



Waste Management Plan

Lot 12041 Main Street, Ellenbrook

Prepared for Space Collective Architects

3 March 2026

Project Number: WMP25149

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Name	Position	File Reference
Ann Brouwer	Project Manager – Waste Management Plan Lead (WA)	WMP25149-02_Waste Management Plan_1.0

Signature

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Executive Summary

Space Collective Architects is seeking development approval for the proposed mixed-use development located at Lot 12041 Main Street, Ellenbrook (the Proposal).

To satisfy the conditions of the development application the City of Swan (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

A summary of the bin size, numbers, collection frequency and collection method is provided in the below table.

Proposed Waste Collection Summary

Waste Type	Generation (L/week)	Bin Size (L)	Number of Bins	Collection Frequency	Collection
North Building Residential Bin Storage Area					
Refuse	3,040	660	Five	Once each week	City of Swan
Recycling	880	660	Three	Once each fortnight	City of Swan
South Building Residential Bin Storage Area					
Refuse	3,440	660	Six	Once each week	City of Swan
Recycling	860	660	Three	Once each fortnight	City of Swan
Commercial Bin Storage Area					
Refuse	2,268	660	Two	Twice each week	Private Contractor
Recycling	1,512	660	Three	Once each week	Private Contractor

The City/private contractor will collect refuse and recyclables from the Proposal utilising its kerbside collection service. The City/private contractor's waste collection vehicle will service the bins from the Waste Collection Point on Fruin Loop.

A building manager/caretaker will oversee the relevant aspects of waste management at the Proposal.

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1 Introduction

Space Collective Architects is seeking development approval for the proposed mixed-use development located at Lot 12041 Main Street, Ellenbrook (the Proposal).

To satisfy the conditions of the development application the City of Swan (the City) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the City's requirements.

The Proposal is bordered by School Lane to the north, Main Street to the east, Oval Vista to the south and Fruin Loop to the west, as shown in Figure 1.

1.1 Objectives and Scope

The objective of this WMP is to outline the equipment and procedures that will be adopted to manage waste (refuse and recyclables) at the Proposal. Specifically, the WMP demonstrates that the Proposal is designed to:

- Adequately cater for the anticipated volume of waste to be generated;
- Provide adequately sized Bin Storage Areas, including appropriate bins; and
- Allow for efficient collection of bins by appropriate waste collection vehicles.

To achieve the objective, the scope of the WMP comprises:

- Section 2: Waste Generation;
- Section 3: Waste Storage;
- Section 4: Waste Collection;
- Section 5: Waste Management; and
- Section 6: Conclusion.

2 Waste Generation

The following section shows the waste generation rates used and the estimated waste volumes to be generated at the Proposal.

2.1 Proposed Tenancies

The anticipated volume of refuse and recyclables is based on the number of apartments and the floor area (m²) of the commercial tenancies at the Proposal. The Proposal consists of the following:

North Building Residential:

- Two Bedroom Apartments – 16; and
- Three Bedroom Apartments – 2.

South Building Residential:

- One Bedroom Apartments – 1; and
- Two Bedroom Apartments – 21.

Commercial:

- Commercial A (assumed café) – 50m²; and
- Commercial B (assumed café) – 58m².

2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the Western Australian Local Government Association's (WALGA) *Multiple Dwelling Development Waste Management Plan Guidelines* (2014) and the City of Melbourne's *Guidelines for Waste Management Plans* (2021).

Table 2-1 shows the waste generation rates which have been applied to the Proposal.

Table 2-1: Waste Generation Rates

Tenancy Use Type	Guideline Reference	Refuse Generation Rate	Recycling Generation Rate
Residential			
One Bedroom Apartments	WALGA - 1 Bedroom	80L/week	20L/week
Two Bedroom Apartments	WALGA - 2 bedroom	160L/week	40L/week
Three Bedroom Apartments	WALGA - 3+ bedroom	240L/week	120L/week
Commercial			
Commercial A & B (assumed café)	Melbourne - Café	300L/100m ² /day	200L/100m ² /day

2.3 Waste Generation Volumes

Waste generation is estimated by volume in litres (L) as this is generally the influencing factor when considering bin size, numbers and storage space required.

