

28 July 2023

David Carey
Village Building
97 Hoskins Street, Mitchell - ACT
Attention: Mr David Carey

Dear Sir,

RUTLEDGE STREET APARTMENTS (LOT2 DP117998, LOT31 DP771673)

Waste Management

Please find below a detailed explanation to support the proposal for a full access waste rooms in lieu of chutes for the above development. The key reasons for this change are:

- The efficient solar layout of the site minimises corridor length which is a fully supported architectural/planning outcome but would require a significant number of chutes for this development.
- The development aims to maximise its “green” credentials, and in the Developer’s view, access to areas for management and sorting of waste affords the opportunity to achieve less contamination, better user education and more visible outcomes.
- The location of the waste room and waste pick up point does not allow for both towers to utilise a chute system to dispose of waste.
- The chutes add unnecessary installation and ongoing maintenance cost to the development and ultimately to the home purchaser, for little to nil added amenity.
- There are no locally based chute maintenance contractors.

By demonstrating that there is no loss of amenity for all residents accessing centralised waste rooms, within a 75m path of travel, the option to not rely on chutes is not an operational matter for Suez or QPRC. Indesco, on behalf of the Developer, requests that a performance solution be considered for this development.

Yours faithfully,

Michael Smith
Director

Encl.

BACKGROUND

Indesco has been engaged for the civil design of Rutledge Street Apartments, Queanbeyan NSW. The proposed development will be lodged for DA. The proposed development involves the construction of the following:

Two mixed-use buildings, Block West (W) and Block East (E), respectively. Carparking has been provided on two basement levels and commercial spaces have included in the ground floor designs.

- Block W: 96 Units over 9 residential floors and 9 commercial tenancies located on the ground floor;
- Block E: 82 Units over 9 residential floors and 7 commercial tenancies located on the ground floor.

Waste and Recycling Management Plan (WRMP) for the project utilises two centrally located waste and recycling enclosures for Block W and Block E, respectively. Continuous paths of travel from each apartment to the waste stations have been provided to ensure accessibility. The waste and recycling enclosure for Block E is located on the basement 1 level and is accessible via Lift 04 and Lift 05. Block W's waste and recycling enclosure is located on the ground floor adjacent to the nominated pick-up point located on the Service Lane Way. Access to this enclosure is achievable via Lift 03.

Body corporate will transfer waste from the basement and ground floor waste station rooms to the central Waste and Recycling Storage Facility located on the ground floor. A bin tipper will be used to transfer the waste from the bins into larger hoppers contained in the waste and recycling room. The waste and recycling storage facility is located adjacent to Service Lane Way and the designated collection point, where the hoppers will be presented for collection by the Queanbeyan-Palerang Local Government. This system will encourage responsible waste management practices from residents.

Under the *Better Practice Guide for Resource Recovery in Residential Developments* the proposed arrangement is not covered under Section 5.3. Waste Management Options for medium to high-rise residential buildings. During the early stages of the project Indesco had pre-lodgement with Queanbeyan-Palerang Local Council to discuss alternative options and given an opportunity to provide a solution in lieu of the waste chute installation. During this meeting QPRC and Indesco discussed effective methods of waste management in lieu of waste chutes, these methods included:

- New collection point along the western boundary laneway for commercial and residential waste collection,
- Confirmation of no waste chute,
- Waste management for residents is using multiple transfer station in the basement and ground floor,
- Registered for access to waste right of carriage way to allow for management of waste only in principle suits waste strategy,
- Waste collection for western building on ground floor level
- Waste collection for residents for eastern building collection in the basement using transfer station. Building manager transfers waste from basement station to ground floor secure waste room,
- Waste collection for residents for western building collection on the ground floor level using transfer station. Building manager transfers waste from ground floor station to ground floor secure waste room, and
- Waste collection to be for 2 x days between managers transfer.

Indesco noted that *The Development Control Code for Best Practice Waste Management in the ACT 2019* had similar criteria for on-site collection for mixed-purpose residential developments and included Performance-Based Solutions. These Performance-based solutions were implemented in the waste management plan. It is noted that some options are not suitable for the scope of the project and therefore have been omitted from the report.

Table 1 – Waste management options for medium and high-rise RFBs (N.S.W EPA)

Option	Comments	System Requirements
Option 2 Single-chute system for waste and a service room on each floor for recyclables	Advantage: - Simple to use - Encourages resource recovery through collocating waste, recycling and possibly organics - Caretakers can monitor contamination in all bins - No need for residents to carry waste up and down stairs or lifts - Compactor bins under waste chute outlet save space - Reduced breakage of glass	- BCA compliance for bin storage and service rooms - A hydraulic or gas strut bin lifter may be required Better practice guide for resource recovery in residential developments 45 resource recovery - Caretakers can monitor contamination in bins - Reduced breakage of glass crates fullness on each floor of the building - Increased likelihood of manual handling injuries due to movement of bins. Residents may dump bulky waste in bin storage rooms
	Disadvantages: - Requires regular transfer of recycling and possibly organics bins to and from main bin storage area - Requires regular monitoring of bin or crates' fullness on each floor of the building - Residents may dump bulky waste in chutes - Contamination risk if residents place items that cannot fit down chutes into recycling bins - Costs and space requirements for bin storage on each floor, compared with only chute	- High level of ongoing management for bin transfer and maintenance of bin storage and service room for decanting waste into bulk bins - Enough space in bin storage and service room for bins - Safe bin-carting routes - Supply of spare bins to be kept in main bin storage area - Caretaker to maintain chutes and rotate bins under chute outlets - Restrict resident access to bin storage and service rooms on each floor and the bulky waste storage area
Option 4 Dual-chute system for waste and recycling	Advantages: - Simple to use - Minimises bin movement through the building - No need for residents to carry waste and recyclables up and down stairs or lifts - No need for manual transfer of bins - Cost and space savings by not building bin storage room on each floor or separate chutes - Compactor bins under waste chute outlet save space	- Caretaker to maintain chutes and rotate bins under chute outlets - Restrict resident access to bulky waste storage in basement - Clear signage to explain what each chute is for - Further information should be obtained from the equipment supplier
	Disadvantages: - Reliant on residents selecting the correct button - Residents may be less committed to sorting recyclables if they perceive the material ends up in the same location - The delay required for chute to divert to the selected stream can be longer in high-rise buildings	

