



environmental management
pty ltd

OPERATIONAL WASTE MANAGEMENT PLAN

HOMEBUSH APARTMENTS

STAGE 2

MIXED USE DEVELOPMENT
21 PARRAMATTA ROAD
HOMEBUSH NSW 2140

STRATHFIELD COUNCIL
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HOUSEIN KARNIB

HYSIDE PROJECTS SUBTWO PTY LTD

HouseinK@omaya.com.au

PRESENTED BY:

JO DRUMMOND

ECCELL ENVIRONMENTAL MANAGEMENT
35 WAVERLY CRST, BONDI JUNCTION 2022

www.eccellenvironmental.com.au

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DISCLAIMER

This report is based on information provided by Hyside Projects Subtwo Pty Ltd.

To that extent this report relies on the accuracy of the information provided to the consultant This report is not a substitute for legal advice on the relevant environmental related legislation, which applies to businesses, contractors or other bodies. Accordingly, EcCell Environmental will not be liable for any loss or damage that may arise out of this project.

DOCUMENT CONTROL

Rev.	DATE	COMMENT	AUTHOR	REVIEW	APPROVED BY
V1	7/12/2019	Issue	Simon Lunn	Jo Drummond	Jo Drummond
V2	17/12/2019	Update to include 8 additional Residential units and slight reduction in the size of the retail areas.	Simon Lunn	Jo Drummond	Jo Drummond

1 INTRODUCTION

This Operational Waste Management Plan (OWMP) has been prepared on behalf of Hyside Projects Subtwo Pty Ltd for Stage 2 of the mixed-use development, located at 21 Parramatta Rd, Homebush “the development”. The purpose of this OWMP is to address aspects of waste management for the proposed development to accompany the Strathfield Council Development Application (the DA).

The plan details management requirements for waste and recycling material generated from the ongoing use of the development in accordance with the Strathfield Consolidated Development Control Plan 2005 Part H *Waste Minimisation and Management Plan* (Strathfield DCP, 2005).

1.1 DEVELOPMENT SUMMARY

It is understood that the proposed development of Stage 2 consists of a 23-level building (Building C) located above a common basement consisting of retail, serviced apartments and residential apartments.

The breakdown of Units per building and retail areas is shown in Table 1.

Table 1 - Building breakdown by usage number of units

Usage	Area or #	Usage/assumptions
Serviced Apartments	77 Units	- Waste storage area required for council waste collection. - Bulk Waste Storage area required. Council has designated a minimum requirement of 4m² per 10 units
Residential Apartments	125 Units	
Food Retail	158 m ²	Separate waste storage area required for private waste collection
Other Retail	165 m ²	

These figures are based on room schedules as advised by Hyside Projects Subtwo Pty Ltd.

1.2 OBJECTIVES

The OWMP objectives are as follows:

1. Advise the appropriate waste storage, source separation and collection facilities required for the development to maximise recovery of recyclables
2. Ensure waste management facilities are safely and easily accessible to occupants and service providers
3. Ensure waste management facilities are appropriately sized for storage of the expected waste
4. Minimise adverse impacts to health, environmental and safety associated with handling and disposal of waste and recycled material
5. Discourage illegal dumping and prevent large quantities of waste piling up by describing appropriate onsite storage and removal services

2 LEGISLATIVE REQUIREMENTS AND GUIDELINES

2.1 LEGISLATION & REGULATIONS:

This OWMP has been prepared in accordance with legislation relevant to waste management at the site including:

The Environmental Protection Act 1970

Environmental Planning and Assessment Act 1979

- *Environmental Planning and Assessment Regulation 2000*

Protection of the Environment Operations Act 1997

- *Protection of the Environment Operations (General) Regulation 2009*
- *Protection of the Environment Operations (Waste) Regulation 2014*

Waste Avoidance and Resource Recovery Act 2001

2.2 GUIDELINES

Guidance documents and policies considered in the preparation of this OWMP including:

NSW Environment Protection Authority (EPA) Waste Classification Guidelines 2014

NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012

NSW EPA's Better Practice Guide for Waste Management in Multi-unit Dwellings 2008

NSW EPA's Waste Avoidance and Resource Recovery (WARR) Strategy 2014-21

Australian Government National Waste Policy - Less Waste More Resources 2018

2.3 COUNCIL REQUIREMENTS

Following review of the Strathfield Council Development Control Plan 2005 *Waste Minimisation and Management Plan* (Strathfield DCP, 2005) it is noted that this OWMP relates to the on-going management of waste from the development which falls under the category of "*Mixed-Use Development*".

