

NEWMARK CAPITAL

SEPTEMBER 2021

BRANDON PARK SHOPPING CENTRE: MIXED USE

WASTE MANAGEMENT PLAN

wsp



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BRANDON PARK SHOPPING CENTRE: MIXED USE Waste Management Plan

Newmark Capital

WSP

Level 15, 28 Freshwater Place
Southbank VIC 3006

Tel: +61 3 9861 1111

Fax: +61 3 9861 1144

wsp.com

REV	DATE	DETAILS
A	27/11/2020	Waste Management Plan (DRAFT)
B	30/11/2020	Waste Management Plan
C	22/09/2021	Waste Management Plan

	NAME	DATE	SIGNATURE
Prepared by:	Francisco Lugo	22/09/2021	
Reviewed by:	Brad Parker	22/09/2021	
Approved by:	Brad Parker	22/09/2021	

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TABLE OF CONTENTS

1	SUMMARY.....	1
2	INTRODUCTION.....	2
2.1	LAND USE	2
3	WASTE MANAGEMENT PLAN.....	3
3.1	WASTE GENERATION.....	3
3.2	WASTE SYSTEMS	3
3.2.1	GENERAL WASTE AND COMMINGLED RECYCLING.....	4
3.2.2	HARD WASTE.....	4
3.2.3	E-WASTE	4
3.2.4	SECURE PAPER.....	4
3.3	CLINICAL & RELATED WASTES (MEDICAL TENANCY)	5
3.4	INTERNAL WASTE TRANSFER & HANDLING	5
3.4.1	SERVICED APARTMENTS.....	5
3.4.2	OFFICE	5
3.5	WASTE EQUIPMENT REQUIRED	6
3.5.1	BIN QUANTITY, SIZE & COLLECTION FREQUENCY	6
3.6	BIN COLOUR AND SUPPLIER	6
3.7	SIGNAGE	6
3.8	WASTE COLLECTION METHODOLOGY	7
4	STANDARDS & COMPLIANCE	8
4.1	VENTILATION.....	10
4.2	WASHING & VERMIN PREVENTION	10
4.3	NOISE REDUCTION	10
5	HIGH LEVEL PURCHASING SCHEDULE.....	10
5.1	SUPPLIER CONTACT INFORMATION	10

LIST OF APPENDICES

APPENDIX A

SCALED WASTE ROOM DRAWINGS

APPENDIX B

COLLECTION VEHICLE SWEEP PATHS



List of Figures

FIGURE 1	EXAMPLE BIN STATION APPLICATION	4
FIGURE 2	SUSTAINABILITY VICTORIA WASTE SIGNAGE	6

List of Tables

TABLE 1	WASTE COLLECTION SUMMARY	1
TABLE 2	DEVELOPMENT SUMMARY	2
TABLE 3	WEEKLY WASTE GENERATION RATES	3
TABLE 4	WEEKLY WASTE GENERATION ASSESSMENT	3
TABLE 5	TENANCY BIN CAPACITY RATES & DISPOSAL FREQUENCY	4
TABLE 6	WASTE STORAGE & CAPACITY	6
TABLE 7	TYPICAL STORAGE UNIT DIMENSIONS	6
TABLE 8	BIN COLLECTION SUMMARY	7
TABLE 9	EQUIPMENT SUPPLY SCHEDULE	10
TABLE 10	SUPPLIER CONTACT LIST	10

1 SUMMARY

The below is a summary of the waste management strategy proposed for the subject site. The complete report must be read in detail prior to implementing the waste management plan.

Located at Ferntree Gully Road, Wheelers Hill the proposed redevelopment of Brandon Park Shopping Centre will deliver a mixed use of commercial and residential components, comprising of:

- 5,160m² of Office space;
- 730m² of Medical suites; and
- 102 Serviced apartments.

The following waste systems are proposed for the development:

Table 1 Waste Collection Summary

Waste Stream	Equipment	Collections per Week	Collection Operator
Garbage	3no. 1,100L Bins	2	Private Contractor
Commingled Recycling	3no. 1,100L Bins	2	Private Contractor
Hard Waste & E-waste	3m ² Line marked area	As Required	Private Contractor

All waste collections will occur on-site directly from the ground floor waste rooms. An 8.8m MRV or smaller collection vehicle will be utilised to perform all collections, entering and exiting the ground floor loading bay via Brandon Park Drive. The collection vehicle will prop within the loading bay with operators collecting bins directly from the waste room and returning them immediately upon emptying (see Appendix A).

Building management will ensure sufficient access is provided for collection vehicle operators during collection times.

Typically, operators are provided with keypad/swipe card access to the service doors.