where people on different floors require use of the chute		
Option 5 Automated waste collection system (AWCS) for waste and recycling	Advantages: - Reliant on residents selecting the correct button - Residents may be less committed to sorting recyclables if they perceive the material ends up in the same location - The delay required for chute to divert to the selected stream can be longer in high-rise buildings where people on different floors require use of the chute	
	Disadvantages: - Expensive to install - Requires underground pipe network - Glass can only be collected in limited quantities - Recycling needs to be bagged before being deposited into the inlet, which is not in line with current waste education for recycling - Bulky items can jam chute inlet	- Cost-benefit analysis recommended - On-call caretaker for maintenance, care and cleaning required - If integrated into the basement of a building, a basement clearance height of 4.5m is required - Not yet trialled in Australia - Ongoing and clear education to residents and caretakers on how to use the system correctly will be necessary

Table 2 – Deemed-to-satisfy method for mixed-used developments (A.C.T DCC)

DCC Control/Objective	Deemed-to-Satisfy Method	Performance-Based Solution
C14 Multi-unit residential developments with 4 residential floors or more must have convenient access to waste and recycling services for all residents.	a. Dual waste and recycling chutes are required and must be located on each floor in a waste service compartment to provide an efficient and safe transfer method to the centralised waste and recycling storage facility b. Access to plant and equipment in the waste and recycling storage facility must be restricted to authorised personnel, such as a building manager, caretaker or waste transporter. Where residents have access to bins, these bins must be placed so that restricted access to plant and equipment is maintained.	Centrally located basement waste enclosures with maximum carting distance of 75m from dwelling entrance to designated collection point.

PERFORMANCE-BASED SOLUTION

As outlined in the *Development Control Code for Best Practice Waste Management in the ACT 2019*, a performance-based solution must:

- Comply with the relevant objective; or
- Be at least equivalent to the deemed-to-satisfy solution.

A comparison of the options described in *Better Practice Guide for Resource Recovery in Residential Developments* Section 5.3 Table 4 *Waste management options for medium- and high-rise RFBs* and Section 6.5. *Waste management options for Mixed-use developments with Development Control Code for Best Practice Waste Management in the ACT 2019* has provided Performance-Based Solutions suitable for this development.

A comparison of the solutions for the objectives of C14 suggests the use of chutes provides more convenient access for residential users compared to a 75m maximum carting distance. However, to best assess the adequacy of the performance-based solution a holistic approach has been utilised by benchmarking the performance solution against the relevant options of NSW DCC and compared further to the deemed-to-satisfy method. In this manner the broader impact of the options described in the NSW Better Practice Guide can be assessed.

The table below outlines this assessment against the relevant aims described in the DCC in context to the use of waste chutes.

DCC Aim	Deemed-to-Satisfy Method	Performance-Based Solution
Promote best practice waste management particularly relating to waste reduction, waste separation and resource recovery in the demolition, design, construction and operation of buildings.	The use of waste chutes, though convenient, can have hazards associated with it. The use of chutes discourages reflection on the volume of waste created by the user as the accumulated end result is deflected as body corporate responsibility. Additionally, chutes allow for individuals to, knowingly or unknowingly, dispose of waste that warrants a visit to a resource management centre to be disposed of in an adequate manner and with the potential for resource recovery.	Centrally located waste enclosures are conveniently located adjacent to lift lobbies on the basement floor (Block E) and ground floor (Block W) of the development for residents to drop off their waste and recycling. The colour coded hoppers in the basement waste room encourage waste separation and allow residents to easily identify where each waste and recycling stream is mean to be deposited into.
Define and codify the minimum necessary design requirements for the effective and efficient management, separation, storage and collection of waste and resource recovery in buildings.	The installation of chutes comes with various maintenance hazards. The use of chutes would require an additional room with limited access for a qualified person to safely manage the waste from chutes. This person would then have to cart the waste to the main pickup point at frequent intervals. Blockages in chutes are a common problem creating further complications for the operation and management of waste in buildings.	The waste enclosures reduce the need for specialised management and maintenance of equipment, allowing for an easier operation of the waste and recycling system. Colour coded bins allow residents to easily identify where each waste and recycling stream is mean to be deposited into.
Minimise the overall impacts of waste and recyclables management in buildings by designing waste and recyclables separation, storage and collection systems that are: hygienic; accessible; safe in all aspects; quiet to operate; adequately sized; and visually compatible with their surroundings.	Hygiene: With multiple facilities to manage the likelihood of waste remaining stagnant or being handled incorrectly is increased. Accessible: Access on each floor. Safe in all aspects: Additional hazards associated with blockages and carting. Quiet to operate: Noise insulation required to ensure adequacy. Adequately sized: Chute are prone to blockages. Additional basement waste rooms require careful management. Visually compatible: Additional facilities in basement and each floor level. Waste collection point still required.	Hygiene: Efficiency of a single facility makes it simpler to maintain hygiene. Accessible: Within 75m of each resident. Safe in all aspects: Easy to manage. Low risk hazards. Quiet to operate: Quiet. No mechanical equipment required by body corporate. Adequately sized: Waste rooms sized for ease of access and sufficient capacity. Visually compatible: Single waste collection point for visual compatibility

In addition to the above, the proposed development would require the following:

- Redesign of floor plans to allow for access to chutes and for to be appropriately installed above waste rooms,
- Minimum 2 Waste chutes,
- Minimum 2 Recycling chutes,
- Waste chute rooms to be relocated on Basement 1 for Building E's waste, and
- An additional street frontage area allocated for waste pick-up by waste services.