The EPA's Better Practice Guide for Waste Management in Multi Unit Dwellings (EPA 2008) and Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (EPA 2012) should be used to inform design and waste management outcomes in the development.

3 WASTE GENERATION

3.1 WASTE TYPES

The NSW EPA Waste Classification Guidelines (NSW EPA, 2014a) groups wastes with similar risks to the environment and human health, as defined in the Protection of the Environment Operations Act 1997. The primary waste streams expected to be generated from the operation of the development and corresponding EPA classifications for the ongoing operation of the development are summarised in Table 2.

Table 2 - Potential Waste Types and Classifications

Waste Type	EPA Classification	Waste Management
Paper (excludes paper towels, toilet paper & tissues)	General solid waste (non-putrescible)	Co-mingled recycling
Cardboard (excludes waxed cardboard)	General solid waste (non-putrescible)	
Metals (steel, aluminium, stainless)	General solid waste (non-putrescible)	
Glass (bottles and containers)	General solid waste (non-putrescible)	
Plastics (recyclables)	General solid waste (non-putrescible)	
Non-recyclable Plastics (Dirty/contaminated plastic, Plastic bags & film, clingwrap)	General solid waste (non-putrescible)	Garbage Waste
General refuse	General solid waste (non-putrescible)	
Food scraps / organics material	General solid waste (putrescible)	
Lead-acid or nickel-cadmium batteries, e-waste	Potentially hazardous waste	Specific recycling

Waste from the development will be separated into three streams as follows:

Co-mingled recyclables A mixture or blend of recyclable materials. The type of recyclables collected in the recycling service may vary across different areas and collectors, but generally covers all recyclable materials including paper, cardboard, glass bottles and jars, steel cans and aerosols, aluminium packaging and plastic containers.

Garbage Waste All non-recyclable non-hazardous and non-problem waste that fits inside the nominated bin, commonly termed 'garbage'.

Problem waste Materials that cannot easily be managed by regular waste and recycling services and is often hazardous in nature. Includes paints, chemicals, batteries, e-waste, light bulbs, construction waste, gas bottles, and motor and cooking oils.

3.2 ESTIMATE OF QUANTITIES

The generation rates as outlined in Part H of Strathfield Council Development Control Plan 2005 *Waste Minimisation and Management Plan* (Strathfield DCP, 2005) have been adopted to form the basis of the following operational waste estimates.

The following guidance documents have also been referenced:

- NSW EPA's Better Practice Guide for Waste Management in Multi-unit Dwellings (NSW EPA, 2008)
- NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012 (NSW EPA, 2012)

To derive indicative quantities of waste, the following assumptions have been applied:

- The occupancy rate = full-time
- Weekly collection frequency of apartment/residential waste
- Twice weekly collection frequency of retail waste
- Food Retail facilities are operating 7 Days a week
- Other Retail facilities are operating 5 Days a week
- "Floor area" relates to the sum of each area of each floor of a building measured from the internal face of the external walls, as well as any external dining areas
- The assessment of waste volumes is an estimate only and will be influenced by the development's management, retail uses and occupant's attitude to waste disposal and recycling.

Table 3 - Waste Generation estimates for Multi Dwelling, Residential Flat Buildings and Residential Accommodation in Mixed-Use Development (Strathfield DCP, 2005).

