

# Traffix Group

# Waste Management Plan

Proposed Retirement Village  
2-10 Clarke Street, Abbotsford

Prepared for  
Mercy Health

July 2024

G34092R-02B (WMP)

# Document Control

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# Table of Contents

- 1. Introduction..... 1**
- 2. Proposal..... 1**
- 3. Waste Management Plan..... 2**
  - 3.1. Waste Systems..... 2
  - 3.2. Management of Waste Streams..... 2
  - 3.3. Waste Generation ..... 3
    - 3.3.1. Overall Generation Rates ..... 3
    - 3.3.2. Considering Alternative Waste Streams ..... 4
  - 3.4. Waste Equipment (MGBs)..... 4
    - 3.4.1. Dual Chute System..... 6
    - 3.4.2. Waste Area and Access..... 6
  - 3.5. Signage ..... 7
  - 3.6. Waste Collection Arrangements and Vehicle Access..... 8
- 4. Amenity Impacts ..... 9**
  - 4.1. Ventilation/Odour Prevention..... 9
  - 4.2. Noise Reduction ..... 9
  - 4.3. Vermin Prevention & Litter Management ..... 9
  - 4.4. Washing Facilities and Stormwater Pollution ..... 9
- 5. Ongoing Maintenance & Sustainability Initiatives..... 10**
  - 5.1. Maintenance Management..... 10
  - 5.2. Waste Reduction Strategies..... 10
  - 5.3. Waste Management Rules ..... 11
  - 5.4. Monitoring and Review..... 11
- 6. Contact Information ..... 12**

## List of Figures

Figure 1: Proposed Waste Area & Pedestrian Access Route	6
Figure 2: Waste Signage Examples	7
Figure 3: Sustainability Victoria’s Waste Management Hierarchy	10

## List of Tables

Table 1: Proposed Development Schedule	1
Table 2: Waste Streams	2
Table 3: Waste Generation Rates	3
Table 4: Expected Waste Generation – Northern Core	3
Table 5: Expected Waste Generation - Southern Core	3
Table 6: Alternative Waste Streams	4
Table 7: Expected Waste Generation – Splits per Stream	4
Table 8: Waste Bins and Collection Frequencies – Northern Core	4
Table 9: Waste Bins and Collection Frequencies – Southern Core	5
Table 10: Bin Details and Colours	5
Table 11: Waste Area Requirements	7
Table 12: Supplier Contact Information	12

## List of Appendices

<b>Appendix A</b>	<b>Development Plans</b>
<b>Appendix B</b>	<b>Swept Path Diagrams</b>

# 1. Introduction

Traffix Group has been engaged by Mercy Health to prepare a Waste Management Plan for the Proposed Retirement Village at 2-10 Clarke Street, Abbotsford.

This Waste Management Plan (WMP) is intended to act as a guideline for the proposed development and may be subject to the ongoing updates, post-development.

# 2. Proposal

The application proposes to develop the site for the purposes of a residential aged care facility providing a total of 60 residential dwellings

The proposed development on the site as set out in the Table 1.

Table 1: Proposed Development Schedule

Retirement living Facility Use	Size/No.
One-bedroom apartments	9 no.
Two-bedroom apartments	46 no.
Three-bedroom apartments	5 no.
<b>Total</b>	<b>60 no.</b>

Vehicular access to the site is provided via two-way crossover to the Clarke Street which is located at the southwest corner of the site.

A dual chute system for residents is provided for both the northern and southern cores of the building at each level and will terminate into the respective waste storage areas at the basement level. Garbage and commingled recycling will be accommodated within the chutes. Additional bins are provided within the basement level shared bin store for Glass and FOGO waste.

Hard waste will be temporarily stored within the shared waste storage areas for both cores at basement level as required prior to collection.

Waste collection is to be undertaken on-site within the carpark at basement level via a private contractor using a 6.4m long mini rear loading waste vehicle.

A copy of the development plans prepared by CHT Architects (dated August 2024) is attached at Appendix A.

### 3. Waste Management Plan

#### 3.1. Waste Systems

The waste management systems of the proposed development comprise of the following components:

- Immediate smaller bins within individual dwellings for temporary storage of garbage and recyclable waste, prior to transferring to the Mobile Garbage Bins (MGB's),
- A dual-chute system for residential dwellings at each level, and
- Mobile garbage bins (MGB's) within the respective waste storage areas at basement level.

#### 3.2. Management of Waste Streams

In accordance with the Victorian Government’s *Circular Economy Policy: Recycling Victoria*, food organics green organics (FOGO), glass and paper & cardboard waste have been considered separately to reduce landfill at the source.

The waste generated by the proposed development will be separated and managed into the following waste streams:

- General Garbage Waste,
- Food and Organics/Green Waste,
- Glass Recycling, and
- Other Commingled Recycling (Paper & Cardboard Waste).

The proposed management of each of the streams/systems is detailed below.

Table 2: Waste Streams

Waste Type	Waste Management
Garbage	Residents will place general landfill waste in tied plastic bags and dispose of the bagged garbage directly into the relevant chutes provided at each level of the building.
Recycling	Residents will dispose of recyclable items directly into the relevant chute provided at each level of the building.
FOGO	Residents will dispose of organic waste directly into the organic bins within the respective waste storage areas at basement level.
Glass	Residents will dispose of glass waste directly into the glass bins within the respective waste storage areas at basement level.
Paper & cardboard	Paper and cardboard waste generated by the residents is anticipated to be low and therefore can be accommodated within the recycling bin. (transfer to occur via the commingled recycling chute). Cardboard items shall be folded where appropriate.

Waste Type	Waste Management
<b>Hard Waste</b>	Residents will dispose of hard waste including used furniture and white goods with the assistance of the property manager. Hard waste will be stored within the shared waste storage areas at basement level. Collection will occur via private contractor on demand.
<b>Other</b>	Residents will dispose of any electric waste including batteries, phones, computers etc. with the assistance of the property manager or drop it off at Yarra Council Transfer Station (168 Roseneath Street, Clifton Hill). E-waste must not be disposed in landfill. Residents can dispose of any charity goods at the local shops or charity bins.

### 3.3. Waste Generation

#### 3.3.1. Overall Generation Rates

The proposed land uses have been assessed against the waste generation rates specified under the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments* by Sustainability Victoria.

