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10-16 Selwyn Street, Elsternwick

Transport Impact Assessment

11 February 2025

Client:	Pace Development Group
Eukai Reference:	24075
Primary Contact:	Kane Williams, Director, Eukai Pty Ltd

Acknowledgement of Country

In the spirit of reconciliation, Eukai acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea, and community. We pay our respect to their Elders past and present, and we extend that respect to all Aboriginal and Torres Strait Islander peoples.

Issue Record

Issue	Date	Status	Authored By	Reviewed By	Signature
B	11/02/25	Final (updated plans)	Kane Williams	Andrew Farran	

Table of Contents

Introduction

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1 Introduction

1.1 Background

A planning permit is currently being sought for a proposed mixed-use development on land located at 10-16 Selwyn Street, Elsternwick.

In September 2022, a planning permit (Permit No. GE/DP-34187/2021/A) was issued for a mixed-use development located on 10-16 Selwyn Street in Elsternwick. Stantec was engaged by Fabcot Pty Ltd (the Applicant) to prepare the traffic impact assessment report (dated 01/07/2021) and a subsequent letter which detailed some minor adjustments to development floor areas (dated 23/02/2024).

Having regard for the above, a new planning permit application is now being sought for the proposed development. **Table 1** provides a summary of the key transport elements including what was previously endorsed and the details of the new proposal which is the subject of this report.

Table 1: Approved Development and Proposed Development Schedule

Item		Approved Development[1]	New Development	Difference
1 – Land Use / Floor Areas				
Supermarket inc. office		3,733sqm LFA	3,696sqm LFA	- 37sqm LFA
Food & Drink (café)		267sqm LFA	137sqm LFA	- 130sqm LFA
Bottle shop		156sqm LFA	156sqm LFA	0
Retail kiosk		28sqm LFA	0	- 28sqm LFA
Office		0	312sqm NFA	+312 NFA
Place of Assembly		703sqm NFA	671sqm NFA	- 32sqm NFA
Apartments		135 dwellings	148 dwellings	+ 13 dwellings
2 – Transport Items				
Car Parking spaces	Supermarket / Retail	229 spaces	212 spaces	- 17 spaces
	Office	0 spaces	3 spaces	+ 3 spaces
	Place of Assembly	30 spaces	15 spaces	- 15 spaces
	Residential	159 spaces	199 spaces	+ 40 spaces
	Sub Total	418 spaces	429 spaces	+ 11 spaces
Bicycle Parking spaces	Basement	115 staff, residents and resident visitor spaces	115 staff, residents, resident visitor spaces	-
	Ground	8 visitor spaces	12 visitor spaces	+ 4 spaces
	Sub Total	123 spaces	127 spaces	+ 4 spaces
End of Trip Facilities		2 shower / change room	2 shower / change room	Nil
Loading bays		1 x 14.7m truck (Supermarket) 1 x 6.4m truck (residential)	1 x 14.7m truck (Supermarket) 1 x 6.4m truck (residential)	Nil
Waste Collection		Private contractor using 6.4m truck from both docks	Private contractor using 6.4m truck from both docks and basement B3 and B4.	Private residential waste collection via Basement 3 & 4.

[1] Sourced from Stantec transport related assessment letter dated 23/02/2024

Further to the above noted development changes, the mix of 1, 2 and 3 bedroom apartments has changed. The office land use is also a new addition to the development when compared to the previously endorsed development. This is explored in greater detail within relevant sections of this report.

In September 2024, Eukai was engaged by the Applicant to prepare a transport impact assessment for the new development application. This report sets out that assessment.

The proposed ground floor architectural plan is reproduced in **Figure 1**.

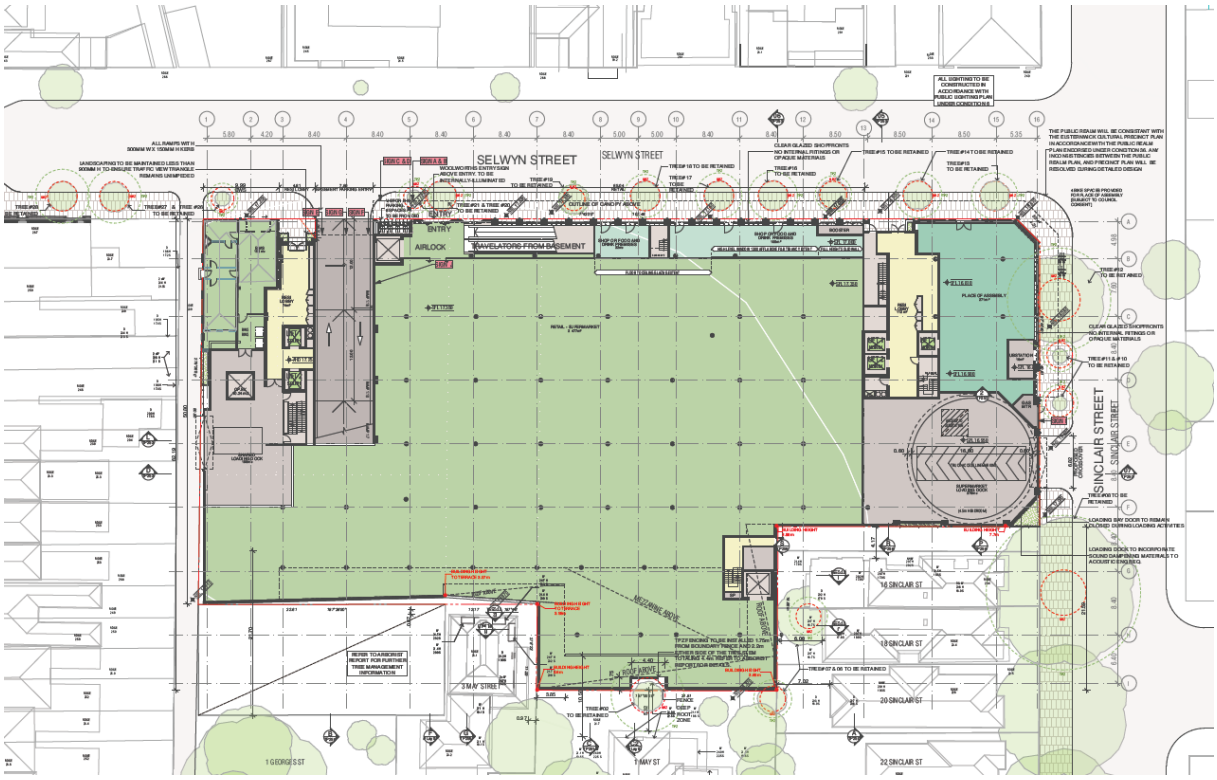

Figure 1: Ground Floor Architectural Plan
(Sourced from FK Architects)

The previously prepared traffic assessment of the site included the preparation of a Loading Dock Management Plan (LDMP) and a Green Travel Plan (GTP). Changes which effect the content within each of these documents is detailed within Sections 4 and 7 of this report.

1.2 Purpose and Structure of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development. It entails the following sections:

- **Section 2** presents an overview of relevant transport conditions in the vicinity of the site
- **Section 3** presents an overview of the proposed development details
- **Section 4** presents an assessment of the sufficiency of the sustainable transport infrastructure for the revised development, including the appropriateness of the pedestrian and cycling access arrangements as well as the proposed bicycle parking and associated end-of-trip facilities.

- **Section 5** presents an assessment of the adequacy of the proposed car parking provision for the revised development, both in terms of quantum, design and compliance.
- **Section 6** presents an assessment of the anticipated traffic generation and external impacts of the revised development
- **Section 7** presents an assessment of the adequacy of the proposed loading arrangements for the revised development.
- **Section 8** presents a summary of key findings and recommendations contained within this report.

1.3 References

In preparing this report, reference has been made to the following:

- Glen Eira Planning Scheme.
- Australian/New Zealand Standard 2890, Parking Facilities
- Architectural drawings for the proposed development prepared by Fender Katsalidis, dated September 2024.
- Traffic Impact Assessment report prepared by Stantec dated 01/07/2021
- Traffic Impact Assessment Amendment letter prepared by Stantec dated 23/02/2024
- Traffic Engineering Assessment Evidence Report prepared by Charmaine Dunstan of Traffix Group, for VCAT Hearing P263/2019, dated 29 October 2019.
- Traffic Engineering Assessment Evidence Report prepared by Stephen Hunt of Ratio for VCAT Hearing P263/2019, dated 29 October 2019.
- VCAT decision report cited Fabcot Pty Ltd v Glen Eira CC [2020] VCAT 957, reference: P263/2019, for the hearing ending 29 November 2019.
- Data collection undertaken by GTA Consultants and Traffix, as referenced in the context of this report.
- Glen Eira Street Design Guidelines
- Elsternwick Cultural Precinct Documentation
- Various technical data as referenced in this report.
- An inspection of the site and its surrounds.
- Other documents as nominated.

Existing Conditions

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2 Existing Context

2.1 Subject Site

The site is located at 10-16 Selwyn Street, Elsternwick. It has an area of 5,700sqm and frontages of 110m to Selwyn Street, 41m to Sinclair Street and 51m to a laneway along the southern boundary of the property.

The site is located within a Mixed-Use Zone – Schedule 1 (MUZ1) and is currently occupied by the former ABC television studios. The surrounding properties and zoning include:

- Commercial land uses fronting Glen Huntly Road (Commercial 1 Zone – C1Z) to the south of the site and on Selwyn Street.
- Residential uses within a Residential Growth Zone – Schedule 1 (RGZ1) to the east of the site.
- Residential uses within a Neighbourhood Residential Zone – Schedule 1 (NRZ1) in the wider Elsternwick area.

Notable land use exceptions include the Public Use Zone rail corridor located to the west of the site, the Public Park & Recreation Zone next to Elsternwick rail station, and Sholem Aleichem College to the north.

The location of the site and the surrounding environs is shown in **Figure 2**, and the land zoning is shown in **Figure 3**.

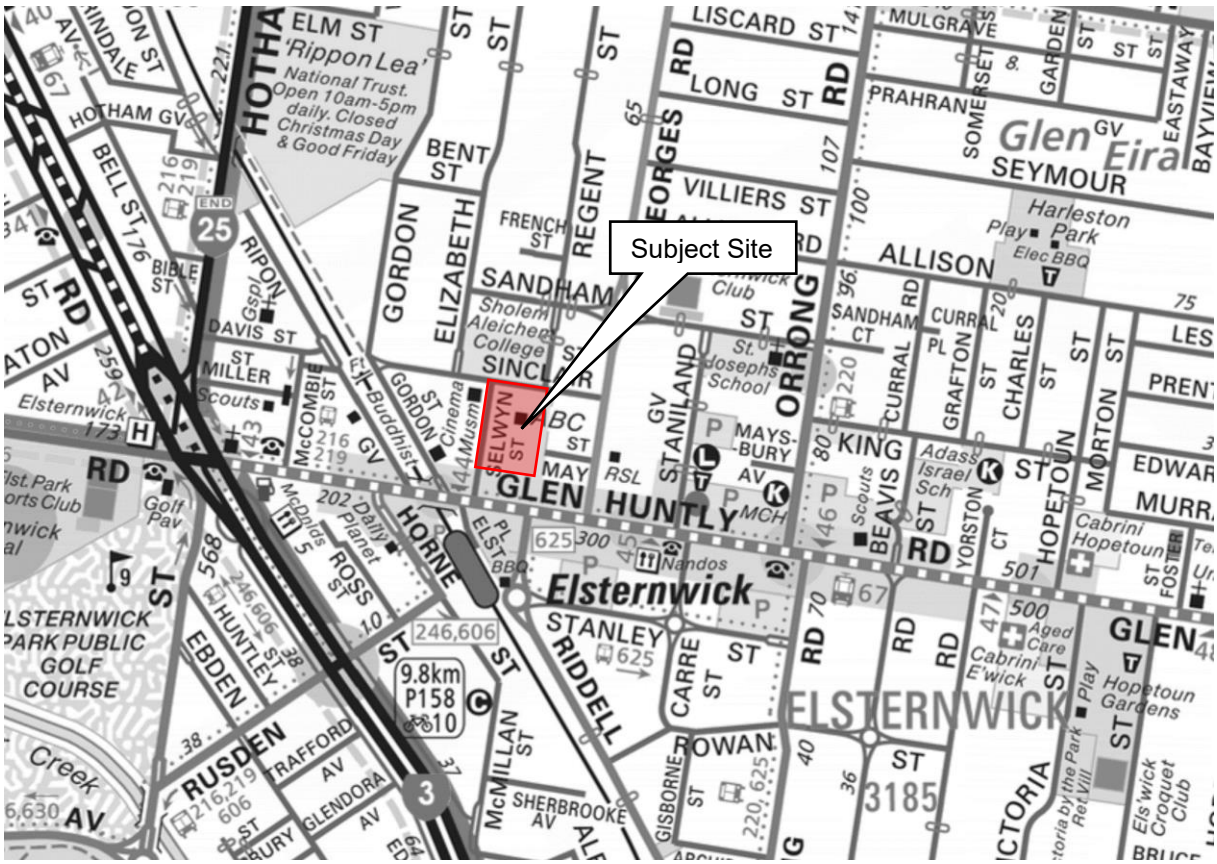

Figure 2: Subject Site and Surrounds
(Sourced from Melway Online)

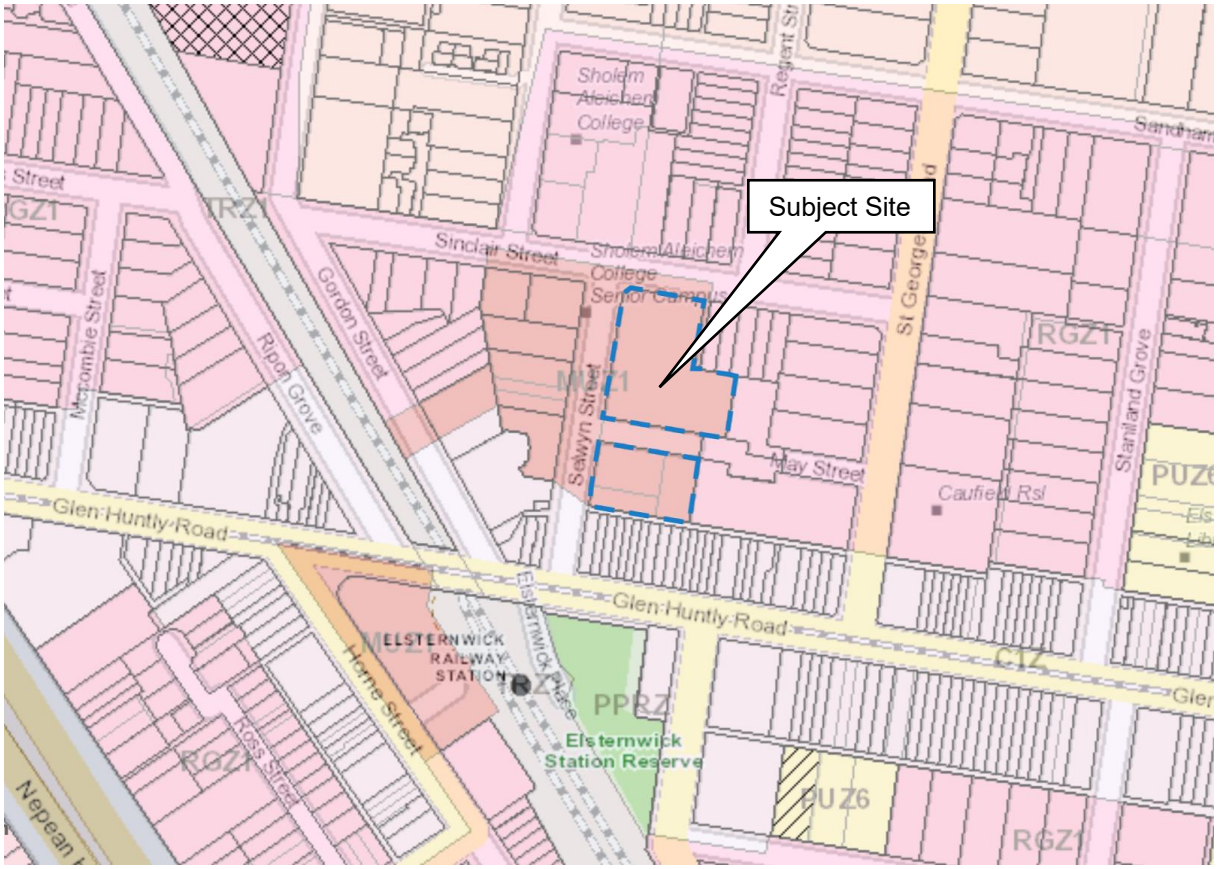

Figure 3: Land Zoning Map
(Reproduced from https://www.land.vic.gov.au/)

2.2 Sustainable Transport

Public Transport

The site is located approximately 150m walking distance from the pedestrian entrance to Elsternwick rail station. This station is located on the Sandringham line and has a journey time to Flinders Street station of approximately 15 minutes with peak hour service frequency of 8 minutes.

The site is also served by Tram route 67 (Melbourne University - Carnegie) which provide a light rail connection to the Melbourne CBD and surrounds. This route operates on a 10-minute frequency. The nearest stop is located along Glen Huntly Road, approximately 100m from the site.

The site is also located close to the following bus routes: Route 603 (Brighton Beach - Alfred Hospital) at Elsternwick Station, Route 246 (Elsternwick - Clifton Hill via St Kilda) at Elsternwick Station, Route 606 (Elsternwick Station - Fishermans Bend) at Elsternwick Station, and Route 625 (Elsternwick - Chadstone via Ormond, Oakleigh) which has its nearest stop 140m from the site.

Figure 4 shows the subject site in relation to existing public transport routes.

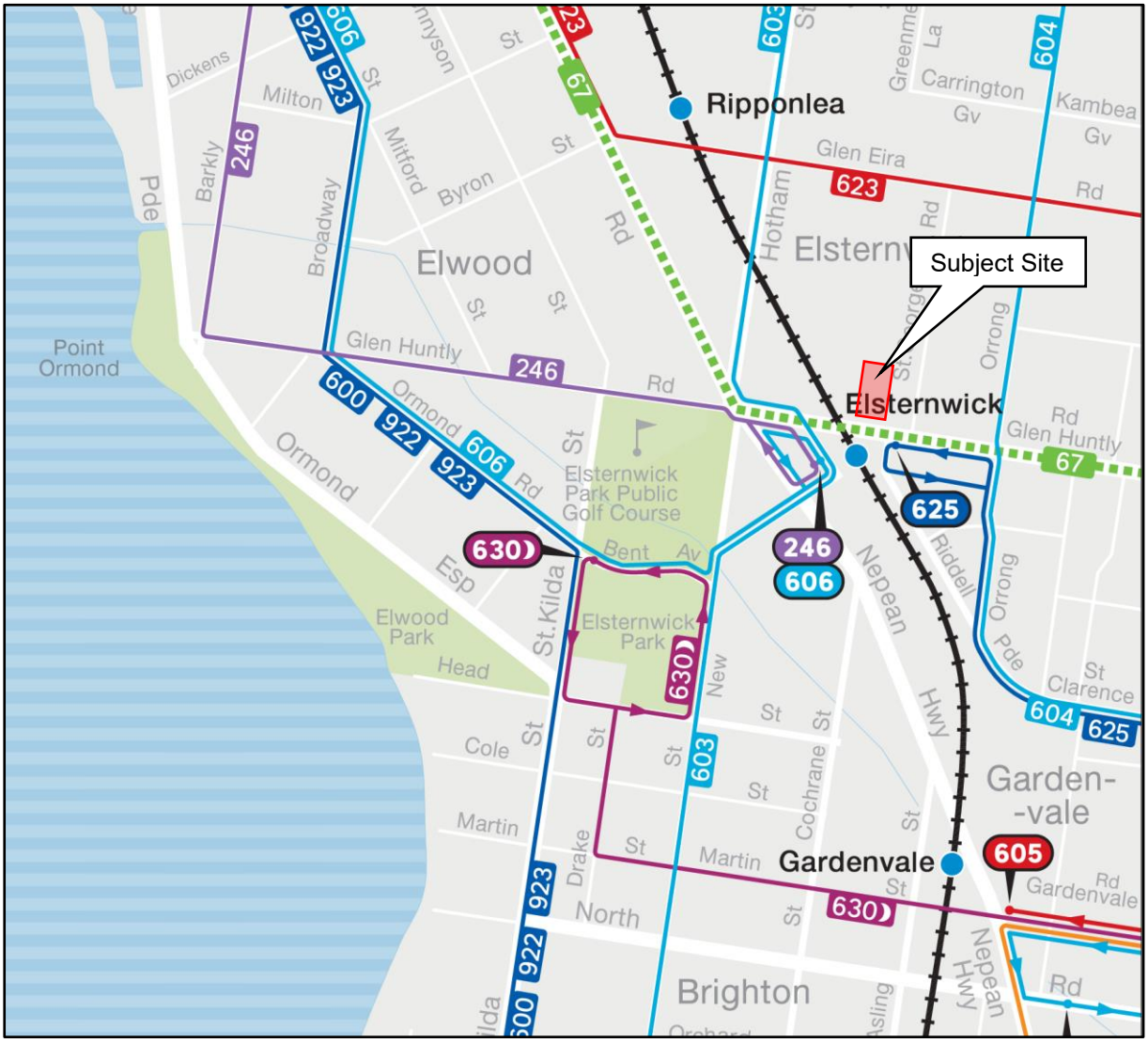

Figure 4*:* Public Transport Map
Source: Map from www.ptv.com.au

To assess the accessibility of the site via public transport, guidance has been sought from the Walkscore, which can be found at https://www.walkscore.com/.

In this instance, the site has a walk score of 97 out of 100 and is described as having a “Walkers Paradise”. The site also has a transit score of 67 out of 100 which is described as “good transit” with “many nearby public transportation options”. The combination of these scores is considered to be a good outcome given Melbourne CBD is within approximately 25-minutes reach of the site (including walk time to Elsternwick station).