Premises Use	Measure	Week Length (Days)	Generation rate L/Week/measure	
			Garbage	Recycling
Residential	L per Unit/week	7	120	60
Retail Other	L per 100m ² /week	5	250	250
Retail Food	L per 100m ² /week	7	4666	933

Table 4 provides the estimated volume (L) of expected waste and recyclables generated through the ongoing operations of each premises type.

Table 4 - Waste Generation Schedule Estimates

Building Usage	Sub Type	#units / area	Generated Garbage (L/Week)	Generated Recycling (L/Week)
Apartments	Residential	202	24240	12120
Retail	Other	165	412.5	412.5
Retail	Food	158	7372.28	1474.14

4 WASTE STORAGE

4.1 STORAGE AREA SIZE ESTIMATES

Areas for storage of the applicable waste streams will be provided as part of the development. The storage areas will be sized to accommodate all bins or containers, for all applicable waste streams, for at least one collection cycle.

To derive indicative areas required for waste storage, the following assumptions have been applied:

- Number of bins have been rounded up for best operational outcome;
- Bin numbers based on weekly collection frequency

- Waste is stored and collected in Mobile Garbage Bins (MGB's), a waste container generally constructed of plastic with wheels.
- Bin footprint size of ~1.16m² for 660L and 0.43m² for 240L.
- Compaction is undertaken of general residential waste only.
- Circulation space has been calculated as 2 x the total bin footprint

Table 5 - Waste Storage Estimates Block C - Stage 2

RESIDENTIAL						
Waste Stream	Generated Material (L/Week)	Compaction Undertaken (Ratio 2:1)	Bin Type	No. of Bins Required (per clearance)	Each bin Fotprint (m ²)	Area totals (m ²)
Garbage Waste	24240	Yes	660	19	1.16	22.04
Co-Mingled Recycled	12120	No	240	51	0.43	21.93
Total Bin Footprint						43.97
Estimated bin area required - including circulation space (x2)						87.94
Area for Compactor Building C						8
Bulky goods waste store size -(4m2 per 10 units)						80.8
Total Estimate Area						176.74
Retail Other						
Waste Stream	Generated Material (L/Week)	Compaction Undertaken (Ratio 2:1)	Bin Type	No. of Bins Required (per clearance)	Each bin Fotprint (m ²)	Area totals (m ²)
Garbage Waste	412.5	No	660	1	1.16	1.16
Co-Mingled Recycled	412.5	No	660	1	1.16	1.16
Total Bin Footprint						2.32
Estimated bin area required - including circulation space (x2)						4.64
Bulky goods waste store area						4
Total Estimate Area						8.64
Retail Food						
Waste Stream	Generated Material (L/Week)	Compaction Undertaken (Ratio 2:1)	Bin Type	No. of Bins Required (per clearance)	Each bin Fotprint (m ²)	Area totals (m ²)
Garbage Waste	7372.28	No	660	12	1.16	13.92
Co-Mingled Recycled	1474.14	No	660	3	1.16	3.48
Total Bin Footprint						17.4
Estimated bin area required - including circulation space (x2)						34.8
Bulky goods waste store area						4
Grease Trap / waste oil bin space (bundled) (If Required pending tenancy finalization)						2
Total Estimate Area						40.8

5 WASTE STORAGE

An indicative waste pathway diagram is presented in Appendix A showing:

- the location and configuration of bins within the Waste Storage Area;
- how bins are to be transferred to collection vehicles.
- the area available for manoeuvring of bins within the area during collection.

The general allowance summary for the waste storage area is summarised as follows:

Table 6 Estimated Areas Breakdown

Total Items and Area Required Block C - Stage 2							
Usage Type	Room Type	# 660L Bins	# 240L	# Compactor	# Grease Trap Area	Bulk Waste Area per m ²	Estimate m ²
Retail	Bin room	15	0	0	1	8	49
Residential	Bin room	19	51	1	0	0	96
Residential	Bulky waste	0	0	0	0	80.8	81

Total Area Required (m ²)- Stage 2						
Usage Type	Room Type	Stage 1 Area Estimate	Stage 2 Area Estimate	Stage 1+ 2 Area Estimate	Area Currently Available	Area Required as part of stage 2
Retail	Bin room	22	49	71	79	0
Residential	Bin room	89	96	185	88	97
Residential	Bulky waste	63	81	144	95	49

The basement layout showing the proposed area of bin storage for the development is presented in Appendix A.

