

Traffix Group

Waste Management Plan

Proposed Commercial Development
101-105 Willowbank Road, Gisborne

Prepared for
Brady Road Investments

July, 2022

G31013R-02B (WMP)

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1. Introduction

Traffix Group has been engaged by Brady Road Investments to undertake a Waste Management Plan for the commercial development at 101-105 Willowbank Road, Gisborne.

It is noted that the Waste Management Plan is intended to act as a guideline for the proposed development and may be subject to ongoing updates, post development.

2. Proposal

The proposal is for a double-storey commercial development, consisting of two separate buildings on the site as set out in the following table.

Table 1: Development Summary

Building	Use	Size
A	Medical Centre	452m ²
	Commercial Space (Assessed as Office) ¹	300m ²
B	Mini Mart	370m ²
	Café (Two tenancies)	170m ²
	Mezzanine Office	80m ²

Vehicle access to the site is proposed via two separate double-width crossovers to Willowbank Road and Brady Road respectively.

Waste collection is to be undertaken within the site via a private contractor using up to an 8.8m long Rear Loader vehicle.

Two separate waste rooms have been provided for the development with one waste room located in each building. The waste room in Building A will be assigned to the medical centre, the commercial space in Building A, and café; whilst the waste room located in Building B will be allocated to the mini mart and the corresponding mezzanine office.

A copy of the development plans prepared by ClarkeHopkinsClarke (dated 10th June, 2022) is attached at Appendix A to this report.

¹ For the purposes of this assessment, we have considered that the likely use of the Level 1 commercial space will be 'Office'. This may ultimately be another commercial land use but if the corresponding land use generates a higher waste usage than Office, this would be re-assessed at that time to determine if any further changes are required.

3. Waste Management Plan

3.1. Waste Generation

The waste generation rates adopted are based on rates specified under the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments* by Sustainability Victoria. The following table sets out the expected waste generation for the commercial development.

Table 2: Waste Generation Rates

Waste Source	Garbage ¹	Recycling ¹
Commercial Space (Assessed as Office)	10L/100m ² floor area/day	10L/100m ² floor area/day
Medical Centre ²	10L/100m ² floor area/day	10L/100m ² floor area/day
Café	300L/100m ² floor area/day	200L/100m ² floor area/day
Mini Mart ³	130L/100m ² floor area/day	240L/100m ² floor area/day

Notes:

1. The waste generation rates are based on the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments* by Sustainable Victoria.
2. There is no specific rate for a medical centre under the *Better Practice Guide for Waste Management and Recycling in Multi unit Developments* by Sustainable Victoria. Accordingly, a rate of 'Office' has been adopted for the 'Medical Centre'.
3. The waste generation rates adopted for the mini mart is based on waste generation rates of similar supermarket developments and the operator's requirements. The rates specified within the *Better Practice Guide* of 660L garbage/100m²/day, is overly conservative and suggests approximately 26m² of waste per day for the supermarket alone. This does not reflect actual practice for modern supermarkets.

The proposed land uses have been assessed against the waste generation rates within the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments*. It is assumed that all commercial tenancies operate seven days per week, with the exception of the commercial space in Building A, which will operate five days per week.

An estimate of the total waste generated by the proposed development is detailed in Table 3.

Table 3: Expected Waste Generation for the Proposed Uses

Waste Room ¹	Waste Source	Size/No.	Garbage	Recycling
A	Medical Centre	452m ²	316L per week	316L per week
	Commercial Space (Assessed as Office)	300m ²	150L per week	150L per week
	Café (Two Tenancies)	170m ²	3,570L per week	2,380L per week
B	Mini Mart	370m ²	3,367L per week	6,216L per week
	Mezzanine Office ²	80m ²	56L per week	56L per week
TOTAL WASTE GENERATED			7,459L per week	9,118L per week
Notes:				
<ol style="list-style-type: none"> 1. Waste Room A represents the waste room located in Building A, allocated for the medical centre, office tenancy and both cafés, whereas Waste Room B represents the waste room located in Building B, allocated for the mini mart and the corresponding mezzanine office. 2. The mezzanine office in Building B is assumed to operate seven days a week as it is assumed to be linked to the mini mart. 				

In accordance with the Victorian Government’s *Circular Economy Policy*, additional waste streams, including paper and cardboard, as well as food organics garden organics (FOGO), have been considered separately in order to reduce landfill at the source or assist in separating commingled recycling.

Thirty percent of garbage waste from the café tenancies have been adopted as FOGO, whilst 20% of the garbage waste from the mini mart has been adopted as FOGO.

A rate of 40% have been implemented as paper and cardboard waste from commingled recycling waste for the entire development, except for the mini mart and corresponding mezzanine office, which have been allocated a rate of 70% of commingled recycling waste as paper and cardboard waste.

3.2. Waste Equipment

Based on those rates previously specified, Table 4 provides a summary of the waste storage requirements and the frequency of collection separated based on the corresponding waste rooms they are allocated to.

