WATERLOO COLLECTIVE | mirvac JOHN HOLLAND

WATERLOO METRO QUARTER OVER STATION DEVELOPMENT

Environmental Impact Statement
Appendix X – Waste Management Plan

SSD-79307746 Central Precinct

Detailed State Significant Development
Development Application

Prepared for **WL Developer Pty Ltd**

28 October 2025

Question today
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Waterloo Metro Quarter: Central Precinct
Waste Management Plan

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REV	DATE	DETAILS
A	11/09/2025	Waste Management Plan
B	22/09/2025	Waste Management Plan
C	23/09/2025	Waste Management Plan
D2	23/09/2025	Waste Management Plan

	NAME	DATE	SIGNATURE
Prepared by:	Maria Madsen	28/10/2025	
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1 INTRODUCTION

Client: *WL Developer Pty Ltd*

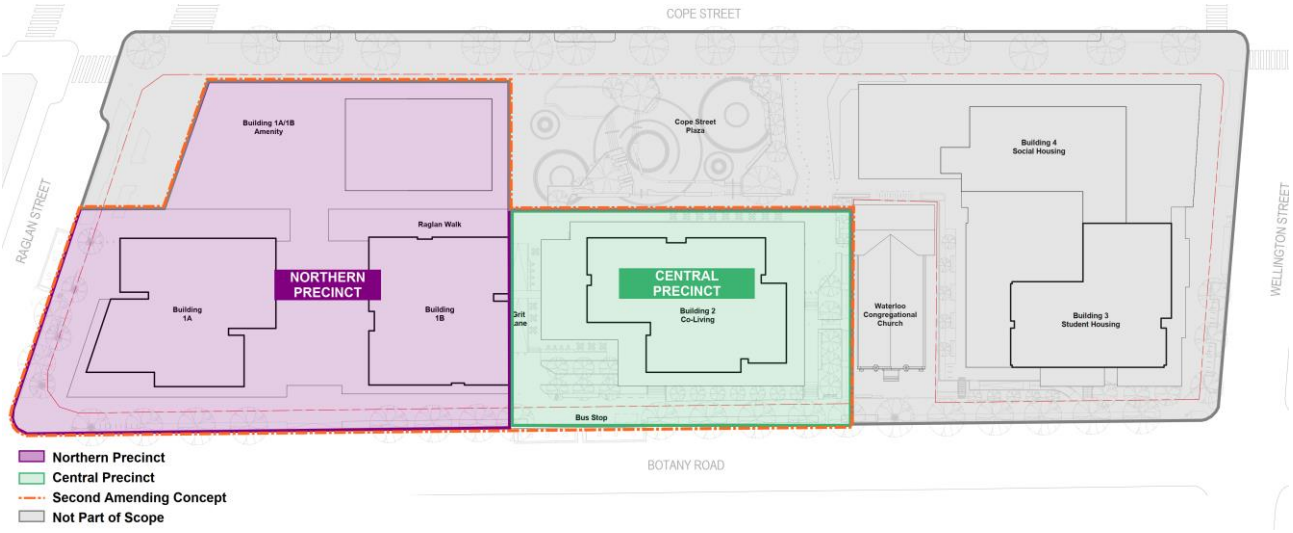
Land Use Type: *Mixed Use*

Planning Application No. *SSD-79307746*

This report has been prepared by WSP Australia on behalf of WL Developer Pty Ltd (the applicant) to accompany a State Significant Development Application (SSDA) for the detailed Central Precinct SSD (SSD-79307746), located within the Waterloo Metro Quarter (WMQ) at 150 Cope Street, Waterloo. This SSD will replace the previous detailed approval applying to the Central precinct.

This report has been prepared to respond to Item 18 (Waste Management) of the Planning Secretary's Environmental Assessment Requirements (SEARs) issued by Department of Planning, Infrastructure and Housing (DPHI) on 13 February 2025.
The figure below indicates the land to which this DA applies in relation to the overall WMQ site (shaded in green).

Figure 1 Land to which Scoping Reports Apply



This application seeks consent for the design, construction and operation of a 26 storey (including plant level) mixed use building within the Central Precinct (the site) of the WMQ estate. The proposal comprises a Co-living housing tower above a three storey podium containing retail and community facility in the form of a childcare centre. Specifically, the proposal comprises:

- Ground level retail tenancies, community facility, and childcare, co-living and shared basement access lobbies
- Community centre in the form of a childcare centre at Level 1 and Level 2
- A Co-living housing tower from Levels 3 to 24 comprising:
  - Self-contained co-living accommodation rooms across 20 levels, with capacity for around 500 rooms
  - Indoor and outdoor communal amenity at Levels 3 and 24
  - Communal space also provided on each accommodation level;
- Ground level vehicular access from Church Square shared zone to the shared basement, delivery of a pedestrian thoroughfare through the site, landscaping and public domain works.

- Indicative building signage zones

This application is submitted for concurrent assessment with a DA to amend the Waterloo Metro Over Station Development (OSD) Concept DA (SSD 9393) (the Concept DA) - referred to as the Second Amending Concept DA. The Second Amending Concept DA seeks consent to modify the existing concept approval as it relates to the Northern and Central Precincts, by amending the building envelopes to redistribute floor space to suit a new mix of land uses. This Central Precinct SSD will be consistent with the Concept DA as amended.

Separately, a Detailed SSDA for the detailed design, construction and operation of the Northern Precinct (SSD-79307758) and a Section 4.55 Modification Application to modify the approved detailed Basement SSDA (SSD 10438), will be concurrently submitted with this application.

1.1 RESPONSE TO SEARS

The proposal is State Significant Development (SSD) for the purposes of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Department of Planning, Housing and Infrastructure (DPHI) have issued Secretary's Environmental Assessment Requirements (SEARs) to the applicant under planning application number SSD-79307746. These SEARs will provide the basis for the preparation of an Environmental Impact Statement (EIS) for the proposed development.

Waste specific SEARs have been addressed throughout this report as per Table 1 below.

Table 1 SEARs Requirements (SSD-79307746)

Item	Description of Requirement	Section Reference (this report)
18. Waste Management	*Identify, quantify and classify the likely waste streams to be generated during construction and operation..*	Sections 3.1 and 4.1
	Provide the measures to be implemented to manage, reuse, recycle and safely dispose of waste in accordance with any council waste management requirements.	Sections 3 and 4
	Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site.	Section 3.7 and 3.8

This report has further considered City of Sydney's Advice on Request for SEARs relevant to the subject development. These comments have been addressed throughout this report as per Table 2 below.

Table 2 City of Sydney – Advice on Request for SEARs

Item	City of Sydney (CoS) Comment	Section Reference (this report)
Waste Management	*The EIS should detail how waste management facilities including waste infrastructure, waste storage areas, truck access and loading facilities will comply with Council's requirements for waste management facilities in accordance with the SDCP 2012 and the City's Guidelines for Waste Management in New Developments (2018).*	Section 1.2 (response to CoS DCP) Appendix C (response to CoS waste guidelines)
	The EIS should outline onsite servicing arrangements that meet Council requirements for a standard residential waste collection in accordance with the SDCP 2012, incorporating a 10.6m waste collection vehicle. It is noted that the Design Guidelines refer to the	Section 3.8

Item	City of Sydney (CoS) Comment	Section Reference (this report)
	requirements for a now redundant waste collection vehicle fleet.	
	Co-living must be designed in accordance with residential requirements in the Guidelines for Waste Management in New Developments and the SDCP 2012.	Section 1.2 (response to CoS DCP) Appendix C (response to CoS waste guidelines)

This report has further considered relevant development consent requirements of SSD 10441 where appropriate. Waste specific development conditions of SSD 10441 have been addressed throughout this report as per Table 3 below.

Table 3 Development Consent Requirements (SSD 10441)

Development Consent Condition	Description	Section Reference (this report)
B18	*Construction Impact Assessment* *Future development applications shall provide analysis and assessment of the impacts of construction works and include:* *(a) Construction Traffic and Pedestrian Management Plan, as per Condition B12* *(b) Community Consultation and Engagement Plan(s)* *(c) Noise and Vibration Impact Assessment* ***(d) Construction Waste Management Plan*** *(e) Air Quality Management Plan.*	Section 4

1.2 APPLICATION STANDARDS

This Waste Management Plan (WMP) and the waste generation rates therein have been prepared based on City of Sydney document *Guidelines for waste management in new developments* (2018) and current best practice waste management methodology and technologies commonly available in Australia.

This WMP has been prepared in accordance with the City of Sydney document *Guidelines for Waste Management in New Developments* (2018), as per standard Council requirements. A response to the requirements of this document is provided in Appendix C.

The requirements of the City of Sydney Development Control Plan have been further captured as part of this assessment (Development Control Plan Sections 3.11.13 - Design and location of waste collection points and loading areas, 3.14 – Waste; and 4.2.6 - Waste and recycling management), as summarised in Table 4 below:

Table 4 City of Sydney DCP Requirements (Waste Management)

City of Sydney DCP Requirement	WSP Response	WMP Reference
3.11.13 - Design and location of waste collection points and loading areas		
(1). Waste collection and loading is to be in accordance with the City of Sydney's Guidelines for Waste Management in New Developments (the Guidelines) and accommodated wholly within new development in order of preference: *(a) in the building's basement; or*	The WMP has been prepared in accordance with the City of Sydney document *Guidelines for Waste Management in New Developments* (2018). All waste collections will occur onsite from the Northern Precinct loading dock at ground level. On-street waste collection and loading is not proposed under this WMP.	Section 3.8

City of Sydney DCP Requirement	WSP Response	WMP Reference
(b) at grade within the building in a dedicated collection or loading bay; or *(c) at grade and off street within a safe vehicular circulation system wherein all cases vehicles will enter and exit the premises in a forward direction.* *Consideration will only be given to less preferable options if the consent authority is satisfied the preferred options are unreasonable.*		
(2) The waste collection and loading point is to be designed to: *(a) allow waste collection and loading operations to occur on a level surface away from vehicle ramps; and* *(b) provide sufficient side and vertical clearance to allow the lifting arc for automated bin lifters to remain clear of any walls or ceilings and all ducts, pipes and other services.*	Waste collection will be undertaken from the Northern Precinct loading dock at ground level. Loading dock conditions will cater for the side and vertical clearance required for waste collection.	Section 3.8
(3) Vehicle access for collection and loading will provide for: *(a) a 9.25m Council garbage truck and a small rigid delivery vehicle;* *(b) minimum vertical clearance of 4.0 metres clear of all ducts, pipes and other services, depending on the gradient of the access and the type of collection vehicle;* *(c) collection vehicles to be able to enter and exit the premises in a forward direction. Where a vehicle turntable is necessary to meet this requirement, it is to have a capacity of 30 tonnes;* *(d) maximum grades of 1:20 for the first 6m from the street, then amaximum of 1:8 with a transition of 1:12 for 4m at the lower end;* *(e) a minimum driveway width of 3.6m; and* *(f) a minimum turning circle radius of 10.5m.*	Waste collection will be undertaken from the loading zone at ground level. The loading dock can accommodate standard City of Sydney sized collection vehicles (9.25m length, 2.6m width, 4.0m height clear required) or smaller. Bins presented for collection throughout the dock will be at grade with the collection vehicle. Transfer of bins across a change in grade is not proposed. Collection vehicles will enter and exit the site in a forwards direction. An turntable will be within the loading dock to facilitate vehicle access.	Section 3.8
(4) Where vehicle access is via a ramp, design requirements for the gradient, surface treatment and curved sections are critical and must be analysed at an early stage in the design process.	Waste collection will be undertaken from the loading zone at ground level. Collection vehicles will be required to traverse an access to a minor gradient it has been design to cater for standard City of Sydney sized collection vehicles (9.25m length, 2.6m width, 4.0m height clear required) or smaller private contractor vehicles.	Section 3.8
3.14.1 Waste and Recycling Management Plans		

City of Sydney DCP Requirement	WSP Response	WMP Reference
(1) A Waste and Recycling Management Plan is to be submitted with the Development Application and will be used to assess and monitor the management of waste and recycling during construction and operational phases of the proposed development. The Waste and Recycling Management Plan is to be consistent with the City of Sydney Guidelines for Waste Management in New Developments.	The WMP has been prepared in accordance with the City of Sydney document *Guidelines for Waste Management in New Developments* (2018).	Section 1.2, Appendix C
3.14.2 Construction and demolition waste		
(1) The Waste and Recycling Management Plan is to address construction and demolition waste and include: *(a) details regarding how waste is to be minimised within a development;* *(b) estimations of quantities and types of materials to be re-used or left over for removal from the site;* *(c) details regarding the types of waste and likely quantities of waste to be produced;* *(d) a site plan showing storage areas away from public access for reusable materials and recyclables during demolition and construction and the vehicle access to these areas;* *(e) targets for recycling and reuse;* *(f) nomination of the role/person responsible for ensuring targets are met and the person responsible for retaining waste dockets from facilities appropriately licensed to receive the development's construction and demolition waste;* *(g) confirmation that all waste going to landfill is not recyclable or hazardous; and* *(h) measures to reuse or recycle at least 80% of construction and demolition waste, either on site or diverted for reuse and recycling with receipts sufficient to demonstrate the target will be achieved.*	A high-level summary of Construction & Demolition waste requirements is included within this WMP. The information as shown is not intended to form the basis of any construction and/or demolition works, and will be superseded in full by the C&D strategy as nominated in the Construction Management Plan as appropriate.	Section 4
3.14.3 Collection and minimisation of waste during occupation		
(1) The Waste and Recycling Management Plan is to address the generation of waste from the occupants of the development and include: *(a) plans and drawings of the proposed development that show:* *(i) the location and space allocated to the waste and recycling management systems;*	The WMP has been prepared in accordance with the City of Sydney document *Guidelines for Waste Management in New Developments* (2018), and features the following: - Plans and drawings of the proposed development - Waste generation	Sections 3

City of Sydney DCP Requirement	WSP Response	WMP Reference
(ii) the nominated waste collection point/s for the site; and *(iii) identify the path of access for users and collection vehicles.* *(b) details of the on-going management of the storage and collection of waste and recycling, including responsibility for cleaning, transfer of bins between storage areas and collection points, maintenance of signage, and security of storage areas; and* *(c) where appropriate to the nature of the development, a summary document for tenants and residents to inform them of waste and recycling management arrangements.*	- Details of the on-going management of the storage and collection of waste and recycling ***If required***, this document may be used as to inform residents/tenants of proposed operations.	
(2) Waste incineration devices are not permitted.	No incineration devices are proposed onsite.	
(3) Development is to include sufficient space in kitchens to separate food waste collection or compostable material for composting or worm farming.	The office, retail, childcare, and co-living facilities of the site will be provided with separate food organics bins.	Sections 3.3.3
(4) Development is to include a separate space in a room or screened area for the storage and management of bulky waste (this can include furniture, mattresses and stripout waste) and problem waste (this can include light bulbs and electronic waste) for recycling collection.	A series of bulky waste spaces will be provided throughout the site for the further separation of this stream. Residential, office, retail, childcare, and co-living facilities will each have access to a bulky waste drop off area.	Sections 3.3.4
4.2.6.1 Waste and recycling management (General)		
(1) Comply with the City of Sydney's Guidelines for Waste Management in New Developments.	The WMP has been prepared in accordance with the City of Sydney document *Guidelines for Waste Management in New Developments* (2018	Section 1.2, Appendix C
4.2.6.2 Waste and recycling management (Additional provisions for mixed use developments)		
(1) The waste handling, storage and collection systems for residential and non-residential waste are to be separate and self-contained, this includes separate keys and locking systems.	All commercial waste will be stored separately to residential waste, with separate retail, office, childcare, and co-living waste stores provided throughout the site. Direct internal access to the commercial waste store is provided.	Appendix A
(2) Provide easy access from each central waste and recycling storage area to the nominated collection point.	Direct access is provided to each waste store as necessary. Waste store access will be limited according to user (i.e. residential waste room limited to residents only, retail waste store limited to retail tenants only, etc.). Access pathways are shown in Appendix A.	Appendix A
(3) The Waste Management and Recycling Plan is required to separately identify the collection points	Separate waste management systems have been nominated for residential waste and commercial	Sections 3

City of Sydney DCP Requirement	WSP Response	WMP Reference
and management systems for both residential and non-residential waste streams.	waste, including separate disposal, storage, and collection arrangements.	
(4) Demonstrate that noise and odour from the non-residential waste and recycling management system does not impact on other occupants within the development	Ventilation throughout each waste room will be provided in accordance with Australian Standard AS1668, as to avoid impact on other occupants and surrounding development.	Section 3.9.1
(5) The design and management of the waste management system is to physically and actively discourage non-residential tenants from using residential waste and recycling systems.	All commercial waste will be stored separately to residential waste, with separate retail, office, childcare, and co-living waste stores provided throughout the site. Direct internal access to the commercial waste store is provided.	Appendix A

1.3 GREEN STAR CRITERIA ASSESSMENT

The Operational Waste Management Plan (OWMP) within this document follows best practice waste engineering systems. Table 5 provides a review of Credit 8A (Operational Waste) of *Green Star Design & As Built v1.3* criteria in comparison to this OWMP.