2.3.1 North Building Residential Waste

Residential waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-2. It is estimated that the North Building residential apartments at the Proposal will generate 3,040L of refuse and 880L of recyclables each week.

Table 2-2: Estimated Residential Waste Generation – North Building

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
Refuse			
Two Bedroom Apartments	16	160	2,560
Three Bedroom Apartments	2	240	480
Total			3,040
Recyclables			
Two Bedroom Apartments	16	40	640
Three Bedroom Apartments	2	120	240
Total			880

2.3.2 South Building Residential Waste

Residential waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-3. It is estimated that the South Building residential apartments at the Proposal will generate 3,440L of refuse and 860L of recyclables each week.

Table 2-3: Estimated Residential Waste Generation – South Building

Residential Apartments	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
Refuse			
One Bedroom Apartments	1	80	80
Two Bedroom Apartments	21	160	3,360
Total			3,440
Recyclables			
One Bedroom Apartments	1	20	20
Two Bedroom Apartments	21	40	840
Total			860

2.3.3 Commercial Waste

Commercial waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-4. It is estimated that the commercial tenancies at the Proposal will generate 2,268L of refuse and 1,512L of recyclables each week.

Table 2-4: Estimated Commercial Waste Generation

Commercial Tenancies	Area (m ²)	Waste Generation Rate (L/100m ² /day)	Waste Generation (L/week)
Refuse			
Commercial A (assumed café)	50	300	1,050
Commercial B (assumed café)	58	300	1,218
Total			2,268
Recyclables			
Commercial A (assumed café)	50	200	700
Commercial B (assumed café)	58	200	812
Total			1,512

3 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Areas, as shown in Diagram 1 to Diagram 3, and discussed in the following sub-sections.

3.1 Bin Sizes

Table 3-1 gives the typical dimensions of standard bins sizes that may be utilised at the Proposal. It should be noted that these bin dimensions are approximate and can vary slightly between suppliers.

Table 3-1: Typical Bin Dimensions

Dimensions (m)	Bin Sizes		
	240L	360L	660L
Depth	0.740	0.830	1.360
Width	0.590	0.650	0.770
Height	1.100	1.100	1.390

Reference: City of Swan Guidelines

3.2 North Building Residential Bin Storage Area Size

To ensure sufficient area is available for storage of the residential bins, the amount of bins required for the North Building Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2, bin sizes in Table 3-1 and based on collection of refuse once each week and recyclables once each fortnight.

Based on the results shown in Table 3-2 the North Building Bin Storage Area has been sized to accommodate:

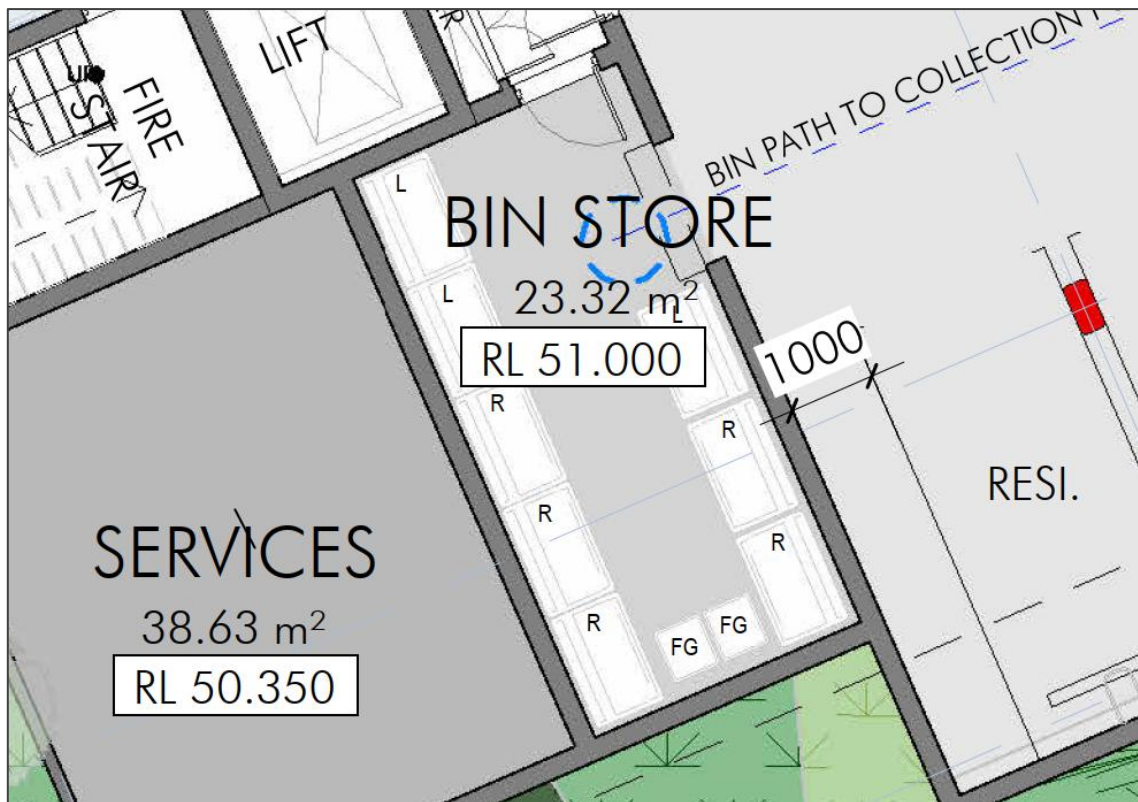
- Five 660L refuse bins; and
- Three 660L recycling bins.

Table 3-2: Residential Bin Requirements for Bin Storage Area – North Building

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	360L	660L
Refuse	3,040	13	-	5
Recycling	880	8	5	3

The configuration of these residential bins within the North Building Bin Storage Area is shown in Diagram 1. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 1 represents the maximum requirements assuming one collection each week of refuse and one collection each fortnight of recyclables.

Diagram 1: North Building Bin Storage Area