The available public transport catchment of the site is shown in **Figure 5** and indicates an excellent coverage for public transport journeys to and from the site which includes the Melbourne CBD and Southbank to the northwest.

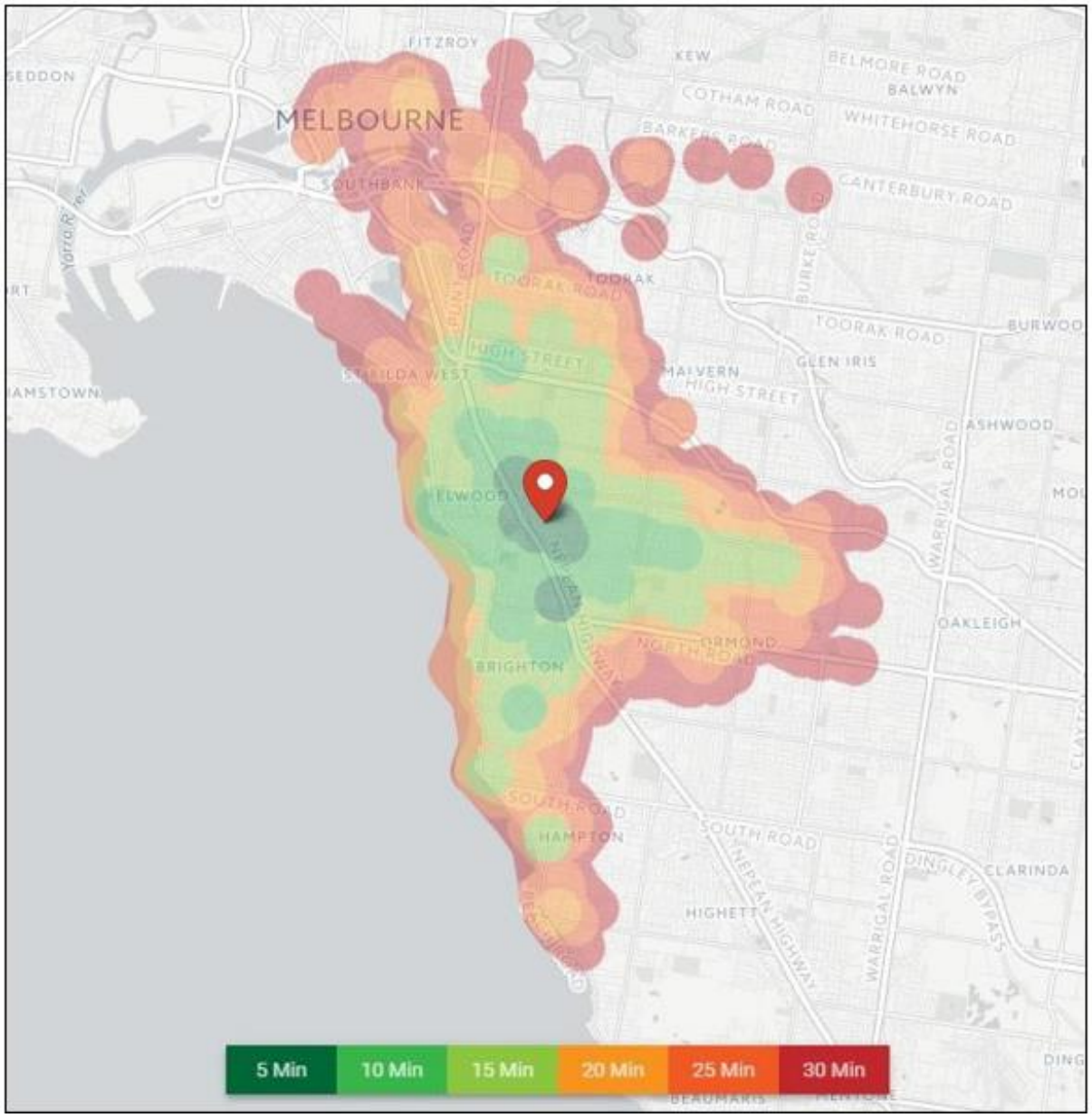

Figure 5: Public Transport Catchment
Source: Map from www.route360.net

Pedestrian Infrastructure

Pedestrian footpaths are provided on both sides of the roads in the vicinity of the subject site, with the exception of the existing laneway along the southern boundary of the site. A pedestrian operated signal crossing facility is located nearby at Glen Huntly Road, between Gordon Street and Rippon Grove, opposite Elsternwick Station.

Walkscore indicates the site has a walk score of 97 out of 100 and is described as a “Walker’s Paradise”. This is reflective of the site’s proximity to shops, restaurants, and other day-to-day services along Glen Huntly Road and beyond.

Bicycle Infrastructure

There are a range of existing bicycle facilities within the vicinity of the site. These are best illustrated through the Glen Eira TravelSmart Map as presented in **Figure 6**.

While the site is not directly served by cycling routes, **Figure 6** nevertheless indicates that there are several on-road cycling lanes along major load roads and primary state arterial roads. These on-road lanes provide cycling access to the wider metropolitan area, including Brighton, St Kilda and Caulfield, as shown in **Figure 7**. It is noted that Melbourne CBD is within 45-minutes of the site by bike.

Figure 6: TravelSmart Map

Source: Reproduced from Glen Eira TravelSmart Map from www.gleneira.vic.gov.au

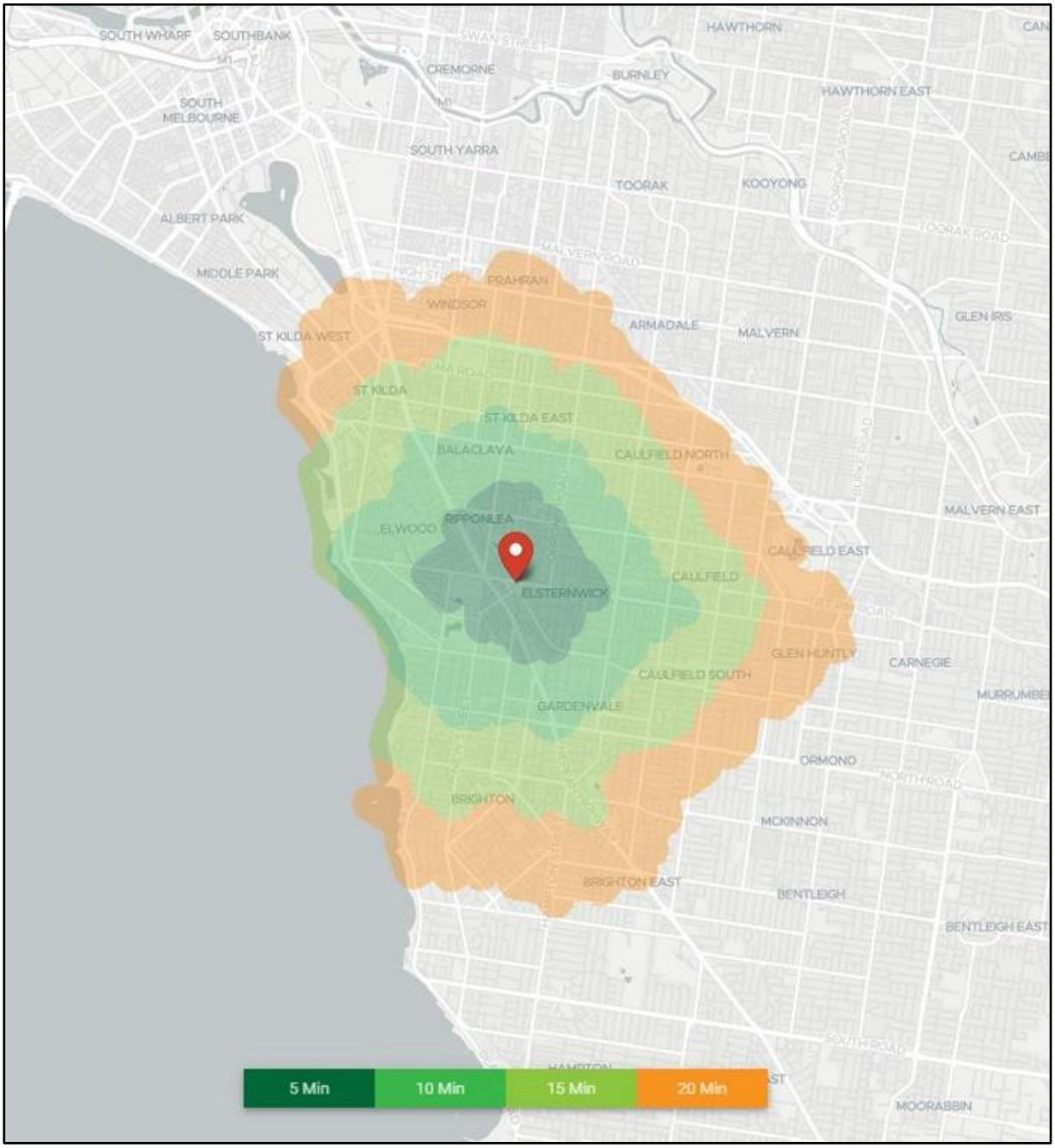

Figure 7: Cycling Catchment
Source: Map from www.route360.net

2.3 Road Network

Surrounding Roads

Selwyn Street

Selwyn Street is classified as a local street controlled by Glen Eira City Council.

It is a two-way road aligned in a north-south direction and is configured with a two-lane 12m wide carriageway set within a 20m wide road reserve (approximately). Kerbside parking is permitted, subject to time restrictions.

Selwyn Street carries approximately 1,950 vehicles per day[2], is subject to a 40km/h speed limit and provides broader network connectivity to the finer grain local street network north of the subject site.

Photographs of Selwyn Street are provided in Figure 8 and Figure 9.

Figure 8: Selwyn Street looking south

Figure 9: Selwyn Street looking north

Sinclair Street

Sinclair Street is classified as a local street controlled by Glen Eira City Council.

It is a two-way road aligned in an east-west direction and is configured with a two-lane 12m wide carriageway set within a 20m wide road reserve (approximately). Kerbside parking is permitted and is generally subject to time restrictions and permit parking.

Sinclair Street carries approximately 1,500 vehicles per day[3], is subject to a 40km/h speed limit and provides connectivity between streets in the vicinity of the subject site, including Gordon Street, Elizabeth Street, Selwyn Street, Regent Street and St Georges Road.

Photographs of Sinclair Street are provided in Figure 10 and Figure 11.

[2] Sourced from Traffic Engineering Assessment Report by Traffix Group of Traffic Count Summaries collected from Monday 6 to Sunday 12 May 2019 (Weekday Average Volumes).
[3] Sourced from Traffic Engineering Assessment Report by Traffix Group of Traffic Count Summaries collected from Monday 6 to Sunday 12 May 2019 (Weekday Average Volumes).

Figure 10: Sinclair Street looking west

Figure 11: Sinclair Street looking east

Glen Huntly Road

Glen Huntly Road is a Council controlled major road in the vicinity of the site.

It is a two-way road aligned in an east-west direction and typically configured with a two-lane 11.5m wide carriageway set within a 19.5m wide road reserve (approximately). Kerbside parking is permitted, subject to time restrictions. Light rail (tram) lines are centrally located within the carriageway.

Glen Huntly Road carries approximately 13,000 vehicles per day[4] and is subject to a 40km/h speed limit between 8:00am and 12:00 midnight Monday to Saturday.

Photographs of Glen Huntly Road are provided in Figure 12 and Figure 13.

Figure 12: Glen Huntly Road looking east

Figure 13: Glen Huntly Road looking west

Other Nearby Roads

There are various Council controlled collector roads and access streets that serve existing land uses in the vicinity of the site.

[4] Based on annual average daily traffic from 2020 data obtained from the Department of Transports Open Data ArcGIS maps, sourced on 26 November 2020.

These roads connect existing precincts to the arterial road network and typically have a two-lane cross-section with a speed limit of 50km/h (40km/h signed in some areas). These roads include, but are not limited to St Georges Road, and Gordon Street, Elizabeth Street and Regent Street.

Nearby Intersections

Key intersections near the site include:

- Glen Huntly Road/ Selwyn Street (3-arm unsignalised T-intersection).
- Glen Huntly Road/ Gordon Street (3-arm unsignalised T-intersection).
- Glen Huntly Road/ St Georges Street (3-arm unsignalised T-intersection).
- Selwyn Street/ Sinclair Street (3-arm unsignalised T-intersection).

Traffic Volumes

Traffic volumes have been sourced from the Traffic Engineering Assessment Evidence Report prepared by Charmaine Dunstan of Traffix Group for VCAT Hearing P263/2019. These volumes are reproduced in **Figure 14** and **Figure 15** for the weekday AM and PM peak hours and Saturday lunchtime peak hour, respectively.

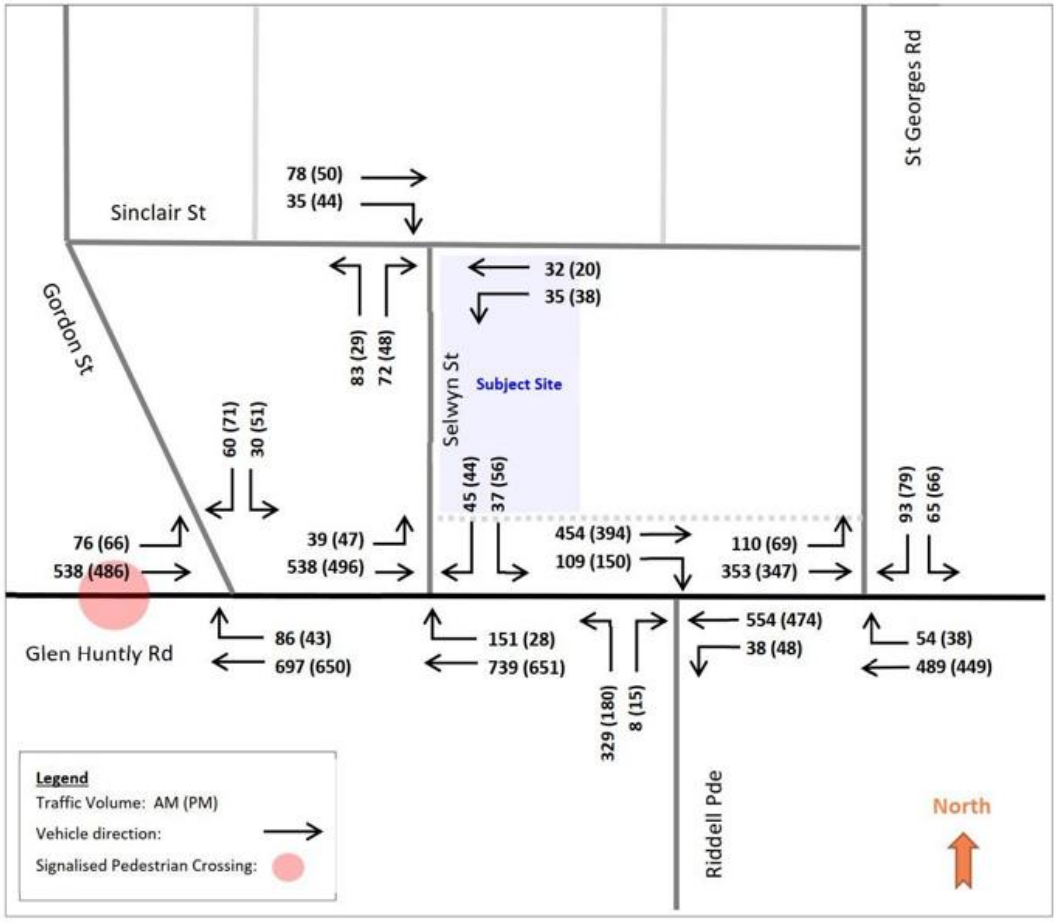

Figure 14: Existing Traffic Volumes – Thursday AM (8-9am) & PM (4:15-5:15pm)
Source: Stantec Transport Impact Assessment Report dated 01/07/2021

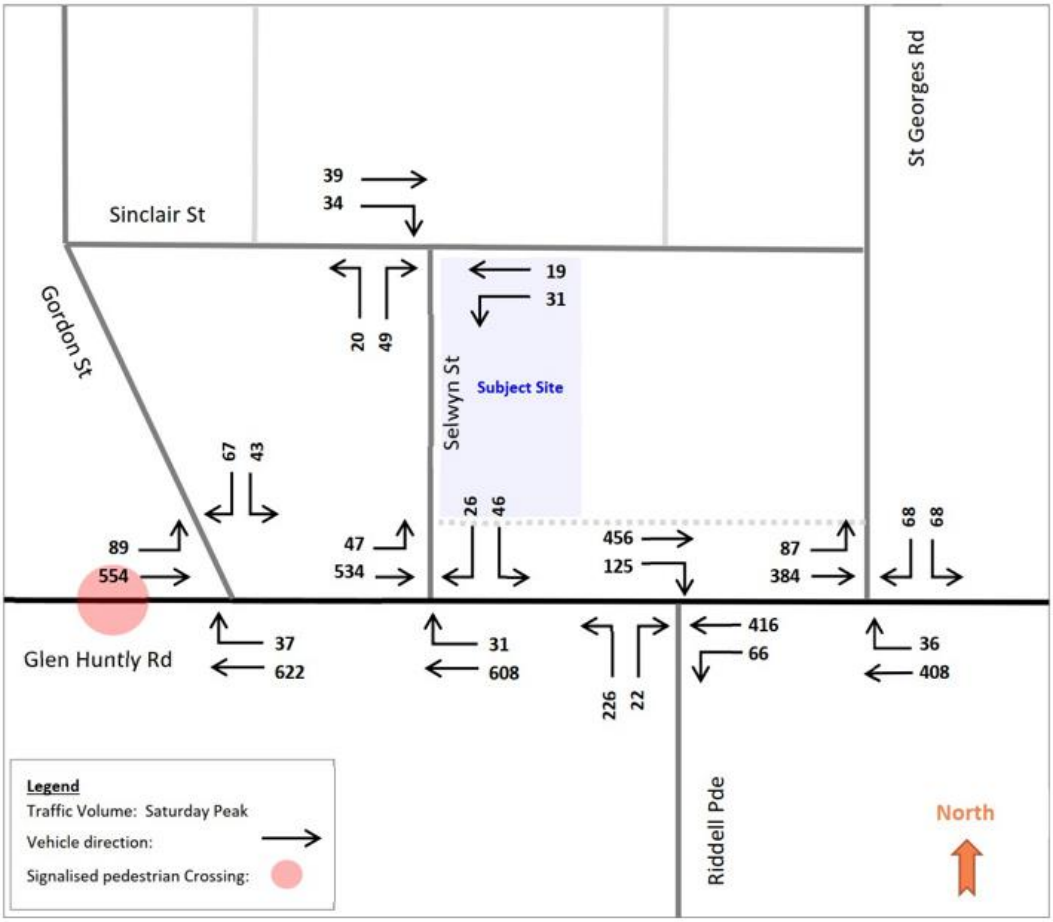

Figure 15: Existing Traffic Volumes – Saturday Peak 12:15-1:15pm
Source: Stantec Transport Impact Assessment Report dated 01/07/2021

2.4 Relevant Transport Plans

On 27 April 2021, Glen Eira Council endorsed the Elsternwick Cultural Precinct Functional Arrangement & Precinct Design and supported the commencement of further design work to develop a detailed design for the precinct. The plans include the following changes with respect to road network:

- Signalisation of the Selwyn Street / Glen Huntly Road intersection, with a single exit lane from Selwyn Street providing left and right-turn movement from Selwyn Street.
- Restriction of vehicle movements on Selwyn Street to northbound movements only at Sinclair Street, which permits left and right-turn movements from Selwyn Street.
- Provision of a raised pavement at the northern end of Selwyn Street to facilitate a “pedestrianised space”.
- Provision of increased footpath widths for outdoor café dining, planting and public seating.
- Restriction of exit movements to left out only from Gordon Street into Glen Huntly Road.

Other changes on Sinclair Street, including the creation of two bus drop-off zones in Sinclair Street located west of Selwyn Street and the relocation of the school crossing. The design strategy as documented in the endorsed plans is shown in **Figure 16**.

