



Mona Vale Surf Club, Surf View Road, Mona Vale  
Commercial Development

## OPERATIONAL WASTE MANAGEMENT PLAN

24/10/2018  
Report No. 18076  
Revision A

Client

---

**Northern Beaches Council**  
T 1300 434 434 •

Architect

---

**Warren and Mahoney Architects Ltd**  
Suite 13.03, Plaza Building, 95 Pitt Street, Sydney NSW  
[www.warrenandmahoney.com](http://www.warrenandmahoney.com)  
T 02 8021 9809 •

**ELEPHANTS FOOT RECYCLING SOLUTIONS • ABN 70 001 378 294**  
44-46 Gibson Ave Padstow NSW 2211  
[www.elephantsfoot.com.au](http://www.elephantsfoot.com.au)

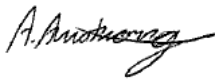
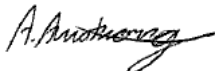
T +612 9780 3500 • F +612 9707 2588  
E [info@elephantsfoot.com.au](mailto:info@elephantsfoot.com.au)

## SCOPE

This waste management plan (WMP) only applies to the **operational** phase of the proposed development; therefore the requirements outlined in this WMP must be implemented during the operational phase of the site and may be subject to review upon further expansion for, and/or changes to the development.

The waste management of the **construction** and **demolition** phases of the development are not addressed in this report. It is EFRS's understanding that a construction and demolition WMP will be completed by a separate party appointed by the developer, and submitted separately to this report. Typically, the head contractor of the site will be responsible for removing all construction-related waste offsite in a manner that meets all authority requirements.

## REVISION REFERENCE

Revision	Date	Prepared by	Reviewed by	Description	Signed
A	16/10/2018	A Armstrong	E Saidi	DRAFT	
B	24/10/2018	A Armstrong	E Saidi	AMENDMENT	

The information contained in this document produced by Elephants Foot Recycling Solutions (EFRS) is solely for the use of the client identified on the cover sheet for the purpose for which it has been prepared for. EFRS undertakes no duty, nor accepts any responsibility for any third party who may rely upon this document. Reproduction, publication or distribution of this document without written permission from EFRS is strictly prohibited.

## TABLE OF CONTENTS

GLOSSARY OF TERMS.....	i
LIST OF TABLES.....	i
INTRODUCTION .....	1
DEVELOPMENT SUMMARY .....	1
SITE LOCATION.....	2
NORTHERN BEACHES COUNCIL .....	3
COUNCIL OBJECTIVES.....	3
COUNCIL REQUIREMENTS.....	3
STAKEHOLDER ROLES AND RESPONSIBILITIES.....	4
EDUCATION.....	4
LIMITATIONS .....	5
SURFCLUB WASTE MANAGEMENT.....	6
ESTIMATED WASTE VOLUMES AND PROVISIONS .....	6
GYM & FIRST AID ROOM WASTE MANAGEMENT.....	6
OFFICE, FUNCTION ROOM AND MEETING ROOM WASTE MANAGEMENT.....	6
CANTEEN, café, BAR AND RESTAURANT WASTE MANAGEMENT .....	7
GREEN WASTE.....	7
ELECTRONIC WASTE.....	7
PUBLIC SPACES.....	8
COMMON AREAS .....	8
WASTE OILS .....	8
COLLECTION OF WASTE.....	9
WASTE ROOM AREAS.....	9
WASTE ROOMS.....	10
CONSTRUCTION REQUIREMENTS.....	10
SIGNAGE.....	10
VENTILATION.....	10
USEFUL CONTACTS .....	11
APPENDICES.....	12
APPENDIX A ARCHITECTURAL DRAWING EXERPTS.....	12
APPENDIX A.1 GROUND PLAN DISPLAYING WASTE ROOM AND COLLECTION AREA	12
APPENDIX B PRIMARY WASTE MANAGEMENT PROVISIONS .....	13
APPENDIX B.1 TYPICAL BIN SPECIFICATIONS .....	13
APPENDIX B.2 SIGNAGE FOR WASTE & RECYCLING BINS.....	14
APPENDIX B.3 TYPICAL COLLECTION VEHICLE INFORMATION .....	15
APPENDIX B.4 TYPICAL MOTORISED BIN TUG.....	16
APPENDIX C SECONDARY WASTE MANAGEMENT PROVISIONS.....	17