Table 4: Waste Bins and Collection Frequencies

Waste Room	Waste Stream	Waste Volume (L/week) ¹	Bin Capacity	No. of Bins Required	Collection Frequency (per week)
A	Garbage	2,965L	660L	1	2
			1,100L	1	
	Recycling	1,708L	1,100L	1	2
	FOGO	1,071L	240L	3	2
	Paper & Cardboard	1,139L	1,100L	1	1
	Medical Waste	-	80L	1	As Required
B	Garbage	2,738L	660L	2	2
	Recycling	1,882L	1,100L	1	2
	FOGO	685L	240L	2	2
	Paper & Cardboard	4,390L	1,100L	2	2

Overall, the development requires a total of 1 x 80L bin, 5 x 240L bins, 3 x 660L bins and 6 x 1,100L bins.

Further details regarding the waste equipment required for the development are detailed in Table 5 below.

Table 5: Bin Details and Colours

Waste Stream	Bin Capacity	Dimensions (H x W x D) ¹	Bin Lid Colour ²	Bin Body Colour ²
Garbage	660L	1,200 x 1,260 x 780mm	Red	Dark Green
	1,100L	1,330 x 1,240 x 1,070mm		
Recycling	1,100L	1,330 x 1,240 x 1,070mm	Yellow	
FOGO	240L	1,060 x 585 x 730mm	Lime Green	
Paper & Cardboard	1,100L	1,330 x 1,240 x 1,070mm	Blue	
Medical Waste	80L	840 x 450 x 510mm	Yellow	

Notes:

- Bin capacity and dimensions are provided as an indicative dimension, sourced from Bin Supplier, 'Sulo'.
- Bin lid and body colours are based on the bin colour scheme set out within the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments*.

3.3. Waste Systems

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

- Immediate smaller bins to temporarily store garbage and recyclable waste prior to transferring to the Mobile Garbage Bins (MGB) within the bin store,
- MGBs, and
- Bin Store Area.

3.3.1. Waste Streams

The waste generated by the proposed development will be separated and managed into the following waste streams, as detailed below.

Table 6: Waste Streams

Waste Type	Waste Management
Garbage	The commercial tenancies will require smaller plastic bins for temporary storage of waste within each tenancy. Staff will place general landfill waste in tied plastic bags and dispose of bagged garbage directly into the corresponding shared garbage bins located in their allocated waste room respectively.
Recycling	The commercial tenancies will require smaller plastic bins for temporary storage of recyclable items. Staff will dispose of loose recyclable items directly into the corresponding shared waste bins located in their allocated waste room respectively. Cardboard items shall be folded where appropriate.
Organic Waste	The commercial tenancies will require small caddies for temporary storage of organics waste within each tenancy. Staff will dispose of organic waste directly into the corresponding FOGO bins located in their allocated waste room respectively.
Green Waste	The Property Manager will be responsible for the collection and disposal of any garden organics via a landscape maintenance contractor.
Hard Waste	Commercial tenants shall dispose of hard waste via a private contractor on an as-need basis.
Other	Commercial tenants shall dispose of electric waste including batteries, phones, computers etc via a private contractor on an as-need basis.

3.3.2. Bin Storage Areas and Access

The proposed development includes two separate waste rooms, located in Building A and Building B respectively. The waste room in Building A is located at the western side of the building, whilst the waste room in Building B is located at the south-western corner of the building.

Access to both of the waste rooms will be via the footpath along the buildings as required.

The waste rooms and pedestrian access routes are illustrated at Figure 1 and Figure 2.