Bins will not be stored outside of the title boundary or presented to kerb for collection at any time.

2 INTRODUCTION

The following Waste Management Plan has been prepared for a proposed mixed-use development at Ferntree Gully Road, Wheelers Hill.

This Waste Management Plan (WMP) has been prepared based on City of Monash waste management requirements and best practice waste management methodology and technologies commonly available in Australia. The waste generation rates provided within have been prepared based on *City of Melbourne's Guidelines for Waste Management Plans (2021)*.

2.1 LAND USE

Client: Newmark Capital

Town Planning Application 52240

Land Use Type: Commercial

Number Levels: 7 levels

Table 2 Development Summary

Commercial	
Use	Area
Commercial Office	5,160m ²
Medical Suites	730m ²
Serviced Apartments Hotel	102 Apartments

3 WASTE MANAGEMENT PLAN

The following waste management strategy addresses the commercial components (medical suites and office) and residential components of the subject development.

3.1 WASTE GENERATION

Waste generation rates per week are shown in Table 3 and are based on a 5 day per week operation for commercial office and medical spaces and a 7 day per week operation for serviced apartments.

Table 3 Weekly Waste Generation Rates

Use	Generation Rates	
	Garbage	Recycling
Commercial Office	50 L/100m ² /week	50 L/100m ² /week
Medical Suites	65 L/100m ² /week	75 L/100m ² /week
Serviced Apartments Hotel	35 L/apartment/week	35 L/apartment/week

Weekly waste generation assessment for the development is shown in Table 4.

Table 4 Weekly Waste Generation Assessment

Use	Area / Quantity	Waste Volume (L/week)	
		Garbage	Recycling
Commercial Office	5,160m ²	2,580	2,580
Medical Suites	730m ²	475	548
Serviced Apartments Hotel	102 Units	3,570	3,570
TOTAL	-	6,625	6,698

3.2 WASTE SYSTEMS

Waste shall be sorted on-site by tenants as appropriate into the following core streams:

- General Waste (Garbage)
- Commingled Recycling

Throughout the facility it will be ensured that it is as easy to dispose of all other core waste streams as it is garbage. This will be achieved by ensuring the development is appropriately furnished with bin stations throughout the individual rooms, ancillary spaces and communal areas. Clear signage is to be appropriately displayed in combination with the bin stations to identify the segregation of waste streams and correct use of the bins.

Bin stations will be used to encourage the separation of waste streams and diversion from landfill. The bin stations incorporate the provision of multiple bins for different waste streams at central locations and common areas for ease of disposal. This system is beneficial as users are required to make a conscious decision as to which bin they place their refuse in, typically resulting in a reduced volume of garbage (landfill).

The use of bin stations also reduces the amount of locations cleaners are required to service throughout the development.

Figure 1 Example Bin Station Application



Brand: Ecobins



Brand: Method Bins

3.2.1 GENERAL WASTE AND COMMINGLED RECYCLING

Commercial tenancies shall have minimum provisions for a single bin station per room or collective area for all uses. Each bin station is to consist of a minimum of four bins to have a minimum cumulative capacity as outlined in Table 5 for the temporary holding of the core waste streams: garbage, commingled recycling, cardboard and organics waste.

Each apartment shall have provisions for plastic lined bins to have a minimum cumulative capacity of 5 litres each for the temporary holding of garbage and commingled recycling. Cleaners will transfer bagged garbage and loose recyclables as required to the ground floor bin room.

Anticipated minimum disposal frequency per day for each tenancy use is also outlined in Table 5. “Transfer frequency” within the below table refers to the frequency at which waste will be required to be transferred from the commercial tenancies to the waste disposal systems on the ground floor.

Table 5 Tenancy Bin Capacity Rates & Disposal Frequency

Tenancy Use	Bin Capacity by Stream (Litres per 100m ² of NLA)		Transfer Frequency per Day
	Garbage	Commingled Recycling	
Commercial Office	10	10	1
Medical Suites	13	15	1
Serviced Apartments Hotel	5	5	1

3.2.2 HARD WASTE

A secure hard waste area of 2m² has been allocated within the ground floor waste room for the temporary storage of hard waste such as broken furniture and appliances.

Hard waste collections will be arranged by building management (or equivalent) via a private contractor as required.

3.2.3 E-WASTE

Approximately 1m² of the 3m² hard waste area has been allocated for the temporary holding of e-waste (electronic waste). To enable the collection of various smaller items such as mobile phones, the area may incorporate a 240 litre e-waste bin as deemed appropriate by building management (or equivalent). The remaining e-waste area will be utilised for large items such as flat screen televisions.

E-waste collections will be arranged by building management (or equivalent) via a private contractor as required.