APPENDIX C.1	TYPICAL PUBLIC PLACE WASTE BINS .....	17
--------------	---------------------------------------	----

## GLOSSARY OF TERMS

TERM	DESCRIPTION
<i>Collection Area/Point</i>	The identified position or area where garbage or recyclables are actually loaded onto the collection vehicle
<i>Compactor</i>	A machine for compressing waste into disposable or reusable containers
<i>Composter</i>	A container/machine used for composting specific food scraps
<i>Crate</i>	A plastic box used for the collection of recyclable materials
<i>Garbage</i>	All domestic waste (Except recyclables and green waste)
<i>Green Waste</i>	All vegetated organic material such as small branches, leaves and grass clippings, tree and shrub pruning, plants and flowers
<i>L</i>	Litre(s)
<i>Liquid Waste</i>	Non-hazardous liquid waste generated by commercial premises that is supposed to be connected to sewer or collected for treatment and disposal by a liquid waste contractor (including grease trap waste)
<i>LRV</i>	Large rigid vehicle described by AS 2890.2-2002 Parking facilities – Off-street commercial vehicle facilities as heavy rigid vehicle (HRV)
<i>Mobile Garbage Bin(s) (MGB)</i>	A waste container generally constructed of plastic with wheels with a capacity in litres of 120, 240, 360, 660, 1000 or 1100
<i>MRV</i>	Medium rigid vehicle
<i>Putrescible Waste</i>	Component of the waste stream liable to become putrid. Usually breaks down in a landfill to create landfill gases and leachate. Typically applies to food, animal and organic products.
<i>Recycling</i>	Glass bottles and jars – PET, HDPE and PVC plastics; aluminium aerosol and steel cans; milk and juice cartons; soft drink, milk and shampoo containers; paper, cardboard, junk mail, newspapers and magazines
<i>Refuse</i>	Material generated and discarded from residential and commercial buildings including general waste, recyclables, green waste and bulky items
<i>SRV</i>	Small rigid vehicle as in AS 2890.2-2002 Parking facilities – Off-street commercial vehicle facilities, generally incorporating a body width of 2.33

## LIST OF TABLES

Table 1: Stakeholder Roles and Responsibilities.....	4
Table 2: Calculated Waste Generation.....	6

## INTRODUCTION

EFRS has been tasked to prepare the following waste management plan for Warren and Mohoney Architects Ltd on behalf of Northern Beaches Council for the operational management of waste generated by the Mona Vale Surf Club located at Surf View Road, Mona Vale NSW.

Waste management strategies and auditing are a requirement for new developments to provide support for the building design, and promote strong sustainability outcomes for the building. It is EFRS's belief that a successful waste management strategy contains three key objectives:

- i. **Promote responsible source separation** to reduce the amount of waste that goes to landfill, by implementing convenient and efficient waste management systems
- ii. **Ensure adequate waste provisions and robust procedures** that will cater for potential changes during the operational phase of the development
- iii. **Compliance** with all relevant council codes, policies, and guidelines.

To achieve these objectives, this WMP identifies the different waste streams likely to be generated during the operational phase of the development. Associated information includes: how the waste will be handled and disposed of, details of bin sizes/quantities and waste rooms, descriptions of the proposed waste management equipment used and information on waste collection points and frequencies.

It is essential that this waste management plan is integral to the overall management of the building and clearly communicated to all relevant stakeholders.

## DEVELOPMENT SUMMARY

The proposed development falls under the LGA of Northern Beaches Council, and consists of one (1), 1-level building incorporating:

- Ground Level
  - 39m<sup>2</sup> allocated to a gym;
  - 14m<sup>2</sup> allocated to a canteen;
  - 13m<sup>2</sup> allocated to a first aid room;
  - 86m<sup>2</sup> allocated to a café (kitchen area included); &
  - 14m<sup>2</sup> allocated to an office.
- Level 1
  - 173m<sup>2</sup> allocated to a restaurant (kitchen area included);
  - 256m<sup>2</sup> allocated to a function room, meeting rooms and a members lounge;
  - 27m<sup>2</sup> allocated to a small bar/kitchen.

All figures and calculations are based on area schedules as advised by our client and shown on architectural drawings.

## SITE LOCATION

The site located is Surfview Road, Mona Vale NSW, as shown in Figure.1.



## NORTHEN BEACHES COUNCIL

The development is within Northern Beaches Council's jurisdiction. The commercial garbage and recycling will be guided by the services and acceptance criteria of Northern Beaches Council. All waste facilities and equipment are to be designed and constructed to be in compliance with the Northern Beaches Council Waste Management Guidelines (Chapter 5: On-going waste management for non-residential developments), Australian Standards and statutory requirements.