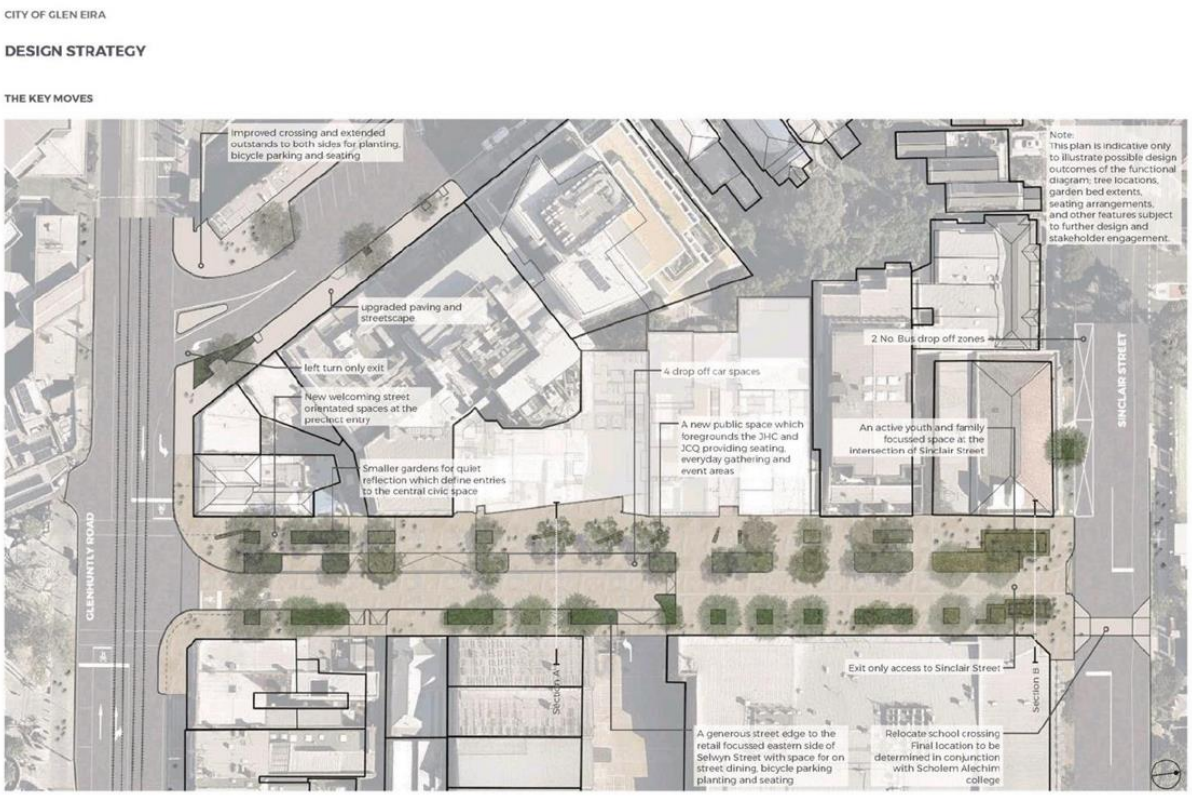

Figure 16: Elsternwick Cultural Precinct Functional Arrangement – Key Moves
Source: Elsternwick Cultural Precinct endorsed functional design arrangement

Note:

The vehicle access strategy for the proposed development has been developed to respond to the urban realm improvements endorsed by the Responsible Authority for the precinct.

This includes the relocation of the vehicle access to the southern end of the site to maximise the length of Selwyn Street that can be raised and created as a "pedestrianised space". However, for this assessment, we have assumed:

1. *Two exit lanes are proposed from Selwyn Street onto Glen Huntly Road to:*
   - *Minimise delays to vehicle (including tram and bus) movements on Glen Huntly Road.*
   - *Manage vehicle queues on Selwyn Street heading to the north that would otherwise extend to the proposed vehicle access to the site if only one exit lane was provided.*
2. *Right turn movements out of the site onto Selwyn Street are permitted (noting that northbound traffic movements are to be retained) to:*
   - *Minimise traffic impacts that would otherwise be experienced on Glen Huntly Road if all vehicle traffic generated from the proposed development was forced to exit to the south.*
   - *More evenly distribute traffic volumes which have a destination to the north that would otherwise likely be concentrated on St Georges Road if all vehicle traffic generated from the proposed development was forced to exit to the south and then have to find the next best option to travel north.*

These assessment assumptions were confirmed with the responsible Authority (DTP and Council) prior to the preparation of this report.

2.5 Summary

A summary of the key transport elements as it relates to the existing site context are as follows:

- The site is located in a prominent position and is well serviced by all modes of public transport including nearby Elsternwick train station, trams along Glen Huntly Road and bus services.
- The site has a very high level of pedestrian accessibility which is represented in its high walk score.
- The road network surrounding the site accommodates a reasonable amount of through traffic, particularly along Glen Huntly Road, together with local traffic on the local road network.
- Glen Eira City Council has developed plans proximate to the site, namely, via the endorsed 'Elsternwick Cultural Precinct' documentation which involves changes to the road network including signalisation of Selwyn Street / Glen Huntly Road intersection, restricting Selwyn Street to northbound movements only at Sinclair Street, improved pedestrian and urban design outcomes and restriction of egress movements to left-out only from Gordon Street into Glen Huntly Road.

Proposed Development

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3 Land Uses

The proposed development includes a supermarket, café, bottle shop and place of assembly at ground level, with the place of assembly and supermarket offices also at mezzanine floor level and residential dwellings at first-floor level and above. The proposed land uses are outlined in **Table 2**.

Table 2: Proposed Development Schedule

Use	Description	Size
Supermarket	Supermarket	3,696sqm LFA
Food & drink premises	Café	137sqm LFA
Shop	Bottle shop	156sqm LFA
Place of Assembly	Community Space	671sqm NFA
Office	Office	312sqm NFA
Dwellings	1-bedroom	45 dwellings
	2-bedroom	62 dwellings
	3-bedroom	41 dwellings
	Sub Total	148 dwellings

LFA denotes Leasable Floor Area NFA denotes Net Floor Area

3.1 Pedestrian Facilities

Pedestrian facilities and improvements associated with the proposed development include:

- An entry plaza for the supermarket/bottle shop/food and drink on Selwyn Street.
- Two pedestrian access points to the residential building via Selwyn Street.
- Access to the place of assembly use on Selwyn Street (corner Sinclair Street).

It is noted that all main entrance points are located close to vertical transport (lifts and travelators) between ground and basement floor levels. Moreover, signalised pedestrian crossings are included in the proposed signalisation of the Glen Huntly Road/Selwyn Street intersection (which is discussed later in this report).

3.2 Bicycle Facilities

The proposed development includes the provision of 127 bicycle parking spaces located in storage areas within ground and basement levels, including:

- Ground Level: 12 bicycle spaces (including 4 proposed on the footpath)
- Basement Level 2: 35 bicycle spaces
- Basement Level 3: 80 bicycle spaces, including 17 visitor bicycle spaces

Access to bicycle parking in the basement levels will be provided via the southern residential apartment lifts to the south of the site.

3.3 Car Parking

A total of 429 car spaces are proposed in four basement levels, which are to be allocated as follows:

- Basement Level 1 – 101 (95 supermarket/retail spaces, 6 direct-to-boot bays)
- Basement Level 2 – 111 (111 supermarket/retail spaces)
- Basement Level 3 – 135 (15 place of assembly spaces, 3 office spaces, 117 resident spaces)
- Basement Level 4 – 82 (82 resident spaces)

Access to the car park is proposed off Selwyn Street (discussed in Section 3.5) and will be controlled by a ticketless (frictionless) control system, together with a schedule of timed parking restrictions and parking charges. The ticketless parking system will require customers/visitors of the supermarket, the other retail units and the place of assembly land uses to either use a payment terminal in the car park or pay via an online account. The car park will be secured by boom gates to control access.

Internally, a separate barrier control system is proposed to segregate the public retail car park from the other car parking areas. The internal security point is shown at the top of the ramp on Basement Level 2 and will be accessed via a remote control (not a swipe card).

3.4 Vehicle Access & Mitigation

Vehicle access to the on-site car parking is to be provided via a crossover to Selwyn Street at the southern end of the site.

To ensure satisfactory operation of nearby intersections, traffic signals are proposed at the Glen Huntly Road/ Selwyn Street intersection (with the retention of the pedestrian crossing opposite Elsternwick Station) and Gordon Street retained with stop sign control. The layout of the proposed signalised intersection is shown on **Figure 17**.

It is noted that the proposed signalisation of this intersection was supported by DOT prior to the VCAT Hearing. It is further noted that Stantec's correspondence with DOT (25 June 2021) indicated that two lanes exiting Selwyn Street would be likely be preferred by DOT to reduce delay to buses and trams along Glen Huntly Road. Further, meetings and other discussions with Council officers (10 June and 29 June 2021) have established that two lanes exiting Selwyn Street is a broadly acceptable design principle. Noting, this is not what has been documented within Council's endorsed document 'Elsternwick Cultural Precinct' documentation which shows a single lane proving left and right turning opportunities. Refer to **Figure 18** below for an excerpt from Elsternwick Cultural Precinct.

Figure 17: Proposed Glen Huntly Road/Selwyn Street Signalised Intersection Concept Plan
Source: Traffix drawing G24495-01-01, dated 23 October 2019

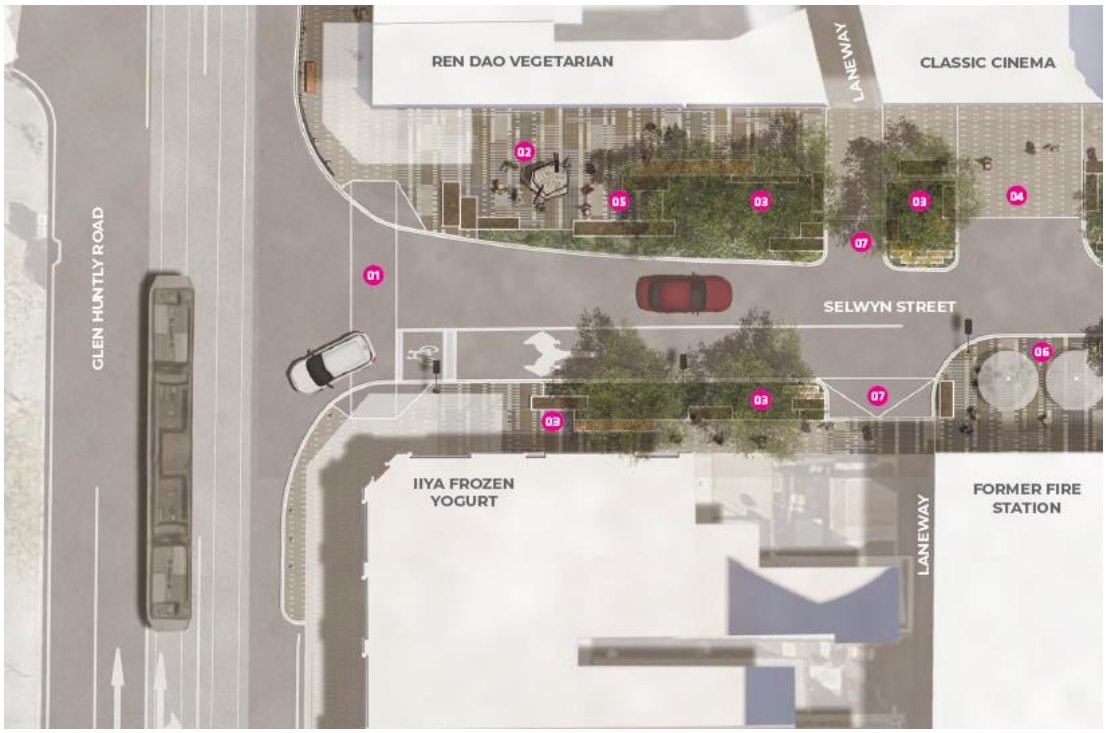

Figure 18: Council Endorsed Glen Huntly Road/Selwyn Street Signalised Intersection Concept Plan
Source: 'Elsternwick Cultural Precinct' documentation endorsed by Council

3.5 Electric Vehicle Parking

Within the basement car park, the development also offers electric vehicle charging spaces for at least 5% of the total car parking spaces. As such, 22 charging bays are provided for residents within basement 4.

3.6 Loading Areas

The loading for the supermarket and bottle shop is proposed in a dock off Sinclair Street, at the northern end of the site. The loading area has been designed to accommodate a 14.7m articulated vehicle, with vehicle turning manoeuvres assisted by a turntable.

It is proposed that the operation of the loading dock will be managed by a Loading Dock Management Plan, prepared to the satisfaction of the Responsible Authority as a planning permit condition and generally consistent with the previously endorsed LDMP for the same site. This Management Plan outlines the available hours for loading activity and specify the routes to be followed for access to/from the loading dock (including routes to be followed in the unlikely event that the dock was occupied when another vehicle arrives at the site).

As noted above, a loading dock management plan was prepared and endorsed as part of the previously endorsed development at this site. In this respect, the proposed loading arrangements are consistent with those described in the existing loading dock management plan and as such, in this instance it is not proposed to update the plan as part of this revised scheme.

A secondary loading area is also proposed at the southern end of the site for the café and residential use waste collection. The loading area is located off the laneway to the south of the site and has been designed to allow access for a 6.4m long rear loading waste collection truck.

3.7 Summary

The proposed development is generally consistent with the previously endorsed development with key changes summarised as follows:

- Marginal decrease in overall LFA associated with the supermarket / retail / place of assembly land uses
- Increase of 13 apartments and a change to the mix of 1 / 2 / 3 bedrooms.
- Addition of a small office space
- Increase in bicycle parking provision by four spaces
- Increase in car parking provision by 11 spaces (and minor reallocation of spaces)
- Residential waste collection from basement car park B3 and B4

Sustainable Travel

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4 Sustainable Travel

4.1 Pedestrian Access & Permeability

Consistent with the Responsible Authorities vision of street design, as outlined within 'Glen Eira Street Design Guidelines – Summary Document', the proposed development prioritises the activation of pedestrian activity along the Selwyn Street frontage. The loading activity for the supermarket is provided from Sinclair Street with multiple pedestrian access points, including bicycle access, being provided along the Selwyn Street frontage. The following key design features are proposed:

- The removal and rationalisation of vehicle crossovers to a single vehicle access point between Sinclair Street and Glen Huntly Road
- The introduction of a new widened pedestrian link along the site frontage
- The provision of an improved public realm and ground floor activation.

A summary of the key transport design features of the proposed development are presented in **Figure 19**.

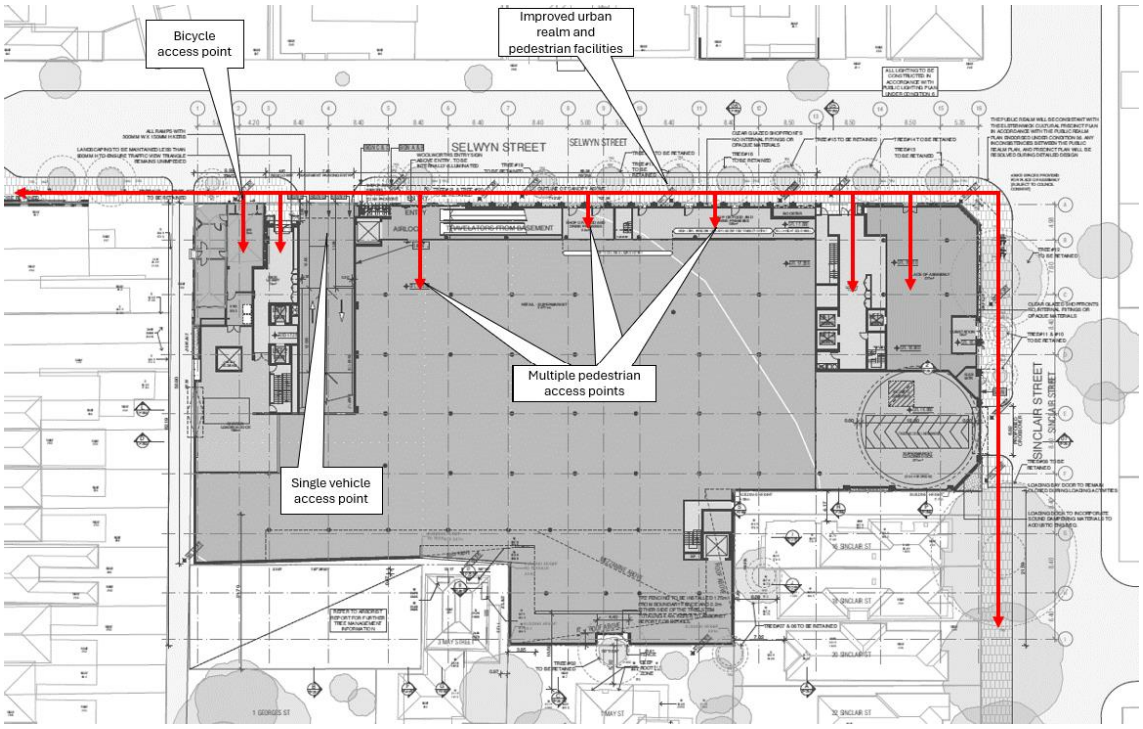

Figure 19: Ground Floor Key Design Features

4.2 Bicycle Parking Infrastructure

Preamble

The approved development included a total of 127 bicycle parking spaces provided across the ground and basement levels, comprising 115 spaces (including residential, residential visitor, retail employee) and 12 visitor spaces at ground level.

The proposed development seeks to maintain the approved bicycle parking provisions, albeit with a slight change in bicycle parking rates as a result of the adjustment to floor areas and total apartment numbers.

Statutory Requirement

Statutory requirements for the provision of bicycle parking are set out in Clause 52.34 of the Glen Eira Planning Scheme. Based on this, the statutory requirements for the provision of bicycle facilities for the development proposal are set out in **Table 3**

Table 3: Statutory Requirement for Bicycle Facilities

Use	Size	Statutory Rate		Statutory Requirement	
		Employee/ Resident	Visitor / Shopper	Employee / Resident	Visitor / Shopper
Supermarket [1, 2]	3,696sqm LFA	1 space per 600sqm of LFA if the LFA exceeds 1,000sqm	1 space per 500sqm LFA if the LFA exceeds 1,000sqm	6 spaces	7 spaces
Café [3]	137sqm LFA	1 to each 300sqm of leasable floor area	1 to each 500sqm of leasable floor area	0 spaces	0 spaces
Bottle shop [1]	156sqm LFA	1 to each 600sqm of LFA if the LFA exceeds 1,000sqm	1 space per 500sqm LFA if the LFA exceeds 1,000sqm	0 spaces	0 spaces
Place of Assembly	671sqm NFA	1 to each 1500 sqm of net floor area	2 plus 1 to each 1500 sqm of net floor area	0 spaces	2 spaces
Office	312sqm LFA	1 to each 300 sqm of NFA	1 to each 1,000sqm of NFA	1 space	0 spaces
Residential	148 dwellings	1 space per 5 dwellings	1 space per 10 dwellings	30 spaces	15 spaces
			Sub-total	37 spaces	24 spaces
			Total	61 spaces	

[1] Shop use under Clause 73 of the Glen Eira Planning Scheme.

[2] Includes the office component of the supermarket .

[3] Retail Premises use under Clause 73 of the Glen Eira Planning Scheme.

Table 3 indicates that the proposed development has a statutory bicycle parking requirement of 61 bicycle spaces, including 37 for employees/residents and 24 for visitors/shoppers. Of this total, 30 resident bicycle spaces and 15 residential visitor bicycle spaces are required.

Adequacy of Bicycle Parking Provision

In this instance, the proposed on-site bicycle parking provision of 127 bicycle spaces, and represents more than double the minimum statutory requirement.

This provision includes a total of 115 bicycle spaces proposed at basement levels 2 and 3 for residents and staff, including 17 residential visitor bicycle spaces proposed at basement level 2. It is understood

that residential visitors using this bicycle parking will be provided with an access code for the use of the lift to the basement bicycle parking area.

In addition, it is proposed to provide a total of 12 visitor bicycle parking spaces across two locations – adjacent the supermarket entrance doors on Selwyn Street, and next to the place of assembly use on Sinclair Street.

The proposed bike parking and end of trip facility arrangements within the basement car park are reproduced below in **Figure 20**.

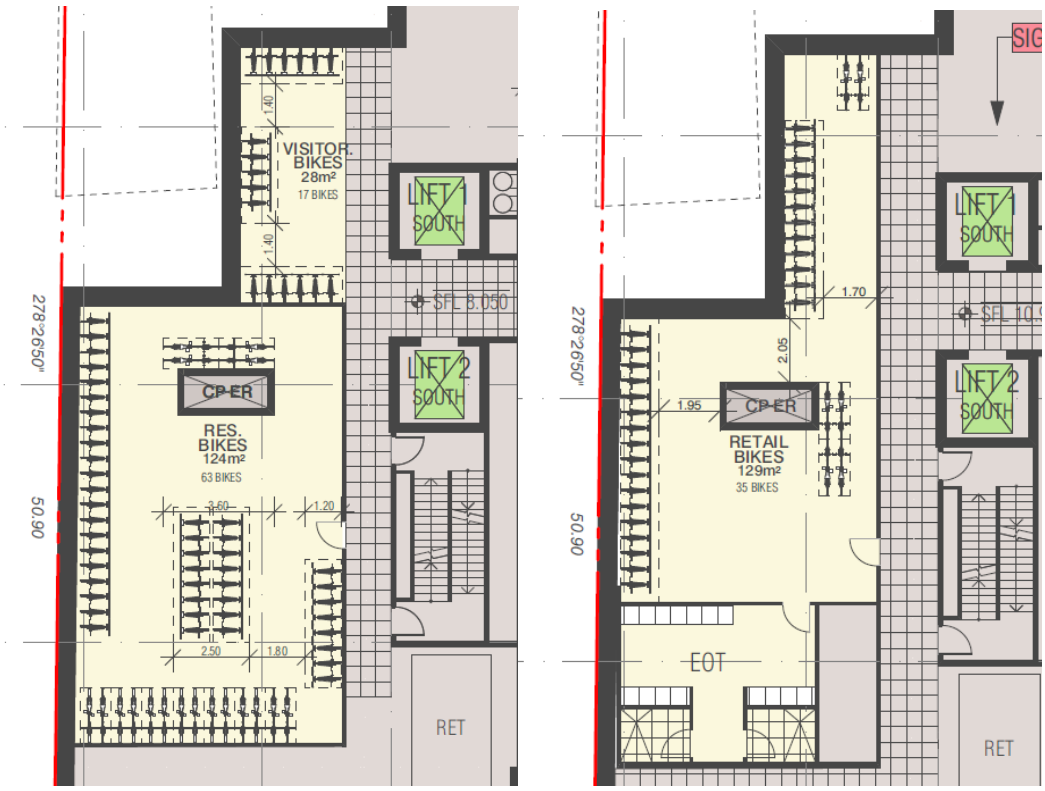

Figure 20: Proposed Basement Bicycle and End of Trip Facilities
(Sourced from FK Architects)

Associated Facilities

Clause 52.34-3 of the Glen Eira Planning Scheme requires one shower for the first five employee bicycle parking spaces and one shower for each subsequent 10 employee bicycle parking spaces (if five or more employee bicycle parking spaces are required).

