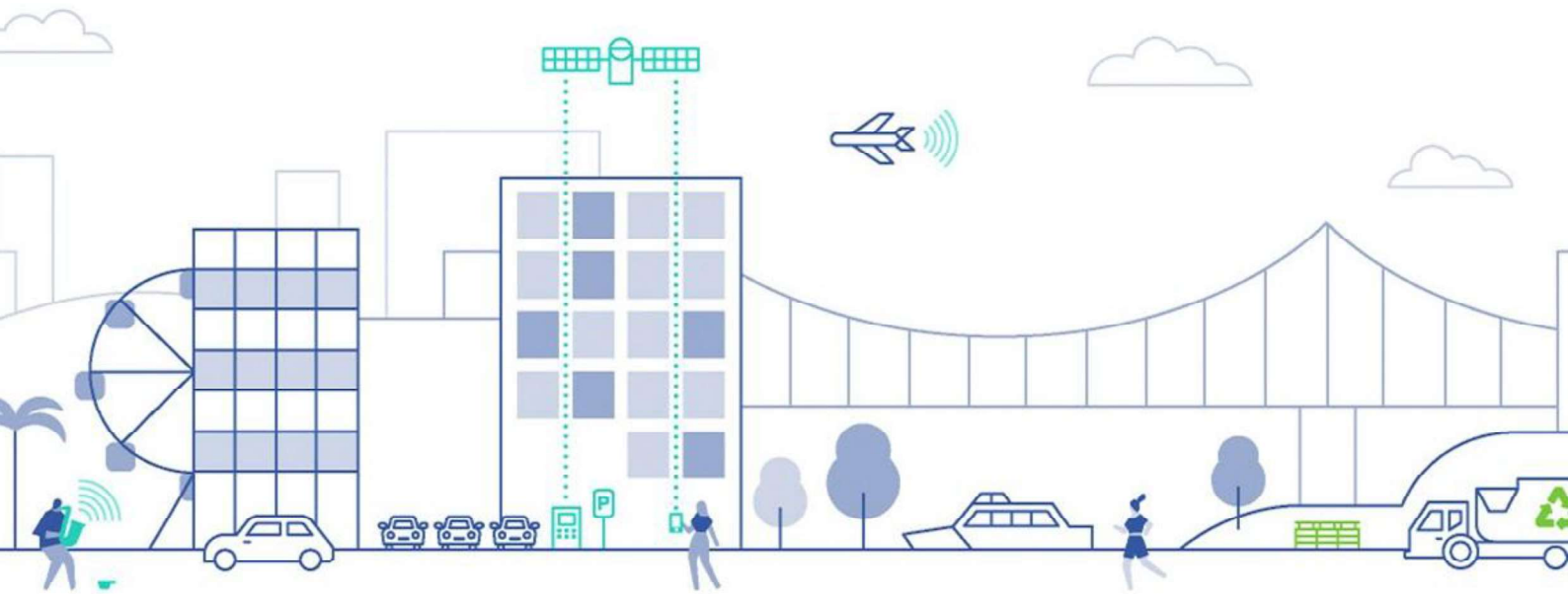
Colliers

# Operational Waste Management Plan

## Broadway Hotel – Proposed Mixed-Use Development

## At 44 Balaclava Street & 93 Logan Road, Woolloongabba

## On Behalf of Carbone Developments



**Disclaimer**

This report has been prepared by Colliers for the exclusive use of the client for the specific purpose stated within. The findings, conclusions, and recommendations presented in this report are based on the information available, assumptions made, and methodologies applied at the time of analysis.

Colliers shall not be held liable for any losses, damages, or reliance placed on this report beyond the scope of the agreed-upon engagement. Any reproduction or distribution of this report without Colliers' consent is prohibited.

## Revision Record

| Issue No. | Author | Reviewed/Approved | Development Stage / Revision Description | Date |
|---|---|---|---|---|
| 1. | N. Lee | S. Kenny | Schematic Design – Draft | 18/08/2025 |
| 2. | N. Lee | S. Kenny | Schematic Design – DA Issue | 05/09/2025 |
| 3. | | | | |
| 4. | | | | |


Level 8, 369 Ann Street, Brisbane. PO Box 12015 George Street Brisbane QLD 4003

# Contents

# Table Index



# Figure Index

# 1 Introduction

## 1.1. Background

Colliers International Engineering & Design (TTMC) has been engaged by Carbone Developments to prepare an Operational Waste Management Plan (OWMP) to support a proposed mixed-use development known as the Broadway Hotel. The proposed development is located at 44 Balaclava Street and 93 Logan Road, Woolloongabba. It is understood this OWMP will accompany a Development Application submitted to Economic Development Queensland (EDQ).

## 1.2. Project brief and scope

The proposed development intends to leverage an underutilised portion of the site to deliver a mixed-use tower while maintaining and refurbishing the existing heritage Broadway Hotel.

The content of this OWMP is intended to provide information on the typical movement of waste streams from generation to collection. Information on refuse management is given for each use and each building within the development.

Detailed information including site plans and drawings, recommended refuse management equipment and system specifications, common refuse signage as well as a list of terms and abbreviations are provided in the appendices.

The recommendations in this report relate to the operational phase of the development only. Additional requirements for refuse management during or after demolition or construction phases are not included and require a dedicated plan.

The items covered within the OWMP are described in Table 1.1.

Table 1.1: Scope items

| Item | Description |
|---|---|
| Refuse streams | Identification of refuse streams & anticipated development refuse volumes likely to be produced |
| Refuse separation | Recommendations for appropriate segregation methods for each refuse stream |
| Refuse collections | Assessment of refuse collection vehicle (RCV) access and manoeuvring |
| Refuse storage | Detailed analysis of refuse storage facilities and design |
| Refuse transfer | Assessment of refuse transfer between refuse storage and collections areas |
| Refuse disposal | Recommendations for refuse disposal within the development |
| Refuse management equipment | Identification of recommended and optional refuse management systems and equipment |
| Refuse management operations | Recommendations for operational efficiency and ongoing management, including refuse minimisation, tenant education and safety |
| Building design | Recommendations for design of refuse management facilities |

## 1.3. Site analysis

The site is located at 44 Balaclava Street and 93 Logan Road, Woolloongabba and is formally described as Lot 76 on RP11846 and Lot 50 on RP217072 as depicted in Figure 1.1.

The site has frontages on Balaclava Street, Logan Road and a local road reserve referred to as "Short Street". All service vehicle access into the site will occur via Logan Road, recognised as a neighbourhood road on BCC's road hierarchy.

The site is located within Precinct 2: Logan Road of the Woolloongabba Priority Development Area (PDA).


Figure 1.1: Site location
Source: Nearmap, image dated 7/07/2025

## 1.4. Site statistics

The proposed development consists of the existing heritage building known as the Broadway Hotel and a residential-led mixed use tower connected to the Broadway Hotel by retail laneway.

The 3 storey Broadway Hotel will be refurbished as part of the proposed works.

The 34 storey tower is comprised of basement and podium car and bike parking, retail uses at ground level and residential apartments from level 8 to level 33. Communal resident amenity is located on level 7 and the rooftop.

Figure 1.2 and Figure 1.3 provide a summary of the development as context for the refuse volume information provided in Section 2.

| BUILDING | | APARTMENTS | | | | |
|---|---|---|---|---|---|---|
| LEVEL | DESCRIPTION | APARTMENTS | 4 BED | 3 BED | 2 BED | 1 BED |
| B4 | BASEMENT 4 | | | | | |
| B3 | BASEMENT 3 | | | | | |
| B2 | BASEMENT 2 | | | | | |
| B1 | BASEMENT 1 | | | | | |
| 1 | GROUND FLOOR | | | | | |
| 2 | PODIUM 1 PARKING | | | | | |
| 3 | PODIUM 2 PARKING | | | | | |
| 4 | PODIUM 3 PARKING | | | | | |
| 5 | PODIUM 4 PARKING | | | | | |
| 6 | PODIUM 5 PARKING | | | | | |
| 7 | PODIUM 6 COMMUNAL | | | | | |
| 8 | PART FLOOR | 7 | 0 | 1 | 2 | 4 |
| 9 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 10 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 11 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 12 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 13 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 14 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 15 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 16 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 17 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 18 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 19 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 20 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 21 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 22 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 23 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 24 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 25 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 26 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 27 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 28 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 29 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 30 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 31 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 32 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 33 | TYPICAL FLOOR | 11 | 0 | 1 | 6 | 4 |
| 34 | ROOF TERRACE | | | | | |
| | | **282** | **0** | **26** | **152** | **104** |

Figure 1.2: Residential development summary

Source: Reddoor Architecture, Project: 93 Logan Road, Woolloongabba Drawing: Development Summary, Drawing Number: -, Dated: 25/08/2025

| HOTEL - AREAS BY ACTIVITY (m²) | | |
|---|---|---|
| LEVEL | USE | AREA (m²) |
| GROUND - OUTDOOR | BAR / KITCHEN / BACK OF HOUSE / STORAGE | 106 |
| | FOOD & DRINK (PATRONS AREA) | 167 |
| | CIRCULATION | 127 |
| | AMENITIES | 33 |
| | | |
| GROUND - INDOOR | HOTEL BAR (PATRONS AREA) | 53 |
| | HOTEL BAR / BACK OF HOUSE / STORAGE | 51 |
| | HOTEL FOOD & DRINK | 57 |
| | CIRCULATION | 40 |
| | | |
| LEVEL 1 - OUTDOOR | HOTEL BAR SEATING - MEZZANINE | 66 |
| | AMENITIES | 21 |
| | | |
| LEVEL 1 - INDOOR | HOTEL - BAR / SEATING | 52 |
| | BACK OF HOUSE | 15 |
| | GAMING ROOM | 68 |
| | CIRCULATION | 53 |
| | | |
| LEVEL 2 - OUTDOOR | PRIVATE FUNCTIONS - MEZZANINE | 66 |
| | AMENITIES | 21 |
| | | |
| LEVEL 2 - INDOOR | PRIVATE FUNCTIONS - ROOM | 42 |
| | BACK OF HOUSE | 15 |
| | HOTEL OFFICES | 72 |
| | CIRCULATION | 34 |

Figure 1.3: Hotel activity areas

Source: Reddoor Architecture, Project: 93 Logan Road, Woolloongabba Drawing: Hotel Use Areas, Drawing Number: -, Dated: 11/07/2025

# 2 Regulatory refuse management requirements

This section provides the detailed refuse calculations and describes the arrangements for the collection, storage, transfer and disposal of refuse within the development as deemed to satisfy current regulatory assessment benchmarks. This includes associated bin quantities, storage capacities, equipment details, collection frequencies and site access details.

## 2.1. Regulatory and governance considerations

### 2.1.1. State Government Development Scheme

This plan has been prepared to align with the refuse related sustainability goals and requirements outlined in The Woolloongabba Plan.

Whilst the application has been submitted to EDQ as a development application, it is noted that the site is located within the Brisbane City Council local government area. As such, where relevant this development has been designed to align with the respective provisions of the Brisbane City Council City Plan 2014 as outlined in Section 2.1.2.

### 2.1.2. Council's Refuse Planning Scheme

This plan has been prepared to align with BCC's refuse requirements of SC6.26 Refuse Planning Scheme Policy (PSP) v33.00. Additionally, PO2, PO63 of the Centre or mixed use code, PO32 of the Multiple dwelling code and PO8 of the Infrastructure design code.

Colliers has referred to BCC's requirements as outlined in the Refuse PSP under section 2, 3, 4 and 5 as these sections are related to general requirements for all developments and specific planning controls for both residential and non-residential uses.

A checklist detailing the specific design details addressed to align with BCC's Refuse PSP requirements is located in *Appendix A*.

## 2.2. Prescribed refuse volumes

### 2.2.1. Residential refuse volumes

The refuse volumes utilised for the calculation of residential refuse storage are based on Brisbane City Council's standard waste entitlement used for planning purposes. The entitlement is applied to all dwellings with an unchanged rate regardless of dwelling size. The waste entitlement applied to refuse calculations below is a requirement for development consent and not reflective of actual refuse generation.

A residential collection frequency of 3 times per week has been established for both general waste and commingled recycling in line with comparably sized developments previously approved by Brisbane City Council.

Table 2.1 details the residential rated entitlement applied to the calculations in Table 2.2 that form the basis for residential refuse storage area sizing and design.

Table 2.1: Residential refuse generation rate

| Generation rate | Applied to | Measure | General waste | Recycling |
|---|---|---|---|---|
| Residential | All Residential Units | L / Unit / Week | 240 | 240 |

Table 2.2: Residential refuse calculations

| Area description | Measure | Quantity | General waste L/Week | Commingle recycling L/Week |
|---|---|---|---|---|
| Residential Apartments | Unit | 282 | 67,680 | 67,680 |
| **Total Weekly Volumes Compacted (L / Week)** | | | 22,560* | N/A |
| **Volumes per Day (L / Day)** | | | 3,223* | 9,669 |
| **Volumes per Collection (L / Collection)** | | | 7,520* | 22,560 |
| Collection and Equipment Details | Collections per Week | | 3 | 3 |
| | Storage Capacity | | 3 Days | 3 Days |
| | Equipment Size | | 1,100L | 1,100L |
| | Equipment Quantity Required | | 6.84 | 20.51 |
| | Equipment Quantity Provided | | 7 + 1 | 21 + 1 |

*Compaction ratio of 3:1 used for calculation purposes

### 2.2.2. Non-residential refuse volumes

The generation rates and service frequency used for the calculation of non-residential refuse produced have been applied based on rates prescribed by Brisbane City Council to achieve compliance. While the non-residential component proposes a single tenancy, a mix of refuse generation rates have been applied to refuse generation calculations based on the different activities of the various areas, typical of a large or multi-storey tenancy. The area activity mix is based on the tenancy test fit identified by the client and as indicatively depicted on architectural drawings.