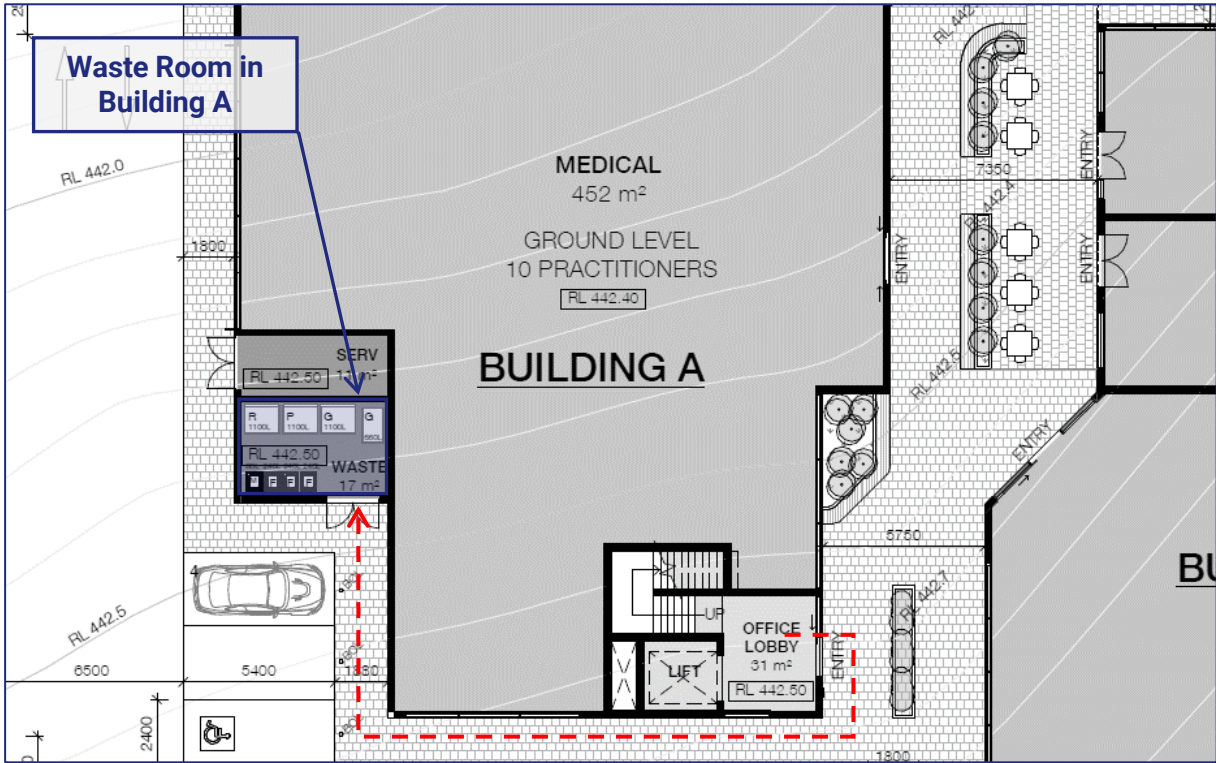


Figure 1: Proposed Waste Room Area located in Building A

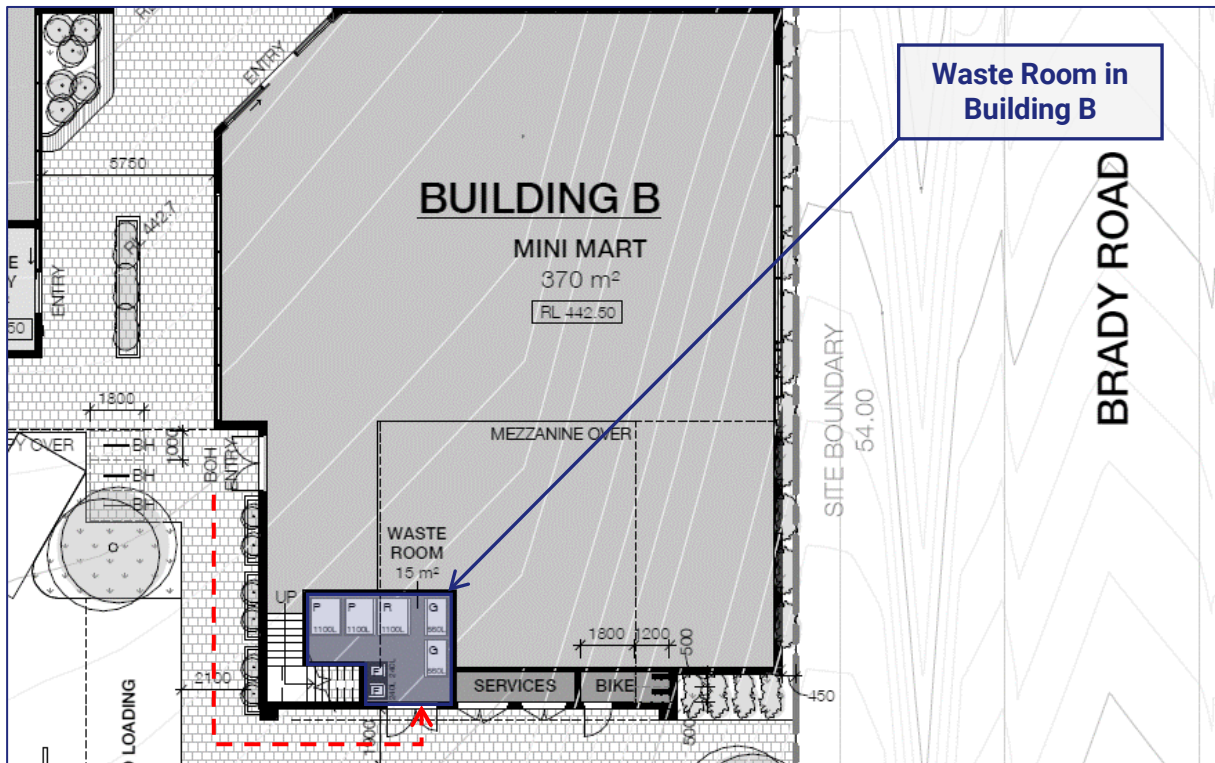


Figure 2: Proposed Waste Room Area located in Building B

Table 7 details the storage area requirements based on the waste equipment proposed.