Table 3 sets out the expected waste generation for the Proposed Retirement Village.

Table 3: Waste Generation Rates

Waste Source	Garbage	Recycling
One-bedroom apartments	80L/dwelling per week	80L/dwelling per week
Two-bedroom apartments	100L/dwelling per week	100L/dwelling per week
Three-bedroom apartments	120L/dwelling per week	120L/dwelling per week

An estimate of the total waste generated by the proposed development is detailed in Table 4.

Table 4: Expected Waste Generation – Northern Core

Waste Source	Size/No.	Garbage	Recycling
One-bedroom apartments	7 no.	560L per week	560L per week
Two-bedroom apartments	20 no.	2,000L per week	2,000L per week
Three-bedroom apartments	3 no.	360L per week	360L per week
<b>Total</b>	<b>30 no.</b>	<b>2,920L per week</b>	<b>2,920L per week</b>

Table 5: Expected Waste Generation - Southern Core

Waste Source	Size/No.	Garbage	Recycling
One-bedroom apartments	2 no.	160L per week	160L per week
Two-bedroom apartments	26 no.	2,600L per week	2,600L per week
Three-bedroom apartments	2 no.	240L per week	240L per week
<b>Total</b>	<b>30 no.</b>	<b>3,000L per week</b>	<b>3,000L per week</b>

### 3.3.2. Considering Alternative Waste Streams

The development of the site is expected to generate FOGO and glass waste as summarised in Table 6.

Table 6: Alternative Waste Streams

Land Use	Garbage		Recycling	
	General	FOGO	Commingled (inc. P&C)	Glass
Residential apartments	65%	35%	80%	20%

Based on the preceding assessment, the development is expected to generate the following waste volumes.

Table 7: Expected Waste Generation – Splits per Stream

Waste Source	Size/No.	Garbage		Recycling	
		General	FOGO	Commingled (inc. P&C)	Glass
<b>Northern Core</b>					
Residential apartments	30 no.	1,898L	1,022L	2,336L	584L
<b>Total</b>		<b>2,920L per week</b>		<b>2,920L per week</b>	
<b>Southern core</b>					
Residential apartments	30 no.	1,950L	1,050L	2,400L	600L
<b>Total</b>		<b>3,000L per week</b>		<b>3,000L per week</b>	

### 3.4. Waste Equipment (MGBs)

Based on the determined waste generation, Table 8 & Table 9 provides a summary of the nominated waste storage area provisions and the frequency of collection.

Table 8: Waste Bins and Collection Frequencies – Northern Core

Waste Stream	Waste Volume (L/week)	Bin Capacity	No. of Bins Required	Collection Frequency (per week)
Garbage	1,898L	1,100L	2 no.	1
FOGO	1,022L	240L	5 no.	1
Recycling	2,336L	660L	4 no.	1
Glass	584L	360L	2 no	1

Table 9: Waste Bins and Collection Frequencies – Southern Core

Waste Stream	Waste Volume (L/week)	Bin Capacity	No. of Bins Required	Collection Frequency (per week)
Garbage	1,950L	1,100L	2 no.	1
FOGO	1,050L	240L	5 no.	1
Recycling	2,400L	660L	4 no.	1
Glass	600L	240L	1 no.	1
		360L	1 no.	

Overall, the proposed development requires the following bins:

Northern Core:

- 2 x 1,100L bins,
- 4 x 660L bins,
- 2 x 360L bins, and
- 5 x 240L bins.

Southern Core:

- 2 x 1,100L bins,
- 4 x 660L bins,
- 1 x 360L bin, and
- 6 x 240L bins.

Further details regarding the waste equipment required for the development are detailed in Table 10.

Table 10: Bin Details and Colours

Waste Stream	Bin Capacity	Dimensions (H x W x D) <sup>Note 1</sup>	Bin Lid Colour <sup>Note 2</sup>	Bin Body Colour <sup>Note 2</sup>
Garbage	1,100L	1,330 x 1,240 x 1,070mm	Red	Dark Green
Recycling	660L	1,200 x 1,260 x 780mm	Yellow	
FOGO	240L	1,060 x 585 x 730mm	Light Green	
Glass	240L	1,060 x 585 x 730mm	Purple	
	360L	1098 x 880 x 610mm		

Note 1. Bin capacity and dimensions are provided as an indicative dimension, sourced from Bin Supplier, 'Sulo'.

Note 2. Bin lid and body colours are based on the bin colour scheme set out by Sustainability Victoria.

**3.4.1. Dual Chute System**

A dual waste chute system will be provided for residents on each level of the retirement living facility. A dedicated chute will be provided for garbage and recycling which will terminate into the appropriate bins located in the bin store area at ground level. Skirting/equivalent system should be provided at the termination of the chutes to reduce the impact of materials falling into the bins. Residential garbage and recycling bins can have reinforced bases to increase the durability of the bins.

The chutes shall be designed to the manufacturer’s specifications and appropriate signage and instructions will be provided to residents to ensure correct and safe use of the chute system.

Access to the chute outlet at ground level will be secured and accessible to trained personnel only. Bins would be rotated as required by trained personnel.

**3.4.2. Waste Area and Access**

The proposed development provides two waste storage areas for northern and southern cores of the building which can be accessed via the lifts provided adjacent to each waste storage area.

The waste storage area and access route are illustrated at Figure 1.

