



Operational Waste Management Plan

At Lot 30, 51 First Avenue Maroochydore

On Behalf of Walker Corporation



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Revision Record

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1 Introduction

1.1 Project Background & Site Location

Colliers International Engineering & Design has been engaged by Walker Corporation to prepare and submit an **Operational Waste Management Plan (OWMP)** to support the proposed Residential development located at Lot 30, Sunshine Coast Parade, Maroochydore, Qld.

The subject site is located within the SunCentral Precinct, Maroochydore, and is bounded by Sunshine Coast Parade, First Avenue and Future Way as demonstrated in Figure 1-1. Connection to the AWCS - Public Pneumatic Waste Infrastructure Stub is via First Avenue. RCV access to the on-site enclosed loading bay for collection of (Private Non-Pneumatic Waste Infrastructure) bins is via Future Way.



Figure 1-1: Site Location (Nearmaps)

Source: Nearmaps, 17/05/2025

1.2 Scope & Objectives

This report details the waste management processes, equipment, and construction requirements for the development, including integration with the Sunshine Coast Council's Automated Waste Collection System (AWCS). It references the Prescribed Waste Infrastructure Standards No. 4 - 2022 (**PWIS No. 4 - 2022**) to ensure compliant design for the Private Pneumatic Waste Infrastructure (PPWI) and Private Non-Pneumatic Waste Infrastructure (PNPWI), accommodating both AWCS and non-AWCS waste collections.

The plan provides information in reverse order, from collection to inhouse disposal, to contextualise refuse management. It details refuse protocols and disposal points for each use area within the development. Table 1-1 explains the report's items, addressing PWIS No. 4 - 2022 points. Key information for Council approval is in Section 2 – Regulatory Framework.

Table 1-1: Items Covered in this Report.

Item	Explanation
Refuse streams	Identification of refuse streams and anticipated refuse volumes that will be produced within the development
Refuse separation	Recommendations for appropriate segregation methods for each refuse stream considering AWCS and Non-AWCS refuse
Refuse collections	Assessment of collection via AWCS as well as via refuse collection vehicles (RCV) for non-AWCS refuse
Refuse storage	Detailed analysis of refuse storage facilities and design (refuse rooms, AWCS inlets)
Refuse transfer	Assessment of refuse transfer between refuse storage and collections areas if required
Refuse disposal	Recommendations for refuse disposal within the building into AWCS inlets or other refuse management equipment
Refuse management equipment	Explanation of AWCS system and identification of other 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, referring to AWCS system where required
Building design	Recommendations for design of refuse management facilities

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

1.3 Development Summary

This section of the report outlines the various areas and key uses within the development. Table 1-2 provides a breakdown of the key areas, and an assessment of waste-generating uses is outlined below.

Ground floor common areas, including “Work from Home” (WFH) spaces and the recreational dining and gym areas on level 29, are considered ancillary amenities to the residential building and are therefore not typically treated as additional refuse-generating areas beyond the generation rates already applied to residential units. Notwithstanding this, these areas have been assessed together with the building office areas, with applicable refuse generation rates applied. This approach provides a conservative stress test of the building’s daily waste generation against the capacity of the building’s AWCS screw tanks and provides information for the maximum volumes of non-AWCS materials that will be produced. Other areas that are specifically considered to be non-waste-generating are outlined below, together with the relevant justification.

- The rooftop pool are not considered potential function areas and are therefore not considered as additional refuse-generating spaces.
- Bike storage areas are provided solely for the storage of bicycles and associated gear and do not include end-of-trip facilities such as showers, lockers, or change rooms and do not attract a generation rate.

Table 1-2: Development Breakdown

Domain	Level	Detail	Quantity	
Residential	Basement 2	AWCS Room - Accommodating Screw Tanks	91m² GFA	
	Ground	Building Management Office, Residential WFH	161m² GFA	
	Basement 1 and Podiums 1-4	Carparks	255 Spaces	
	Level 5-27	1, 2, 3 & 4 Bedroom Dwellings	204 Units	Total 208 Units
	Level 28	Penthouse Dwellings	4 Units	
	Level 29	Recreational - Roof Top Recreation (Pool, Sauna Spa, Private Dining and Outdoor BBQ and Sunset Dining, Penthouse - Private Terrace) , Gym	Ancillary to Residential Dwellings - Not typically considered to generate additional waste beyond that already included in the generation rate applied for individual dwellings i.e. use of dining areas would be in lieu of a meal in residents units. Residential Gym and Dining areas are considered however, in volume estimates. All common areas including the Penthouse private terrace areas are considered to be amenities and absorbed into standard unit volumes Gym 117m² GFA Dinning 258m² GFA	
Retail	Ground	3 x Tenancy	242m² GFA	

2 Regulatory Framework

This section outlines the regulatory framework, including the design, approval, and installation requirements for Automated Waste Collection Systems (AWCS), also referred to as **Private Pneumatic Waste Infrastructure**, and Non-Automated Waste Collection Systems (Non-AWCS) also referred to as **Private Non-Pneumatic Waste Infrastructure**, in accordance with the Sunshine Coast Regional Council Prescribed Waste Infrastructure Standards (No. 4 – 2022).

Note: This section will be updated, where necessary, to incorporate the relevant requirements applicable to each OWMP submission during the consent and prescribed waste infrastructure satisfaction notice stages

2.1.1 Section 2.3 Application for a Prescribed Waste Infrastructure Consent

This preliminary report has been prepared and submitted in accordance with the requirements of the Prescribed Waste Infrastructure Standards No. 4 – 2022, specifically as part of a Section 2.3 Application for Prescribed Waste Infrastructure Consent – Item (b). The intent of the report is to provide the required preliminary waste management information to support the application, including concept design considerations prepared and submitted to the Waste Infrastructure Authority for review. The report may be amended as required to address subsequent notices issued under Sections 2.6 and 2.7 of the Standards during the detailed design and approval process. Figure 1-2 presents an excerpt of section 2.3 from the PWIS (No4) 2022

2.3	Application for a Prescribed Waste Infrastructure Consent
(a)	Prior to applying for a Prescribed Waste Infrastructure Consent, the Prescribed Proponent must issue a request to the Waste Infrastructure Authority for a pre-design meeting between the Prescribed Proponent and the Waste Infrastructure Authority. The meeting: (i) is to be for the purpose of discussing the Prescribed Proponent's development proposal and the design of the relevant Prescribed Waste Infrastructure; and (ii) will be scheduled by the Waste Infrastructure Authority. <i>Editor's Note – In accordance to clause 2.2(b), a pre-design must be held prior to the Prescribed Proponent lodging their PDA development application with EDQ.</i>
(b)	To apply for a Prescribed Waste Infrastructure Consent, a Prescribed Proponent must give a Notice to the Waste Infrastructure Authority which states that it is an application under this section 2.3, and is accompanied by: (i) preliminary design information for the Prescribed Waste Infrastructure, including basic information and spatial arrangements; and (ii) a preliminary waste management plan containing information in accordance with Schedule 5;

Figure 2-1: Excerpt – Section 2.3 Application for Prescribed Waste Infrastructure Consent

Source: SCC PWIS (No 4) Sep 2022

2.2 Schedule 5 Minimum Standards for Waste Management Plan

In accordance with Section 2.3(b)(ii) Table 2-1 demonstrates the Schedule 5 - Minimum Standards for Waste Management Plan. Reference is made to individual sections within the report to demonstrate compliance.

Table 2-1: Waste Management Plan Compliance Checklist according to Schedule 5 PWIS No. 4 - 2022

Schedule 5 Line Item	Relevant Section	Compliance
(a) A waste management plan in a form specified by the Waste Infrastructure Authority is to be included in the detailed design and specification documentation for the Prescribed Waste Infrastructure.	Entire report responds to schedule 5 items	Compliant Subject to review by the PWIA and further development of the WMP
(b) A waste management plan for Prescribed Waste Infrastructure is to contain information which is to include the following: (i) the proposed or actual uses of the Serviced Premises including: A. a description of any environmentally relevant activity (as defined by Schedule 1 of the Environmental Protection Regulation 2008), B. the estimated floor area occupied by each defined use specified in Table SC7.1 of the Infrastructure Agreement C. for a non-residential use, the details of the estimated floor area occupied by each tenancy for each development type and defined use specified in Table SC7.1 of the Infrastructure Agreement;	A. Not applicable, B. See Section 1.3 for floor areas relevant to refuse generation. C. See Appendix A for detailed floor plans.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(ii) the types of waste likely to be generated in the Serviced Premises;	Refer to Section 3.1 for a summary of refuse generated. Refer to Section 3.1.2 for detailed refuse calculations considering all types of refuse generated by the development.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(iii) the estimated quantity of waste likely to be generated in the Serviced Premises for each AWCS Waste Fraction and Non AWCS Waste Fraction;	Refer to Section 3.1 for a summary of refuse generated. Refer to 3.1.2 for detailed refuse calculations and split into AWCS and non-AWCS waste.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(iv) the methods for the collection and disposal of waste to be generated in the Serviced Premises including the proposed collection service hours (i.e. between the hours of 7:00am and 7:00pm);	Refer to Section 3.2 and 3.3 for refuse storage, collection and disposal methods. Refer to Section 4 for detailed design recommendations.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(v) initiatives that will be implemented to: A. minimise waste by reducing, reusing or recycling waste; and B. segregate and separate waste into each of the AWCS Waste Fractions;	Refer to Section 5.2 for refuse minimisation options. Refer to Section 3.2 for AWCS Waste Fractions.	Compliant as per Sc.5 Subject to review by the PWIA and further development of the WMP
(vi) a strategy for the compliant use of the Private Pneumatic Waste Infrastructure incorporating the following: A. communication strategy; B. signage; C. placement of AWCS Collection Points;	Refer to Section 3.2 for AWCS Collection Points. Refer to Section 5 for signage and communication.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP

(vii)	details on how the Non AWCS Waste, other than Organic Waste, will be processed, handled, stored and presented for collection including the proposed location of any associated processing equipment and a description of the type of Non AWCS Waste Receptacles proposed to store the Non AWCS Waste;	Refer to Section 3.3 for refuse storage, collection and disposal methods. Refer to Section 5.1 for an equipment summary. Refer to Section 4 for detailed design recommendations.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(viii)	the methods and processes for transferring Non AWCS Waste, other than Organic Waste, from in the Serviced Premises to the Waste Storage Area;	Refer to Section 3 for refuse disposal from the individual parts of the development.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(ix)	details of the spaces and infrastructure allocated for processing, handling, storage and collection activities and demonstration that they are adequate to meet the Amenity and Character Criteria;	Refer to Section 3 for refuse storage, collection and disposal methods. Refer to Section 4 for detailed design recommendations.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(x)	details of the proposed Non AWCS Waste Service Point, including the range of collection vehicles that are to be accommodated;	Refer to Section 4.2 for RCV access.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(xi)	details of the proposed access arrangement to the Non AWCS Waste Service Point for collection vehicles to remove the Non AWCS Waste;	Refer to Section 4.2 for RCV access	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(xii)	details which demonstrate that the proposed service method, processes, and frequency of collection meet the Amenity and Character Criteria;	Refer to Section 3 for refuse storage and collections.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(xiii)	a description of the design details of the Waste Storage Area, including the method of preventing stormwater contamination;	Refer to Section 3 for refuse storage details.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP
(xiv)	the location and details of the Waste Storage Area.	Refer to Section 3 for refuse storage details.	Compliant as per Sc. 5 Subject to review by the PWIA and further development of the WMP

2.3 Sunshine Coast Refuse Planning Scheme Policy (SC6.18)

Colliers Engineering have included this section to highlight that the refuse generation rates employed for refuse calculations originated from Sunshine Coast Council's Refuse Planning Scheme Policy. These rates have been captured in

Figure 2-2. A rate for a gym is not nominated. For the purpose of stress testing capacity however a nominal rate of 10L/100m² / day each for waste and recycling has been applied which aligns with rates provided under refuse planning scheme policies in Southeast Queensland based LGA's

Table 5.5A Indicative waste and recycling generation rates for particular uses

Use	Waste generation rate	Recycling generation rate
Short-term accommodation where for a backpackers	40L / occupant / week	20 litres / occupant / week
Rooming accommodation where for a boarding house	40L / occupant / week	20 litres / occupant / week
Short-term accommodation where for a motel and not including a public restaurant	5L / bed / day 10L / 1.5m ² / of dining area / day	1L / bed / day
Entertainment/catering use and retail business use where for: (a) a butcher (b) a delicatessen (c) a fish shop (d) a greengrocer (e) a hairdresser (f) a restaurant (g) a supermarket (h) a takeaway	(a) 80L / 100m ² floor area / day (b) 80L / 100m ² floor area / day (c) 80L / 100m ² floor area / day (d) 240L / 100m ² floor area / day (e) 80L / 100m ² floor area / day (f) 10L / 1.5m ² floor area / day (g) 240L / 100m ² floor area / day (h) 80L / 100m ² floor area / day	(a) 40L (b) 40L (c) 40L (d) 120L / 100m ² / day (e) 40L (f) 2L / 1.5m ² floor area / day (g) 240L / 100m ² / day (h) 40L
Entertainment/catering use where for a hotel	5L / bed / day 50L / 100m ² / bar area / day 10L / 1.5m ² / of dining area / day	50L / 100m ² / of bar and dining areas / day
Entertainment/catering use where for a licensed club	50L / 100m ² / bar area / day 10L / 1.5m ² / of dining area / day	50L / 100m ² / of bar and dining areas / day
A retail business use where for: (a) a shop or shops having a gross leasable floor area not exceeding 100m ²	(a) 50L / 100m ² / floor area / day	(a) 25L / 100m ² / floor area / day

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(b) 100m ² (b) a shop of shops having a gross leasable floor area 100m ² or greater.	(b) 50L / 100m ² / floor area / day	(b) 50L / 100m ² / floor area / day
A retail business use where for a showroom	40L / 100m ² / floor area / day	10L / 100m ² / floor area / day
A commercial business use where for an office	10L / 100m ² / day	10L / 100m ² / day

Table 5.5B Minimum waste receptacle storage requirements

Use	Minimum requirements
Dual occupancy	An area or areas capable of accommodating 3 x 240 litre waste storage bins per dwelling.
Short-term accommodation, Multiple dwelling, Relocatable home park, Residential care facility and Retirement facility	An area or areas capable of accommodating 2 x 240 litre waste storage bins per 2 dwellings; or An area or areas capable of accommodating bulk storage bins with an equivalent volume of 120 litres per site for waste and 120 litres per site for recycling.
Tourist park	An area or areas capable of accommodating 2 x 240 litre waste storage bins per 4 cabins or caravan sites; or An area or areas capable of accommodating bulk storage bins with an equivalent volume of 60 litres per site for waste and 60 litres per site for recycling.
Food and drink outlet	An area or areas capable of accommodating 2 x 240 litre waste storage bins.
All other uses	Determined as part of assessment of proposal.