Table 5 Green Star Criteria Assessment (Credit 8A)

Green Star Credit 8A Criteria	Operational Waste Management Plan Response
Identify the site boundary, the waste streams relevant to the project, and the individual roles responsible for delivering and reviewing the OWMP;	Appendix A identifies the site boundaries. Section 3.2 identifies the relevant waste streams, such as general waste and recyclables. Section 3.9.3 identifies the individual roles with regard to delivery and review of the OWMP.
Set diversion from landfill targets and/or targets for reducing total materials generation (general waste materials and recyclable/reusable materials), as well as monitoring and measurement procedures for waste and recycling streams by weight;	Section 3.9.3 details required monitoring and measurement procedures.
Outline methods for encouraging the separation of waste streams, such as bins, storage areas, or recycling facilities in public areas as required;	Sections 3.2 through 3.8 contain relevant information regarding the provision of bin storage, recycling facilities and encouragement for waste stream separation.
Identify storage areas for all waste streams and outline best practice safety and access requirements for their collection;	Sections 3.7 and 3.8 detail the bin storage requirements and collection methods, respectively, adhering to best practice waste design and safety.
Identify safe methods for vehicle access and transfer of waste; and	Section 3.8 identifies the waste collection method in accordance with best and safe practices.
Incorporate a review process to assess the success of the OWMP and make improvements, based on operational experience.	Section 3.9.3 identifies the review process to be implemented for the OWMP.

1.4 CUMULATIVE IMPACTS & MITIGATION MEASURES

A number of potential cumulative impacts of the proposed development have been identified below. Provided the associated mitigation measures as listed are enacted, the potential impact of each item is considered acceptable.

Table 6 Cumulative Impacts & Mitigation Measures

Development Phase	Potential Impact	Mitigation Measure
Construction	Noise generated throughout construction waste collection (likely an open-air collection) to impact upon surrounding development.	Construction waste will be collected between the allowable work times as dictated by City of Sydney (i.e. between work from 7.30am to 5.30pm Monday to Friday and 7.30am to 3.30pm Saturday).
Construction	Dust / debris / odours generated throughout construction activities not contained within the dedicated construction waste skips.	The Construction Management Plan (to be prepared by the construction contractor) will consider air quality and acoustics measures throughout the site to minimise risk. Rain, wind, and shading will be considered in the placement of any construction waste skips throughout the site, as to minimise risk. Construction waste skips should feature the capacity to be covered (with a tarp or otherwise) during periods of high wind / rainfall.
Construction	Construction waste collection vehicles to impact upon local traffic conditions.	Construction waste collection will be scheduled such that access to the site is not impeded by any other heavy duty vehicles onsite (i.e. materials delivery vehicles). Construction waste collection vehicles will not be expected to prop on-street or circulate throughout the local road network in wait of site access.
Construction	Potential conflict between construction waste vehicles and local pedestrians.	Traffic Management will be provided throughout construction. The contractor will be responsible for supervising the access of all incoming vehicles, for temporarily limiting pedestrian movements , and for installing safety measures throughout the site.
Operations	Various impacts resulting from ongoing operations.	A series of management measures during the operational stage is provided in Section 3.9.3.

2 SCOPE OF REPORT

The following Waste Management Plan (WMP) has been prepared for the proposed Central Precinct SSD (SSD-79307746) development located within the Waterloo Metro Quarter (WMQ) at 150 Cope Street, Waterloo.

The Waste Management Plan is prepared to support the State Significant Development Application (SSD-79307746) and aims to deliver integrated waste management solutions that reduce risk, enhance operational efficiency, and align with engineering design principles. Key components of the scope include:

- Waste volume calculations to estimate expected waste generation across all relevant streams.
- Identification of appropriate waste streams, including general waste, co-mingled recyclables, food organics, electronic waste (e-waste), bulky waste, secure paper, and other relevant categories.
- Assessment of waste management equipment options and determination of storage area requirements to support efficient waste handling.
- Recommendations for waste disposal pathways, including internal transfer routes and external collection vehicle movements.
- Advice on available waste collection vehicles and methods, tailored to site constraints and operational needs.
- Spatial planning for waste loading areas, ensuring compliance with safety and access standards.
- Guidance on safe waste management practices for both operators and building occupants.
- Review of swept path analysis (as prepared by the traffic consultant) to confirm suitability of waste collection vehicle access and manoeuvrability

3 OPERATIONAL WASTE MANAGEMENT PLAN

A single loading dock will be shared between the subject Central Precinct development (SSD-79307746) and the adjacent Northern Precinct development (SSD-79307758). As shown in Appendix A, this loading dock will be provided within the Northern Precinct, with pedestrian connections throughout the wider site **and** shared basement levels across the two sites to enable shared use by Central Precinct users.

This loading dock will serve as the single point of waste collection for all Northern Precinct and Central Precinct uses. Given the shared nature of the Northern Precinct loading dock, the following section includes an overview of key Northern Precinct waste features where necessary (i.e. description of bin quantities, loading dock access, collection arrangement, etc.).

A separate Waste Management Plan has been prepared for the Northern Precinct, further outlining additional site features as appropriate.

3.1 WASTE GENERATION

A summary of proposed land use across the site is provided in Table 7 below. These quantities / areas will form the basis of the waste generation assessment, calculated in accordance with the City of Sydney document *Guidelines for waste management in new developments* (2018).

Note that as per direction from the project team, the following retail spaces at ground level have been assumed to operate as food & beverage (F&B):

- **Northern Precinct**: N01, N02, N03, N04, N05, N06
- **Central Precinct**: C01, C02, C03, C04, C05, C06, C07

Table 7 Development Summary

Use	Quantity / Area (GFA)			
	Building 1A	**Building 1B**	**Building 2**	**Total**
One Bedroom Dwelling	65	85	-	150
Two Bedroom Dwelling	77	62	-	139
Three Bedroom Dwelling	25	-	-	25
Office	4,915m^2		-	4,915m^2
Retail (F&B)	714m^2		386m^2	1,100m^2
Retail (non-food)	67m^2		142m^2	209m^2
Childcare	-		2,254m^2	2,254m^2
Co-living *	-		14,480m^2	14,480m^2

** Area is inclusive of community facilities.*

Waste generation rates are shown in Table 8, and a waste generation assessment (per the collective quantities and areas as noted above) in Table 9 through Table 11. Calculations are based on a 5 day per week operation of the office and childcare spaces, and a 7 day per week operation for all other uses. All generation rates as shown have been adapted from the City of Sydney document *Guidelines for waste management in new developments* (2018).

Note that the below waste generation assessment adopts Gross Floor Areas, inclusive of areas typically considered ancillary to the active uses of the site (lobby, amenity, etc.). Noting that these ancillary uses are not typically considered to generate additional waste, the below waste volumes are considered highly conservative.

Further note that a single retail waste room is proposed to be shared between the Northern Precinct and Central Precinct (to be located at ground level within the Northern Precinct), and as such the below considers collection retail waste volumes across the two developments.

Table 8 Waste Generation Rates (Northern Precinct + Central Precinct)

Use	Metric	Waste Generation Rates			
		General Waste	Co-mingled	Paper / Cardboard	Organics
One Bedroom Dwelling	L/dwelling/week	120	120	-	-
Two Bedroom Dwelling	L/dwelling/week	120	120	-	-
Three Bedroom Dwelling	L/dwelling/week	120	120	-	-
Office	L/100m^2/week	75	39	86	25
Retail (non food)	L/100m^2/week	210	100	1,300	-
Retail (F&B)	L/100m^2/week	700	1,000	2,500	700
Childcare	L/100m^2/week	250	125	125	75
Co-living	L/100m^2/week	210	210	-	210

Table 9 Waste Generation Assessment (Northern Precinct)

Precinct	Use	Quantity / Area	Waste Generation Assessment (L/week)			
			General Waste	Co-mingled	Paper / Cardboard	Organics
Northern Precinct	Residential: Building 1A	167	20,040	20,040	-	-
	Residential: Building 1B	147	17,640	17,640	-	-
	Office	4,915m^2	3,686	1,931	4,213	1,229

Table 10 Waste Generation Assessment (Central Precinct)

Precinct	Use	Quantity / Area	Waste Generation Assessment (L/week)			
			General Waste	Co-mingled	Paper / Cardboard	Organics
Central Precinct	Childcare	2,254m^2	5,635	2,818	2,818	1,691
	Co-living	14,480m^2	30,408	30,408	-	30,408

Table 11 Waste Generation Assessment (Combined Retail Northern Precinct + Central Precinct))

Precinct	Use	Area	Waste Generation Assessment (L/week)			
			General Waste	Co-mingled	Paper / Cardboard	Organics
Northern Precinct	Retail (F&B)	714m^2	4,998	7,140	17,850	4,998
	Retail (non food)	67m^2	141	67	871	-
SUBTOTAL – NORTHERN PRECINCT			**5,139**	**7,207**	**18,721**	**4,998**

Precinct	Use	Area	Waste Generation Assessment (L/week)			
			General Waste	Co-mingled	Paper / Cardboard	Organics
Central Precinct	Retail (F&B)	386m^2	2,702	3,860	9,650	2,702
	Retail (non food)	142m^2	298	142	1,846	298
SUBTOTAL – CENTRAL PRECINCT			**3,000**	**4,002**	**11,496**	**2,702**
TOTAL RETAIL WASTE			**8,139**	**11,209**	**30,217**	**7,700**

3.2 WASTE SYSTEMS

Waste shall be sorted on-site by building occupants as appropriate into the following streams:

- General Waste (General Waste)
- Co-mingled Recycling
- Paper/Cardboard
- Organics
- Bulky Waste / Electronic Waste
- Charity

3.2.1 WASTE CLASSIFICATION

In accordance with the NSW EPA document Waste Classification Guidelines (2014), General Waste and food organics volumes will generally be treated as **general solid waste (putrescible)**, and all other volumes (co-mingled recycling, paper/cardboard, bulky waste, etc.) as **general solid waste (non-putrescible)**.

Whilst intact electronics (including fluorescent tubes, batteries, and mobile phones) can generally be treated as **general solid waste (non-putrescible)**, once broken these materials are often re-classified as **hazardous waste** due to chemical leakage. Any broken electronics will be classified on a case-by-case basis, with any ensuring hazardous waste volumes treated as separate volumes in accordance with proper handling protocols.

Each waste category will be managed, stored, and collected in accordance with appropriate standards. Storage areas will only be accessible by authorised personnel.

3.2.2 WASTE DESIGN FEATURES

A series of waste design features are provided across the Basement, Northern Precinct, and Central Precinct, as outlined in Table 12 below.

Table 12 Waste Design Features

Waste Design Feature	Location	Level(s)	Description
Loading Dock	Northern Precinct	Ground Level	Loading facilities to be shared between both the Northern Precinct and Central Precinct. The loading dock will serve as the point of waste collection for all uses across the Northern Precinct and Central Precinct.
Dual Waste Chutes	Northern Precinct	L04 – L27 (Building 1A) L04 – L24 (Building 1B)	To be used by the residents of the Northern Precinct apartments for the disposal of garbage and co-mingles.

Waste Design Feature	Location	Level(s)	Description
Dual Waste Chutes	Central Precinct	L03 – L24 (Building 2)	To be used by the residents of the Central Precinct co-living for the disposal of garbage and co-mingles.
Building 1A Waste Room	Northern Precinct	Ground Level	Waste room in which the Building 1A dual chutes will terminate.
Building 1B Waste Room	Northern Precinct	Ground Level	Waste room in which the Building 1B dual chutes will terminate.
Residential Bulky Waste Room	Northern Precinct	Ground Level	Waste room in which Northern Precinct residents will dispose of bulky waste.
Office Waste Room	Northern Precinct	Ground Level	Waste room in which commercial (office) tenancies of the Northern Precinct will dispose of waste.
Retail Waste Room	Northern Precinct	Ground Level	A shared waste room in which retail tenancies of both the Northern Precinct **and** Central Precinct will dispose of waste.
Childcare Waste Room	Basement	Basement Level 01	Waste room in which childcare tenancy of the Central Precinct will dispose of waste.
Co-living Chute Room	Basement	Basement Level 01	Waste room in which the Building 2 dual chutes will terminate.
Co-living Waste Room	Basement	Basement Level 01	Waste room in which co-living waste equipment (including bulky waste) will be predominately stored.

The general position of each of the above listed waste design features in shown in Figure 2 (ground level), Figure 3 (basement), and Figure 4 (upper levels) for ease of reference. Architectural plans of each level are further provided in Appendix A.

Figure 2 Northern Precinct Waste Design Features – Ground Level (Indicative)

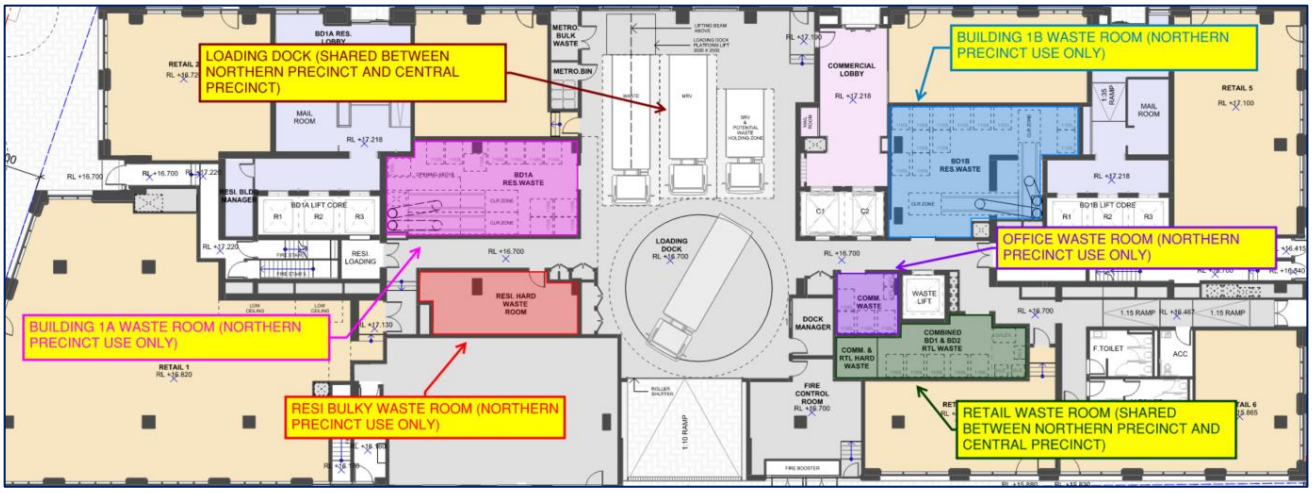


Figure 3 Basement Waste Design Features (Indicative)

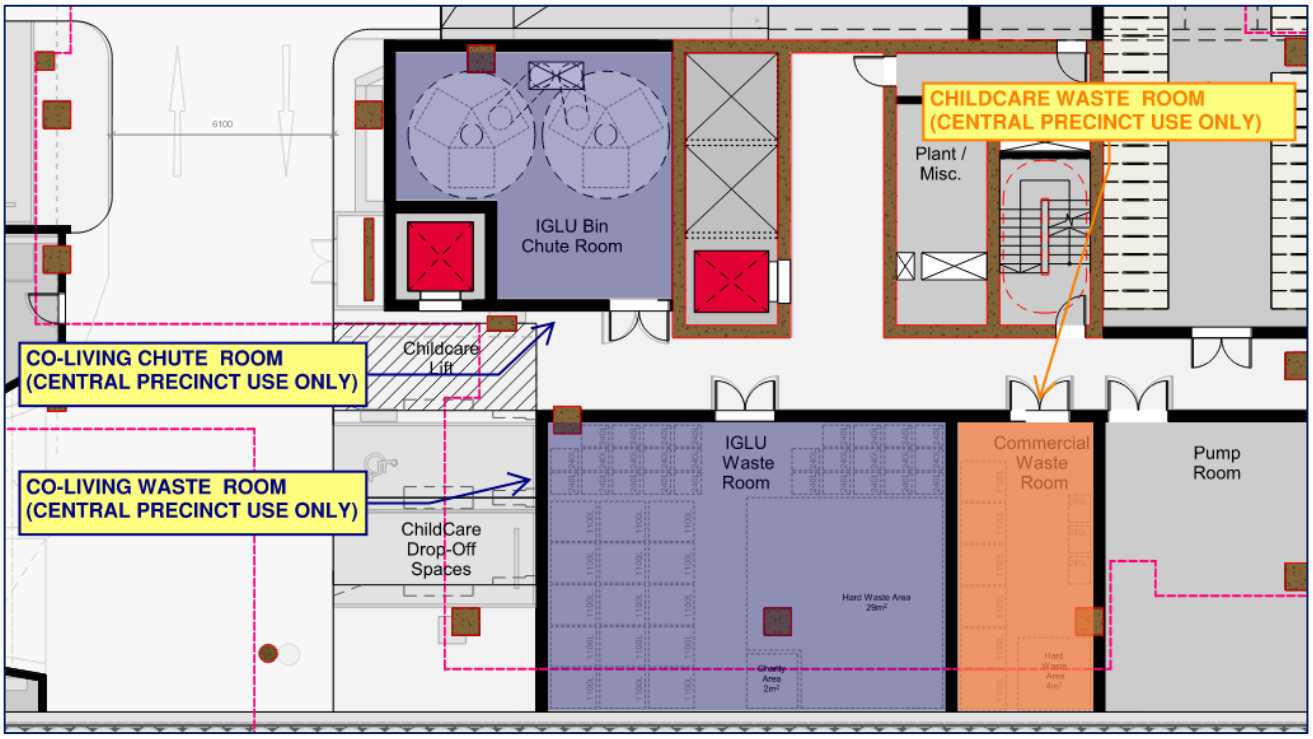
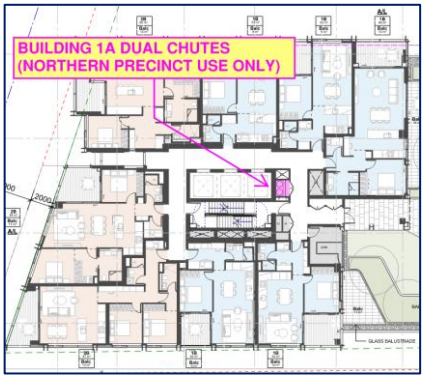
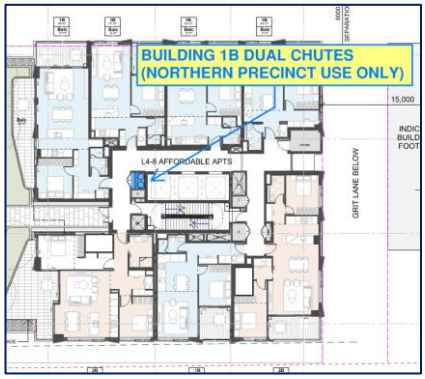


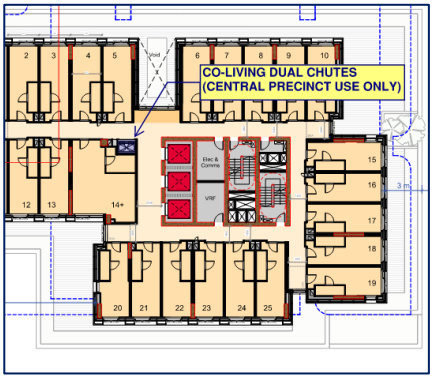
Figure 4 Northern Precinct + Central Waste Design Features – Upper Levels (Indicative)



Building 1A
(Northern Precinct)



Building 1B
(Northern Precinct)



Building 2
(Central Precinct)

3.3 WASTE DISPOSAL PROCEDURES

3.3.1 GENERAL WASTE, CO-MINGLED RECYCLING

RESIDENTIAL, CO-LIVING

Each building (Building 1A, Building 1B, Building 2) will be fitted with a set of dual chutes. Residents throughout the development will dispose of waste using these provided dual chute systems as appropriate, with each set to contain one chute dedicated to garbage and another dedicated to co-mingled recycling (refer Appendix A).