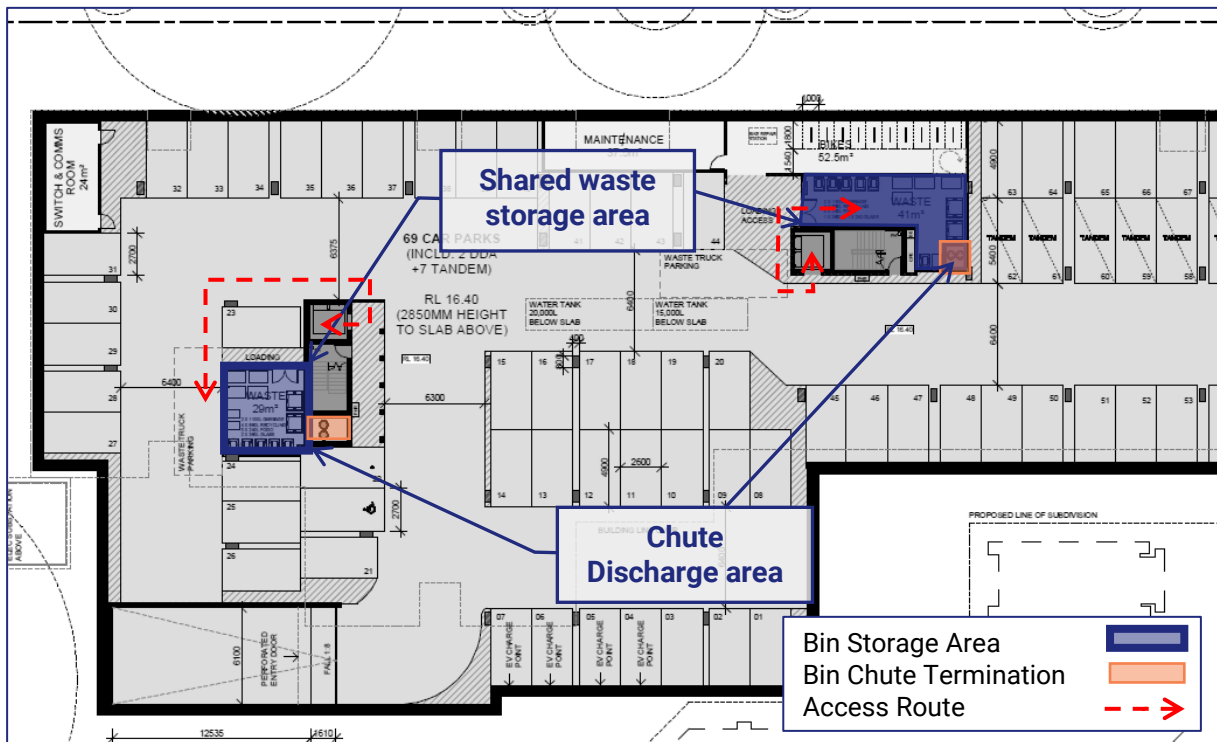


Figure 1: Proposed Waste Area & Pedestrian Access Route

Table 11 details the waste area requirements based on the waste equipment proposed.

Table 11: Waste Area Requirements

Waste Equipment	Net Area <sup>1</sup>	Quantity	Net Waste Storage Area Required	Waste Area Provided
<b>Northern Core</b>				
240L	0.43m <sup>2</sup>	6	2.56m <sup>2</sup>	43m <sup>2</sup>
360L	0.58m <sup>2</sup>	1	0.58m <sup>2</sup>	
660L	0.98m <sup>2</sup>	4	3.93m <sup>2</sup>	
1,100L	1.33m <sup>2</sup>	4	2.65m <sup>2</sup>	
<b>Southern Core</b>				
240L	0.43m <sup>2</sup>	5	2.14m <sup>2</sup>	29m <sup>2</sup>
360L	0.58m <sup>2</sup>	2	1.15m <sup>2</sup>	
660L	0.98m <sup>2</sup>	4	3.93m <sup>2</sup>	
1,100L	1.33m <sup>2</sup>	4	2.65m <sup>2</sup>	
Note 1: Net area required is calculated from the dimensions of the bins.				

Based on the above, sufficient space is provided for on-site waste storage within the proposed development.

### 3.5. Signage

Appropriate signage in accordance with Sustainability Victoria will be displayed on the bins and within the waste area, as illustrated in Figure 2.

The signage will help guide and encourage residents of the proposed development to dispose of waste correctly into the appropriate waste streams.



Figure 2: Waste Signage Examples

### 3.6. Waste Collection Arrangements and Vehicle Access

It is proposed that waste collection will occur on-site within the basement carpark by a private contractor. Waste collection will be undertaken via a waste via a mini rear loading waste collection vehicle (typically 6.4m long and 2.1m high).

The private contractor will prop temporarily within the internal accessway whilst the bins are emptied and exit the site in a forward direction. Waste collection will be undertaken outside the peak periods to minimise disruption and ensure there is sufficient space within the carpark for the transfer of bins to and from the waste vehicle.

Traffix Group has provided advice to the project architect in order to accommodate vehicle access of the 6.4m long mini rear loading waste vehicle within the site.

Swept path diagrams demonstrating vehicle access of the 6.4m long mini rear loading waste vehicle entering and exiting the site in a forward direction is attached at Appendix B.

## 4. Amenity Impacts

It is the responsibility of the building manager to carry out the ongoing maintenance of all waste areas to minimise the following amenity impacts.

### 4.1. Ventilation/Odour Prevention

For developments using forced ventilation or air-conditioning system, adequate ventilation will be provided within the bin store areas in accordance with AS1668.2 to ensure waste-related odours are minimised.

Waste areas will be frequently cleaned to prevent the retainment of odours.

### 4.2. Noise Reduction

The waste facilities will comply with BCA and AS2107 acoustic requirements. Private waste collection will follow Council's and EPA guidelines to ensure acoustic impact is minimised.

Collection days and times will be determined following the confirmation of a specific private waste collection contractor by the building manager. Waste collection times should comply with the EPA Noise Control Guidelines (Publication 1254):

#### Domestic Waste Collection

- Collections occurring once a week should be restricted to the hours 6:00am – 6pm Monday to Saturday,
- Collections occurring more than once a week should be restricted to the hours 7 am – 6pm Monday to Saturday.

### 4.3. Vermin Prevention & Litter Management

Waste areas will be secured to prevent any unauthorised use. Waste areas will be monitored by the property manager to ensure that bins are not overfilled and any spillage resulting from waste collection is appropriately addressed. All access doors and bin lids will be kept closed at all times to prevent vermin access to the waste areas.

### 4.4. Washing Facilities and Stormwater Pollution

Third party contractors can be engaged for washing and cleaning of bins. Alternatively, appropriate washing facilities including water supply and hose shall be provided for the regular washing of the bins and waste area by the property manager.

Washing facility provided will be connected to the sewerage for drainage to prevent any stormwater pollution.

## 5. Ongoing Maintenance & Sustainability Initiatives

### 5.1. Maintenance Management

Further to the occupation of the proposed development, it is the responsibility of the building manager for the ongoing operation and maintenance of the Waste Management Plan.

