWEPT PATH ASSESSMENT





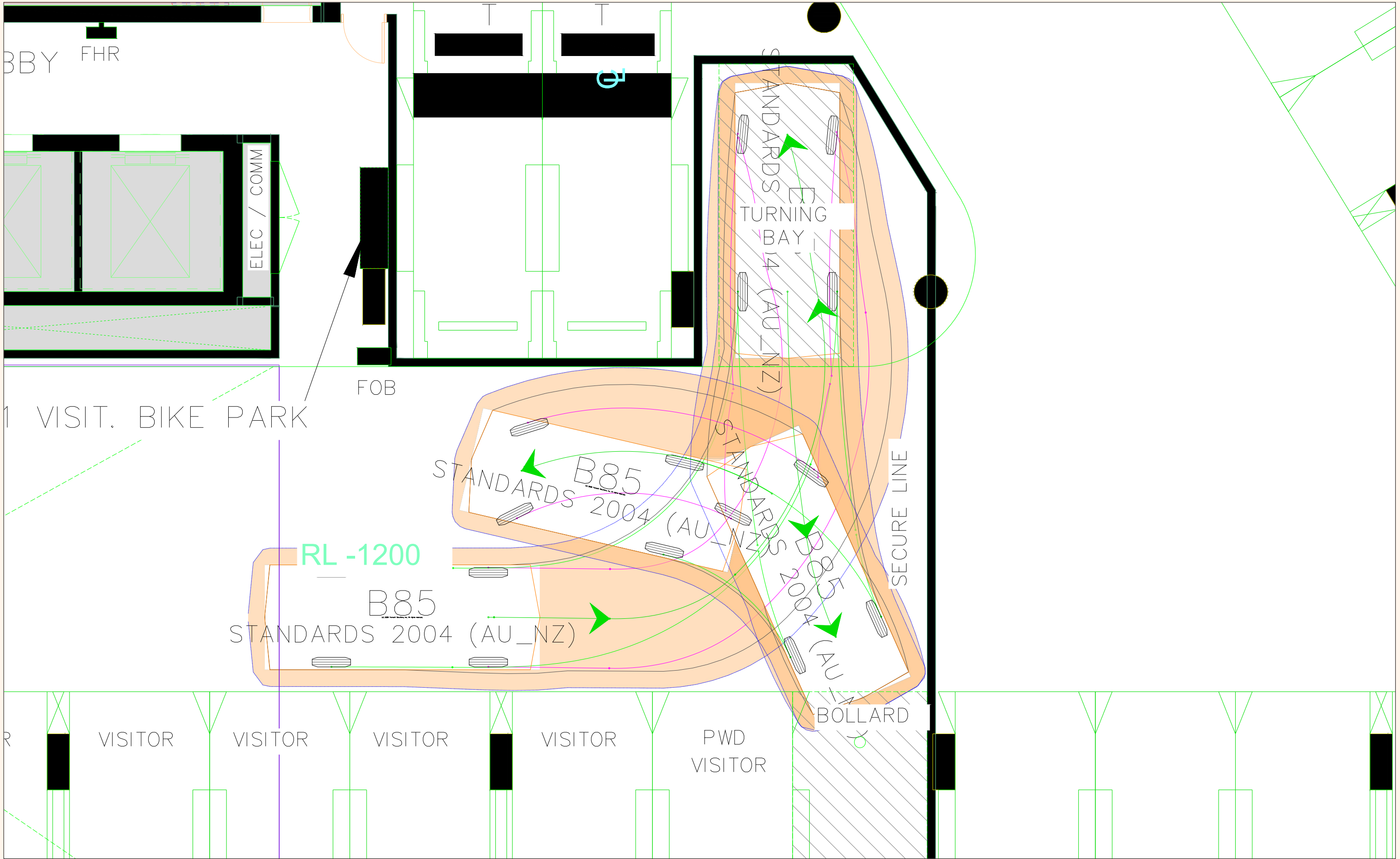
SWEPT PATH LEGEND	
	VEHICLE BODY
	FRONT TIRES
	REAR TIRES
	VEHICLE PATH
	VEHICLE CLEARANCE (300mm)
	VEHICLE

TAPS Code Rear Lift	
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 38.9
Travel Height	: 3.6
Operating Height	: 3.6
Turning radius (kerb-to-kerb)	: 9.757

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FRANK DEVELOPMENTS PTY
22-40 WYANDRA STREET, NEWSTEAD
SWEPT PATH - RCV
LEFT: ENTRY
RIGHT: EXIT

Drawn C.Schackow	Date 22/06/2026	Scale 1:100	Size A3
Drawing Number SK01	Rev A		



SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- REAR TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE

B85 - AS2890.1

Meters

Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 40.0

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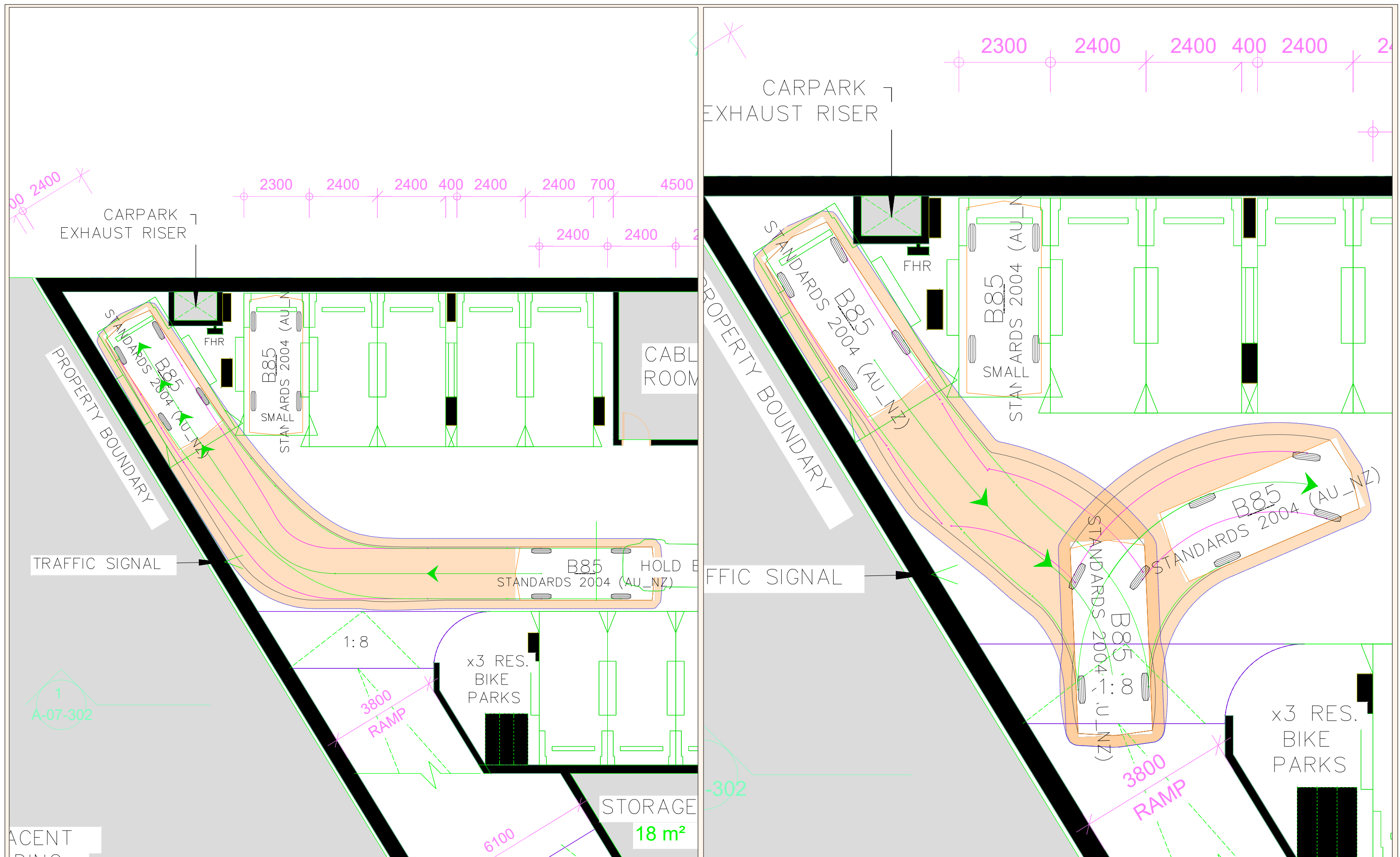
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FRANK DEVELOPMENTS PTY