The dual chutes will terminate directly within 1100L bins either at ground level (Building 1A Waste Room, Building 1B Waste Room) or at Basement level (Co-living Chute Room). A bin changeover unit will be provided at the termination point of each chute, as to provide a means of automatically rotating the 1100L bins beneath each chute. The following changeover systems are provided per waste room:

- **Building 1A Waste Room**: Linear bin conveyors, 3x 1100L bins per unit

- **Building 1B Waste Room**: Linear bin conveyors, 3x 1100L bins per unit
- **Co-living Chute Room (Building 2):** Bin carrousels, 3x 1100L bins per unit

The General Waste chutes of Building 1A and Building 1B will be further fitted with at-chute compactor units, as to provide a means of compacting waste prior to end discharge within the 1100L bins. Residential garbage bins should feature reinforced bases to account for the additional weight of the compacted waste.

Specification sheets of the proposed bin conveyors, bin carousels, and at-chute compactor units are provided in Appendix E for reference.

OFFICE, RETAIL, CHILDCARE

Each office, retail and childcare space shall have provision for plastic-lined general waste and co-mingled recycling bins for the temporary holding of waste, the size and position of which will be subject to the operational preference and internal fitout of each individual tenancy. Each individual tenancy will be responsible for the respective purchase and installation of any bins intended for the temporary holding of waste. Building management will not provide any such bins.

Each tenancy should allow for temporary holding bins of sufficient capacity to hold one days' worth of waste. Staff and/or cleaners will transfer waste from these bins directly to the 1100L bins within the relevant waste room at ground level (Office Waste Room, Retail Waste Room) or basement level (Childcare Waste Room) as required.

3.3.2 PAPER / CARDBOARD

RESIDENTIAL, CO-LIVING

Any cardboard volumes generated by residents not suitable for chute disposal will be disposed of within the bulky waste spaces either at ground level (Residential Bulky Waste Store) or basement level (Co-living Waste Room).

All other (small) cardboard volumes will be disposed of alongside co-mingled recycling via the dual chutes.

OFFICE, CHILDCARE

1100L drop off bins will be provided at ground level (Office Waste Room) and basement level (Childcare Waste Room) for the disposal of any large cardboard volumes generated by these users.

RETAIL

A cardboard baler is provided at ground level (Retail Waste Room) for the disposal of any large cardboard volumes generated by the retail users.

Baler use will be limited to trained staff only.

3.3.3 FOOD ORGANICS

OFFICE, CHILDCARE, CO-LIVING

240L drop off bins will be provided at ground level (Office Waste Room) and basement level (Childcare Waste Room, Co-living Waste Room) for the disposal of any organics generated by these users.

RETAIL

660L drop off bins will be provided at ground level (Retail Waste Room) for the disposal of any organics generated by these users.

3.3.4 BULKY WASTE AND ELECTRONIC WASTE (E-WASTE)

RESIDENTIAL, OFFICE, RETAIL, CHILDCARE, CO-LIVING

A series of bulky waste spaces are provided across the site at ground level (Residential Bulky Waste Store, Commercial Bulky Waste Store) and basement level (Co-living Waste Room, Childcare Waste Room) for the disposal of bulky waste. Bulky waste will be transferred from the upper levels via the lift(s), with facilities management (or equivalent) to assist with and supervise the transfer of residential hard waste.

Of the area provided, approximately half will be dedicated to the disposal of e-waste. It is recommended a 660L e-waste bin be incorporated into each bulky waste area for the disposal of smaller e-waste goods (such as phones and computer keyboards), with larger goods (such as televisions and computer monitors) being disposed of across the remaining floor space.

3.3.5 CHARITY / TEXTILES

RESIDENTIAL

A 660L charity bin (or similar) for the disposal of high-quality charitable goods such as clothing or sporting goods is to be provided within the bulky waste room.

The building manager is to select a charity who is to provide the bins and perform collections on an as required basis.

3.4 INTERNAL WASTE TRANSFER

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

Transfer of waste between basement level and ground level will be undertaken via the goods lift (refer Appendix A), with bins to be carted between the waste stores and goods lift via the carpark aisle. A mechanical bin tug will be used to assist in the transfer of bins. All transfers are to be undertaken outside of peak operating periods to minimise any potential conflict with vehicle movements throughout the carpark.

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 service doors as required.

Figure 5 Example Bin Tug

3.5 WASTE EQUIPMENT DETAIL

Table 13 through Table 16 outline the equipment sizes and collection frequencies for the development.

As per industry standard, a compaction ratio of 2:1 has been adopted for the at-chute compactor units for building 1, and 5:1 for the cardboard baler. WSP understands that higher ratios can be achieved under certain conditions.

Otherwise, given the variance between capacities and actual volumes, from time-to-time lesser collection frequencies than those specified below may be required. Waste will be generally collected as volumes approach maximum capacities.

While the projected organic waste volume for Co-living areas and general waste for Office exceeds the available bin capacity, this is considered negligible due to the highly conservative nature of the waste generation rates. These estimates are intentionally cautious to ensure system adequacy, and as such, the specified waste management system is deemed appropriate

Table 13 General Waste Equipment Detail

General Waste					
Waste Stream	**Equipment**	**Compaction Ratio**	**Collections Per Week**	**Weekly Capacity (Uncompacted)**	**Weekly Volume (Uncompacted)**
Residential: Building 1A	5x 1100L Bins	2:1	2	22,000L	20,040L
Residential: Building 1B	4x 1100L Bins	2:1	2	17,600L	17,640L
Office	1x 1100L Bin	nil	3	3,300L	3,686L
Retail	3x 1100L Bins	nil	3	9,900L	8,139L
Childcare	2x 1100L Bins	nil	3	6,600L	5,635L
Co-living	10x 1100L Bins	nil	3	33,000L	30,408L

Table 14 Co-mingled Recycling Equipment Detail

Co-mingled Recycling					
Waste Stream	**Equipment**	**Compaction Ratio**	**Collections Per Week**	**Weekly Capacity (Uncompacted)**	**Weekly Volume (Uncompacted)**
Residential: Building 1A	9x 1100L Bins	nil	2	19,800L	20,040L*
Residential: Building 1B	8x 1100L Bins	nil	2	17,600L	17,640L*
Office	1x 1100L Bin	nil	2	2,200L	1,931L
Retail	5x 1100L Bins	nil	3	16,500L	11,209L
Childcare	2x 1100L Bins	nil	3	4,400L	2,818L
Co-living	10x 1100L Bins	nil	3	33,000L	30,408L

** It is noted that the anticipated recycling volumes exceed capacity volume by 1.2% and 0.2% respectively. Due to the conservative nature of the waste generation estimates these minor exceedances of bin capacity are considered negligible, and as such the system specified is considered appropriate.*

Table 15 Paper / Cardboard Equipment Detail

Paper / Cardboard					
Waste Stream	**Equipment**	**Compaction Ratio**	**Collections Per Week**	**Weekly Capacity (Uncompacted)**	**Weekly Volume (Uncompacted)**
Office	1x 1100L Bin	nil	2	4,400L	4,213L
Retail	5x Bales	5:1	3	42,000L	30,217L
Childcare	2x 1100L Bins	nil	2	4,400L	2,818L

Table 16 Organics Equipment Detail

Organics					
Waste Stream	**Equipment**	**Compaction Ratio**	**Collections Per Week**	**Weekly Capacity (Uncompacted)**	**Weekly Volume (Uncompacted)**
Office	1x 240L Bin	nil	2	1,440L	1,229L
Retail	5x 660L Bins	nil	3	9.900L	7,700L
Childcare	3x 240L Bins	nil	2	1,440L	1,691L
Co-living	25x 240L Bins	nil	5	30,000L	30,408L

Table 17 outlines typical dimensions for the waste equipment required across the development. Note that the dimensions provided are approximate only and must be confirmed with the supplier prior to development.

Table 17 Typical Equipment Dimensions

Typical Equipment Dimensions (mm)			
Item	**Width**	**Depth**	**Height**
1100L Bin	1245	1370	1470
660L Bin	1370	850	1250
240L Bin	580	735	1080
Bin Conveyor (Linear)	4750	1350	100
Bin Conveyor (Carousel)	3600	3600	100
Baler (B5W Bramidan)	1355	985	2370
Bale	1000	800	700

3.6 SIGNAGE

Waste storage areas, bins and equipment will be clearly marked and signed with the industry standard signage approved by City of Sydney (such as that illustrated in Figure 6 below) or equivalent.

Users will be instructed by building management to adhere to these requirements.

Figure 6 City of Sydney Waste Signage

3.7 WASTE STORAGE AREA & LOCATION

Table 18 demonstrates the cumulative area requirements (excluding circulation) and provision of waste areas. Waste area requirements are assessed based on the footprint of individual waste equipment, excluding any clearance or circulation space needed for manoeuvring around the equipment.

Scaled waste room drawings outlining each waste room are provided in Appendix A.

Table 18 Waste Storage Requirements

Waste Store	Level	User	Equipment	Area Required	Total Area Required	Area Provided
Building 1A Waste Room	Ground	Northern Precinct	2x Linear Bin Changeovers	12.83m^2	31.45m^2	64.00m^2
			14x 1100L Bins	18.62m^2		
Building 1B Waste Room	Ground	Northern Precinct	2x Linear Bin Changeovers	12.83m^2	28.79m^2	76.00m^2
			12x 1100L Bins	15.96m^2		
Resi. Bulky Waste Room	Ground	Northern Precinct	Bulky Waste	20.00m^2	22.00m^2	34.00m^2
			Charity	2.00m^2		
Office Waste Room	Ground	Northern Precinct	3x 1100L Bins	3.99m^2	4.42m^2	14.00m^2
			1x 240L Bin	0.43m^2		
Retail Waste Room	Ground	Shared between Northern Precinct + Central Precinct	8x 1100L Bins	10.64m^2	24.97m^2	36.00m^2
			5x 660L Bins	4.90m^2		
			1x Baler	1.33m^2		
			5x Bales	2.10m^2		

Waste Store	Level	User	Equipment	Area Required	Total Area Required	Area Provided
			Bulky Waste	6.00m^2		
Childcare Waste Room	Basement 01	Central Precinct	6x 1100L Bins	7.98m^2	13.27m^2	30.00m^2
			3x 240L Bins	1.29m^2		
			Bulky Waste	4.00m^2		
Co-living Chute Room	Basement 01	Central Precinct	2x Carousel Bin Conveyors	25.92m^2	25.92m^2	45.00m^2
Co-living Waste Room	Basement 01	Central Precinct	20x 1100L Bins	26.06m^2	68.35m^2	88.00m^2
			25x 240L Bins	10.75m^2		
			Bulky Waste	29.00m^2		
			Charity	2.00m^2		

3.8 WASTE COLLECTION METHODOLOGY

Residential waste (Building 1A, Building 1B apartments) will be collected through a City of Sydney collection service and commercial waste (Office, Retail, Childcare, Co-living) waste through a private contractor as outlined in Table 19 and Table 20 below.

Table 19 Residential Waste Collection Summary

Residential Waste Collection Summary				
Waste Stream	Waste Source		Collections per Week	Collection Operator
	Building 1A	Building 1B		
General Waste	5x 1100L Bins	4x 1100L Bins	2	City of Sydney
Recycling	9x 1100L Bins	8x 1100L Bins	2	City of Sydney
Bulky Waste	20m^2 Bulky Waste Area		As required	City of Sydney

Table 20 Commercial Waste Collection Summary

Commercial Waste Collection Summary						
Waste Stream	Waste Source				Collections per Week	Collection Operator
	Office	Retail	Childcare	Co-living		
General Waste	1x 1100L Bin	3x 1100L Bins	2x 1100L Bins	10x 1100L Bins	(Up to) 3	Private Contractor
Co-mingled	1x 1100L Bin	5x 1100L Bins	2x 1100L Bins	10x 1100L Bins	(Up to) 3	Private Contractor
Paper / Card	1x 1100L Bin	5x Bales	2x 1100L Bins	-	(Up to) 3	Private Contractor
Organics	1x 240L Bin	5x 660L Bins	3x 240L Bins	25x 240L Bins	(Up to) 5	Private Contractor
Bulky Waste	2m^2 Area		4m^2 Area	30m^2 Area	As required	Private Contractor

All waste collections will occur onsite from the Northern Precinct loading dock at ground level. Residential (Building 1A, Building 1B) waste will be collected by City of Sydney, and all other waste will be collected by private collection contractors.

As per the swept path diagrams of Appendix B, the loading dock provides sufficient access for standard City of Sydney sized waste collection vehicles of up to 9.25m length / 2.6m width / 4.0m height clear, as specified by the City of Sydney document *Guidelines for waste management in new developments* (2019). This limiting vehicle size will apply to all collection vehicles operated by either City of Sydney or private collection contractors.

Waste vehicles will access the loading dock in a forward direction via the Botany Road accessway, and will exit in a forward direction via the same Botany Road accessway. A turntable will be provided within the loading dock to enable vehicle access.

All waste collections will be undertaken from the designated waste collection bay within the loading dock (refer Appendix A). Depending on waste room, volumes will be collected as follows:

- **Building 1A Waste (City of Sydney Collection)**: The waste room is positioned directly adjacent to the loading bay, such that collection vehicle contractors can collect (and return) bins directly from the waste room. Facilities management will ensure the waste room is accessible at the time of collection.
- **Building 1B Waste (City of Sydney Collection)**: Facilities management will present Building 1B bins to a temporary storage point within the loading dock prior to collection, and will return the bins to the waste store areas following collection.
    - The SRV & MRV bays within the loading dock will be utilised as the temporary storage point to enable collection (refer Appendix A).
- **Residential Bulky Waste (City of Sydney Collection)**: Collection vehicle contractors will collect bulky waste directly from the waste room at ground level. Facilities management will ensure the waste room is accessible at the time of collection.
- **Retail Waste (Private Collection)**: The retail waste room is positioned directly adjacent to the loading bay, such that collection vehicle contractors can collect (and return) bins directly from the waste room. Facilities management will ensure the waste room is accessible at the time of collection.
- **Office Waste (Private Collection)**: The office waste room is positioned directly adjacent to the loading bay, such that collection vehicle contractors can collect (and return) bins directly from the waste room. Facilities management will ensure the waste room is accessible at the time of collection.
- **Co-living Waste (Private Collection)**: Facilities management will present the co-living bins to a temporary storage point within the loading dock prior to collection, and will return the bins to the co-living waste store following collection.
    - The SRV bay within the loading dock will be utilised as the temporary storage point to enable collection (refer Appendix A).
    - Transfer of waste between basement level waste store and ground level loading dock will be undertaken via the goods lift (refer Appendix A), with bins to be carted between the waste stores and goods lift via the carpark aisle.
    - A mechanical bin tug will be used to assist in the transfer of bins across the basement level, with all transfers to be undertaken outside of peak operating periods to minimise any potential conflict with vehicle movements throughout the carpark.
    - Co-living waste collection will be scheduled on alternate days to Council collection, as to ensure Building 1B and co-living bins are not presented to the loading dock at the same time.
- **Childcare Waste (Private Collection)**: Facilities management will present the childcare bins to a temporary storage point within the loading dock prior to collection, and will return the bins to the childcare waste store following collection.
    - The SRV bay within the loading dock will be utilised as the temporary storage point to enable collection (refer Appendix A).
    - Transfer of waste between basement level waste store and ground level loading dock will be undertaken via the goods lift (refer Appendix A).
    - A mechanical bin tug will be used to assist in the transfer of bins across the basement level, with all transfers to be undertaken outside of peak operating periods to minimise any potential conflict with vehicle movements throughout the carpark.
    - Childcare waste collection will be scheduled on alternate days to Council collection, as to ensure Building 1B and childcare bins are not presented to the loading dock at the same time.