The building manager will ensure that maintenance work and upgrades are carried out on the waste areas and components of the waste system. When required, the building manager will engage an appropriate contractor to conduct maintenance services, replacements, or upgrades.

All ongoing costs are to be fully met by the building manager.

### 5.2. Waste Reduction Strategies

The building manager will be responsible to encourage residents of the proposed development to reduce waste disposal and recycle materials based on the waste management hierarchy set out by Sustainability Victoria.

The hierarchy is detailed at Figure 3 below.

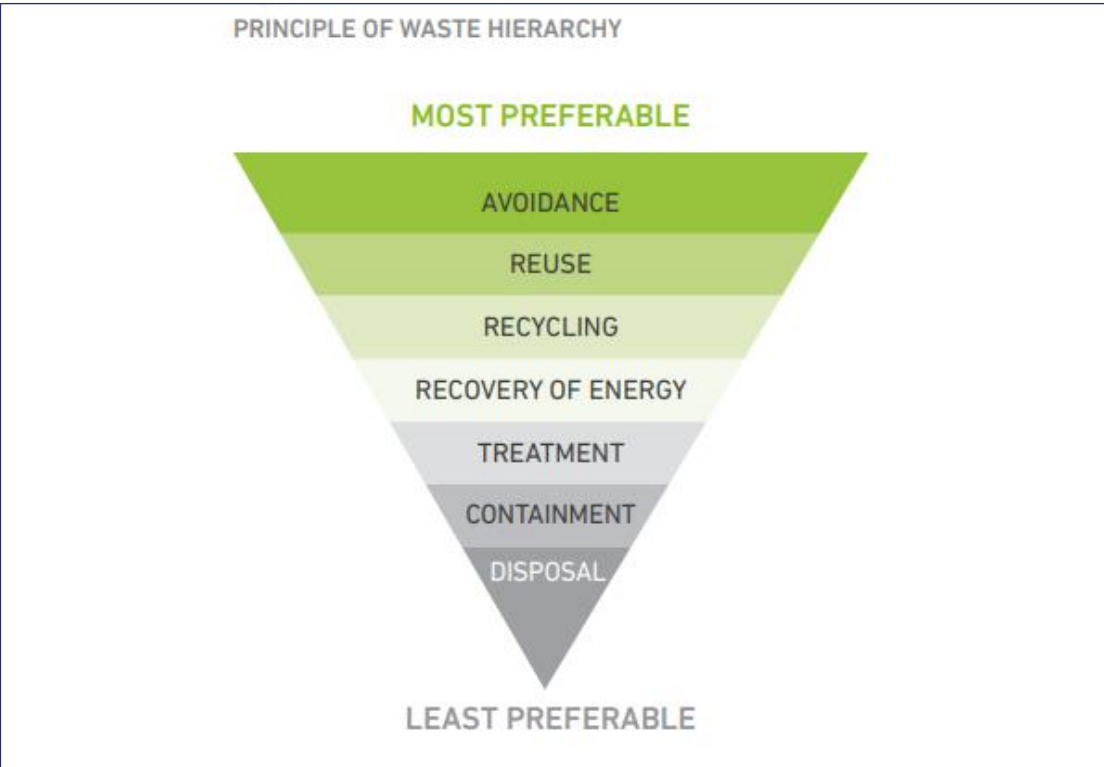


Figure 3: Sustainability Victoria’s Waste Management Hierarchy

Additionally, the building manager can set targets and measures to reduce garbage going to landfill and increase recycling and choose to participate in Council’s waste programs to promote sustainability initiatives.

### 5.3. Waste Management Rules

It will be the responsibility of the building manager to ensure all staff are provided with the relevant information and materials regarding the waste management system and sustainability strategies of the proposed development.

Relevant information will be provided at the waste areas to ensure that all users will operate and maintain safe practice when utilising the waste facilities.

### 5.4. Monitoring and Review

This Waste Management Plan should be monitored and reviewed on a regular basis to ensure that it meets the regulatory requirements and the expected waste generation rates outlined in Section 3.3. The building manager will be responsible for monitoring the Waste Management Plan. Where required, the building manager should undertake a waste audit to identify any modifications and/or improvements to the waste management system.

## 6. Contact Information

Table 12 provides a list of common waste collection service contractors and waste equipment suppliers. The building manager is not obligated to procure goods/services from the following suppliers and reserves the right to choose their own preferred suppliers.

Traffic Group does not make representations for the goods/services provided by the suppliers listed below.

Table 12: Supplier Contact Information

Service Type	Business Name	Phone	Website
Private Waste Collectors	Citywide Waste	03 9261 5000	<a href="http://www.citywide.com.au">www.citywide.com.au</a>
	Cleanaway	13 13 39	<a href="http://www.cleanaway.com.au">www.cleanaway.com.au</a>
	Veolia	13 29 55	<a href="http://www.veolia.com/anz">www.veolia.com/anz</a>
	JJ Richards	03 9794 5722	<a href="http://www.jjrichards.com.au">www.jjrichards.com.au</a>
	Waste Wise Environmental	1300 550 408	<a href="http://www.wastewise.com.au">www.wastewise.com.au</a>
	Kartaway	1300 362 362	<a href="http://www.kartaway.com.au">www.kartaway.com.au</a>
	iDump	1300 443 867	<a href="http://www.idump.com.au">www.idump.com.au</a>
	Waste Ninja	1300 648 088	<a href="http://www.wasteninja.com.au">www.wasteninja.com.au</a>
E-Waste Collection	TechCollect	1300 229 837	<a href="http://www.techcollect.com.au">www.techcollect.com.au</a>
	ToxFree	1300 869 373	<a href="http://www.toxfree.com.au">www.toxfree.com.au</a>
Equipment Supplier	Sulo Australian (bin supplier)	03 9357 7320	<a href="http://www.sulo.com.au">www.sulo.com.au</a>
	Mr Wheelie Bin (bin supplier)	03 9912 2850	<a href="http://www.mrwheeliebin.com.au">www.mrwheeliebin.com.au</a>
	Wastech Engineering (compactors & chutes)	1800 465 465	<a href="http://www.wastech.com.au">www.wastech.com.au</a>
	Elephants Foot (compactors & chutes)	1300 435 374	<a href="http://www.elephantsfoot.com.au">www.elephantsfoot.com.au</a>
	ASI JD MacDonald (chutes)	1800 023 441	<a href="http://www.jdmacdonald.com.au">www.jdmacdonald.com.au</a>
	Eco-safe Technologies (odour control system)	1300 135 039	<a href="http://www.eco-safe.com.au">www.eco-safe.com.au</a>
Bin Washing Services	The Bin Butlers	1300 788 123	<a href="http://www.thebinbutlers.com.au">www.thebinbutlers.com.au</a>
	WBCM Environmental Australia	1300 800 621	<a href="http://www.wbcm-aust.com.au">www.wbcm-aust.com.au</a>
	Kerbside Clean-A-Bin	03 9588 1944	<a href="http://www.kerbsidecleanabin.com.au">www.kerbsidecleanabin.com.au</a>