### COUNCIL OBJECTIVES

- To facilitate sustainable waste management in a manner consistent with the principles of Ecologically Sustainable Development (ESD).
- To achieve waste avoidance, source separation and recycling of industrial/commercial waste.
- To design and locate waste storage and collection facilities which are convenient and easily accessible; safe; hygienic; of an adequate size, and with minimal adverse impacts on residents, surrounding neighbours, and pedestrian and vehicle movements.
- To ensure waste storage and collection facilities complement waste collection and management services, offered by Council and the private service providers and support ongoing control for such standards and services.
- To minimise risks to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
- To minimise any adverse environmental impacts associated with the storage and collection of waste.
- To discourage illegal dumping.

### COUNCIL REQUIREMENTS

**Access** – Ensure waste systems are easy to use and collection vehicles are able to access buildings to safely remove waste and recycling;

**Safety** – Ensure safe practises for storage, handling and collection of waste and recycling;

**Pollution Prevention** – Prevent stormwater pollution that may occur as a result of poor waste storage and management practises;

**Noise Minimisation** – Provide acoustic insulation to the waste service facilities or residential units adjacent to or above chutes, waste storage facilities, chute discharge, waste compaction equipment and waste collection vehicle access points;

**Ecologically Sustainable Development (ESD)** – Promote the principles of ESD through resource recovery and recycling leading to a reduction in the consumption of finite natural resources;

**Hygiene** – Ensure health and amenity for residents, visitors and workers in the Northern Beaches Council.



## STAKEHOLDER ROLES AND RESPONSIBILITIES

The following table demonstrates the primary roles and responsibilities of the respective stakeholders:

*Table 1: Stakeholder Roles and Responsibilities*

Roles	Responsibilities
Strata/Management	<ul style="list-style-type: none"> <li>Ensuring that all waste service providers submit monthly reports on all equipment movements and waste quantities/weights;</li> <li>Organising internal waste audits/visual assessments on a regular basis; and</li> <li>Manage any non-compliances/complaints reported through waste audits.</li> </ul>
Building Management or Cleaner	<ul style="list-style-type: none"> <li>Ensuring effective signage, communication and education is provided to staff and cleaners;</li> <li>Providing staff/contractors with equipment manuals, training, health and safety procedures, risk assessments, and PPE to control hazards associated with all waste management activities;</li> <li>Ensuring site safety for tenants, visitors, staff and contractors;</li> <li>Abiding by all relevant OH&amp;S legislation, regulations, and guidelines;</li> <li>Assessing any manual handling risks and prepare a manual handling control plan for waste and bin transfers;</li> <li>Cleaning and transporting of bins as required;</li> <li>Organising, maintaining and cleaning the general and recycled waste holding area;</li> <li>Organising both garbage and recycled waste pick-ups as required;</li> <li>Organising replacement or maintenance requirements for bins.</li> </ul>
Staff	<ul style="list-style-type: none"> <li>Dispose of all garbage and recycling in the allocated MGBs provided;</li> <li>Ensure adequate separation of garbage and recycling; and</li> <li>Compliance with the provisions of Council and the WMP.</li> </ul>
Waste Contractor	<ul style="list-style-type: none"> <li>Provide a reliable and appropriate waste collection service;</li> <li>Provide feedback to building managers/staff in regards to contamination of recyclables; and</li> <li>Work with building managers to customise waste systems where possible.</li> </ul>
Gardening/Landscaping Contractor	<ul style="list-style-type: none"> <li>Removal of all garden organic waste generated during gardening maintenance activities for recycling at an offsite location.</li> </ul>

## EDUCATION

Building management is responsible for creating and managing the waste management education process.

Educational material encouraging the correct separation of garbage and recycling items must be provided to all personnel to ensure the correct disposal of waste, including E-Waste and hazardous waste.

It is expected that leasing arrangements with commercial operations contain direction on waste management services and expectations.

## LIMITATIONS

The purpose of this report is to document a Waste Management Plan (WMP) as part of a development application and is supplied by Elephants Foot Recycling Solutions (EFRS) with the following limitations:

- Council are subject to changing waste and recycling policies and requirements at their own discretion. Information in this operational waste management plan is correct as of October 2018.
- The works agreed to in the fee proposal includes a review of the waste management plans and up to three amendments. Any revisions subsequent to the third amendments will be charged at an hourly rate.
- Drawings, estimates and information 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 assumptions based on the information contained in the WMP is outside the control of EFRS;
- 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 residents 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 WMP reflects the actual outcome and EFRS will not be liable to you for plans or outcomes that are not suitable for your purpose, whether as a result of incorrect or unsuitable information or otherwise;
- EFRS offer no warranty or representation of accuracy or reliability of the WMP unless specifically stated;
- Any manual handling equipment recommended should be provided at the recommendation of the appropriate equipment provider who will assess the correct equipment for supply;
- Design of waste management chute equipment and systems must be approved by the supplier.