A 7-day trading week has been assumed for the non-residential tenancy.

A non-residential collection frequency of 3 days per week has been established for both general waste and commingled recycling in alignment with the proposed residential collection frequency.

Table 2.3 outlines the non-residential refuse generation rates utilised.

Table 2.4 outlines the refuse generation volumes which form the basis for waste storage area design and sizing.

Table 2.3: Refuse generation rates

| Generation rate | Applied to | Measure | General waste | Recycling | Days of operation |
|---|---|---|---|---|---|
| Food and drink outlet (if greater than 150m$^2$) | Basement 1 Indoor and outdoor F&B and BoH spaces | L / 100m$^2$ / Day | 660 | 200 | 7 |
| Food and drink outlet (if less than 150m$^2$) | Basement 1 coffee area | L / 100m$^2$ / Day | 300 | 200 | 7 |
| Bar/club/nightclub entertainment facility | Basement 1 bar and bar seating, Level 2 Bar seating and Level 3 private functions | L / 100m$^2$ / Day | 50 | 50 | 7 |
| Office | Level 3 office areas | L / 100m$^2$ / Day | 10 | 20 | 7 |

Table 2.4: Non-residential refuse calculations

| Area description | Measure | Quantity | General waste L/Week | Commingle recycling L/Week |
|---|---|---|---|---|
| Food and drink outlet (if greater than 150m²) | GFA (m²) | 324 | 14,969 | 4,536 |
| Food and drink outlet (if less than 150m²) | GFA (m²) | 22 | 462 | 308 |
| Bar/club/nightclub entertainment facility | GFA (m²) | 314 | 1,099 | 1,099 |
| Office | GFA (m²) | 72 | 50 | 101 |
| **Total Weekly Volumes (L / Week)** | | | **16,580** | **6,044** |
| **Volumes per Day (L / Day)** | | | **2,369** | **863** |
| **Volumes per Collection (L / Collection)** | | | **5,527** | **2,015** |
| Collection and Equipment Details | Collections per Week | | 3 | 3 |
| | Storage Capacity | | 3 Days | 3 Days |
| | Equipment Size | | 1,100L | 1,100L |
| | Equipment Quantity Required | | 5.02 | 1.83 |
| | Equipment Quantity Provided | | 5 | 2 |

## 2.3. Refuse bin, equipment requirements and specification

Table 2.5, and Table 2.6 outline the total number of bins and additional equipment required for the development based on the volume calculations above.

As actual refuse volumes may vary from assessment benchmarks or over time according to evolving waste streams and operation of the site, bin numbers and sizes may need to be altered throughout the operational phase to suit the building operation and occupant needs.

Table 2.5: Total bin requirements

| Component | Refuse stream | Bin/storage – Size or type | Number required |
|---|---|---|---|
| Residential | General waste | 1,100L | 7 + 1<br>1 to remain beneath the chute discharge during servicing |
| | Commingled recycling | 1,100L | 21 + 1<br>1 to remain beneath the chute discharge during servicing |
| Non-residential | General waste | 1,100L | 5 |
| | Commingled recycling | 1,100L | 2 |

Table 2.6: Additional residential equipment

| Component | Description | Quantity | Capability/specification - See *Appendix D* for further details |
|---|---|---|---|
| Residential | Individual unit bins - stream separated receptacles | 564 Min. | A minimum of 1 receptacle for each stream is required in each unit. Refer to Section 2.4.1.<br>Dimensions of receptacles used are not to exceed the dimensions of the chute hoppers; typically 30cm$^3$. |
| | Dual refuse chute system | 1 | Co-located refuse chutes for the disposal for general waste and commingled recycling. Disposal points provided on each habitable level.<br>Colliers recommends a 600mm chute diameter for commingled recycling applications. |
| | Integrated chute discharge compactor | 1 | For use with general waste only. Will have a capacity to achieve an average compaction ratio of 3:1. |
| | 2-bin 1,100L linear bin rotation system | 1 | Automates bin rotation beneath the chute discharge for general waste. Reduces the overall level of building management intervention required. |
| | 3-bin 1,100L linear bin rotation system | 1 | Automates bin rotation beneath the chute discharge for commingled recycling. Reduces the overall level of building management intervention required. |
| Non-residential | Individual stream receptacles | TBD | Receptacles for the immediate disposal of refuse into separate streams. Typically, bins up to 60L in volume placed BoH in bin stations. Further details in Section 2.4.1 |
| | Used cooking oil storage | 1<br>(If required) | Required for food and beverage tenancies and commercial kitchens using fry vat equipment. Portable storage tank stored BOH of each tenancy. |

## 2.4. Refuse disposal

The tables in this section summarise general recommended disposal arrangements for frequently generated and infrequently generated refuse for each development component. Section 2.4.1 describes the frequently generated refuse streams that are generated in high volumes for any given period and require significant capacity for storage prior to collections. Section 2.4.2 describes the infrequently generated refuse streams that are generated in relatively low volumes, and where minimal provision for storage can be easily managed by collection frequency and ad hoc storage arrangements.

### 2.4.1. Frequently generated refuse

Table 2.7: Disposal of frequently generated waste

| Refuse stream | Disposal details |
|---|---|
| WASTE | |
| General waste | Residential<br>Space for bins to store one day's worth of generated refuse will be provided in each residential apartment. Each day or as required, general waste will be transferred by residents to the dual chute access hoppers on each habitable residential level (see Figure 2.1). The refuse chute will discharge directly into the bulk bins stored in the chute discharge room. The chute hopper doors will be colour-coded for easy identification and to support the separation of refuse streams. Instructions on the use of the dual chute system and accepted items in each stream will be required to be included in the resident apartment manual.<br>Waste bins should always be lined with bags and the bags tied before removal. Operationally, bins used for general waste should limited to 30L or less and must not exceed the dimensions of the chute hoppers.<br>Bins are typically positioned in a cupboard beneath the kitchen sink. Waste bins should be accompanied by a commingled recycling bin in order to facilitate separation of general waste and recycling.<br>Receptacles will be placed in all communal areas where refuse will be generated such as the various rooms of the common amenity podium for collection and storage of at least one day of general waste. Bin quantities will be determined during the operational phase. A recycle bin will be positioned wherever a general waste bin is positioned to maximise recovery. Building management will assist with disposal of all refuse generated in communal areas.<br>Non-residential<br>Depending on the type of operations of the individual areas within the tenancy, different wastes may be produced. Waste bins should always be lined with bags and the bags tied before removal. Waste bins must be accompanied by a recycling bin in order to facilitate separation of general waste and recycling.<br>F&B/restaurant waste will be captured by bins typically ranging in size from 30 L to 60 L that will be placed within the kitchen or back-of-house area to meet the design or layout criteria of the operators. Bar related areas will typically produce lighter general waste and may consider the use of larger bins, up to 90L for disposal. All areas will have a sufficient quantity of receptacles within each tenancy for collection and storage of at least one peak service period worth of general waste.<br>After each day of service or between peak operating periods, waste will be transferred by cleaning staff to the refuse storage area and placed / decanted into the bulk storage. Carts or trolleys may be used for transfer if required, e.g. to transport heavier waste, multiple bags or types of refuse at the same time. |

Table 2.8: Disposal of frequently generated recoverable material

| Refuse stream | Disposal details |
|---|---|
| **Organic (Food) waste** | Separating organic or food waste from general waste is recommended to reduce the total amount of general waste produced. Separation may be considered and implemented at any stage during the operational phase of the development.<br>Residential<br>While BCC does not currently offer a food organics collection service to multiple unit dwellings, commercial options are available at additional cost.<br>Alternatively, domestic compositing equipment may be used for individual units or communally. Communal composting must be facilitated and managed by a building manager or caretaker to ensure correct usage.<br>Where food waste is separated, caddy bins or bins less than 10L should be used in residential kitchens, for disposal of food waste. The bins are then transferred to the refuse room for collection. The content is then decanted in bulk bins or composting equipment provided. Transfer and collection should occur on a frequent basis to minimise odour amenity issues.<br>Non-residential<br>Where food waste is separated, caddy bins or bins no larger than 60L should be used in high volume situations such as commercial kitchens, for disposal of food waste. The bins are then transferred to the refuse room for collection. The content is then decanted in bulk bins or processing equipment provided within the refuse enclosure. |
| **Cooking oil waste** | Waste oils should be disposed separately from general waste if large quantities are produced (e.g. in food and beverage outlets). All waste liquids / oils (e.g. from commercial kitchens) should be separated and stored in clearly labelled containers. Typically, waste oils are removed during delivery of new oils by the supplying contractor.<br>Bunded areas or bunded plastic pallets should be supplied for the storage of liquid waste / oils and stored in a levelled area. Alternatively, portable self-bunded storage tanks may be utilized an stored in the kitchen or BoH. |
| RECYCLING | |
| **Commingled, including**<br>• glass<br>• aluminum<br>• steel cans<br>• tins<br>• cardboard<br>• semi rigid plastics | Residential<br>Items for recycling must not be bagged and disposed in loose form. This can be done by decanting the materials from the individual receptacles into the recycling chute (see Figure 2.1). The refuse chute will discharge directly into the appropriate bulk bin stored in the chute discharge room. The chute hopper doors will be colour-coded for easy identification and to support the separation of refuse streams. Instructions on the use of the chute system and accepted items in each stream will be required to be included in the resident manual.<br>Residents will liaise with building management for the disposal of all oversized recyclable materials, lifts will be utilised for vertical transfer of oversized material.<br>Residents will have receptacles within their individual units for collection and storage of at least one day of recycling. Recycling bins are typically placed under the kitchen sink next to the general waste bin.<br>Recycling bins will usually be used for all recycling materials (commingled recycling). However, residents are encouraged to make use of the container refund scheme and separate eligible containers from the commingled recycling material (see below).<br>Receptacles will be placed in all communal areas where refuse will be generated for collection and storage of at least one day of commingled recycling. Bin quantities will be determined during the operational phase.<br>Non-residential<br>Commingled recycling from areas such as food and beverage outlets including kitchens, bars can be captured by bins up to 90L that will be placed within the kitchen or back-of-house area to meet the design or layout criteria of the café or restaurant operators. |
| | Container deposit / refund schemes are currently in place in Queensland. Various models exist including bottle return facilities and (automated) reverse vending machines.<br>Occupants should be encouraged to separate containers that qualify for the schemes from the waste or recycling streams and send back to a return point. Storage space or dedicated bins within the units or refuse rooms can be provided. |

## 2.4.2. Infrequent waste

Table 2.9: Disposal of infrequently generated waste

| Refuse stream | Disposal details |
|---|---|
| Garden organics refuse/green waste | Garden organic refuse also referred to as green waste will be produced from landscaped areas or potted plants around this development. Green waste is produced largely on a weather or seasonal dependent basis and based on plant selections. Green waste is usually removed by the designated maintenance contractor. Interim storage is not provided.<br>The engaged contractor will be required to send this material to a composting or resource recovery facility rather than to a landfill.<br>Alternatively, where onsite composting occurs, green waste may be combined with food waste for composting. Output product may be reused in site landscaping where appropriately matured or pasteurised as outlined in *AS 4454-2003 Composts, soil conditioners and mulches*. |
| Hard waste/bulky goods | Hard waste collections will be coordinated in line with BCC's hard waste collection arrangements for residential uses, and hard waste / bulky goods moved to the loading or a designated area for removal prior to collection. When storing bulky goods in a loading area, it is recommended that items are placed on a pallet for efficient loading via a pallet jack or forklift onto the RCV.<br>Non-residential uses will utilise bulk bins provided for bulky waste disposal or make other coordinated collection arrangements where items are unsuitable for bulk bin disposal or where significant volumes are generated such as during tenancy refits. |
| Hazardous waste - Batteries | Batteries are highly volatile and must be disposed of separately and never in the general waste or commingled recycling bins. Colliers recommend a communal disposal point is provided by site management and located in the main lobby or alternate easily accessible location for use by both residential and non-residential uses. |
| Hazardous waste (paints, chemicals) | It is expected that the building management assist residents or tenancy operators with disposal of hazardous or liquid waste and any paint or chemicals as required and requested. Hazardous waste must be handled with due care, separated and securely stored for collection by a specialist waste contractor. Please refer to local and QLD government websites for further information. |

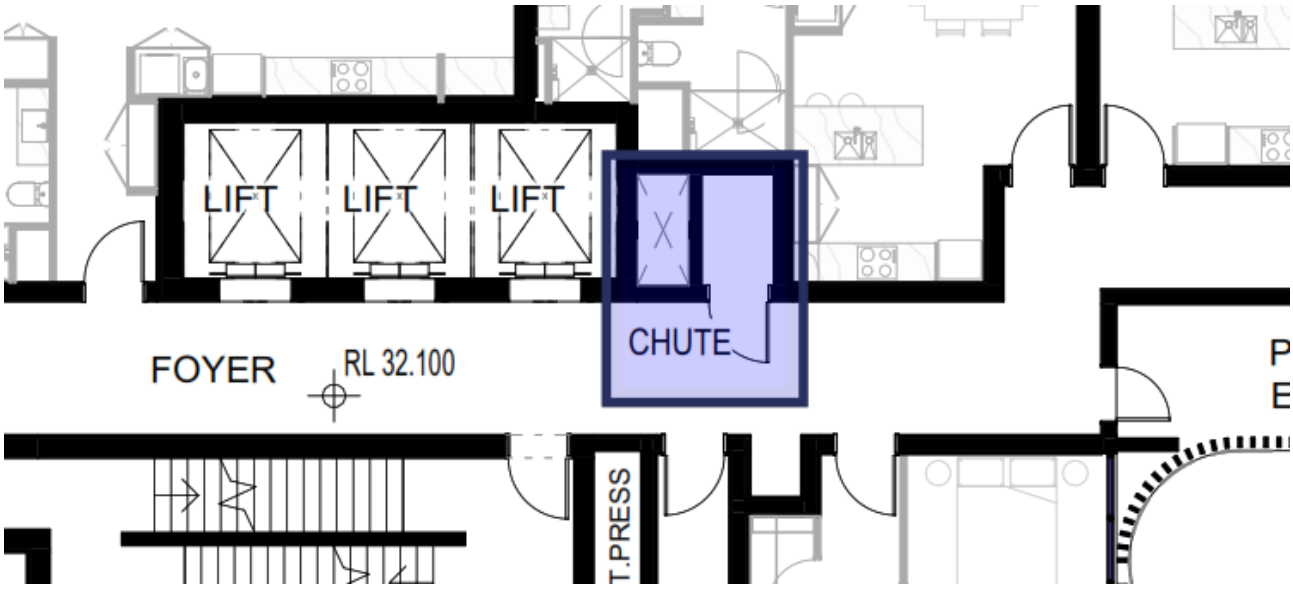



Figure 2.1: Typical residential level chute hopper access

Source: Reddoor Architecture, Project: 93 Logan Road, Woolloongabba, Drawing: Typical floor plan – Type 1, Rev: DA-2-118, Rev: D

## 2.5. Refuse storage, access and rotation requirements

All refuse will be stored within bins housed within dedicated refuse storage areas. Separate storage areas are provided for residential and non-residential uses. All refuse storage and servicing areas are provided on Basement 1.