5.1 WASTE STORAGE AREA REQUIREMENTS

The basic requirements for waste handling facilities are as follows:

- To be of adequate size
- Integrated with building design and site landscaping.
- Assurance that OH&S requirements for staff and waste contractors are met.

Garbage and recycling storage facilities should be located in a position that is convenient for both users and waste collectors and:

- has easy, direct and convenient access for tenants, cleaners and other the users of the facility
- has easy transfer of bins to the collection point
- has easy, direct and convenient access for collection service providers
- is well screened, enclosed or hidden so that visual amenity is not reduced for the public, customers, visitors or others
- is secure and provide protection against potential vandalism.

Bin storage areas should be easy to clean, have hot and cold running water (including a hose) and correct drainage to the sewer. Water from washing bins and/or waste storage areas should not be allowed to flow into a stormwater drain. Wall to floor junctions should be sealed to help with cleaning and avoid the build-up of dirt and spilt waste. To maintain hygiene:

- prevent vermin from accessing waste collection and storage areas, where possible.
- assign responsibility for keeping bin storage areas and collection points clean
- do not allow bins to sit open for extended periods of time
- keep waste collection and storage areas free of clutter and dumped rubbish
- regularly wash the bins, floors and walls of bin storage areas.

5.2 WASTE STORAGE AREA CONSTRUCTION SPECIFICATIONS

The room for storing waste and recycling must comply with the Building Code of Australia (BCA) and relevant Australian Standards (AS) in accordance with the requirements of Strathfield DCP, 2005. The BCA requirements for waste storage rooms is summarised in Appendix B.

Responsibility for cleaning of waste storage areas and service compartments will be designated to the cleaning staff. The room for storing waste and recycling will be in a position that is convenient for both users and waste collection staff.

Residential units shall be insulated from noise if adjacent to or above:

- i) Waste and recycling storage facilities,
- ii) Chute and compaction systems,
- iii) Waste and recycling collection and vehicle access points.

In mixed-use developments, there are often serious problems with retail tenants using the residential waste facilities (or vice versa), which can cause overloading of the waste management system, unhygienic conditions and disputes over payment for collection. This will be avoided by requiring providing separate waste storage areas and collection arrangements for residential and non-residential or other uses.

6 WASTE MANAGEMENT

6.1 SEGREGATING WASTE

Waste will be segregated into three separate streams as follows:

- Co-mingled Recycling – 660L Recycling Bins
- Garbage Waste – 660L General Waste Bins
- Problem waste – Stored separately in the bulky waste storage space and collections arranged as required

Several strategies can be used to avoid mistakes when separating waste and recyclables and make sure bins and equipment are used correctly. These include:

- Educational information provided all tenants, residents and staff in correct waste separation and collection procedures and safe use of relevant equipment.
- Add waste-related responsibilities in relevant job descriptions
- Appointing a person to be responsible for the proper separation of waste and use of waste infrastructure
- Using clear signage with consistent design and colours in waste storage rooms and on bins
- Ensure bins and signage using colour coding according to AS4123.7-2006 Mobile Waste Containers – Part 7: colours, markings and designation requirements
- Ensuring all waste can be easily, safely and correctly segregated at the point of generation.

6.2 WASTE STORAGE SYSTEMS

It is anticipated that mobile garbage bins (MGBs) will be utilised within the waste storage areas. Bulk bin storage is to be provided based on the use of 660L bins for general waste and 240L bins for recycling material, in accordance with the generation rates. All waste is to be sorted and stored on

the site and not within a public place. Bins will be kept clean and in good condition and any damaged, lidless, wheel-less, split or incomplete bins will be repaired or disposed of after being replaced.