## SURF CLUB WASTE MANAGEMENT

The *Northern Beaches Council Waste Management Guidelines (Chapter 5: On-going waste management for non-residential developments)* has been referenced to calculate the total number of bins required for the retail and commercial areas. Calculations are based on generic figures; waste generation rates may differ according to the tenants' waste management practice.

### ESTIMATED WASTE VOLUMES AND PROVISIONS

The following table shows the estimated volume (L) of garbage and recycling generated by the surf club. A seven day operating week has been assumed.

Table 2: Calculated Waste Generation

Location		Type	GFA (m <sup>2</sup> )	Garbage Generation Rate (L/100m <sup>2</sup> /day)	Generated Garbage (L/week)	Recycling Generation Rate (L/100m <sup>2</sup> /day)	Generated Recycling (L/week)
Ground	Gym		39	10	27.3	10	27.3
Ground	First Aid Room		13	50	45.5	10	9.1
Ground	Office		14	10	9.8	10	9.8
Ground	Canteen		14	150	147	150	147
Ground	Café		86	300	1806	200	1204
Level 1	Restaurant		173	660	7992.6	200	2422
Level 1	Function/meeting rooms		256	50	896	10	179.2
Level 1	Bar/Kitchen		27	660	1247.4	200	378
	TOTAL		622		12171.6		4376.4
Collections & Equipment			Bin Size (L)		1100	Bin Size (L)	240
			Collections per Week		3	Collections per Week	3
			No Bins Required		4	No Bins Required	6

### GYM & FIRST AID ROOM WASTE MANAGEMENT

It is recommended that all amenities be furnished with suitable recycling and garbage collection receptacles in convenient locations.

All items that are soiled with blood or body substances should be placed in plastic bags, tied securely and disposed of in accordance with state requirements.

Sharps including scissors, tweezers and needles that have become contaminated with blood or body substances should be disposed of in a rigid-walled secure sharps container by the person utilising them. All sharps containers should be assessed for compliance with the current NSW Health Infection Control Policy and the relevant Australian Standard.

On completion of each trading day or when required, staff and or cleaners will be responsible for transferring bagged garbage and recyclables to the central waste room.

### OFFICE, FUNCTION ROOM AND MEETING ROOM WASTE MANAGEMENT

Typically, receptacles for garbage and recycling are positioned in designated areas throughout the vicinities. These bins will be emptied by contract cleaners, who circulate around the workplace after normal office hours and also perform other cleaning tasks generally vacuuming and cleaning toilets.

Cleaners empty the bins into bags which they transport around the office/s in a cart which is also used to store cleaning products, spare bags, PPE and consumables.

## OPERATIONAL WASTE MANAGEMENT PLAN

Bags of garbage and/or recycling will be transferred to the central waste room on the ground floor.

### CANTEEN, CAFÉ, BAR AND RESTAURANT WASTE MANAGEMENT

Staff will be responsible for their own storage of garbage and recycling back of house (BOH).

Food handling for food cooked or prepared, served and consumed on site will produce a typical waste composition of food scraps from plates, packaging waste and some plastics. Café or restaurant staff will be responsible for their own BOH waste management.

Cardboard is a major component of the waste generated by cafes/restaurants. All cardboard should be flattened (to save bin space) and placed in the 240L bins provided. Whilst cardboard is bulky, it is generally lightweight however it can be contaminated with food or liquid which makes it unsuitable for recycling.

On completion of each trading day or as required, nominated retail staff/cleaners will transport their garbage and recycling to the waste room on the ground level and place garbage and recycling into the appropriate collection bins.

To ensure the proper management and disposal of waste, tenants must be made aware of the following practices:

- All garbage should be bagged and garbage bins should be plastic lined;
- Bagging of recyclables is not permitted;
- All interim waste storage is located BOH during operations;
- Individual recycling programs are recommended for retailers to ensure commingled recycling is correctly separated;
- Any food and beverage tenant will make arrangements for storing used and unused cooking oil in a bunded storage area;
- The operator will organise grease interceptor trap servicing;
- A suitable storage area needs to be provided and effectively bunded for chemicals, pesticides and cleaning products;
- Dry basket arrestors need to be provided to the floor wastes in the food preparation and waste storage areas; and
- All flattened cardboard will be collected and removed to the waste room recycling MGB

Note: It is the responsibility of the building manager to monitor the number of bins required for the development. As waste volumes may change according to the development's management, customer base and retail tenancy attitudes to waste disposal and recycling, bin numbers and sizes may need to be altered to suit the building operation. Seasonal peak periods i.e. public and school holidays should also be considered.