3.3 South Building Residential Bin Storage Area Size

To ensure sufficient area is available for storage of the residential bins, the amount of bins required for the South Building Bin Storage Area was modelled utilising the estimated waste generation in Table 2-3, bin sizes in Table 3-1 and based on collection of refuse once each week and recyclables once each fortnight.

Based on the results shown in Table 3-3 the South Building Residential Bin Storage Area has been sized to accommodate:

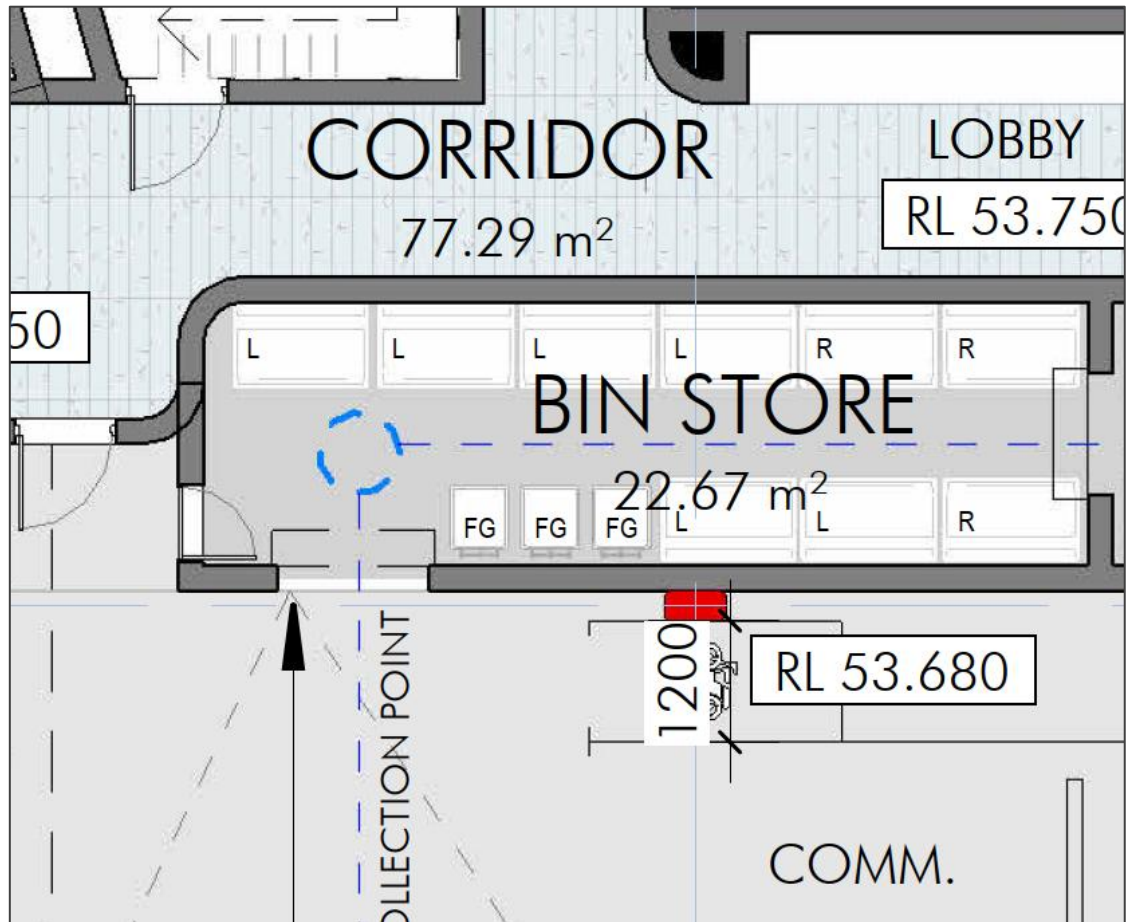
- Six 660L refuse bins; and
- Three 660L recycling bins.