Application of the above rates to the statutory employee bicycle parking requirement of seven bicycle spaces indicates that the proposal also generates a statutory requirement of one shower (and one change room). The architectural plans show that two showers are proposed within the bicycle parking area on Basement Level 2 which meets this requirement.

Appropriateness of Bicycle Parking Design & Access

The proposed bicycle parking layout will be designed in accordance with the relevant Australian Standard (or otherwise as agreed with the Responsible Authority), noting that bicycle parking rails are

to be spaced at least 500mm apart (assuming a staggered vertical arrangement or a front to back horizontal arrangement) with an access width of 1.5m.

4.3 Green Travel Planning

In addition to the physical measures incorporated into the design (and documented in this report), a Green Travel Plan (GTP) has previously been prepared by Stantec. Given the minor nature of the changes to the development when compared to the previously endorsed development, it is not considered necessary to update the current GTP in this instance.

The GTP has been prepared to assist future employees and visitors of the development to make informed decisions about the most efficient and sustainable transport options for travel to/from the site. The GTP seeks to encourage a reduction in mode share away from private vehicle use.

The below **Figure 21** sourced from the "Good Practice Guidelines: Delivering Travel Plans through the Planning Process" guideline[5], identifies how successful Travel Plans are developed and indicates that a mixture of "hard" and "soft" measures is critical to reducing private vehicle use. In this context, it is noted that the GTP focuses principally on "soft measures" with the "hard measures" assessed in this report.

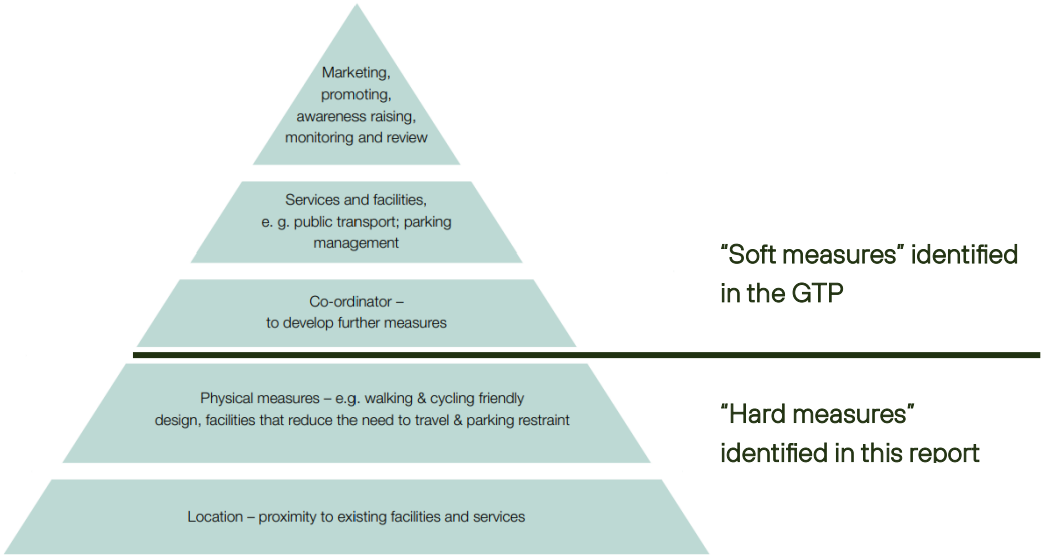

Figure 21: Green Travel Plan Pyramid

4.4 Summary

From a sustainable transport perspective, the development proposes activation at ground level and an improved pedestrian experience surrounding the site which aligns with the Responsible Authority endorsed 'Elsternwick Cultural Precinct' documentation. Further, encouragement of the use of bicycles is represented through the significant bicycle parking provision which is included within the development and at street level.

[5] Prepared by the UK Department for Transport, dated April 2009.

Car Parking

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5 Car Parking Provision

5.1 Preamble

The previously approved development included 418 car spaces provided across four basement levels, comprising 159 residential car spaces, 259 publicly accessible car spaces (inclusive of supermarket, employee, place of assembly and retail). The car parking is provided at the following rates:

- Retail (excl. place of assembly): 5.5 car spaces per 100sqm LFA (229 car spaces)
- Place of assembly: 30 car spaces
- Residential: 1.17 car spaces per dwelling (159 car spaces)

The proposed development seeks to slightly reduce the overall LFA associated with the supermarket, retail and place of assembly and introduce a commercial office area. Further, the total number of dwellings proposed to be provided is increasing from 135 to 148. The resultant car parking rates for the revised development are:

- Retail (excl. place of assembly): 5.6 car spaces per 100sqm LFA (212 car spaces)
- Place of Assembly: 15 car spaces
- Office Employee: 0.96 car space per 100sqm NFA (3 car spaces)
- Residential: 1.34 car spaces per dwelling (199 car spaces)

In comparison to the approved development, it is noted that the proposed rates reflect an increase in the retail and residential parking rates and a decrease in the place of assembly parking rate.

An assessment of the adequacy of the revised car parking provision and layout is presented below.

5.2 Statutory Car Parking Requirement

Statutory requirements for the provision of car parking are set out in Clause 52.06 of the Glen Eira Planning Scheme, with parking rates specified in Table 1 to Clause 52.06-5.

As the site is within the Principal Public Transport Network Area, the rates in Column B of the table apply to this site. Using these rates, an assessment of the statutory parking requirements for the development proposal is set out in **Table 4**.

Table 4: Statutory Car Parking Requirements

Use	Description	Size	Statutory Parking Rate	Statutory Parking Requirement	Proposed Provision
Supermarket	Supermarket	3,696sqm LFA	5 spaces per 100sqm LFA	184 spaces	227 spaces
Food & drink premises	Café	137sqm LFA	3.5 spaces per 100sqm LFA	4 spaces	
Shop	Bottle shop	156sqm LFA	3.5 spaces per 100sqm LFA	5 spaces	
Place of Assembly	Community Space	100 patrons [1]	0.3 to each patron permitted	30 spaces	
			Sub-total	*223 spaces*	
Office	Office	312sqm LFA	3 spaces per 100sqm LFA	9 spaces	*3 spaces*
Dwelling (Residents)	Apartments	148 dwellings (45 x one-bedroom + 62 x two-bedroom + 41 x three- bedroom)	1 space per one or two bedroom dwelling 2 spaces per three+ bedroom dwelling	189 spaces	199 spaces
Dwelling (Visitors)		148 dwellings	0	0 spaces	
			Total	421 spaces	429 spaces

[1] Based on advice from the Applicant that a maximum of 100 persons will occupy the space.

LFA denotes leasable floor area and NFA denotes net floor area.

Table 7.1 indicates that the proposed development has a statutory car parking requirement of 421 car parking spaces. Whilst the overall car parking provision of 429 spaces exceeds the minimum statutory requirement, the allocation of car parking results in a statutory shortfall for the proposed office use.

5.3 Car Parking Demand Assessment

Overview

To quantify the reduced car parking provision, reference is made to the Planning Scheme guidelines for the preparation of a Car Parking Demand Assessment. The assessment is to consider a range of factors, including:

- multi-purpose trips
- pedestrian and cyclist convenience
- availability of public transport
- provision of bicycle end of trip facilities in excess of planning scheme requirements
- empirical and case study data.

These characteristics often combine to deliver car parking demands that are meaningfully lower than those set out in the statutory car parking assessment. In this regard, an empirical assessment of the anticipated car parking demand is set out below.

Anticipated Car Parking Demand

The following sets out an empirical study to determine the standalone car parking demand requirements of the proposed residential and office land uses.

In this instance, an assessment of the anticipated car parking demand for the supermarket, food & drink, shop, residential and community centre land uses has not been undertaken, given the following:

1. The proposed car parking rate for these land uses is generally consistent with the approved car parking rate for the site.
2. The proposed car parking provision exceeds the minimum statutory car parking requirement for these land uses.

Accordingly, the proposed car parking provision for these uses is considered acceptable and further assessment is not considered necessary.

Office Car Parking Demands

The office land use has a statutory car parking requirement of 3 car spaces per 100sqm NFA. This rate is applicable across the majority of inner metropolitan Melbourne, and almost all of the neighbouring City of Yarra, and does not have material regard to the different transport characteristics of sites.

Over the past decade, there have been many office developments in inner metropolitan areas (particularly in locations such as Cremorne, Richmond, Fitzroy and Collingwood within the neighbouring City of Yarra) approved with car parking rates of between 0 and 1 car space per 100sqm NFA. These approvals include recent approval for the site which had an office car parking rate of 0.8 car spaces per 100sqm NFA.

The approved developments with reduced car parking rates share many similar attributes, including:

- High levels of public transport accessibility with frequent and reliable services.
- Located in high density areas with potential future employees living within surrounding walking and cycling catchments.
- Bicycle parking and end of trip facilities are provided well above statutory minimum requirements to proactively encourage cycling as a preferred mode of transport.
- Surrounding on-street car parking supplies are protected from long-term employee car parking demands via time or permit restrictions, such that long-term employee car parking demands cannot be simply displaced from on-site to on-street.

As a result of these attributes and particularly the restriction in on-site and off-site car parking, the car parking demand generated by office uses is typically a function of the proposed supply. (The quantum of the office car parking is also often dictated solely by the expected commercial drivers of the development being the expected needs of the future tenants).

In this context, it is expected that the car parking demand generated by the office floor area within the revised development will be consistent with – if not potentially less than – the proposed supply; that is, an office car parking demand of up to 3 car spaces is expected.

5.4 Accessible Parking Spaces

The Building Code of Australia (BCA) outlines requirements for the provision of car parking for people with disabilities. The applicable BCA car parking rates for the development proposal are set out in **Table 5**.

Table 5: BCA Car Parking Requirements for People with Disabilities

Description	BCA Class	BCA Disabled Parking Requirement
Supermarket/Café/Bottle shop	Class 6	1 space for every 50 car parking spaces or part thereof
Community (Place of Assembly)	Class 9b	1 space for every 50 car parking spaces or part thereof
Office	Class 5	1 space for every 100 car parking spaces or part thereof
Apartments	Class 2	None

Based on the above requirements six accessible spaces are required to service the retail, office and community centre uses. This is being provided as part of the proposed development.

5.5 Car Park Layout

Design Compliance

The proposed car parking layout and vehicle access arrangements have been designed to meet or exceed the requirements of the relevant Design Standards set out in Clause 52.06-09 of the Planning Scheme, and where appropriate the relevant Australian Standard. A summary of compliance is set out below.

Design Standard 1: Accessways

- All accessways leading to parking areas are at least 3.0m between kerbs, with an additional clearance of 300mm to adjacent walls and columns.
- A pedestrian visibility triangle measuring 2.0m along the site boundary by 2.5m into the site has been provided adjacent to the left-turn exiting lane of the accessway.
- Dead-end aisles have been extended by at least 1.0m where appropriate.

Design Standard 2: Car Parking Spaces

- Standard car spaces within the non-residential car park measure 2.6m wide by 5.5m long, accessed from
- a 6.5m wide aisle, exceeding Planning Scheme requirements.
- Standard car spaces within the resident car park measure 2.6m wide by 4.9m long, accessed from a
- 7.5m wide aisle, exceeding Planning Scheme requirements.
- DDA car parking spaces measure 2.4m wide by 5.5m long accessed from a 6.5m wide aisle and are located adjacent the travelators and lifts at Basement Level 1. The DDA spaces each have access to a shared area measuring at least 2.4m wide. This arrangement complies with the requirements of the relevant Australian Standard.
- Columns and walls near car spaces are generally located as required by Diagram 1 of Planning Scheme Clause 52.06. Notwithstanding this, it is recommended that a further review of column placement is undertaken as part of the detail design stage to ensure building columns are appropriately located with respect to car spaces and vehicle accessways.
- A minimum 2.1m height clearance will be provided throughout the car park and a 2.5m height clearance will be provided above DDA parking spaces.

Design Standard 3: Gradients

- The ramp from Selwyn Street has been design with grades as follows:
    - 1:16 (6.25%) for the first 12m into the site[6], and
    - A maximum grade of 1:8 (12.5%) for the remainder of the ramp.

  The maximum grade is notably less than those permitted in the Australian Standard and Planning Scheme and has been purposefully adopted to accommodate vehicle queueing on the ramp. This is considered particularly given the location of the ramp near the southern end of the site (near the traffic signals at Glen Huntly Road) where traffic congestion may occur during peak times. The grade of 1:8 (12.5%) is generally consistent with the grade recommended in the Australian Standard for queuing area (i.e., 1:10 (10%)) and is considered acceptable.

[6]

- Other internal ramp grades comply with Australian Standard and Planning Scheme requirements.

Vehicle Accessibility

The basement car parking layouts have been designed with the input of vehicle swept path assessments. These assessments indicate that vehicles travelling in opposite directions can pass one another at key internal locations. Swept path assessments are included in Appendix A.

Queuing Assessment

The proposed car park will be controlled by a ticketless (frictionless) control system and be secured by boom gates to control access. The location of these boom gates is shown in **Figure 22**.

For the entry movement, it is envisaged that the boom gate will be set at a default open position such that there is no delay to entering vehicles and therefore vehicle queueing is not generated for this movement. Under this arrangement, the entering vehicles will simply need to be slowed such the licence plate of the vehicle can be recorded. For the exit movement, a boom gate will be set to the closed position, which opens when the licence plate is recorded, and payment is confirmed if applicable.

During the most critical peak hour for exiting vehicle movements (being the weekday PM peak hour), a total of approximately 250 exiting vehicle movements can be expected; refer to analysis presented in Section 5.1 of this report. Assuming an exit boom gate capacity of 400 vehicles per hour, a 95th percentile vehicle queue of 5 vehicles can be expected exiting the car park. This queue will be able to be accommodated on the ramp, which has a maximum grade of 1:7 (14%), without extending into the car park.

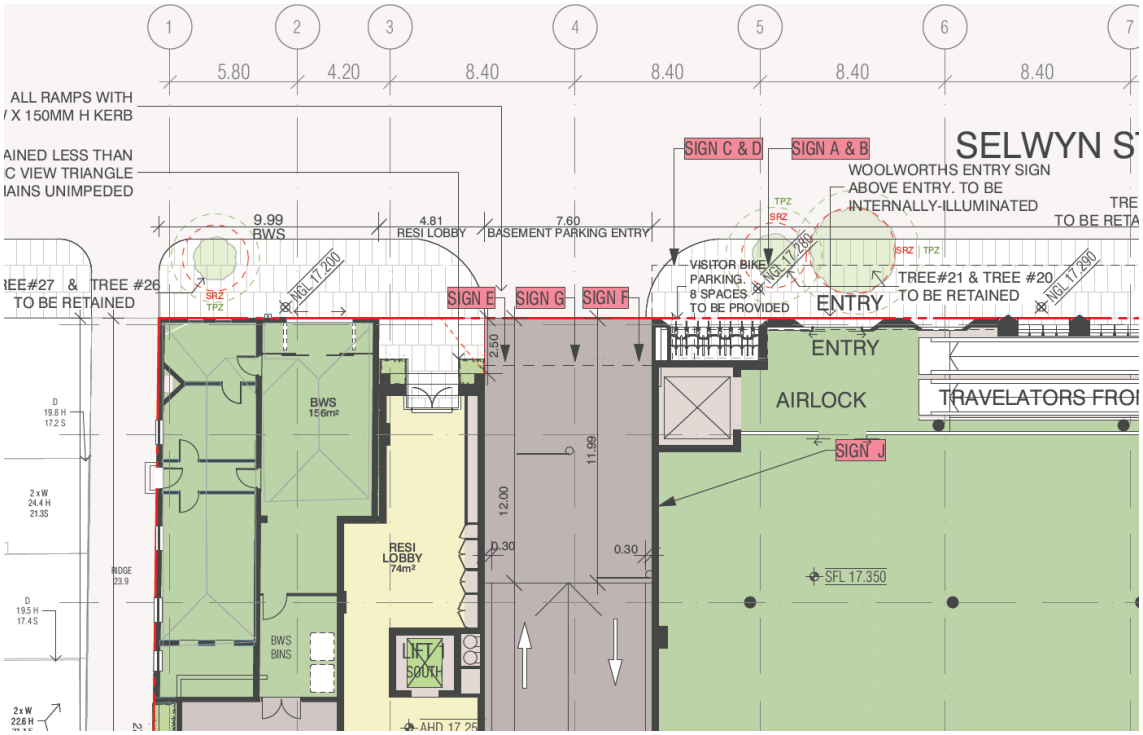

Figure 22: Vehicle Access Arrangements at Selwyn Street
Source: Architectural plans prepared by FK Architect

5.6 Summary

In comparison to the approved development, the proposed rates reflect a marginal decrease in the retail and employee parking rates and a marginal increase in the residential parking rate. An assessment of car parking demand is undertaken using data from Elsternwick apartment buildings. The proposed car parking supply is expected to be in surplus.

The car park has a boom gate control point with a frictionless arrangement proposed. This is expected to operate satisfactorily.

Traffic Impacts

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6 Traffic Impact

The traffic impact of the proposed development was previously assessed at length as part of the previous approval process. The revised development seeks to maintain the approved vehicle access arrangements and marginally reduce the proposed car parking provision. The previous traffic impact assessment for the proposed development identified that the traffic impacts were acceptable.

Additionally, the VCAT Decision outline that the traffic impacts of the proposed development were considered to be acceptable, subject to the completion of mitigation works (including the signalisation of the Glen Huntly Road / Selwyn Street intersection). Specifically, the VCAT Decision[7] noted:

> *"166. For these reasons we find that the proposed development will generate a level of traffic that will be able to be accommodated safely and efficiently on the surrounding road network.*
>
> *192. While we have in our traffic analysis above focussed on the potential traffic impacts of the proposed development, we also need to acknowledge that the proposal will also bring a number of transport related benefits. These include:*
>
> > *a. The provision of a significant amount of additional housing in a location which provides choice between forms of public transport, only a short walk from the review site. This enables the new residents of the review site a realistic choice to avoid or reduce using motor vehicles.*
> >
> > *b. The provision of a significant amount of additional housing in an activity centre location, where people can walk or cycle to a wide range of services and facilities.*
> >
> > *c. The provision of generous bicycle parking facilities on the review site, to encourage workers at the supermarket and residents to cycle to the review site, rather than drive.*
> >
> > *d. The provision of a supermarket in a convenient location, which provides nearby residents an opportunity to choose to do more frequent and smaller shops, that can be done while walking or on public transport, rather than rely on driving to a supermarket.*
> >
> > *e. The design of loading bays on the review site where trucks can enter and exit the site in a forward direction. This contrasts with most loading bays which require trucks to reverse in and perform awkward reversing manoeuvres of the kind depicted by Mr Campbell in his various videos of another loading bay, while blocking traffic in local streets.*
>
> *193. For these reasons, we find that the proposal appropriately responds to Transport and related policy and will provide for appropriate car parking and traffic impacts in the surrounding neighbourhood."*

Based on the above, the traffic impacts of the proposed development are considered acceptable from both a peak hour intersection operation (with the provision of the traffic signals at Glen Huntly Road / Selwyn Street intersection) and daily traffic volume threshold perspective.

To further manage traffic impacts by reducing car dependency for travel to/from the site, a Green Travel Plan (GTP) has also been prepared for the previously endorsed development. That plan comprises a list of strategies aimed at increasing walking, cycling, public transport and carpooling as a means of travel to and from the proposed development and in turn reducing the traffic generation from the site.

[7] Fabcot Pty Ltd v Glen Eira CC [2022] VCAT 1025 (7 September 2022), Paragraphs 166, 192 and 193.

Loading & Waste Collection

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7 Loading

7.1 Overview

Clause 65 of the Glen Eira Planning Scheme outlines that the responsible authority must consider the adequacy of loading and unloading facilities before deciding on a planning permit application. The Clause does not stipulate a statutory loading requirement and therefore a qualitative assessment of the adequacy of the proposed loading response is presented below.

7.2 Proposed Arrangements

The supermarket loading area has been designed with a length of approximately 24m and width of 18m with a total floor area of 371sqm. It will have a minimum height clearance of 4.5m.

Access to the loading area will be from a proposed new crossover onto Sinclair Street. The construction of this crossover will result in the loss of two on-street parking spaces. This loading area has been designed to accommodate vehicles up to and including a 14.7m long vehicles. All vehicles will enter and exit the site in a forward direction, via the use of turntable within the loading area. The layout of this loading dock is shown in **Figure 23**. This dock will be used by the supermarket, food and drink premises and office.

A 196sqm loading area which is proposed to be used by the bottle shop and residents is also provided at the southern end of the site and will be accessed via the existing laneway. A swept path assessment has been undertaken that demonstrates that a 6.4m long Small Rigid Vehicle (SRV) and a 6.4m long mini-rear loader type waste collection vehicle can enter the site via a reverse manoeuvre and exit in a forward direction. The layout of this loading dock is shown in **Figure 24**.

Swept path assessments showing the accessibility of the loading areas is included in Appendix B.

Figure 23: Northern Loading Dock Layout
Source: Architectural plans prepared by FK Architect

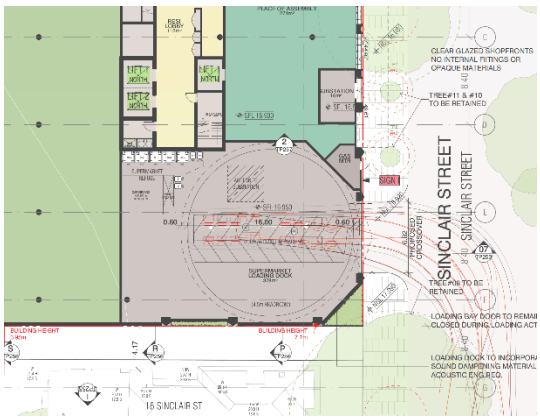

Figure 24: Southern Loading Dock Layout

7.3 Loading Management

All vehicles accessing the northern supermarket loading area will arrive and depart the site using Sinclair Street, St Georges Road and Glen Huntly Road.