### GREEN WASTE

Any green waste generated from surrounding building landscaped areas will be removed by a designated maintenance contractor. Very small quantities may be disposed of via the general waste stream.

### ELECTRONIC WASTE

Electrical waste (e.g. fluorescent tubing, batteries, laptops etc.) can potentially contaminate soil and surrounding water bodies if not disposed correctly. These items must not be placed in standard garbage and recycling bins. Disposal or recycling of electronic waste will be organised with the assistance of building management. These items must not be placed in garbage or recycling bins due to safety and environmental factors.

## **PUBLIC SPACES**

Public spaces are likely to generate minimal waste from the people utilizing these areas. Garbage and recycling bins will be placed throughout public spaces to minimise the likelihood of littering (see APPENDIX C.1).

Areas allocated to outdoor public space will be managed by Council, unless another type of arrangement has been agreed with by Council. Public waste bins placed in outdoor public areas will be serviced and maintained by Council.

Public areas on commercial developments such as food courts will be managed by building management. Cleaners will circulate throughout the food court while clearing tables and will remove waste as required.

## **COMMON AREAS**

Any staff tea points will be supplied with a dedicated commingled bin for the collection of all recyclable glass, aluminium, steel and plastic items. Staff will be responsible for sorting this material and allocating recyclables into the correct collection facility.

Washroom facilities should be supplied with collection bins for paper towels (if used). Sanitary bins for female restroom facilities must also be arranged with an appropriate contractor.

## **WASTE OILS**

Consideration should be given to the use of cooking oil collection systems. A single service provider may be used to reduce the amount of commercial traffic into the loading bay or around the precinct area. This should be measured against bulk delivery of oils where the same vehicle is used to remove containers of waste cooking oils.

## COLLECTION OF WASTE

An allocated waste contractor will be engaged to service all bins to an agreed collection schedule.

The collection vehicle will pull up on Surfview Road and service all bins directly from the waste room via a wheel-in/wheel-out arrangement.

It is Elephant Foot's understanding that the collection areas have been reviewed by a traffic consultant to confirm the swept paths for waste collections, access, egress and load requirements.

The final number of truck movements will depend on management of waste contract; final configuration of garbage and recycling arrangements therefore number of bin lifts and additional irregular truck movements for any other waste streams.

## WASTE ROOM AREAS

The waste room must have the capacity to accommodate the required quantity of garbage and recycling bins and sufficient room to adequately access and manoeuvre bins. A bin wash down area will also be provided.

Based on the calculations presented in Table. 1, the bin and spatial requirements are presented below:

Garbage:	4 x 1100L bins
Recycling:	6 x 240L bins
Recommended Waste Room Size:	<b>18m<sup>2</sup></b>

Note: Any requirement for increasing storage capacity can be done by increasing the frequency of collections for all waste.

## WASTE ROOMS

### CONSTRUCTION REQUIREMENTS

The waste room will be required to contain the following facilities to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area:

- Waste room floor to be sealed with a two pack epoxy;
- Waste room walls and floor surface is flat and even;
- All corners coved and sealed 100mm up, this is to eliminate build-up of dirt;
- For retail/commercial: a cold water facility with hose cock must be provided for washing the bins;
- Any waste water discharge from bin washing must be drained to sewer in accordance with the relevant water board. (Sydney water);
- Tap height of 1.6m;
- Storm water access preventatives (grate);
- All walls painted with light colour and washable paint;
- Equipment electric outlets to be installed 1700mm above floor levels;
- The room must be mechanically ventilated;
- Light switch installed at height of 1.6m;
- Waste rooms must be well lit (sensor lighting recommended);
- Optional automatic odour and pest control system installed to eliminate all pest types and assist with odour reduction – this process generally takes place at building handover – building management make the decision to install;
- If 660l or 1100l bins are utilised, 2 x 820mm (minimum) door leafs must be used;
- All personnel doors are hinged, lockable and self-closing;
- Waste collection area must hold all bins – bin movements should be with ease of access;
- Conform to the building code of Australia, Australian standards and local laws; and
- Childproofing and public/operator safety shall be assessed and ensured

### SIGNAGE

Building management is responsible for waste room signage including safety signage (see *APPENDIX B.2*). Appropriate signage must be prominently displayed on doors, walls and above all bins, clearly stating what type of waste or recyclables is to be placed in the bin underneath.