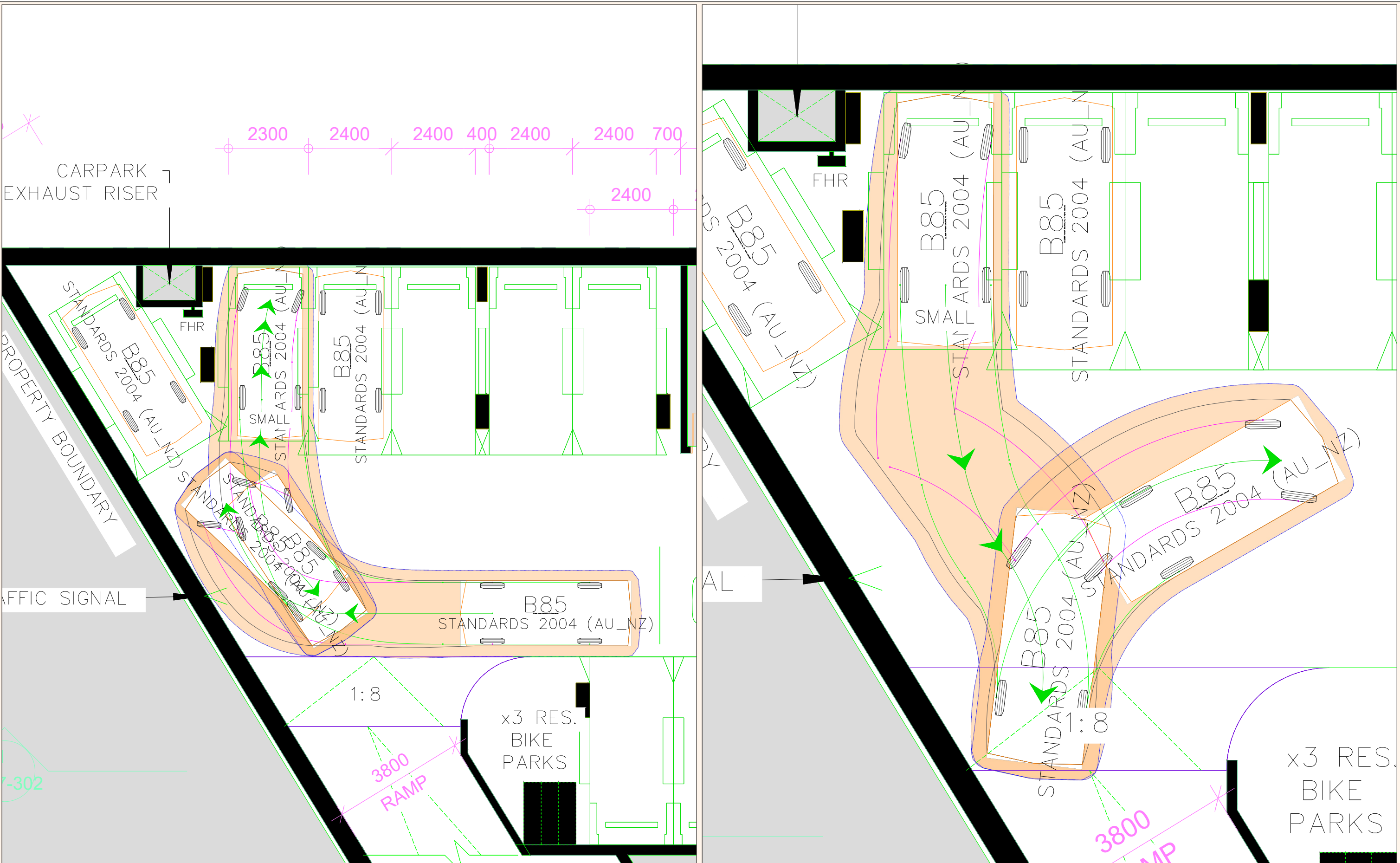
22-40 WYANDRA STREET, NEWSTEAD

SWEPT PATH - VISITOR TURNAROUND - B85

Drawn	Date	Scale	Size
C.Schackow	20/07/2026	1:100	A3
Drawing Number	SK02	Rev	A



SWEPT PATH LEGEND VEHICLE BODY FRONT TIRES REAR TIRES VEHICLE PATH VEHICLE CLEARANCE (300mm) VEHICLE		4.91 0.92 2.80 B85 - AS2890.1 Meters Width : 1.87 Track : 1.77 Lock to Lock Time : 6.0 Steering Angle : 40.0																				
		Velocity Traffic Engineering Velocity Traffic Engineering T 0413482746 ABN 94 658 980 208	FRANK DEVELOPMENTS PTY 22-40 WYANDRA STREET, NEWSTEAD SWEPT PATH - B85 - END BAY 1 LEFT: ENTRY RIGHT: EXIT <table><tr><td>Drawn</td><td>Date</td><td>Scale</td><td>Size</td></tr><tr><td>C.Schackow</td><td>20/07/2026</td><td>1:100</td><td>A3</td></tr><tr><td colspan="3">Drawing Number</td><td>Rev</td></tr><tr><td colspan="3">SK03</td><td>A</td></tr></table>				Drawn	Date	Scale	Size	C.Schackow	20/07/2026	1:100	A3	Drawing Number			Rev	SK03			A
Drawn	Date	Scale	Size																			
C.Schackow	20/07/2026	1:100	A3																			
Drawing Number			Rev																			
SK03			A																			