### 2.5.1. Residential refuse storage areas

Residential refuse storage is provided over 2 areas being a bin storage room and chute discharge area separated by chain mesh or equivalent partition, indicated by a dashed line surrounding the indicative bin rotation equipment on architectural drawings.

The chute discharge area is provided beneath the chute termination. The chute discharge area is designed to house the chute discharge equipment including bin rotation and compaction equipment specified in Table 2.6. The dual chute systems will offset from the core at a sufficient height above ground to enable the chute to discharge into the appropriate position on the bin rotation equipment.

Access to the chute discharge area will be restricted to building management or approved personnel only via the restricted distribution of keys / fobs and signage.

The bin storage room, referred to as 'res bins' on architectural drawings will provide storage for all residential bins required for the development as detailed in Table 2.5 and will serve as the servicing location. The bin storage room directly adjoins the loading dock and RCV bay.

Residents will liaise with building management to access the bin storage room for the disposal of all refuse materials not suitable for chute disposal.

Building management will be responsible for the exchange of bins beneath the chutes on bin rotation equipment as well as the presentation of bins requiring collection to the bin storage room prior to each scheduled collection.

The collecting contractor will access the residential bin room for the retrieval of bins for collections servicing.

Figure 2.2 overleaf depicts the refuse storage areas provided for the development.

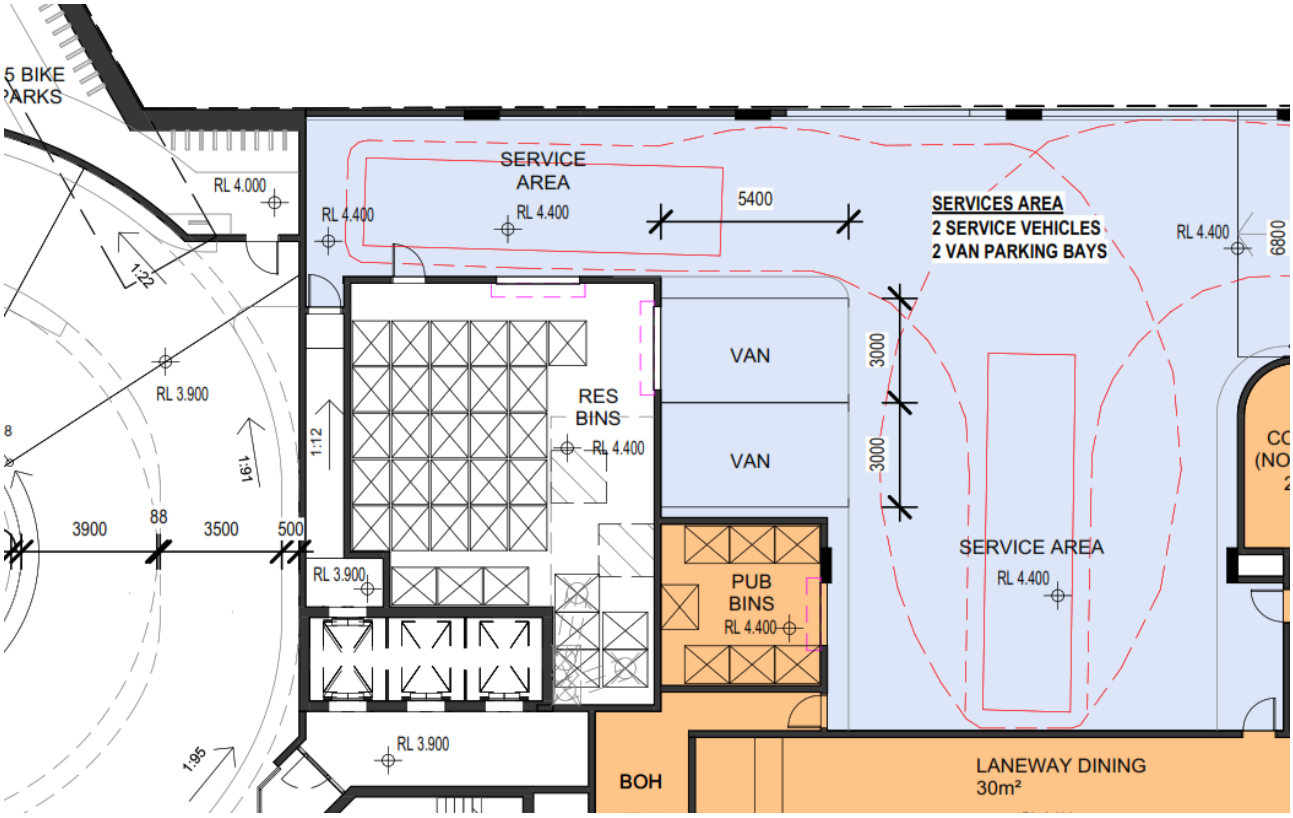



Figure 2.2: Refuse storage area layouts
Source: Reddoor Architecture, Project: 93 Logan Road, Woolloongabba, Drawing: Basement 1, Rev: DA-2-099, Rev: F

### 2.5.2. Non-residential refuse storage areas

A co-located but wholly separate room is provided for the non-residential component of the development and is referred to as 'pub bins' on architectural drawings. The pub bins room directly adjoins the loading bay and BoH access on Basement 1 to facilitate both convenient disposal and servicing.

The room is sufficiently sized to provide direct access to all bins required for the non-residential component of the site as detailed in Table 2.5.

Access to the non-residential refuse room will be restricted to tenancy staff and the collecting contractor only.

The configuration of the non-residential refuse room is illustrated in Figure 2.2.

## 2.5.3. Refuse storage area design

Table 2.10 outlines the refuse storage area design criteria addressed for each storge area in order to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area.

Table 2.10: Refuse storage area design requirements

| |
|---|
| **Positioning considerations** |
| Positioned in immediate proximity or directly accessible to the designated loading point |
| Storage provided is conveniently accessible to residents and tenancy staff for disposal or accessed via chutes. |
| Is in a purpose-built storage room which is designed to be unattractive to vermin and used solely for the storage of refuse leaving the site only. |
| Not located adjacent to or within any habitable portion of a building or place used in connection with food preparation (including food storage). |
| Is positioned away from entrances to shops or residential premises |
| Is over 5m from any door, window or fresh air intake within the development or any adjoining site. |
| **Visual amenity considerations** |
| Is enclosed on all sides except for the access points to ensure bins are not visible from a public place, neighbouring properties, passing vehicles or pedestrian traffic external to the site. |
| Is designed to minimise their visual impact on the surrounding areas. |
| **Functional design considerations** |
| Is of sufficient size to accommodate the bins with sufficient clearance around the combined bin area |
| Doors / shutters wide enough to allow for the easy removal of the largest container to be stored. |
| Permits unobstructed access for removal of the containers to the service point. |
| The height of the bin storage area allows for waste bins to be opened and closed. |
| Does not have any steps or lips where bins are required to be moved. |
| Adequate artificial lighting. |
| Be fire rated and ventilated in accordance with the National Construction Code – Building Code of Australia. |
| **Bin washing and room cleaning considerations** |
| A hose cock provided inside each room for cleaning bins and the enclosures. |
| The walls, ceilings, floors and equipment are to be designed and constructed of impervious material with a smooth finish to allow for easy cleaning. |
| Coved at the intersection with the walls with coving integral to the floor. |
| The floors to be graded to fall to a drainage point. |
| Drainage points connected to sewer in accordance with trade waste requirements. |
| Roofed and designed to prevent entry by rainwater. |

## 2.5. Refuse transfer

### 2.5.1. Residential refuse transfer

Residents will transfer all refuse vertically via the dual refuse chutes. Building management will assist residents in facilitating disposal of bulky recyclable items not suitable for chute disposal.

The building manager or caretaker will be responsible for the rotation of bins beneath the chute discharge and for ensuring all bins requiring collection are presented to the bin storage room prior to collection.

The collecting contractor will collect all bins directly from the consolidated bin room manoeuvre to the RCV lifting mechanism and return bins after service.

Building management will be responsible for the cleaning of bins and the room after collection as required.

### 2.5.2. Non-residential refuse transfer

Tenancy staff will be responsible for the transfer of all refuse from within the tenancy to the refuse room between peak service periods as required. The service stairs or lift will be used for the vertical transfer of refuse.

The collecting contractor will collect all bins directly from the non-residential storage room, manoeuvre to the RCV lifting mechanism and return bins to the room after service.

### 2.5.3. Refuse transfer path design

Table 2.11 demonstrates the criteria addressed in the design of the refuse transfer path.

Table 2.11: Refuse transfer path design

| |
|---|
| The bins and refuse to be transferred via hard stand pathway. |
| Allows bins to be easily manoeuvred. |
| Does not impede traffic flow. |
| The transfer of bins does not extend through any habitable parts of a building or food premise |
| Does not have any lips, stairs or steps for bins to be manoeuvred easily. |

## 2.6. RCV and bin servicing arrangements

The refuse collection methodology is consistent for both residential and non-residential uses; all refuse will be collected by Rear Loading RCV.

Council's appointed collecting contractor will be responsible for the collection of all residential refuse. All non-residential refuse will be collected by private contractor however; the development operators may elect to use engage Council's appointed collecting contractor under commercial contract arrangement and align service days during residential servicing to reduce overall site vehicle movements.

All RCV's enter site via the driveway crossover on Logan Road in a forward gear. Residential collections may be performed with the RCV standing next to the residential bin room. Alternatively, the RCV may perform collections in the same position as the non-residential refuse collections area. Dependent on RCV servicing location, a single reverse manoeuvre will be performed either prior to or once the collections service is complete, then will exit site onto Logan Road in a forward gear.

Building management will be responsible for ensuring the van bay in front of the second roller shutter for the residential bin room is vacant prior to and during service. The second roller shutter is provided for the improved circulation of bins for collections.

Figure 2.3 demonstrates the ingress and egress RCV swept path manoeuvres for a 10.24m rear loading RCV as specified in BSD 3008.

Further details on vehicle access and on-site manoeuvring can be found in the transport report submitted with the submission.

Table 2.12 demonstrates the features of the bin servicing area.

Table 2.12: Service area design

| |
|---|
| Has sufficient access and clearance for the waste and recycling collection vehicles to service the bins, including no overhead obstructions. |
| Allows bins to be serviced safely while minimising the impediment to vehicle movements during servicing. |
| Is clearly separated from car parking bays, footpaths and pedestrian access. |
| Is devoid of stairs, lips or ramps and allows bins to be manoeuvred easily. |
| Does not block the entry and exit to the property. |
| Is not adjacent to a kitchen or eating area for public use. |
| Is over 5m from any door, window or fresh air intake within the development or any adjoining site. |
| Is screened sufficiently to minimise the view of bins from neighbouring properties or passing vehicles and pedestrian traffic external to the site. |
| Is positioned away from entrances to shops or residential premises. |
| Best practice for non-residential development includes CCTV or other video monitoring designed to record RCV's collecting bins. |