Waste and recycling chutes will be required in each respective building resulting in an additional waste and recycling enclosure. At each of these locations a waste service compartment has been provided, as each of the two buildings has a separate lift lobby on each floor. None of the common hallways are interconnected between the lift lobbies. For a development of this size there will be a large financial burden on the residents of the apartments with increased strata fees, due to increase maintenance costs and building management required to manage the waste management system.

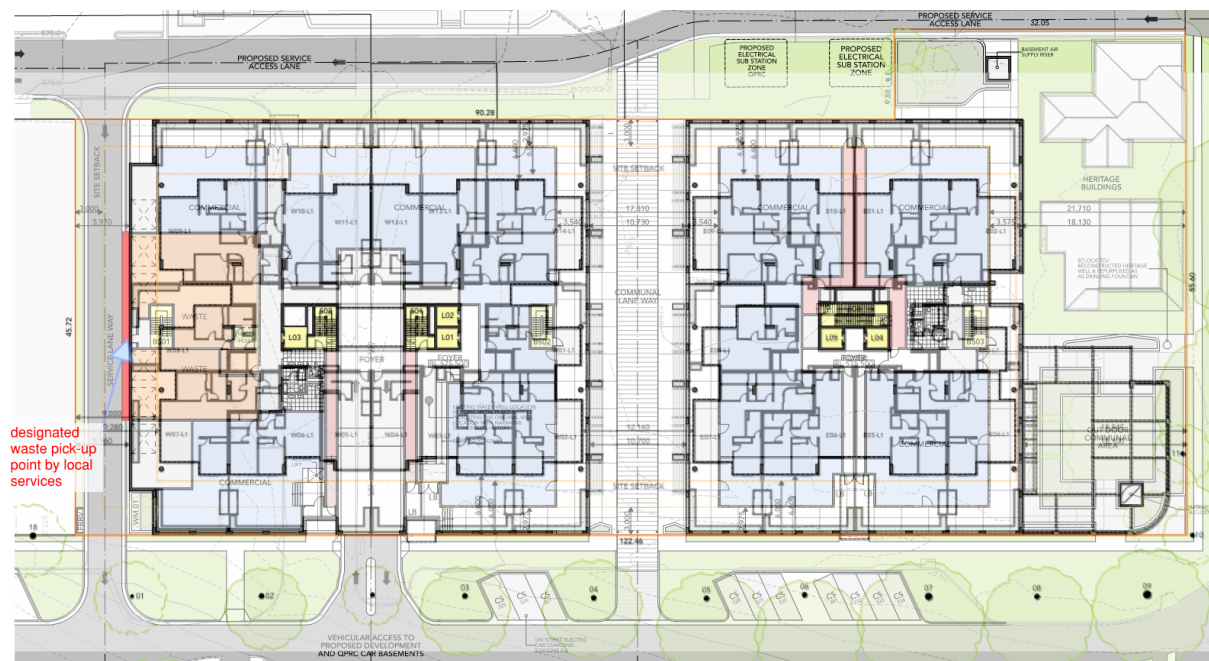
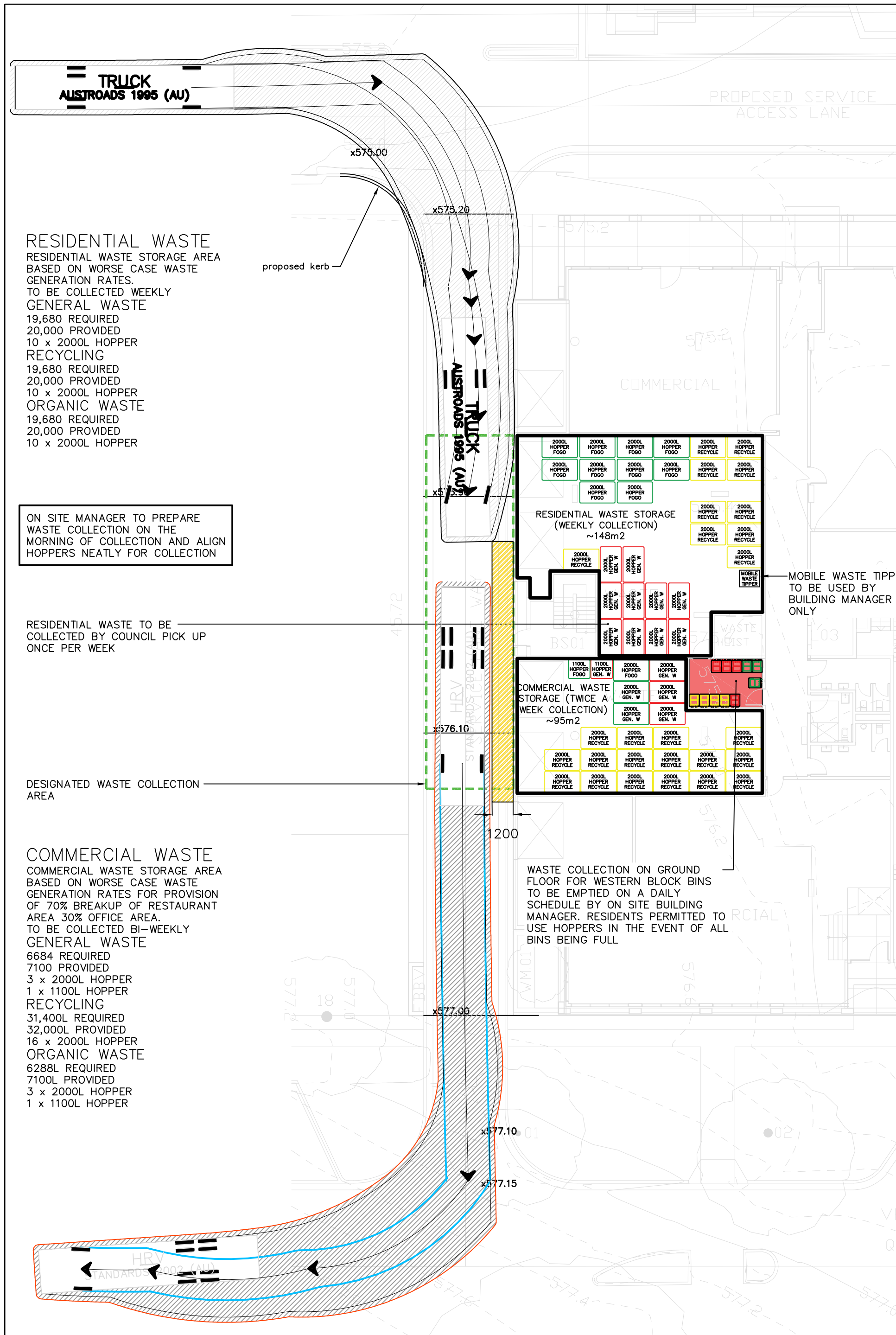