Small quantities of hazardous wastes may be generated (e.g. light bulbs, E-waste, batteries, oil, chemicals or paint). Separate containers for the safe storage of these wastes in the waste storage areas shall be provided where applicable, prior to removal offsite by an appropriately licensed contractor for recycling or disposal at a licensed facility.

Open space and garden areas are limited within the development and therefore an on-site composting system is not considered appropriate given the potential amenity and environment impacts. Also, there will be minimal green waste generated by the development. Any green waste will be collected and removed from site by the maintenance contractor.

Provision will be made for a room, for the temporary storage of unwanted bulky items adjacent to the waste storage area. The space allocated for bulky items storage will consider the intended frequency of collection. Bulky items may be collected by council or contractors. To reduce the requirements for bulk storage, building managers may make arrangements to take excess bulky items directly to a waste management centre.

6.3 WASTE MOVEMENT

In general, waste movement from generation to collection, will undertake the following path for residential waste:



Figure 1 - Residential Waste Pathway



Figure 2 - Retail Waste Pathway

It is also relevant that:

- There is a goods lift that can be used solely to transport retail waste between ground floor and basement 1. This reduces the potential for residential /retail waste interaction and incorrect disposal.

- The building will have a chute for general waste that discharges into a waste store located in the basement
- As per the drawings, there is a dual waste and recyclables chute servicing each level
- On each floor there will be access to the chute, at the bottom of the chute there will be a compactor, with bins under, located on an automated carousel which compacts on a 2:1 ratio and rotates as required
- Cardboard will not be placed down the chutes, as it may cause blockages. Cardboard should be flattened by residents and deposited in a collection bin placed in the car park level/s.
- Waste to be collected by an appropriate waste transporter and taken to a licensed facility;
- The path from the units to waste storage area will be level for easy transfer of waste and recycling;
- A bin tug and/or bin lifting equipment is provided for heavy bins, or where moving regular bins over long distances without assistance is deemed unreasonable (Appendix C for an example)
- Appropriate personal protective equipment (PPE) will be provided for all people handling waste or bins.

7 WASTE COLLECTION

All generated residential waste will be collected by Strathfield Council to an agreed schedule for collection. All retail waste generated by this development will be collected by private waste contractors to an agreed collection schedule. Waste Bins will be collected from the Basement 1 level loading area accessed off the ground level entry from Powell Street. A vehicle turntable will not be used, 3-point turning arrangements will be required to gain access and egress to the loading bay. The waste vehicle must entry and exit in a forward direction.

A traffic management plan will confirm the swept paths for waste collections, access and egress, internal manoeuvring to assume parked position for loading and to exit, load requirements as well as collection vehicle dimensions. This information and supporting drawings will be provided in the Traffic Management Plan separate to this report.

A caretaker or individual(s) shall be nominated as being responsible for transferring the bins to the collection point and back into the waste storage room/area. The waste bins will be collected from the waste room via a wheel-in/wheel-out scenario. The building manager will be responsible for ensuring that all bins are neatly arranged within the waste room for ease of use and servicing.

7.1 VEHICLE MOVEMENTS

Waste collection vehicles will collect in such a manner as to minimize risk of damage to the roadway, building or other services. Waste collection vehicles will not obstruct access to adjacent premises, roadways or parking bays. In addition, waste collection will be carried out with due care for public safety including other basement users, vehicles and passers-by. The waste collection truck will enter the site via the basement entrance and will proceed via a ramp into the first floor of the basement and park in a loading area to collect the waste.

7.2 COLLECTION HOURS

Collection of waste and recycling will only occur between 8am and 6pm on collection days to minimize noise disturbance to the nearby area, tenants and residents.

7.3 CONTRACTORS

A contract with a licensed waste contractor for the removal of all waste, will be arranged prior to an occupation certificate or commencement of use (earlier of the two). The contract should also include provisions for the collection of Hazardous and Bulky Waste.

Upon engagement, written evidence of a valid and current contract with a licensed collector for waste and recycling collection will be provided to the client. The contract will include details on the method, timing and disposal of waste. Commercial waste service collections and waste storage arrangements will be conducted in accordance with the Council's Waste Policy.