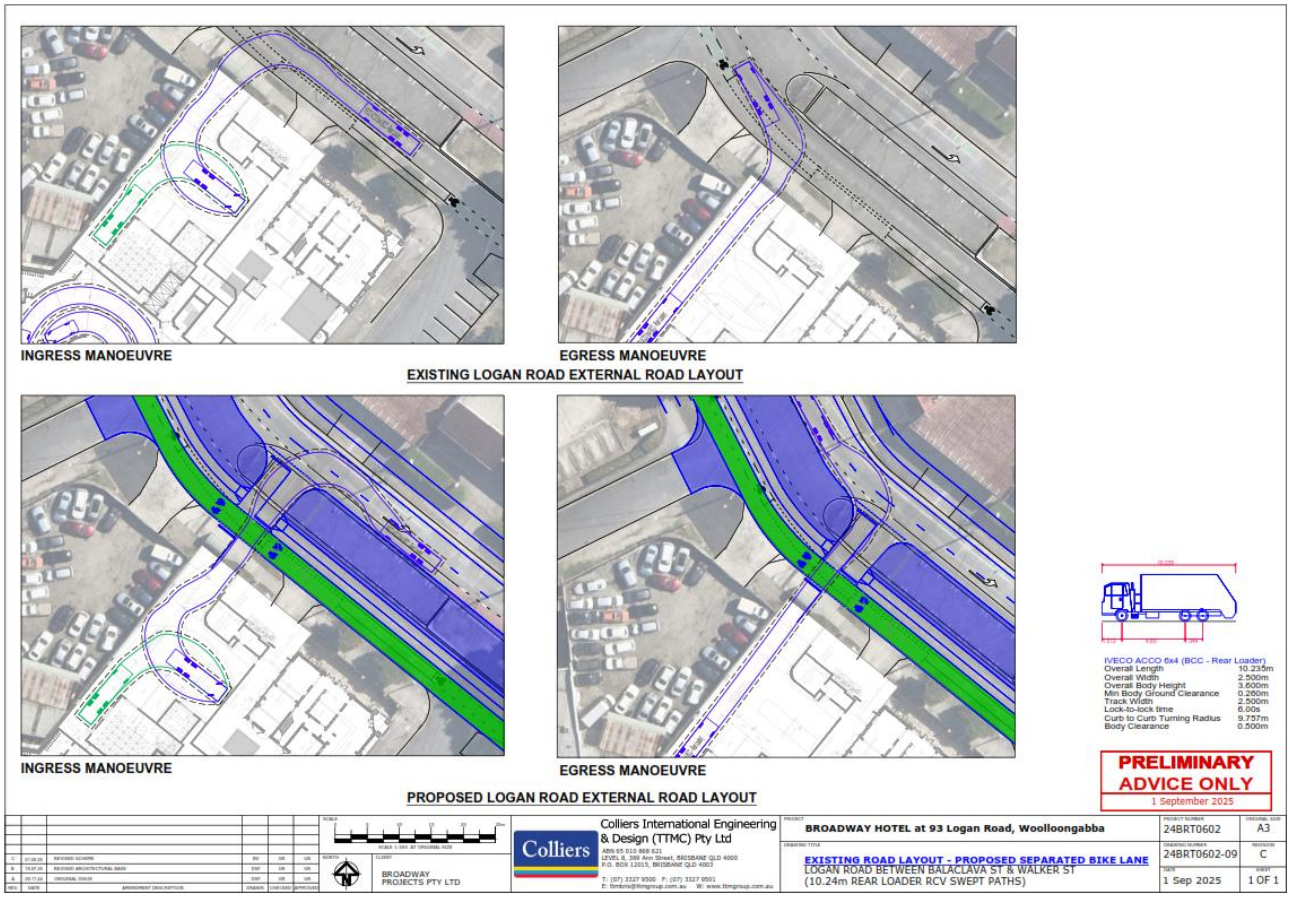



Figure 2.3: RCV swept path

# 3. Recommended operational refuse management

**This section does not contain information relevant for building design assessment.**

This section relates to the outcomes and waste management practices of the development during the operational phase as recommended by Colliers. It is intended for use as a live document by the end user of the development to assist with the ongoing management of the development.

## 3.1. Anticipated residential refuse volumes

Colliers have worked extensively with operating residential developments within the Brisbane local government area. This includes establishing typical volumes of refuse generated through volumetric assessment. Colliers have established a flat generation rate applicable to developments containing mixed unit sizes. This rate is used to provide more accurate recommendations relating to anticipated bin numbers and building management intervention through bin rotations beneath the refuse chute.

It should be noted that the recommendations and comments in this section are based on the aggregate audit results of operational sites completed by Colliers and do not factor in potential demographic or socio-economic factors and therefore not site specific however, give an estimation of likely waste generation. Site specific auditing is recommended to establish actual generation and composition of refuse for this site. Site specific auditing allows refinement of the overall refuse strategy.

### 3.1.1. Residential refuse profile and stream separation

Refuse generated by residential uses including multiple dwelling residential apartments includes a substantial volume of food waste. Colliers recommend that food organic waste is separated from the general waste stream. Onsite compositing or organics processing equipment should be considered within the final design, and an area should be identified for the potential instigation of composting during the operational phase of the development. Where onsite composting or processing occurs, this must be facilitated and managed through a building manager to ensure the correct use.

Alternatively, commercial food waste collections may be undertaken by the development at an additional cost. Council do not provide rating concessions for initiatives to reduce waste. Where commercial collections are undertaken this is an additional waste expense over Council's waste rating charge.

Colliers recommend that Container Deposit Scheme (CDS) receptacles are also available for resident use, this may provide additional revenue to the development (such as social club funds) or be donated to charity. Single item recyclable streams as captured by CDS offer a higher value recyclable product than achieved through commingled recycling. Incentivised recycling schemes help promote participant buy-in.

Similarly, consideration should be given to the separation of bulky cardboard. Oversized cardboard improperly disposed of is a leading cause of blockages in recycling chute applications.

### 3.1.2. Recommended residential refuse bins and equipment

Table 3.1 outlines the number of bins that may be implemented where an additional level of sustainability through landfill diversion is sought. The recommended level of stream separation may be implemented at any stage during the occupational phase of the site.

These recommendations are provided to assist in the instigation of collection services and provided based on Colliers recommended stream separation.

Additional services may be provided utilising the residential bin holding room as proposed within the development application, with disposal facilitate through building management.

Table 3.1: Recommended residential bin requirements

| Refuse stream | Bin/equipment - Type or size | Bins required | Storage capacity between collections |
|---|---|---|---|
| General waste | 1,100L | 5<br>+ 1 to remain beneath each chute discharge during servicing | 3 Days |
| Food organics | 240L | 8 | 2 Days<br>Servicing every 2 days recommended |
| Commingled recycling | 1,100L | 9<br>+ 1 to remain beneath each chute discharge during servicing | 3 Days |
| CDS | 660L | 1 | 7 Days |
| Bulky cardboard | 1,100L | 1 | 3 Days |
| E-waste<br>(Excluding batteries) | 1,100L | 1 | Ad Hoc |
| Mixed batteries | Countertop receptacle | 2 | Ad Hoc |

## 3.2. Anticipated non-residential refuse volumes

The volume and composition of non-residential refuse will vary by and be influenced by the venue operator and their preferences.

Based on both Colliers experience with operating sites and published third-party audit data, it is anticipated the site will generate less refuse than the generation calculations required for development compliance. The storage areas provisioned for non-residential storage may be used to implement best practice stream separation.

The comments in this section are provided as a guide for the implementation of this OWMP. It is recommended that site specific auditing is undertaken once the development reaches 80% occupancy to refine the waste strategy and related equipment.

### 3.2.1. Non-residential refuse profile and stream separation

Cardboard / Paper and Organics constitute the majority of total refuse generation and represent approximately 70% of the total volume of refuse generated in food and beverage related developments. Colliers recommends that organics waste, cardboard / paper and plastics are all separated from the general waste and commingled recycling.

Where food waste is separated, a service interval no greater than 2 days between services is recommended to prevent odour amenity issues.

Glass should also be separated where significant volumes are generated as typical of tavern/pub developments and may be collected as a CDS stream. As CDS offers a rebate and is not subject to a waste levy, this may be consolidated with residential CDS collection.

### 3.2.2. Non-residential refuse profile and stream separation

Table 3.2 outlines the number of bins that may be implemented where an additional level of sustainability through landfill diversion is sought.

The recommended level of stream separation may be implemented at any stage during the occupational phase of the site.

Table 3.2: Recommended non-residential bin requirements

| Refuse stream | Bin/equipment - Type or size | Bins required | Storage capacity between collections |
|---|---|---|---|
| General waste | 1,100L | 2 | 3 Days |
| Food organics | 240L | 3 | 4 Days<br>Servicing every 2 days recommended |
| Commingled recycling | 1,100L | 1 | 3 Days |
| Cardboard | 1,100L | 2 | 3 Days |
| CDS | 240L | 4 | 7 Days |

## 3.3. On-going management

*The tables below relate to a cycle of ongoing implementation, operation, review and amendment of the refuse strategy. These tables are intended to serve as a live document to be completed and updated during the operational phase of the development and therefore intentionally left blank.*

Responsibilities will be assigned for all on-going refuse management related activities during the operation of the development. Colliers recommend the appointment of dedicated personnel to champion refuse management and sustainability. The following lists (Table 3.3 to Table 3.5) are designed to help manage and assign responsibilities and monitor the refuse operations. On-going management of the refuse strategy will maintain efficient services, a safe environment and improve on sustainability outcomes.

### 3.3.1. Implementation phase

Refuse management tasks during the implementation of the refuse strategy are required prior to and during the early stages of building occupancy. An opportunity to revisit these tasks is provided at set intervals with the review of the refuse strategy.

Table 3.3: Implementation checklist

| Task | Assigned | Remarks |
|---|---|---|
| **Verify the as-built form of all refuse related areas.**<br>This task does not refer to building certification but is typically undertaken by a specialist waste consultant prior to building certification. This provides an opportunity to identify variances in building form versus design and recommend alternate or mitigating refuse management strategies.<br>This task may also be required during significant building refits or renovation. | | |
| **Appoint personnel to oversee or undertake refuse management tasks.**<br>A building or facilities manager is typically appointed undertakes most operational tasks, engaging contractors for specialist tasks. | | |
| **Conduct internal safety review.**<br>An internal safety review is required to be undertaken to identify potential hazards in the implementation of the refuse strategy and risk mitigation opportunities.<br>This includes the use of any refuse management equipment installed, as well as refuse transfer paths | | |
| **Development of policy and procedures**<br>Must be undertaken after safety review and abide by all relevant occupational health and safety legislation, regulations and guidelines to ensure site safety for visitors, staff and contractors.<br>Also includes assessment of any manual handling risks and preparation of a manual handling control plan for waste and bin transfers. | | |

| Task | Assigned | Remarks |
|---|---|---|
| **Engage refuse collection contractors.**<br>Either council's collections contractor or a private contractor must conduct a site visit for the purposes of risk assessing the site prior to conducting services. Contractors must ensure that a full risk assessment of equipment, surfaces and related gradients is complete and procedural documentation is provided to the appropriate personnel.<br>RCV manoeuvrability testing and the establishment of service frequency and timing is also undertaken at this time. | | |
| **Install signage in all refuse disposal and storage points.**<br>Signage is required to be installed to educate building occupants on location of disposal and refuse storage points. Additionally, to identify the accepted items disposed of in each refuse. The installed signage should be colour coded in accordance with *AS 4123.7 – 2006 Mobile waste containers*. Examples of signage are provided in the appendices. | | |
| **Leasing & Body Corporate Agreements**<br>All leasing contracts and body corporate agreements should contain clauses pertaining to waste management arrangements and use of any associated equipment. | | |
| **Education and Training.**<br>Provision of equipment manuals, induction, training, health and safety procedures, risk assessments and personal protective equipment (PPE) to all staff / contractors associated with all waste management activities in order to control hazards.<br>The step is repeated through the operational phase of the development as required due to changes is users or personnel. | | |
| **Consider fit out and move-in refuse.**<br>Higher volumes of waste are generated during the initial occupant move-in or final fit out. This typically includes large volumes of cardboard. Additional bins or collections may be required.<br>This also applies to high turnover events and refits or renovation. | | |
| **Baseline Refuse Auditing**<br>A baseline audit for non-residential uses once the development reaches 80% occupancy undertaken by a specialist waste consultant is recommended to identify refuse volumes and stream composition. This information is then used to establish potential recoverable material percentage based on initial waste practices and set recycling rate targets. | | |
| **Establish Baseline Targets**<br>The baseline audit results should be used to establish baseline landfill reduction and recycling rate targets. Baseline targets should be achievable with a view to continual improvement to enable the celebration of success and promote buy-in by building occupants. | | |

### 3.2.1. Occupation/operational phase

Refuse management tasks during the occupation or operational phase of the development relate to the day to day and business as usual operational tasks that must be undertaken to execute the refuse strategy.

Table 3.4: Occupation/operation checklist

| Task | Assigned | Remarks |
|---|---|---|
| **Facilitate disposal from communal areas, public realm and tenancies.**<br>Appointed building manager / caretaker is required to transfer refuse generated in communal areas and the public realm to the refuse storage area for final disposal, this includes litter removal.<br>Best practice operations include having dedicated cleaning staff assigned to handle all waste generated, rather than tenancy staff. This results in maximum recovery of available streams. | | |
| **Manage rotations of bins to ensure convenient access.**<br>Check bin fill levels and rotate / swap bins as required. Sufficient capacity must be provided for the disposal of all streams at all times including reduced personnel on site (such as weekends or public holidays). Where equal access to a refuse stream is not maintained, other streams may be contaminated leading lost resources. | | |
| **Manage bin transfers to agreed servicing point.**<br>Bins are required to be presented to the temporary holding or agreed servicing point prior to the scheduled service time and ensure the area is free from obstruction. Late bin placement or servicing obstruction may lead to missed bin services. | | |
| **General cleaning.**<br>Regular cleaning and maintenance of all refuse management facilities is important to maintain a safe and hygienic environment for visitors, staff and contractors.<br>General cleaning is required for all refuse holding and transfer areas including<br>• Refuse bins, rooms and storage areas<br>• Refuse transfer areas including lifts and staircases<br>• Any other refuse management equipment | | |
| **Perform spot checks on bin contents and refuse streams.**<br>Building management regularly check for correct bin use and stream contamination. Early intervention prevents the development of poor practice and lost resources. Feedback and education is provided to the relevant parties (see below). | | |
| **Ongoing education and communication.**<br>On-going education is important to ensure people continue to use the facilities as originally intended and to avoid ongoing contamination of recoverable refuse streams.<br>Appointed personnel should be actively involved in education of occupants and encouraging participation in recycling activities. Widespread communication of the achievements of the refuse strategy and areas for improvement encourage participant buy-in. | | |

### 3.2.2. Review and amendment phase

The review and amendment refuse management tasks relate to tasks undertaken on a routine (e.g. quarterly, bi-annually or annually) or ad hoc basis. At the completion of the review and amendment phase, the cycle restarts with the implementation of the amended refuse strategy.