Table 7: Bin Store Area Requirements

Use	Waste Equipment	Net Area	Quantity	Net Waste Storage Area Required	Bin Store Area Provided
Waste Room in Building A	80L	0.23m ²	1	0.23m ²	17m ²
	240L	0.43m ²	3	1.29m ²	
	660L	0.99m ²	1	0.99m ²	
	1,100L	1.33m ²	3	3.99m ²	
Waste Room in Building B	240L	0.43m ²	2	0.86m ²	15m ²
	660L	0.99m ²	2	1.98m ²	
	1,100L	1.33m ²	3	3.99m ²	

Notes:

1. Net Floor Area required is calculated from the dimensions of the bins.

Based on the above, we are satisfied that sufficient space is provided for on-site waste rooms within the proposed development.

3.4. Signage

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

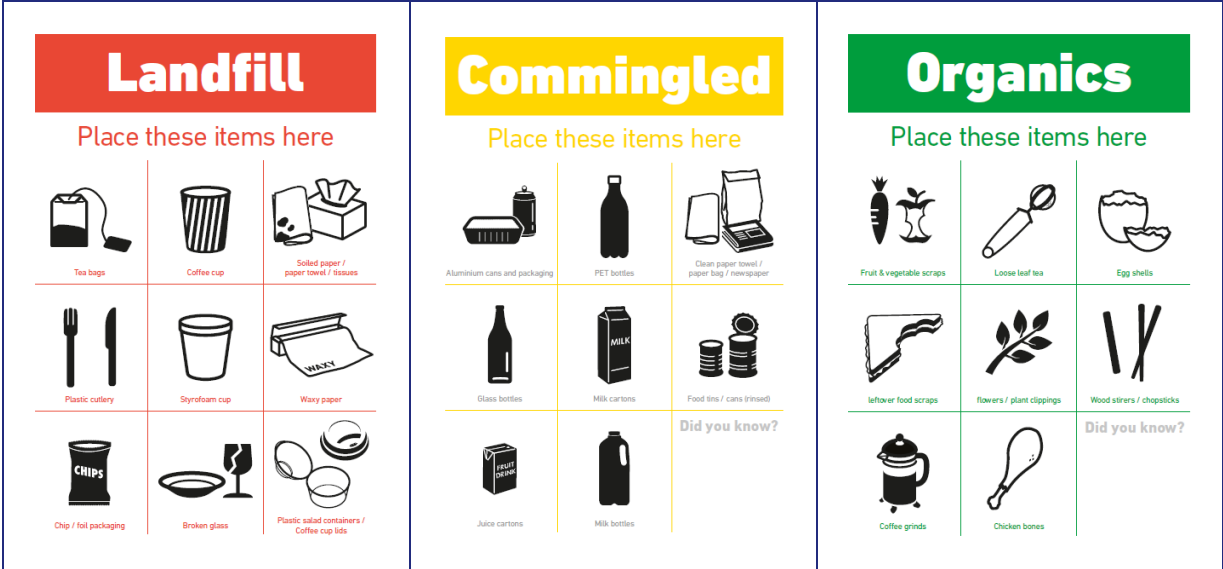


Figure 3: Waste Signage Examples

The signage will help guide and encourage staff of the commercial tenancies to dispose of waste correctly into the appropriate waste streams. The posters are available for download from the Sustainability Victoria website.

3.5. Waste Collection Arrangements and Vehicle Access

It is proposed that waste collection will occur on-site within the at-grade carpark. A private contractor will be engaged to collect the waste via an 8.8m long rear-loading waste collection vehicle (typically similar to an 8.8m long medium rigid vehicle).

The private contractor will prop temporarily along the accessways adjacent to the waste room areas whilst the bins are emptied. Waste collection will be undertaken outside of the operating times of the proposed development (i.e., between 7pm - 8pm) to minimise disruption.

Traffix Group has provided advice to the project architect in order to accommodate vehicle access of the 8.8 long rear-loading vehicle within the site.

Swept path diagrams demonstrating vehicle access of the 8.8m long rear-loading vehicle accessing the waste collection areas is attached at Appendix B.

4. Amenity Impacts

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

Ventilation/Odour Prevention

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

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 property manager. Waste collection time should comply with the EPA Noise Control Guidelines (Publication 1254):

- *Collections occurring once a week should be restricted to the hours 6:30am - 8pm Monday to Saturday, 9am - 8pm Sunday and public holidays*
- *Collections occurring more than once a week should be restricted to the hours 7am - 8pm Monday to Saturday, 9am - 8pm Sunday and public holidays*

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.

Washing Facilities and Stormwater Pollution

Appropriate washing facilities, including water supply and hose will 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 and Suitable Initiatives

5.1. Maintenance Management

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

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

5.2. Waste Reduction Strategies

The property manager will be responsible to encourage staff of the commercial tenancies to reduce waste disposal and recycle materials based on the waste management hierarchy set out by Sustainability Victoria.

The hierarchy is detailed at Figure 4 below.