The required travel routes to the loading dock are specified in the Loading Dock Management Plan which was endorsed as part of the previously issued permit for the site. Given the minor changes between the previously endorsed development and the proposed development, this has not been updated.

The swept path assessments for this route are included in Appendix C and confirm that appropriate access can be provided for the largest vehicle, subject to minor line marking modifications at the St Georges Road / Glen Huntly Road intersection[8].

It is noted that the endorsed Loading Dock Management Plan also outlines the preferred route for vehicles to travel in the unlikely event that a loading vehicle arrives at the site when the dock is already in use. (This occurrence is not expected as approximately eight loading vehicles are expected per day (excluding specialist deliveries by vans) and these vehicles will be scheduled with separation between the bookings to minimise the potential for two vehicles to be on-site at the same time). In this circumstance, the preferred recirculation route will be to travel westbound along Sinclair Street to turn left onto Gordon Street and then left back onto Glen Huntly Road. For this recirculation movement to occur, the Gordon Street / Sinclair Street would need to be modified, as shown in the two options presented in Appendix C.

It is proposed to access the residential loading area to the south of the site via the existing laneway. The VCAT decision for a previous planning permit application on the site noted this arrangement to be acceptable given this laneway already serves this “back-of-house” function for the nearby properties fronting Glen Huntly Road.

The proposed loading dock routes are shown in **Figure 25**.

Figure 25: Proposed Loading Access Routes (from draft Loading Dock Management Plan)
Source: Stantec Transport Impact Report dated 01/07/2021

[8] The swept path indicates that the largest truck needs to cross over the central line marking on Glen Huntly Road for less than 50m. This complies with relevant Victorian Road Rules

7.4 Waste Collection

Waste from the supermarket will be collected from the supermarket loading area on Sinclair Street and for the bottle shop via the southernmost loading dock by a private contractor.

Residential waste will be stored in two areas on Basement Level 3 and 4. All residential waste will be collected using a private waste contractor from Basement 3 and 4 at low activity times (i.e. outside of the am/pm weekday peaks or on weekends) and scheduled to ensure residents and other car park users are aware of the activity.

The waste from the café will be stored in and collected from the southern loading area. Collection of waste from this loading area will be undertaken by a private contractor using a 6.4m long mini-rear loader type waste collection vehicle.

The place of assembly use waste will be stored in an area accessed via the northern loading area. Building management will be responsible for moving the place of assembly use bins to a temporary internal (on-site) location within the loading area for kerbside collection on Sinclair Street by a private contractor.

It is expected that all waste collection will be controlled by a Waste Management Plan included as a Condition of Permit that would be enforceable by the Responsible Authority.

7.5 Summary

On the basis of the above discussions and analysis, the proposed loading strategy and waste collection arrangements for the northern and southern buildings are considered to be acceptable.

Conclusion

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8 Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- The proposed development generates a minimum statutory car parking requirement of 421 car spaces. In this instance a permit is being sought to reduce the office statutory car parking requirement. Noting, the overall car parking provision for the site still exceeds the statutory parking requirement.
- A car parking demand assessment for the office land use indicates that the proposed reduction being sought is appropriate.
- The proposed car parking and vehicle access layout is generally consistent with the dimensional requirements as set out in the Glen Eira Planning Scheme, and where appropriate the relevant Australian Standard.
- The proposed development provides 127 bicycle parking spaces on-site. The provision for bicycle facilities exceeds the requirements of Clause 52.34 of the Glen Eira Planning Scheme. The bicycle parking layout is considered satisfactory.
- The provision of suitably sized loading areas have been provided for the supermarket, bottle shop and the residential uses. The loading areas can be accessed by the largest expected vehicle for each use in a forward direction. Satisfactory waste collection arrangements have also been made for all land uses. The loading activity to/from the site is also proposed to be managed by a Loading Dock Management Plan which will specify hours of operation of the dock and required travel routes for loading vehicles.
- The revised development is expected to generate similar peak hour and daily vehicle movements as the approved development.
- The traffic impacts of the proposed development are considered acceptable from both a peak hour intersection operation and daily traffic volume threshold perspective, with the provision of the traffic signals at Glen Huntly Road / Selwyn Street intersection.

Appendices

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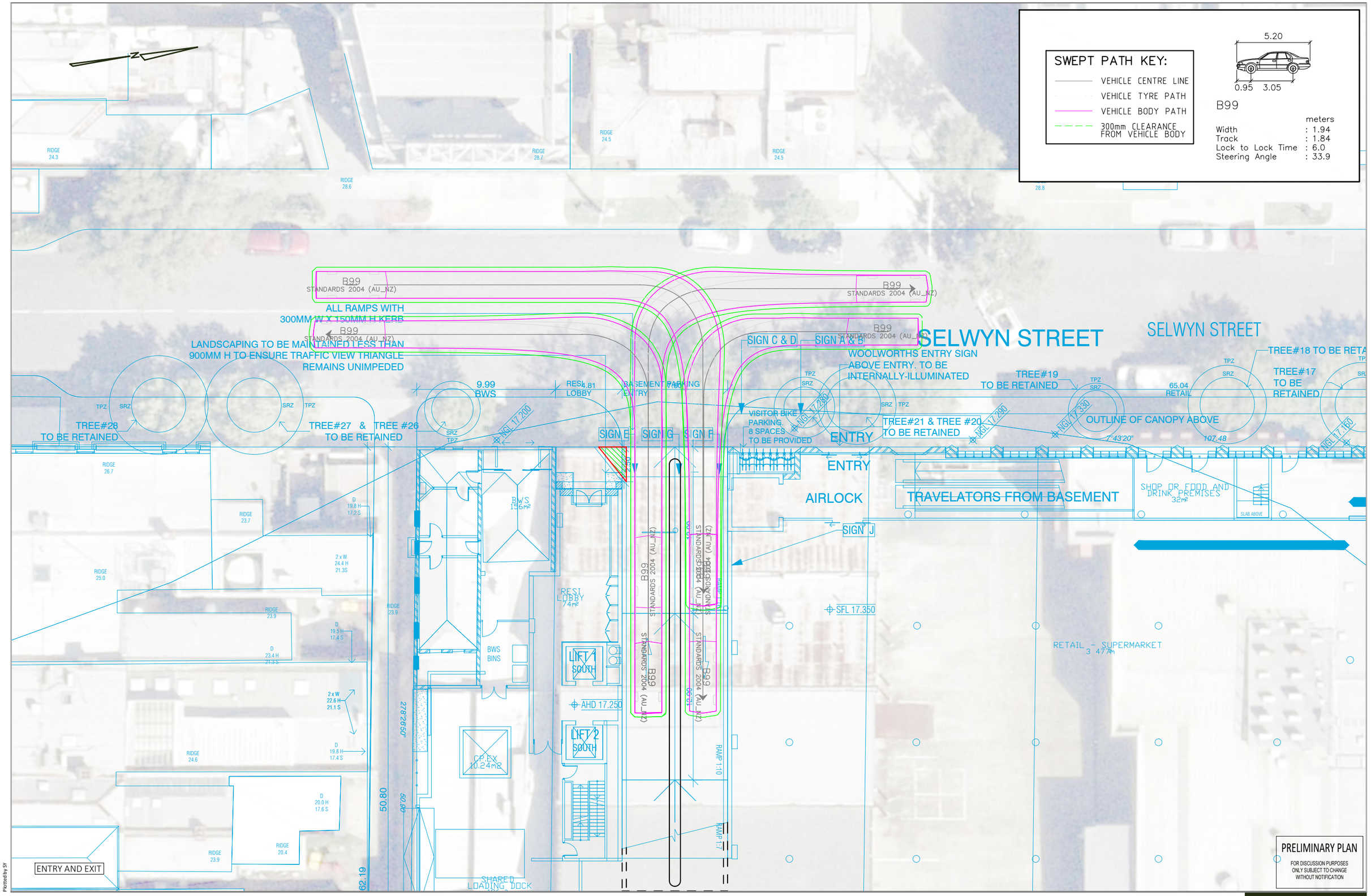
Appendix A
Swept Path Analysis – Car Parks



PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai
Transport Advisory

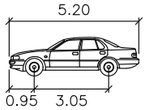
10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
GROUND
SWEPT PATH ASSESSMENT

SCALE 0 2.5 5.0 1:250 @ A3
DRAWING NO. 24075-01-P2
DATE OF ISSUE 19 September 2024
DESGINED BY Z.YANG
REVIEWED BY K.WILLIAMS

SHEET
09 OF 18

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



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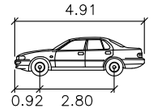
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



B85

	meters
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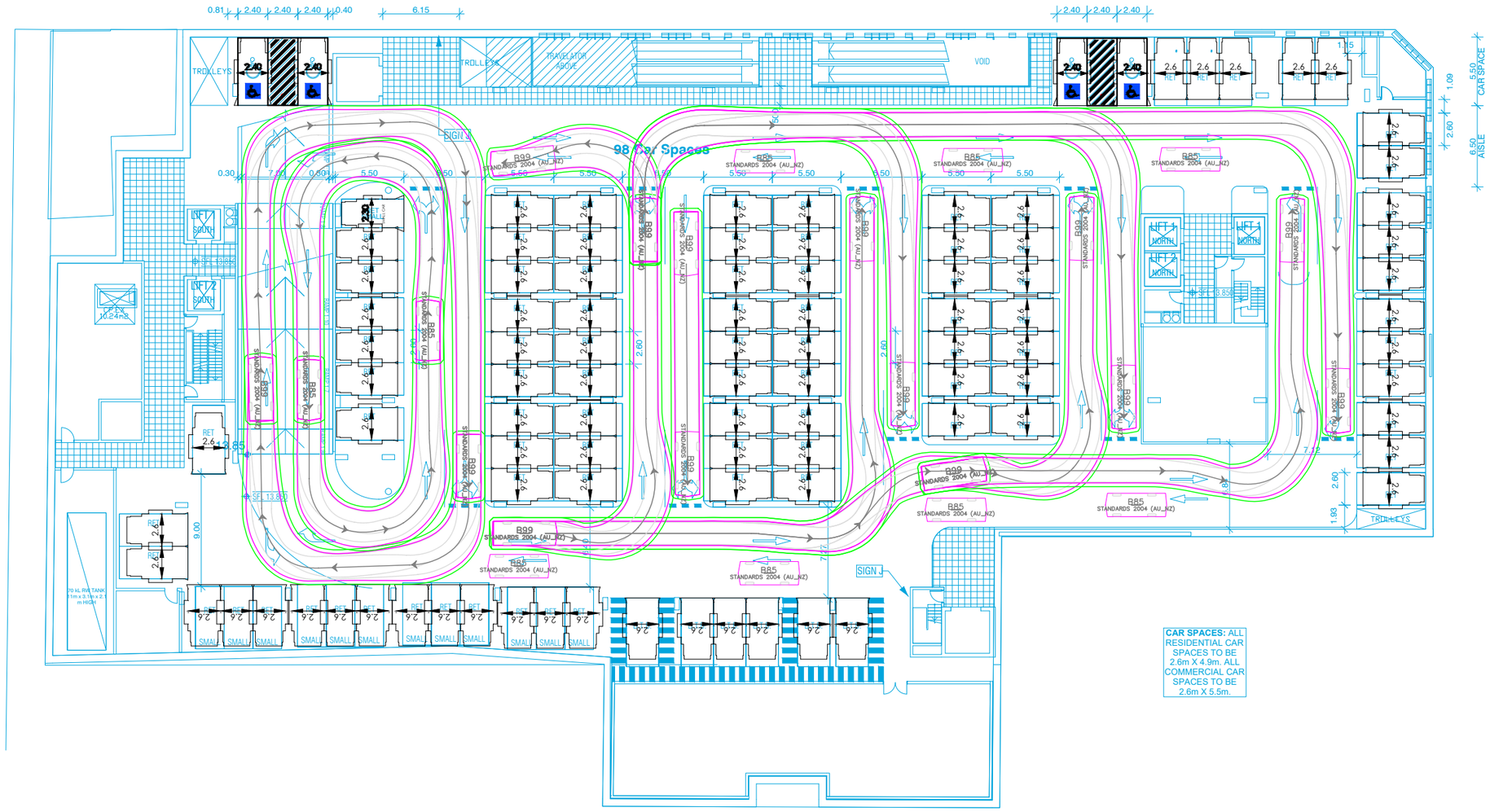
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

SELWYN STREET



SINCLAIR STREET

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 1
SWEPT PATH ASSESSMENT

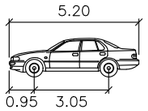
SCALE 0 4.0 8.0 1:400 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 10 OF 18

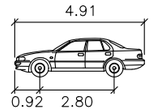
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B99

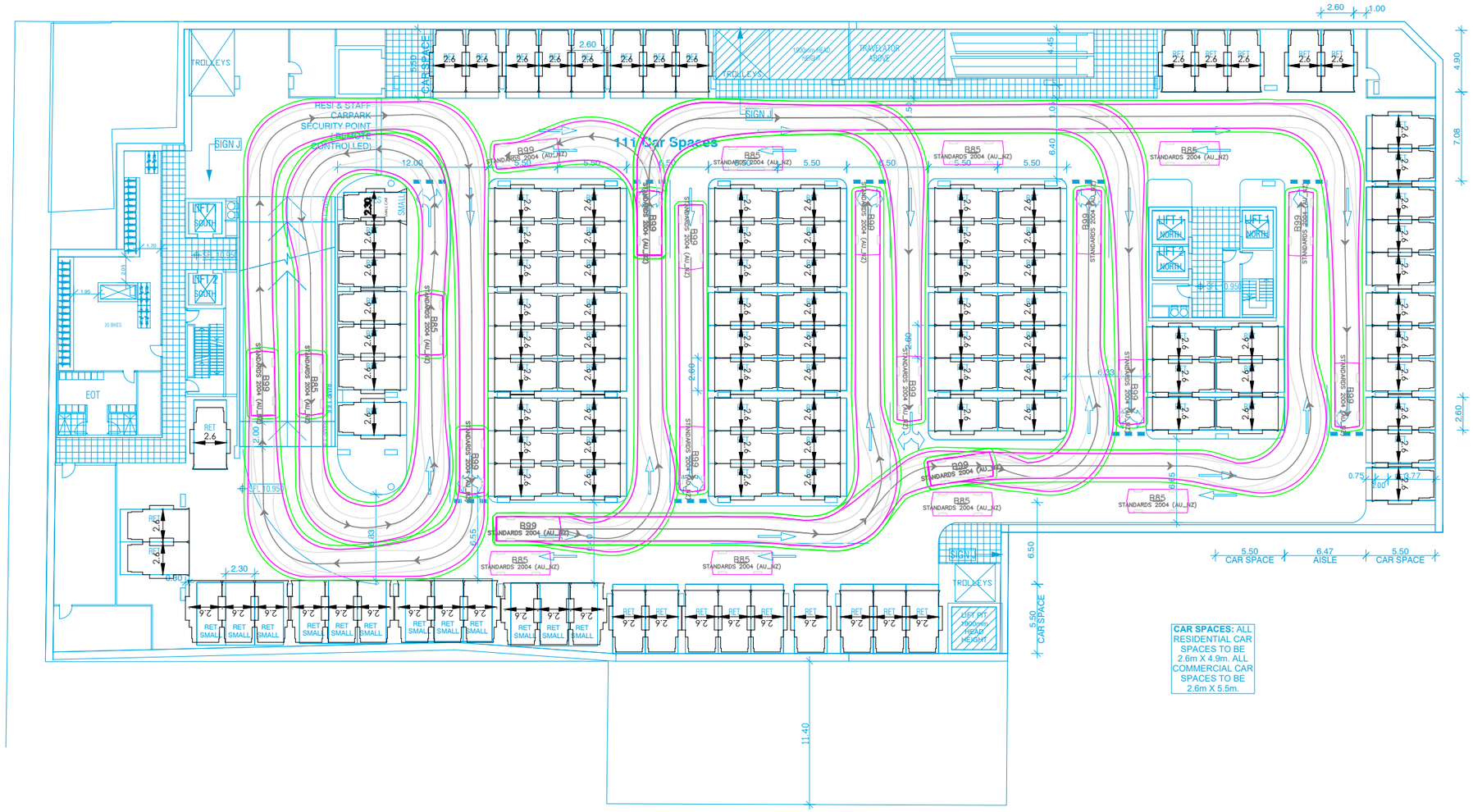
	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



B85

	meters
Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

SELWYN STREET



SINCLAIR STREET

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 2
SWEPT PATH ASSESSMENT

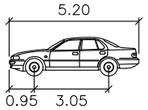
SCALE 0 4.0 8.0 1:400 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 11 OF 18

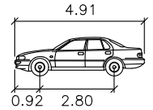
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B99

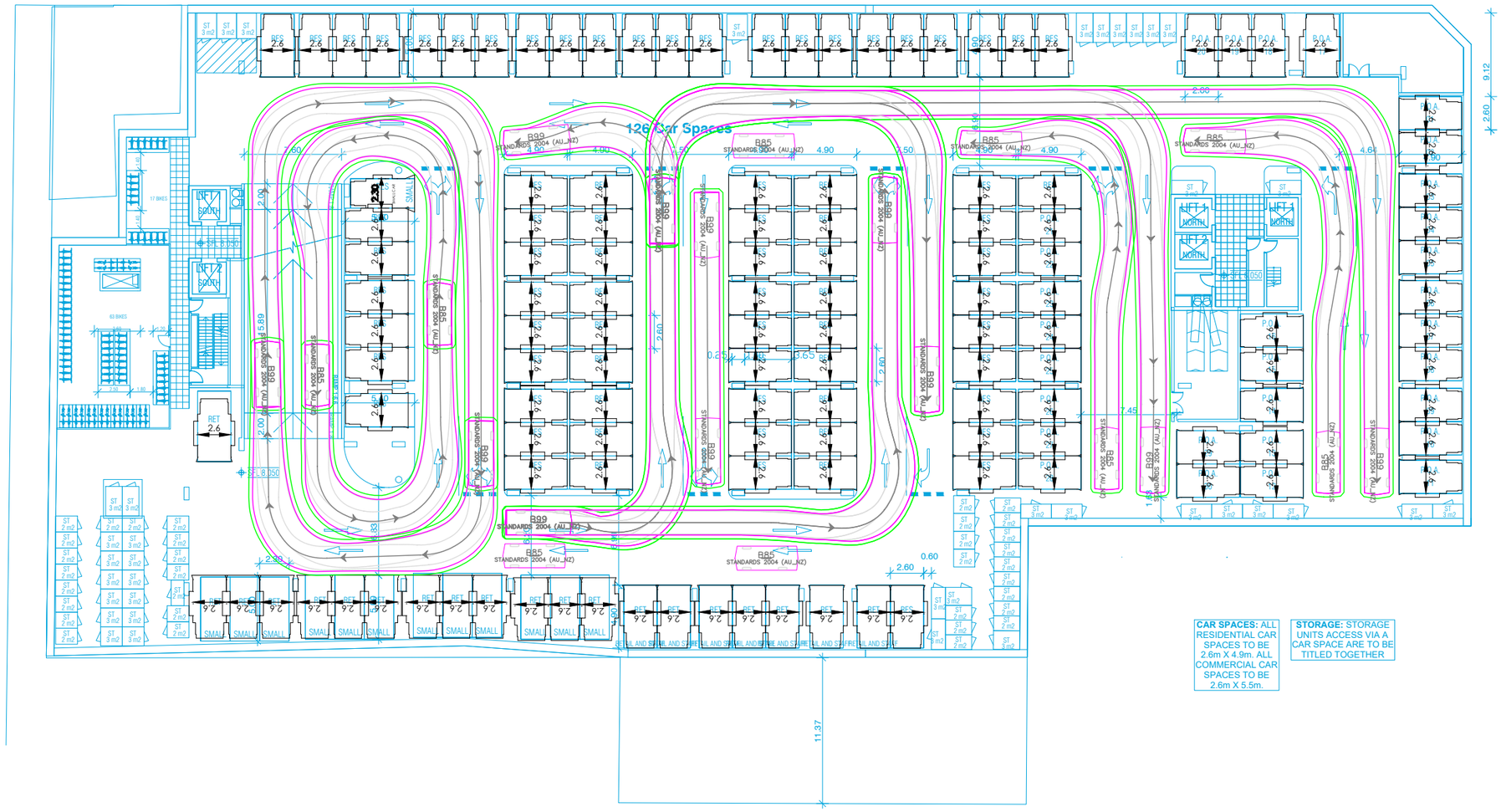
	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