# Appendix A

## Development Plans

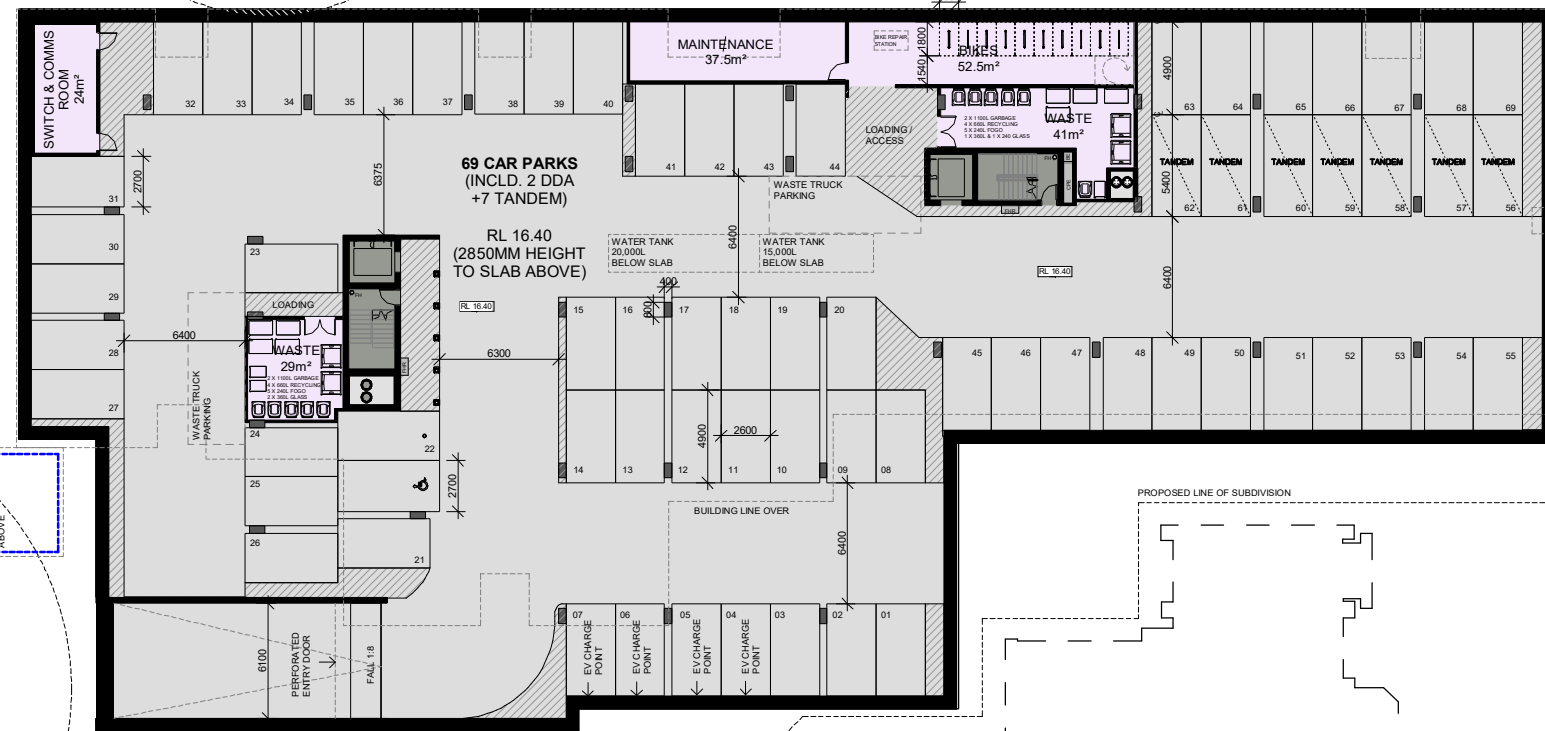
ABBOTSFORD STREET

CLARKE STREET

ST HELIERS STREET

CONVENT BUILDING ABOVE

CHAPEL ABOVE



ELEC SUBSTATION ABOVE

PROPOSED LINE OF SUBDIVISION

EV CHARGE POINT 01-07

69 CAR PARKS (INCLD. 2 DDA +7 TANDEM)

RL 16.40 (2850MM HEIGHT TO SLAB ABOVE)