The use of the SRV bay as a temporary waste storage point will be limited to fixed hours, to be detailed within the site's Loading Dock Management Plan.

A 9.25m collection vehicle has been allowed for throughout the design (as specified within the City of Sydney document *Guidelines for waste management in new developments* (2019)), which is consistent with the vehicle size endorsed under the waste and loading strategy of the Waterloo Metro Quarter Southern Precinct. Collections between the sites will be undertaken concurrently through the same collection operators and same collection vehicles.

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

3.9 ADDITIONAL INFORMATION

3.9.1 SERVICE REQUIREMENTS

VENTILATION

Ventilation of all waste facilities will be provided in accordance with Australian Standard AS1668.

WASHING AND VERMIN PROTECTION

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

Each of the waste chutes should be fitted with flushing nozzles to enable regular washing from within.

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.

3.9.2 EQUIPMENT PROCUREMENT DETAIL

BIN COLOUR AND SUPPLIER

All residential (Building 1A, Building 1B) bins will be provided by the City of Sydney, except for general waste bins, which will be reinforced, and all commercial bins (Retail, Office, Childcare, Co-living) by a private supplier. The below bin colours are specified by Australian Standard AS4123.7 2006, however these are only recommendations and are not mandatory:

- General Waste (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.
- E-waste bins shall have white lids with dark green or black body.
- Food organics bins shall have burgundy body with dark green lids.
- Glass bins shall have purple body with purple lids.

Charity waste bins are not specified within AS4123.7, however they typically have a white lid with a white body.

HIGH LEVEL PURCHASING SCHEDULE

Table 21 lists the waste equipment required for the development under the conditions proposed within this report.

Table 21 Equipment Supply Schedule

Item	Supplier	Typical Services Requirement(s)*	Quantity / Notes
1100L Bin	City of Sydney	nil	9 No. General Waste 17 No. Recycling
1100L Bin	Private Supplier* *(SULO or equivalent)*	nil	15 No. General Waste 17 No. Recycling 3 No. Paper/Cardboard
660L Bin	Private Supplier* *(SULO or equivalent)*	nil	5 No. Food Organics
240L Bin	Private Supplier* *(SULO or equivalent)*	nil	29 No. Food Organics
Dual Waste Chutes	Private Supplier* *(Wastech or equivalent)*	***Power***: 2 x 240V 10A Power (at roof for ventilation fan) ***Water***: Cold water connection (at roof for flushing nozzles)	3 No. Dual Chute Systems (1 system per tower; 2 chutes per system)
Baler	Private Supplier* *(Wastech or equivalent)*	***Power***: 240V 10A Power per unit	1 No. units For retail use
Linear Bin Conveyor	Private Supplier* *(Wastech or equivalent)*	***Power***: 240V 10A Power per unit	4 No. units For residential use
Bin Carousel	Private Supplier* *(Wastech or equivalent)*	***Power***: 240V 10A Power per unit	2 No. units For Co-living use
Bin tug	Private Supplier* *(Sitecraft or equivalent)*	***Power***: 240V 10A Power per unit (Charging point)	1 No. unit
** Services requirements are indicative only and must be confirmed with the manufacture prior to commencement of construction*			

3.9.3 MANAGEMENT STRATEGY

Table 22 below outlines a high level management strategy for the site, outlining user responsibilities and key points of contact for typical waste management issues that may arise following building occupation.

Table 22 Management Strategy

Item	Responsibility	Contact	Notes
Waste Management Plan	Developer	Building Operator	The developer of the site will be responsible for providing a copy of the Endorsed Waste Management Plan to the Building Operator for ongoing reference prior to occupation.
	Building Operator	Council	***If*** the developer fails to provide the WMP to the Building Operator for whatever reason, the Building Operator will be responsible for requesting a copy of the Endorsed Waste Management Plan from Council.
Building Occupant Education	Facilities manager	Building occupants	Correct waste disposal practices onsite and general waste education will be provided by facilities management to residents as part of standard practice. This should include clear guidelines to support: ▪ Waste equipment and correct use (chutes, drop off bins, etc.) ▪ Waste room locations ▪ Waste stream separation (e-waste, glass, food, etc.)

Item	Responsibility	Contact	Notes
			▪ Contamination risks and impacts ▪ Facilities management / cleaning staff contact details This should feature emphasis on the proper sorting of waste, and the various impacts (cost, environmental, social) of contamination in the recycling streams. This should include information on where each waste stream is being processed, the methods in which the waste is processed, and the subsequent application of the recycled materials. This 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.
Waste Signage	Facilities manager	-	Facilities management will ensure waste rooms, bins and chutes are appropriately signed at all times. 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.
Chute Blockages	Facilities manager	Chute Manufacturer	Facilities management will be responsible for directly contacting the nominated chute manufacturer for a service call-out should either chute be blocked at any stage.
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.
Bulky 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.
Waste Data and Reporting	Collection Contractor	Facilities manager	The collection contractor will be responsible for providing regular waste collection reports (typically monthly as Excel spreadsheets), outlining waste collection details of the site. This will typically feature volume of material collected, percent of waste diverted from landfill, records of contaminated bins, and total cost of collection (amongst other details).
	Facilities manager	Building occupants	Facilities management will be responsible for collating key outputs of the provided waste reports, and for providing a summary of results to building occupants. This should highlighting areas in which residents have performed strongly (i.e. waste diversion) as well as areas in which residents should aim to improve (i.e. contamination rates).
Contamination Management	Collection Contractor	Facilities manager	Contamination will be monitored by the collection contractor, with recycling bins featuring contamination to be collected as General Waste and billed accordingly. Contamination rates will be provided as part of regular collection contractor reporting, to be monitored over time by facilities management as necessary.
	Facilities manager	Building occupants	Facilities management will further monitor contamination rates through visual inspection as part of day to day

Item	Responsibility	Contact	Notes
			operations, which will be considered in tandem with the collection contractor contamination reporting. Facilities management will be responsible for conveying proper waste stream use and the impacts of contaminations to occupants as part of standard practice.

4 CONSTRUCTION WASTE MANAGEMENT PLAN

A detailed Construction waste strategy should be incorporated into the site's Construction Management Plan (CMP), to be prepared as a separate document by the principal construction contractor prior to the commencement of construction works.

The CMP should include detail of:

- The type and of waste to be generated during demolition and construction and respective recycling, reuse and disposal methods;
- Location and space allocated for the storage of demolition and construction waste or materials; and
- Waste collection point(s) for the site.

Maximised diversion of construction waste from landfill should be targeted for this development, to be achieved through appropriate material separation practices. The specific re-use, removal or treatment of C&D waste will be undertaken by a third party as appropriate.

The following is provided as a high-level summary of construction waste requirements for ease of reference. Information as shown is not intended to form the basis of any construction ,and will be superseded in full by the construction strategy as nominated in the CMP.

4.1 CONSTRUCTION PHASE

Construction works will generally generate waste through the erection and finishing of the development (i.e. construction waste). The CMP should include a detailed construction waste strategy in line with the head contractor's program and trades scheduling.

Most waste products generated throughout construction works can be readily recycled or reused, and include steel framing, damaged glazing, cladding and roof sheeting, plasterboard linings, timber features and framing, metals, concrete and rubble. Metal and plastic piping and conduits, cabling and floor finishes such as carpet and tiling should also be recovered.

Accurate materials estimation and ordering, offsite prefabrication of framing modules and fitout components, and monitoring and review of specifications and onsite construction and fitout operations will minimise the potential volume of construction waste to be generated in the first instance.

Wherever possible, construction waste will be stored and sorted on-site, including on-site collection zones for each waste stream. Any waste skips stored in public places will be done so in accordance with Council policy.
Subcontractors and other site personnel should be educated regarding requirements for recovery of waste. This will assist in maximising recovery of resources from construction waste on-site, and minimise the cost and environmental impacts of waste being disposed to landfill.

Construction sites generate construction waste and will requiring regular collection, which can contribute to an increase in traffic on existing traffic levels in the surrounding area during the construction period. These cumulative impacts will be addressed in the detailed construction traffic management plan to ensure appropriate safety measures and minimise disruption.

4.2 WASTE SYSTEMS

A detailed waste strategy should form part of the CMP to be provided by the principal construction contractor prior to commencement. A minimum 95% diversion rate from landfill for waste generated from construction activities should be targeted across the subject site.

A high level overview of reuse, recycle and disposal opportunities for likely construction waste streams is provided in Table 23 below. Information as shown is provided for discussion only and should not be used as the basis of any construction works or waste reporting.

Table 23 C&D Waste – Aspirational Stream Separation

Waste Stream	Typical Receptacle	Note
Brick / Masonry	Skips	**Re-Use (Onsite):** Crush on-site for application as fill / gravel. **Recycle**: Transported to a C&D waste recycler for recovery.
Concrete	Skips	**Re-Use (Onsite):** Crush on-site for application as fill / gravel. **Recycle**: Transported to a C&D waste recycler for recovery.
Timber (untreated)	Skips	**Re-Use (Onsite):** Timber chipped for application onsite as fill / landscaping. **Recycle**: Transported to a C&D waste recycler for recovery.
Plasterboard	Skips	**Recycle**: Transported to a C&D waste recycler for recovery.
Metals	Skips	**Recycle**: Transported to a C&D waste recycler for recovery.
Other Waste	Skips	**Recycle**: Transported to a C&D waste recycler for the recovery of any additional, minor streams (i.e. glass, plastics, tiles, etc.). Dispose: Residual volumes sent to landfill.
Domestic General Waste	Bins	**Dispose**: Volumes sent to landfill.
Domestic Recyclables	Bins	**Recycle**: Volumes transported to a recycling / cardboard plant for recycling into recovered products.
Cardboard		
Vegetation	Bagged / Loose	**Recycle**: Volumes transported to a composting / mulching facility for recovery.

In accordance with the NSW EPA document *Waste Classification Guidelines* (2014), any vegetation will generally be treated as **general solid waste (putrescible)**, and all volumes other than (bricks, concrete, glass, etc.) as **general solid waste (non-putrescible)**.

Each waste category will be managed, stored, and collected in accordance with appropriate standards. Storage areas will only be accessible by authorised personnel.

4.3 WASTE COLLECTION

Waste collection will be undertaken by private collection contractors on an as-required basis. Vehicle sizes and on-site access will be in accordance with the Construction Traffic Management Plan (or equivalent) to be prepared as part of forthcoming works.

The principal contractor will be responsible for positioning waste stockpiles / bins / skips throughout the site such that collections can be readily undertaken. WSP anticipate that collection vehicles will generally be undertaken by Heavy Rigid Vehicles (12.5m length, 4.5m operating height) or smaller.

4.4 WASTE GENERATION

A high-level estimate of construction waste volumes generated throughout proposed works is provided in Table 24 below.

Estimated volumes of construction waste materials have been undertaken as a desktop review, calculated based on *Handbook of Recycled Concrete and Demolition Waste (Pacheco-Torgal et al., 2013).*

It is acknowledged that the estimated waste volumes and may be updated when more accurate estimates are received by the relevant personnel (e.g. head contractor or quantity surveyor). Values as shown are provided as estimates only and should not be used as the basis of any construction works or waste reporting. Detailed material estimates and strategies for on-site material reuse should be provided as part of the CMP.

Note that the estimates below address the building materials associated with construction and suggested development. Any waste generated from additional activities (i.e. paving, landscaping, access roads etc.) are not included in the above, nor are domestic general waste / recyclables volumes.

Table 24 Construction Waste Estimate (Central Precinct)

Waste Stream	Nearby Resource Recovery Facility	% Diversion Target	Total Estimated Volume (m^3)	Estimated Diversion from Landfill (m^3)
Concrete	Bingo Recycling Centre Alexandria	98%	91.7	89.8
Timber (untreated)		98%	160.4	157.2
Plasterboard		98%	103.1	101.1
Metals		100%	20.6	20.6
Other Waste		80%	82.5	66.0
TOTAL CONSTRUCTION WASTE GENERATED			**458.4**	**434.7**
TYPICAL % OF CONSTRUCTION WASTE RECYCLED				**95%**

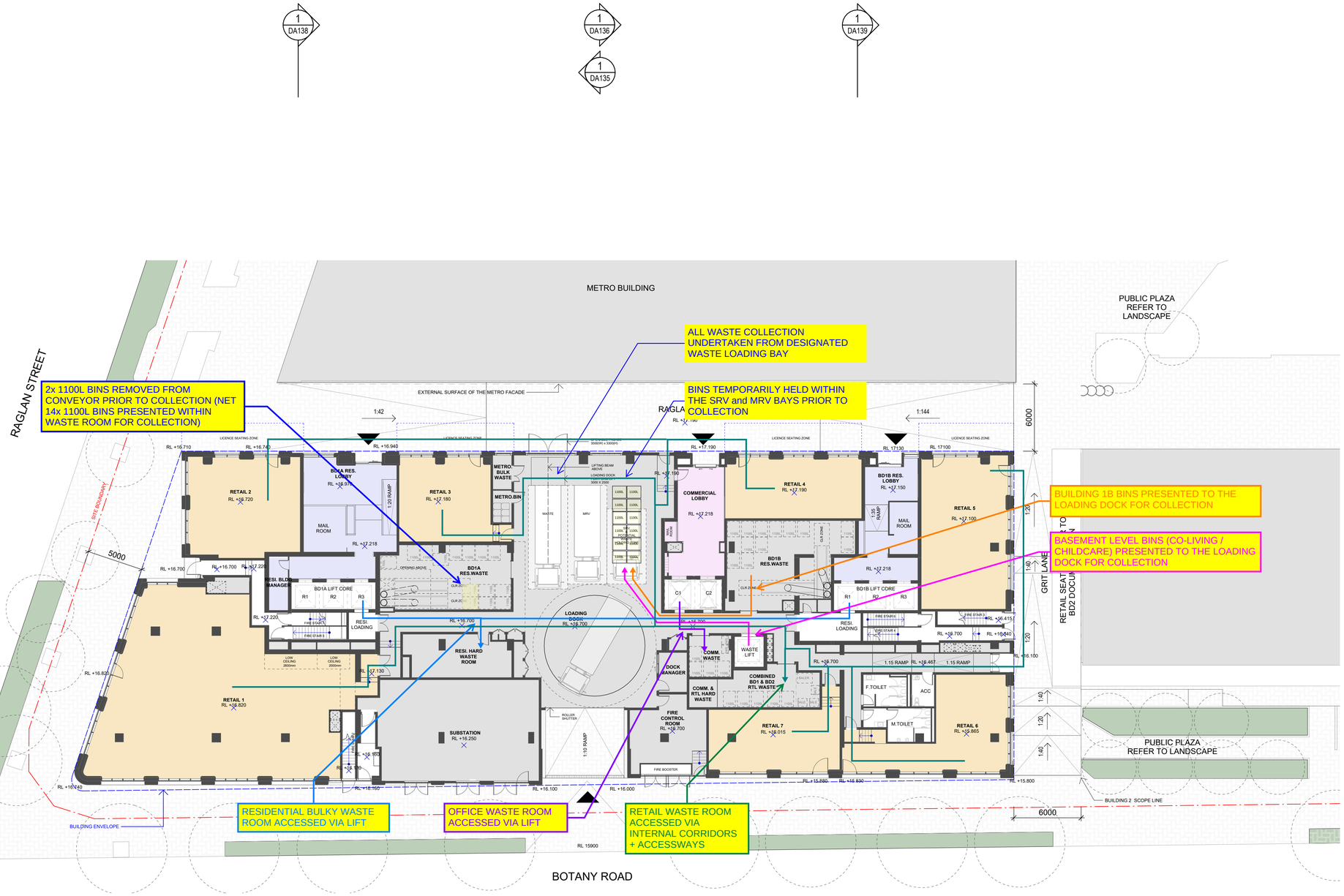
5 CONCLUSION

With consideration for the above, WSP consider the waste system specified for the proposed Central Precinct SSD (SSD-79307746) development located within the Waterloo Metro Quarter (WMQ) at 150 Cope Street, Waterloo to be appropriate.

The proposed waste system (i.e. quantities, classifications, storage, collection) has been prepared based on City of Sydney document *Guidelines for waste management in new developments* (2018) where reasonably possible, and outlines a functional method of managing waste volumes across the site.