### VENTILATION

Waste and recycling rooms must have their own exhaust ventilation system either;

- Mechanically - exhausting at a rate of 5L/m<sup>2</sup> floor area, with a minimum rate of 100L/s minimum; or
- Naturally - permanent, unobstructed, and opening direct to the external air, not less than one-twentieth (1/20) of the floor area

Mechanical exhaust systems shall comply with AS1668 and not cause any inconvenience, noise or odour problem.

## USEFUL CONTACTS

Elephants Foot Recycling Solutions does not warrant or make representation for goods or services provided by suppliers.

**Northern Beaches Council Customer Service**

Phone: 1300 434 434

Email: [council@northernbeaches.nsw.gov.au](mailto:council@northernbeaches.nsw.gov.au)

**SULO MGB** (MGB, Public Place Bins, Tugs and Bin Hitches)

Phone: 1300 364 388

**ELECTRODRIVE** (Bin Mover)

Phone: 1800 333 002

Email: [sales@electrodrive.com.au](mailto:sales@electrodrive.com.au)

**RUD** (Public Place Bins, Recycling Bins)

Phone: 07 3712 8000

Email: [Info@rud.com.au](mailto:Info@rud.com.au)

**CAPITAL CITY WASTE SERVICES** (Private Waste Services Provider)

Phone: 02 9359 9999

**REMONDIS** (Private Waste Services Provider)

Phone: 13 73 73

**SITA ENVIRONMENTAL** (Private Waste Services Provider)

Phone: 13 13 35

**NATIONAL ASSOCIATION OF CHARITABLE RECYCLING ORGANISATIONS INC.**  
(NACRO)

Phone: 03 9429 9884

Email: [information@nacro.org.au](mailto:information@nacro.org.au)

**PURIFYING SOLUTIONS** (Odour Control)

Phone: 1300 636 877

Email: [sales@purifyingsolutions.com.au](mailto:sales@purifyingsolutions.com.au)