Table 3.5: Review and amendment checklist

| Task | Assigned | Remarks |
|---|---|---|
| **Coordination of specialised cleaning contractors as required.**<br>Typical specialised cleaning services may include cleaning internal areas of compaction equipment (if selected); this reduces risk of blockage, odour and risk of fire. | | |
| **Maintenance and servicing of refuse management equipment as per schedule.**<br>Frequency depends on equipment, building operation and manufacturer specification. Routine maintenance reduces downtime and detrimental impact of unscheduled equipment breakdown. | | |
| **Coordination of specialised equipment contractors as required.**<br>May extend to ad hoc services requiring specialist equipment such as bulky / hard waste removal. | | |
| **Internal safety review.**<br>Routine safety reviews are required to identify changes to the site, work practices or legislation that may impact existing policies and procedures.<br>Reviews should include visual inspection of equipment and user PPE.<br>Any policy or procedure updates arising from a safety review must be immediately communicated. | | |
| **Audit operational refuse volumes and composition.**<br>As similarly undertaken at the beginning of occupancy a review by a specialist waste consultant is recommended to identify refuse volumes and stream composition. This information is then used to establish potential recoverable material percentage and identify opportunities for improvement in refuse strategy.<br>Alternatively, an internal audit may be undertaken by visual inspection during on-site waste management handling activities. For example, cleaners may observe contents of waste receptacles when decanting caddies in larger bins and recording results, this method is less accurate than a comprehensive audit, however, give immediate indicative results and may be undertaken on an ongoing basis. | | |
| **Review bin quantities and refuse management equipment.**<br>Reviewing bin quantities and equipment is required ensure operational sustainability of refuse volumes and equipment remains fit for purpose. Consideration should be given where alternate equipment may provide improved outcomes.<br>This review may form part of the external audit process (above) as recommendations made. | | |

| Task | Assigned | Remarks |
|---|---|---|
| **Review service frequency and methodology on 6 monthly intervals with collecting contractor.**<br>The service frequency and service methodology should be reviewed once development is fully occupied and on rolling 6 monthly basis to ensure the optimum cost efficiency in services provided and explore options for additional services.<br>Any potential changes to the bin numbers or bin sizes should be made in liaison with the appointed contractor to confirm cost or contract implications. | | |
| **Review of recycling rate target to target continual improvement.**<br>Once benchmarked performance has been assessed against the existing targeted recycling rate a new target can be established that strives for continual improvement.<br>Any changes in targeted recycling rates and the achievements of the refuse strategy should be widely communicated to all uses. | | |
| **Update and amend OWMP based on review outcomes.**<br>On completion of the refuse strategy review the OWMP should be updated to reflect refuse strategy amendments and to enable implantation of refuse strategy. | | |

# Appendix A Council PSP compliance checklist

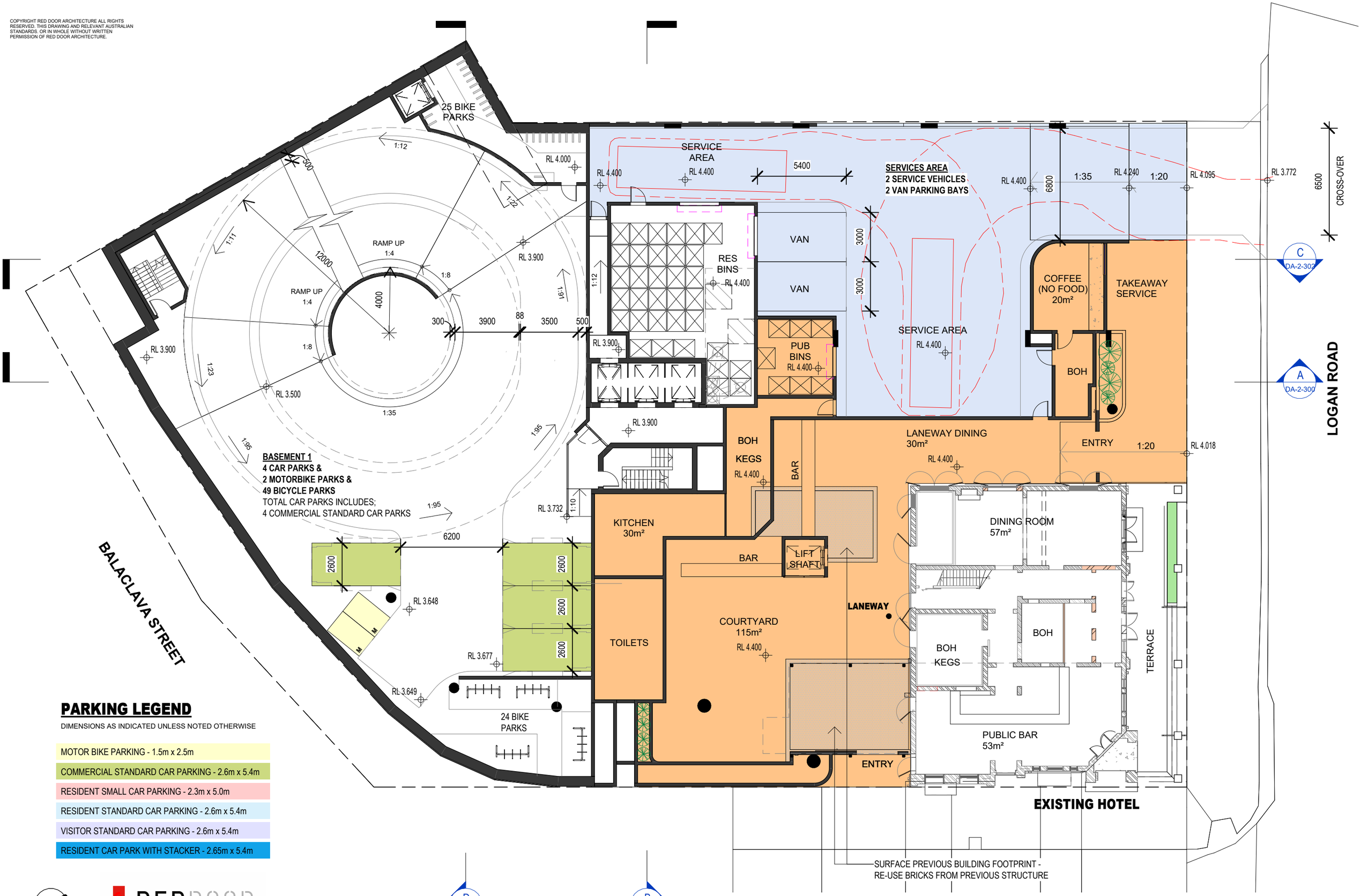
| BCC SC6.26 Refuse Planning Scheme Policy | | |
|---|---|---|
| Item | Requirement | Compliance / Comment |
| Section 2 – General Requirements | | |
| (1) | A written design proposal for waste collection is to be provided giving full details of the proposed solution, bin sizes, number of bins and the storage and collection areas, frequency of collection and the refuse collection vehicle size. Table 1 provides the dimensions and types of bins. Table 3 provides the specifications and types of collection vehicles. | Details provided in this OWMP. |
| (2) | The collection of refuse is to be considered during the planning phase of development. This includes the physical manoeuvring area for the refuse collection vehicle and the bin storage areas and collection points. Access for other road users including pedestrians, cyclists, motorists and other service providers (e.g. postal) is to be maintained. | Considerations provided within this OWMP and Transport Engineering documentation. |
| (3) | The type of refuse service that is to be used (domestic or commercial) is identified, including whether the refuse collection vehicle is to be front loading, side loading or rear loading (sufficient height must be available). | All refuse collected by rear loading RCV. 3.6m available. |
| (4) | Uses with high trip-end densities provide a transport impact assessment report in accordance with the Transport, access, parking and servicing planning scheme policy with an assessment of refuse storage and collection included. | See Transport Engineering documentation for details. |
| (5) | Where a Refuse Collection Vehicle (RCV) is required to manoeuvre from an on-site position, allow an additional 500mm clearance for vehicle turning dimensions (swept paths) and servicing. Three clear swept path lines must be demonstrated for the RCV, namely wheel path, vehicle body path and 500mm clearance path. | See Transport Engineering documentation for details. |
| (6) | The waste collection system is to achieve the following outcomes:<br>a. both the customer and service provider can access the bin storage area and collection point conveniently;<br>b. the location, design and operation of the bin storage and collection system do not have unreasonable adverse acoustic, odour or visual impacts on the development, surrounding properties or the streetscape;<br>c. the supply and servicing of either mobile garbage bins or bulk bins or refuse compactors complies with the requirements of this planning scheme policy. | Complies<br><br>Complies – Collection service will be undertaken wholly on site.<br><br>Complies |
| Section 3 - Access and Manoeuvrability | | |
| (1) | The manoeuvring of the refuse collection vehicle is undertaken in a safe and efficient manner, without detrimental impacts to pedestrian amenity or safety, Council or private infrastructure or the function of the road network. | See Transport Engineering documentation for details. |
| (2) | For multiple dwelling development accessed via a local, neighbourhood, district or suburban road, the refuse collection vehicle may enter the site in a reverse gear in a single movement. | Forward-in, forward- out manoeuvring provided. |
| (3) | For multiple dwellings development accessed via an arterial road, or where the refuse collection vehicle cannot reverse onto the site in a single movement, the refuse collection vehicle must enter and leave the site in a forward gear. | Forward-in, forward- out manoeuvring provided. |
| (4) | For development (other than a multiple dwelling) accessed via an arterial, suburban, district or minor road adjacent to an intersection with a major road, the refuse collection vehicle must enter and leave the site in a forward gear. | Forward-in, forward- out manoeuvring provided. |
| (5) | Where refuse collection is from an on-site position, the area trafficked by the refuse collection vehicle must comply with requirements under the Transport, access, parking and servicing planning scheme policy including a minimum aisle/carriageway width of 6.5m wide. | Complies |
| (6) | For detached dwellings on rear lots, pavements/carriageways trafficked by a refuse collection vehicle have a minimum width of 5.5m. | N/A |

| | | |
|---|---|---|
| **Section 3 - Access and Manoeuvrability - Continued** | | |
| (7) | All entry and exit points are of a width and design that allows for sufficient ingress and egress for the refuse collection vehicle, including a minimum 6.5m crossover which is free from overhead projections inclusive of gardens or trees. | Complies |
| (8) | To maximise safety, the distance required for refuse collection vehicles to reverse on-site is minimised. Where on-site turnaround of the refuse vehicle cannot be achieved, the bin storage area and collection point is located within 20m of the street frontage. | Complies – Minimal reversing required. |
| (9) | Turnaround facilities for a refuse collection vehicle exist or are provided for where involving staged subdivision developments or where development is located on a no through road. Turning and manoeuvring facilities for refuse collection vehicles are provided to meet design requirements for the vehicles identified in Table 3. | N/A |
| (10) | Subdivision layouts are to provide for the safe and efficient operation and manoeuvring of a side-lift loading refuse collection vehicle. Layouts that require a refuse collection vehicle to reverse more than 20m are to be avoided. Where the provided transport network results in a stub road for a proposed future road connection, interim turnaround facilities must be provided in compliance with the Transport, access, parking and servicing planning scheme policy and the Infrastructure design planning scheme policy. | N/A |
| (11) | Adequate lift clearances are provided to overhanging trees and wires in accordance with Table 3. | Complies – 3.6m provided |
| (12) | The required vertical and horizontal clearances are provided for the service to operate safely and efficiently. Operational clearance dimensions are shown in Table 3 for various types of collection arrangements. | Complies |
| (13) | Access for a refuse collection vehicle to the collection point is maintained at all times. | Servicing occurs in dedicated RCV loading bay. |
| (14) | Where non-residential development is proposing to use an alternative design vehicle other than those named in Table 3, written confirmation from the proposed licensed waste collection contractor giving full details of the bin size and the refuse collection vehicle size must be provided. | N/A |
| (15) | In instances where the gradient of the on-site manoeuvring area is greater than 5% (1:20), the pad that the collection vehicle will stand on while accessing refuse bins at the collection point, is to have a maximum gradient of 2% (1:50). | Complies – RCV will stand on a flat grade for servicing. |
| **Section 4 - Residential Refuse Collection** | | |
| (1) | Residential development must be serviced by Council or their appointed collection contractor. | Complies |
| (2) | Residential development is to provide sufficient capacity for 240L of refuse and 240 or 360L of recycling per dwelling, allowing for one collection per week. | Servicing 3 times per week is proposed. |
| (3) | Residential development is to utilise kerbside collection where the locations for both the bin storage area and kerbside collection point can be appropriately accommodated in accordance with section 4.1. | Greater than 10 dwellings kerbside collection not proposed. |
| (4) | On-site collection must be provided for in the following cases:<br>a. the development cannot accommodate external (fronting public road) kerbside collection; or<br>b. the development comprises greater than 10 dwellings; or<br>c. where the road verge is not properly shaped to the standard 1:50 gradient and a minimum of 2.5m wide or where the longitudinal road gradient is greater than 1:10. | Complies |
| (5) | Refuse and recycling collection for a mixed use development ensures residential and commercial bins are stored separately with separate access to each. | Complies |
| **Section 4.1 - Kerbside Collection (MGB's) – N/A Greater than 10 dwellings, kerbside collection not proposed** | | |