3.2.4 SECURE PAPER

Commercial tenancies may be furnished with secure paper bins as deemed appropriate by the commercial tenant(s). Secure paper collections will be performed on an “as required” basis via an authorised contractor.

Collection contractors will enter the building, collect and exchange the secure paper bins directly from the individual commercial tenancies on each floor, as per common practice. The commercial tenant and/or building management (or equivalent) will coordinate collection services.

3.3 CLINICAL & RELATED WASTES (MEDICAL TENANCY)

A small volume of clinical waste may be generated by the medical tenancy subject to operational practice. The below principles apply to the transfer, storage, and collection of clinical waste within the subject development. These principles or methodologies are not to supersede any applicable operational safety and/or goods handling procedures for clinical and related wastes.

- Storage bins will be labelled and stored (internal to the tenancy) in accordance with all relevant standards and safety requirements.
- All clinical waste storage areas will be secured, with access restricted to trained and qualified staff/cleaners only.
- Collection will occur from the ground level on-site loading bay accessed via Brandon Park Drive, with the loading bay opening to be closed during collection operations.

Detailed waste management methodologies will be developed by the tenant in accordance with the specific operations and relevant safe handling framework(s), with incorporation of the above principles.

3.4 INTERNAL WASTE TRANSFER & HANDLING

All waste transfer paths are to be exclusively within the site title boundary and should not require cleaners/tenants to exit title to perform operations. Transfer routes for waste collections are not to include stairs or gradients greater than 1:14.

3.4.1 SERVICED APARTMENTS

Cleaners will transfer bagged garbage and loose recyclables as required into the appropriate 1100L bins within the ground level waste room.

3.4.2 OFFICE

Bins / bin stations throughout the offices and medical suites spaces are anticipated to be cleared by cleaning staff in accordance with building management operations. Cleaners will manually empty these bins utilising cleaners' trolleys.

Material from the trolleys is to be decanted into the appropriate larger collection bins provided in the ground floor waste room. Waste transfer will generally occur via the internal lift (or goods lift), primarily outside of standard office operational hours.

Garbage waste is to be disposed of bagged, and comingled recycling is to be disposed of loosely, with all plastic liners to be appropriately disposed of within the 1100 litre garbage bins.

3.5 WASTE EQUIPMENT REQUIRED

3.5.1 BIN QUANTITY, SIZE & COLLECTION FREQUENCY

Table 6 through Table 7 to contain information regarding bin quantity, size, and frequency of collection required for the development.

Table 6 Waste Storage & Capacity

Stream	Storage Method	Size	Quantity	Collections per Week	Weekly Capacity (L)	Weekly Volume (L)
General Waste	Bin Based	1,100L	3	2	6,600	6,625*
Commingled Recycling	Bin Based	1,100L	3	2	6,600	6,698*

** It is noted that the anticipated garbage and recycling volumes exceeds the capacity volume by 25L and 98L respectively. Due to the conservative nature of the waste generation estimates this minor exceedance of bin capacity is considered negligible, and as such the system specified is considered appropriate.*

Table 7 Typical Storage Unit Dimensions

Unit	Width (mm)	Depth (mm)	Height (mm)
1100 Litre Bin	1,240	1,070	1,330

3.6 BIN COLOUR AND SUPPLIER

All bins will be provided by private supplier. The below bin colours are specified by Australian Standard AS4123.7 2006, however due the private nature of the collection, these are only recommendations and are not mandatory:

- Garbage (general waste) bins shall have red lids with dark green or black body.
- Recycle bins shall have yellow lids with dark green or black body.

Private collection contractors often supply their own bins for collection.

3.7 SIGNAGE

Waste drop-off areas, bins and equipment will be clearly marked and signed with the industry standard signage approved by Sustainability Victoria or equivalent. The typical Sustainability Victoria signage is depicted in Figure 2.

Commercial tenants will be instructed by building management to adhere to these requirements.

Figure 2 Sustainability Victoria Waste Signage



3.8 WASTE COLLECTION METHODOLOGY

All waste will be collected via a private contractor as outlined in Table 8.

Table 8 Bin Collection Summary

Waste Stream	Equipment	Collections per Week	Collection Operator
Garbage	3no. 1,100L Bins	2	Private Contractor
Commingled Recycling	3no. 1,100L Bins	2	Private Contractor
Hard Waste & E-waste	2m ² Line marked area	As Required	Private Contractor

All waste collections will occur on-site directly from the ground floor waste rooms. An 8.8m MRV or smaller collection vehicle will be utilised to perform all collections, entering and exiting the ground floor loading bay via Brandon Park Drive. The collection vehicle will prop within the loading bay with operators collecting bins directly from the waste room and returning them immediately upon emptying (see Appendix A).