Table 3-3: Residential Bin Requirements for Bin Storage Area – South Building

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	360L	660L
Refuse	3,440	15	-	6
Recycling	860	8	5	3

The configuration of these residential bins within the South Building Bin Storage Area is shown in Diagram 2. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 2 represents the maximum requirements assuming one collection each week of refuse and one collection each fortnight of recyclables.

Diagram 2: South Building Bin Storage Area



3.4 Commercial Bin Storage Area Size

To ensure sufficient area is available for storage of the commercial bins, the amount of bins required for the Commercial Bin Storage Area was modelled utilising the estimated waste generation in Table 2-4, bin sizes in Table 3-1 and based on collection of refuse twice each week and recyclables once each week.

Based on the results shown in Table 3-4 the Commercial Bin Storage Area has been sized to accommodate:

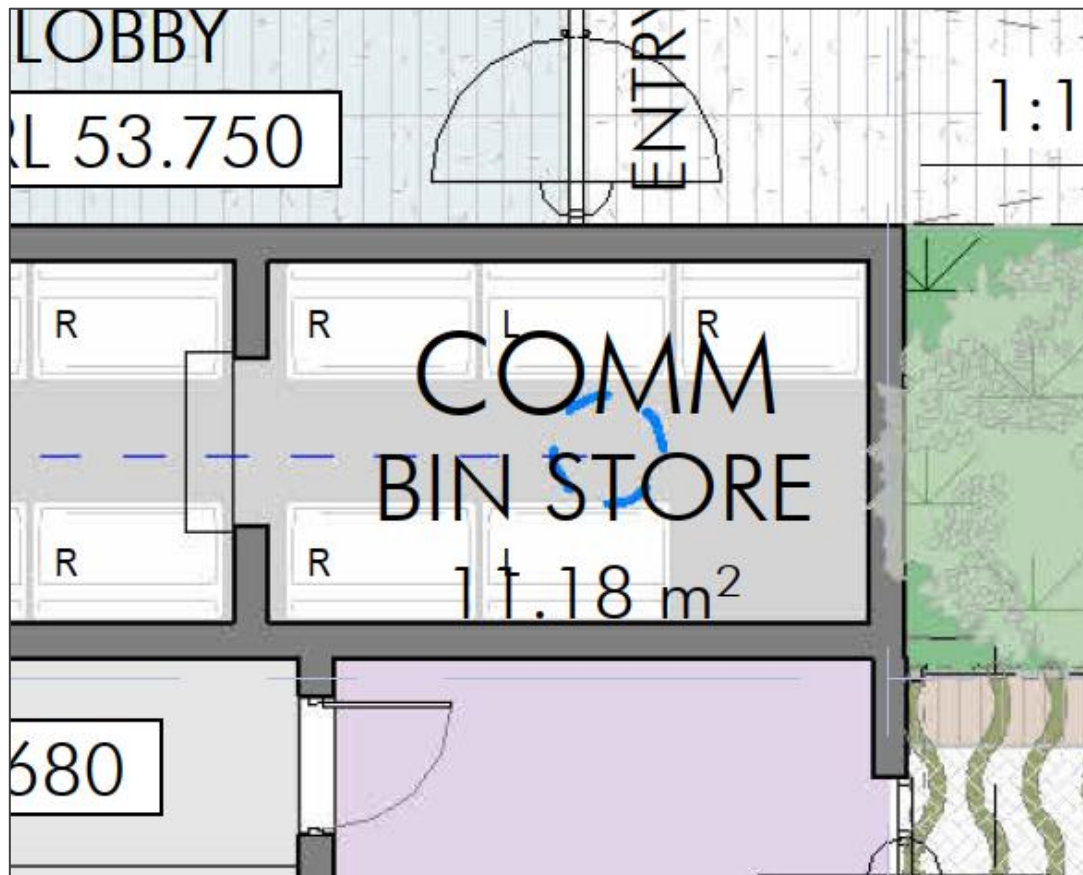
- Two 660L refuse bins; and
- Three 660L recycling bins.

Table 3-4: Bin Requirements for Bin Storage Area – Commercial

Waste Stream	Waste Generation (L/week)	Number of Bins Required	
		240L	660L
Refuse	2,268	5	2
Recycling	1,512	7	3

The configuration of these bins within the Commercial Bin Storage Area is shown in Diagram 3. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 3 represents the maximum requirements assuming two collections each week of refuse and one collection each week of recyclables.

Diagram 3: Commercial Bin Storage Area



3.5 Provision for Food Organics Garden Organics (FOGO)

In the near future it is expected that the City will be introducing bins for the separate collection of food organics and garden organics (FOGO) within multi-unit residential properties in line with the state government's Waste Avoidance and Resource Recovery (WARR) Strategy 2030. As such, the development has provided sufficient space to accommodate **an additional five 240L FOGO bins**, should the development be required to separate food waste for collection in the future, refer Diagram 1 and Diagram 2.

Kitchen caddies would be used in each residential apartment to collect FOGO, which will then be taken by residents to their respective Residential Bin Storage Area located on the Ground Floor, as shown in Diagram 1 and Diagram 2, for depositing into communal 240L lime green lidded FOGO bins.

These bins will be transferred by the building manager/caretaker to the Waste Collection Point on collection days and returned following collection. This will also allow the building manager/caretaker to monitor the waste system and help track any sources of contamination.

It is anticipated FOGO would be collected a minimum of once each week due to the malodorous nature of this type of waste. The City will assess the FOGO bin numbers and collections in the future, as required.

3.6 Bin Storage Area Design

The design of the Bin Storage Areas will take into consideration:

- Smooth impervious floor sloped to a drain connected to the sewer system;
- Taps for washing of bins and Bin Storage Areas;
- Adequate aisle width for easy manoeuvring of bins;
- No double stacking of bins;
- Doors to the Bin Storage Areas self-closing and vermin proof;
- Doors to the Bin Storage Areas wide enough to fit bins through;
- Ventilated to a suitable standard;
- Appropriate signage;
- Undercover where possible and be designed to not permit stormwater to enter into the drain;
- Located behind the building setback line;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

Bin numbers and storage space within the Bin Storage Areas will be monitored by the building manager/caretaker during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

4 Waste Collection

The City will service the residential apartments at the Proposal and provide eleven 660L bins for refuse collected once each week and six 660L bins for recyclables collected fortnightly.