Figure 2-2: Refuse Planning Scheme Generation Rates

Source: Sunshine Coast Council, SC6.18

3 Refuse Profile

This section describes the arrangements for the collection, storage, transfer and disposal of refuse within the development. This includes bin quantities, storage capacities, equipment details, collection frequencies, integration with the AWCS as well as RCV site access and manoeuvring. Recommended operational and design requirements for the AWCS and the associated the **PPWI** and **PNPWI** are outlined in Sections 4 and 5. Refuse generated by this development is Soley residential though commercial generation rates are applied to certain ground level ancillary uses.

3.1 Development Refuse Profile

Section 3.1.2 presents the anticipated volumes for each of the standard AWCS and Non-AWCS refuse streams. All volumes have been calculated using refuse generation rates provided by the Sunshine Coast Council as demonstrated in section 2.3 and Section 3.1.1. Individual refuse streams for residential buildings and retail outlets are expressed as a percentage of the total waste and recycling volumes.

For the purpose of stress-testing the daily capacity of the AWCS equipment, combined refuse volumes for both residential and retail waste and recycling have been assessed on a 100% aggregated basis, without stream separation.

For **Residential Non-AWCS** assessments, a nominal percentage has been applied to

- general waste, to estimate bulky waste volumes; and
- commingled recycling, to estimate cardboard volumes.

The adopted assumptions are as follows:

- **Bulky Waste:** 10% of total waste volume
- **Bulky Recycling:**
 - Cardboard: 15% of total recycling volume
 - Glass: Not applied for Residential uses

For **Retail Non-AWCS** assessment a nominal percentage have been applied to

- general waste, to estimate bulky waste volumes; and
- commingled recycling, to estimate cardboard and commercial glass volumes.

The adopted assumptions are as follows:

- **Bulky Waste:** 10% of total waste volume
- **Bulky Recycling:**
 - Cardboard: 40% of total recycling volume
 - Glass: 20% of total recycling volume

Table 3.1 outlines the average weighting applied between AWCS and Non AWCS against the percentages outlined above.

Table 3-1: Average Weighting AWCS vs Non AWCS

Description		Waste Streams	Recycling Streams
Non-AWCS Averaged Separation	AWCS Volume (Assessed)	100%	100%
	AWCS Volume (Not Assessed)	90%	82.1%
	Bulky Waste	10%	-
	Bulky Recycling - Cardboard	-	16.4%
	Bulky Recycling – Glass	-	1.5%

Note: Based on recent assessments no separation has been applied to organics / food waste and these volumes remain within the AWCS calculations. Bulky Recycling – Glass is applied against retail volumes only but demonstrated as a percentage against total combined Residential and Retail volumes.

3.1.1 Refuse Generation Rates

Refer to Table 3-2 for the relevant refuse generation rates.

Table 3-2: Generation Rates

Use Type	Measure	General Waste	Commingle Recycling
Residential Unit*	L / Day / Unit	17.14	17.14
Retail (Restaurant)	L / 1.5m ² / Day	10	2
Gym	L / 100m ² / Day	10	10
Recreational Dining Area	L / 100m ² / Day	250	120
Office	L / 100m ² / Day	10	10
Carpark	L / Park / Day	0.5	0.5

Note: Generation for Both Waste and Recycling is 120L week per stream divided by 7 days to provide a daily rate. The gym is allocated as a typical gym rate whilst the values applied to dining areas reflects typical function area rates.

3.1.2 Refuse Calculations

Table 3-3 provides relevant refuse calculations for the residential building. These calculations included both AWCS and Non-AWCS waste streams.

Table 3-3: Residential Building Refuse Calculations

Level	Description	Measure	Quantity	AWCS *	AWCS*	Non-AWCS	Non-AWCS	Non-AWCS
				General Waste	Commingle Recycling	Bulky Waste L/Day	Cardboard L/Day	Glass L/Day
29	Dinning	GFA (m ²)	258	646	310	65	2.21	0
	Gym	GFA (m ²)	117	12	12	1	46.48	0
5-28	Residential	Dwellings	208	3,531	3,531	353	530	0
B1, 1-4	Carpark	Spaces	255	128	128	13	0	0
Ground	Tenancy 1	GFA (m ²)	89.8	599	120	60	48	24
	Tenancy 2	GFA (m ²)	75.3	502	100	50	40	20
	Tenancy 3	GFA (m ²)	76.1	507	101	51	41	20
	Office WFH & BMGMT	GFA (m ²)	161	16	16	2	2.4	0
Total Daily Volumes (L / Day)				5,940	4,318	594	709	64
Volumes per Collection (L / Collection)				1,485	1,080	2,048	2,481	225
Collection and Equipment Details		Collections Per Day (#)		4	4	0.29	0.29	0.29
		Equipment Type		A2Screw Tank (60% Cap)	B2 Screw Tank (60% Cap)	MGB	MGB	MGB
		Bin / Equipment Size (L)		2,070	1,440	1,100	1,100	1100
		Equipment Quantity Required (#)		0.72	0.87	1.86	2.26	0.20
		Equipment Quantity Provided (#)		1	1	2	3	

Table 3-4 summarises the AWCS and Non-AWCS collection volumes and equipment capacity utilisation per collection cycle. AWCS volumes are indicated as a reference for screw tank requirements. Bin collections will not be required for waste and recycling items that are disposed via the PPWI and collected via the AWCS. All non-AWCS volumes are indicated for equipment requirements per collection.

Table 3-4: AWCS and Non-AWCS Refuse Volumes per Collection

Component	Refuse Stream	Classification	Estimated Volumes per collection	Storage Capacity / Utilisation per Collection Cycle	
Council Collections or Infrastructure	General Waste	AWCS Waste	1,485 L per Collection	2,070L per Collection	72%
	Commingled Recycling	AWCS Recycling	1,080 L per Collection	1,242L per Collection	87%
	Bulk Waste	Non-AWCS Waste	2,048 L per Collection	2,200 per Collection	93%
	Cardboard	Non-AWCS Recycling	2,707 L per Collection	3,300 per Collection	82%

3.2 Automated Waste Collection System

This section pertains only to waste that is collected through the Private Pneumatic Waste Infrastructure (PPWI) system.

3.2.1 Refuse Collection

AWCS waste and recycling will be collected **four times per day**. Sufficient storage capacity must be provided within the screw tank system to store the required amount of waste and recycling. Estimated volumes reflect all refuse generating areas that are not duplicated in the calculations for each dwelling. Based on the volume estimates and direct link to residential chutes throughout the building, AWCS screw tanks will be installed within the basement. The screw tank size have been nominated based on 60% capacity, indicating a 40% redundancy of volumetric space per collection cycle. This redundancy is in addition to the capacity built into conservative generation rates and the unused capacity indicated per collection cycle even after including all variables.

3.2.2 Refuse Storage

All refuse will be stored in the refuse storage room located on the ground level adjacent to the loading bay. The location and layout of the refuse room and basement Level PPWI are indicated in drawings in Appendix B. An RFID system is not necessarily required for the residential chute and screw tank system however the RFID technology can support the measurement and analysis by fraction and by individual user and user level as well as identify any misuse of the system. Proxy card or FOB will allow entry to the ground floor refuse room. . CCTV systems are also recommended for the ground floor refuse room and basement AWCS rooms.

The PPWI for refuse disposal will be accessible via direct link to the screw tanks and single inlets per refuse stream in the ground floor refuse room. Based on the expected refuse generated per collection (see Table 3-3 and Appendix A.2) and a maximum of four AWCS collections per day each for waste and recycling, the following screw tank storage capacities are recommended:

- AWCS waste: 1 x Screw Tank (A2)
- AWCS recycling: 1 x Screw Tanks (B2)

Figure 3-1 demonstrates the location for the Basement 2 Level PPWI / AWCS Room. As the screw tanks are located within Basement 2 the connected chutes provide access down to ground level. Figure 3-2 demonstrates chute access from the ground level and Figure 3.3 demonstrates a typical residential level.

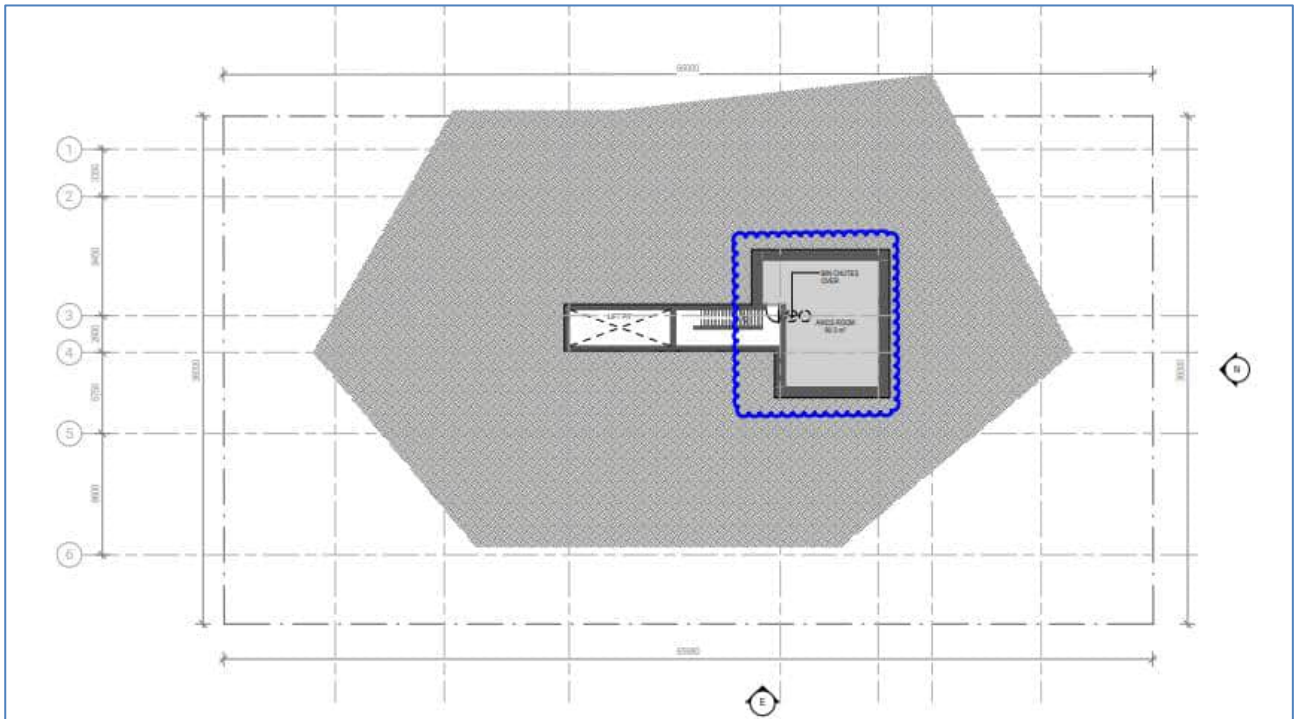


Figure 3-1: AWCS Screw Tank Room

Source: Plus Studio, Concept Plan Basement 01 – DA099 | PLAN UPDATE | ISSUE 1 | 24.06.26