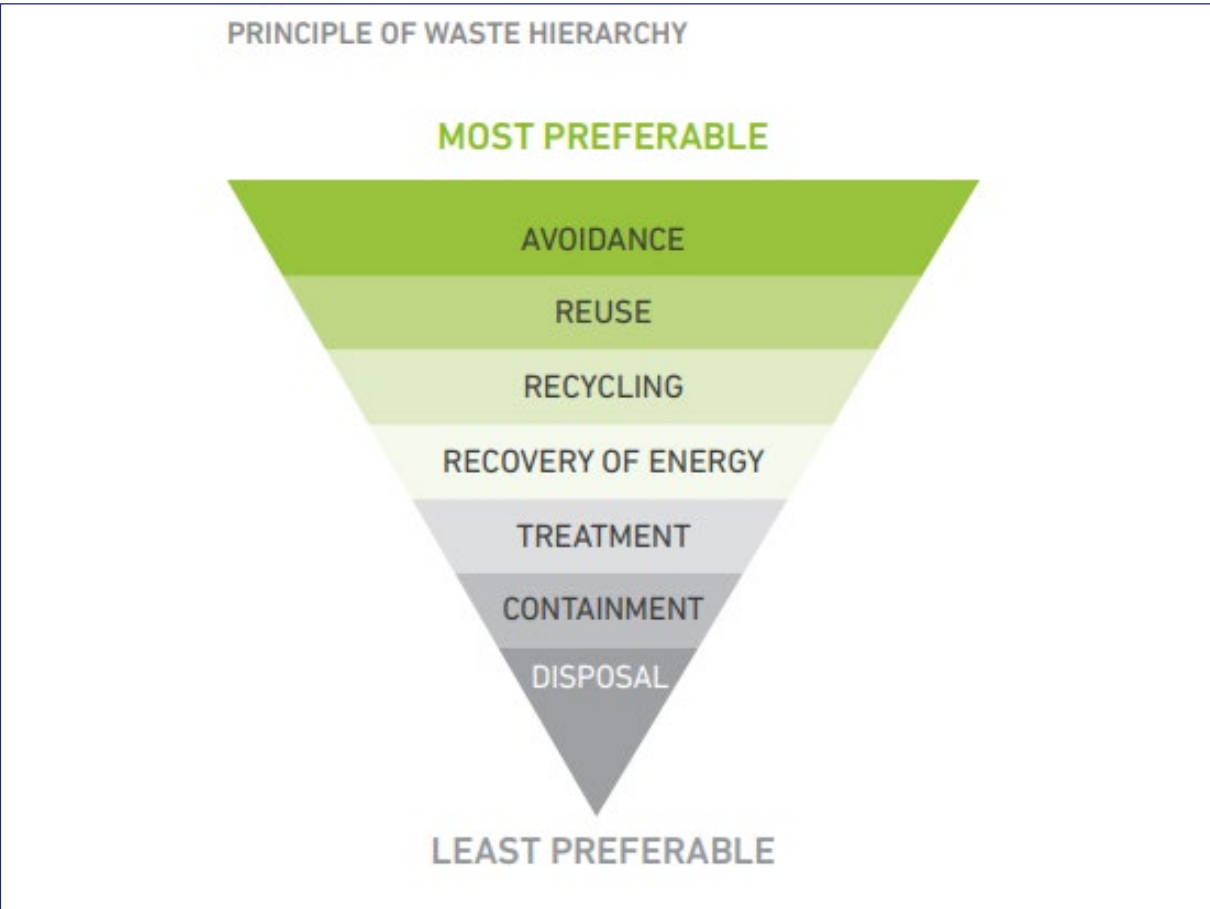


Figure 4: Sustainability Victoria’s Waste Management Hierarchy

Additionally, the property 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 property manager to ensure all staff are provided with the relevant information and materials regarding the waste management system and sustainability strategies of the 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 3.1. The property manager will be responsible for monitoring the Waste Management Plan. Where required, the property manager should undertake a waste audit to identify any modifications and/or improvements to the waste management system.