Figure 1: Residential floor overlaid over Basement 1 level

Our performance solution requires 2 waste and recycling stations located on the ground and basement floor, for building's E and W, respectively. These stations are to be located via a continuous path of travel and are accessible to residents and tenants via lifts located less than 75m from each unit. Compared to the requirements outlined in NSW EPA the initial capital cost and ongoing maintenance cost is greatly reduced. The waste from these storage areas is to be transported by the building manager and staff to the waste rooms using the designated elevators and waste hoists. A waste tipper is to be used to move the waste from the wheelie bins into the larger skips bins daily.

APPENDIX A - WASTE COLLECTION, PROPOSED LANEWAY AND LOADING ZONE DRAWING



PROPOSED LANEWAY AND BIN COLLECTION AREA
SCALE 1:200 @ A1

LEGEND

- DENOTES GENERAL WASTE 240L BIN WEEKLY COLLECTION
- DENOTES RECYCLING 240L BIN FORTNIGHTLY COLLECTION
- DENOTES ORGANICS 240L BIN FORTNIGHTLY COLLECTION
- DENOTES PATH OF TRAVEL
- DENOTES GARBAGE ROOM
- DENOTES BIN LOCATION FOR PICK-UP (1.2m X 16.0m)

No.	AMENDMENT	APPROVED	DATE	AMENDED BY	ARCHITECT
2	ISSUE FOR DA APPLICATION	M.S	09.12.2023	D.K	
1	ISSUE FOR DA APPLICATION COORDINATION	M.S	03.11.2023	D.K	

general waste

RESIDENTIAL											
EAST											
GENERAL WASTE PER FLOOR	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	total	Bins/Apartment size (L)
1 BED	4	4	4	4	4	4	4	4	2	2	32
2 BED	4	4	4	4	4	4	4	4	2	2	32
3 BED	2	2	2	2	2	2	2	2	2	2	18
Bin Litres/Level	960	960	960	960	960	960	960	960	720	600	8040
WEST											
1 BED	4	4	4	4	4	4	4	4	1	1	30
2 BED	8	4	8	4	8	4	4	7	2	3	48
3 BED	2	2	2	2	2	2	2	2	2	3	19
Bin Litres/Level	1680	1200	1680	960	1360	960	1560	600	840	11640	

recycling waste

RESIDENTIAL											
EAST											
RECYCLING PER FLOOR	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	total	Bins/Apartment size (L)
1 BED	4	4	4	4	4	4	4	4	2	2	32
2 BED	4	4	4	4	4	4	4	4	2	2	32
3 BED	2	2	2	2	2	2	2	2	2	2	18
Bin Litres/Level	960	960	960	960	960	960	960	960	720	600	8040
WEST											
1 BED	4	4	4	4	4	4	4	4	1	1	30
2 BED	8	4	8	4	8	4	4	7	2	3	48
3 BED	2	2	2	2	2	2	2	2	2	3	19
Bin Litres/Level	1680	1200	1680	960	1360	960	1560	600	840	11640	

organic wastes

RESIDENTIAL											
EAST											
GENERAL WASTE PER FLOOR	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	total	Bins/Apartment size (L)
1 BED	4	4	4	4	4	4	4	4	2	2	32
2 BED	4	4	4	4	4	4	4	4	2	2	32
3 BED	2	2	2	2	2	2	2	2	2	2	18
Bin Litres/Level	960	960	960	960	960	960	960	960	720	600	8040
WEST											
1 BED	4	4	4	4	4	4	4	4	1	1	30
2 BED	8	4	8	4	8	4	4	7	2	3	48
3 BED	2	2	2	2	2	2	2	2	2	3	19
Bin Litres/Level	1680	1200	1680	960	1360	960	1560	600	840	11640	

WASTE GENERATION RATES PROVIDED
BASED ON FEEDBACK WITH COUNCIL

commercial (% dedication)
general waste (70%/30%)

Commercial WEST				
Type of Com	No. of Area	Waste/Unit/	Total Waste	No. Bins
Retail : 70%		997.5	100	6982.5
Retail : 30%		427.5	20	598.5
Total		1425	120	7581

recycling waste (70%/30%)

Commercial WEST				
Type of Com	No. of Area	Waste/Unit/	Total Waste	No. Bins
Retail : 70%		997.5	500	34912.5
Retail : 30%		427.5	25	748.125
Total		1425	525	35660.625

organic waste (70%/30%)