| Section 4.2 – On-site Collection (Bulk Bins) – This section applies to Residential services | | |
|---|---|---|
| (1) | In accordance with section 4, development will avoid adverse impacts to residents, pedestrians and roads users by providing sufficient capacity to achieve one collection per week while ensuring sufficient refuse and recycling capacity is provided to meet the needs of residents. | Complies |
| (2) | An on-site dedicated pedestrian route is provided and is separate from the required vehicle manoeuvring area to ensure pedestrian safety is protected. The pedestrian route is to provide access from the site's frontage to the development and will have a minimum width of 1.2m. | Complies |
| (3) | Bulk bins of 1.1m$^3$ or less are positioned so that collection personnel do not have to move them more than 5m. If a gradient is evident, speed bumps are provided to stop bulk bins from rolling away from the collection point. | Refuse storage immediately adjoins servicing area. |
| (4) | Bulk bins of 1.5m$^3$ or more are positioned so that front-lift refuse vehicles can drive directly to the container without relocating the bulk bin. If this cannot be achieved due to physical constraints, then the bulk bins are not moved more than 3m from the storage area to the collection point. | N/A – 1.1m$^3$ bins proposed. |
| (5) | The storage areas for bulk bins are:<br>a. contained in a roofed and wholly screened enclosure or room of sufficient size for the bulk bin quantity required;<br>b. easily accessible for residents and for the required servicing of bins;<br>c. screened from neighbouring properties to mitigate odour, amenity and noise;<br>d. of a design to mitigate the harbourage of vermin or attraction of scavenging animals;<br>e. provided with natural or temperature-controlled ventilation if in an enclosed room;<br>f. of a design which maintains a minimum internal vertical clearance of 2.1m;<br>g. kept clear of obstructions, such as fixed bay separators, that impede the ability to change from existing bin sizes or which otherwise limit future refuse collection options;<br>h. are not to contain other amenities such as air-conditioning compressors, hot water systems or electrical hubs. | Complies |
| (6) | Best practice may include allowing additional space for the storage of extra containers to separately store either organic waste or other recyclables in the future. | Adequate space provided. |
| (7) | If a refuse or recycling chute is provided:<br>a. it is to be constructed to allow refuse to fall into the centre of the bin;<br>b. it is to have a door / lid to ensure clean changeover of bins;<br>c. the chute room must be of suitable size to allow for an additional bin/s to remain under the chute discharge/s at all times;<br>d. separate chutes and bulk bins are to be used for each waste stream;<br>e. the room containing the chute and bin or compactor excludes all but authorised personnel;<br>f. design best practice may include developments greater than 15m (3 storeys) in height utilising twin chutes or single chute dual stream technology with openings on each residential floor to enable chute disposal of both refuse and recycling. | Complies |
| (8) | Environmental best practices may also include the installation of a trapped waste connection to the sewer system. | Complies |

| Section 5 – Non-Residential Refuse Collection | | |
|---|---|---|
| (1) | Non-residential development is to provide sufficient capacity to achieve low-frequency servicing in line with Table 2. | Complies – 3 services per week proposed. |
| (2) | Refuse generation rates for specific uses are provided in Table 4. These figures are to be used to calculate the refuse and recycling capacity required.<br>*Note—Where a refuse generation rate is not defined in Table 4, the applicant is responsible for providing evidence in support of the refuse generation proposed.* | Complies |
| (3) | Sufficient information is provided to demonstrate that refuse collection can occur in an efficient and safe manner on site without adverse impact on amenity (acoustic, odour or visual impacts) and pedestrian and vehicular traffic. | Complies |
| (4) | This information may include evidence from a refuse collection contractor to demonstrate that collection will occur outside normal service/delivery or business times, where seeking permission to allow a refuse collection vehicle to use service bays or parking spaces on the site for access. | Details on servicing provided within this OWMP. |
| (5) | Bulk bins of 1.1m3 or less are positioned so that collection personnel do not have to move them more than 5m. If a gradient is evident, speed bumps are provided to stop bulk bins from rolling away from the collection point.<br>*Note—Standard design arrangements, including gradients, are contained in the Transport, access, parking and servicing planning scheme policy.* | Complies |
| (6) | Bulk bins of 1.5m3 or more are positioned so that front-lift refuse collection vehicles can drive directly to the container without relocating the bulk bin. If this cannot be achieved due to physical constraints, then the bulk bins are not moved more than 3m from the storage area to the collection point. | N/A 1.1m$^3$ bins proposed. |
| (7) | The storage area for refuse bins are:<br>a. contained either within a building or a roofed and wholly screened enclosure of sufficient size for the bin quantity required. Table 1 provides the bin types and dimensions;<br>*Note—Where screening is utilised to form part or all of a refuse storage area, the screening is to have a maximum of 25% openings, with a maximum opening dimension of 50mm, and are to be permanently fixed, durable and maintainable.*<br>b. easily accessible for occupants and for the required servicing of bins;<br>*Note—Allow for at least an additional 0.5m clearance surrounding each container, or for the storage of multiple bins, 1.5m clearance around the combined bin area (whichever is lesser).*<br>c. screened from neighbouring properties to mitigate impacts from odour, amenity and noise;<br>d. of a design to mitigate the harbourage of vermin or attraction of scavenging animals;<br>e. provided with natural or temperature-controlled ventilation if in an enclosed room;<br>f. of a design which maintains a minimum internal vertical clearance of 2.1m;<br>g. kept clear of obstructions, such as fixed bay separators, that impede the ability to change from existing bin sizes or which otherwise limit future refuse collection options;<br>h. are not to contain other amenities such as air-conditioning compressors, hot water systems or electrical hubs. | Complies |
| (8) | Best practice may include allowing additional space for the storage of extra containers to separately store either organic waste or other recyclables in the future. | Refuse area sufficiently sized. |
| (9) | Where disposal of industrial or commercial liquid waste by discharge to a road tanker, the road tanker is to be wholly on-site during collection. | Complies |

# Appendix B Architectural drawings



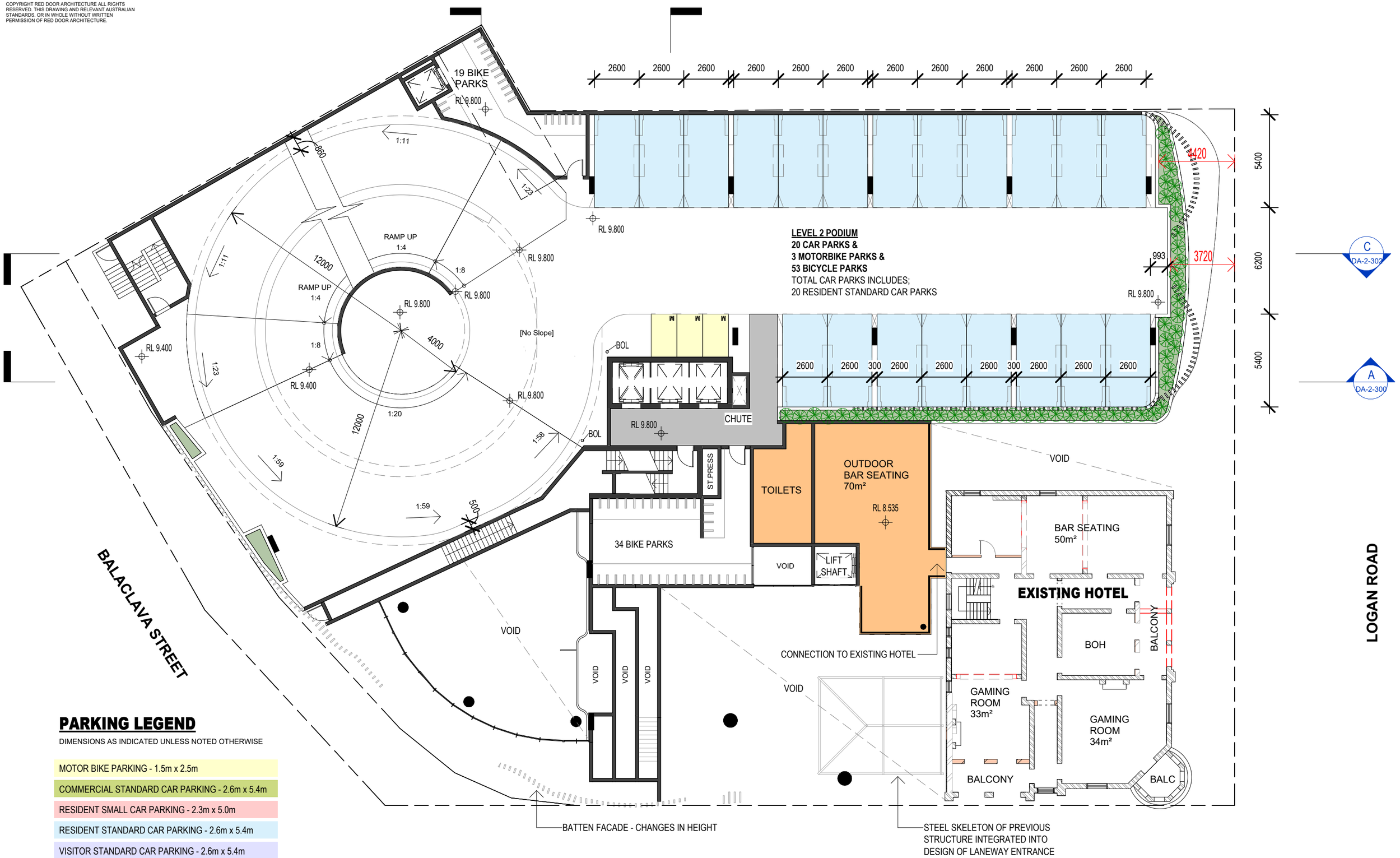

## PARKING LEGEND

DIMENSIONS AS INDICATED UNLESS NOTED OTHERWISE

- MOTOR BIKE PARKING - 1.5m x 2.5m
- COMMERCIAL STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT SMALL CAR PARKING - 2.3m x 5.0m
- RESIDENT STANDARD CAR PARKING - 2.6m x 5.4m
- VISITOR STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT CAR PARK WITH STACKER - 2.65m x 5.4m

REDDOOR ARCHITECTURE

| REVISION | | | |
|---|---|---|---|
| F | 25.08.25 | REVIEW ISSUE | |




## PARKING LEGEND

DIMENSIONS AS INDICATED UNLESS NOTED OTHERWISE

- MOTOR BIKE PARKING - 1.5m x 2.5m
- COMMERCIAL STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT SMALL CAR PARKING - 2.3m x 5.0m
- RESIDENT STANDARD CAR PARKING - 2.6m x 5.4m
- VISITOR STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT CAR PARK WITH STACKER - 2.65m x 5.4m

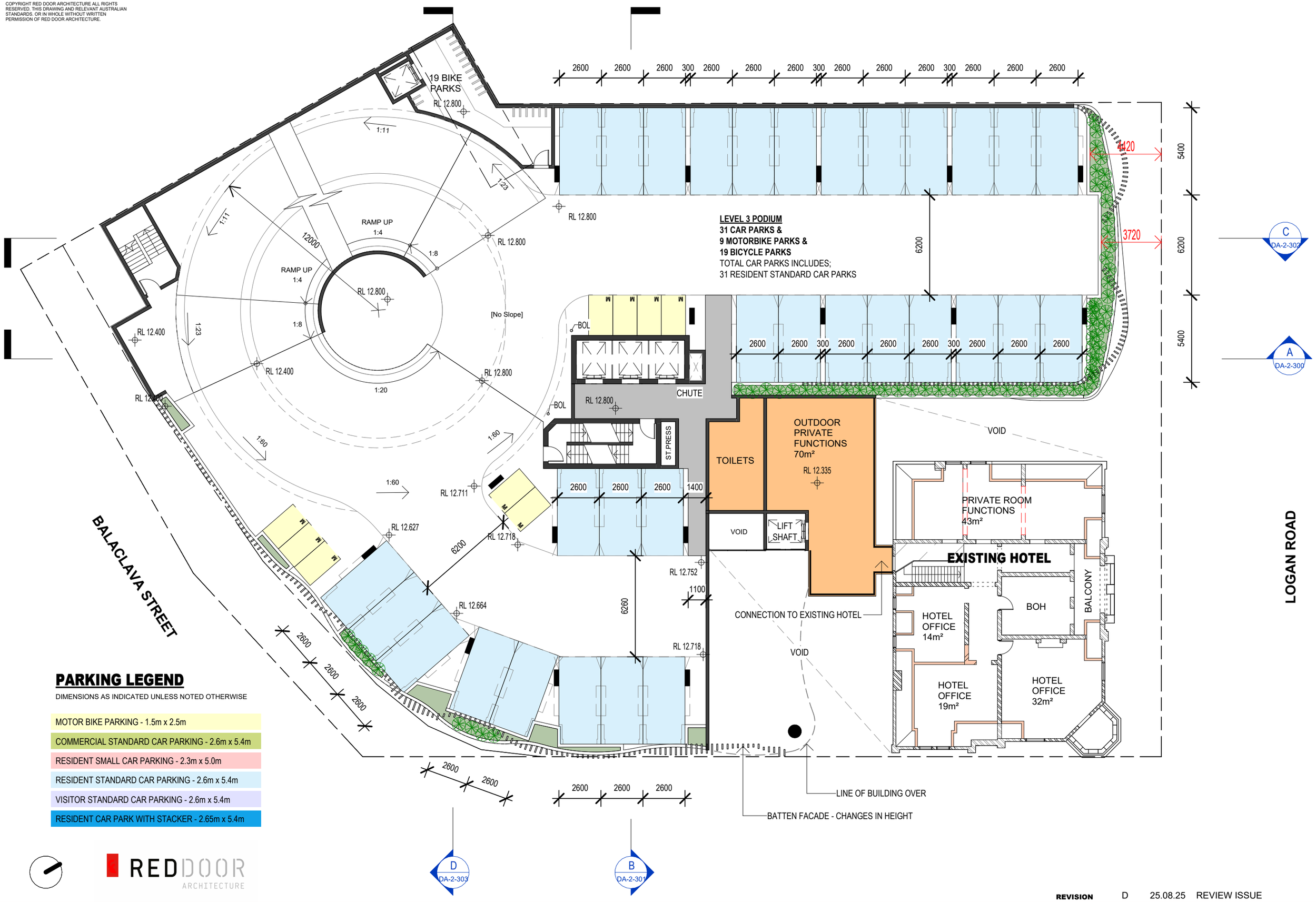
D DA-2-303

B DA-2-301

REDDOOR ARCHITECTURE

| REVISION | C | 16.07.25 | FOR DISCUSSION |
|---|---|---|---|

| WWW.RDARCH.COM.AU | 210078 | SCALE 1 : 200 | 16.07.25 | 93 LOGAN ROAD, WOOLOONGABBA, QLD. 4102 | MIXED USE DEVELOPMENT | DA-2-111 | LEVEL 2 - PODIUM PARKING |
|---|---|---|---|---|---|---|---|