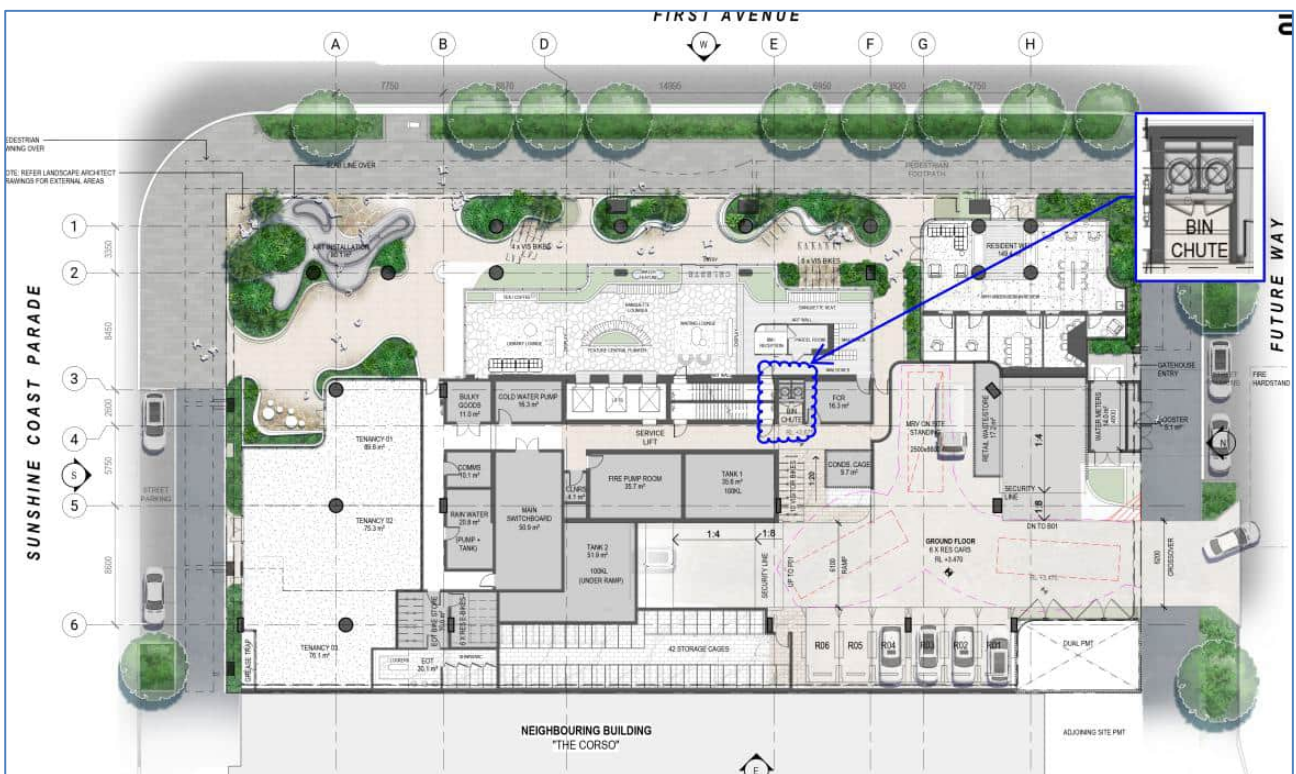


Figure 3-2: Ground Floor Chute Access to AWCS

Source: Plus Studio, Concept Plan Ground – DA100 | PLAN UPDATE | ISSUE 12 | 24.06.2026



Figure 3-3: Typical Residential Level Chute Access to AWCS

Source: Plus Studio, Concept Plan Lower Typical (L06-16) – DA106 | PLAN UPDATE | ISSUE 13 | 24.06.2026

3.2.3 Refuse Transfer

Refuse disposed via the AWCS will be transferred multiple times per day through vacuum pipes to a central collection point for further processing. Internal building refuse will be placed in refuse chutes or inlets connected directly to the screw tanks located in the basement refer to previous Figure 3-1 to Figure 3-3.

3.2.4 Refuse Disposal

Waste and recycling materials suitable for disposal via the Automated Waste Collection System (AWCS), as outlined in Schedule 1 of PWIS No. 4 – 2022, will be discharged through refuse chutes connected directly to screw tanks. These chutes are accessible from ground level and all upper floors.

Waste bags and loose recyclable materials must be sized to fit within a standard commercial inlet opening of approximately 420 mm × 580 mm.

For this development, the waste system is simplified such that the screw tanks, located in Basement Level 02, are fed exclusively by the refuse chutes. No additional direct inlets to the screw tanks are required, as all waste—including that generated at ground level—is deposited via the chute system.

Refer to Section 4.1 for preliminary PPWI drawings indicating the location, arrangement, and orientation of the screw tanks within Basement Level 02. Detailed section drawings will be developed in subsequent design stages and section response and included within this report.

3.3 Non-Automated Waste Collection System

This section pertains only to waste that is collected through Private Non-Pneumatic Waste Infrastructure (PNPWI).

3.3.1 Refuse Collection

All non-AWCS waste and recycling will be collected by Council or Council's Private Contractor. The building manager / caretaker will finalise collection arrangements and schedules with all collection contractors to guarantee smooth operations. Non-AWCS collection will not occur outside of the nominated collection service hours (between the hours of 7:00am and 7:00pm) as per Schedule 7.1 of the PWIS No. 4 - 2022.

- **Bulky Waste:** Non-AWCS bulky waste items includes any item that is too large to fit into the AWCS and cannot be reasonably reduced in size. Services will be completed twice weekly subject to operational volumes. Refuse bin quantities and required storage space have been calculated based on the maximum expected volumes generated by the development.
- **Cardboard and Residual Materials (i.e. Glass and bulky packaging):** Non-AWCS recycling items include (bulky) cardboard and residual materials. Services will be completed twice weekly subject to operational volumes. Refuse bin quantities and required storage space have been calculated based on the maximum expected volumes generated by the development.
- **Containers eligible under the container deposit / refund scheme:** Referring to Schedule 5 (b) (v) (A) of the PWIS No. 4 - 2022, containers that are eligible for a refund under the container deposit / refund will be separated for collection. Collection of these materials will be completed via the AWCS Recycling Inlets or Bulk Commingled Collection offered by Council. With the inclusion of a Baler, options exist to separate the cardboard and isolate containers / glass for future collection services when available.

3.3.2 RCV Access and Manoeuvring

The RCV access and subsequent collection requirements have been identified for all non-AWCS materials. RCV access is in accordance with Schedule 4.7 of the PWIS No. 4 - 2022. The site will include service vehicle access via Future Way. On the days of service, the RCV will enter the site in a forward gear and complete a reversing manoeuvre to stand in the designated loading bay. Once collections are completed the RCV will exit the site in a forward gear. Council bins may be transferred and temporarily stored at the rear of the loading bay prior to collection however the refuse room is also within a reasonable distance allowing for the driver to service directly from the room. Council will utilise a rear loading RCV for bulky recycling and bulky waste collections.

It is noted that the design vehicle is used for the purpose of demonstrating an MRV entry. Dimensions are shown in the architectural drawings to demonstrate space for the maximum sized vehicle that may be used to enter and exit the site. Refuse collection contractors will complete a full risk assessment of the loading bay and entry to the building prior to commencing collection and nominate a compliant vehicle to complete the service. Further Details relating to vehicle site access and manoeuvring should be referenced in the submitted Traffic Engineering report.

Figure 3-5 demonstrates vehicle manoeuvring. A full size drawings is included in the Appendix D

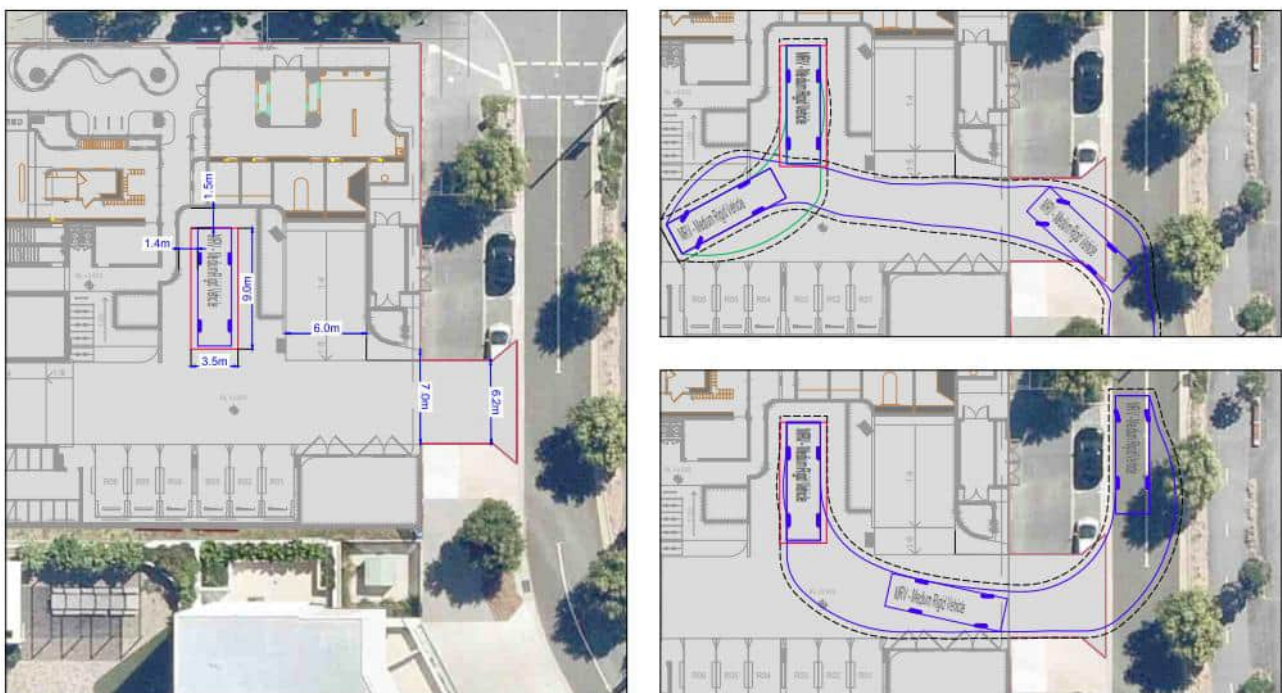


Figure 3-4: RCV Collection & Bin Access

Source: Colliers, Swept Path Analysis, Drawing No: 25BRT0574-01, Rev A, 24/06/2026

3.3.3 Refuse Storage

Non-AWCS waste and recycling (refer to Section 3.3) will be stored in conventional 1,100L bins. Bin quantities for each refuse stream are listed below.

- Bulky General Waste: 2 x 1,100L bins,
- Bulky Recycling: 3 x 1,100L bins,

The refuse room as shown in previous Figures 3.5 is located on the ground floor adjacent to the enclosed loading bay. Figure 3.6 demonstrates the potential configuration for the Ground Floor Refuse Room

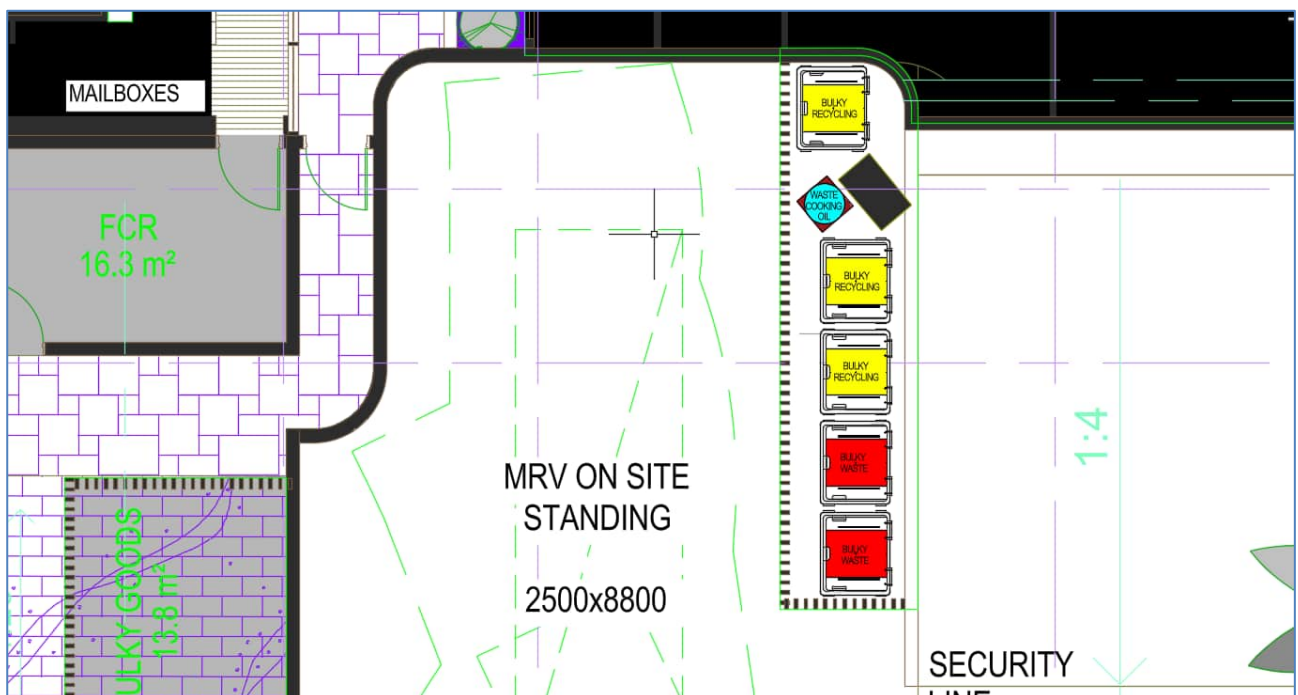


Figure 3-5: Non-AWCS Storage, Access and Collection

Source: Plus Studio, Concept Plan Ground – DA100 DWG 16.06.2026 – Colliers Mark Up

3.3.4 Refuse Transfer

Non-AWCS waste is stored in conventional bins or equipment until pick-up by the refuse collection contractor. Materials not suitable for AWCS disposal may be transferred to the refuse room via corridors (Ground Level) and lifts or stairs from all other levels. As the refuse is located in proximity to the loading bay where the RCVs stand for refuse collections, bin transfer equipment such as a bin tug is not required. Figure 3-6 demonstrates location of the loading bay for Non AWCS collections and transfer path from the refuse room to the loading bay