B85

	meters
Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

SELWYN STREET



PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

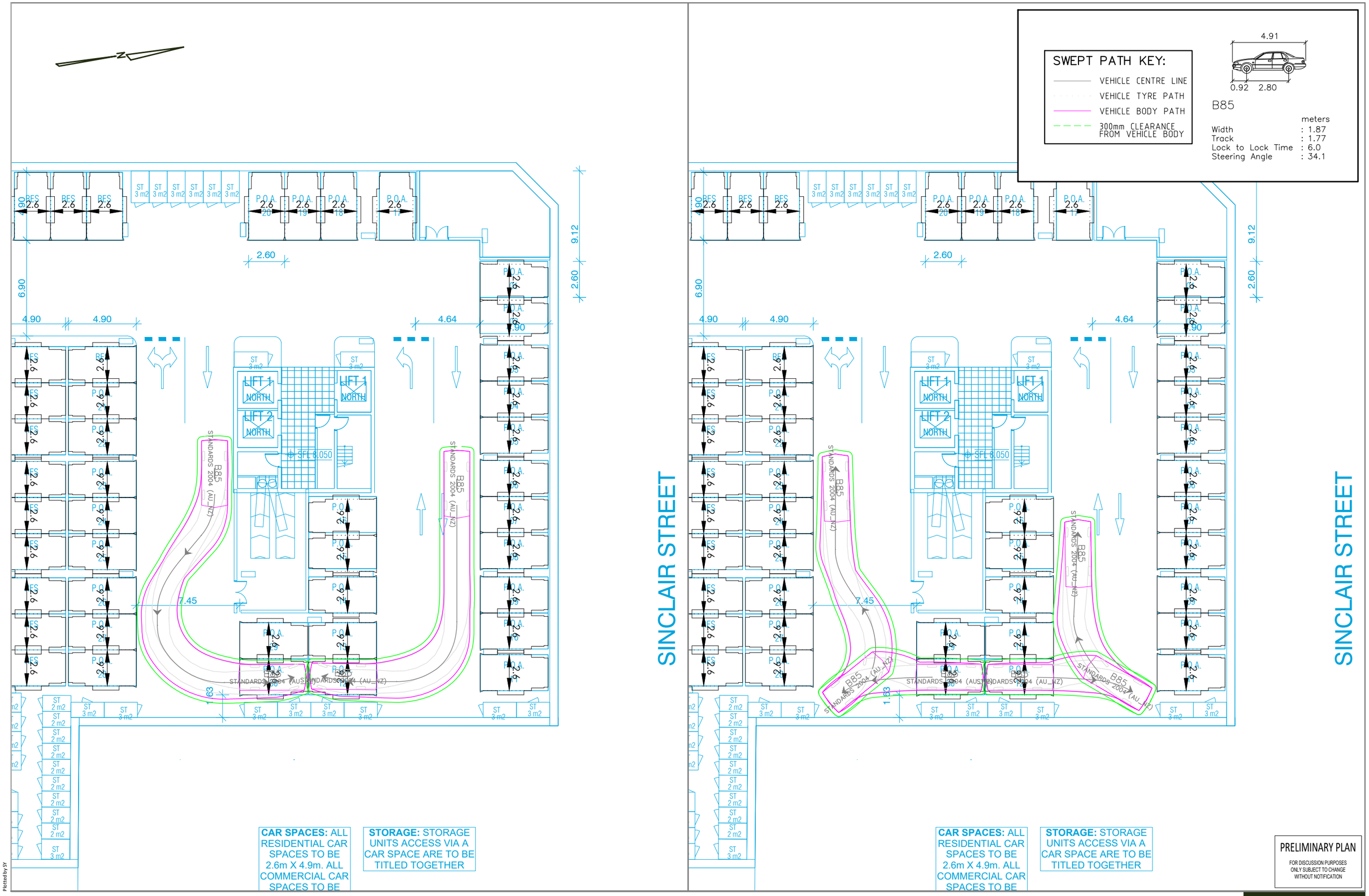
eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 3
SWEPT PATH ASSESSMENT

SCALE 0 4.0 8.0 1:400 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 12 OF 18



PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

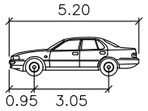
10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 3
SWEPT PATH ASSESSMENT

SCALE 0 2.5 5.0 1:250 @ A3
DRAWING NO. 24075-01-P2
DATE OF ISSUE 19 September 2024
DESGINED BY Z.YANG
REVIEWED BY K.WILLIAMS

SHEET 15 OF 18

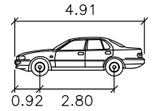
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B99

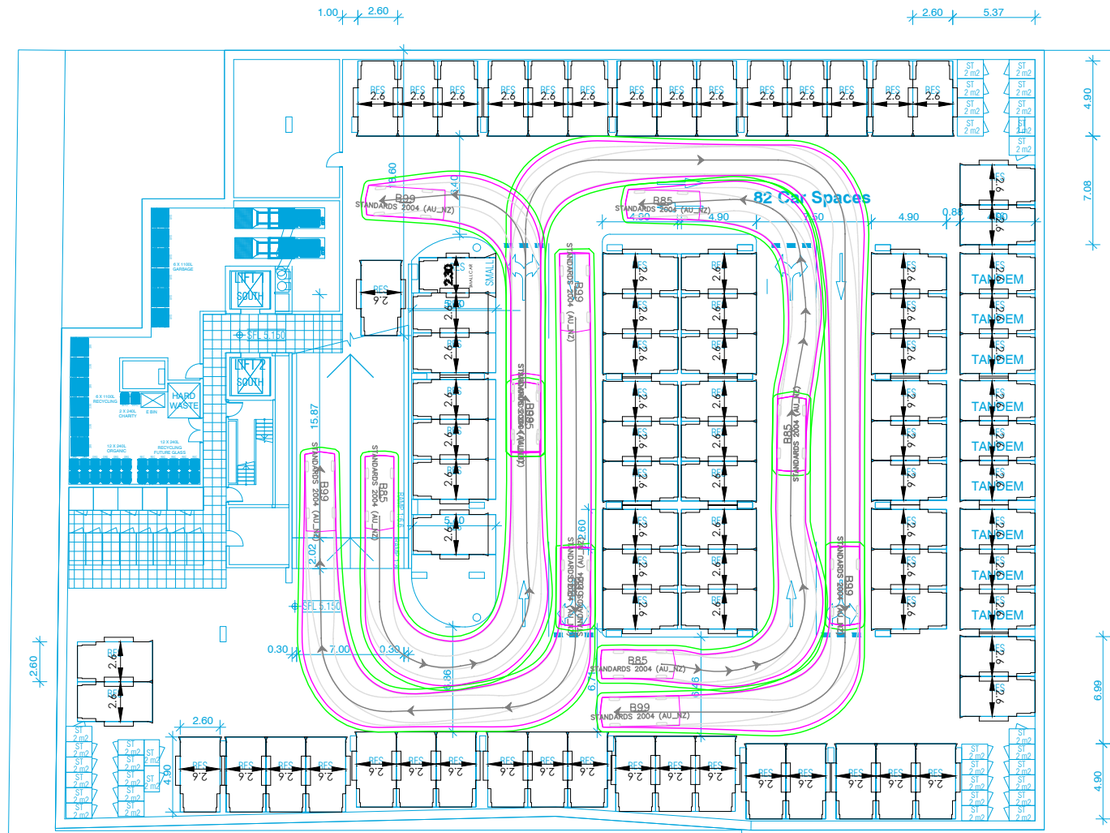
	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



B85

	meters
Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

SELWYN STREET



SINCLAIR STREET

CAR SPACES: ALL RESIDENTIAL CAR SPACES TO BE 2.6m X 4.9m. ALL COMMERCIAL CAR SPACES TO BE 2.6m X 5.5m.

STORAGE: STORAGE UNITS ACCESS VIA A CAR SPACE ARE TO BE TITLED TOGETHER

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

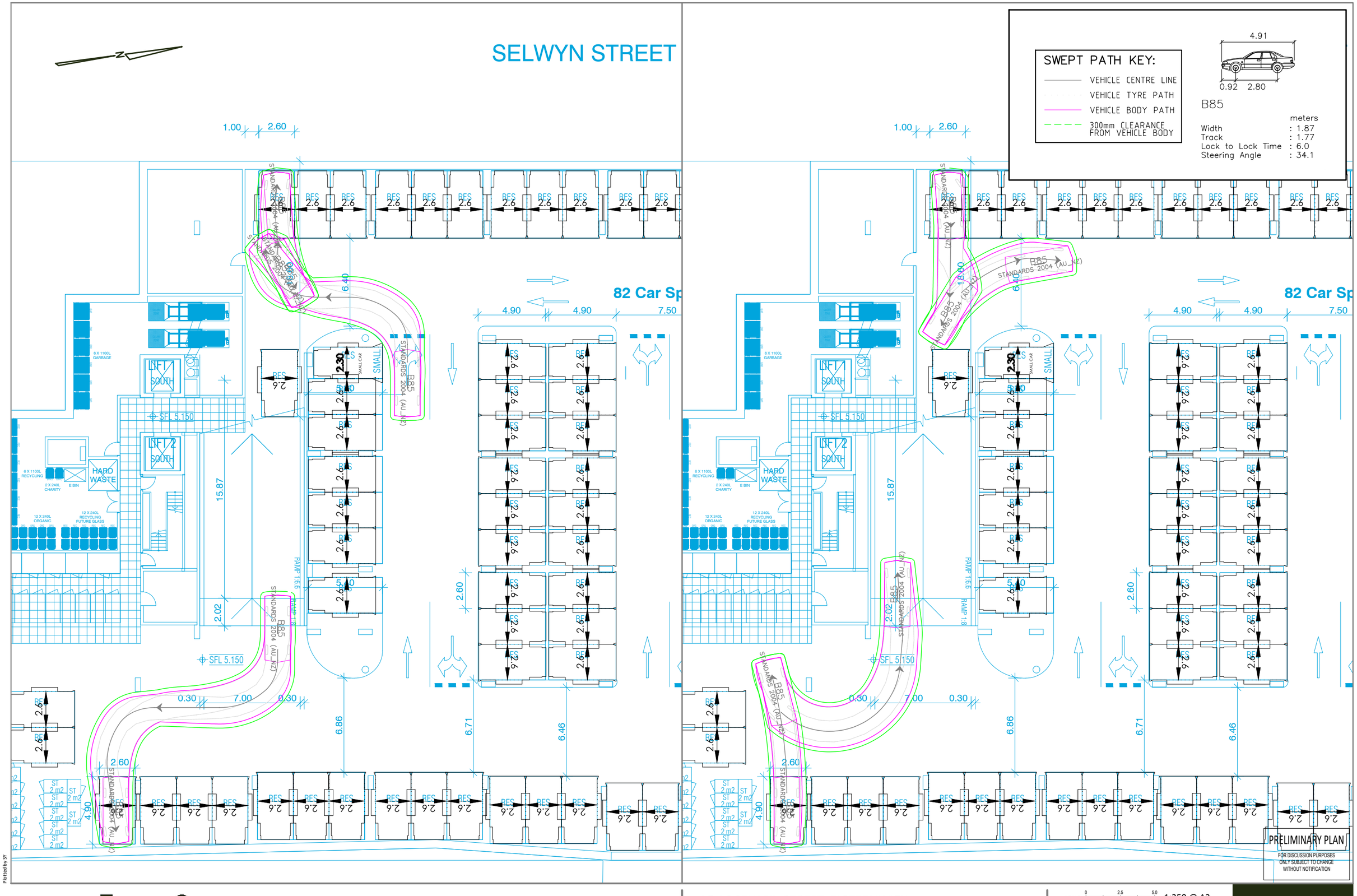
10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 4
SWEPT PATH ASSESSMENT

SCALE 0 4.0 8.0 1:400 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 16 OF 18

SELWYN STREET



Plotted by SY

eukai Transport Advisory

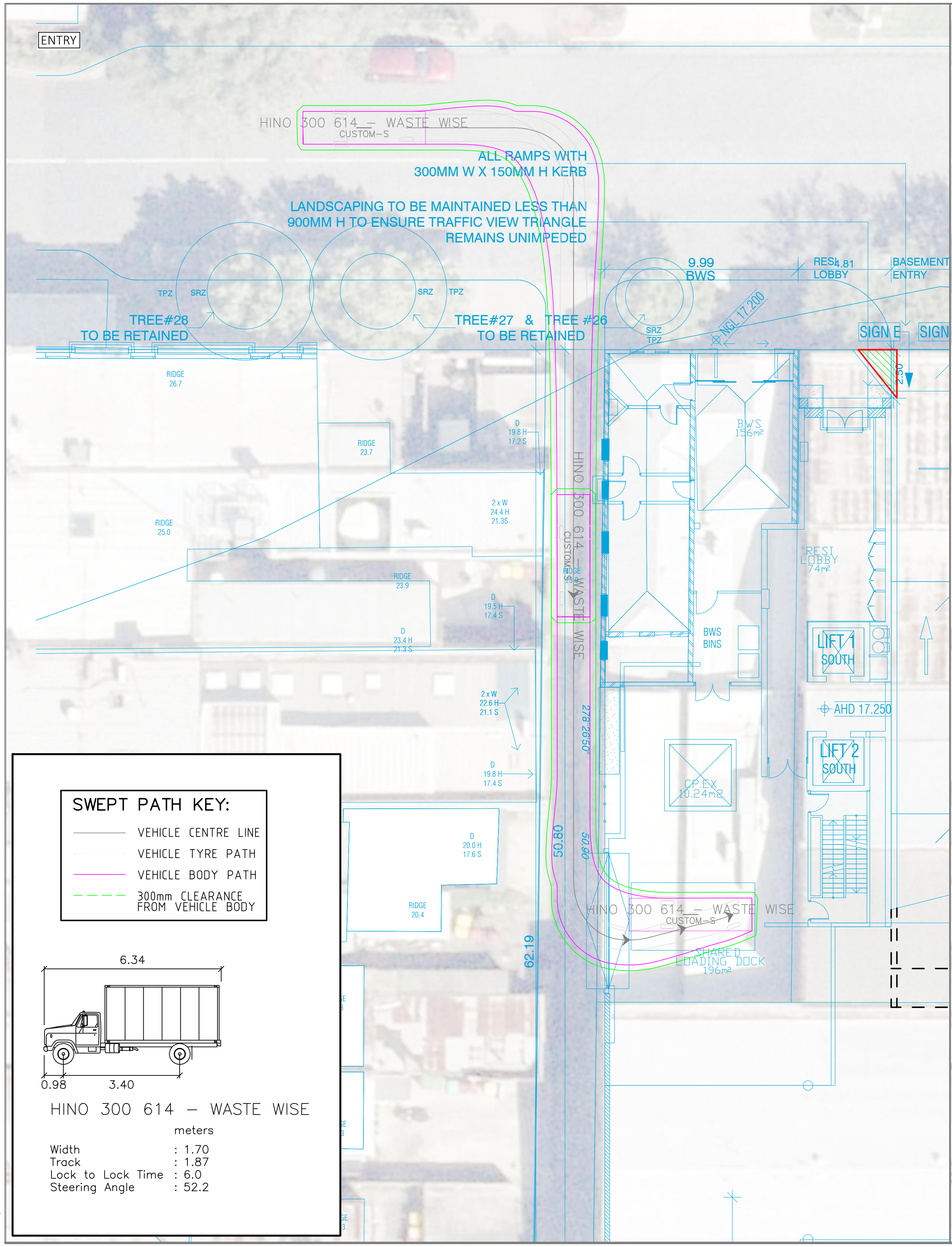
10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 4
SWEPT PATH ASSESSMENT

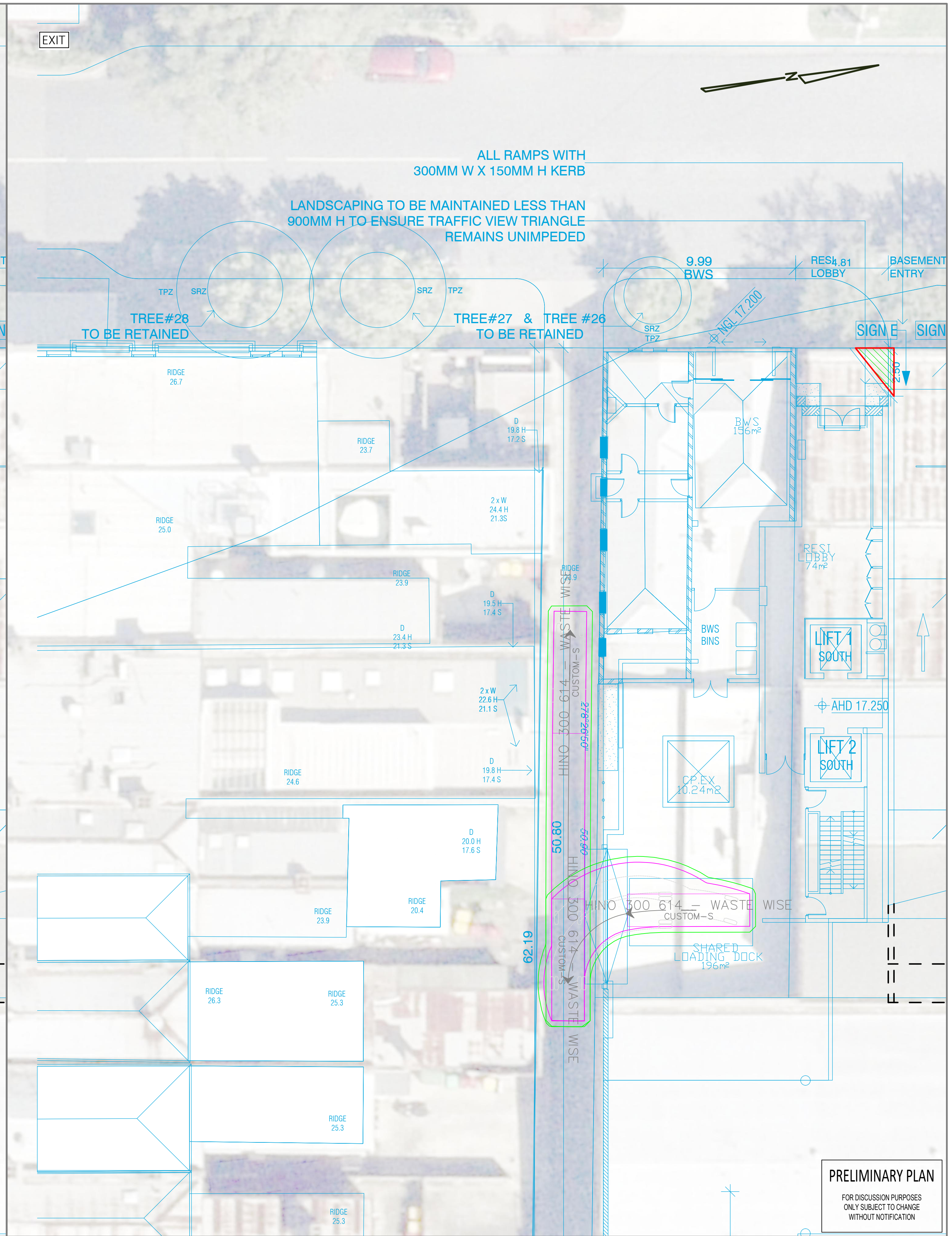
SCALE 1:250 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 18 OF 18

Appendix B
Swept Path Analysis – Loading Bays

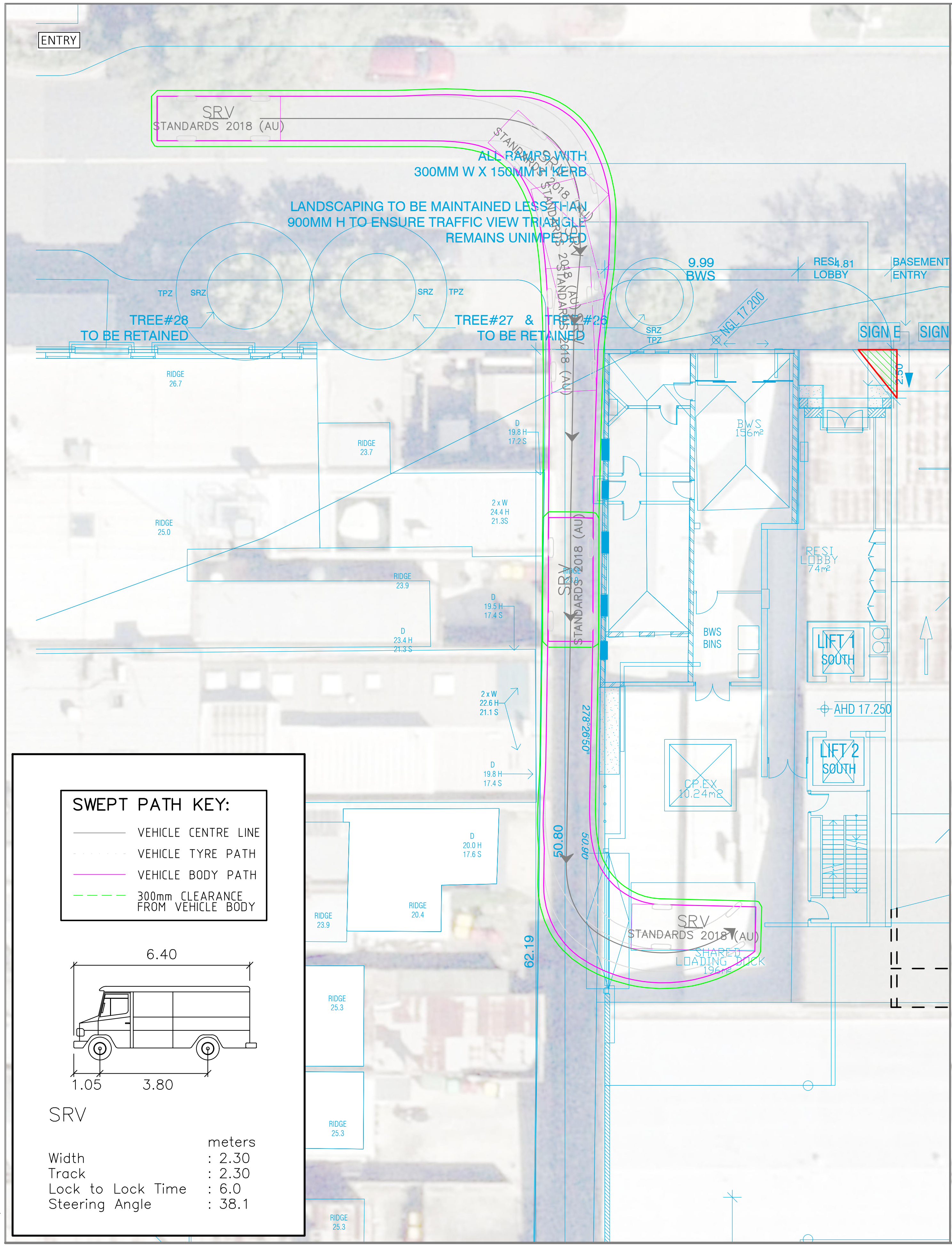

ENTRY
HINO 300 614 – WASTE WISE
CUSTOM–S
ALL RAMPS WITH
300MM W X 150MM H KERB
LANDSCAPING TO BE MAINTAINED LESS THAN
900MM H TO ENSURE TRAFFIC VIEW TRIANGLE
REMAINS UNIMPEDED
TREE#28
TO BE RETAINED
TREE#27 & TREE #26
TO BE RETAINED
9.99
BWS
BASEMENT
ENTRY
SIGN E
BWS BINS
LIFT 1
SOUTH
AHD 17.250
LIFT 2
SOUTH
SHARED
LOADING DOCK
196m2
SWEPT PATH KEY:
VEHICLE CENTRE LINE
VEHICLE TYRE PATH
VEHICLE BODY PATH
300mm CLEARANCE
FROM VEHICLE BODY
6.34
0.98
3.40
HINO 300 614 – WASTE WISE
meters
Width : 1.70
Track : 1.87
Lock to Lock Time : 6.0
Steering Angle : 52.2