Building management will ensure sufficient access is provided for collection vehicle operators during collection times.

Typically, operators are provided with keypad/swipe card access to the service doors.

Bins will not be stored outside of the title boundary or presented to kerb for collection at any time.

1 ADDITIONAL INFORMATION

1.1 COMMUNICATIONS STRATEGY

Table 1 below outlines a high level communications strategy for the site, outlining user responsibilities and key points of contact. The ‘House Rules and Guidelines’ document (or equivalent) prepared by facilities management will further detail contact details and specific reporting procedures.

Once occupancy commences, facilities management will contact Council to ensure their Waste Services department has a record of contact details.

Table 1 Communications Strategy

Item	Responsibility	Contact	Notes
Residential Induction	Facilities manager	Residents	<p>Correct waste disposal practices onsite will be provided by facilities management as part of standard residential induction.</p> <p>Residential induction should include clear guidelines to support:</p> <ul style="list-style-type: none"> ▪ Waste equipment and correct use (bin rooms, drop off bins, chutes etc.) ▪ Waste room locations ▪ Waste stream separation (e-waste, glass, food, etc.) ▪ Contamination risks and impacts ▪ Facilities management / cleaning staff contact details <p>Induction should be further supported by printed materials for residential reference (including this WMP), which should be available in various languages for ESL speakers where possible. Additional printed materials should be available upon request.</p>
Waste Signage	Facilities manager	To be provided upon occupancy	<p>Facilities management will ensure waste rooms, bin rooms, chutes and bins are appropriately signed at all times.</p> <p>Signage should be clearly marked, with clear instruction (illustrated or otherwise) of acceptable and non-acceptable materials. Signage should be provided in different languages (i.e. Chinese script alongside English text) for ESL speakers.</p>
Illegal Waste Dumping	Facilities manager	City of Monash	Facilities management will report any on-site illegal waste dumping from an external source to Council for collection.
Equipment Purchase	Facilities manager	Equipment Suppliers	Facilities management will be responsible for coordinating equipment provision with nominated suppliers.

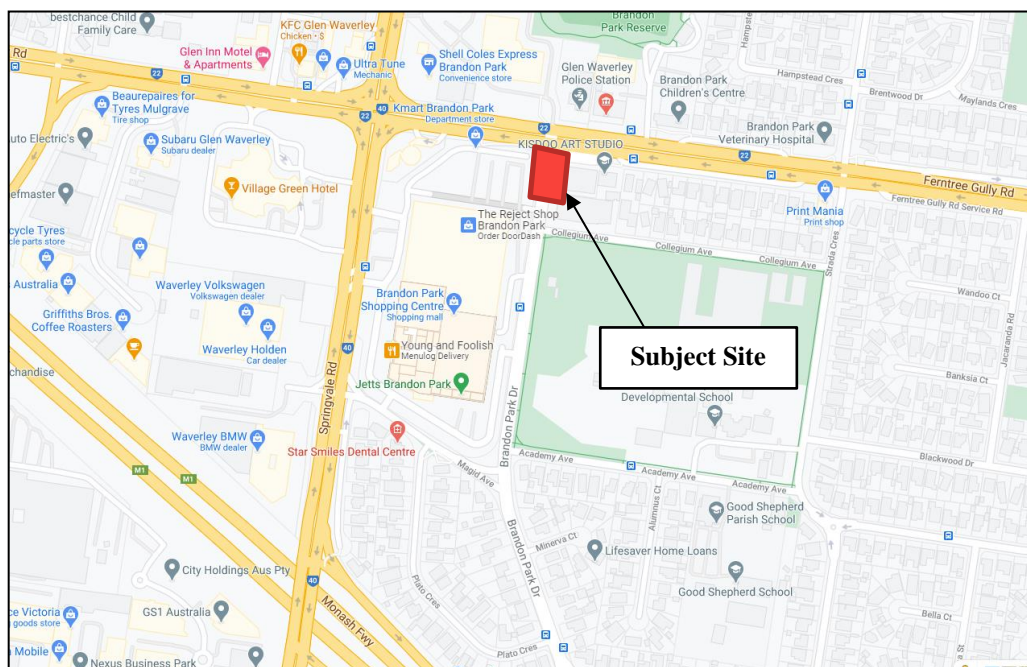
Waste Collection	Facilities manager	Private waste collectors	Facilities management will coordinate the collection of each waste stream with the nominated collection contractors, inclusive of vehicle access, collection schedules, and collection times.
Waste Spillage	Residents / Facilities manager	Cleaning Staff	Residents and/or facilities management will contact cleaning staff directly in reporting major waste spillages.
Hard Waste Transfer	Residents	Facilities manager	Residents will contact facilities management to nominate a scheduled time for the transfer of hard waste to basement level. Facilities management will assist residents in the transfer of hard waste.