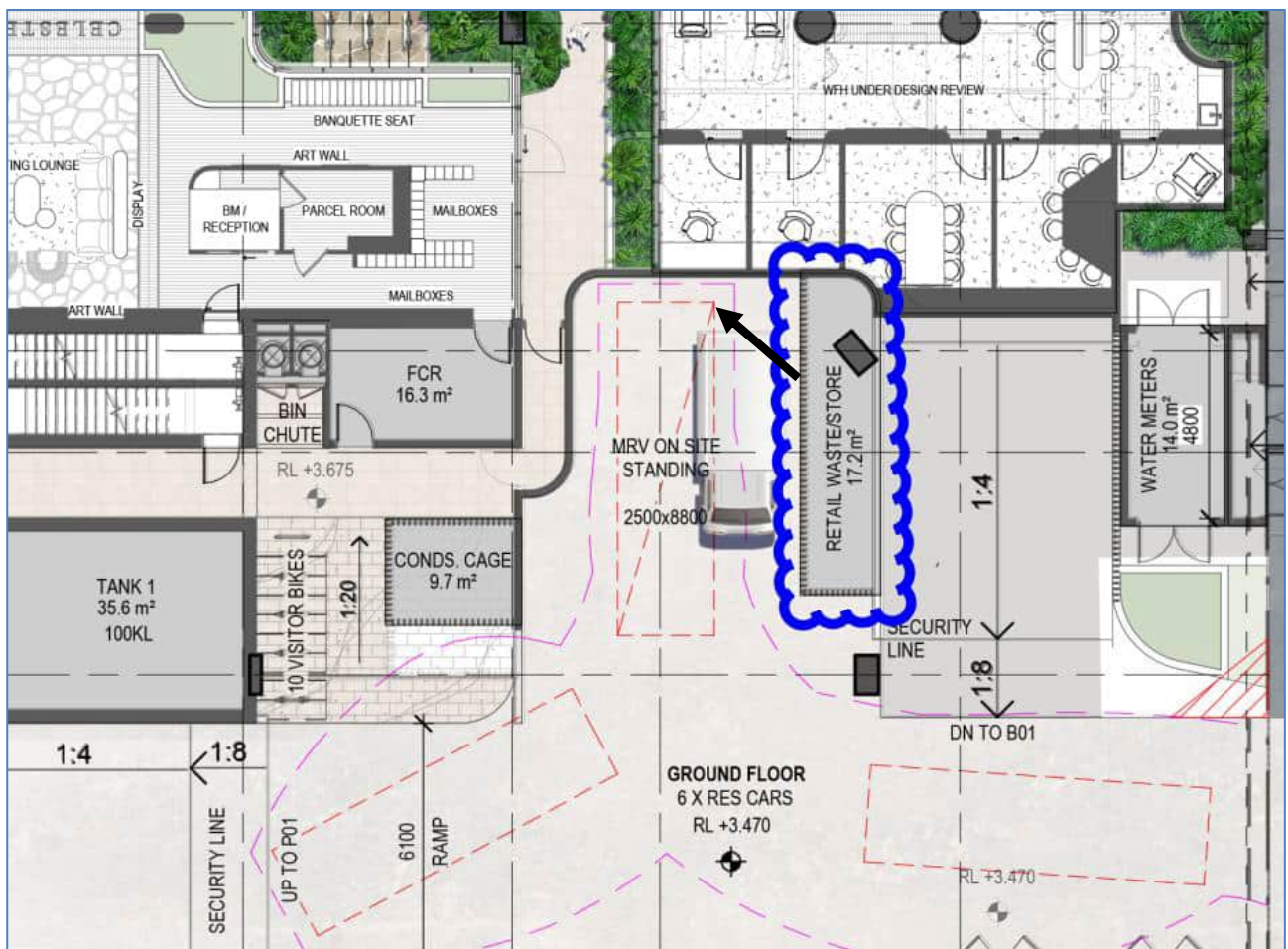


Figure 3-6: Non AWCS Transfer Paths

Source: Plus Studio, Concept Plan Ground – DA100 | PLAN UPDATE | ISSUE 12 | 24.06.2026

3.3.5 Refuse Disposal

Refuse is generally disposed of by residents using the refuse chutes however, not all types of refuse are appropriate to be disposed into the AWCS system as described in Schedule 1 and 2 of the PWIS No. 4 - 2022. These items include but are not limited to.

- Bulk cardboard (>300mm in any dimension, of >10kg / week),
- Bulk glass (10% or more total waste weight or volume),
- Other bulk waste (>300mm in any dimension).

Residents will discard of these materials into bins located in the refuse room or bulky goods room on the ground floor. Disposal of bulky materials for the individual ground floor areas will be completed by building staff or cleaners.

These materials will be disposed into bins ranging from 240L to 1,100L (see appendix for examples) located in the refuse room.

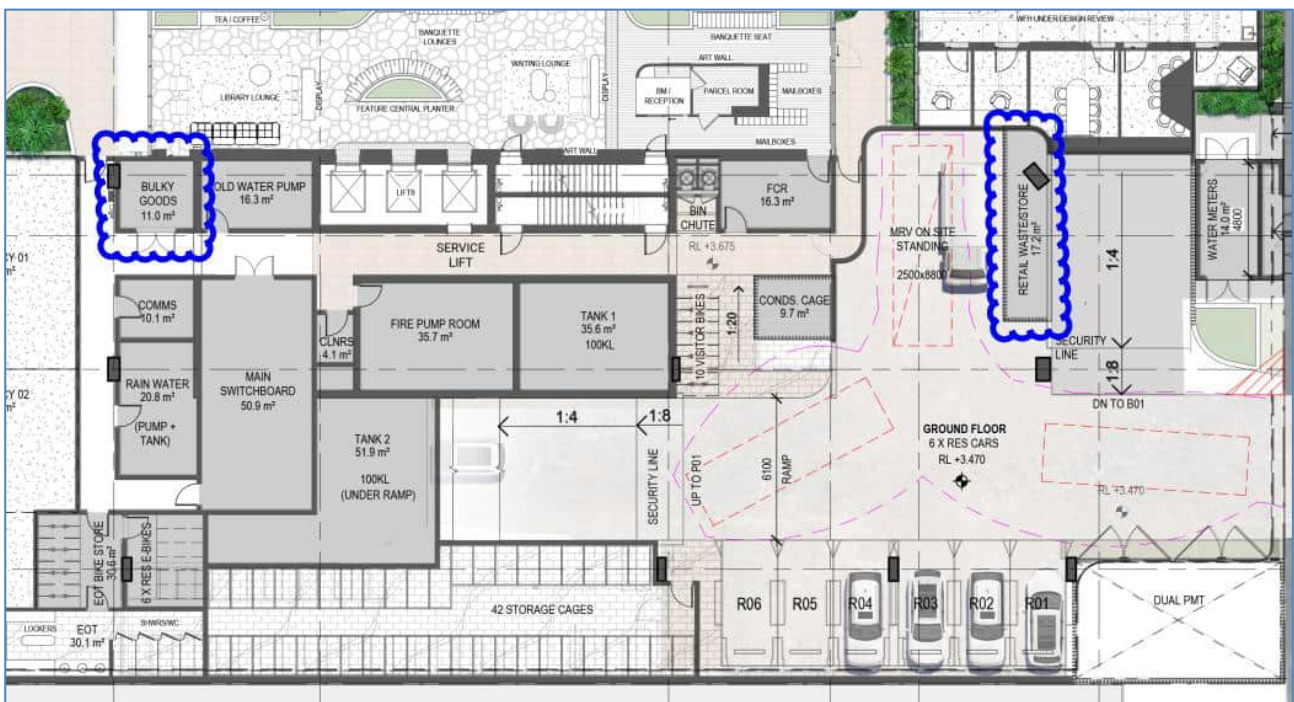


Figure 3-7: Ground Floor Non-AWCS Refuse Room

Source: Plus Studio, Concept Plan Ground – DA100 | PLAN UPDATE | ISSUE 12 | 24.06.2026

4 Recommended Design Requirements

This section lists recommended design requirements for the building including AWCS and Non-AWCS refuse management facilities. They should be considered for optimal refuse management within the development, and to comply with relevant regulations and Council requirements.

The following recommendations reflect the provision of preliminary design information as required under Schedule 3 of the Sunshine Coast Council's Prescribed Waste Infrastructure Standards No. 4 2022.

4.1 Automated Waste Collection System

4.1.1 Private Pneumatic Waste Infrastructure

Figure 4-1 contains an overview of the layout of the ASWCS room including the proposed screw tanks. Detailed design requirements for the PPWI and AWCS connection are included in Appendix C and will be updated as design progresses.

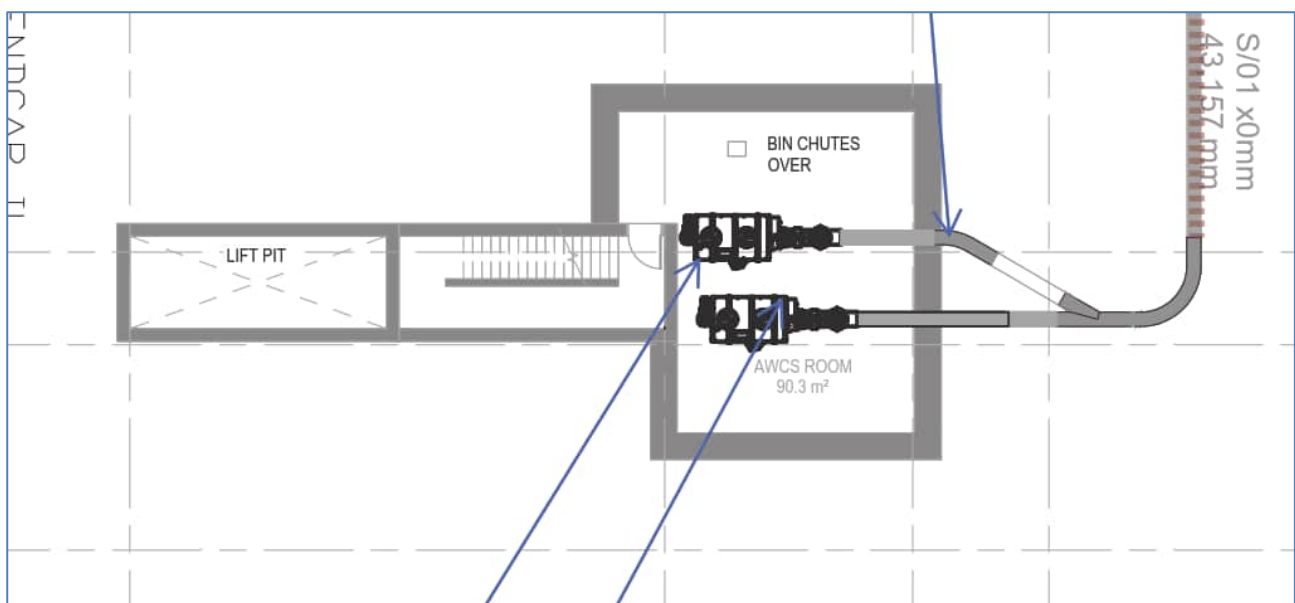


Figure 4-1: Excerpt - PPWI Arrangement

Source: LUCID, Drawing: LCE104915-PPWI-001 PRIVATE PNEUMATIC WASTE INFRASTRUCTURE BASEMENT 02 - PPWI ARRANGEMENT
- Preliminary Issue, Rev: SK02, Date: 25.06.2026

Source: LUCID, Drawing: LCE104915-PPWI-001 PRIVATE PNEUMATIC WASTE INFRASTRUCTURE BASEMENT 02 - PPWI ARRANGEMENT
- Preliminary Issue, Rev: SK02, Date: 25.06.2026

4.2 Non-Automated Waste & Recycling

According to the **PWIS No. 4 - 2022**, the PNPWI is to comprise the following:

- A waste storage area where non-AWCS waste is to be handled and stored, if the serviced premises is used for a purpose other than a residential use,
- Glass will be combined into a bulk commingle stream (As advised by council),

Cardboard processing equipment such as a baler may be installed but is not compulsory and is not recommended for the expected volumes to be produced

4.2.1 Waste Storage Area (Refuse Room)

According to the **PWIS No. 4 - 2022**, a waste storage area which is to be provided in the serviced premises is to be designed to comply with the minimum requirements outlined below. Drawings and information relating to ***Pressure Services (Water and Hose Cock Location), Drainage Services*** and ***Ventilation*** are included as attachments in Appendix B.5:

- The storage of Non AWCS waste is to be functional, environmentally acceptable and minimises any adverse impacts to the amenity of the Maroochydore City Centre,
- The potential for environmental harm and environmental nuisance under the Environmental Protection Act 1994 is to be minimised,
- The waste storage area is to provide access to the Non AWCS waste receptacles,
- The waste storage area is to be situated within the Serviced Premises and designed to minimise the visual impact to surrounding areas,
- The waste storage area is to allow access to the Non AWCS waste service point and the access is to be in a separate location to the main entrance to the building,
- The waste storage area is not to be located within or adjacent to any habitable room, living area or place used in connection with food preparation,
- The waste storage area is to be of sufficient size to fully contain the number of non-AWCS waste receptacles required to manage the generation of non-AWCS waste,
- The waste storage area is to function as the non-AWCS waste service point or is otherwise to be located within 40 metres of the non-AWCS waste service point,
- Unobstructed access is to be provided for the removal of non-AWCS waste receptacles to the non-AWCS waste service point, where the waste storage area and the non-AWCS waste service point are in different locations,
- Where the non-AWCS waste service point is located within a building or structure its design is to ensure that the following:

- The height clearance is sufficient to allow the lifting of non-AWCS waste receptacles and safe movement of a service vehicle for example by a truck mounted lifting gear such as a forklift within the building or structure,
 - The grade of access / egress ramps is not to exceed 1:8.
- The walls, doors and roof of the waste storage area are lined with non-combustible and impervious material with a smooth finish and a fire resistance rating of one hour,
- The junctions of the walls with the floors of the waste storage area are lined to prevent damage to walls by non-AWCS waste receptacles,
- The door frames of the waste storage area are rebated with a lock capable of being activated from within without a key at all times,
- A hose cock and an adequate length of hand hose of a minimum internal diameter of 12mm is provided immediately outside of the waste storage area,
- Unless refrigerated to below 4 degrees Celsius, the waste storage area is to have an approved mechanical exhaust system for ventilation or permanent, unobstructed natural ventilation openings which are direct to the external air not less than one-twentieth ($1/20^{\text{th}}$) of the floor area with one half of such openings situated at or near the floor level and one half at or near the ceiling level,
- The waste storage area is to have an automatic or other system for the control of fire which meets the applicable Australian Standards for sprinkler installation,
- The waste storage area is to be fly and vermin proof,
- The floor of the waste storage area is to be graded to fall to a drain located outside and adjacent to the waste storage area, which is as close as practicable to the doorway,
- The drainage of the waste storage area is to be by means of a trapped gully connected to the sewer with gullies positioned to avoid the track of waste receptacle wheels,
- Rainfall and other surface water are not to drain into the waste storage area,
- Artificial lighting is to be provided within the waste storage area,
- All equipment in a fixed position is to be located clear of walls and floors and is supported on suitable plinths or impervious legs,
- Any container storage and drainage rack is to be made of galvanised metal or other durable, impervious materials,
- The waste storage area is to be well ventilated and is to have "no smoking" signs installed,
- The waste storage area is to include a bunded area for the storage and cleaning of waste oil containers if waste oil is to be generated by the Serviced Premises,
- The waste storage area is to include a waste wash down area for the regular cleaning of the non-AWCS waste receptacles, which:
 - Is located such that the non-AWCS waste receptacles can be easily moved to the waste wash down area and is not located adjacent to or underneath dining or living areas of any building,

- Has a floor graded to fall to a drainage point located within the waste wash down area,
- Provide for drainage by means of a trapped gully connected to the sewer and is to be designed such that rainfall and other surface water cannot flow into the waste wash down area; and
- Includes a hose cock located in the vicinity of the wash down area.

Note: An indicative drawing has been provided within **Error! Reference source not found.**, positioning of a hose cock and wash down area for 240L bins. All other bins are used to complete exchange services, and bins will be washed off-site when emptied by the servicing contractor.

4.2.2 Cardboard and Glass Processing Equipment

Requirements are listed below however Cardboard and Glass processing is not recommended for the minimal volumes that will be produced by this residential site, noting that the development does not include any associated mixed-use retail.

According to the **PWIS No. 4 - 2022**, the cardboard processing equipment are to:

- Be suitable for the types of cardboard generated,
- Comply with the noise regulations in accordance with the Environmental Protection Act 1994; and
- Be provided within an adequate area for the housing, satisfactory functioning, storage and servicing of the cardboard processing equipment and the handling of bulk cardboard waste or bulk glass waste for the serviced premises which are intended to be serviced by the equipment.

4.2.3 Non-AWCS Waste Receptacles (Refuse Bins)

According to the **PWIS No. 4 - 2022**, a non-AWCS waste receptacle is:

- To provide for the segregation of the non-AWCS waste fractions,
- To be provided in numbers sufficient to manage the volume of non-AWCS waste which is generated by the serviced premises,
- To be appropriately coloured in accordance with *AS 4123.7: Mobile waste containers – colours, markings and designation requirements*,
- To be appropriately signed and labelled for the non-AWCS waste types,
- To be made of non-combustible materials; and
- Not to be placed:
 - Where it may impede the safe use of any exit, exit corridor, doorway or stairway,
 - Under stairways; or
 - Near any existing or potential heat source.

4.2.4 Refuse Collection Vehicle Access

According to the **PWIS No. 4 - 2022**, the PNPWI is to be designed to facilitate and allow for adequate access for collection vehicles to service the waste storage area and is to comply with the following minimum requirements:

- The layout and internal trafficable area of the serviced premises is designed to facilitate the direct servicing of the non-AWCS waste receptacle by a collection vehicle in a safe, unobstructed and efficient manner,
- The entry and exit from the non-AWCS waste service point is carried out in a forward gear unless accessed from laneways and service laneways identified within Map 7 – Road Hierarchy Plan of the development scheme,
- The non-AWCS Waste service point is designed to minimise the potential noise and odour nuisances,
- The turning path for a collection vehicle is designed in accordance with Austroads Design Vehicles and Turning Path Template Guide for a design service (8.8 metres),
- The collection of non-AWCS waste at the non-AWCS waste service point by a collection vehicle is
 - Not to be performed using front lift, side lift or rear lift tipping means unless this is demonstrated to the satisfaction of the Waste infrastructure Authority as being suitable for the amenity of the Serviced Premises,
 - To be undertaken by way of any of the following:
 - A waste receptacle swap,
 - The loading of baled or compacted waste,
 - Another servicing method acceptable to the Waste Infrastructure Authority.
 - To be carried out within the serviced premises such as a load dock, designated loading bay or basement and not within an area external to the serviced premises such as a road reserve; and
 - To allow a collection vehicle to move in a forward direction at all times unless accessed from laneways and service laneways identified within Map 7 – Road Hierarchy Plan of the development scheme or to be able to enter and exit from the non-AWCS waste service point in a forward direction or to include a turning bowl or a "T" or "Y" shaped manoeuvring area which allows the collection vehicle to make a turn within 3 manoeuvres.

5 Operational Recommendations

5.1 Equipment Summary

Equipment required or suitable for use as part of the operational phase of the development is outlined in Table 5-1. Lists of equipment, equipment suppliers and refuse management service providers for use during the operational phase of the development can be found in Appendix C.

Table 5-1: Equipment Schedule

Component	Description	Quantity	Notes
Council Collections or Collection Infrastructure	PPWI / AWCS Loading and Inlet Stations (for Waste and Recycling)	2	2 x AWCS Screw Tanks: General Waste A2 Commingled Waste B2
	Waste Bins - (Bulky) Waste	2	1,100L bin
	Recycling Bins - (Bulky) Commingled	3	1,100L bin
External Collection	Containers for Change (Optional) Note - Space is available for placement of additional 240L bins in the waste room	1-2	240L Bins

5.2 Operational Management

Responsibilities have to be assigned for all on-going refuse management operations. This is generally done by a building manager, staff and / or cleaners. The following lists (Table 5-2 to Table 5-8) are designed to help managing responsibilities and monitor the refuse operations in order to maintain efficient services and a safe environment.

Table 5-2: General Refuse Management Checklist

Objectives	Checked	Remarks
Organising and monitoring daily AWCS operations.		
Organising of weekly pick-ups for all non-AWCS refuse streams.		Liaise with private contractors and Council as required.
Managing daily bin transfers between refuse storage / collection areas if required.		
Check bin fill levels and rotate / swap bins as required, e.g. under chutes.		

5.2.1 Safety

Transferring refuse bins and using refuse management equipment including the AWCS are considered manual handling tasks. Therefore, contractors must ensure that a full risk assessment of equipment, surfaces and related gradients is complete. The contractor must provide procedural documentation to appropriate personnel prior to delivery of equipment and occupancy of the development.

Table 5-3: General Safety Checklist

Objectives	Checked	Remarks
Abiding by all relevant occupational health and safety legislation, regulations and guidelines to ensure site safety for residents, visitors, staff and contractors.		
Assessment of any manual handling risks and preparation of a manual handling control plan for waste and bin transfers.		
Provision of equipment manuals, training, health and safety procedures, risk assessments and personal protective equipment to staff / contractors in order to control hazards associated with all waste management activities.		

5.2.2 Signage

All receptacles, bins and other refuse management equipment will have adequate signage. Signage will be provided in and around waste collection and storage areas as per AWCS ECP, section 6 and the **PWIS No. 4 - 2022**. Example signage can be found in the appendix.

Table 5-4: General Signage Checklist

Objectives	Checked	Remarks
Ensuring compliance of signage with government local council regulations.		Use signage provided by Council's if available, e.g. in accordance with AWCS ECP, section 6 (signage for commercial users).
Ensuring that labelling on bins, refuse room etc. is appropriate and clear and easy to read and updated if required.		

5.2.3 Cleaning and Maintenance

Cleaning and maintenance need to be in accordance with the guidelines for the AWCS as specified in the **PWIS No. 4 – 2022** and should be carried out by qualified staff or contractors. Regular cleaning and maintenance of all refuse management facilities is important to maintain a safe and hygienic environment for residents, visitors, staff and contractors.

Table 5-5: General Cleaning and Maintenance Checklist

Objectives	Checked	Remarks
Cleaning and maintenance of PPWI as per specifications.		Frequency depends on refuse generation and building operation.
General cleaning of all refuse holding and transfer areas including • Refuse rooms and storage areas • Refuse bins • Refuse transfer areas including lifts and staircases • Any other refuse management equipment		Frequency depends on refuse generation and building operation.
Coordination of specialised cleaning contractors as required.		
Maintenance and servicing of refuse management equipment as per schedule.		Frequency depends on equipment and building operation.
Coordination of specialised equipment contractors as required.		

5.2.4 Refuse Minimisation

Refuse minimisation is an important part of any site operation. At a minimum, the following should be implemented.

Refuse minimisation requires regular reviewing to ensure operational sustainability of refuse volumes, equipment and economic feasibility. It is recommended that refuse weights and movements are noted and reviewed. An external review is usually conducted 12 to 18 months after the implementation of the plan.

Table 5-6: General Refuse Minimisation Checklist

Objectives	Checked	Remarks
Regular review of material quantities to avoid over-ordering.		
Consideration of secondary and recycled materials where possible.		
Encouraging refuse minimisation through education and signage (see below).		
Reduce refuse through continuous monitoring and review (see below).		

5.2.5 Education and Communication

According to the **PWIS No. 4 - 2022**, education material of how to use the PPWI and PNPWI is to be given to the users of the AWCS. On-going education is important to ensure people continue to use the facilities as originally intended. All leasing contracts should contain clauses pertaining to waste management arrangements and use of any associated equipment. Reference should be made to the current version of the AWCS ECP.

Table 5-7: General Education and Communication Checklist

Objectives	Checked	Remarks
Education of tenants about how to use the AWCS in accordance with the current version of the AWCS ECP.		E.g. separation of waste streams, AWCS vs. non-AWCS waste
Communication of specific refuse management arrangements as required to all residents, staff and contractors.		
Consideration of promotional opportunities for any successes e.g. awards programs.		

5.2.6 Monitoring and Review

Regular monitoring and inspections of waste and related equipment and facilities from the development should be conducted by building management or designated staff for maintenance and sustainability.

Table 5-8: General Monitoring and Review Checklist

Objectives	Checked	Remarks
Continual monitoring of equipment uses and scheduling to ensure best operational outcomes.		
Regular review of refuse management equipment and facilities such as bin volumes, refuse storage capacities and stormwater management arrangements.		