APPENDIX A

SCALED WASTE ROOM DRAWINGS



1 GROUND FLOOR
SCALE 1 : 200

Recent revision history

#	Status	Description	Date
01		SSDA	18/09/25

Current Revision Amendments

#	Mark	Comments

Notes

Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

LEGEND

PODIUM & TOWER

C1-C2 Commercial Lift
R1-R3 Residential Lift

Unit Type

A/L Adaptbale and Silver Livable
L Silver Livable

LEGEND

SITE BOUNDARY
BUILDING ENVELOPE

Key Plan

NP

North Point

Client

WATERLOO COLLECTIVE
JOHN HOLLAND | mirvac
NSW GOVERNMENT | sydney METRO

Consultant

W–B™
WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
AC	CY	A1	1 : 200

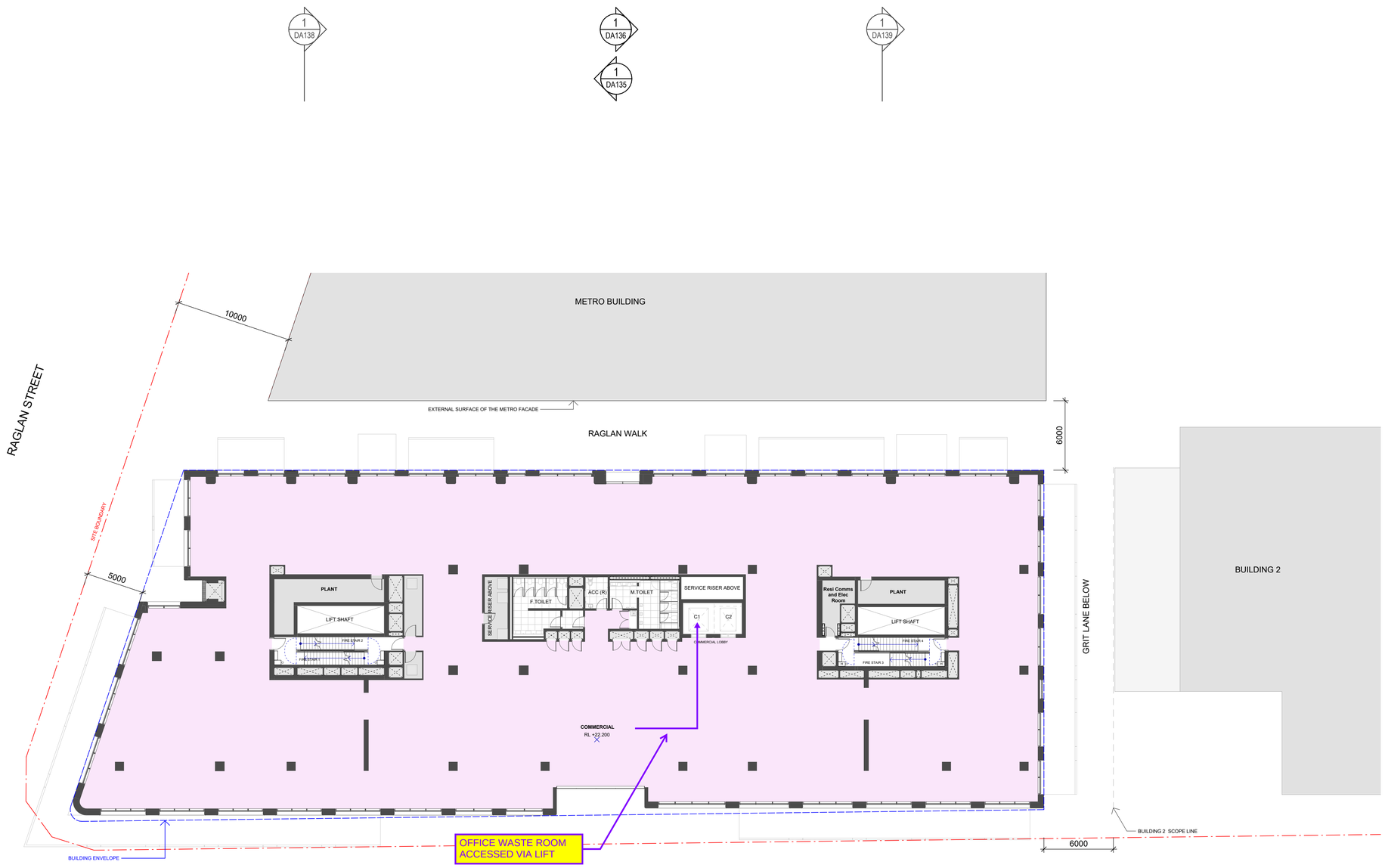
Sheet title

OVERALL ARRANGEMENT - GROUND FLOOR

Status

SSDA

Sheet number	Revision
WMQ-BD1-WBG-AR-DRG-DA100	01



Recent revision history

#	Status	Description	Date
01		SSDA	18/09/25

Current Revision Amendments

#	Mark	Comments

Notes

Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

LEGEND

PODIUM & TOWER

C1-C2 Commercial Lift
R1-R3 Residential Lift

Unit Type

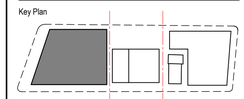
A/L Adaptbale and Silver Livable
L Silver Livable

LEGEND

SITE BOUNDARY

BUILDING ENVELOPE

Key Plan



NP

North Point

Client

WATERLOO COLLECTIVE

JOHN HOLLAND | mirvac

NSW GOVERNMENT | sydney METRO

Consultant

W–B™
WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
AC	CY	A1	1 : 200

Sheet title

OVERALL ARRANGEMENT - LEVEL 1

Status

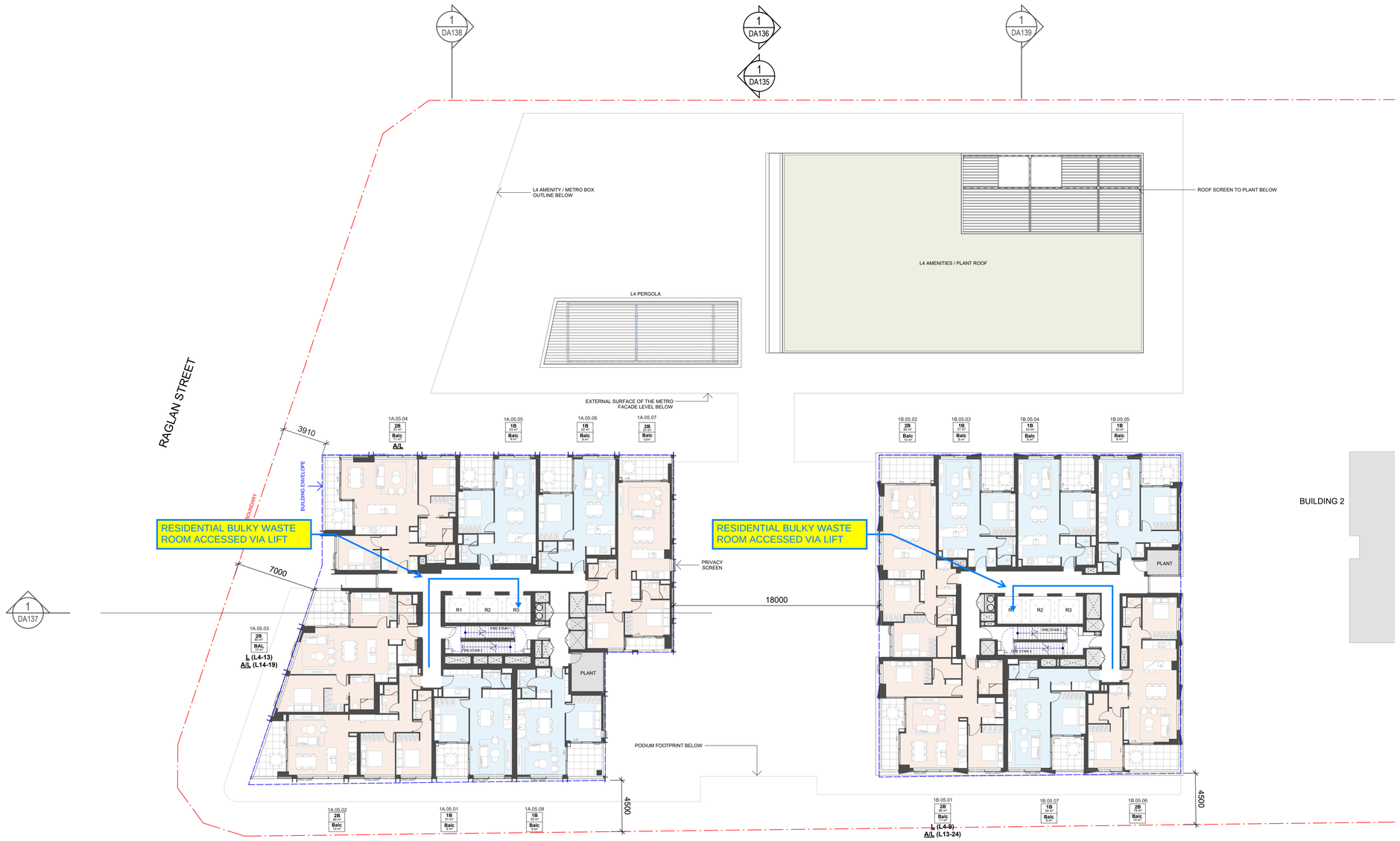
SSDA

Sheet number

WMQ-BD1-WBG-AR-DRG-DA101

Revision

01



1 LEVEL 05 - 08 TYPICAL
SCALE 1 : 200

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Recent revision history

#	Status	Description	Date
01		SSDA	18/09/25

Current Revision Amendments

#	Mark	Comments

Notes

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Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

LEGEND

PODIUM & TOWER

C1-C2 Commercial Lift
R1-R3 Residential Lift

Unit Type

A/L Adaptbale and Silver Livable
L Silver Livable

LEGEND

SITE BOUNDARY
BUILDING ENVELOPE

Key Plan

NP

North Point

Client

WATERLOO COLLECTIVE
JOHN HOLLAND | mirvac
NSW GOVERNMENT | sydney METRO

Consultant

W–B™
WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
AC	CY	A1	1 : 200

Sheet title

OVERALL ARRANGEMENT - LEVEL 5 - 8

Status

SSDA

Sheet number	Revision
WMQ-BD1-WBG-AR-DRG-DA105	01

Revision Cloud - General coordination amendments in accordance with design revision updates

Recent revision history

#	Description	Date
A	FOR INFORMATION	11.07.25
B	FOR INFORMATION	01.08.25

Key Plan

North Central South

Client

Waterloo Integrated Station Development
A Joint Venture Project
JOHN HOLLAND mirvac

NSW GOVERNMENT sydney METRO

Consultant

BATESSMART

Consultant

Aileen Sage

Project
WATERLOO METRO QUARTER DEVELOPMENT
Central Precinct - Building 2

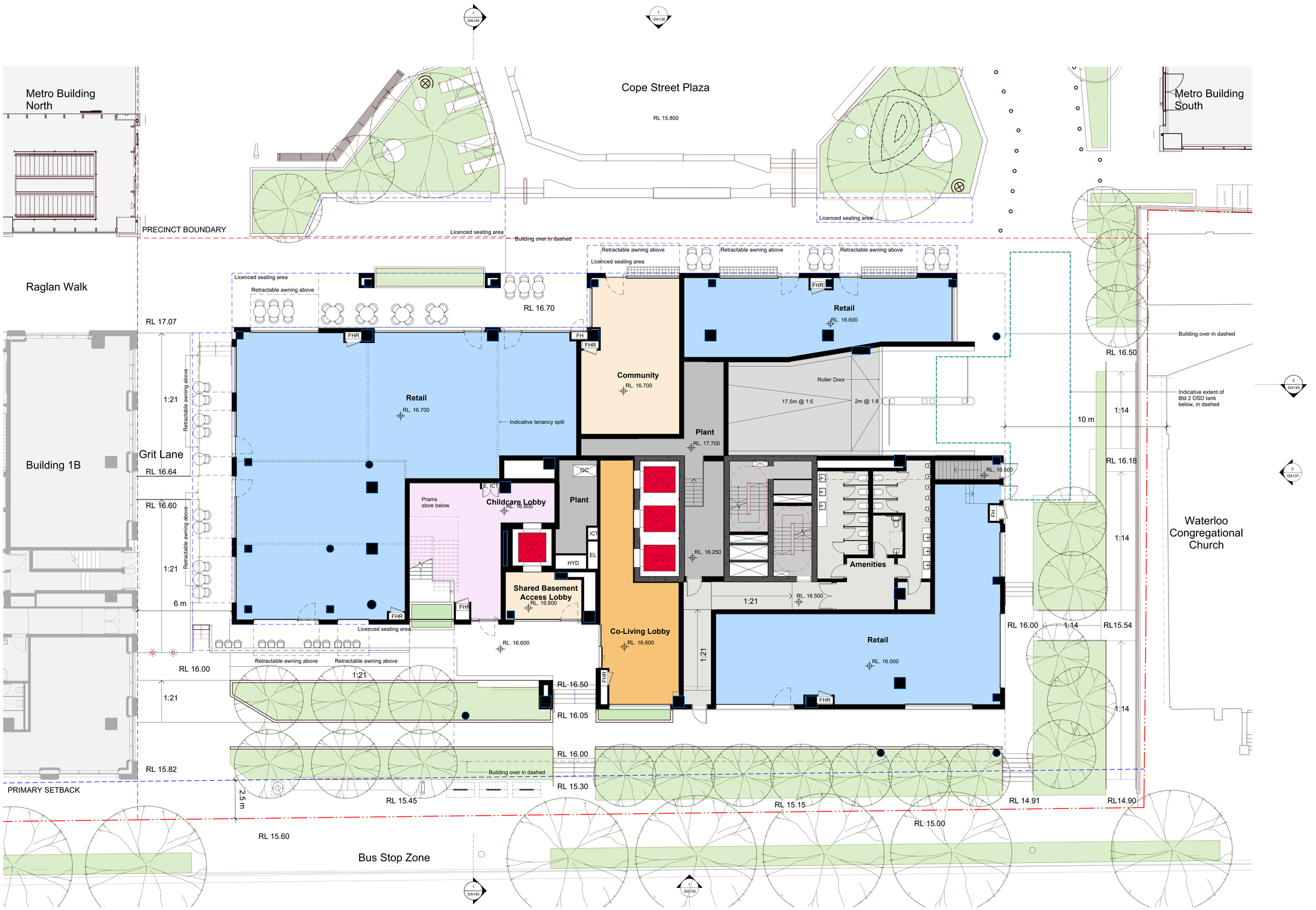
Project number	Size check
S12398.A	25mm

Checked	Approved	Sheet size	Scale
DS/RT	Approver	B1	1 : 100

Sheet title
General Arrangement Plan
Basement 01

Status	Revision
FOR INFORMATION	B

Sheet number
WMQ-BD2-BSA-AR-DRG-DA03.B01



Recent revision history

#	Description	Date
01	SSDA ISSUE	12.09.25

Notes

Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

Legend

- Masonry Facade
- Fire wall
- Tower Structure
- Podium Structure
- Outline of Approved Podium/Tower SSD10439

Note

Base building only the subject of this DA. Fit out design indicative and for test fit purposes only. All fitout works including but not limited to internal layout, seating, internal wall finishes, floor finishes will be subject to separate future fitout DA.

Key Plan

Client

WATERLOO COLLECTIVE
JOHN HOLLAND | mirvac

NSW GOVERNMENT | sydney METRO

Consultant

BATESSMART

Consultant

Aileen Sage

Project

WATERLOO METRO QUARTER DEVELOPMENT

Central Precinct - Building 2

Project number	Size check
S12398.A	25mm

Checked	Approved	Sheet size	Scale
Checker	Approver	B1	1 : 100

Sheet title

General Arrangement Plan
Level 00

Status	Revision
SSDA ISSUE	01

Sheet number

WMQ-BD2-BSA-AR-DRG-DA100

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1 LEVEL P1 BMT
SCALE 1 : 200

PARKING ALLOCATION

OVERALL BASEMENT PARKING NUMBERS (B1 TO B2)

SERVICES	5 COURIER BAY
SOCIAL HOUSING	6 CAR SPACES 2 ACCESSIBLE CAR SPACES
RESIDENTIAL	85 CAR SPACES 16 ADAPTABLE CAR SPACES 1 SMALL CAR SPACE
ALL OTHER NON-RESIDENTIAL	14 CAR SPACES 1 SMALL CAR SPACES 2 ACCESSIBLE CAR SPACES
MOTORBIKE	10 SPACES
BICYCLE	314 RESIDENTIAL SPACES 35 COMMERCIAL STAFF SPACES 4 BUILDING 1 RETAIL STAFF SPACES 16 BUILDING 2 STAFF SPACES 50 CO-LIVING SPACES

Recent revision history

#	Status	Description	Date
01		SECTION 4.55	15/09/25

Current Revision Amendments

#	Mark	Comments
01	1	INTERNAL CORE AND LAYOUT CHANGES, NO CHANGES TO FOOTPRINT OR AREA

LEGEND

BASEMENT

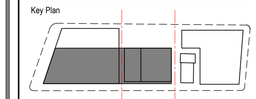
SD Spoon Drain
ST Strip Drain
A Adaptable Parking Space
HOS Hydraulic Oil Separator
M Motorcycle Parking Space
SEP Sewer Pump Station (In Ground)
STP Stormwater Pump Station (In Ground)

Storage Cage

LEGEND

- PROPERTY LINE
- LINE DENOTES BASEMENT CARPARK FOOTPRINT
- LINE DENOTES BUILDING FOOTPRINT
- INDICATIVE TSE WALL
- SSD DA PRECINCT BOUNDARY
- NOT IN SCOPE

Key Plan



BASEMENT

North Point

Client
WATERLOO COLLECTIVE
JOHN HOLLAND | mirvac
NSW GOVERNMENT | sydney METRO

Consultant
W–B™
WOODS BAGOT

Project
WATERLOO METRO QUARTER DEVELOPMENT

Project number 121234
Size check 25mm
Checked AC
Approved CY
Sheet size A1
Scale As indicated

Sheet title
BASEMENT - FLOOR PLAN LEVEL P1

Status
FOR INFORMATION

Sheet number **WMQ-BMT-WBG-AR-DRG-DA091**
Revision 01

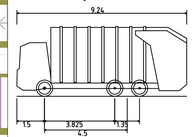
APPENDIX B

SWEPT PATH DIAGRAMS

NOTES:

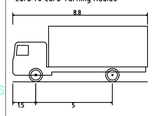
AERIAL IMAGERY / SCALED PDF
This swept path assessment has been completed utilising aerial imagery/scaled pdf in the absence of detailed survey. It should be noted that aerial imagery/scaled pdf can have an element of error, and all swept paths are preliminary and shall be verified using survey data or site validation.
It is the responsibility of the contractor to ensure that the proposed vehicle routes and accesses are suitable for the anticipated vehicles.
All swept paths performed by ptc. using aerial imagery/scaled pdf are indicative and should be used for preliminary purposes only. NOT FOR CONSTRUCTION
These drawings have been prepared for information only and are not issue for construction

SWEPT PATHS
The turning paths illustrated in this drawing have been prepared using the Autotrack vehicle modelling software in conjunction with AutoCAD. The vehicle model was prepared by Analytico Pty Ltd based upon vehicle data provided by Austroads. While this modelling represents a conservative assessment of the vehicles ability, it is not possible to account for all vehicle types/characteristics or driver ability.