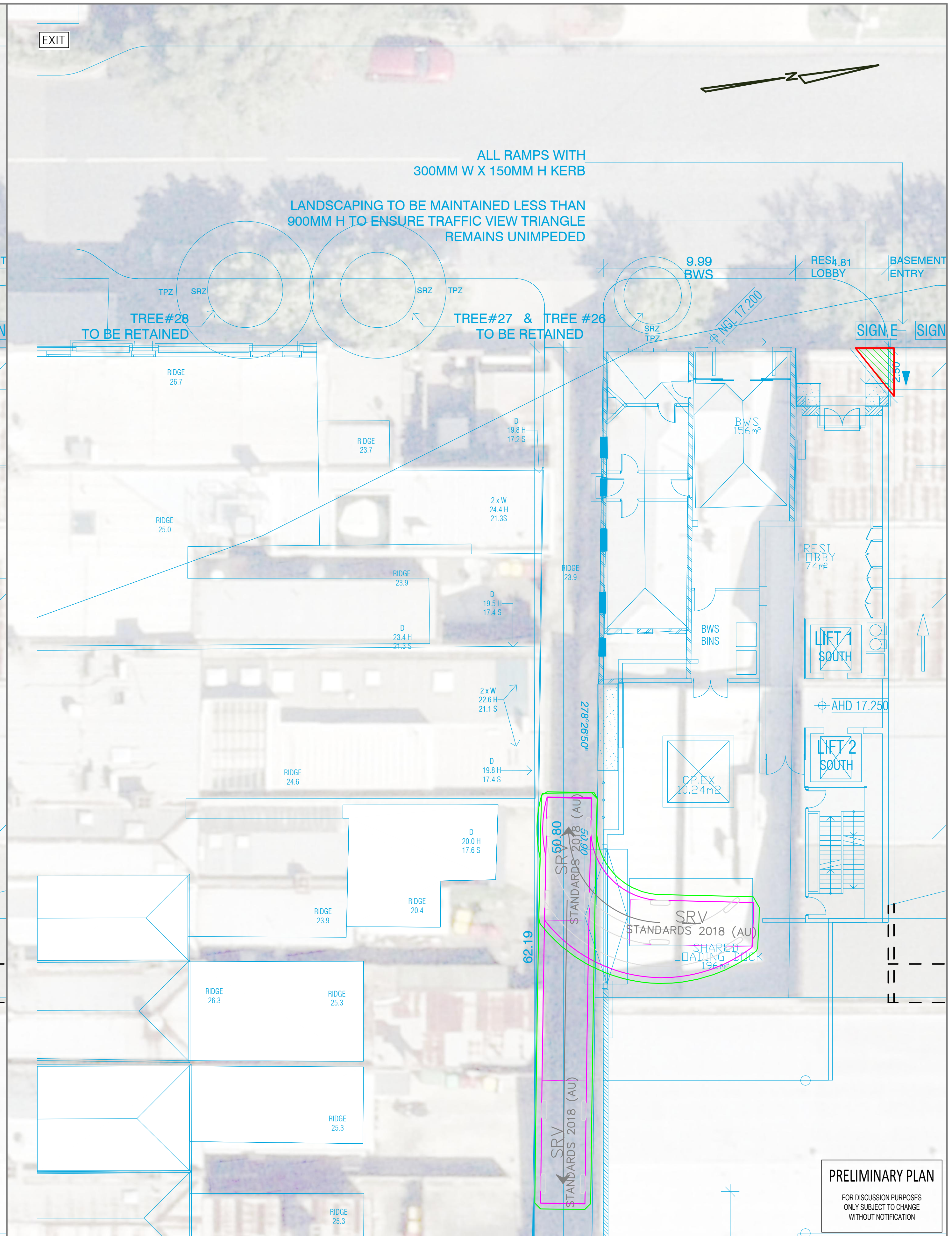

EXIT
HINO 300 614 – WASTE WISE
CUSTOM–S
ALL RAMPS WITH
300MM W X 150MM H KERB
LANDSCAPING TO BE MAINTAINED LESS THAN
900MM H TO ENSURE TRAFFIC VIEW TRIANGLE
REMAINS UNIMPEDED
TREE#28
TO BE RETAINED
TREE#27 & TREE #26
TO BE RETAINED
9.99
BWS
BASEMENT
ENTRY
SIGN E
BWS BINS
LIFT 1
SOUTH
AHD 17.250
LIFT 2
SOUTH
SHARED
LOADING DOCK
196m2
PRELIMINARY PLAN
FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION

eukai
Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
GROUND
SWEPT PATH ASSESSMENT

SCALE 1:250 @ A3
DRAWING NO. 24075-01-P2
DATE OF ISSUE 19 September 2024
DESGINED BY Z.YANG
REVIEWED BY K.WILLIAMS


ENTRY
SRV
STANDARDS 2018 (AU)
ALL RAMPS WITH
300MM W X 150MM H KERB
LANDSCAPING TO BE MAINTAINED LESS THAN
900MM H TO ENSURE TRAFFIC VIEW TRIANGLE
REMAINS UNIMPEDED
TREE#28
TO BE RETAINED
TREE#27 & TREE #26
TO BE RETAINED
9.99
BWS
BASEMENT
ENTRY
SIGN E
BWS BINS
LIFT 1 SOUTH
LIFT 2 SOUTH
AHD 17.250
SHARED LOADING DOCK
SWEPT PATH KEY:
VEHICLE CENTRE LINE
VEHICLE TYRE PATH
VEHICLE BODY PATH
300mm CLEARANCE FROM VEHICLE BODY
6.40
1.05
3.80
SRV
meters
Width : 2.30
Track : 2.30
Lock to Lock Time : 6.0
Steering Angle : 38.1


EXIT
ALL RAMPS WITH
300MM W X 150MM H KERB
LANDSCAPING TO BE MAINTAINED LESS THAN
900MM H TO ENSURE TRAFFIC VIEW TRIANGLE
REMAINS UNIMPEDED
TREE#28
TO BE RETAINED
TREE#27 & TREE #26
TO BE RETAINED
SRV
STANDARDS 2018 (AU)
LIFT 1 SOUTH
LIFT 2 SOUTH
AHD 17.250
PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

eukai
Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
GROUND
SWEPT PATH ASSESSMENT

SCALE	1:250 @ A3
DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

ENTRY

ACCESS TO SUBSTATION

GAS MTR

SRZ

SIGN I

SFL 16.950

NGL 16.920

NGL 17.090

0.60

Woolworths 16 Pallet 15.00

CUSTOM TRUCK ACCESS LINEMARKING

0.60

SUPERMARKET LOADING DOCK 378㎡

(4.5m HEADROOM)

BUILDING HEIGHT 7.7m

6.32 PROPOSED CROSSOVER

SINCLAIR STREET

SINCLAIR STREET

TREE#08 TO BE RETAINED

LOADING BAY DOOR TO REMAIN CLOSED DURING LOADING ACTIVITIES

LOADING DOCK TO INCORPORATE SOUND DAMPENING MATERIALS TO ACOUSTIC ENG REQ.

4.17

21.59

SRZ

TPZ

16 SINCLAIR ST

W 20.6 H 20.2 S

W 20.2 H 17.9 S

D 20.7 H 17.9 S

NHW 20.7 H 20.2 S

W 20.5 H 18.4 S

D & W 20.8 H 18.0 S

RIDGE 23.4

18 SINCLAIR ST

D 19.9 H 17.8 S

W 20.7 H 19.9 S

RIDGE 23.4

06 TO BE RETAINED

RIDGE 22.5

NHW 20.1 H 19.3 S

RIDGE 22.8

20 SINCLAIR ST

D 22.7 H 20.8 S

Woolworths 16 Pallet CUSTOM

EXIT

ACCESS TO SUBSTATION

GAS MTR

SRZ

SIGN I

SFL 16.950

NGL 16.920

NGL 17.090

0.60

Woolworths 16 Pallet 15.00

CUSTOM TRUCK ACCESS LINEMARKING

0.60

SUPERMARKET LOADING DOCK 378㎡

(4.5m HEADROOM)

BUILDING HEIGHT 7.7m

6.82 PROPOSED CROSSOVER

SINCLAIR STREET

SINCLAIR STREET

TREE#08 TO BE RETAINED

LOADING BAY DOOR TO REMAIN CLOSED DURING LOADING ACTIVITIES

LOADING DOCK TO INCORPORATE SOUND DAMPENING MATERIALS TO ACOUSTIC ENG REQ.

4.17

21.59

SRZ

TPZ

16 SINCLAIR ST

W 20.6 H 20.2 S

W 20.2 H 17.9 S

D 20.7 H 17.9 S

W 20.5 H 18.4 S

D & W 20.8 H 18.0 S

RIDGE 23.4

18 SINCLAIR ST

D 19.9 H 17.8 S

W 20.7 H 19.9 S

RIDGE 23.4

06 TO BE RETAINED

RIDGE 22.5

NHW 20.1 H 19.3 S

RIDGE 22.8

20 SINCLAIR ST

D 22.7 H 20.8 S

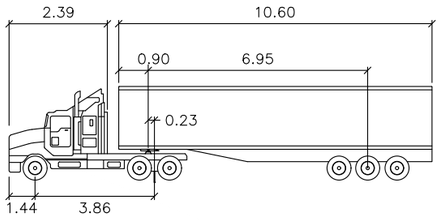
22 SINCLAIR ST

RIDGE 23.3

Woolworths 16 Pallet CUSTOM

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 500mm CLEARANCE FROM VEHICLE BODY



Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK

CAR PARK COMPLIANCE REVIEW

GROUND

SWEPT PATH ASSESSMENT

SCALE 0 2.5 5.0 1:250 @ A3

DRAWING NO. 24075-01-P2

DATE OF ISSUE 19 September 2024

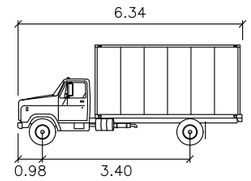
DESGINED BY Z.YANG

REVIEWED BY K.WILLIAMS

SHEET 08 OF 18

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



HINO 300 614 – WASTE WISE

meters

Width	: 1.70
Track	: 1.87
Lock to Lock Time	: 6.0
Steering Angle	: 52.2

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 3
SWEPT PATH ASSESSMENT

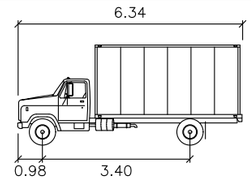
SCALE 0 2.5 5.0 1:250 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 13 OF 18

SWEPT PATH KEY:

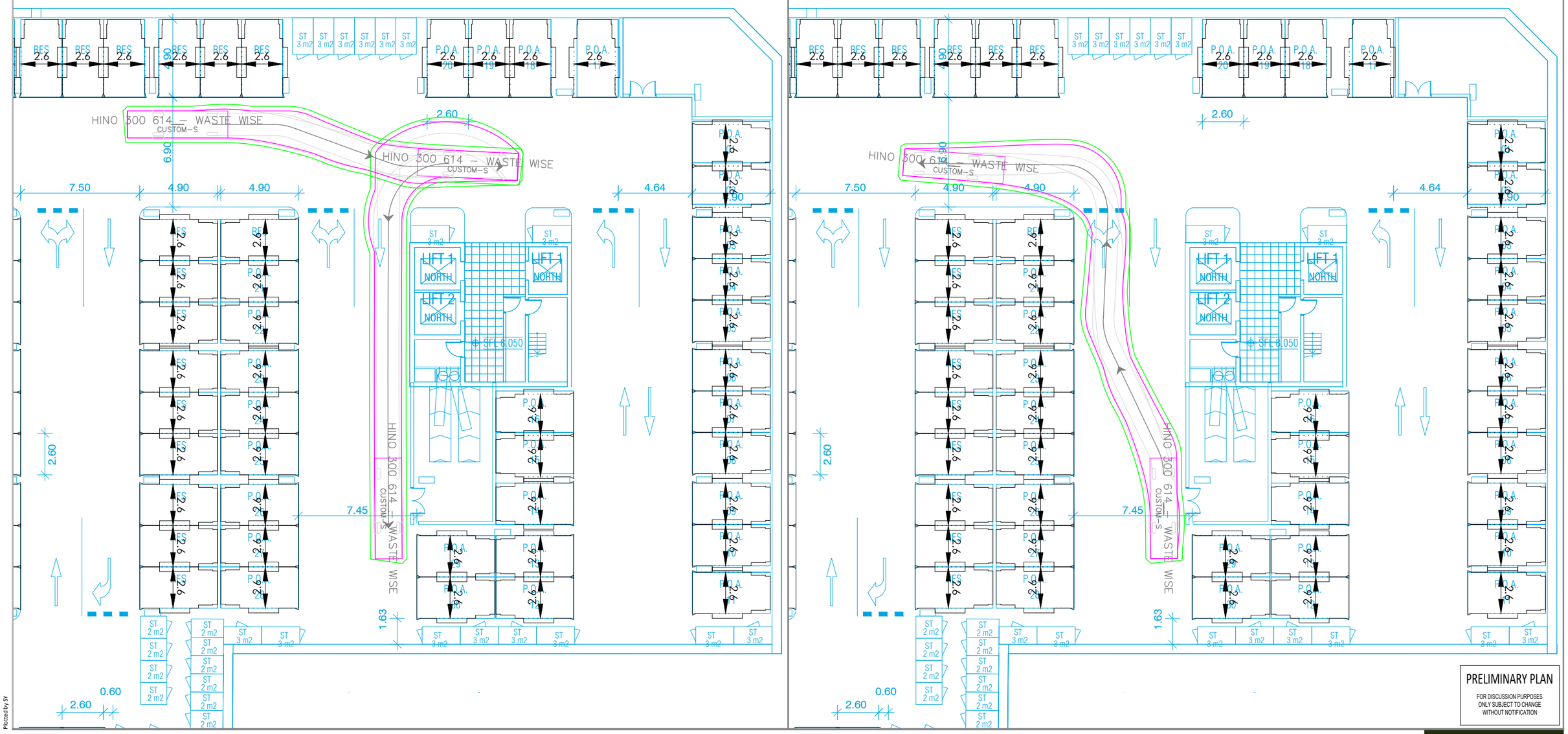
- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



HINO 300 614 – WASTE WISE

meters

Width	: 1.70
Track	: 1.87
Lock to Lock Time	: 6.0
Steering Angle	: 52.2



PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

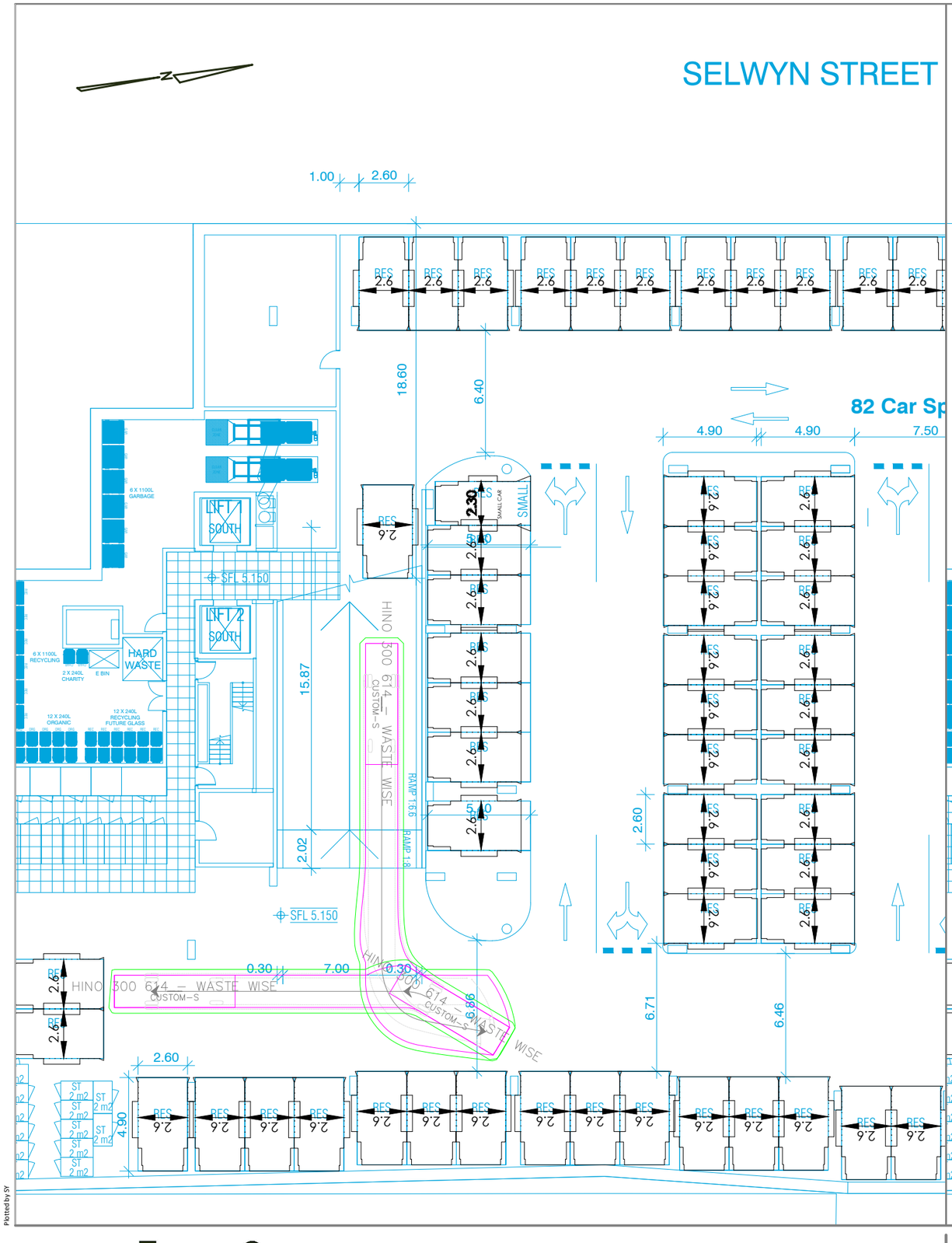
10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 3
SWEPT PATH ASSESSMENT

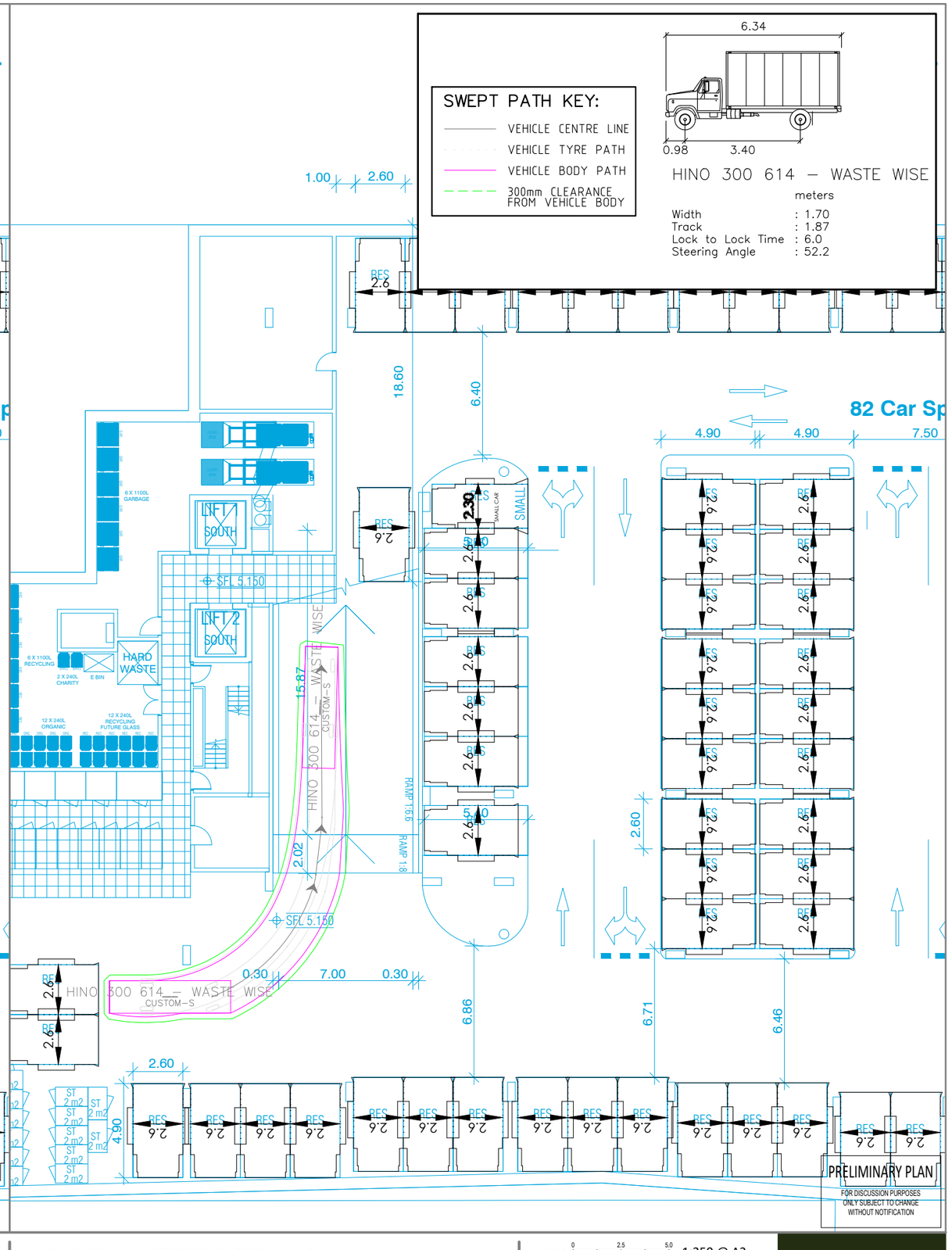
SCALE 0 2.5 5.0 1:250 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 14 OF 18