SWEPT PATH LEGEND

VEHICLE BODY

FRONT TIRES

REAR TIRES

VEHICLE PATH

VEHICLE CLEARANCE (300mm)

VEHICLE

4.91

0.92

2.80

B85 - AS2890.1

Meters

Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 40.0

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Velocity Traffic Engineering

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ABN 94 658 980 208

FRANK DEVELOPMENTS PTY

22-40 WYANDRA STREET, NEWSTEAD

SWEPT PATH - B85 - END BAY 2

LEFT: ENTRY

RIGHT: EXIT

Drawn

Date

Scale

Size

Drawing Number

Rev

C.Schackow

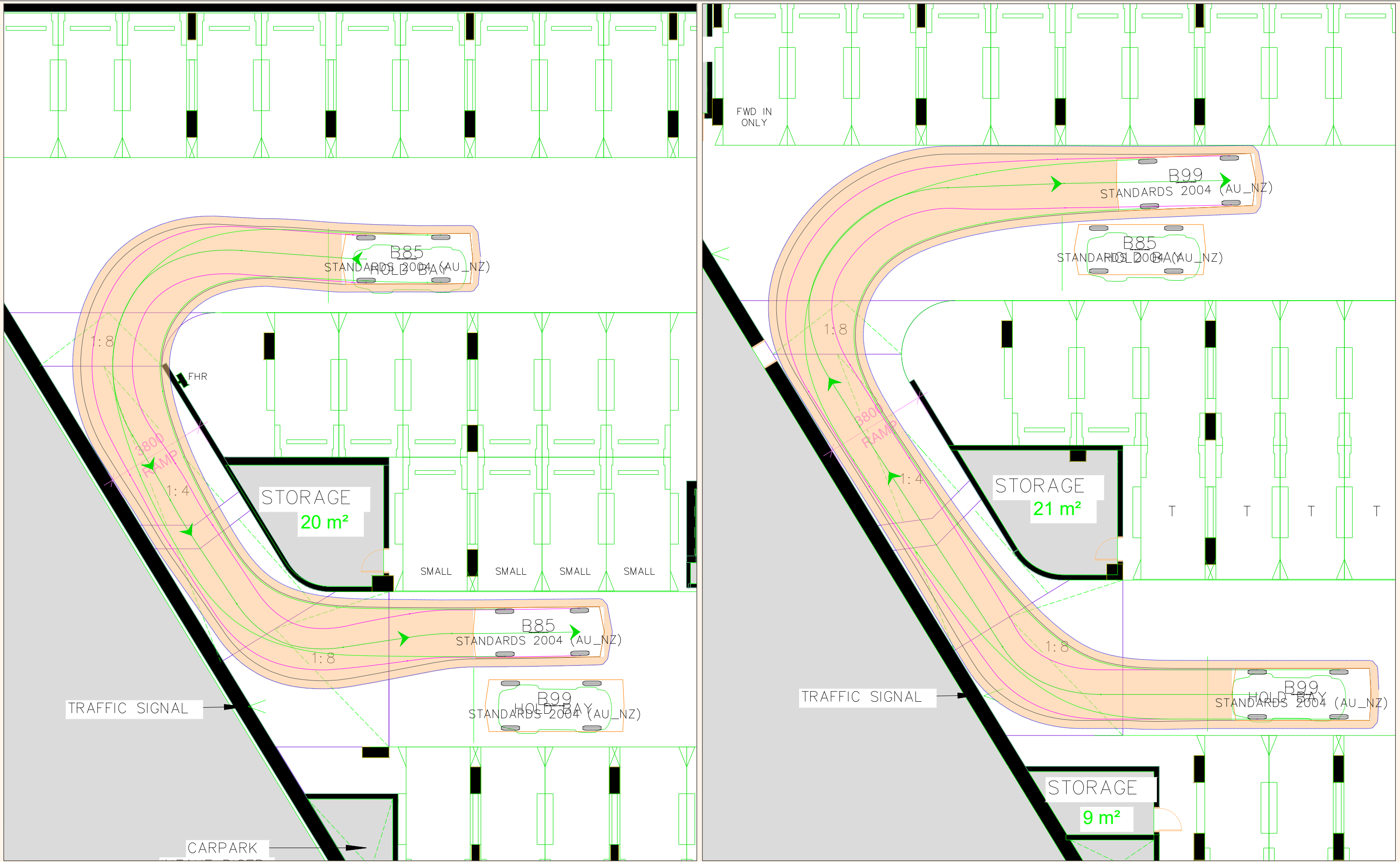
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1:100

A3

SK04

A



SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- REAR TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE

B85 - AS2890.1

Meters

Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 40.0

B99

Meters

Width : 1.94

Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.5

FRANK DEVELOPMENTS PTY

22-40 WYANDRA STREET, NEWSTEAD

SWEPT PATH - ONE WAY RAMPS

LEFT: DOWNWARD - B85 PASS B99

RIGHT: UPWARD - B99 PASS B85

Drawn **C.Schackow** Date **22/06/2026** Scale **1:100** Size **A3**

Drawing Number **SK05** Rev **A**

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ABN 94 658 980 208



SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- REAR TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE

B85 - AS2890.1

Meters

Width : 1.87

Track : 1.77

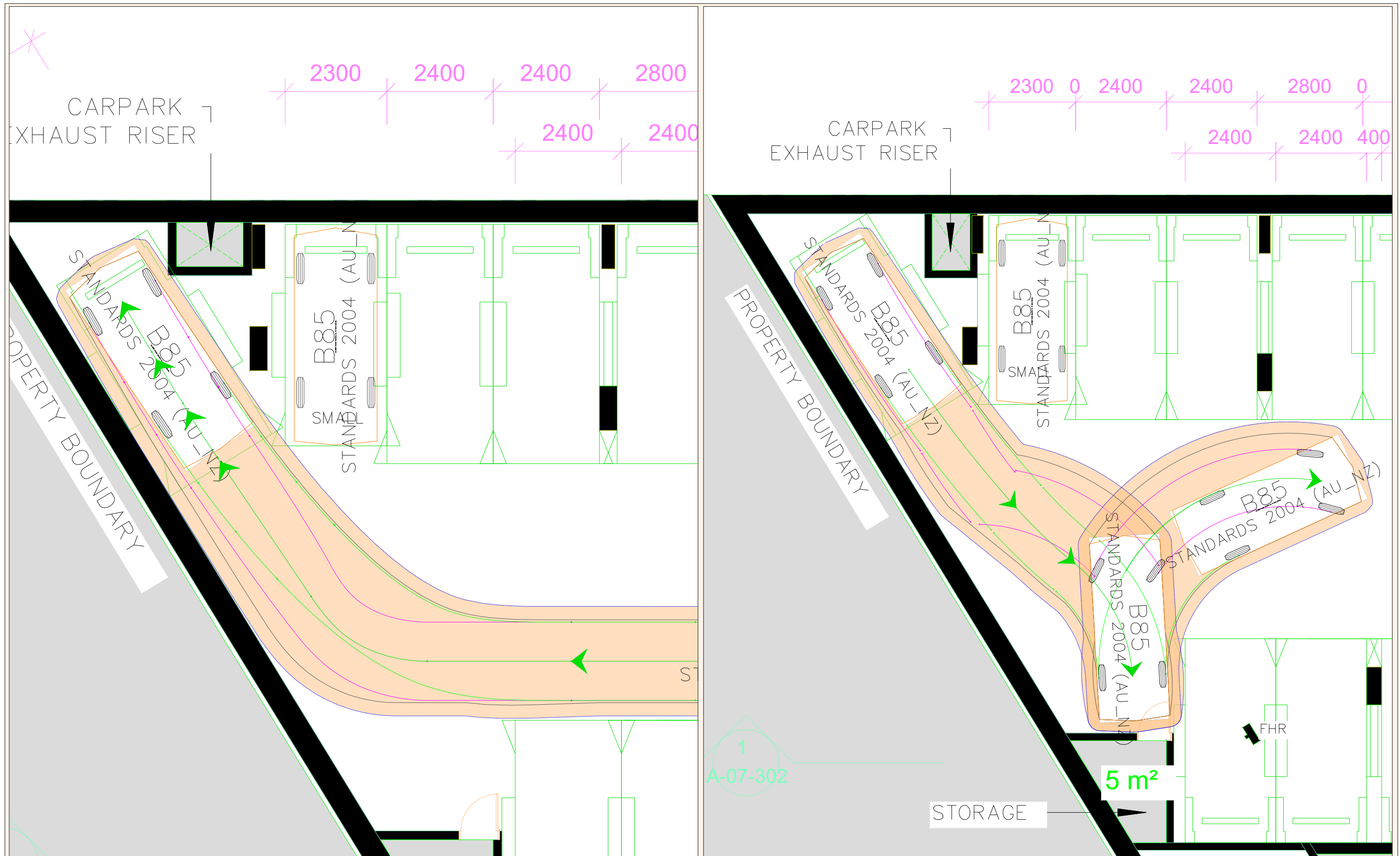
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Velocity Traffic Engineering
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ABN 94 658 980 208

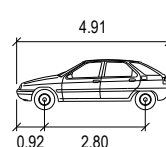
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22-40 WYANDRA STREET, NEWSTEAD
CRITICAL SWEPT PATHS - B85
END BAY 3
END BAY 4