**AUSCOL** (Recycling Oils & Animal Fats)

Phone: 1800 629 476

**Elephants Foot Recycling Solutions**

44 – 46 Gibson Avenue

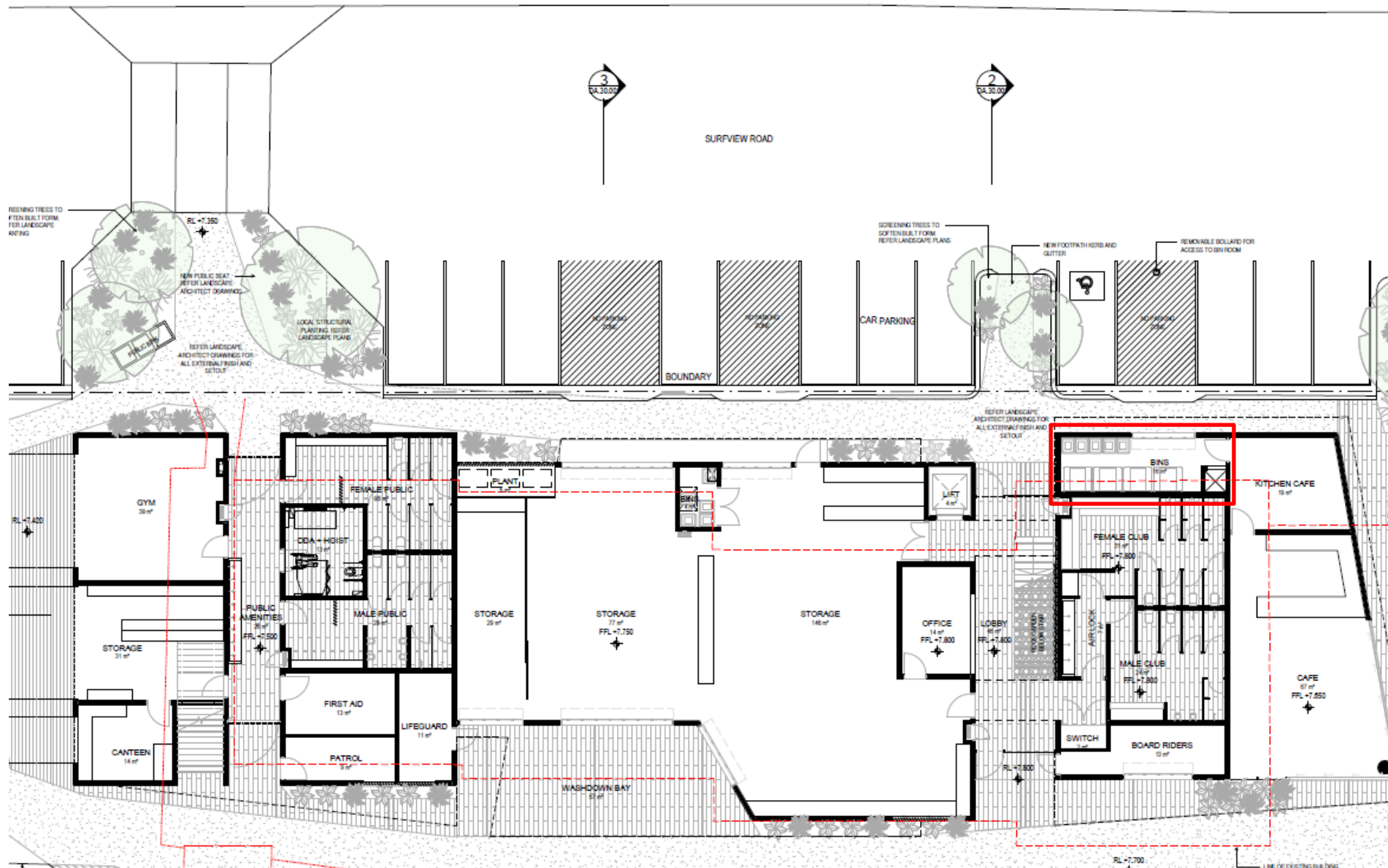
Padstow NSW 2211

Free call: 1800 025 073

Email: [info@elephantsfoot.com.au](mailto:info@elephantsfoot.com.au)



## APPENDIX A.1 GROUND PLAN DISPLAYING WASTE ROOM AND COLLECTION AREA



12

## APPENDIX B PRIMARY WASTE MANAGEMENT PROVISIONS

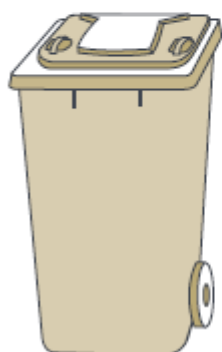
### APPENDIX B.1 TYPICAL BIN SPECIFICATIONS

#### Mobile garbage bins (MGBs)

MGBs with capacities up to 1700L should comply with the Australian Standard for Mobile Waste Containers (AS 4123). AS 4123 specifies standard sizes and sets out the colour designations for bodies and lids of mobile waste containers that relate to the type of materials they will be used for.

Indicative sizes only for common MGB sizes are provided below. Note that not all MGB sizes are shown; the dimensions are only a guide and differ slightly according to manufacturer, if bins have flat or dome lids and are used with different lifting devices. Refer to AS 4123 for further detail.

Mobile containers with a capacity from 80L to 360L with two wheels



Bin Type	80 Litre MGB	120 Litre MGB	140 Litre MGB	240 Litre MGB	360 Litre MGB
Height	870 mm	940 mm	1065 mm	1080 mm	1100 mm
Depth	530 mm	560 mm	540 mm	735 mm	885 mm
Width	450 mm	485 mm	500 mm	580 mm	600 mm

Mobile containers with a capacity from 500L to 1700L with four wheels



Bin Type	660 Litre MGB	770 Litre MGB	1100 Litre MGB	1300 Litre MGB	1700 Litre MGB
Height	1250	1425	1470	1480	1470
Depth	850	1100	1245	1250	1250
Width	1370	1370	1370	1770	1770

Dome or flat lid containers

SOURCE: Department of Environment and Climate Change NSW 2008, *Better Practice Guide for Waste Management in Multi-Unit Dwellings*

## APPENDIX B.2 SIGNAGE FOR WASTE & RECYCLING BINS

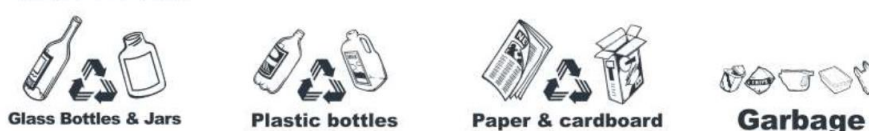
### WASTE SIGNS

Signs for garbage, recycling and organics bins should comply with the standard signs promoted by the Department of Environment and Heritage.