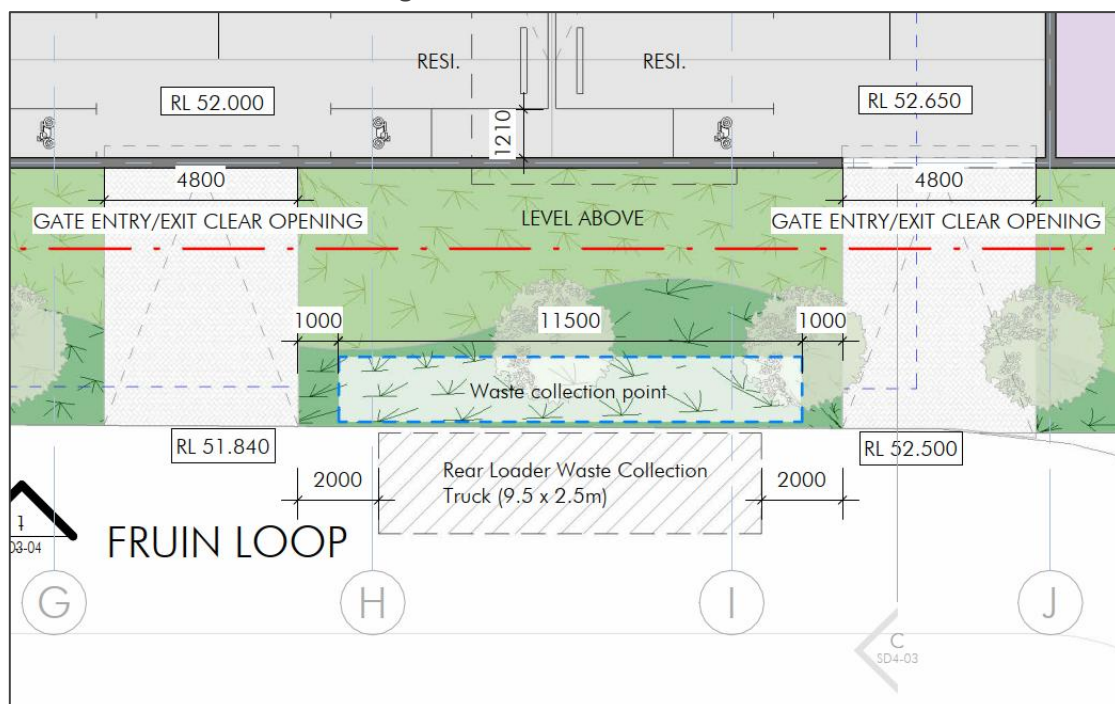
A private contractor will service the commercial tenancies at the Proposal and provide two 660L bins for refuse collected twice each week and three 660L bins for recyclables collected once each week.

The City/private contractor's rear loader waste collection vehicle will service bins directly from the Waste Collection Point on the verge on Fruin Loop to the east of the Proposal, refer Diagram 4.

The building manager/caretaker will ferry the bins to and from the Waste Collection Point on collection days, as required. The travel path between the Bin Storage Areas and the Waste Collection Point will be of flat surface and kept free of obstacles. The building manager/caretaker will return the bins to the respective Bin Storage Area as soon as possible on the same day following collection.

Once servicing is complete the City/private contractor's waste collection vehicle will continue along Fruin Loop in a forward motion, moving with traffic flow.