CoS 9.24m Refuse Vehicle

Overall Length	9.240m
Overall Width	2.600m
Overall Body Height	3.800m
Min Body Ground Clearance	0.394m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.500m



MRV - Medium Rigid Vehicle

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

REV	DATE	DESCRIPTION	DRAWN	REVIEWED
X	X	X	x	x
X	X	X	x	x
X	X	X	x	x
4	12/09/25	SSDA	SW	SW
3	03/09/25	REDUCED DRIVEWAY	SW	AM
2	15/05/25	SRV BAY ADDED	SW	AM
1	05/05/25	INITIAL ASSESSMENT	SW	AM

PROJECT
WATERLOO METRO OSD

DRAWING TITLE
Loading Dock Assessment
9.25m Waste Vehicle Entry
8.80m MRV Exit

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

CLIENT WLD
DRAWING # ptcT_DWG-SK03
PROJECT # 24-1134
SCALE 1 : 100 @ A1
1 : 200 @ A3
SSDA

REV 4

EXTERNAL SURFACE OF THE METRO FACADE

RAGLAN WALK

3.50 3.50 3.50

1:42

1:144

RL +16.710 RL +16.740 RL +16.940 RL +17.190 RL 17130 RL 17100

LICENCE SEATING ZONE

OPENABLE FACADE 3500(W) x 3300(H)

LIFTING BEAM ABOVE

LOADING DOCK PLATFORM LIFT 3000 X 7500

2.69m clearance

1.30 (edge of bay)

1.35 (edge of bay)

RETAIL 2 RL +16.720

BD1A RES. LOBBY RL +16.970

RETAIL 3 RL +17.180

RETAIL 4 RL +17.190

BD1B RES. LOBBY RL +17.150

RETAIL 5 RL +17.100

MAIL ROOM

COMMERCIAL LOBBY RL +17.218

RO. BIN

WASTE

MRV

SRV & POTENTIAL WASTE HOLDIN ZONE

9.25

8.80

6.40

CoS 9.24m Refuse Vehicle

MRV - Medium Rigid Vehicle

Ø11.00 turning circle

Ø11.00 clearance

RL +16.700 RL +17.220

RESI. BLDG MANAGER

TOWER 1A CORE R1 R2 R3

OPENING ABOVE

BD1A RES.WASTE

CLR ZONE

BD1B RES.WASTE

C1 C2

TOWER 1B CORE R1 R2 R3

RESI. LOADING

FIRE STAIR 1

FIRE STAIR 5

FIRE STAIR 6

FIRE STAIR 4

LOW CEILING 2600mm

LOW CEILING 2000mm

RESI. HARD WASTE ROOM

RL +17.130

RETAIL 1 RL +16.820

DOCK MANAGER

COMM. WASTE

WASTE LIFT

COMBINED BD1 & BD2 RTL WASTE

BALER

COMM. & RTL HARD WASTE

F.TOILET

ACC

M.TOILET

RL +16.467

FCR RL +16.700

RETAIL 7 RL +16.015

RETAIL RL +15.86

FIRE BOOSTER

FIRE STAIR 2

SUBSTATION RL +16.250

ROLLER SHUTTER

RL +16.160 RL +16.100 RL +16.000

RL +15.880 RL +15.830

9.24

7.60

RL 15900

MRV - Medium Rigid Vehicle

BOTANY ROAD 11.00

NOTES:

AERIAL IMAGERY / SCALED PDF
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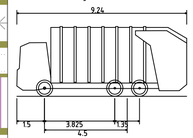
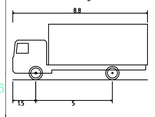
The turning paths illustrated in this drawing have been prepared using the Autotrack vehicle modelling software in conjunction with AutoCAD. The vehicle model was prepared by Analytico Pty Ltd based upon vehicle data provided by Austroads. While this modelling represents a conservative assessment of the vehicles ability, it is not possible to account for all vehicle types/characteristics or driver ability.



CoS 9.24m Refuse Vehicle

Overall Length	9.240m
Overall Width	2.600m
Overall Body Height	3.800m
Min Body Ground Clearance	0.394m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.500m



MRV - Medium Rigid Vehicle

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

REV	DATE	DESCRIPTION	DRAWN	REVIEWED
X	X	X	x	x
X	X	X	x	x
X	X	X	x	x
4	12/09/25	SSDA	SW	SW
3	03/09/25	REDUCED DRIVEWAY	SW	AM
2	15/05/25	SRV BAY ADDED	SW	AM
1	05/05/25	INITIAL ASSESSMENT	SW	AM

PROJECT
WATERLOO METRO OSD

DRAWING TITLE
Loading Dock Assessment
8.80m MRV Entry
9.24m Waste Vehicle Exit

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

CLIENT WLD
DRAWING # ptcT_DWG-SK04
PROJECT # 24-1134
SCALE 1 : 100 @ A1
1 : 200 @ A3

SSDA

REV 4

APPENDIX C

CITY OF SYDNEY WMP FORM

Appendix
Waste and Recycling Management Plan forms

A. Construction Waste and Recycling Management Plan

Refer to the Construction and Demolition Waste Requirements.

Site Address: 150 Cope Street, Waterloo **DA Number:** SSD-79307758

Will you use Site Cleaners?
- ☐ Yes, for some work
- ☐ Yes, for all work
- ☐ No

Estimated total volume or weight: ~817m3

Please supply details of site cleaners used
- ABN Number
- Name
- Phone
- Mobile

All Excavation Material (including from Swimming Pool excavations)
- ■ Less than 10 m³
- ☐ More than 10 m³ (if more than 10 m³, specify estimated volume below)
- ☐ Re-use on-site
- ☐ Re-use off site
- ☐ Landfill Disposal

Address if re-used off site: nil

Name and Address of licensed landfill: Cleanaway Lucas Heights Resource Recovery Park: Little Forest Rd, Lucas Heights NSW 2234

Note: Details of site cleaners to be confirmed as part of Construction Management Plan

			How will you manage this waste?				
Type of Material	**Less than 10 m³**	**Please specify estimated volumes if more than 10 m³**	**Re-use on-site**	**Recycle** (separate collection from site)	**Recycle** (off-site separation)	**Landfill**	**% of material diverted from landfill**
Bricks	☐		☐	☐	☐	☐	%
Concrete	☐		☐	☐	☐	☐	%
Tiles	☐		☐	☐	☐	☐	%
Timber (clean)	☐		☐	☐	☐	☐	%
Timber (treated)							%
Plasterboard	☐		☐	☐	☐	☐	%
Glass	☐		☐	☐	☐	☐	%
Ceiling tiles	☐		☐	☐	☐	☐	%
Metals (ferrous)	☐		☐	☐	☐	☐	%
Metals (non-ferrous)							%
Carpet	☐		☐	☐	☐	☐	%
Electronic waste	☐		☐	☐	☐	☐	%
		Total diversion of waste from landfill (needs to be minimum 80% diversion):					%

Note: Refer Section 4.4 of WMP for breakdown of construction waste volumes

Principal Off-Site Recycler/s	Off-Site Recycler's Primary Markets for Materials (for residential developments over three storeys and all non-residential developments)	Principal Licensed Landfill Site
Bingo Recycling Centre, Alexandria	Not disclosed	Cleanaway Lucas Heights Resource Recovery Park

Declaration

Name of applicant (please print):

Signature of applicant: Date:

B. Demolition Waste and Recycling Management Plan

Refer to the Construction and Demolition Waste Requirements.

Site Address:	150 Cope Street, Waterloo	**DA Number:**	SSD-79307758
Does demolition contain asbestos?		☐ Yes ☐ No	
All asbestos waste is to be managed in accordance with provisions of the NSW *Work Health and Safety Regulation* 2011 and the City of Sydney *Asbestos Policy*.		☐ Tick ☑ if under 10 m² ☐ Tick ☑ if over 10 m²	
WorkCover Licence No. and Class			
Demolition contractor details			
Licensed landfill			

General demolition waste

			How will you manage this waste?				
Type of Material	**Less than 10 m³**	**Please specify estimated volumes if more than 10 m³**	**Re-use on-site**	**Recycle** (separate collection from site)	**Recycle** (off-site separation)	**Landfill**	**% of material diverted from landfill**
Bricks	☐		☐	☐	☐	☐	%
Concrete	☐		☐	☐	☐	☐	%
Tiles	☐		☐	☐	☐	☐	%
Timber (clean)	☐		☐	☐	☐	☐	%
Timber (treated)							%
Plasterboard	☐		☐	☐	☐	☐	%
Metals (ferrous)	☐		☐	☐	☐	☐	%
Metals (non-ferrous)	☐		☐	☐	☐	☐	%
Mixed recycling	☐		☐	☐	☐	☐	%
Total diversion of waste from landfill (needs to be minimum 80% diversion):							%

Note: Demolition waste not addressed under WMP

Principal Off-Site Recycler/s	**Off-Site Recycler's Primary Markets for Materials** (for residential developments over three storeys and all non-residential developments)	Principal Licensed Landfill Site

Declaration

Name of applicant (please print):

Signature of applicant: Date:

Note: Demolition waste not addressed under WMP

C. Operational Waste and Recycling Management Plan

Site Address: 150 Cope Street, Waterloo **DA Number:** SSD-79307758

☐ Residential Only Development
☐ Mixed Residential/Non-Residential Development

Generation of waste

Refer to the Waste Generation rates in Guidelines.

RESIDENTIAL MULTI-UNIT **Number of dwellings**	Waste generation/ week (100L/dwelling)	Nominated waste bin size (L)	Total number of bins estimated	Recycling generation/ week (120L/dwelling)	Nominated recycling bin size (L)	Total number of bins estimated
e.g. 6	600	240	3	720	240	3
e.g. 20	2000	660	3	2400	660	4

RESIDENTIAL SINGLE DWELLINGS **Number of dwellings**	Waste generation/ week (100L/dwelling)	Nominated waste bin size (L)	Total number of bins estimated	Recycling generation/ week (120L/dwelling)	Nominated recycling bin size (L)	Total number of bins estimated	Food waste generation/ week (for single unit dwellings only)	Nominated food waste bin size (L) (for single unit dwellings only)	Total number of bins estimated
e.g. 1	100	120	1	120	120	1	40	60	1

Note: Refer Section 3.1 of WMP for breakdown of operational waste volumes

NON-RESIDENTIAL **Calculate generation based on premises type and area**	Waste generation/ L/day	Nominated waste bin size (L)	Total number of bins estimated	Recycling generation/ L/day	Nominated recycling storage bin size (L)	Total number of bins estimated	Food waste generation/ L/day	Nominated food waste bin size (L)	Total number of bins estimated
e.g Hotel (11,000 m^2)	2200	660	4	2750	660	5	1650	660	3
e.g Restaurant (200 m^2)	200	240	1	1000	660	1	200	240	1

Note: Refer Section 3.1 of WMP for breakdown of operational waste volumes

General requirements

All multi-unit residential and non-residential development is to address the following.

Refer to the General Requirements section in Guidelines.

1	Have the Guidelines been considered in conjunction with the City's *Waste Management Local Approvals Policy* (found at www.cityofsydney.nsw.gov.au)?	☐ Yes ☐ No
	Is there a waste and recycling storage area provided?	☐ Yes ☐ No
	Is the waste and recycling areas located in a position that is convenient for both users and waste collection staff?	■ Yes ☐ No
	Location of waste and recycling storage areas: (e.g. level 2)	Distance (m) from the waste and recycling storage area to the collection point / Size of waste and recycling storage areas (m^2)
	Refer Section 3.7 of WMP	All collection points are <10m of waste storage points prior to collection (refer Appendix A) / Refer Section 3.7 of WMP
	What is the total area of bin storage provided?	Refer Section 3.7 of WMP (m^2)
	Is the layout of the waste and recycling storage area designed to encourage easy recycling and separation of different waste types by all users?	■ Yes ☐ No
	What is the ceiling height of the waste and recycling storage area?	Minimum 2.1m (refer Appendix A) m
	Have you submitted a detailed plan of the waste and recycling storage area, together with the nominated collection point and access pathway marked? Please include name and location of relevant drawings: Refer Appendix A	■ Yes ☐ No
	Is there sufficient space provided for the estimated general waste and recycling bins PLUS handling?	■ Yes ☐ No
2	How much separate space is dedicated for storing bulky waste and problem waste?	Refer Section 3.7 of WMP m^2
	What type of storage space for bulky and problem waste has been allocated? (e.g. designated area, lockable cage, within waste and recycling storage room or other)	Seperate residential bulky waste room. Bulky waste storage are
	Is food waste or compostable material managed in any way? (tick the applicable management system/s below)	■ Yes ☐ No
	• Suitable space available for composting and worm farming	☐
	• On-site food waste processing system	☐ System type: 240L drop off bins for commercial users (retail, office, co-living, ch
	• Other (please specify)	

3	Is the collection point sufficiently accessible by collection operators?	■ Yes ☐ No
	What is the maximum manual handling distance between the storage point and the collection point for bins?	<10m (refer Appendix A) m
	Are any collection and vehicle access points located adjacent to a habitable room?	☐ Yes ■ No
	What is the maximum grade of the path for wheeling bins between a storage point and the collection point?	1 : 1
	Are all externally located on-site collection points constructed within 15 metres from the property boundary?	☐ Yes ☐ No
	What is the clearance height allowed for collection vehicles to enter the site for collection?	Min. 4.0m (refer Appendix A) m
	Is entry and exit of a collection vehicle from the site in a forward direction?	☐ Yes ☐ No
	Can collection vehicles service the development with minimal reversing?	☐ Yes ☐ No
	Have the following allowances been made for all collection points? • Vehicle access for collection and loading will provide for a maximum grade of 1:20 for the first 6 metres from the street, then a maximum of 1:8 with a transition of 1:12 for 4 metres at the lower • A minimum width of driveway of 3.6 metres • A minimum radius turning circle of 10.5 metres or provision for changing the facing direction	■ Yes ☐ No
	Who will be responsible for waste management (waste storage area management, cleaning, bin transfer, educating occupants etc.) for the development?	
	Facilities management (or equivalent)	
	Will appropriate signage for waste storage areas and equipment (including bins) for effective waste management and safe handling be implemented where necessary?	■ Yes ☐ No
4	Please provide an overview summary of the development's waste management system and arrangements, including a description of how occupants, cleaners and/or building management will use the waste management facilities and how waste will be stored, transported and collected. (This is to be consistent with the drawings attached. Please attach additional pages if more space required)	
	Refer Section 3.3 of WMP	

Multi-unit residential developments dwellings

All residential developments which shared waste and recycling bins are to address the following.

Refer to Multi-Unit Residential Developments Dwellings section in Guidelines.