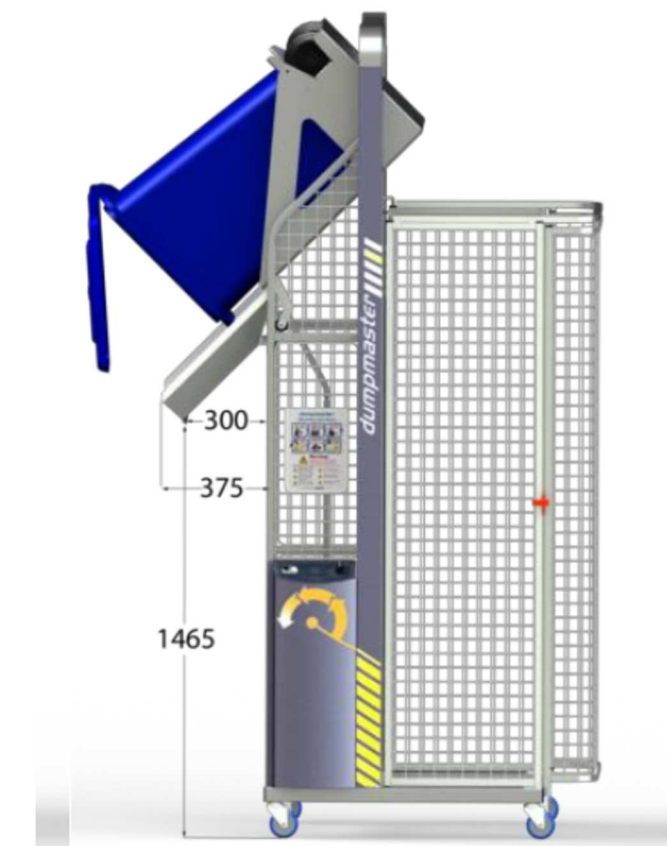
Commercial WEST				
Type of Com	No. of Area	Waste/Unit/	Total Waste	No. Bins
Retail : 70%		997.5	100	6982.5
Retail : 30%		427.5	5	149.625
Total		1425	105	7132.125

WASTE GENERATION RATES PROVIDED
BASED ON FEEDBACK WITH COUNCIL

Commercial EAST					
Type of Commerce	No. of Area	Waste/Unit/	Total Waste	Bin Size	No. Bins
Retail : 70% Restaurant		761.6	100	5331.2	2000L Hopper
Retail : 30% Offices		326.4	20	456.96	240L Bin
Total		1088	120	5788.16	

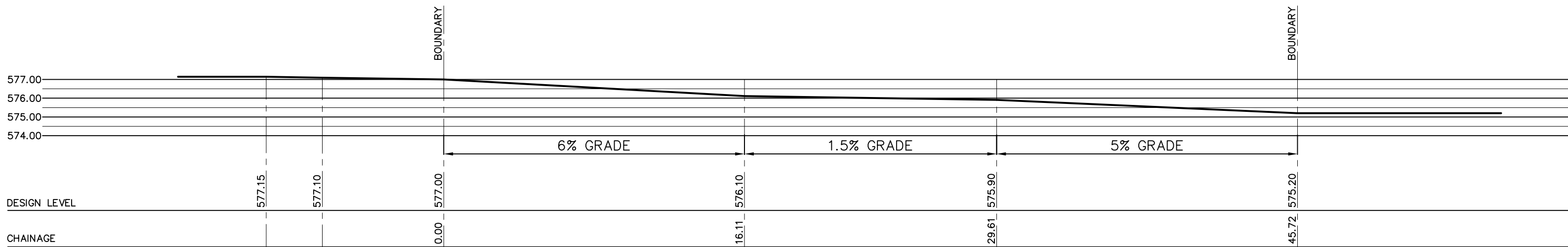
Commercial EAST					
Type of Commerce	No. of Area	Waste/Unit/	Total Waste	Bin Size	No. Bins
Retail : 70% Restaurant		761.6	500	26656	2000L Hopper
Retail : 30% Offices		326.4	25	571.2	240L Bin
Total		1088	525	27227.2	

Commercial EAST					
Type of Commerce	No. of Area	Waste/Unit/	Total Waste	Bin Size	No. Bins
Retail : 70% Restaurant		761.6	100	5331.2	2000L Hopper
Retail : 30% Offices		326.4	5	114.24	240L Bin
Total		1088	105	5445.44	240L Bin