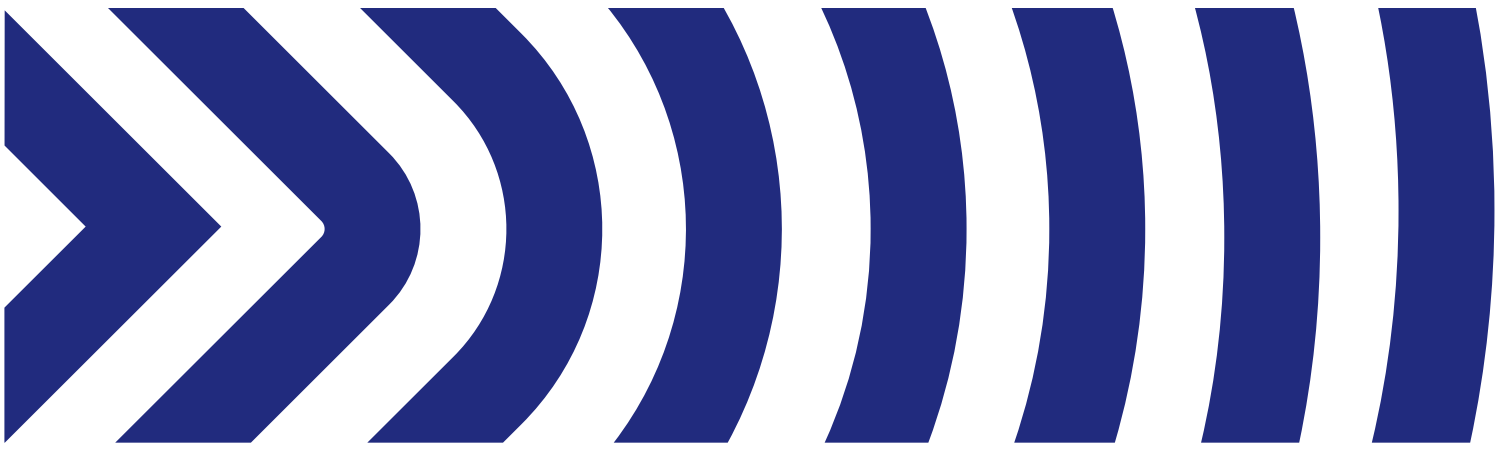
6. Contact Information

Below is a list of common waste collection service contractors and waste equipment suppliers. The property manager is not obligated to procure goods/services from the following suppliers and reserves the right to choose their own preferred suppliers. Traffix Group does not make representations for the goods/services provided by the suppliers listed below.

Table 8: Supplier Contact Information

Service Type	Business Name	Phone	Website
Private Waste Collectors	Citywide Waste	03 9261 5000	www.citywide.com.au
	SUEZ	13 13 35	www.suez.com.au
	Cleanaway	13 13 39	www.cleanaway.com.au
	Veolia	13 29 55	www.veolia.com/anz
	JJ Richards	03 9794 5722	www.jjrichards.com.au
	Waste Wise Environmental	1300 550 408	www.wastewise.com.au
	Kartaway	1300 362 362	www.kartaway.com.au
	iDump	1300 443 867	www.idump.com.au

Service Type	Business Name	Phone	Website
E-Waste Collection	TechCollect	1300 229 837	www.techcollect.com.au
	ToxFree	1300 869 373	www.toxfree.com.au