Example wall posters



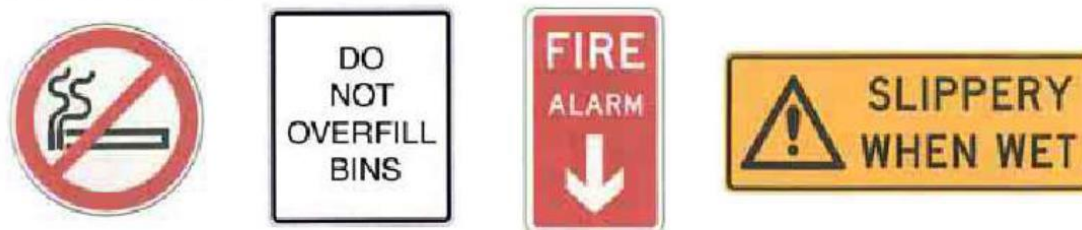
Example bin lid stickers



### SAFETY SIGNS

The design and use of safety signs for waste rooms and enclosures should comply with AS1319 Safety Signs for Occupational Environment. Safety signs should be used to regulate and control safety behaviour, warn of hazards and provide emergency information, including fire protection information. Below are some examples. Each development will need to decide which signs are relevant for its set of circumstances and service provided.

Examples of Australian Standards:



Australian Standards are available from the SAI Global Limited website ([www.saiglobal.com](http://www.saiglobal.com)).

*SOURCE: Department of Environment and Climate Change NSW 2008, Better Practice Guide for Waste Management in Multi-Unit Dwellings*

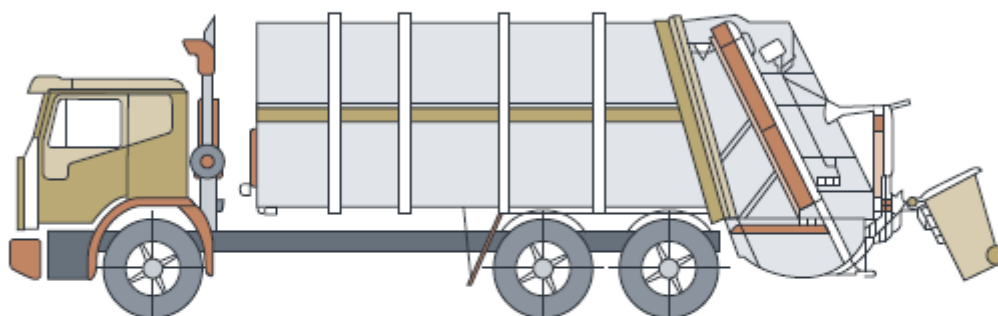
## APPENDIX B.3 TYPICAL COLLECTION VEHICLE INFORMATION

### Collection vehicles

Waste collection vehicles may be side loading, rear-end loading, front-end loading or crane trucks. The size of vehicle varies according to the collection service. Thus it is impossible to specify what constitutes the definitive garbage vehicle. Developers should consult the local council and/or relevant contractors regarding the type of vehicle used in that area.

The following characteristics represent the typical collection vehicle, however, these are only for guidance.

It may be possible to engage a collection service provider to use smaller collection vehicles to service developments with narrow roadways and laneways, or for on-site collections. However, as the availability of smaller vehicles to make services varies between councils and private contractors, wherever possible the development should be designed to accommodate vehicles of a similar size to that reported below.



#### Rear loading collection vehicle

Rear loading collection vehicle	
Length overall	10.24m
Width overall	2.5m
Operational height	3.5m
Travel height	3.5m
Weight (vehicle only)	12.4 tonnes
Weight (payload)	9.5 tonnes
Turning circle	18.0m

This is commonly used for domestic garbage and recycling collections from MUDs. It can be used to collect waste stored in MGBs or bulk bins, particularly where bins are not presented on the kerbside.

*SOURCE: Department of Environment and Climate Change NSW 2008, Better Practice Guide for Waste Management in Multi-Unit Dwellings*

## APPENDIX B.4 TYPICAL MOTORISED BIN TUG



### Typical applications:

- Move trolleys, waste bin trailers and 660/1100L bins up and down a ramp incline.
- Quiet, smooth operation with zero emissions and simple to use, no driver's licence required
- Suitable for:
  - High rise building & apartment basements
  - Large factories & warehouse with sloped ground
  - Caravan parks & other large outdoor areas

### Features:

- 1 tonne tow capacity of inclines up to 8 degrees
- 500kg tow capacity if inclines up to 14 degrees
- CE Compliant
- 4.5 km/h max speed
- 2 x 80amp batteries – includes charger
- Powerful transaxle
- Hitch to suit 660L bins

### Safety Features:

- Intuitive paddle lever control
- Stops and repels the unit if activated when reversing.
- Site assessment recommended to assess ramp incline steepness (*See Useful Contacts*)



## APPENDIX C SECONDARY WASTE MANAGEMENT PROVISIONS

### APPENDIX C.1 TYPICAL PUBLIC PLACE WASTE BINS



*\* Products and specifications may change according to manufacturer.*

SOURCE: SULO Environmental Technology