1.2 LOCAL CONTEXTUAL ANALYSIS PLAN

Impacts of the waste system specified in this WMP upon the surrounding local (urban) landscape will be minimised where possible. WSP note that the following key features have been incorporated into waste design and into this WMP:

- **Waste Design:** The waste system as shown was developed with consideration for building services, car parking and building structure, providing for a fully integrated system.
- **Collection Times:** Waste collection will be undertaken in accordance with EPA Noise regulation requirements.
- **Waste Storage:** Waste storage will be contained entirely onsite at ground level. Waste storage will not impact upon street or public amenity.
- **Street Level Interface:** Bins will not be presented to the kerb for collection. Waste collection will not impact upon local amenity or landscaped areas.

Figure 3 Site Location (Source: Google Maps)



2 STANDARDS & COMPLIANCE

2.1 VENTILATION

Ventilation will be provided in accordance with Australian Standard AS1668.

2.2 WASHING & VERMIN PREVENTION

A third party bin washing service will be engaged to perform regular washing of bins. Bin washing suppliers must retain all waste water to within their washing apparatus and not impact on the drainage provisions of the site.

2.3 NOISE REDUCTION

All waste areas shall meet BCA and AS2107 acoustic requirements as appropriate with operational hours and collection times assigned to minimise acoustic impact on surrounding premises.

3 HIGH LEVEL PURCHASING SCHEDULE

Table 2 lists the waste equipment required for the development under the conditions proposed within this report.

Table 2 Equipment Supply Schedule

Item	Quantity	Typical Services Requirement(s)*	Supplier
1100L Bin	3 No. Garbage 3 No. Recycling	Nil	Private Supplier (SULO or equivalent)
* Services requirements are indicative only and must be confirmed with the manufacture prior to commencement of construction			

3.1 SUPPLIER CONTACT INFORMATION

A complimentary listing of contractors and equipment suppliers is provided in Table 3 below for your reference. You are not obligated to procure goods/services from these companies. This is not, nor is it intended to be, a complete list of available suppliers. WSP does not warrant (or make representations for) the goods/services provided by these suppliers.