SELWYN STREET





SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

HINO 300 614 – WASTE WISE

meters

Width	: 1.70
Track	: 1.87
Lock to Lock Time	: 6.0
Steering Angle	: 52.2

PRELIMINARY PLAN

FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

Plotted by SY

eukai Transport Advisory

10-16 SELWYN STREET, ELSTERNWICK
CAR PARK COMPLIANCE REVIEW
BASEMENT 4
SWEPT PATH ASSESSMENT

SCALE 0 2.5 5.0 1:250 @ A3

DRAWING NO.	24075-01-P2
DATE OF ISSUE	19 September 2024
DESGINED BY	Z.YANG
REVIEWED BY	K.WILLIAMS

SHEET 17 OF 18

Appendix C
Swept Path Analysis – External Roads

Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

MAP REF 67/F3

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

GTA consultants
www.gta.com.au

Melbourne	03 9851 9600
Sydney	02 8448 1800
Brisbane	07 3113 5000
Adelaide	08 8334 3600
Perth	08 6169 1000

DESIGNED D. HUYNH	DESIGN CHECK T. DE YOUNG
APPROVED BY T. DE YOUNG	DATE ISSUED 30 JUNE 2021
CAD FILE NO. V129144-AT02-P3.dgn	

SCALE A3 — 0 2.5 5 — 1:250

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-01 SHEET 01 OF 13 ISSUE P3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:09:02

Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

MAP REF 67/F3

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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Melbourne	03 9851 9600
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DESIGNED D. HUYNH	DESIGN CHECK T. DE YOUNG
APPROVED BY T. DE YOUNG	DATE ISSUED 30 JUNE 2021
CAD FILE NO. V129144-AT02-P3.dgn	

SCALE A3 — 0 2.5 5 — 1:250

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-02 SHEET 02 OF 15 ISSUE P3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:09:12

Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

MAP REF 67/F3

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
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Adelaide	08 8334 3600
Perth	08 6169 1000

DESIGNED	D. HUYNH
DESIGN CHECK	T. DE YOUNG
APPROVED BY	T. DE YOUNG
DATE ISSUED	30 JUNE 2021
SCALE	A3
	0 2.5 5 1:250
CAD FILE NO.	V129144-AT02-P3.dgn

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-03 SHEET 03 OF 13 ISSUE P3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:09:37

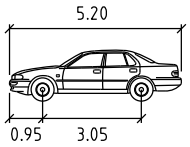
Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

ROAD

COMMERCIAL

ST GEORGES

ROAD

B99
STANDARDS 2004 (AU_NZ)

Woolworths 16 Pallet
GTA-VIC

50.0

GLEN HUNTLY

COMMERCIAL

B99
STANDARDS 2004 (AU_NZ)

Woolworths 16 Pallet
GTA-VIC

N

MAP REF 67/F3

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES
ONLY SUBJECT TO CHANGE
WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:09:49

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Sydney	02 8448 1800
Brisbane	07 3113 5000
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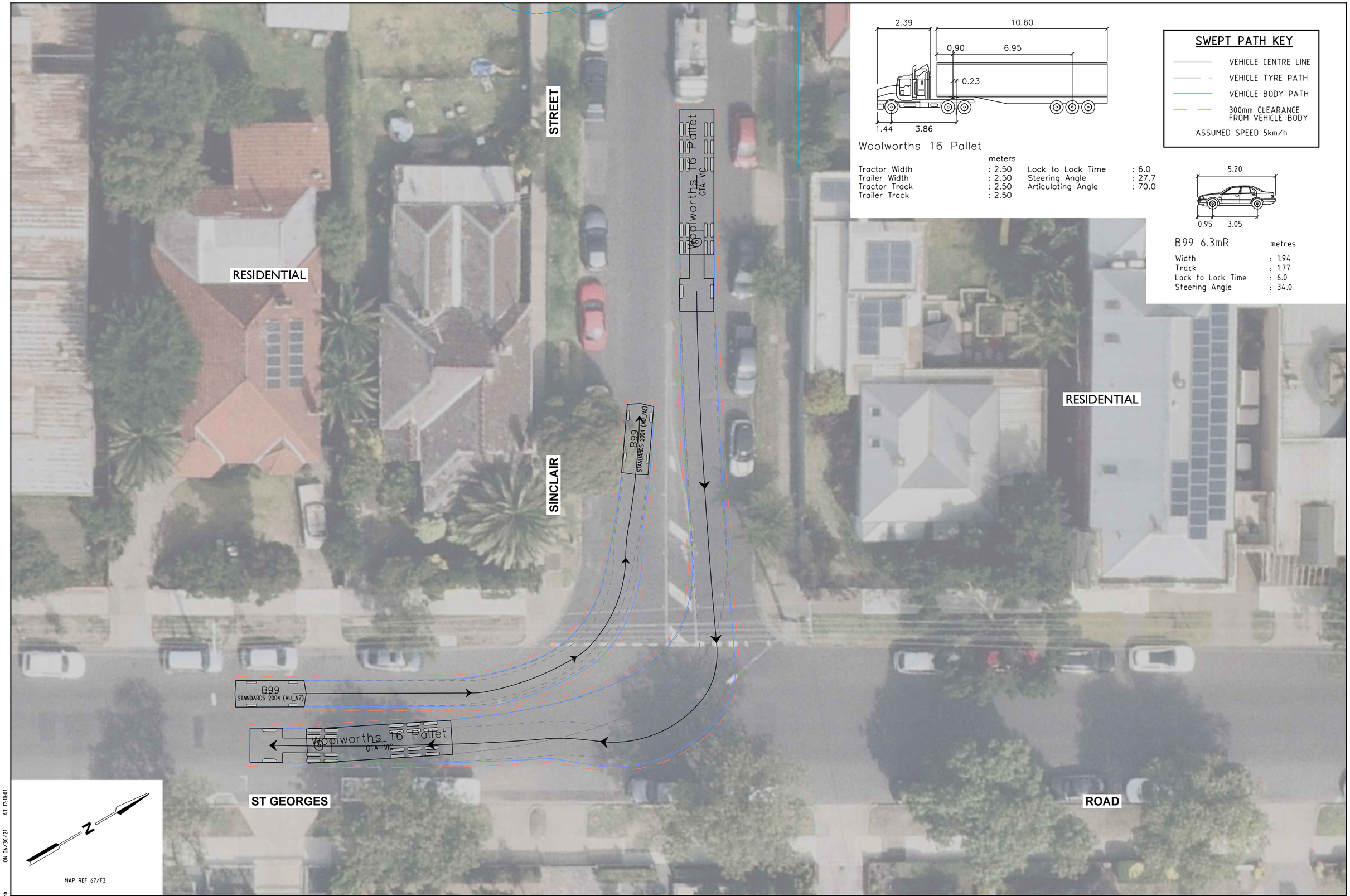
Perth	08 6169 1000

DESIGNED	D. HUYNH
DESIGN CHECK	T. DE YOUNG
APPROVED BY	T. DE YOUNG
DATE ISSUED	30 JUNE 2021
SCALE	A3
	0 2.5 5 1:250
CAD FILE NO.	V129144-AT02-P3.dgn

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-04 SHEET 04 OF 13 ISSUE P3



Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

MAP REF 67/F3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:10:01

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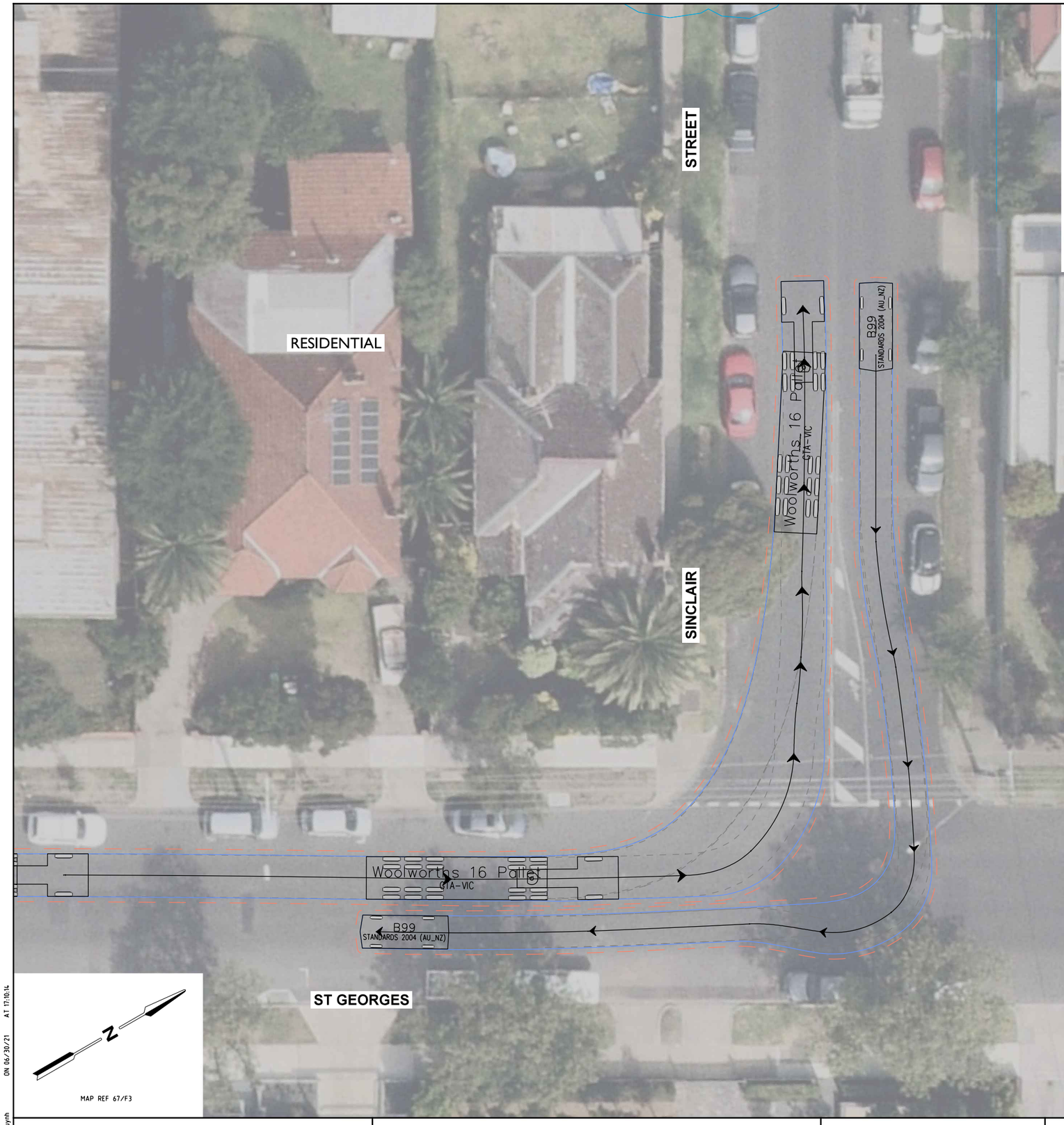
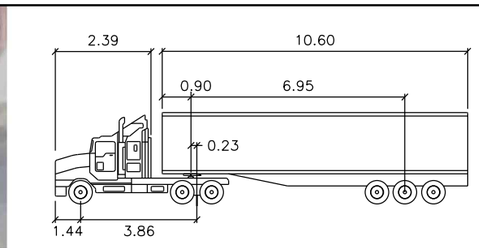
DESIGNED	D. HUYNH
DESIGN CHECK	T. DE YOUNG
APPROVED BY	T. DE YOUNG
DATE ISSUED	30 JUNE 2021
SCALE	A3
	0 2.5 5 1:250
CAD FILE NO.	V129144-AT02-P3.dgn

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-05 SHEET 05 OF 13 ISSUE P3





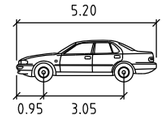
Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



B99 6.3mR

	metres
Width	: 1.94
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

MAP REF 67/F3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:10:14

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DESIGNED	D. HUYNH
DESIGN CHECK	T. DE YOUNG
APPROVED BY	T. DE YOUNG
DATE ISSUED	30 JUNE 2021

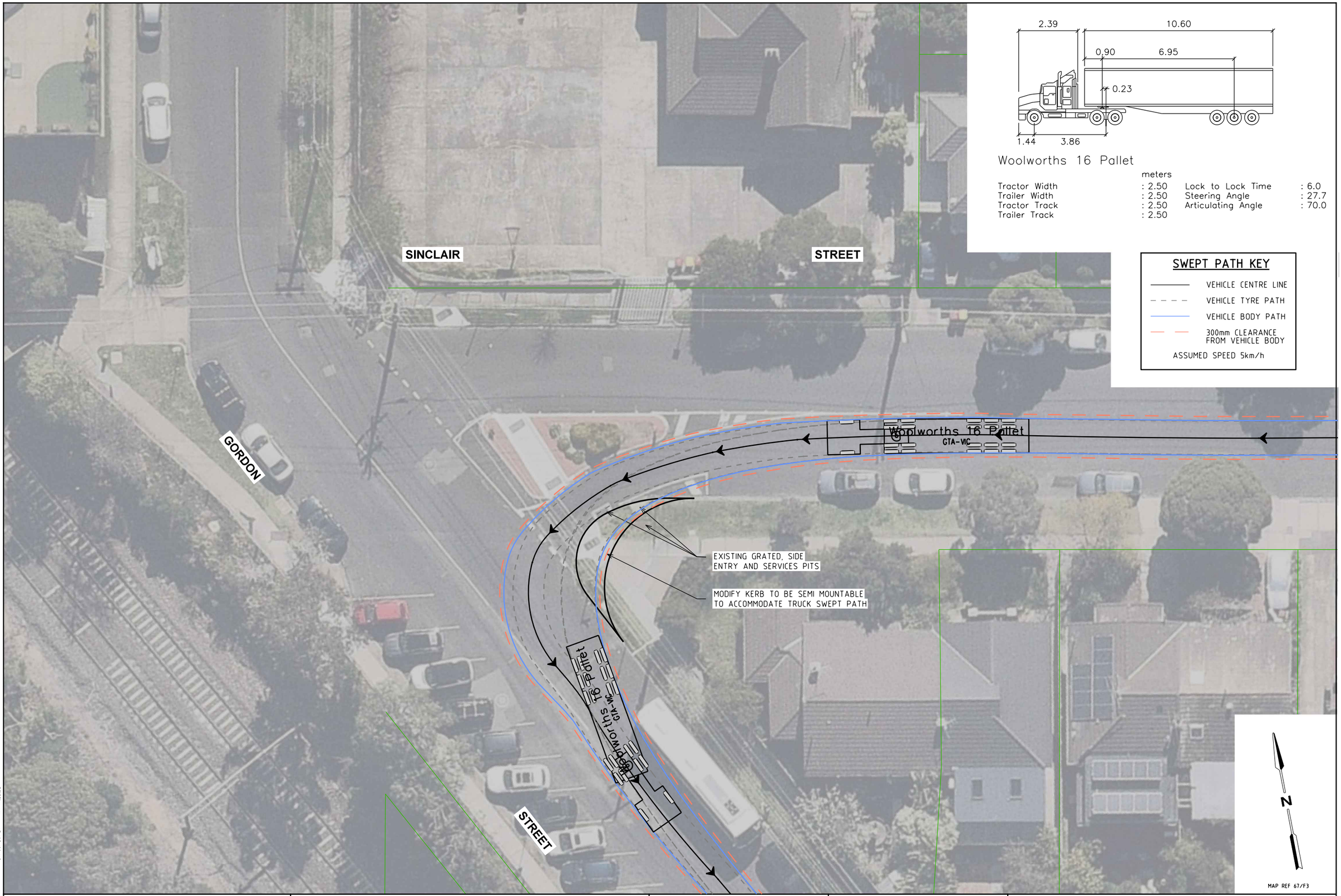
SCALE A3 — 0 2.5 5 — 1:250

CAD FILE NO. V129144-AT02-P3.dgn

PROPOSED MIXED USE DEVELOPMENT
10-16 SELWYN STREET, ELSTERNWICK

SWEPT PATH ASSESSMENT

DRAWING NO. V129144-AT02-06 SHEET 06 OF 15 ISSUE P3



Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 17:23:32

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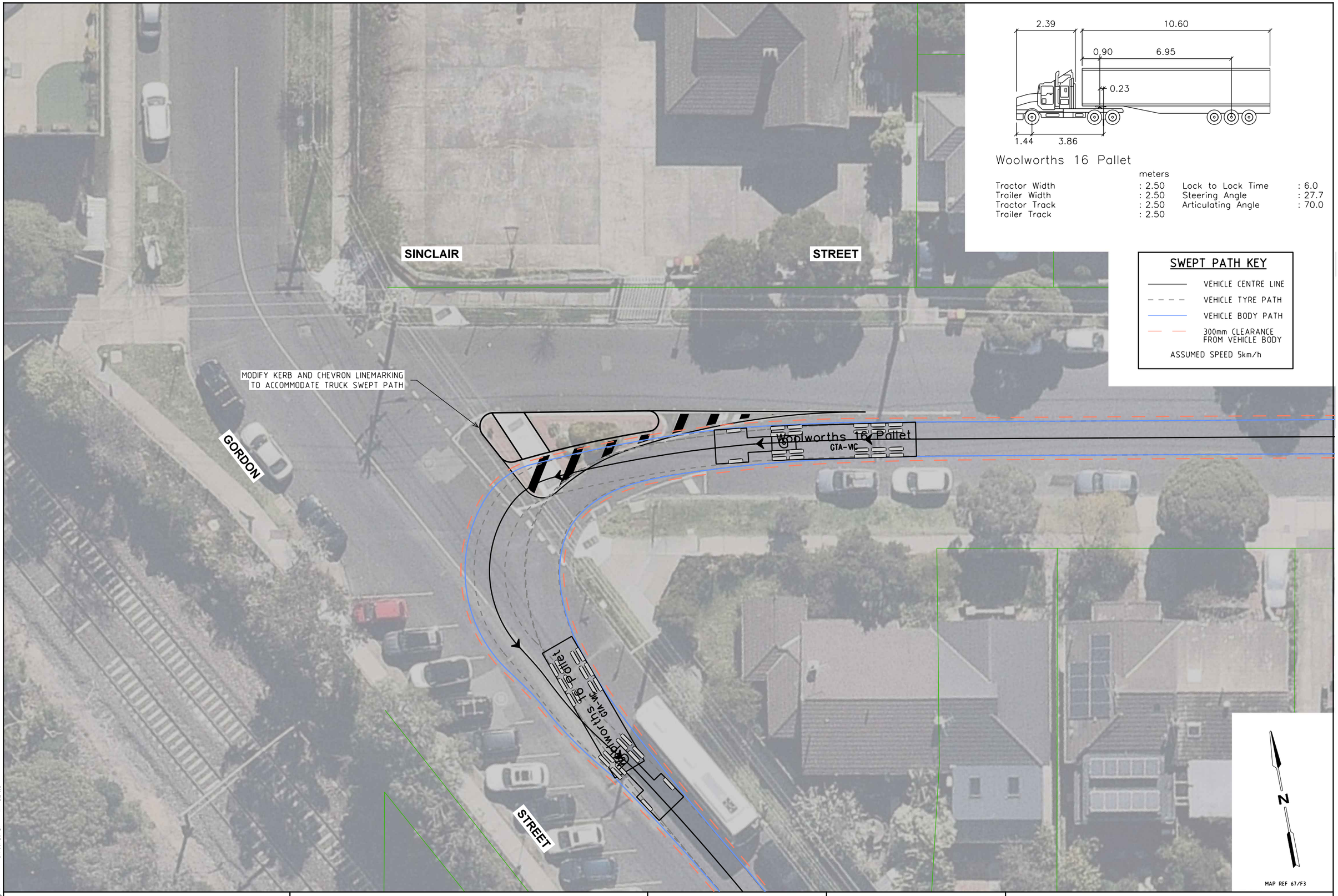
DESIGNED D. HUYNH	DESIGN CHECK T. DE YOUNG
APPROVED BY T. DE YOUNG	DATE ISSUED 30 JUNE 2021

SCALE A3 — 0 2.5 5 — 1:250

CAD FILE NO. V129143-03-P2.dgn

SELWYN STREET
ELSTERNWICK
OPTION 1
SWEPT PATH ASSESSMENT

DRAWING NO. V129142-03-01 SHEET 01 OF 02 ISSUE P2



Woolworths 16 Pallet

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 27.7
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

N

MAP REF 67/F3

PLOTTED BY : Danny.Huynh ON 06/30/21 AT 13:03

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PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

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DESIGNED	DESIGN CHECK
D. HUYNH	T. DE YOUNG
APPROVED BY	DATE ISSUED
T. DE YOUNG	30 JUNE 2021

SCALE A3 — 0 2.5 5 — 1:250

CAD FILE NO. V129143-03-P2.dgn

SELWYN STREET
ELSTERNWICK
OPTION 2
SWEPT PATH ASSESSMENT

DRAWING NO. V129142-03-02 SHEET 02 OF 02 ISSUE P2

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