Equipment Supplier	Sulo Australian (bin supplier)	03 9357 7320	www.sulo.com.au
	Mr Wheelie Bin (bin supplier)	03 9912 2850	www.mrwheeliebin.com.au
	Electrodrive (tug supplier)	1300 934 471	www.electrodrive.com.au
	Warequip (tug supplier)	1800 337 711	www.warequip.com.au
	Wastech Engineering (compactors & chutes)	1800 465 465	www.wastech.com.au
	Elephants Foot (compactors & chutes)	1300 435 374	www.elephantsfoot.com.au
	ASI JD MacDonald (chutes)	1800 023 441	www.jdmacdonald.com.au
	Eco-safe Technologies (odour control system)	1300 135 039	www.eco-safe.com.au
Bin Washing Services	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
	Kerbside Clean-A-Bin	03 9588 1944	www.kerbsidecleanabin.com.au



Appendix A

Development Plans

DEVELOPMENT SCHEDULE

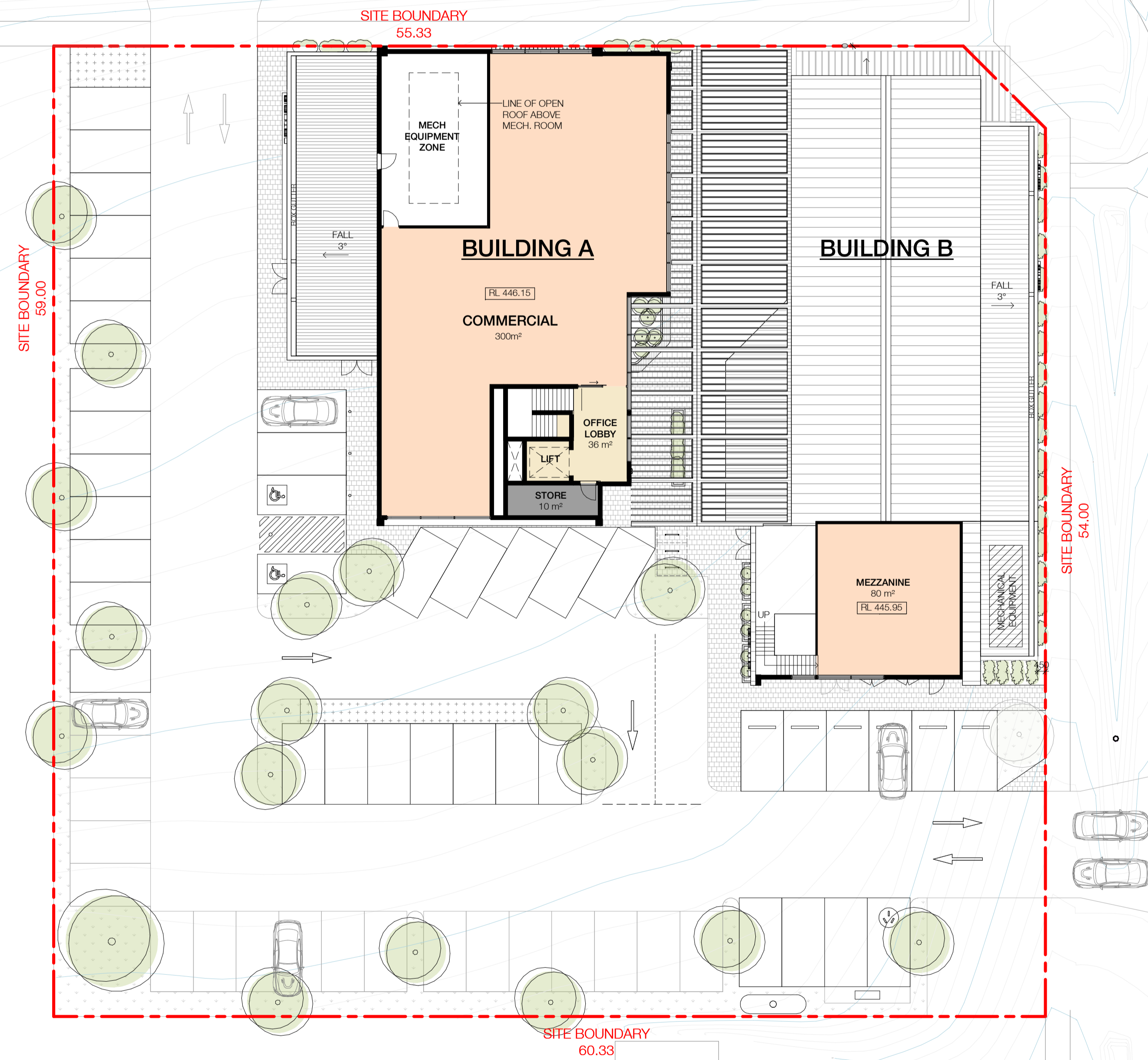
USE	AREA (m ²)	RATE (per 100m ²)	CARS
MINI MART	370	5	18
MINI MART (MEZZANINE LEVEL)	80	5	4
FOOD & BEVERAGE	170	4	6
MEDICAL CENTRE - 10 PRACTITIONERS	450	-	32
COMMERCIAL (LEVEL 1)	300	3.5	10
CARS REQUIRED			70
CARS PROVIDED (CAR PARK)			57