Table 3 Supplier Contact List

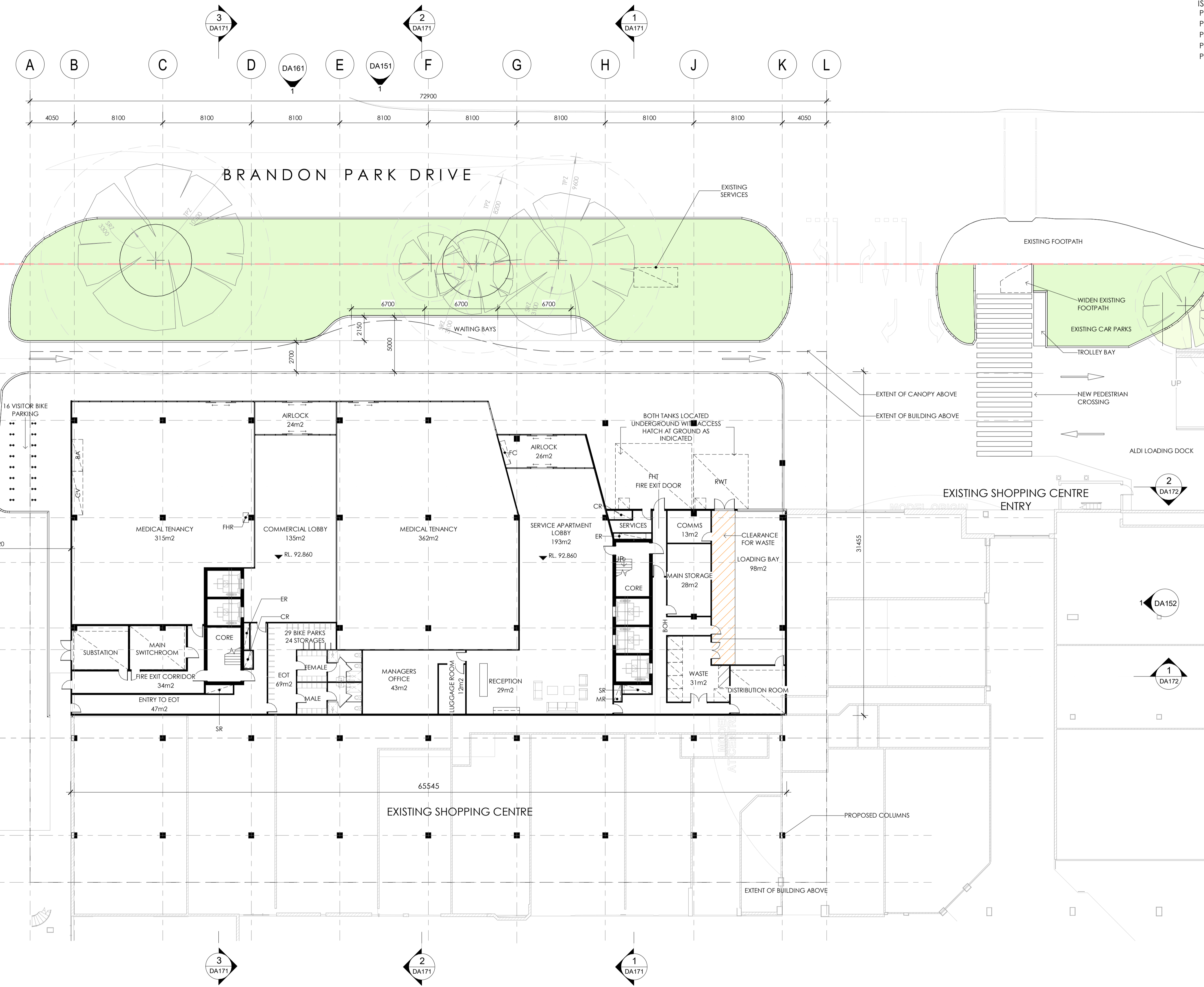
Service Type	Contractor / Supplier Name	Phone	Website
Private Waste Collectors	Citywide Service Solutions Pty Ltd	(03) 9261 5000	www.citywide.com.au
	SUEZ Environment	13 13 35	www.sita.com.au
	Cleanaway	13 13 39	www.cleanaway.com.au
	Veolia	132 955	www.veolia.com
Equipment Suppliers	Sulo Australia (Bins)	1300 364 388	www.sulo.com.au
Bin Washing Services	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	Kerbside Clean-A-Bin	(03) 9830 7381	www.kerbsidecleanabin-srp.com.au
	Calcorp Services	1800 225 267	www.calcorpservices.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
E-waste Collection Services	TechCollect	1300 229 837	www.techcollect.com.au
	Mobile Muster	1800 249 113	www.mobilemuster.com.au
	ToxFree	1300 869 373	www.toxfree.com.au

APPENDIX A

SCALED WASTE ROOM
DRAWINGS



ISSUE	AMENDMENT	DATE	CHK'D
P1	FOR REVIEW	06.08.21	SJE
P2	FOR REVIEW	20.08.21	
P3	FOR INFORMATION	30.08.21	IE
P4	FOR INFORMATION	09.09.21	IE
P5	FOR INFORMATION	17.09.21	IE