Drawn C.Schackow	Date 20/07/2026	Scale 1:100	Size A3
Drawing Number SK06			Rev A



SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- REAR TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE



B85 - AS2890.1

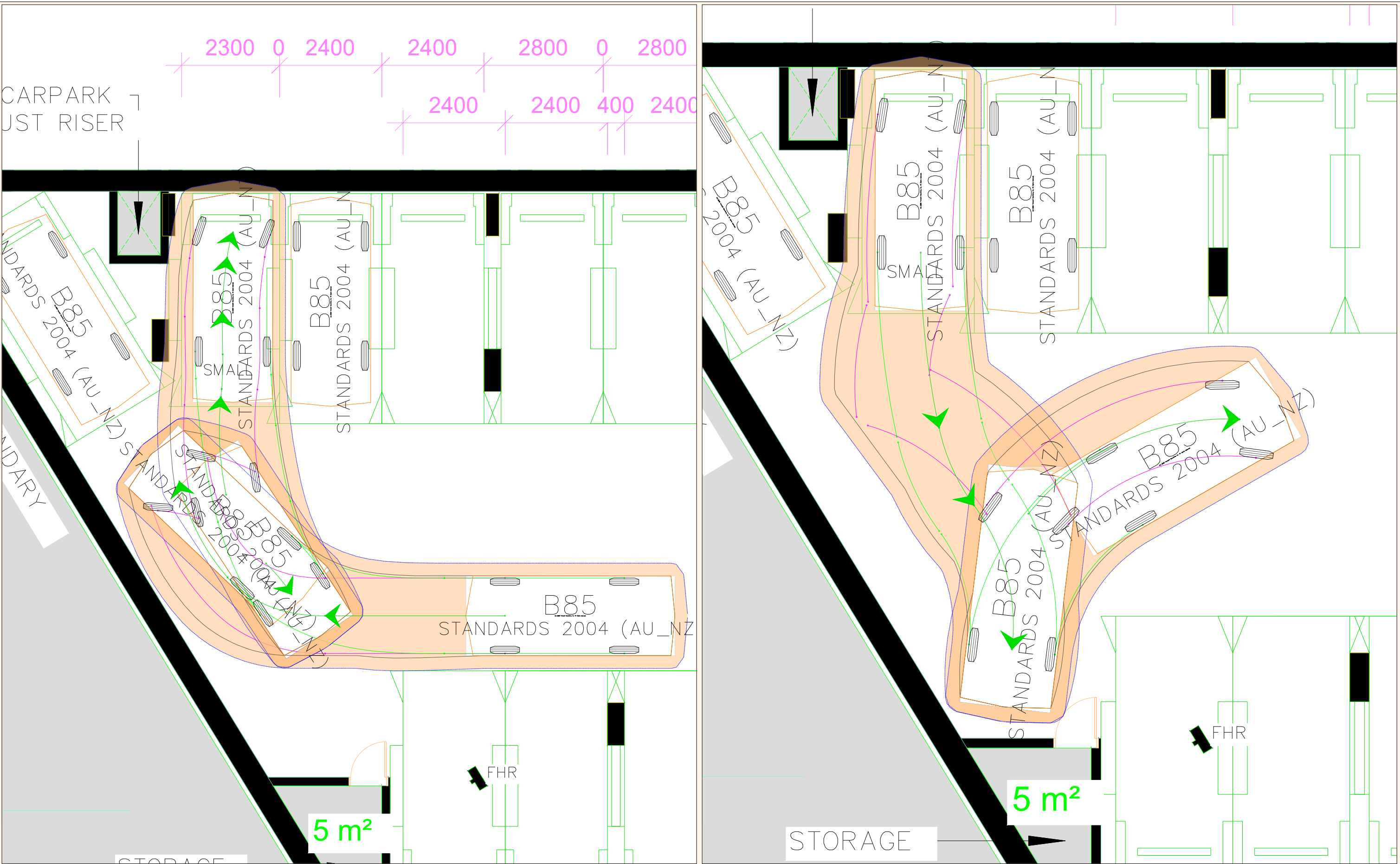
Meters
Width : 1.87
Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 40.0



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FRANK DEVELOPMENTS PTY
22-40 WYANDRA STREET, NEWSTEAD
SWEPT PATH - B85 - END BAY 1 (B4)
LEFT: ENTRY
RIGHT: EXIT

Drawn	Date	Scale	Size
C.Schackow	20/07/2026	1:100	A3
Drawing Number	Rev		
SK07	A		



SWEPT PATH LEGEND

VEHICLE BODY

FRONT TIRES

REAR TIRES

VEHICLE PATH

VEHICLE CLEARANCE (300mm)