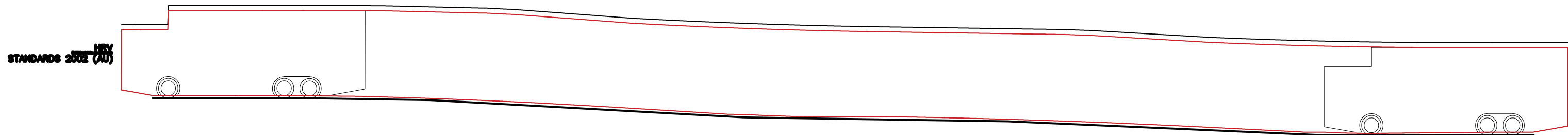


DM1800 with 300mm
chute & 240L bin

MOBILE BIN TIPPER

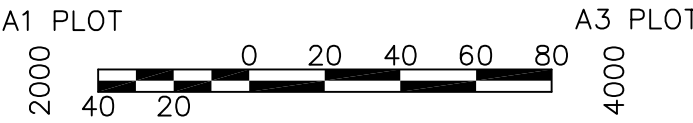


LANEWAY LONG SECTION
SCALE 1:200 @ A1

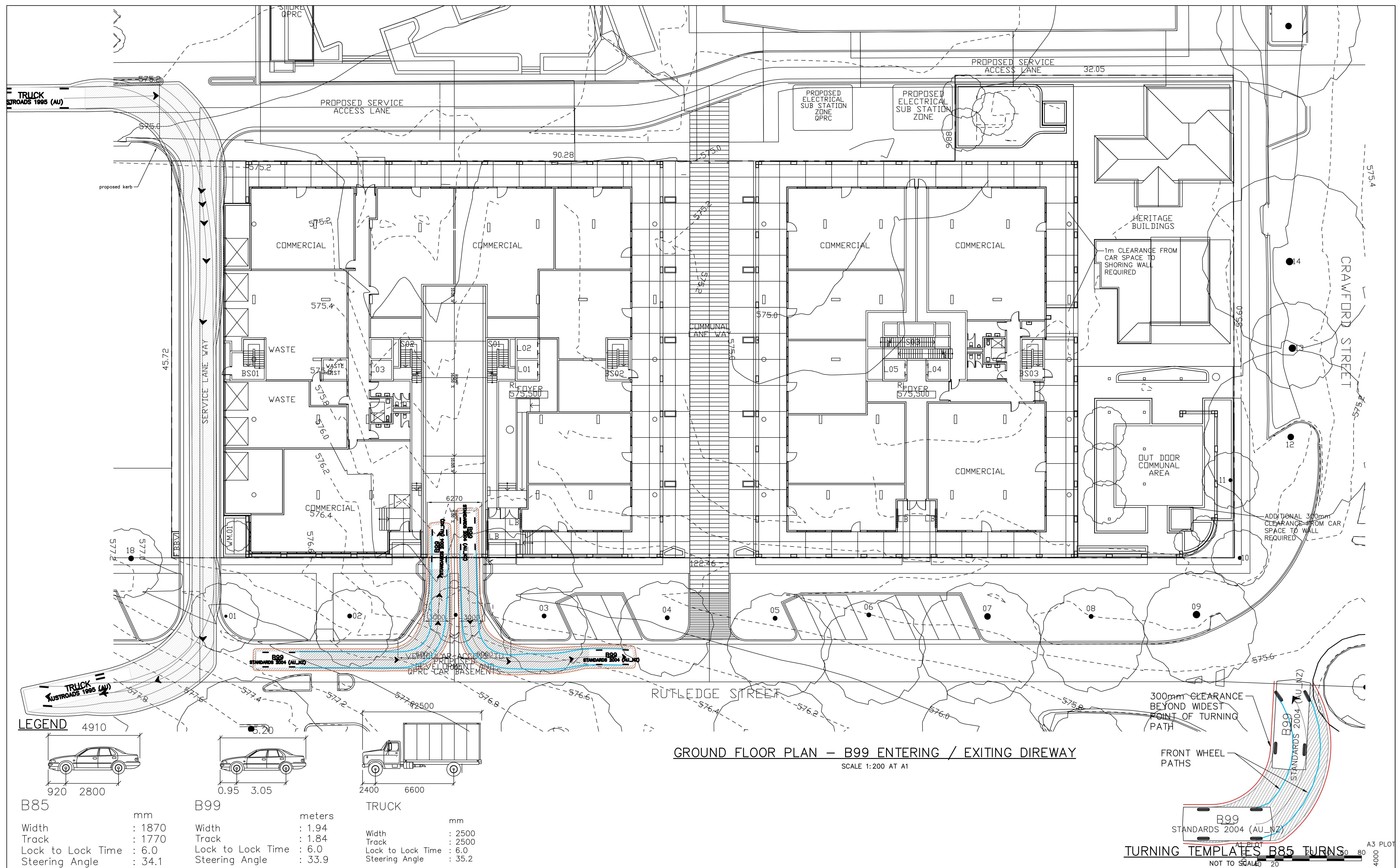


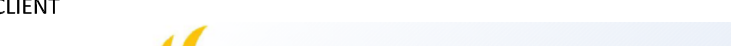
HRV VERTICAL SIMULATION
SCALE 1:200 @ A1

Ground Clearance (units: mm)
Part # Front Wheelbase Rear
g1 150 150 150



No.	AMENDMENT	APPROVED	DATE	AMENDED BY	ARCHITECT	CLIENT	PROJECT	DRAWING TITLE
2	ISSUE FOR DA APPLICATION	M.S	09.12.2023	D.K			SHOP TOP HOUSING LOT 2 DP117998, LOT 31 DP771673 QUEANBEYAN NSW 2620	WASTE COLLECTION PROPOSED LANEWAY LOADING ZONE
1	ISSUE FOR DA APPLICATION COORDINATION	M.S	03.11.2023	D.K				