LEGEND

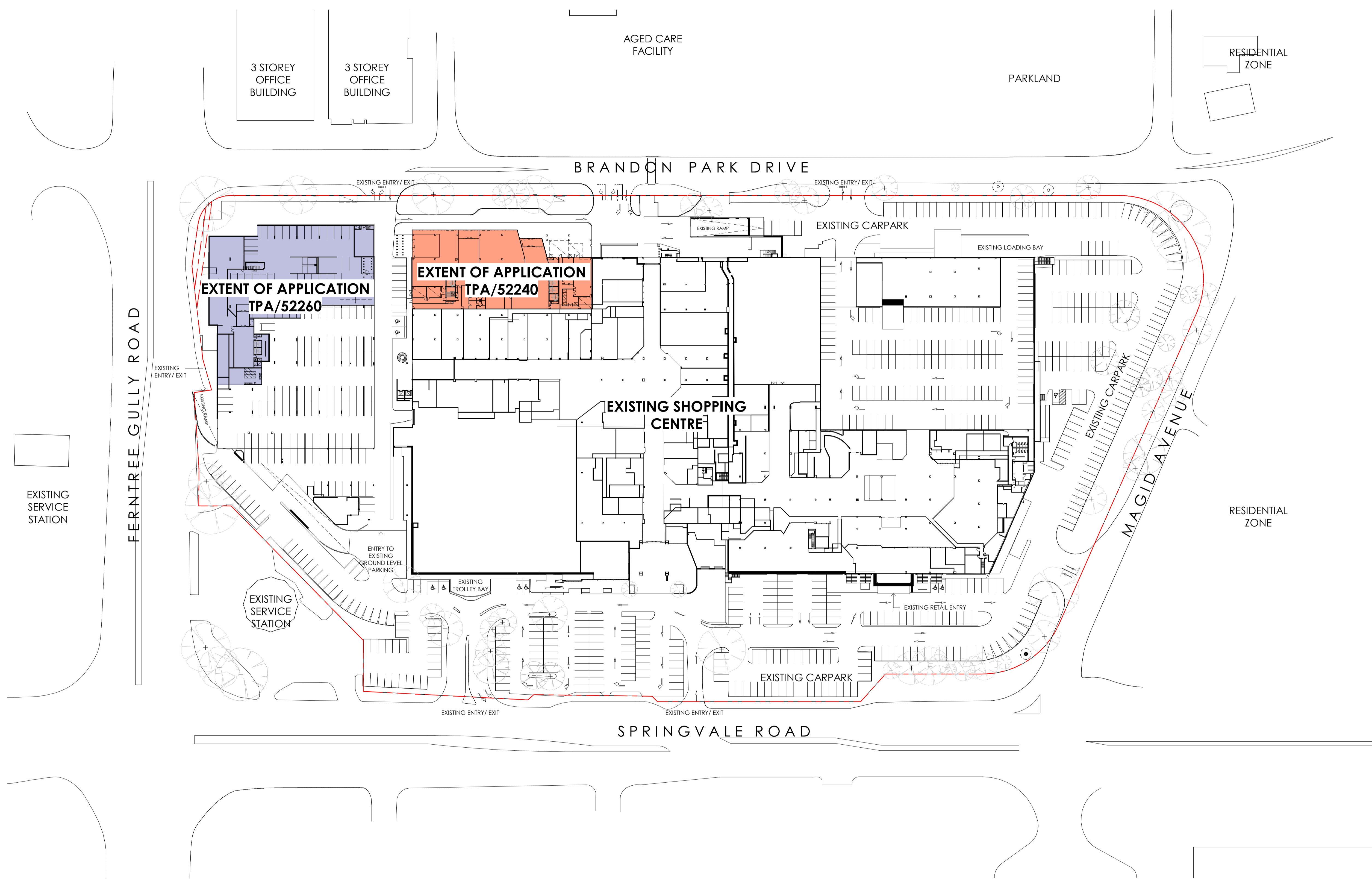
MR	MECHANICAL RISER
CR	COMMS RISER
ER	ELECTRICAL RISER
SR	SERVICES RISER
FHR	FIRE HOSE REEL
TEX	TOILET EXHAUST
GEX	GENERAL EXHAUST
KEX	KITCHEN EXHAUST
HWI	HOT WATER
FC	FIRE CONTROL CENTRE
WT	WATER TANK & PUMP
O/D UNIT	OUTDOOR UNIT
CV	SPRINKLER CONTROL VALVE
BA	FIRE BOOSTER
FHT	6m X 7m FIRE HYDRANT TANK AND PUMP ROOM
RWT	5m X 5m RAIN WATER TANK AND PUMP ROOM

LEGEND

---	PROPERTY BOUNDARIES
---	EASEMENTS
■	LANDSCAPING (REFER TO LANDSCAPE DESIGNERS DRAWINGS)
■	PROPOSED MIXED USE CARSPACES
■	EXISTING CARSPACES



ISSUE	AMENDMENT	DATE	CHK'D
P1	FOR REVIEW	06.08.21	SJE
P2	FOR REVIEW	20.08.21	
P3	FOR INFORMATION	30.08.21	IE
P4	FOR INFORMATION	09.09.21	IE
P5	FOR INFORMATION	17.09.21	IE