DEVELOPMENT SCHEDULE

USE	AREA (m ²)	RATE (per 100m ²)	CARS
MINI MART	370	5	18
MINI MART (MEZZANINE LEVEL)	80	5	4
FOOD & BEVERAGE	170	4	6
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CARS REQUIRED			70
CARS PROVIDED (CAR PARK)			57

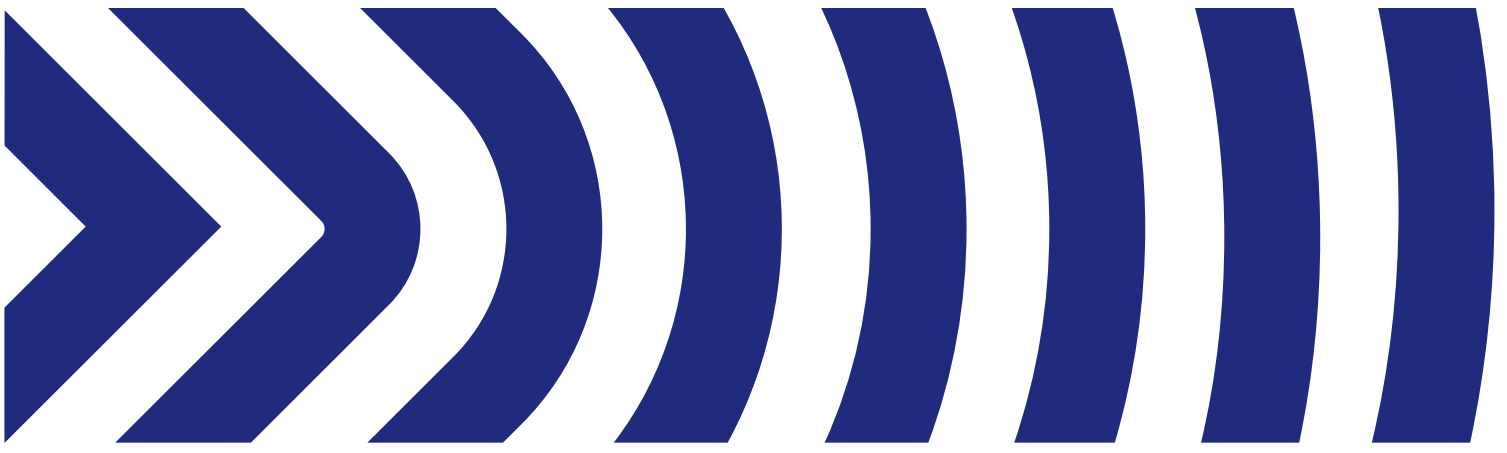
WILLOWBANK ROAD



BRADY ROAD

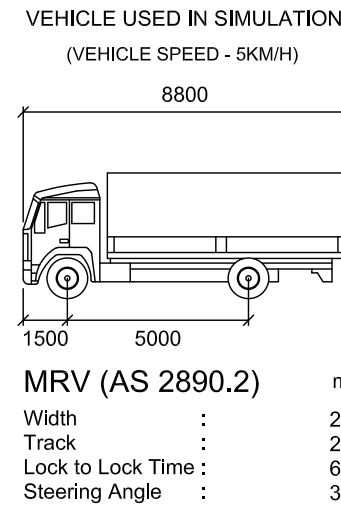
WILLOWBANK EARLY LEARNING CENTRE

INFORM OSTEOPATHY



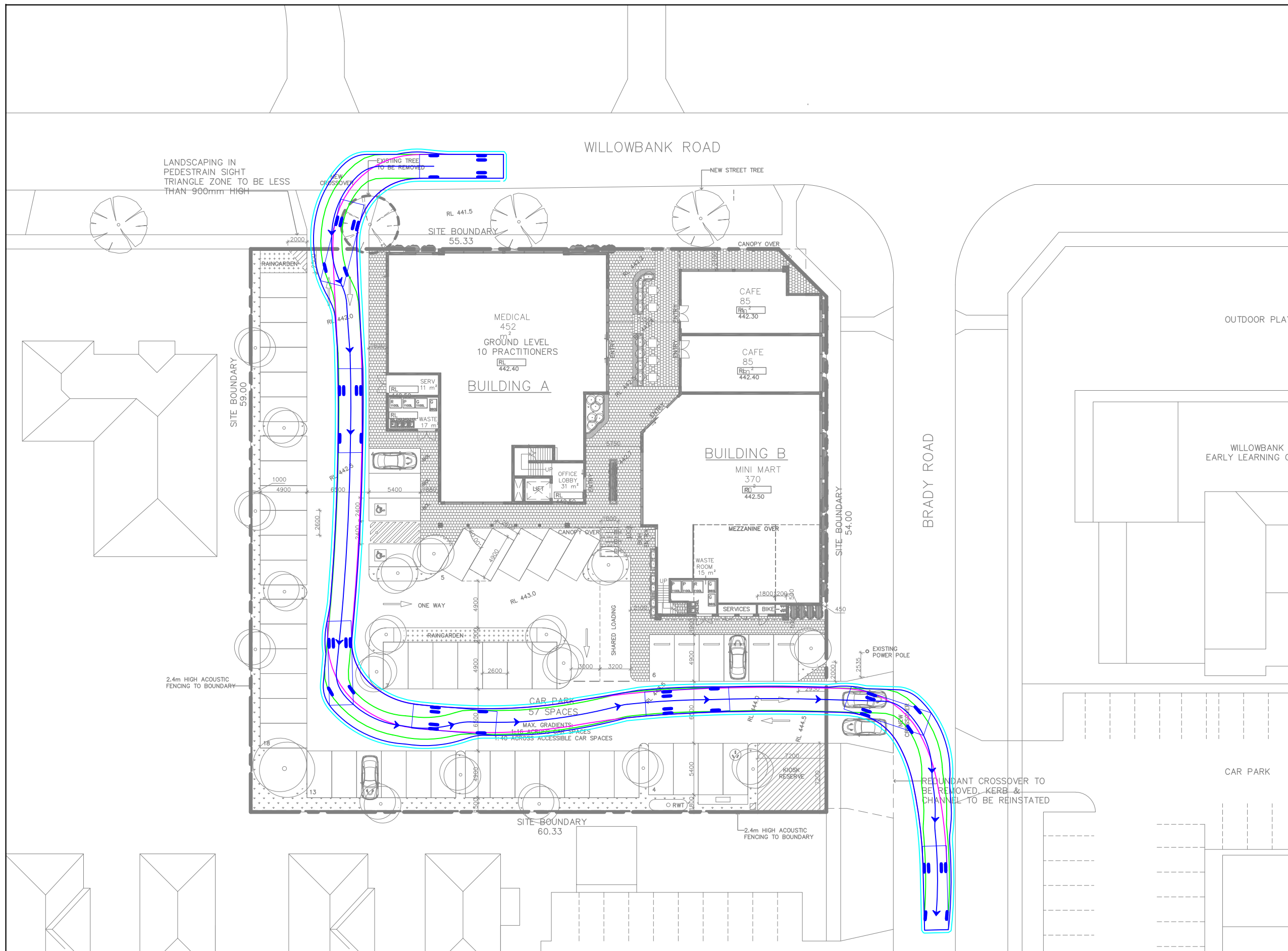
Appendix B

Swept Path Diagrams



LEGEND

— REAR WHEELS	— VEHICLE BODY
— FRONT WHEELS	— BODY CLEARANCE



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	18/07/2022	TOWN PLANNING	K. EWE	J. STONE

101-106 WILLOWBANK ROAD, GISBORNE
PROPOSED COMMERCIAL DEVELOPMENT

GENERAL NOTES:
BASE INFORMATION FROM:
"210037_tp02a_ground floor site plan_dwg.dwg"
DRAWINGS BY: ClarkeHopkinsClarke, dated 10 June, 2022.

FILE NAME: G31013-01A
SHEET NO.: 02



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