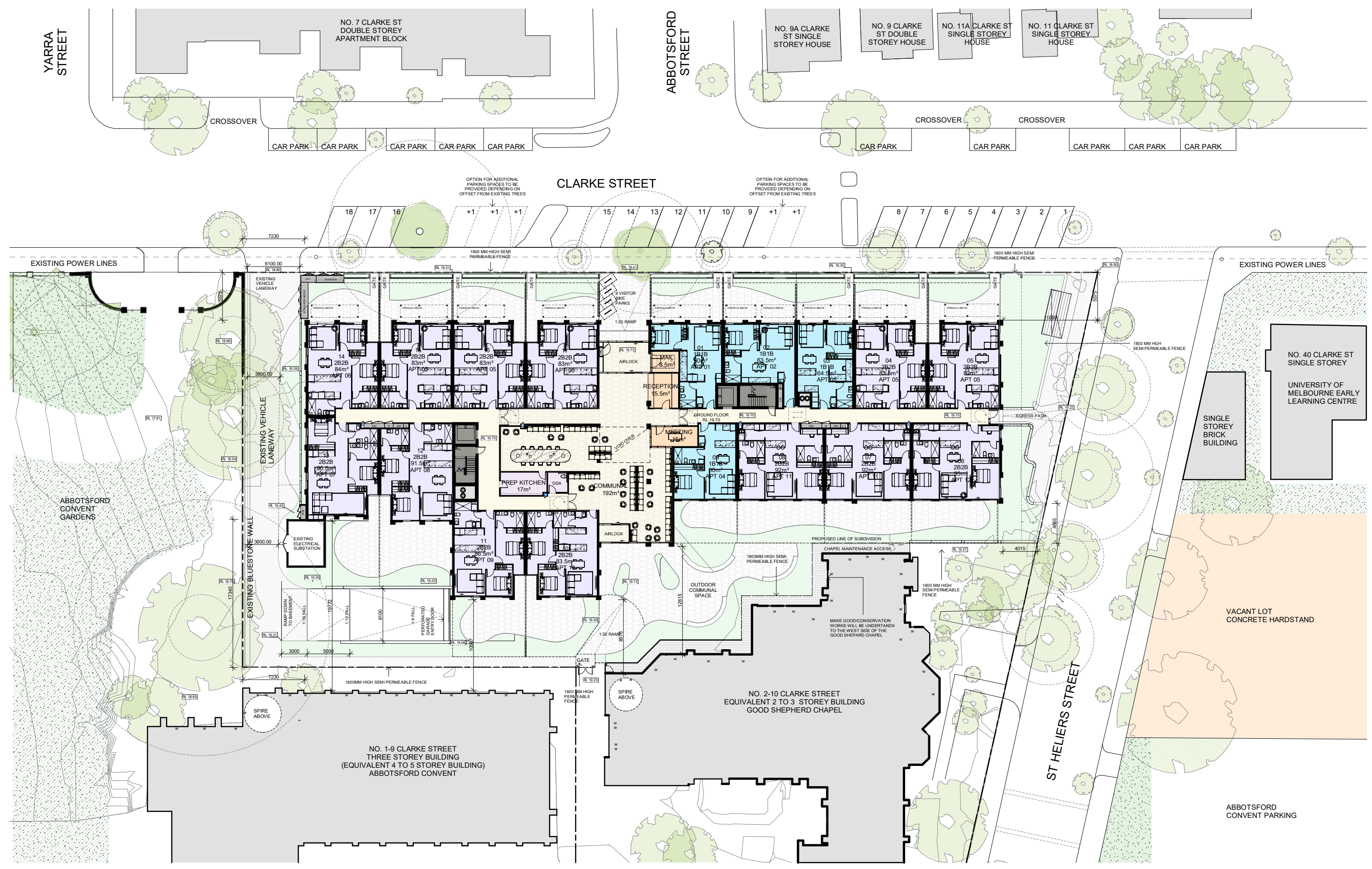
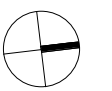
WATER TANK 20,000L BELOW SLAB

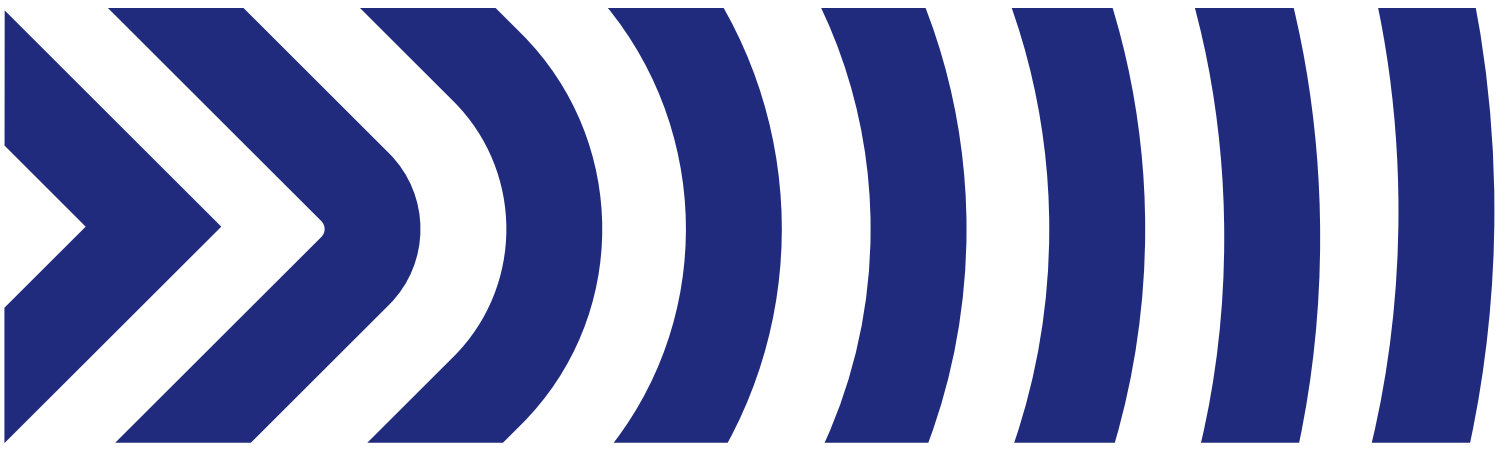
WATER TANK 15,000L BELOW SLAB

BUILDING LINE OVER



20031-12/08/2024 10:08:56 AM PRELIMINARY | NOT FOR CONSTRUCTION





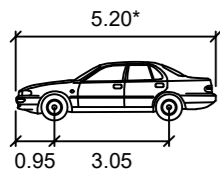
# Appendix B

## Swept Path Diagrams

VEHICLE PROFILE

6.4m SRV SITE ACCESS - B99 PASSING

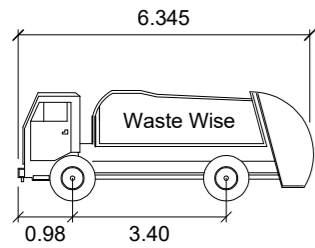
VEHICLE USED IN SIMULATION  
(VEHICLE SPEED - 5KM/H)



99th percentile  
(AS/NZS 2890.1:2004)

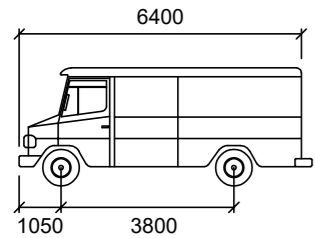
Width : 1.94  
Track : 1.84  
Kerb to Kerb Radius : 6.3m