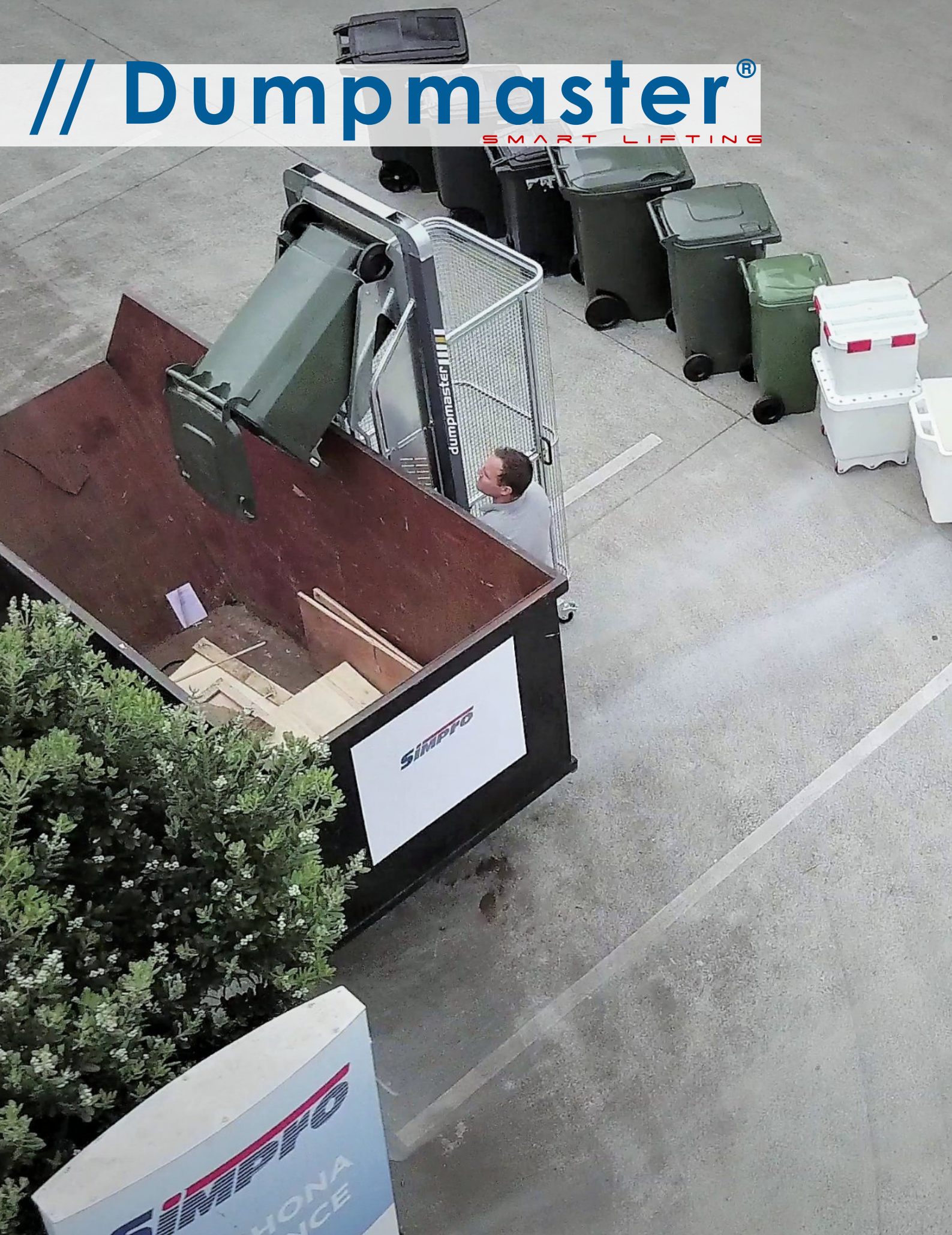


No.					AMENDMENT	APPROVED	DATE	AMENDED BY	ARCHITECT	CLIENT	ARCHITECT	PROJECT	DRAWING TITLE
													

APPENDIX B – EXAMPLE BIN TIPPER PRODUCT SPECIFICATIONS

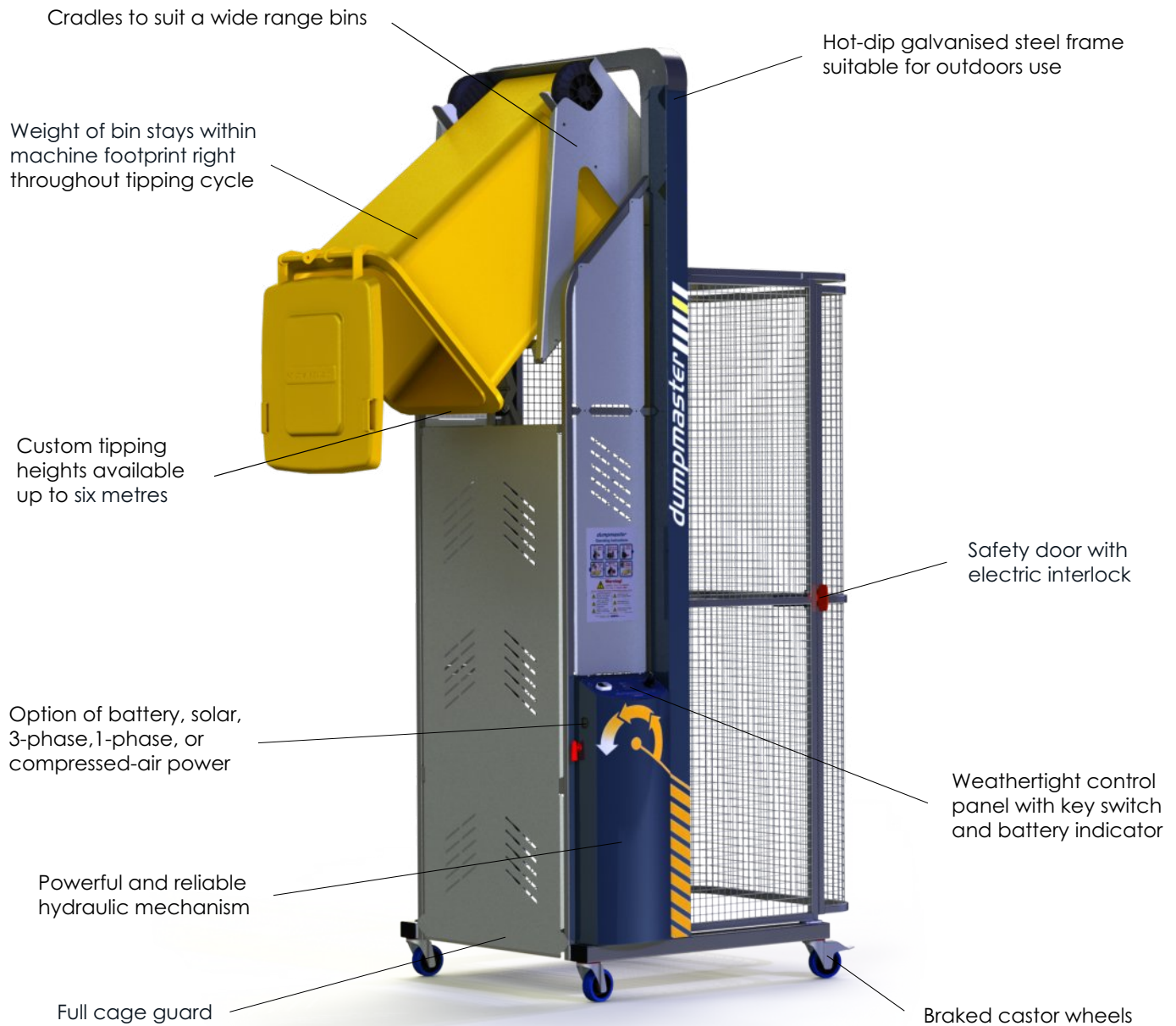
// Dumpmaster®

SMART LIFTING



// Dumpmaster®

HEAVY-DUTY MOBILE BIN LIFTER



Model	Lift Height	Capacity	Bin Compatibility	Power Source	Length	Width	Height	Weight	IP Rating	Safety Rating
DM0700	700mm	250kg*	EN840 wheelie bins: 80L/120L/140L/240L	DMXXXX-B: Battery powerpack, 24V/20Ah GEL (3hr charge on 100-264VAC 1-ph 50/60Hz ≤3A) DMXXXX-3: Mains powerpack, ~415VAC 3-ph 50/60Hz ≤3.6A DMXXXX-1: Mains powerpack, ~230VAC 1-ph 50/60Hz ≤12A [deprecated]	1175mm	965mm	1760mm	~160kg	IP56*	CAT1/PLC (optionally CAT3/PLD or CAT4/PLe)
DM1200	1200mm						2260mm	~190kg		
DM1500	1500mm						2560mm	~210kg		
DM1800	1800mm						2860mm	~220kg		
DM2100	2100mm						3160mm	~260kg		
DM2400	2400mm						3460mm	~280kg		
DM2700	2700mm						3760mm	~300kg		
DM3000	3000mm						4060mm	~320kg		
Options and accessories										
DM-BINHOOK	Bin-Hook Kit, with two adjustable hooks to hold machine in position									
DM-BOLTDN	Boltdown Kit, with four galvanised steel lugs for permanent installation									
DM-CHU200F	Chute, 200mm throw, frame mounted, bolt-on, 2.0mm PGI									
DM-CHU300F	Chute, 300mm throw, frame mounted, bolt-on, 2.0mm PGI									
DM-OFFROAD	Offroad Kit, with four 200mm hard-rubber wheels (2 fixed, 2 swivel)									
DM-OPGUARD	Operator Guard Kit, with transparent panel to shield operator from harmful debris									
DM-SCALES	Scaleset Kit, with MI101 indicator and 2x shearbeam load cells (2021 spec)									
DM-SOLAR	Solar Power Kit, with 80W/24V panel, adjustable mount and controller									
KIT-AUTOCYC	Autocycle Kit for Simpro bin lifters with programmable PLC, AUTO/MANUAL mode & E-Stop									
KIT-FORK	Fork Pocket Kit for Simpro bin lifters, with crane lugs, bolts to top cross-member									
DM-X	For custom requirements please enquire									

* Upgradeable specification



0.7m - 6.0m

Standard tipping heights



250kg

Capacity (max gross bin weight)



10,000kg of material per charge

5,000kg per hour continuous

Duty cycle—battery/mains-powered



Battery/Solar/3-phase

Power supply