Diagram 4: Waste Collection Point



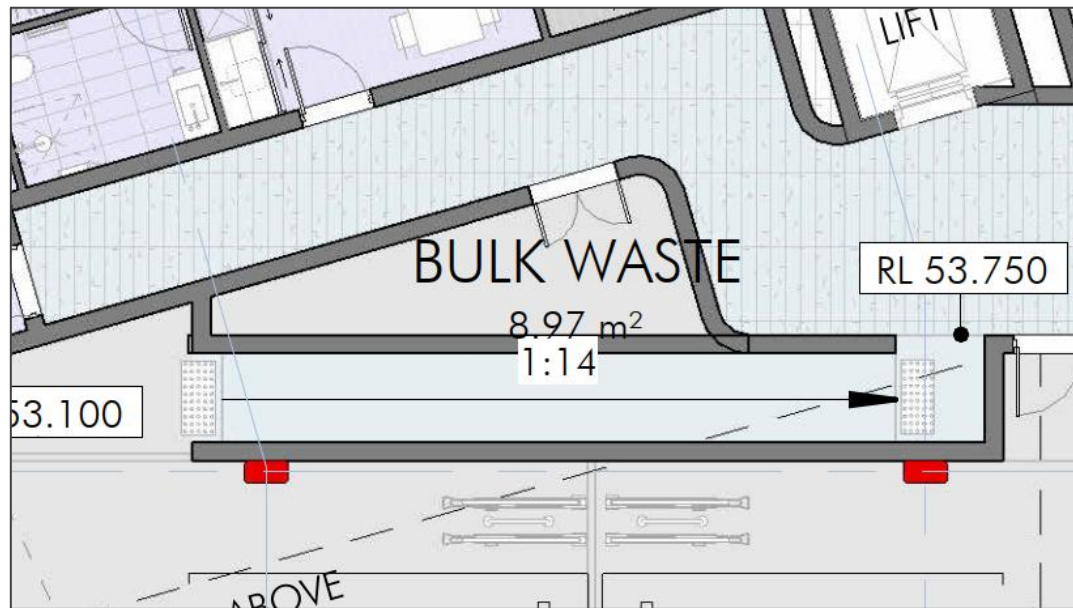
4.1 Residential Bulk Waste

To assist with the reduction of illegal dumping of bulky wastes, a bulk waste storage area of 8.97m² has been allocated on the Ground Floor of the Proposal for the temporary storage of bulk wastes, refer Diagram 5. In addition, each residential apartment has an allocated storage room of at least 4m² which could be used for the temporary storage of bulk waste.

Each financial year the City provides two household bulk waste collections, two green bulk waste collections or the choice of one of each collection services to residents.

The strata manager/caretaker will liaise with residents on procedures for bulky waste disposal within the Proposal, as required.

Diagram 5: Bulk Waste Storage



5 Waste Management

A building manager will be engaged to complete the following tasks:

- Monitoring and maintenance of bins and the Bin Storage Areas;
- Cleaning of bins and Bin Storage Areas, when required;
- Ferrying of bins to and from the Bin Storage Areas and Waste Collection Point on collection days;
- Ensure all residents/tenants at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor resident/tenant behaviour and identify requirements for further education and/or signage;
- Monitor bulk and speciality waste accumulation and assist with its removal, as required;
- Regularly engage with residents/tenants to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the City/private contractor to ensure efficient and effective waste service is maintained.

6 Conclusion

As demonstrated within this WMP, the Proposal provides sufficiently sized Bin Storage Areas for storage of refuse and recyclables, based on the estimated waste generation volumes and suitable configuration of bins. This indicates that adequately designed Bin Storage Areas have been provided, and collection of refuse and recyclables can be completed from the Proposal.

The above is achieved using:

North Building Residential:

- Five 660L refuse bins, collected once each week; and
- Three 660L recycling bins, collected once each fortnight.

South Building Residential:

- Six 660L refuse bins, collected once each week; and
- Three 660L recycling bins, collected once each fortnight.

Commercial:

- Two 660L refuse bins, collected twice each week; and
- Three 660L recycling bins, collected once each week.

The City/private contractor will collect refuse and recyclables from the Proposal utilising its kerbside collection service. The City/private contractor's waste collection vehicle will service the bins from the Waste Collection Point on Fruin Loop.

A building manager/caretaker will oversee the relevant aspects of waste management at the Proposal.

Figures

Figure 1: Locality Plan

 Site Boundary

☐ Strata Plan or Lot

☐ Freehold

 Easement

 Reserve

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Ellenbrook WA 6069

Space Collective Architects



 Coordinate System: GDA2020 MGA Zone 50

 Scale @ A3: 1:1,000

Prepared: Z O'Rourke	Date: 20/01/2026
Reviewed: J Logothetis	Revision: A
Project: WMP25149	



Figure 0-1

Data source: Roads, Cadastre, Imagery • Landgate, 2025.



Assets | Engineering | Environment | Noise | Spatial | Waste

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