\* actual template based on 'relevant longitudinal dimensions that affect swept path' as set out in Section B2.1 of AS/NZS 2890.1:2004



Waste Wise Mini (Hino 300)

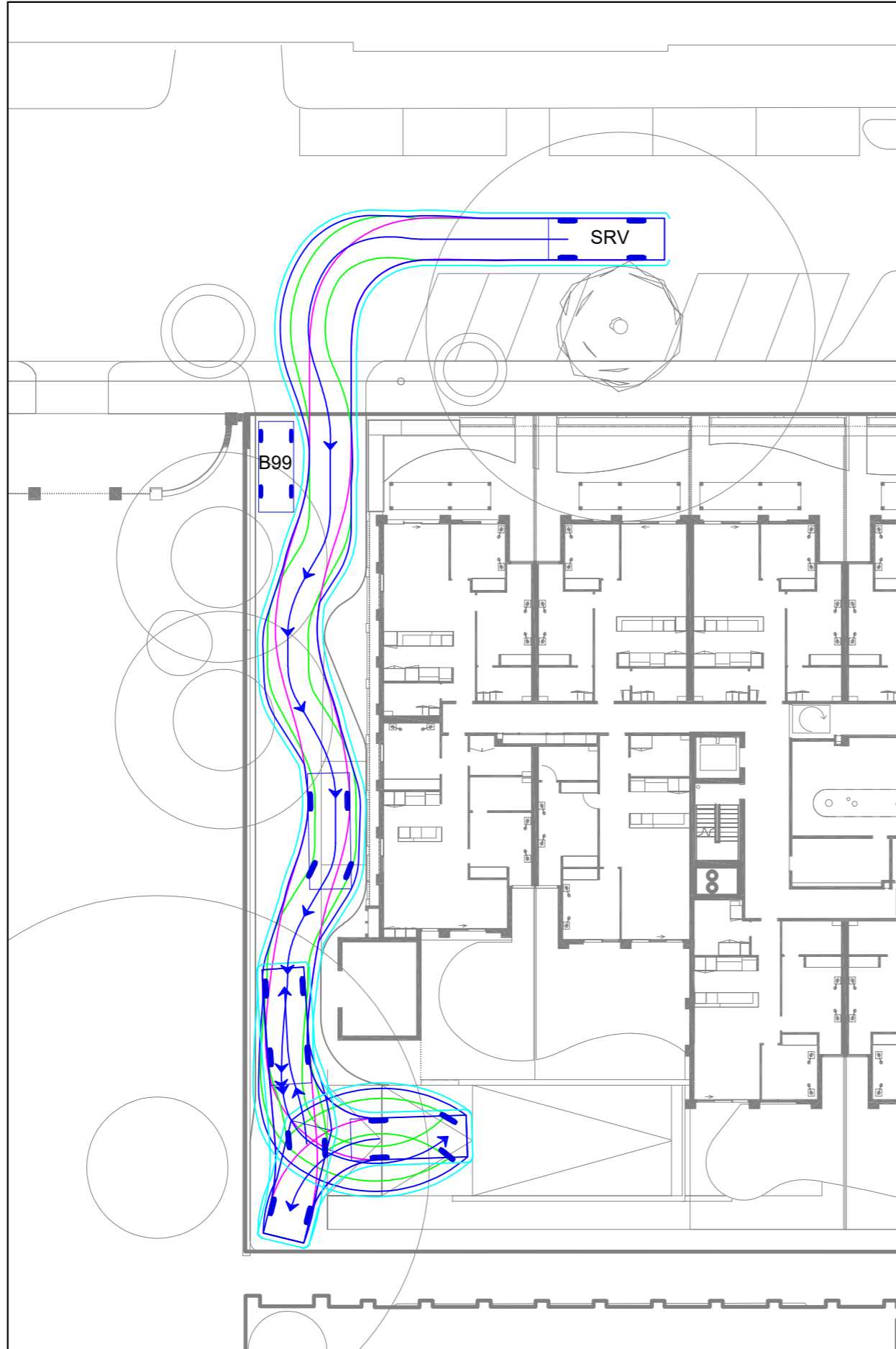
Width : 1.7m  
Front Track : 1.4m  
Rear Track : 1.44m  
Kerb to Kerb Radius : 6.2m



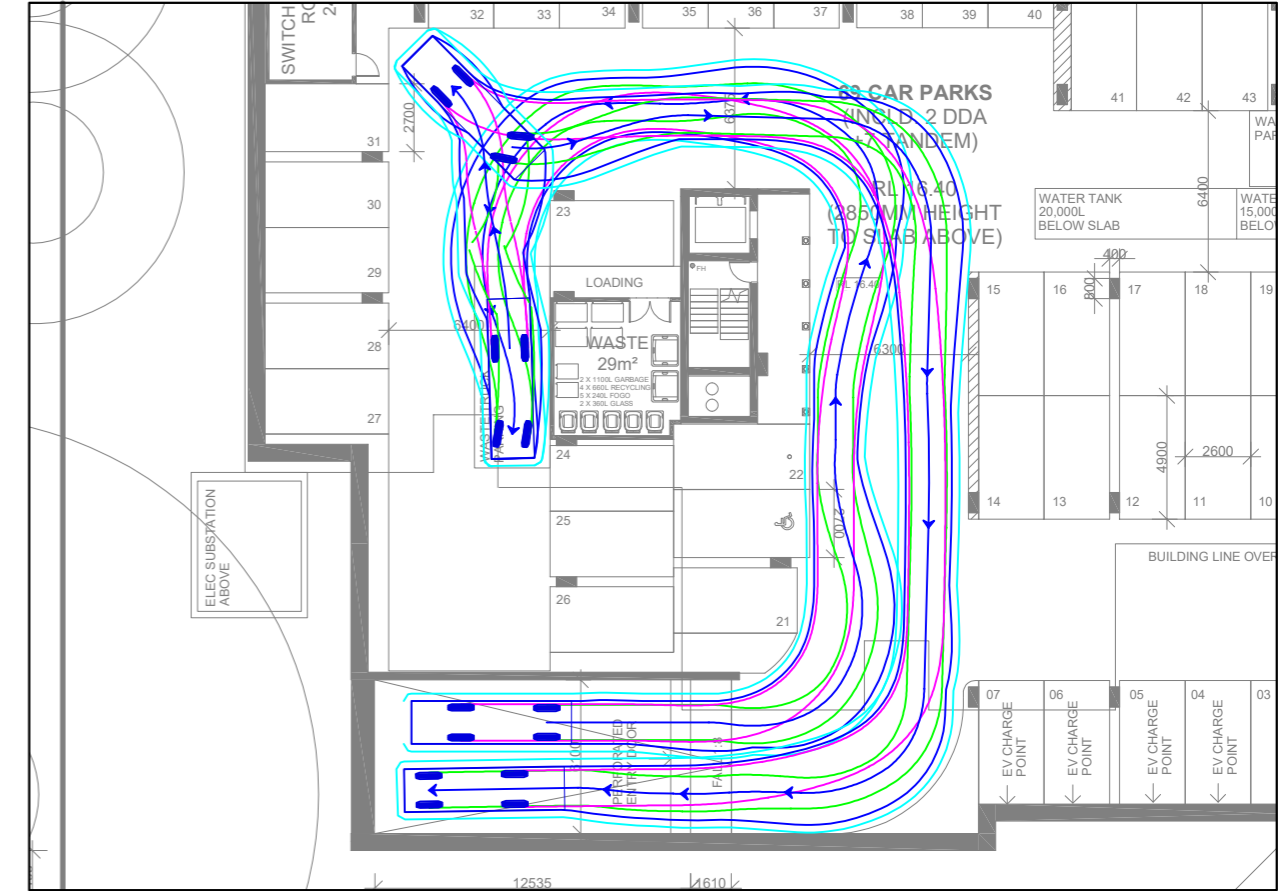
SRV (AS 2890.2) mm  
Width : 2300  
Track : 2300  
Lock to Lock Time : 6.0  
Steering Angle : 38.0