8 ONGOING MANAGEMENT

This OWMP forms the basis of operational waste management on site for the development. It is living document which will be reviewed and revised to provide increased accuracy of waste generation estimates and to ensure appropriate onsite waste management in accordance with current and future waste management regulations. Compliance by the administrative manager, staff, cleaning contractors and waste collection contractor is essential to ensure the efficacy of the system.

8.1 ROLES & RESPONSIBILITIES

Table 7 - Roles and Responsibilities

Personnel	Responsibility / Activity	Monitoring
Building Manager	Issue and execute contracts to Waste Contractor and Cleaning Contract; and Provide educational material to tenants Arrange tenant and cleaner training in order to maximise effectiveness of waste management. Monitor the number of bins required as waste volumes may change according to the development's management, usage and occupants' attitudes to waste disposal Ensure site safety for residents, children, visitors, staff and contractors	Monitor contract and cleaners for compliance to the Waste Management Plan.
Staff / Cleaners	Responsible for keeping waste segregated into different streams as generated by retail and residential use; and Responsible for moving materials to the waste storage area; Organising, maintaining and cleaning the waste bins	Report contamination in co-mingled bins.
Waste Contractors	Acknowledge and comply with waste collection targets; Abide by all relevant OH&S legislation, regulations, and guidelines	Quantify the amount and types of waste, report and address contamination through regular monitoring/bin inspections and agreed upon waste reports.

8.2 EDUCATION AND SIGNAGE

Educational material encouraging correct separation of garbage and recycling items will be provided to each resident to ensure correct use of the chute/s and to ensure an understanding of the chute's use. This should include the correct disposal process for bulky goods (old furniture, large discarded

items etc.). It is recommended that information is provided in multiple languages to support correct practises and minimise contamination in the collection MGB as well as chute blockages.

It is also recommended that the development's website contain information for residents to refer to regarding use of the chute. Information will include:

- directions on using the chute doors;
- recycling and garbage descriptions (Council provides comprehensive information);
- how to dispose of bulky goods and any other items that are not garbage or recycling;
- residents' obligations to WHS and building management; and
- how to prevent damage or blockages to the chute (Information from manufacturer / supplier).

Signage will be provided in all waste disposal, storage and collection areas demonstrating how to use the waste management system, including what materials are acceptable in each bin. All waste streams will be stored in clearly labelled, colour coded bins as appropriate to ensure that waste streams are not inadvertently mixed. Signage will be prepared and located on site in accordance with the Australian Standard (AS 1319) for safety signs, and the NSW EPA and Australian Standard for recycling signage. Examples of signage are shown in Appendix D.

8.3 REPORTING

It is recommended that building management ensure that all waste service providers submit monthly reports on all equipment movements and weights of any waste and recycling products removed from the development and evidence that the material has been taken to a licensed facility that can accept it. Regular reviews of servicing should take place to ensure operational and economic best practise and to assist with sustainability reporting.

9 LIMITATIONS

This report documents an Operational Waste Management Plan (OWMP) as part of a development application with the following limitations:

- Estimates and details contained in this waste management plan have been prepared by analysing the information, plans and documents supplied by the client, and third parties including Council and government information;
- The figures presented in the report are an estimate only – the actual amount of waste generated will be dependent on the occupancy rate of the building/s and waste generation intensity as well as the building managements approach to educating guests, staff and tenants regarding waste management operations and responsibilities;
- The building manager will make adjustments as required based on actual waste volumes (if waste is greater than estimated) and increase the number of bins and collections accordingly;
- The report will not be used to determine or forecast operational costs or prepare any feasibility study or to document any safety or operational procedures;
- The report has been prepared with all due care however no assurance or representation is made that the OWMP reflects the actual outcome and EcCell will not be liable for plans or outcomes that are not suitable for the purpose of the project, whether as a result of incorrect or unsuitable information or otherwise; and
- EcCell offer no warranty or representation of accuracy or reliability of the OWMP unless specifically stated.