VEHICLE

4.91

0.92

2.80

B85 - AS2890.1

Meters

Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 40.0

Velocity Traffic Engineering

Velocity Traffic Engineering

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ABN 94 658 980 208

FRANK DEVELOPMENTS PTY

22-40 WYANDRA STREET, NEWSTEAD

SWEPT PATH - B85 - END BAY 2 (B4)

LEFT: ENTRY

RIGHT: EXIT

Drawn

C.Schackow

Date

20/07/2026

Scale

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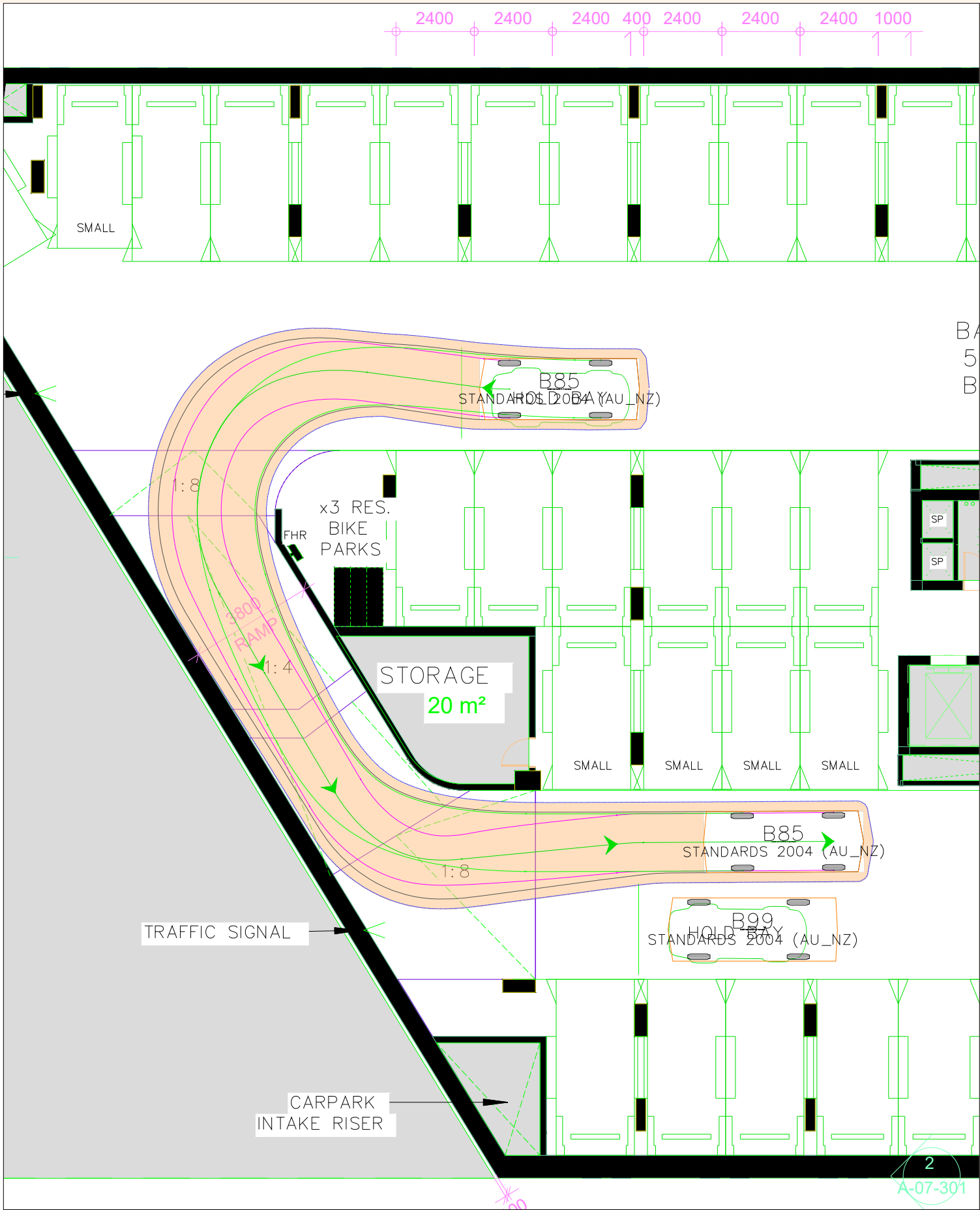
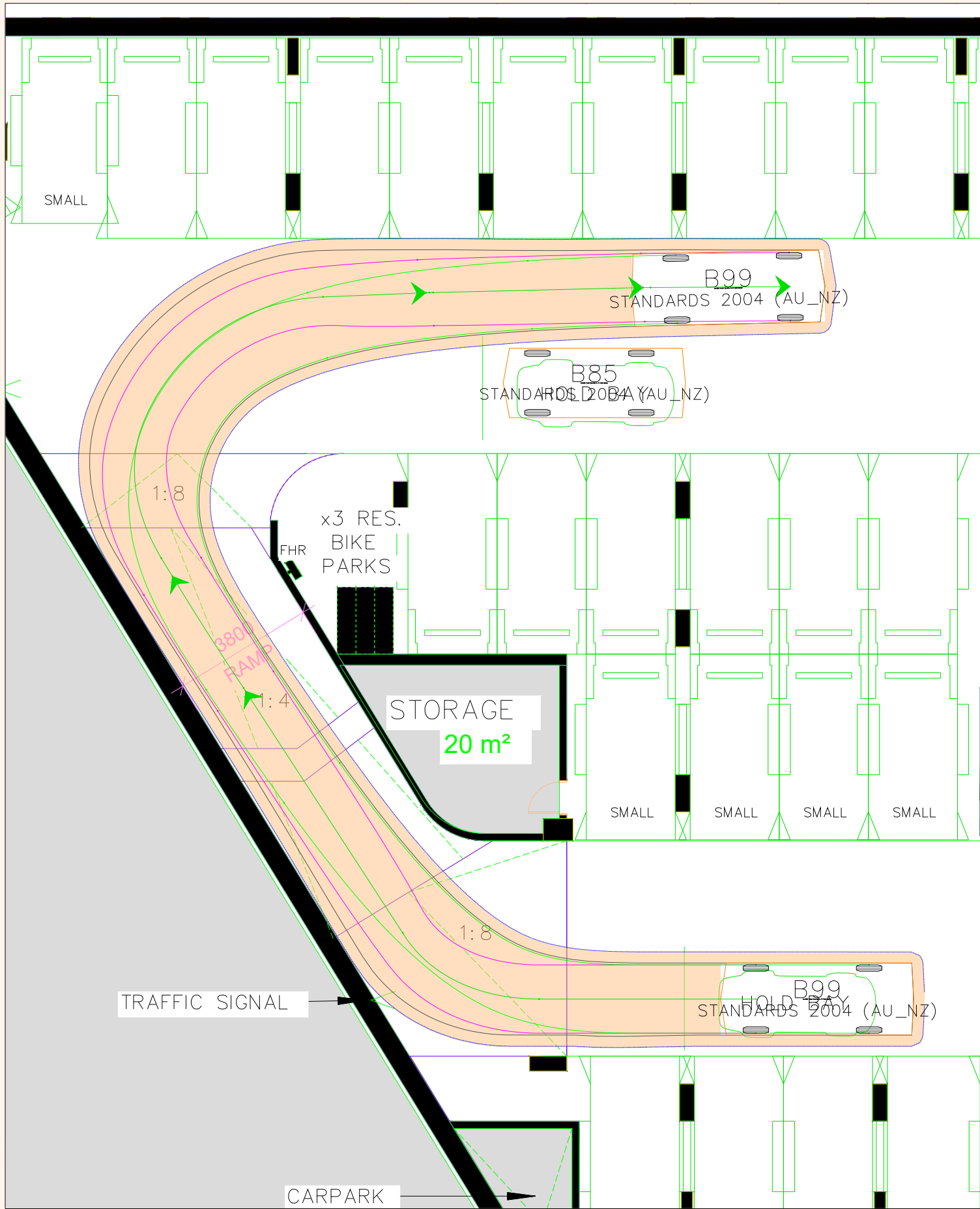
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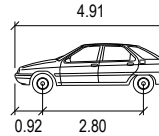
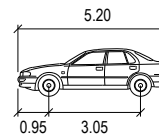
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Rev

A



SWEPT PATH LEGEND — VEHICLE BODY — FRONT TIRES — REAR TIRES → VEHICLE PATH --- VEHICLE CLEARANCE (300mm) — VEHICLE		B85 - AS2890.1  Width : 4.91 Track : 0.92 Lock to Lock Time : 2.80 Steering Angle : 1.87 Meters : 1.77 Meters : 6.0 Meters : 40.0		B99  Width : 5.20 Track : 0.95 Lock to Lock Time : 3.05 Steering Angle : 1.94 Meters : 1.84 Meters : 6.0 Meters : 33.5		 Velocity Traffic Engineering T 0413482746 ABN 94 658 980 208		FRANK DEVELOPMENTS PTY 22-40 WYANDRA STREET, NEWSTEAD SWEPT PATH - B85 / B99 INTERNAL RAMP PASSING		Drawn C.Schackow	Date 20/07/2026	Scale 1:100	Size A3	Rev A
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