LEGEND

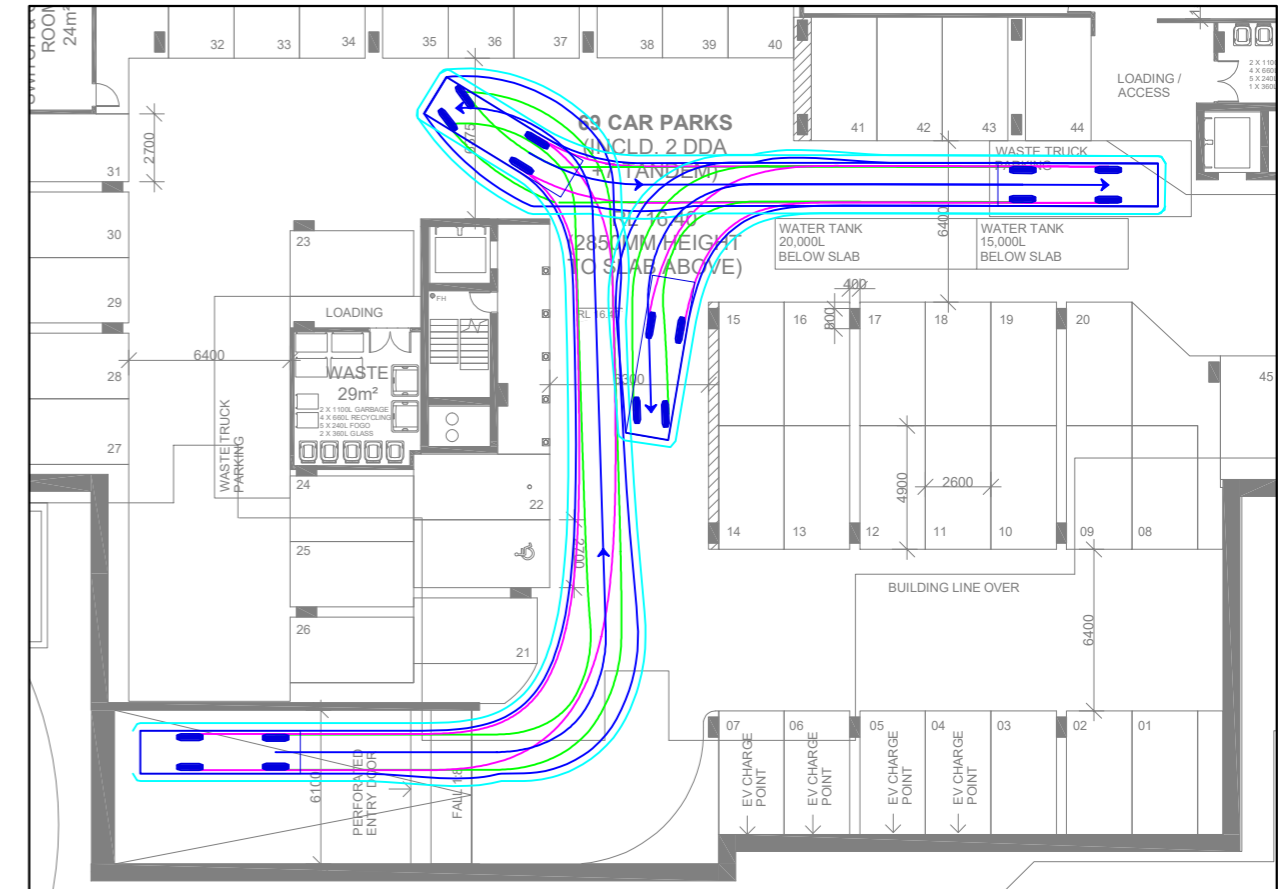
- REAR WHEELS
- FRONT WHEELS
- VEHICLE BODY
- BODY CLEARANCE



WASTE AREA 1 ACCESS



WASTE AREA 2 ACCESS



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	15/08/2024	TOWN PLANNING	G. SINGH	J. COSSINS (RPE11787)

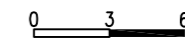
**2-10 CLARKE STREET, ABBOTSFORD**  
**PROPOSED SENIOR RESIDENTIAL DEVELOPMENT**

**GENERAL NOTES:**  
BASED ON PLANS PREPARED BY CHT ARCHITECTS, DATED 12/08/2024.

FILE NAME: G34092-01  
SHEET NO.: 01



SCALE: 1:300 (A3)



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