OPERATIONAL WASTE MANAGEMENT PLAN – HOMEBUSH APARTMENTS

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APPENDIX A – INDICATIVE WASTE ROOM SIZES AND WASTE PATHWAY DIAGRAM



APPENDIX B – BCA REQUIREMENTS FOR WASTE STORAGE ROOMS

General	All waste management facilities will be compliant with the BCA and all relevant Australian Standards.
Surfaces	The floors, walls and ceilings of waste and recycling storage areas (room or bin bays) and chute room(s) must be finished with a rigid, smooth-faced impermeable material capable of being easily cleaned. The floors of waste and recycling storage areas (room or bin bays) must be graded and drained to drainage fitting approved by the relevant authority located in the room. The floor must be provided with a ramp to the doorway where necessary. The walls, ceilings and floors of the storage rooms will be finished with a light colour.
Structure	The walls of the waste storage rooms will be constructed of approved solid impervious material and will be cement rendered internally to a smooth even surface coved at all intersections. The storage area will be constructed and finished to prevent absorption of liquids and odours and will be easily cleanable.
Doors	A close-fitting and self-closing door or gate operable from within the room must be fitted to all waste and recycling storage areas (rooms or bin bays). Doors/gates to the waste storage rooms must provide a minimum clearance of 1,200mm. At least one door or gate to the waste and recycling storage area must have sufficient dimensions to allow the entry and exit of waste containers of a capacity nominated for the development.
Wash down area	A hot and cold-water facility with mixing facility and hose cock must be provided for washing the bins. Typical design includes provision for a water supply: recessed with ramp access and graded floor, with a 1:10 gradient towards drain, flush grate drain, waterproof epoxy applied to floor and walls to 20cm height, water-proof bund/barrier along entry point.
Water	The waste and recycling storage area (room or bin bay) must be provided with an adequate supply of water for cleaning purposes with a hose cock. This does not include within chute rooms (if present).
Lighting	Waste and recycling rooms must be provided with artificial light controlled by switches located both outside and inside the room.
Pest Control	The waste storage rooms, areas and containers will be constructed in a manner as to prevent the entry of vermin.
Ventilation	The waste storage rooms will be supplied with an approved system of mechanical exhaust ventilation.
Safety	Any compactors or mechanical devices, if permitted for the mechanical handling and storage of waste, must be fitted with safety operating and cut-off systems. Smoke detectors will be fitted in accordance with AS1670 Automatic Fire Detection and Alarm Systems and connected to the fire prevention system of the building. The waste compactors will be fully fire proofed and child proofed. Only trained building management and waste contracting staff will have access to compactor equipment. All equipment will be protected from theft and vandalism.
Signage	Signs will be provided to demonstrate how to use the waste management system (including segregation of wastes for recycling, use of waste compactor), as well as appropriate safety signage. The different recycling and waste bins will be clearly identified and signed appropriately.

APPENDIX C – EXAMPLE OF TYPICAL BIN MOVER



Typical applications:

Move trolleys, waste bin trailers and 660litre/1100 litre bins up and down a ramp incline. Ideal for Apartment Buildings (to move waste bins located at a basement level to road level).

Quiet, smooth operation with zero emissions and simple to use, no driver's licence required

Features:

Up to 1 Tonne on a ramp surface (depending on ballast and incline)

Anti rollback system on slopes

Foot print: 1548L x 795W x 1104H (handle in the drive position)

Pin Hitch is standard however alternate hitching options may be available to suit your specific application (e.g./tow ball)

Safety Features:

Intuitive paddle lever control

Stops and repels the unit if activated when reversing.

Site assessment recommended to assess ramp incline steepness

Reference:

<https://www.elephantsfoot.com.au/>

<https://www.medicalsearch.com.au/battery-electric-wheelie-bin-movers-240-660-and-1100-litre-bins/p/113192>

APPENDIX D – EXAMPLES OF APPROPRIATE WASTE SIGNAGE