## PARKING LEGEND

DIMENSIONS AS INDICATED UNLESS NOTED OTHERWISE

- MOTOR BIKE PARKING - 1.5m x 2.5m
- COMMERCIAL STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT SMALL CAR PARKING - 2.3m x 5.0m
- RESIDENT STANDARD CAR PARKING - 2.6m x 5.4m
- VISITOR STANDARD CAR PARKING - 2.6m x 5.4m
- RESIDENT CAR PARK WITH STACKER - 2.65m x 5.4m

REDDOOR ARCHITECTURE

REVISION D 25.08.25 REVIEW ISSUE

POTENTIAL FUTURE DEVELOPMENT

BALACLAVA STREET

LOGAN ROAD

UNIT TYPE E (2B) 98 m²
UNIT TYPE F (1B) 53 m²
UNIT TYPE G (1B) 53 m²
UNIT TYPE H (1B) 57 m²
UNIT TYPE I (1B+) 71 m²
UNIT TYPE D (2B) 100 m²
UNIT TYPE C (2B) 83 m²
UNIT TYPE B (2B) 87 m²
UNIT TYPE A (3B) 132 m²
UNIT TYPE J (2B) 111 m²
UNIT TYPE K (2B) 93 m²

BALCONY [ A ] 57 m²
BALCONY [ B ] 16 m²
BALCONY [ C ] 19 m²
BALCONY [ D ] 25 m²
BALCONY [ E ] 16 m²
BALCONY [ F ] 15 m²
BALCONY [ G ] 18 m²
BALCONY [ H ] 17 m²
BALCONY [ I ] 17 m²
BALCONY [ J ] 22 m²
BALCONY [ K ] 15 m²

PLANT EQUIP
PLANT EQUIP
SERVICES
LIFT
LIFT
LIFT
CHUTE
FOYER
RL 32.100
ST PRESS

7000
3500
3500
3000
3410
4000
7110
6720
4040
3760
3990
5335
5475
7300
4000
7385
3905
6295
3906
3095
2275
9530
4000
5555
4240
5000
8100
4300
4900
4300

DASHED LINE INDICATES BALCONY ABOVE AND BELOW. REFER TO FLOOR PLAN TYPE 2

DASHED LINE INDICATES BALCONY ABOVE AND BELOW. REFER TO FLOOR PLAN TYPE 2

C DA-2-302

A DA-2-300

D DA-2-303

B DA-2-301

**TYPE 1 - FLOOR PLAN LOCATED ON:**

| | |
|---|---|
| LEVEL 9 | LEVEL 23 |
| LEVEL 13 | LEVEL 25 |
| LEVEL 15 | LEVEL 27 |
| LEVEL 17 | LEVEL 29 |
| LEVEL 19 | LEVEL 33 |

REDDOOR ARCHITECTURE

REVISION D 25.08.25 REVIEW ISSUE

POTENTIAL FUTURE DEVELOPMENT

BALACLAVA STREET

LOGAN ROAD

BALCONY [ E ] 16 m²
BALCONY [ D ] 27 m²
BALCONY [ C ] 19 m²
BALCONY [ B ] 16 m²
BALCONY [ A1 ] 34 m²
BALCONY [ A2 ] 15 m²
BALCONY [ F ] 15 m²
BALCONY [ G ] 17 m²
BALCONY [ H ] 14 m²
BALCONY [ I ] 17 m²
BALCONY [ J ] 22 m²
BALCONY [ K ] 15 m²

UNIT TYPE E (2B) 98 m²
UNIT TYPE D (2B) 100 m²
UNIT TYPE C (2B) 83 m²
UNIT TYPE B (2B) 87 m²
UNIT TYPE A (3B) 132 m²
UNIT TYPE F (1B) 53 m²
UNIT TYPE G (1B) 53 m²
UNIT TYPE H (1B) 57 m²
UNIT TYPE I (1B) 71 m²
UNIT TYPE J (2B) 111 m²
UNIT TYPE K (2B) 93 m²

PLANT EQUIP
PLANT EQUIP
SERVICES
LIFT
LIFT
LIFT
CHUTE
FOYER
RL 35.100
ST.PRESS

7000
3500
3500
3000
3410
5175
7300
4000
7385
3905
6295
3095
2275
9530
4070
5555
4000
3810
3220
6740
4265
4040
3625
5985
5000
5000
4300

C DA-2-302
A DA-2-300
D DA-2-303
B DA-2-301

DASHED LINE INDICATES BALCONY ABOVE AND BELOW. REFER TO FLOOR PLAN TYPE 1

DASHED LINE INDICATES BALCONY ABOVE AND BELOW. REFER TO FLOOR PLAN TYPE 1

**TYPE 2 - FLOOR PLAN LOCATED ON:**

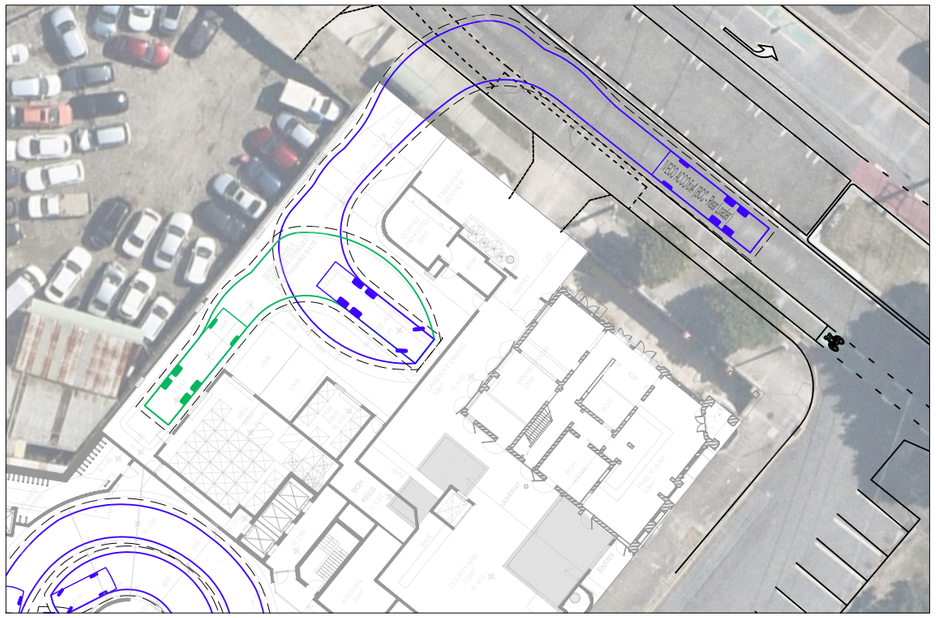
LEVEL 10
LEVEL 14
LEVEL 16
LEVEL 18
LEVEL 20
LEVEL 24
LEVEL 26
LEVEL 28
LEVEL 30

REDDOOR ARCHITECTURE

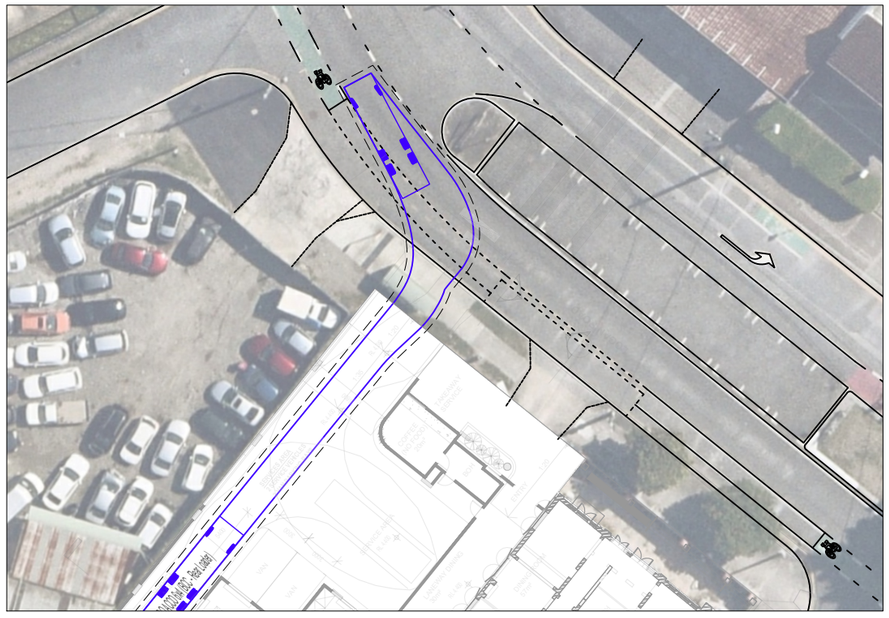
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WWW.RDARCH.COM.AU | 210078 | SCALE 1 : 200 | 25.08.25 | 93 LOGAN ROAD, WOOLOONGABBA, QLD. 4102 | MIXED USE DEVELOPMENT | DA-2-119 | TYPICAL FLOOR PLAN - TYPE 2 | |

REVISION D 25.08.25 REVIEW ISSUE

# Appendix C Swept path analysis

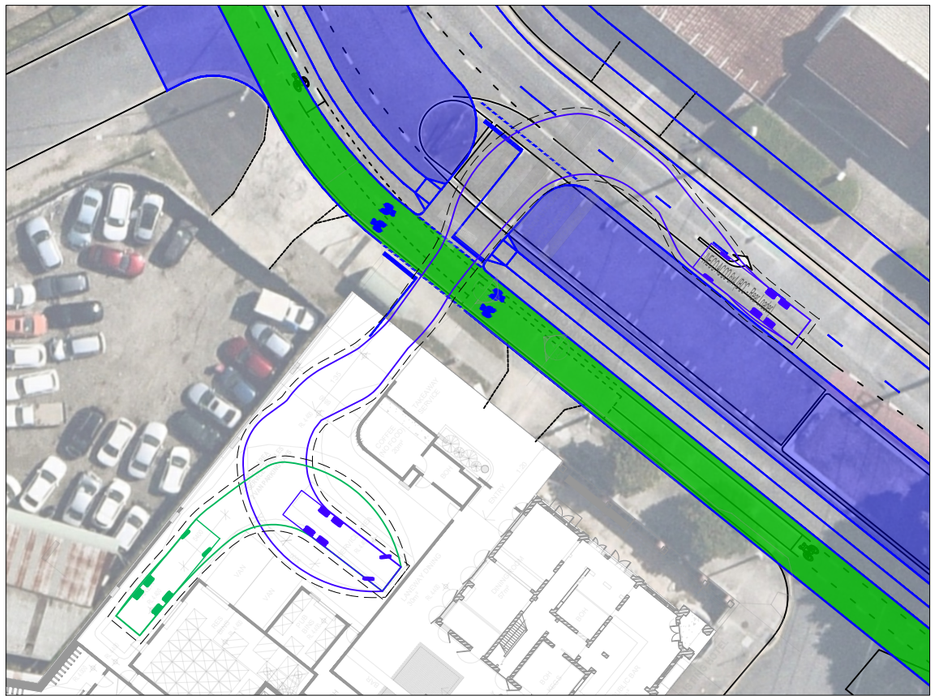


**INGRESS MANOEUVRE**

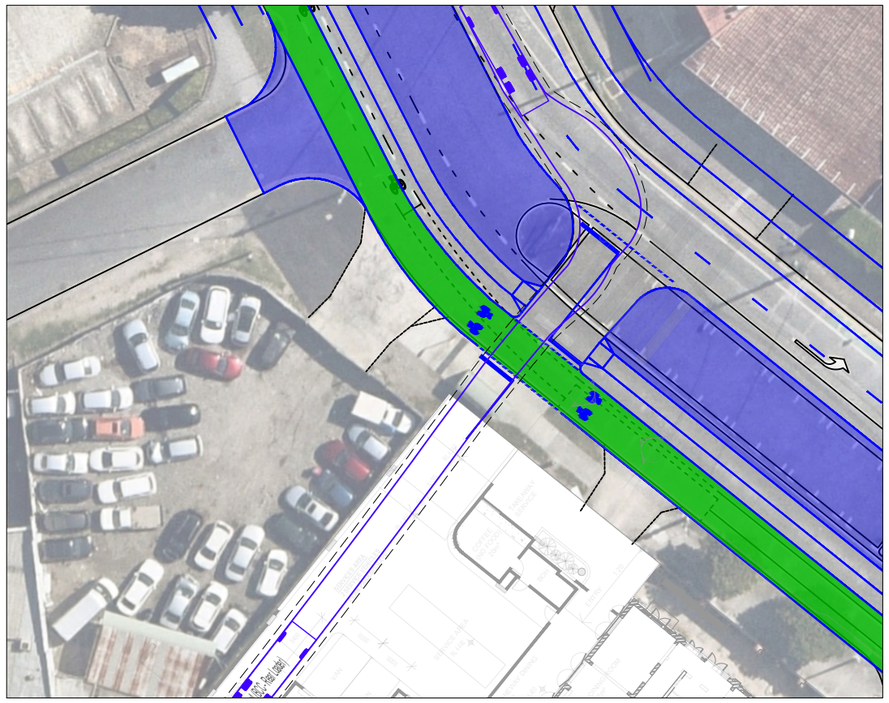


**EGRESS MANOEUVRE**

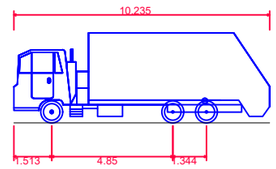
## EXISTING LOGAN ROAD EXTERNAL ROAD LAYOUT