1	Has space for at least two day's generation of waste and recycling been provided per unit?	☐ Yes ☐ No
	Is the waste and recycling storage area(s) easily accessible by all residents of the development?	■ Yes ☐ No
	How far is the waste and recycling storage area from the farthest residential dwelling?	~25m (refer Appendix A) m
	Are you requesting any additional infrastructure in the waste and recycling storage room (carousel, optic sensors, number of bins, automatic bin exchange, size)? *If yes, fill in the section below*	■ Yes ☐ No
2	Please detail the type of additional infrastructure: - 2x Linear Bin changeover systems in the Building 1A waste room - 2x Linear Bin changeover systems in the Building 1B waste room - 2x Bin carousels in the Building 2 (Co-living) chute room - 1x at-chute compactor in the Building 1A waste room (fitted to garbage chute) - 1x at-chute compactor in the Building 1B waste room (fitted to garbage chute)	
	If a compactor is included, what is the proposed compaction ratio (it is not to exceed 2:1)?	2:1
	Will the development elect to have kerbside collection? (only applies to developments with less than 6 units that satisfy the requirements outlined in the General Requirements section)	☐ Yes ■ No
	What type of problem waste will be dealt with in this development? (e.g. electronic waste, batteries, fluorescent tubes and mobile phones)	Electronic waste
	How much space in the waste and recycling storage area has been allocated for textile waste?	Textile waste bin to be incorporated into fitout m^2
3	Will a chute system be utilised in the new development? If yes, will the chute system be a single (general waste) or dual system (two separate chutes for waste and recycling)? *If no, move onto question 5.*	☐ Yes ☐ single or ■ dual ☐ No
	Has the chute system been designed according to the relevant minimum manufacturing standard?	☐ Yes ☐ No
	What is the total maximum travel distance from any residential dwelling entry to a chute system on any given storey? (It is not to exceed 30 metres)	~25m (refer Appendix A) m
	Has the chute system been designed and certified according to the relevant acoustic standards?	■ Yes ☐ No

4	Is there a chute room on each habitable floor of a development with a chute system?	■ Yes	☐ No
	Does the chute room include space for: • recycling MGBs (if a single chute system is used) • the chute inlet hopper • spare MGBs • large cardboard and/or bulky items to reduce the likelihood of blockages in chutes.	☐ Yes	■ No
5	In which of the following ways will on-site collection of waste, recycling , textile waste and bulky items take place?		
	1 In the building's basement	☐ Yes	☐ No
	2 At grade within the building in a dedicated collection or loading bay	■ Yes	☐ No
	3 At grade and off-street within a safe vehicular circulation system where, in all cases, vehicles will enter and exit the premises in a forward direction	☐ Yes	☐ No

Residential single dwellings

All single-dwelling houses, small-scale villas or townhouse-type developments with bins allocated to and managed at each individual dwelling is to address the following.

Refer to Residential Single Dwellings section in Guidelines.

1	Has space for at least two day's generation of waste, recycling and food waste been provided per dwelling?	☐ Yes	☐ No
	Has storage area for one each of council's specified waste bins been allocated per unit? (including general waste, recycling, food waste and garden organics)	☐ Yes	☐ No
	Has appropriate access between the waste and recycling storage area and kerbside collection point been allocated?	☐ Yes	☐ No
	Has sufficient space for the storage of bulky waste, textile waste and problem waste been allocated?	☐ Yes	☐ No

Non-residential developments

All new non-residential developments are to address the following.

Refer to Non-Residential Developments section in Guidelines.

1	How much space is dedicated for storing bulky waste and problem waste for recycling?	☐ m^2
2	Dedicated space (in or attached to the waste and recycling storage area) is provided for the storage and recycling of food waste for collection	☐ Yes ☐ No
3	How much space has been allocated for management of re-usable items (such as crates, pallets, kegs and fit-out waste)?	☐ m
	Have kitchens, office tearooms, service and food preparation areas been designed with dedicated space to collect and recycle food waste?	☐ Yes ☐ No
	Has secure space for the storage of liquid wastes been allocated (such as chemicals, paints, solvents, and motor and cooking oil)?	☐ Yes ☐ No
4	Will collection of non-residential waste take place inside the new development?	☐ Yes ☐ No
5	Will the site employ the use of a waste caretaker or cleaner for managing non-residential waste?	☐ Yes ☐ No
	Will the development employ on-site weighing of waste materials?	☐ Yes ☐ No
6	Has the 'Non-Residential Developments' section of the Guidelines been consulted for specific requirements of different non-residential occupancies at the site?	☐ Yes ☐ No

Mixed use developments

All developments containing both residential and non-residential units are to address the following.

Refer to Mixed Use Developments section in Guidelines.

1	Has separate waste and recycling storage been allocated for residential and non-residential aspects of the site?	☒ Yes ☒ No
	Will the collection point be shared for residential and non-residential waste?	☒ Yes ☐ No
	Have relevant site plans identified the storage areas, collection points and management systems for both residential and non-residential waste streams?	☒ Yes ☐ No

Declaration

Name of applicant (please print):

Signature of applicant: Date:

APPENDIX D

WASTE AUDITOR CV

Our ref: PS219170-LG-Qualified Waste Auditor Statement

9 September 2025

Green Building Council of Australia
Level 31, International Towers, Tower Two
200 Barangaroo Ave
BARANGAROO NSW 2000

Dear Sir/Madam

Waterloo Metro Quarter: Central Precinct
Qualification as a Waste Auditor

I, Laurence Gamble, was the project lead for waste management with respect to the development of the waste management strategy and preparation of the Waste Management Plan for the Waterloo Metro Quarter: Central Precinct works.

I meet the following definition for a "Qualified Waste Auditor" as defined by the standard: "*waste auditor or waste specialist, working for a consultant, building owner or contractor, possessing a minimum of three years' experience developing OWMPs*". I hold several years' experience within the building industry, including key roles such as:

- 1 Year – SALT (consultancy) - Waste Management Consultancy (development of OWMPs as primary job role)
- 2 Years – Irwinconsult (consultancy) – Waste Management Consultancy (development of OWMPs as primary job role)
- 5 Years – WSP (consultancy) – Waste Management Consultancy (development of OWMPs as primary job role)

My current position within WSP is Associate – Waste Management & Circular Economy. My CV is attached for further evidence of my experience in the development OWMPs.

I trust the above suitably provides evidence of my qualification as a Qualified Waste Auditor.

Yours sincerely

Laurence Gamble
Associate – Waste Management & Circular Economy
WSP Australia Pty Limited
Ph: 03 9622 9852
E: Laurence.gamble@wsp.com

Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001

Tel: +61 2 9272 5100
Fax: +61 2 9272 5101
www.wsp.com

LAURENCE GAMBLE

Associate – Waste Management & Circular Economy

8 years with WSP

9 years of experience

Areas of expertise

Waste Management Plans (WMPs)

Waste Engineering Design

Green Star Waste Design

NABERS Waste Tenancy Rating Assessments

Waste Generation Analysis

Waste Modelling

LANGUAGES

English

EDUCATION

Bachelor of Engineering (Civil) (Hons) (2014)

PROFILE

Laurence is an Associate with WSP, with nine years' experience in waste engineering and further experience within the fields of data analysis, statistics and project management.

As an engineer Laurence has been involved in the development of waste management and loading plans for an extensive list of development applications, ranging from high-rise towers to residential subdivisions.

Laurence has further undertaken the role of lead analyst for a number of large scale projects, and has been instrumental in the development of a number of waste projection models and cost-benefit studies. Recent examples include work for the proposed SEMAWP Waste to Energy Plant (inbound tonnage forecasting, 2021-2050), for City of Parramatta (cost-benefit analysis of future waste service, 2021-2036) and for Citywide Solid Waste Services (operational capacity review, 2020-2036).

He is particularly interested sustainability-focused initiatives within the waste management and logistics sector, and is well versed in the waste requirements associated with sustainability benchmarking tools such as Green Star, NABERS and WELL.

KEY PROJECT EXPERIENCE

City of Sydney –Sustainable Destinations Partnership Study

The Sustainable Destinations Partnership (SDP) is a collective of entertainment and accommodation venues comprised of 31 Partners and 13 Associates, that are striving to deliver environmental targets outlined in the City of Sydney's document "Sustainable Sydney 2030".

WSP was engaged by the City of Sydney to assess waste management practices across the SDP, and to identify potential opportunities for improvement. WSP conducted a detailed investigation into partners, through desktop research, an online survey, one-on-one follow up interviews and a focus group. Research findings were provided in the form of regular progress meetings, and a report outlining tailored advice and opportunities, case studies and next steps toward achieving better practice waste management outcomes.

77 Market Street, Sydney

Developed by a partnership of Scentre Group and Cbus, this $300m development will deliver a 22 storey residential tower atop an existing 10 story heritage building in the north east of Sydney. Six levels of PCA A-Grade office will be integrated into the development.

WSP have developed a detailed waste management strategy responding to the unique heritage and access constraints of the site. This strategy will be included within a Waste Management Plan, to be issued to City of Sydney for endorsement.

Picadilly: Brougham Street & Victoria Street, Potts Point

Redevelopment of the former Picadilly Hotel and adjacent terrace houses, the project will provide a new food & beverage space and a series of luxury dwellings, both as refurbished terraces and penthouse apartments.

WSP have developed a detailed waste management strategy responding to the unique heritage and access constraints of the site. This strategy will be included within a Waste Management Plan, to be issued to City of Sydney for endorsement.

32-36 York Street, Sydney

Currently provided as two separate office buildings (a three storey build at 32 York and an eight storey build at 34-36 York), subject works propose that each building be raised to 13 storeys above ground, generally maintaining their separate floorplates at ground level and then conjoining as shared floorplates from level 01 upwards. The finished development will feature a series of boutique retail and office tenancies and a rooftop terrace.

WSP prepared a Waste Management Plan and Loading Management Plan as part of the planning application, Our services included review of existing waste operations, review of existing loading dock layout and capacity, opportunities to consolidate waste volumes across buildings, compliance with City of Sydney design standards, and design requirements to meet aspirational Green Star benchmarks.

The Star Masterplan, Pyrmont

Overlooking Darling Harbour, The Star Casino features a number of gaming facilities, bars, restaurants, hotel, and resort facilities. Star Entertainment Group are seeking to develop a series of new builds as part of precinct works, including:

- A new Ritz Carlton Hotel tower, situated upon the existing casino podium
- A new mixed-use tower (residential, retail, hotel), situated on a separate parcel of land adjacent to the casino
- A new Neighbourhood Centre, integrating four storeys of new wellness spaces into the existing casino podium (subject to Ritz Carlton approval)

The WSP waste team has provided waste engineering services throughout the masterplan. This included advice with respect to waste design and planning requirements, and review of the site against relevant design standards (i.e. City of Sydney waste guidelines, Pyrmont Precinct Plan, and Ritz Carlton design standards).

Circular Quay Renewal Works

With existing existing conditions in need of significant revitalisation, renewal works seek to update the transport infrastructure, amenities, activate public spaces, increase retail offerings, and generally improve the overall quality of the public domain.

The increase in infrastructure throughout the precinct will in turn result in an increased number of loading vehicle movements (i.e. deliveries, service vehicles, waste collection), which has been identified by the project team as a key item to mitigate throughout the public realm. WSP has undertaken a loading demand study of the wider precinct, as to forecast the extent of loading vehicle increase, assess the suitability and capacity of the proposed loading facilities onsite, and to prepare a loading management plan addressing site needs.

Works have been delivered in partnership with Transport NSW, providing a coordinated assessment across the project team to achieve positive outcomes.

Nicholson Place: Nicholson Street And Christie Street, St Leonards

A mixed-use build-to-rent/commercial development, works propose a 40 storey tower providing over 450 apartments and over 900m2 of retail NLA.

WSP provided a Concept Waste Management Plan to support the Concept SSDA submission, and a Demolition Waste Management Plan to support the Early Works DA submission, providing a holistic waste strategy across the proposed demolition, construction, and operation of the building.

ADDITIONAL PROJECT EXPERIENCE

Residential & Mixed Use:

- Uniting Waverley Masterplan, Waverley
- Ed Square, Stages 4-8, Edmonson Park
- 5 Brady Street, Mosman
- 37 Cavell Avenue, Rhodes
- 21c Billyard Ave, Elizabeth Bay

Fitout and Refurbishment:

- The Commons: Omega Store Fitout, Sydney
- The Commons: Chanel Store Fitout, Sydney
- Castlereagh Shopping Centre: Canada Goose Fitout, Sydney
- Transport House: Willowtree Fitout, Sydney
- World Square: WSP Office Fitout, Sydney

Office & Retail:

- 15 Hunter Street, Sydney
- Macquarie Exchange, North Ryde
- 1 Eden Park Drive, North Ryde
- ING Direct, Wyong
- 44-78 Rosehill Street, Redfern

Hotels:

- 371-275 Pitt Street, Sydney
- Club Burwood RSL, Burwood
- Frasers Suites Decarbonisation Strategy, Sydney
- Quincy Hotel, The Rocks
- Seafarers Hotel, Southbank, VIC

Commercial and Industrial:

- FIFE: 2-4 Hannibal Street, Eastern Creek
- Charter Hall Warehouse, Eastern Creek
- Project Pemulwuy (Aliro Bunzl) Warehouse, Cumberland
- Essential Energy Depot, Temora
- Wetherill Distribution Centre, Eastern Creek

Government Infrastructure:

- Sydney Metro, Western Sydney Airport Line
- Australian Inland Rail – Albury to Ilabo
- Moree Special Activation Precinct
- North East Link: Operational Control Centre, VIC
- Queen Victoria Market (QVM) Renewal, VIC

Shopping Centres:

- Westfield Liverpool – Entertainment Precinct Expansion
- Westfield Hurstbridge – Entertainment Precinct Expansion
- Westfield Parramatta – Residential Tower Scheme
- Westfield Belconnel – Residential Tower Scheme, ACT
- Eastern Creek Shopping Centre, Stage 3

Community Facilities:

- Beaumont Hill - Parks for People - The Hills
- Northern Aquatic and Community Hub – Norlane, VIC
- Carnegie Swim Scentre, Carnegie, VICs
- QVM Munro Community Hub – Melbourne, VIC
- Percy Treyvaud Park Redevelopment – East Malvern, VIC
- Gugan Gulwan Community Centre - Canberra, ACT

Education Facilities:

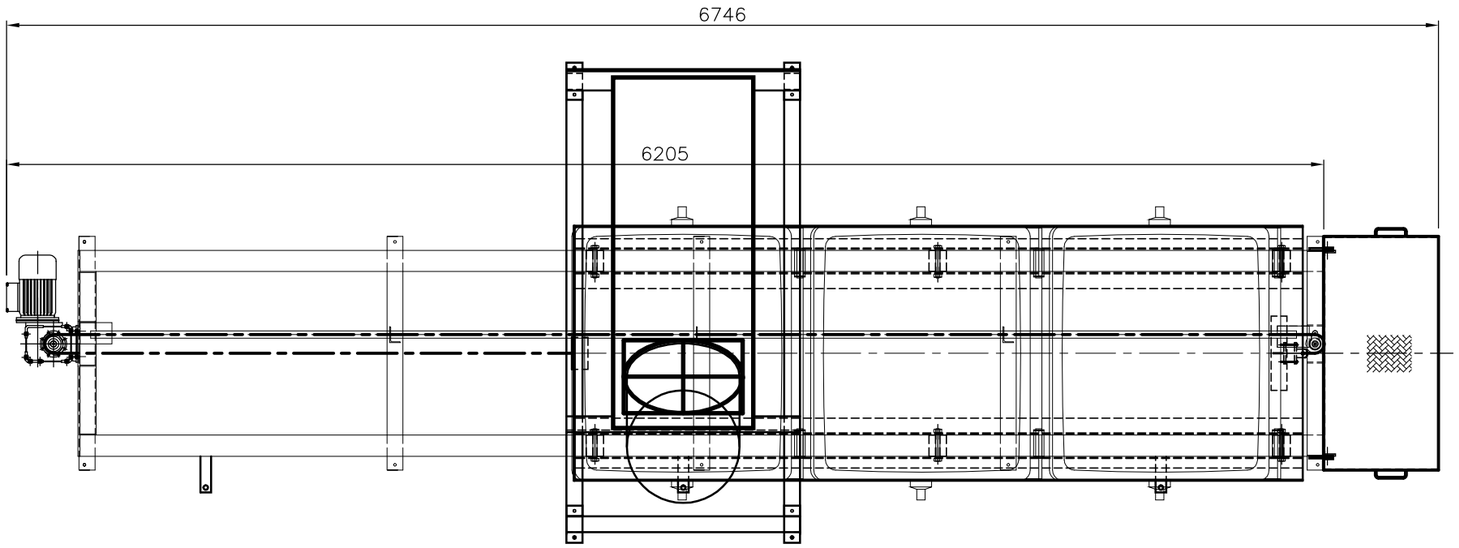
- UNSW Biolink, Randwick Campus
- UNSW Biosciences, Wagga Wagga Campus
- Canberra Institute of Technology, Woden Campus, ACT
- Monash University, Clayton Campus – 40P Waste Compound, VIC
- Victoria University Land Titles Office Tower, Melbourne, VIC
- Victoria University – CBD Campus, Melbourne

Green Star Auditing:

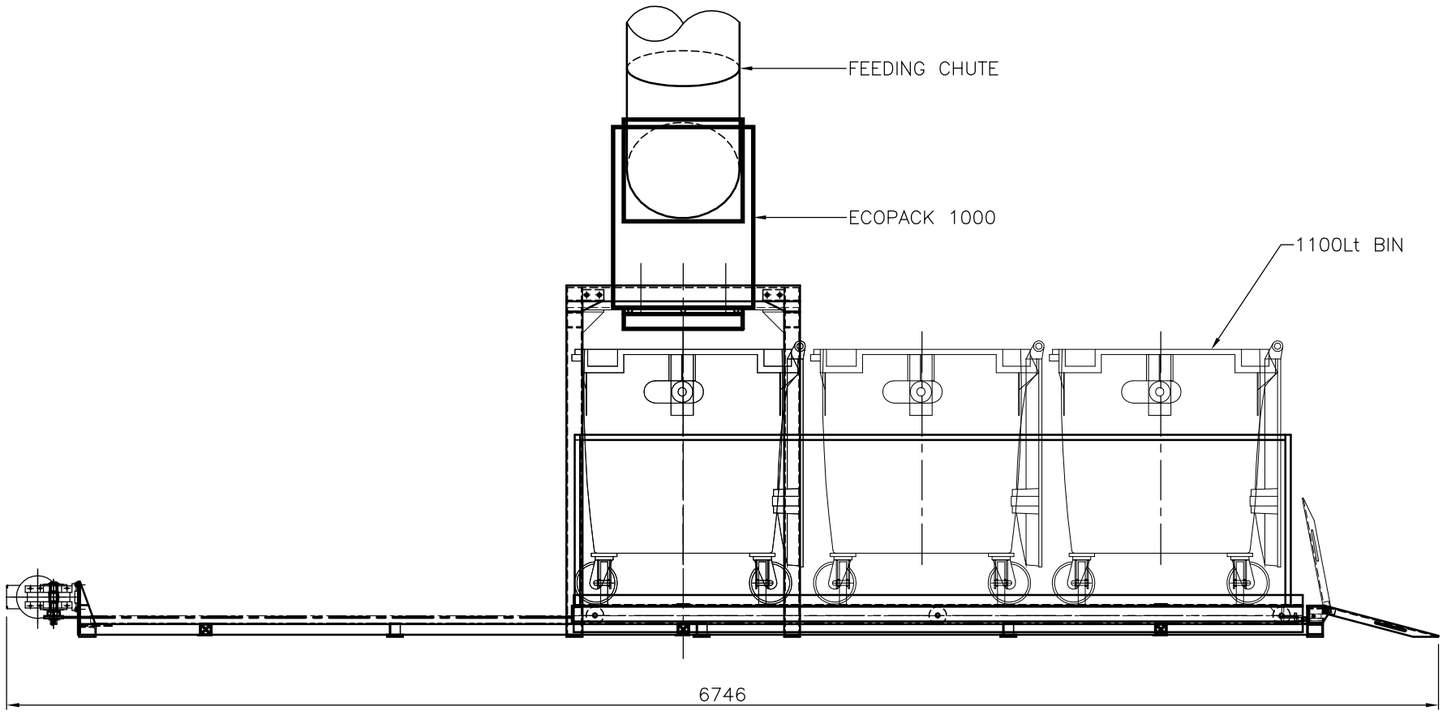
- Cleanaway Solid Waste Services (Waste Contractors)
- Cleanaway Willawong & New Chum (Waste Facilities)
- Emporium Shopping Centre: Caledonia Lane Office Project (Green Star for New Buildings Early Access Program)
- Carnegie Swim Centre (Buildings)
- Geelong Convention Centre (Buildings)
- Flinders Gate: Flinders Street, Melbourne (Interiors)

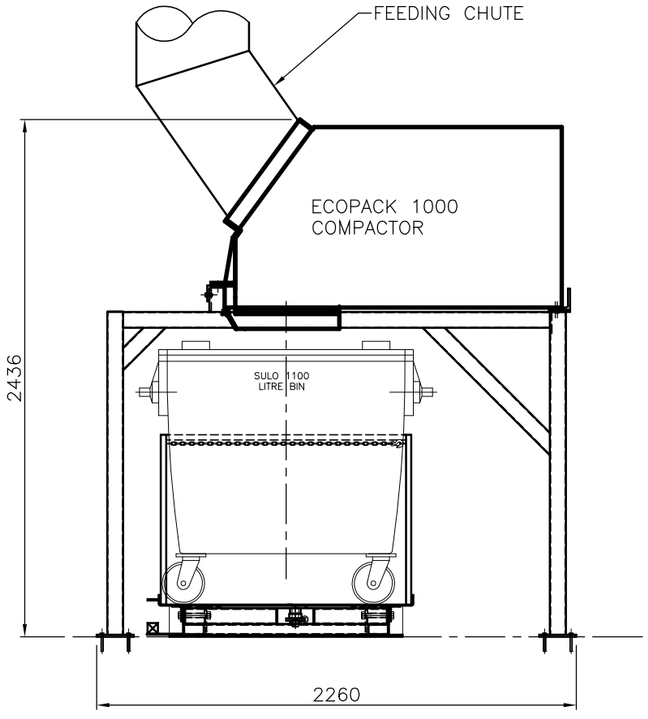
APPENDIX E

EXAMPLE EQUIPMENT SPECIFICATIONS



BIN LOADING





No:	DATE	REVISION	APPD

MATERIAL

UNLESS OTHERWISE STATED
ALL DIMENSIONS IN MILLIMETRES

DEBURR ALL EDGES

QTY:

W/O

WASTECH ENGINEERING

SPECIALISING IN: DESIGN, MANUFACTURE AND SERVICE OF WASTE DISPOSAL AND RECYCLING EQUIPMENT

21 CAPITAL DRIVE, DANDENONG ,VIC. 3175 PHONE (03) 97947155 FAX (03) 9794 7636

DRN A.B	TITLE	ECOPACK 100 3X1100 LT BIN CONVERYOR GA	
CKD S.F			
APP ---	SCALE D.N.S	CAD FILE NAME CONVEY 3x1100-WIDE-END	REV. 0
DATE 03/03/08	VIEWS ---		

ELEPHANTS FOOT RECYCLING SOLUTIONS
44-46 GIBSON AVE, PADSTOW NSW 2211
E info@elephantsfoot.com.au W elephantsfoot.com.au
Free Call: 1300 4 ELEPHANT (1300 435 374)

1100 LITRE CAROUSEL SYSTEM

PRODUCT INFORMATION

Elephants Foot 1100 Litre bin Carousel System is a versatile waste handling solution for many types of multi-storey or multi-level developments. The Carousel System collects waste or recycling being disposed from the floors above through the chute system, discharging the material via a hopper that feeds the bins positioned on the unit. Electromechanically driven with automated operation, the Carousel System automatically replaces full bins by a revolving circular platform. Once all the bins on the system are filled, an indicator light will illuminate signifying that the bins are ready for withdrawal and collection. Available with or without compaction unit, our standard 1100 litre bin Carousel System is available in standard 2, 3 or 4 bin options. Our 5 Bin option is available as a special order.

SPECIFICATIONS

System Control	Electric PLC
Power Supply	415 V AC / 20A / 5 PIN
Motor Size (kW)	0.37
Maximum bin load	440 kg
Noise (dBA)	<85
Bin Size (L)	660
Cycle time (sec)	60
Bin Quantity options	2, 3, 4 or 5

OPTIONAL EXTRAS

- Compaction unit – Please refer to the bin compactor product information sheet for details and specifications
- Enhanced safety add on's - Interlocking barriers, occupancy sensors or safety light curtains (presence sensing light barriers)
- Full bin SMS and email notification
- CMMS and BMS integration
- Extend warranty – Terms and conditions apply

STANDARD FEATURES & BENEFITS

- Simple operation with user friendly controls
- Increased waste servicing efficiency for the development.
- Automatic system control with manual override
- Robust unit construction for long performance life
- Low service and maintain costs
- Rotating flashing beacon (activated during operation)
- Quiet and efficient system operation
- Maximise safety for residents, caretakers and collectors
- Restrained design with minimal moving parts
- Can suit low ceiling clearances
- Floor contact components fully galvanised steel
- Retro fitting options to suit other chutes systems
- Compliant with relevant Building Codes and Standards
- Standard 12 month warranty

ELEPHANTS FOOT RECYCLING SOLUTIONS
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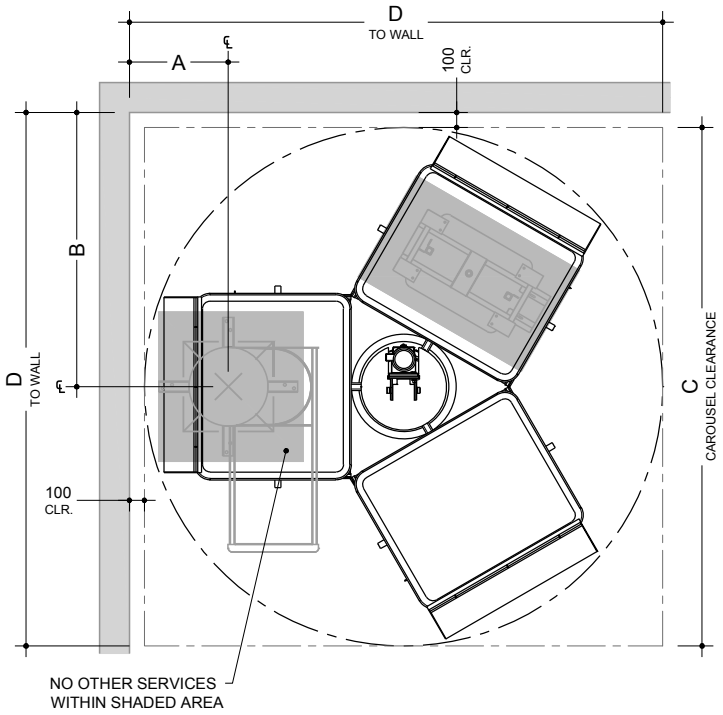
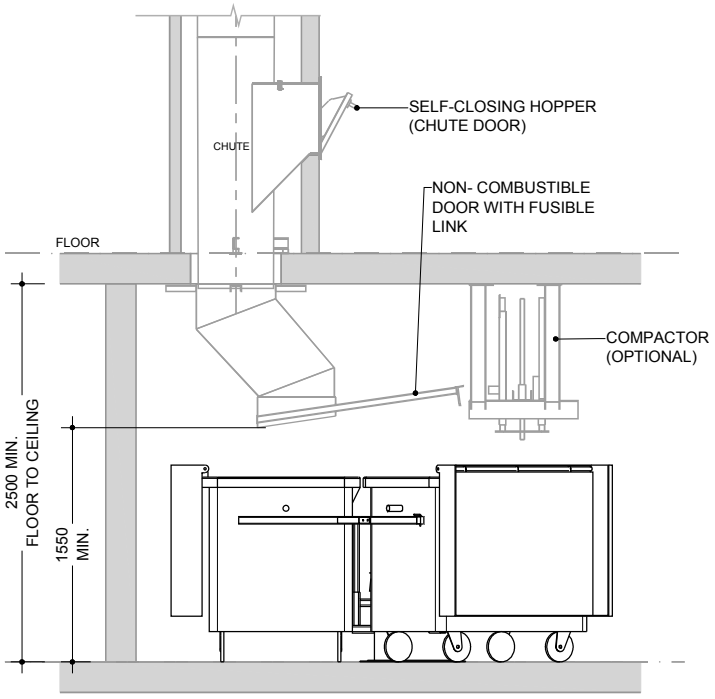
CAROUSEL SYSTEM





1100 LITRE BIN

1100 LITRE BIN CAROUSEL SYSTEM				
No. of Bins	Reference (mm)			
	A	B	C	D
2	650	1700	3200	3350
3	650	1850	3460	3600
4	650	2050	3940	4050

Notes:

Bins not provided by Elephants Foot

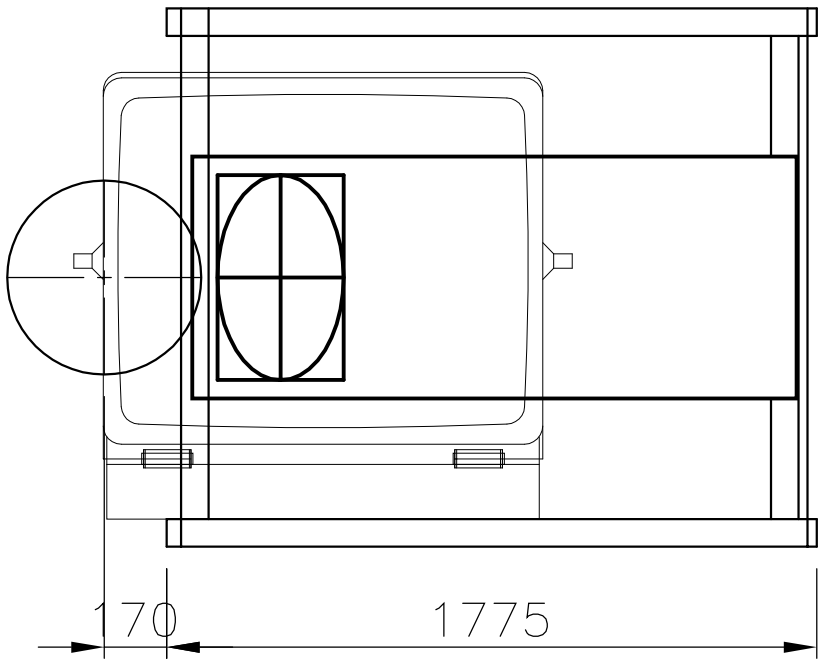
Drawings shown are for general information purposes only and provide minimum equipment spacial requirements for waste room design.

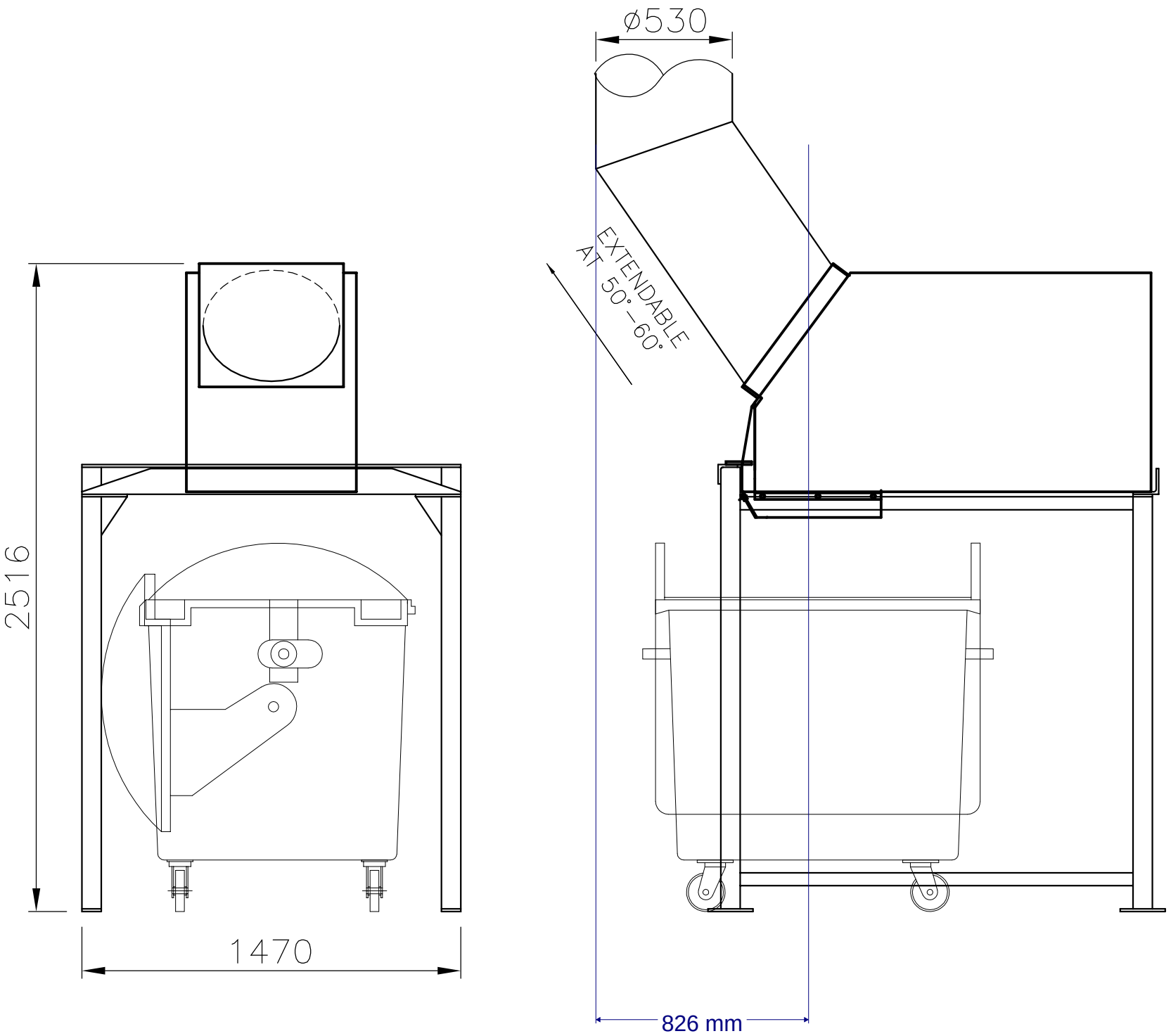
These drawings are not intended for site specific use or for construction. Each project is unique and will be designed to suit.

Additional equipment options, systems and configurations are available. For design assessment, information and advice, please contact an Elephants Foot design consultant on 1300 435 374

AUTOMATED ECOPACK
COMPACTOR WITH A
SINGLE 1100 LT BIN.
WASTECH
ECOPACK & STAND.DWG

(END LOADING)





WASTECH ENGINEERING

SPECIALISING IN: DESIGN, MANUFACTURE AND SERVICE OF WASTE DISPOSAL AND RECYCLING EQUIPMENT

21 CAPITAL DRIVE, DANDENONG ,VIC. 3175 PHONE (03) 97947155 FAX (03) 9794 7636

DRN C.G	TITLE	STAND SYSTEM SINGLE 1100 LT BIN	
CKD ---			
APP ---	SCALE D.N.S	CAD FILE NAME ECOPACK&STAND	REV. 0
DATE 28/09/06	VIEWS ---