The Simpro Dumpmaster safely empties any kind of bin at any height, with a unique electro-hydraulic mechanism that can lift and tip more than 250kg. The Dumpmaster was the very first mobile bin-tipping machine on the market, and has been continuously improved over more than thirty years.

Dumpmaster bin tippers are very versatile and are used in dozens of applications; from emptying rubbish bins into skips to pouring food ingredients into mixers. They feature a unique tipping action which lifts the bin straight up, then gently rolls it upside down over the lip of the receptacle. Less than 1m² of floor space is required regardless of tipping height, since the weight of the bin is maintained within the floor footprint at all times.

The Dumpmaster was designed for safety, with full guarding and door interlock systems fitted as standard. The machine can be optionally certified to various safety standards, including ISO13849 and AS/NZS4024 up to PLe if required.

No matter how it is used, the Simpro Dumpmaster has proven to be safe, reliable and economical to operate, year after year.

“Our bin lifter is solar powered and has not needed to be charged for 18 months!”

Les Pettifer - Kumeu Equestrian Trainer - Auckland



① Simpro has been developing, manufacturing and retailing Smart Lifting solutions for over thirty years. From humble beginnings as a small engineering firm in Auckland, New Zealand, the company has grown to become a leading supplier of equipment for niche applications – such as bin lifting, tipping and handling equipment, pallet trucks, stackers, order pickers, and goods lifts.

Simpro products play an unobtrusive but essential role for thousands of companies around the world, in industries as diverse as waste

management, resource extraction, pharmaceutical manufacturing and food processing. They are distributed through a worldwide network of agents, and are backed by a sophisticated in-house design and fabrication capability.

Simpro is a family-owned company, registered with the New Zealand Companies Office as Simpro Handling Equipment Ltd, company no. 1827916.

The products in this catalogue contain intellectual property, including design elements registered to or licensed by Simpro Handling Equipment Ltd.



66 Rangi Road
Takanini 2105
Auckland, New Zealand



PO Box 74
Takanini 2245
Auckland, New Zealand



+64 9 634 7445



sales@simpro.world



shop.simpro.world



[@simpro-world](https://www.linkedin.com/company/simpro-world)



[@SimproWorld_Lifters](https://www.youtube.com/channel/UC...)