**INGRESS MANOEUVRE**



**EGRESS MANOEUVRE**




IVECO ACCO 6x4 (BCC - Rear Loader)

| | |
|---|---|
| Overall Length | 10.235m |
| Overall Width | 2.500m |
| Overall Body Height | 3.600m |
| Min Body Ground Clearance | 0.260m |
| Track Width | 2.500m |
| Lock-to-lock time | 6.00s |
| Curb to Curb Turning Radius | 9.757m |
| Body Clearance | 0.500m |

**PRELIMINARY ADVICE ONLY**

1 September 2025

## PROPOSED LOGAN ROAD EXTERNAL ROAD LAYOUT

| REV. | DATE | AMENDMENT DESCRIPTION | DRAWN | CHECKED | APPROVED |
|---|---|---|---|---|---|
| C | 01.09.25 | REVISED SCHEME | BV | GR | GR |
| B | 16.07.25 | REVISED ARCHITECTURAL BASE | DSF | GR | GR |
| A | 29.11.24 | ORIGINAL ISSUE | DSF | GR | GR |

SCALE 0 5 10 15 20 25m

SCALE 1:500 AT ORIGINAL SIZE

NORTH

CLIENT

BROADWAY PROJECTS PTY LTD

Colliers International Engineering & Design (TTMC) Pty Ltd
ABN 65 010 868 621
LEVEL 8, 369 Ann Street, BRISBANE QLD 4000
P.O. BOX 12015, BRISBANE QLD 4003

T: (07) 3327 9500 F: (07) 3327 9501
E: ttmbris@ttmgroup.com.au W: www.ttmgroup.com.au

PROJECT
**BROADWAY HOTEL at 93 Logan Road, Woolloongabba**

PROJECT NUMBER: 24BRT0602

ORIGINAL SIZE: A3

DRAWING TITLE
**EXISTING ROAD LAYOUT - PROPOSED SEPARATED BIKE LANE**
LOGAN ROAD BETWEEN BALACLAVA ST & WALKER ST
(10.24m REAR LOADER RCV SWEPT PATHS)

DRAWING NUMBER: 24BRT0602-09

REVISION: C

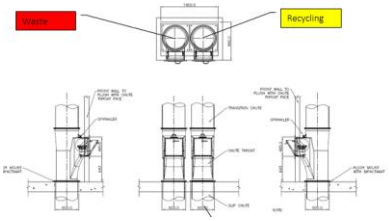
DATE: 1 Sep 2025

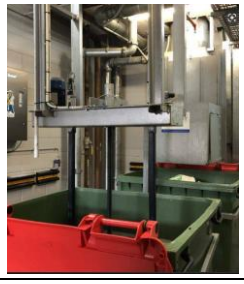
SHEET: 1 OF 1

# Appendix D Systems and specifications

## D.1 Specified refuse management equipment

The table below provides contextual examples of the specific equipment types specified in this OWMP and is not intended to provide an exhaustive list of all potential options of the required equipment.

| Bin / equipment types | Waste streams | Examples | Information |
|---|---|---|---|
| Residential unit bins | General waste and recycling |  | Various options and sizes.<br>Built and standalone bin available.<br>Examples:<br>https://www.bunnings.com.au |
| Tenancy and Communal area bins | General waste, recycling, food waste, paper / cardboard |  | Various options and sizes available. To be supplied depending on preference and space available.<br>Examples:<br>https://www.sourceseparation-systems.com.au-/product/multisort<br>https://methodrecycling.com/au/ |
| 1100L bins | General waste, recycling, paper / cardboard |  | Dimensions approx.<br>1070 x 1240 x 1330mm (L x W x H)<br>(dimensions depend on contractor)<br>Examples:<br>http://www.justwheeliebins.com.au,<br>https://www.australianwaste management.com.au |
| Dual Refuse Chute System | General waste, recycling, food waste |  <br>  | Refuse disposal in multi-storey buildings through refuse chutes options include: single chute for waste only, or single chute with diverter system or dual chute for disposal of waste and recycling<br>Examples:<br>https://www.wastech.com.au /products/chutes<br>https://www.elephantsfoot.com.au /products/chutes |
| Linear Conveyor | General waste, recycling, food waste |  | Automated bin rotation (e.g. linear or carousel) to manage bin fill level and prevent overflow under chutes<br>Example:<br>https://www.elephantsfoot.com.au /products/compactors/carousel-linear<br>https://wastech.com.au |

| Bin / equipment types | Waste streams | Examples | Information |
|---|---|---|---|
| Chute Discharge Compaction | General waste |   | Compactors designed for integration with the refuse chute to minimise the volume of general waste.<br>Examples:<br>https://www.elephantsfoot.com.au/products/compactors/carousel-linear<br>https://wastech.com.au |
| Portable Cooking Oil Storage | Used Cooking Oil |   | Cooking oil recycling<br>Example:<br>https://www.cookers.com.au<br>Cooking oil delivery, used oil collection and provision of required equipment |
| Refuse / Cleaners Trolleys (Optional) | All Streams |   | Assisted manual transfer of refuse<br>Examples:<br>https://rubbermaidcommercial.com.au/products/waste-management/mega-brute<br>https://www.materialshandling.com.au/products/deluxe-compact-cleaning-carts |
| 240L bins (Optional) | General waste, paper, recycling, green waste |  | Dimensions approx.<br>740 x 580 x 1080mm (L x W x H)<br>(dimensions may depend on contractor)<br>Examples:<br>http://www.justwheeliebins.com.au,<br>http://wheeliebinsonline.com.au |
| 660L bins (Optional) | General waste, recycling, paper / cardboard / Food, Organic Waste |   | Dimensions approx.<br>780 x 1260 x 1330mm (L x W x H)<br>(dimensions depend on contractor)<br>Examples:<br>http://www.justwheeliebins.com.au,<br>https://www.australianwastemanagement.com.au |
| Counter-top E-Waste Recycling (Optional) | Electronic Waste |    | Prepaid battery collection<br>Example:<br>https://envirostream.com.au/product/prepaid-countertop-battery-recycling-box/<br>https://www.ecoactiv.com.au/product/4l-battery-recycling-prepaid-service/<br>Toner cartridge collection<br>https://zerowasteboxes.terracycle.com.au-/products/ink-and-toner-catridges-zero-waste-boxes |

# Appendix E Refuse signage

## E.1 Refuse signage

Waste signage guideline are provided by the Queensland government: https://www.qld.gov.au/environment/pollution/management/waste/recovery/recycling/signage.

### General Refuse Signage





### Other Refuse Signage





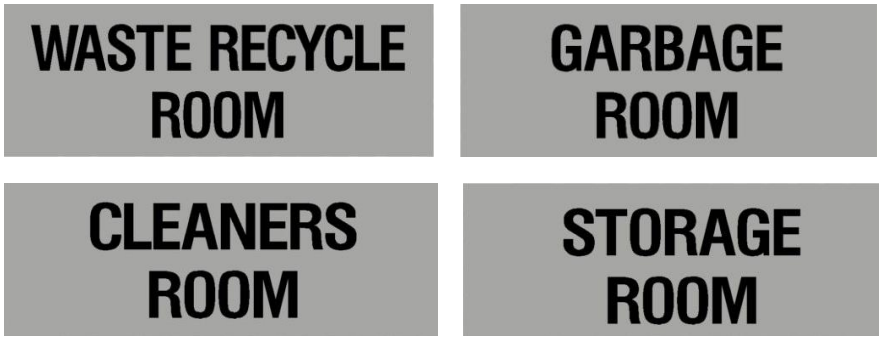
### Colour coding as per AS 4123.7-2006

| | |
|---|---|
| *Mixed (Commingled) Recycling* | *PMS 108* |
| *General waste (landfill)* | *PMS 032C* |
| *Organics* | *PMS 15-0343* |
| *Paper and cardboard recycling* | *PMS Process Blue C* |
| *Soft Plastics* | *PMS 1655* |
| *Used Cooking Oil* | *Grey* |

## E.2 Other refuse, facility and safety signage

Various signage including refuse area, safety and facility signage should be arranged through certified signage providers. Example signs can be found at http://www.signblitz.com.au, https://www.wayout.com.au or https://www.smartsign.com.

Example Refuse Room Signage




Example Facility Signage


Example Safety Signage

# Appendix F Terms and abbreviations

In this OWMP, a term or abbreviation has the following meaning unless indicated otherwise:

| TERM | ABBREVIATION | DEFINITION |
|---|---|---|
| **Equipment** | | |
| Bin (Refuse Bin) | | A plastic or steel container for disposal and temporary storage of waste or recycling items. Various types and sizes exist for different items and purposes. Examples include residential unit bins, bulk bins, MGB, steely bins and specialised for medical waste or cigarette butts. |
| Bin Storage Area | | An enclosed area designated for storing on-site refuse bins or a refuse compactor within the property. |
| Bulk Bin | | A galvanized or steel bin receptacle that is greater than 360L in capacity generally ranging from 1.00m³ to 4.50m³ used for the storage of refuse that is used for on-site refuse collection. |
| Bulk Mobile Garbage Bin | Bulk MGB | A plastic (polypropylene) receptacle that is greater than 360L in capacity generally ranging from 660L to 1100L used for the storage of refuse. |
| Collection Point | | An identified position where refuse bins are stored for collection and emptying. The collection point can also be the bin storage area. |
| Compactor | | A receptacle that provides for the mechanical compaction and temporary storage of refuse. It allows to reduce bin numbers and collection frequency. |
| Composter | | A container or machine used for composting specific food scraps and/or organic materials. |
| Food Waste Recycling System | | Defined as a vacuum or pump-based system for shredding, macerating or pulping of food waste. The food waste is transferred through pressure (service) pipes to sealed liquid storage tanks. |
| Green Waste | | All vegetated organic material such as small branches, leaves and grass clippings, tree and shrub pruning, plants and flowers. |
| Liquid Waste | | Non-hazardous liquid waste generated by commercial premises should be connected to sewer or collected for treatment and disposal by a liquid waste contractor (including grease trap waste). |
| Mobile Garbage Bin | MGB | A plastic (polypropylene) bin or bins used for the temporary storage of refuse that is up to 360L in capacity and may be used in kerbside refuse collection or on-site collection. |
| Putrescible Waste | | Putrescible waste is the component of the waste stream liable to become putrid and usually breaks down in a landfill to create landfill gases and leachate. Typically applies to food, animal and organic products. |
| Recycling | | Recycling contains all material suitable for re-manufacture or re-use, e.g. glass bottles and jars; plastics such as PET, HDPE and PVC; aluminium aerosol and steel cans and lids; milk and juice cartons; soft drink, milk and shampoo containers; paper, cardboard, junk mail, newspapers and magazines. |
| Refuse | | Refuse is material generated and discarded from residential and commercial buildings including general waste, recyclables, green waste and bulky items. |
| Refuse Storage Room | | An area identified for storing on-site MGBs or Bulk Bins within the property. |
| Refuse Tolley | | A cart on wheels that can be used to collect smaller quantities of refuse from different areas or rooms of a building or site, and wheel the collected refuse to a (bulk) bin storage area where it is disposed. Refuse trolleys are commonly used in hotels or offices. |
| Regulated Waste | | Regulated waste is waste prescribed under legislation as regulated waste. |

| TERM | ABBREVIATION | DEFINITION |
|---|---|---|
| Transfer (Manual Transfer) | | Manual transfer means physical transfer of refuse material and associated bulk bins or trolleys without assistance. |
| Waste | | Waste is referred to as refuse material with the exclusion of recycling, green waste, hazardous waste, special waste, liquid waste and restricted solid waste. |
| Waste (General Waste) | | General waste is generally referred to as material free of any actual or apparent contamination such as pathological / infectious, radioactive materials and / or hazardous chemical. Reporting use is for material considered to be free of food waste. |
| Wheelie Bin | | A MGB of up to 360L, usually with 2 wheels for easy transfer. A common type is a 240L wheelie bin used for kerbside collection in many residential areas. |
| **Measures** | | |
| Cubic Metre | $m^3$ | Volume in cubic metre(s) related to refuse management equipment. |
| Ground Floor Area | GFA | The GFA of all storeys of a building is measured from the outside of the external walls or the centre of a common wall. It is commonly measured in square metres. |
| Kilogram | kg | Kilogram(s) related to refuse weight. |
| Litre | L | Litre(s) related to refuse volumes. |
| Square Metre | $m^2$ | Square metre(s) related to refuse areas. |
| Ton | T | Ton(s) related to refuse weight. |
| **Collection Vehicles** | | |
| Body Truck | | A conventional heavy vehicle with a covered loading area. It is generally not specifically designed for emptying the content of bins into the truck during refuse collections, but can be used to carry entire (full) bins for servicing by bin swap-over. |
| Refuse Collection Vehicle | RCV | A vehicle specifically designed for collecting and emptying refuse bins and refuse compactors. |
| Rear-End-Loading Refuse Collection Vehicle | REL RCV | A truck specially designed to collect municipal solid waste and recycling, typically 240L wheelie bins to 1100L bulk bins, from rear loading mechanism and haul the collected waste to a solid waste treatment facility. |
| Tank Truck | | An RCV that is specifically designed to collect liquid wastes such as waste cooking oil and food waste pulp. The waste is typically pumped from a waste storage tank into the truck via a hose. Liquid waste management equipment is often provided by the contractor who collects the waste and operates the truck. |