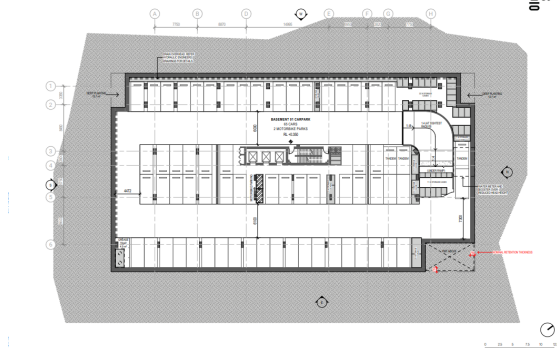
Appendix A Refuse Calculations Sheet

Estimates for All Refuse to Basement 1 Screw Tanks								
Level	Description	Measure	Quantity	Waste Streams		Recycling Streams		
				General Waste (L/Day)	Bulky Waste	Commingled Recycling (L/Day)	Glass (L/Day)	Cardboard (L/Day)
Ground	Office - WFH + Building Managent	GFA (m2)	160.4	16	2	16	0	2
	Tenancy 1	GFA (m2)	89.8	599	60	120	24	48
	Tenancy 2	GFA (m2)	75.3	502	50	100	20	40
	Tenancy 3	GFA (m2)	76.1	507	51	101	20	41
Carpark Level B1, 2-4	Carpark	Park	255.0	128	13	128	0	0
Residential Level 5-28	Residential 1B+1BA	Dwellings	36.0	617	62	617	0	93
	Residential 2B+2BA+2BA+	Dwellings	118.0	2023	202	2023	0	303
	Residential 3B+2BA+	Dwellings	48.0	823	82	823	0	123
	Residential 4B+3.5BA	Dwellings	4.0	69	7	69	0	10
	Recreational Area Gym	GFA (m2)	116.7	12	1	12	0	2
Level 29	Recreational Area Dining	GFA (m2)	258.2	646	65	310	0	46
Total Daily Volumes (L)				5940	594	4318	64	709
Daily Volumes Compacted (L)				N/A	N/A	N/A	N/A	N/A
Volume per Collection				1485	2048	1080	225	2481
Collections Per Day				4	0.29	4	0.29	0.29
Collection and Equipment Details		Equipment Type		A2 Screw Tank (@60% Capcity)	MGB	B2 Screw Tank (@60%Capacity)	MGB	MGB
		Bin / Equipment Size (L)		2070	1100	1242	1100	1100
		Equipment Quantity Required		0.72	1.86	0.87	0.20	2.26
		Equipment Quantity Provided		1	2	1	3	

Refuse Stream by %												Waste Generation Rates				
Waste	Bulky Waste	Comm. Recyc.	Glass	Cardb. / Paper	Total Recyc.		Use Type	Measure	General Waste	Recycling	Notes					
100%	10%	100%	0%	15%	115%		Office	L / 100m ² / Day	10	10	Office					
100%	10%	100%	20%	40%	160%		Restaurant	L / 1.5m ² / Day	10	2	Maximum Retail					
100%	10%	100%	20%	40%	160%		Restaurant	L / 1.5m ² / Day	10	2	Maximum Retail					
100%	10%	100%	20%	40%	160%		Restaurant	L / 1.5m ² / Day	10	2	Maximum Retail					
100%	10%	100%	0%	0%	100%		Car Park	L / Park / Day	0.50	0.50	Previous Approval					
100%	10%	100%	0%	15%	115%		Residential units	L / Dwelling / Day	17.14	17.14	SCC Rates - 120L / 7 Days					
100%	10%	100%	0%	15%	115%		Residential units	L / Dwelling / Day	17.14	17.14	SCC Rates - 120L / 7 Days					
100%	10%	100%	0%	15%	115%		Residential units	L / Dwelling / Day	17.14	17.14	SCC Rates - 120L / 7 Days					
100%	10%	100%	0%	15%	115%		Residential units	L / Dwelling / Day	17.14	17.14	SCC Rates - 120L / 7 Days					
100%	10%	100%	0%	15%			Gym	L / 100m ² / Day	10.00	10.00	Assigned Rate					
100%	10%	100%	0%	15%	115%		Dinning / Function	L / 100m ² / Day	250	120	Assigned Rate					

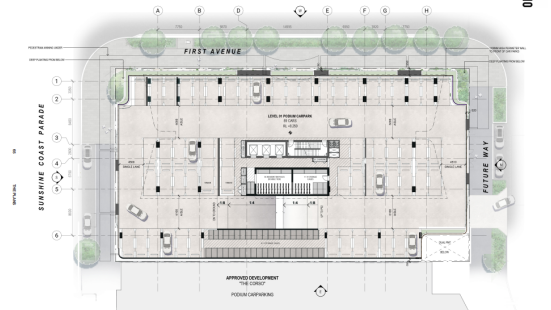
Appendix B Site Plans & Drawings

CONCEPT PLAN - BASEMENT 01



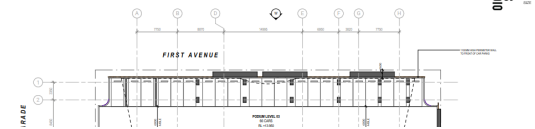
PLUS
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CONCEPT PLAN - PODIUM LEVEL 01



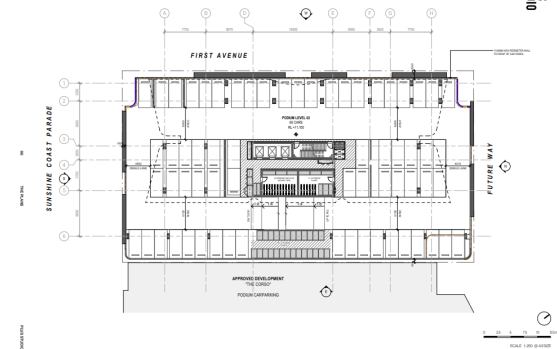
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CONCEPT PLAN - PODIUM LEVEL 03



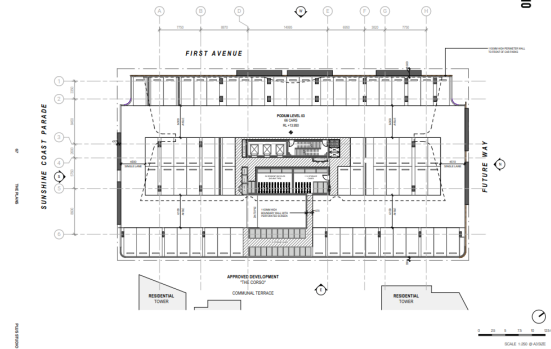
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CONCEPT PLAN - PODIUM LEVEL 02



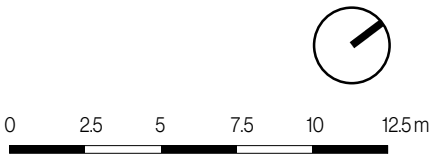
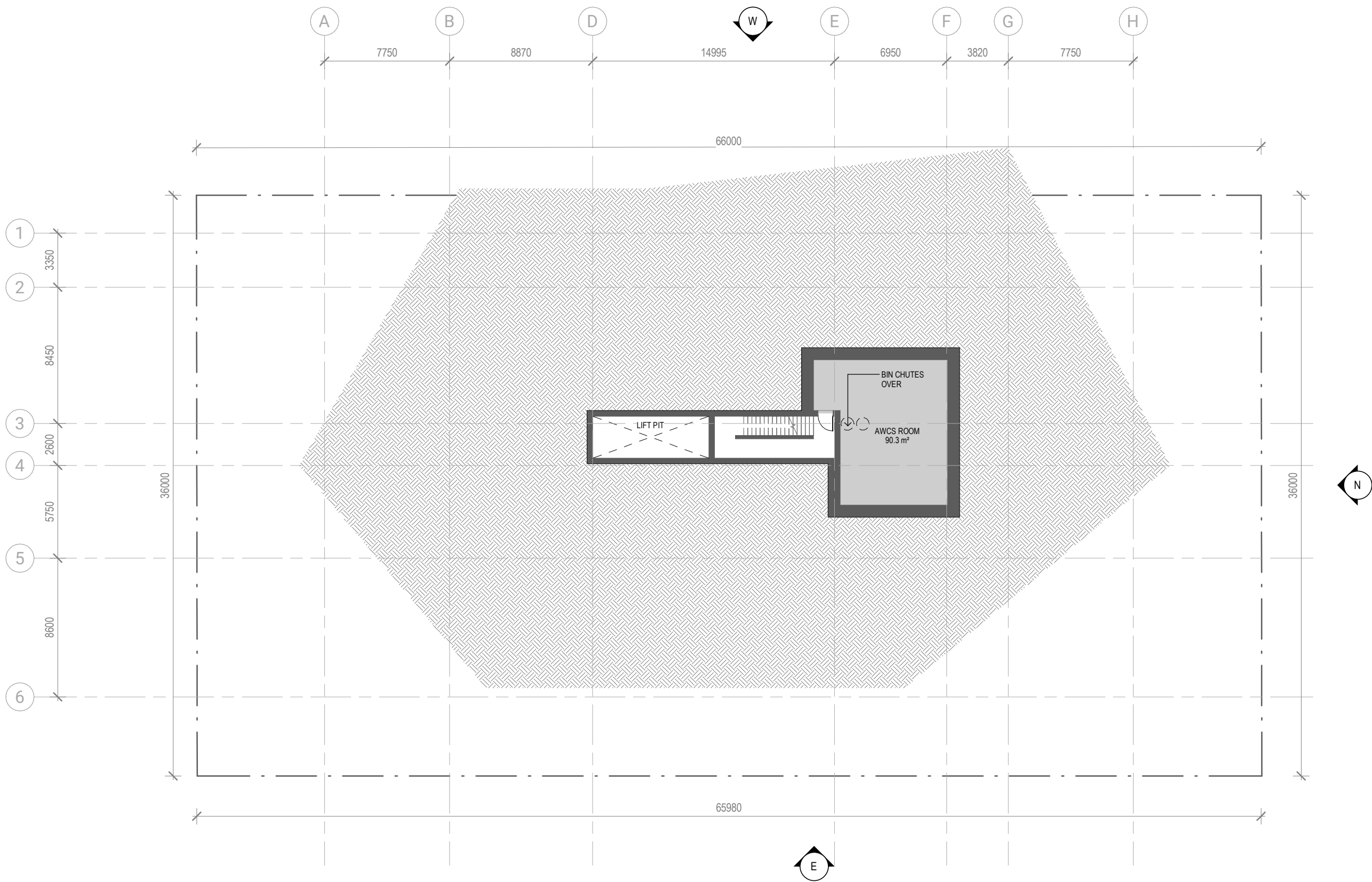
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CONCEPT PLAN - PODIUM LEVEL 03



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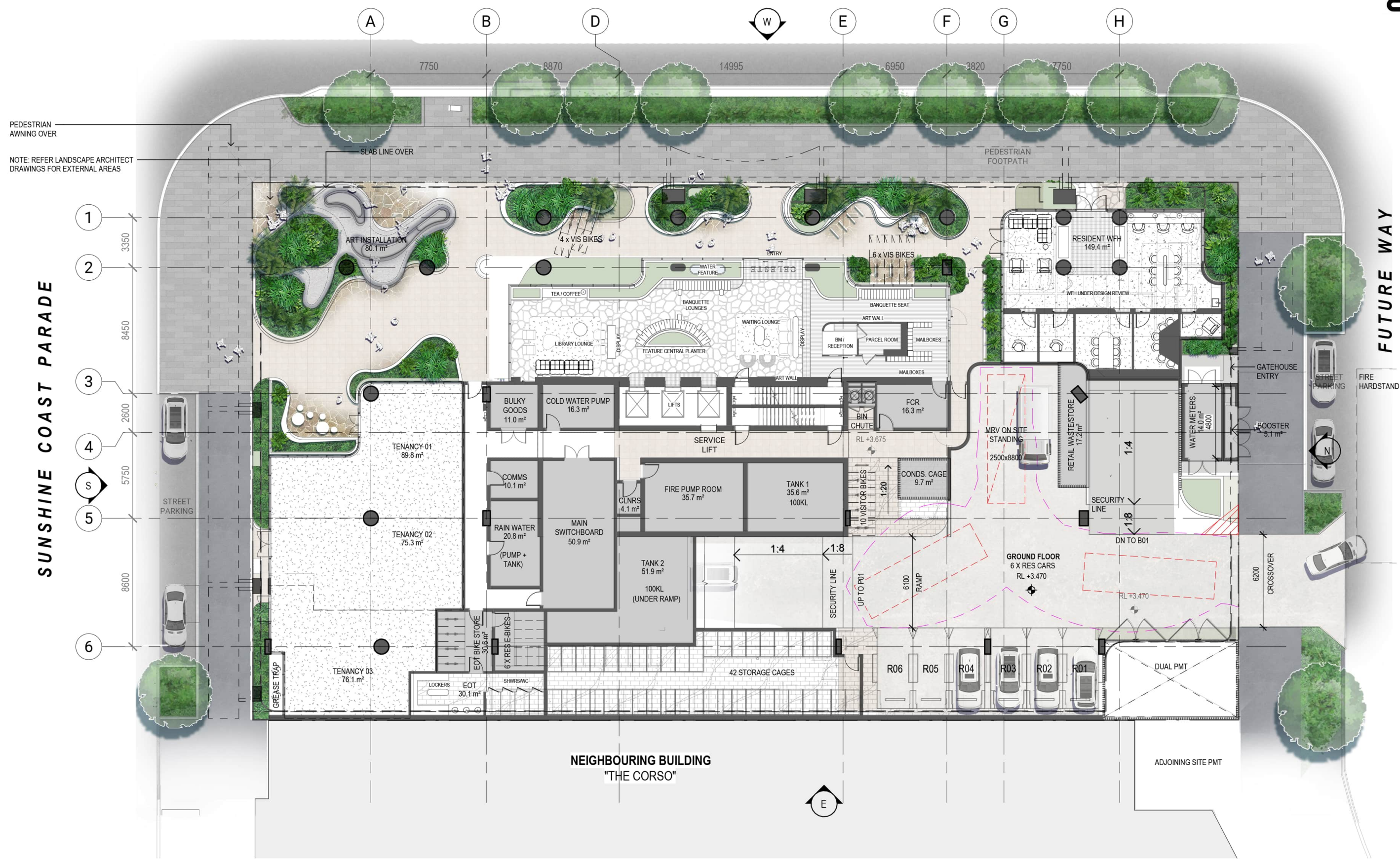
CONCEPT PLAN - BASEMENT 02