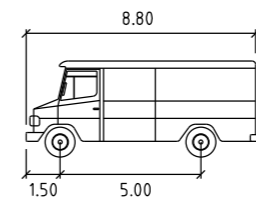
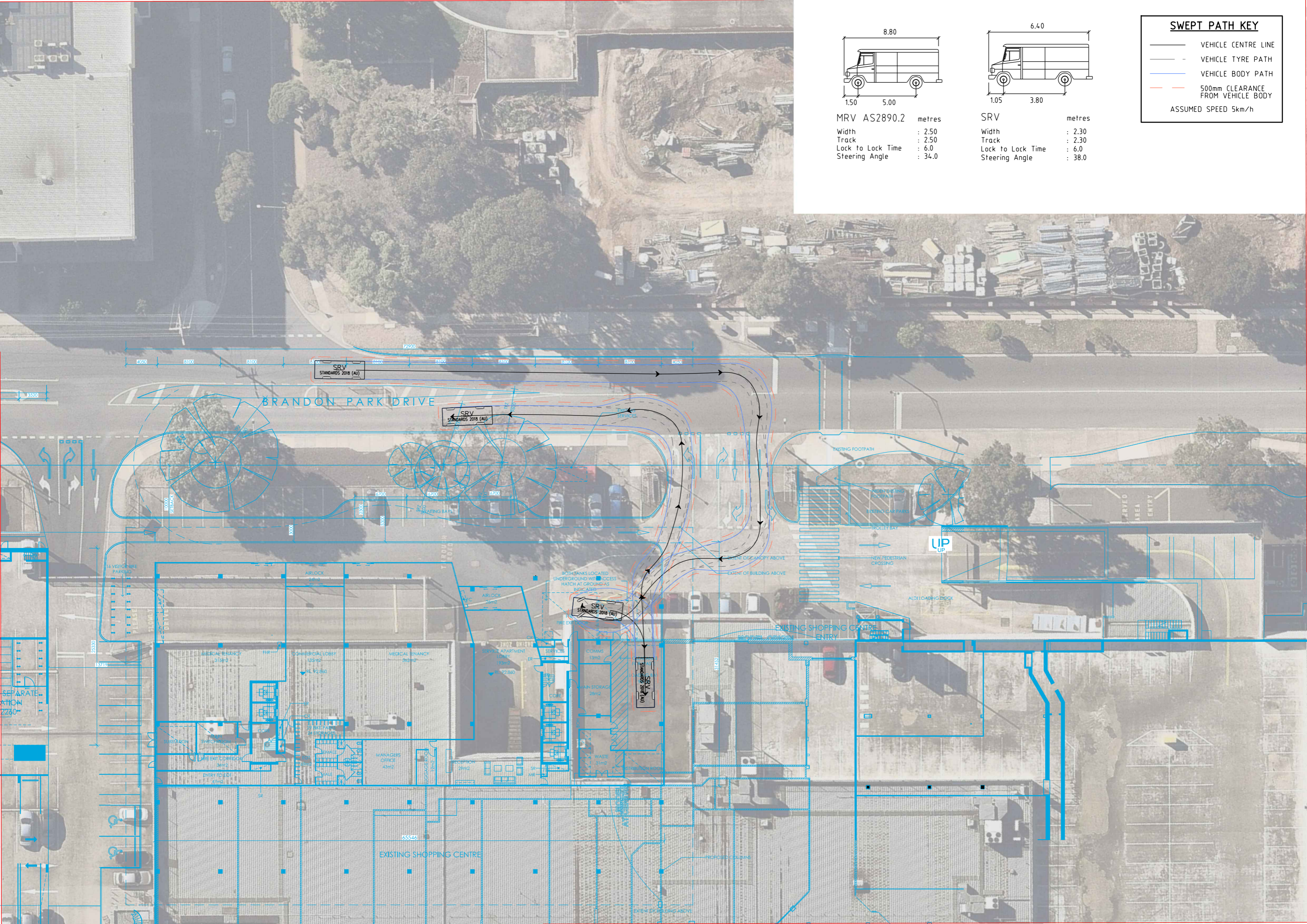
PROPOSED MIXED USE DEVELOPMENT BRANDON PARK SHOPPING CENTRE for NEWMARK CAPITAL LTD.



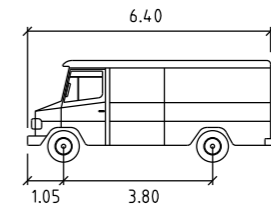
APPENDIX B

COLLECTION VEHICLE
SWEPT PATHS

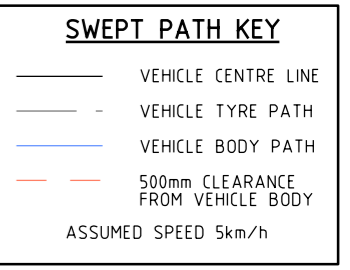




MRV AS2890.2 metres
 Width : 2.50
 Track : 2.50
 Lock to Lock Time : 6.0
 Steering Angle : 34.0



SRV metres
 Width : 2.30
 Track : 2.30
 Lock to Lock Time : 6.0
 Steering Angle : 38.0



BRANDON PARK DRIVE

SRV STANDARDS 2018 (AU)

SRV STANDARDS 2018 (AU)

SRV STANDARDS 2018 (AU)

SRV STANDARDS 2018 (AU)

SEPARATION 2230

MEDICAL TENANCY 313m²

COMMERCIAL LOBBY 135m²

MEDICAL TENANCY 360m²

SERVICE APARTMENT LOBBY 193m²

SERVICES

COMMS 13m²

RECEPTION 29m²

WASTE 31m²

EXISTING SHOPPING CENTRE

EXISTING SHOPPING CENTRE ENTRY

UP

UP

16 VISITOR BAY PARKING

AIRLOCK 2.4m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

AIRLOCK 1m²

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