SCALE 1:250 @ A3 SIZE

CONCEPT PLAN - GROUND

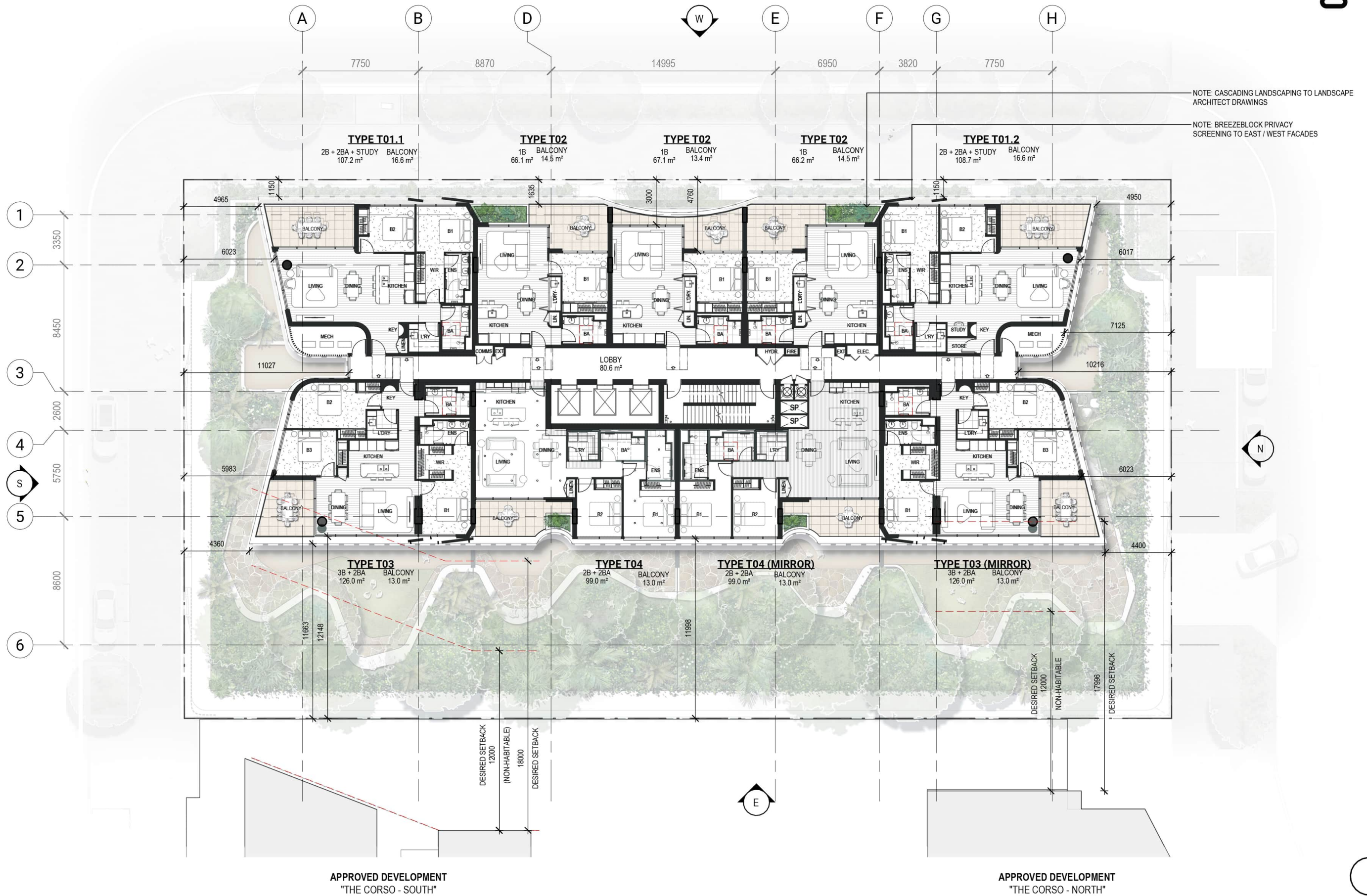
FIRST AVENUE



CONCEPT PLAN - LEVEL 04 - PODIUM RESIDENTIAL



CONCEPT PLAN - LOWER TYPICAL (L05-15)



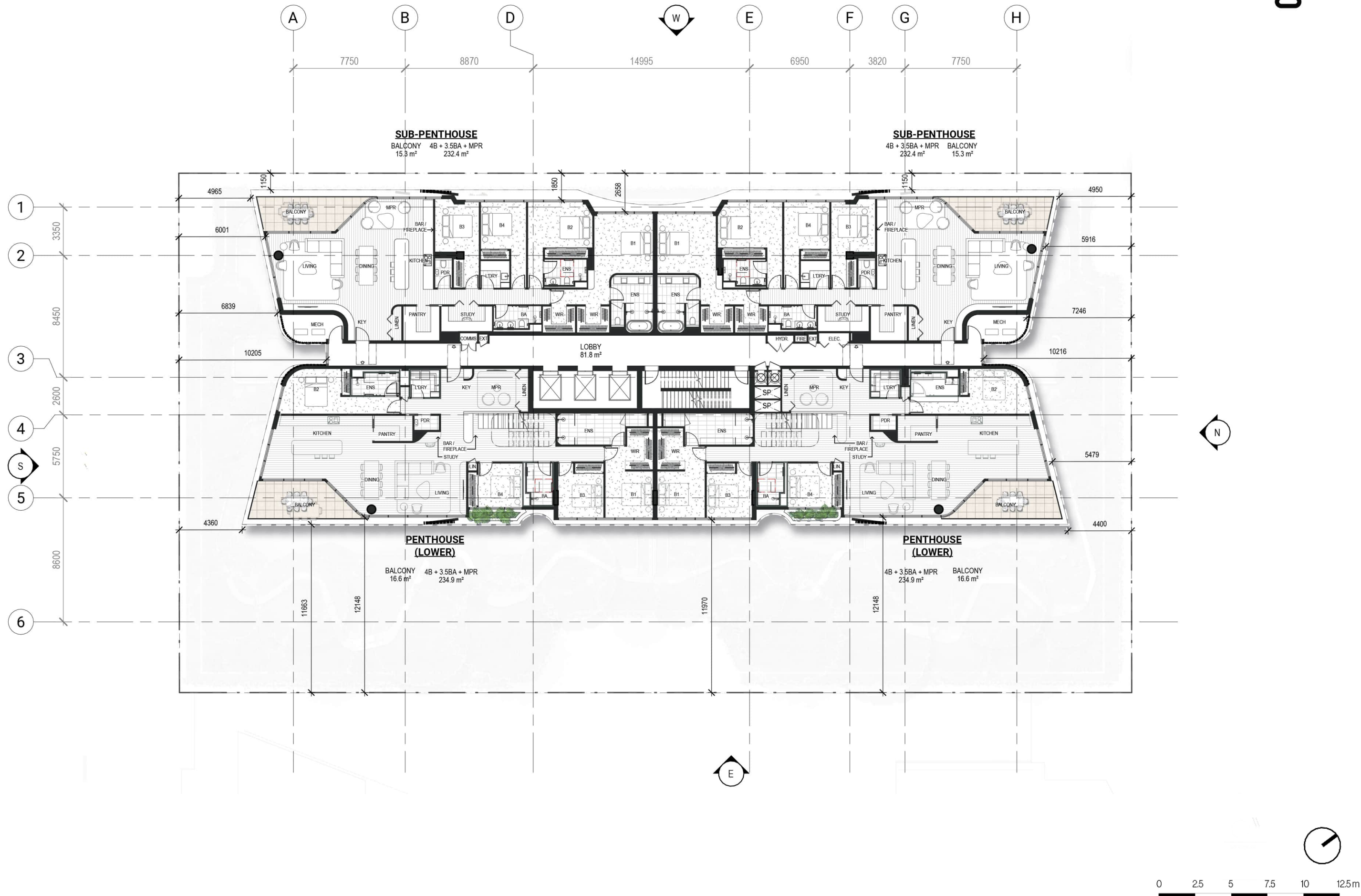
0 2.5 5 7.5 10 12.5m

SCALE 1:250 @ A3SIZE

CONCEPT PLAN - UPPER TYPICAL (L16-27)



CONCEPT PLAN - LEVEL 28 - PENTHOUSE



CONCEPT PLAN - LEVEL 29 - ROOFTOP RECREATION



SCALE 1:250 @ A3 SIZE

			Residential						Building Services/Circulation		Communal (Recreation & Amenity)			Carparking		Area Per Level	
	Area Internal	Area External	1B + 1BA	2B + 2BA	2B+2BA+	3B + 2BA	SUB PH: 4B	PH: 4B +3.5BA	Services	Vertical Transport	Area Internal	Area External	Landscaping	Area	No. of Spaces	Gross Sale Area (GSA)	Gross Floor Area (GFA)
	sqm	sqm	65sqm gross	95sqm gross	115sqm Gross	125sqm gross	227sqm gross	227sqm gross	sqm	sqm	sqm	sqm	sqm	sqm	qty	sqm	sqm
Basement Level 02																	
Basement Level 01									77.5	48					65		
Ground Level									309.7	57	515.6	56.7	313	372	6		608.6
Level 01									10	58				1788	59		311
Level 02									5.85	58			8	1847	65		339
Level 03									9	58				1847	66		339
Level 04			3	2	2	2			9	58			55				339
Level 05	928.6	307.5	3	2	2	2			51	58			749			1236.1	1008.6
Level 06	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 07	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 08	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 09	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 10	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 11	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 12	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 13	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 14	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 15	928.6	127.6	3	2	2	2			23	58			9			1056.2	1008.6
Level 16	949.7	114.2		2	4	2			23	58			9			1063.9	1029.7
Level 17	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 18	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 19	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 20	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 21	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 22	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 23	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 24	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 25	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 26	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 27	949.7	114.2		2	4	2			22	58			6			1063.9	1031.7
Level 28 - PENTHOUSE	945.8	66.4			4	2	2	2	22	58			6			1012.2	1027.8
Level 29 - RECREATION	95.6	68.6							21	58	39.4	667.7	198			164.2	173
Roof																0	0
Totals	22652.4	3088.9	36	48	72	48	2	2	932.55	1739	555	724.4	1494	5854	261	25741.3	26610.4

Carparking Analysis		
Required Council Rate		
Required Cars		
Preferred Rate		
Preferred Cars		

1B + 1BA	2B + 2BA	2B+2BA+	3B + 2BA	Total Dwellings		Total
1.00	1.00	1.00	2.00	2.00	2.00	
36	48	72	96	4	4	260
1.00	1.00	1.00	2.00	2.00	3.00	
36	48	72	96	4	6	262

Bicycle Parking Analysis	Visitor	Resident
Required Council Rate	0.06	0.25
Required Bikes	27.25	109
Preferred E-Bike Rate		0.05
Provided E-Bikes		6
Provided Bikes	28	114

Mix Breakdown						
1B + 1BA	2B + 2BA	2B+2BA+	3B + 2BA	SUB PH: 4B	PH: 4B +3.5BA	TOTAL
36	48	72	48	2	2	208
17%	23%	35%	23%	1%	1%	

Storage Cage Analysis	Required	Achieved
Residential Storage	208	208

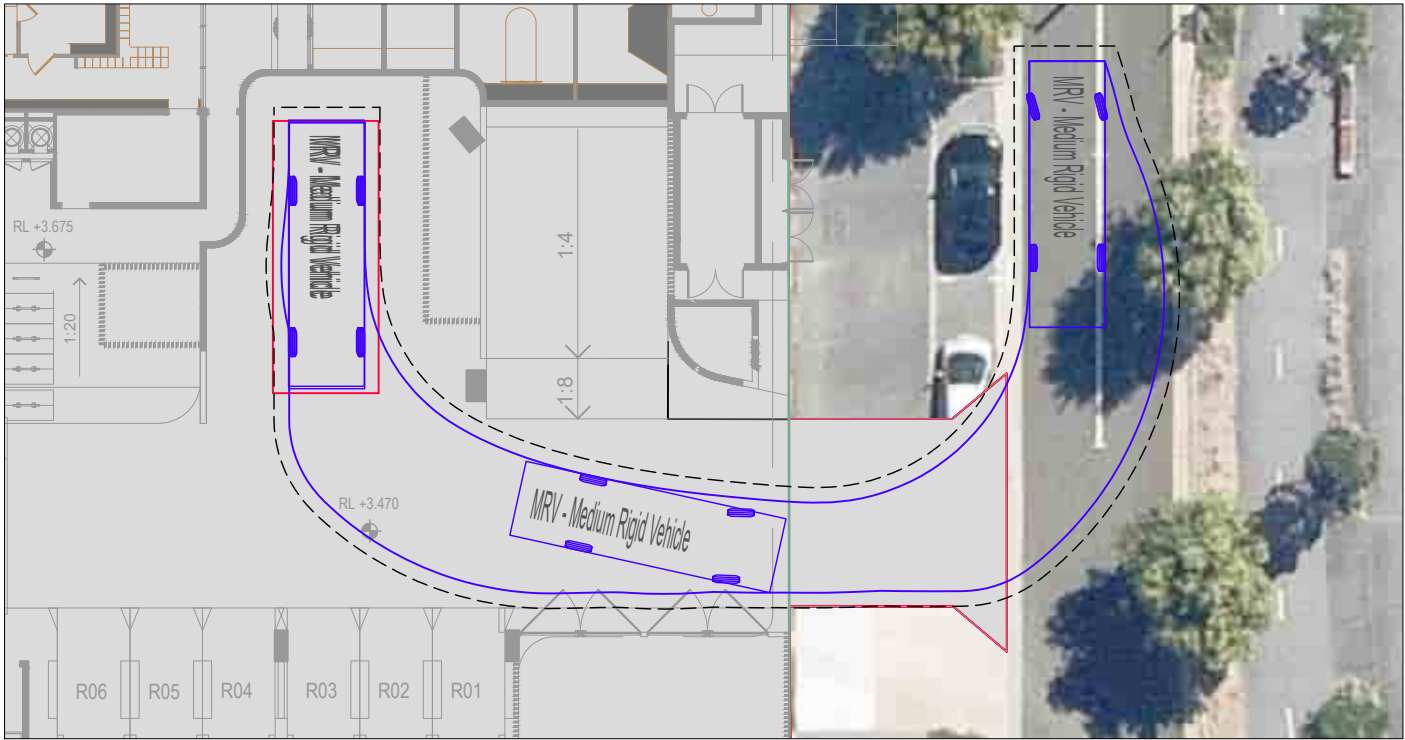
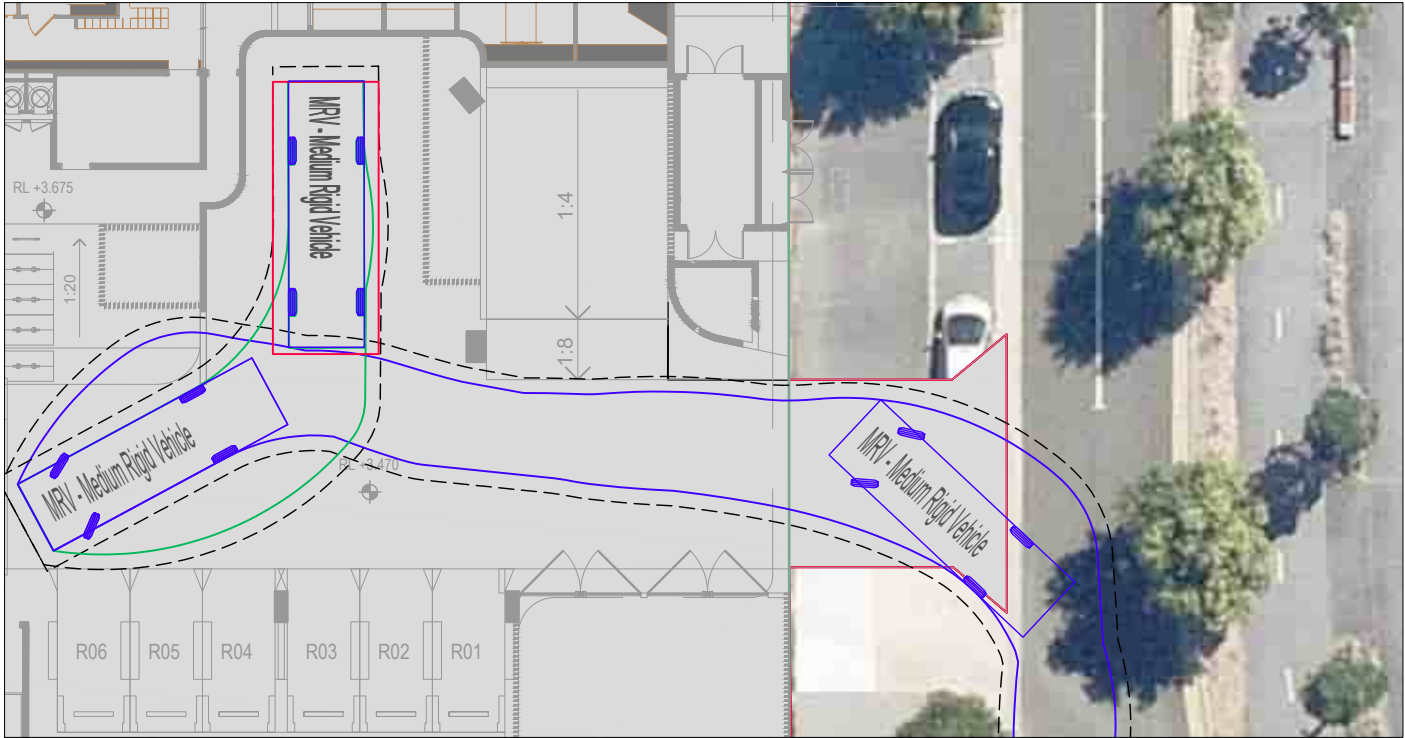
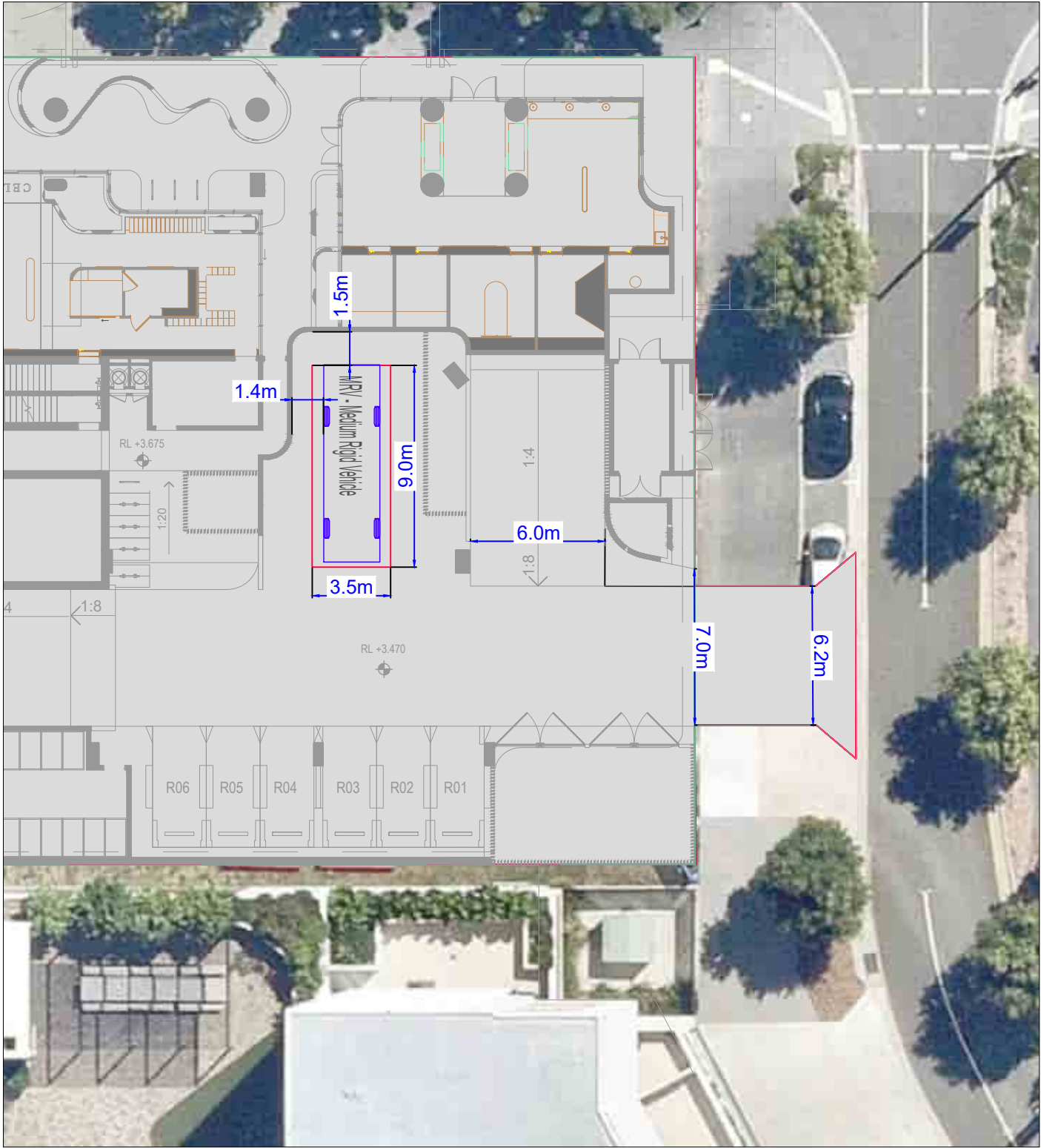
Site Area	2376	
Site Coverage	Podium	Tower
Site Cover (sqm)	2145	1166
Coverage %	90%	49%

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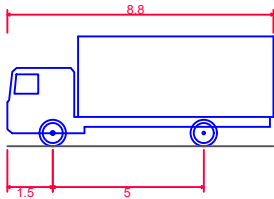
Appendix C AWCS Preliminary Drawing



Appendix D RCV Swept Path



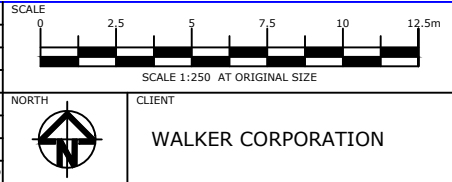
VEHICLE PROFILES



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
Design Speed Forward 5.0km/h
Clearance Envelope 0.5m

**PRELIMINARY
ADVICE ONLY**
24 June 2026

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
A	24-06-26	ORIGINAL ISSUE	ASH	DW	DW



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PROJECT 30 FIRST AVENUE, MAROOCHYDORE	PROJECT NUMBER 25BRT0574	ORIGINAL SIZE A3
DRAWING TITLE SWEPT PATH ANALYSIS 8.8m Medium Rigid Vehicle / WCV Equivalent	DRAWING NUMBER 25BRT0574-01	REVISION A
	DATE 24 Jun 2026	SHEET 1 OF 1

Appendix E Refuse Signage

Refuse Signage

Waste signage guideline are provided by the Queensland government:

<https://www.qld.gov.au/environment/pollution/management/waste/recovery/recycling/signage>.

Also refer to the Sunshine Coast Council's Automated Waste Collection System **Education and Communication Plan** (AWCS ECP) June 2018 for additional signage specifications.

General Refuse Signage



Other Refuse Signage



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 & Abbreviations

Please refer to the **PWIS No. 4 - 2022, Section 1.5.1** for relevant definitions of terms. In addition, the following terms and abbreviations may be relevant in the context of this report:

TERM	ABBREVIATION	DEFINITION
Equipment		
Automated Waste Collection System	AWCS	An Automated vacuum Waste Collection System, also known as pneumatic refuse collection, or automated vacuum collection, transports waste and recycling material at high speed through underground pneumatic tubes to a central collection station where it is compacted and sealed in containers.
Bin		A Bin is 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, Mobile Garbage Bin, Steely Bins and specialised for medical waste or cigarette butts.
Bulk Mobile Garbage Bin	Bulk MGB	A Bulk Mobile Garbage Bin is a plastic (polypropylene) receptacle that is greater than 360 litres in capacity generally ranging from 660 litres to 1100 litres used for the storage of refuse.
Collection Point		The Collection Point is an identified position where refuse bins are stored for collection and emptying. The collection point can also be the bin storage area.
Crusher		A (glass) Crusher is a machine that allows volume reduction by crushing them into small pieces. A glass Crusher can reduce the volume of glass bottle by about 75%.
Green Waste		All vegetated organic material such as small branches, leaves and grass clippings, tree and shrub pruning, plants and flowers.
Mobile Garbage Bin	MGB	A Mobile Garbage Bin is a plastic (polypropylene) bin or bins used for the temporary storage of refuse that is up to 360 litres in capacity and may be used in kerbside refuse collection or on-site collection.
Organic Waste		Organic Waste is defined in Schedule 2 of the PWIS No. 4 - 2022 .
Private Non-Pneumatic Waste Infrastructure	PNPWI	Private Non-Pneumatic Waste Infrastructure is defined as waste infrastructure for collection of waste that is classified as not suitable for collection via an Automated Waste Collection System.
Private Pneumatic Waste Infrastructure	PPWI	Private Pneumatic Waste Infrastructure is defined as waste infrastructure for the Automated Waste Collection System for connecting a serviced premises to the Public Pneumatic Waste Infrastructure.
Recyclable Waste		Recyclable Waste is defined in Schedule 1 of the PWIS No. 4 - 2022
Refuse		Refuse is material generated and discarded from residential and commercial buildings including general waste, recyclables, green waste and bulky items.
Refuse Bin		A refuse bin is a receptacle used for the storage of refuse, e.g. Mobile Garbage Bins ('wheelie bins'), bulk Mobile Garbage Bins or Bulk Bins.
Refuse Collection Vehicle	RCV	A Refuse Collection Vehicle is a vehicle that is specifically designed for collecting and emptying refuse bins and refuse compactors.
Refuse Storage Room		A Refuse Storage Room is an area identified for storing on-site Mobile Garbage Bins or Bulk Bins within the property.
Refuse Trolley		A Refuse Trolley is 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 Trolley are commonly used in hotels.
Regulated Waste		Regulated Waste is defined in Schedule 2 of the PWIS No. 4 .
Radio Frequency Identification	RFID	Radio Frequency Identification uses electromagnetic fields to automatically identify and track tags attached to objects. It can support waste measurement and analysis by waste fraction and by individual user.

TERM	ABBREVIATION	DEFINITION
Transfer (Manual Transfer)		Manual Transfer means physical transfer of refuse material and associated Bulk Bins or trolleys without assistance.
General Waste		Waste is defined in Schedule 1 of the PWIS No. 4 - 2022
Wheelie Bin		A Wheelie Bin is referred to as a Mobile Garbage Bin of up to 360 L, usually with 2 wheels for easy transfer. A common type is a 240L Wheelie Bin used for kerbside collection in many residential areas.
Measures		
Ground Floor Area	GFA	The Ground Floor Area 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.
Net Lettable Area	NLA	The Net Lettable Area of a building is the sum of its whole floor lettable areas, taking measurements from the internal finished surfaces of permanent internal walls and the internal finished surfaces of dominant portions of the permanent outer build walls. It is commonly measured in square metres.
Square Metre	m ²	Square Metre(s) related to refuse areas.
Collection Vehicles		
Body Truck		A Body Truck is 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.
Medium Rigid Vehicle		A Medium Rigid Vehicle is a vehicle (truck) with no more than 2 axles and up to 8 tonnes gross vehicle mass.