



WASTE MANAGEMENT GUIDELINES

MULTIPLE DWELLINGS & SERVICE-MANAGED RESIDENTIAL ACCOMMODATION





Journey Through Time, created by local school students and artist Steven Campbell.

Acknowledgement of Country

Cessnock City Council acknowledges that within its local government area boundaries are the traditional lands of the Wonnarua people, the Awabakal people and the Darkinjung people. We acknowledge these Aboriginal peoples as the traditional custodians of the land on which our offices and operations are located, and pay our respects to Elders past and present. We also acknowledge all other Aboriginal and Torres Strait Islander people who now live within the Cessnock Local Government Area.

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INTRODUCTION

Introduction

Residential development with multiple dwellings or tenancies can take a variety of forms based on building design, number of levels and the overall number of individual residential spaces. These residential developments also include properties that are managed by an external service, or on-site manager, as affordable housing accommodation or for people who may be socially disadvantaged. A waste management system is required to be designed that is responsive to the usage of the development and to enable residents to appropriately minimise and reduce waste while maintaining amenity of the residential space.

This guideline will assist with developing a waste management system for the following residential accommodation types involving multiple dwellings/tenancies

a. Manor houses

b. Multi-dwelling housing

The guideline will also assist with the development of a waste management system for residential accommodation types that may include the provision of managed services on-site. This includes

a. Boarding houses

b. Co-living housing

c. Group homes

e. Groups of independent living units provided as seniors

housing

INASTE COLLECTION SERVICE

Waste collection service

The collection of waste from multiple dwelling developments or service-managed residential accommodation requires appropriate consideration and design. The design will need to be responsive to the equipment used by the waste collection service for the site, either Council or a private waste collection service provider.

Residential waste collection service by Council

Each residential rated property is charged a domestic waste management charge under the Local Government Act 1993. Council's residential waste collection service is primarily from the kerbside of public roads. Where feasible, subject to accessibility design and indemnity from damage, Council may provide on-site collection in accordance with the Waste Management Policy adopted by Council.

Standard bin allocations for rated residential development comprises the following:

- A single 240L mobile garbage bin for organics/ food waste
- A single 240L mobile garbage bin for residual waste
- A single 240L mobile garbage bin for recycling waste







Each week comprises the collection of 2 x 240L bins for each residential rated development. Standard bin sizes are provided in **Table 1** below to enable the design for a kerbside waste collection point.

Table 1: Dimensions of standard 240L mobile bin

BIN CAPACITY (L)	неібнт (мм)	ДЕРТН (ММ)	WIDTH (MM)
240L	1060	730	585

Kerbside waste collection points are to accommodate 2x 240l bins for each dwelling with a minimum dimension of 2670mm wide by 1000mm deep. This dimension includes a 500mm gap between each bin and 500mm clearance each side of the bins. The kerbside waste collection point dimension is required for each residential dwelling.

Waste collection points are to be located with the following

- 2000mm clearance from the base/trunk of any street tree
- 500mm clearance from any driveway or accessway to the property.

INASTE GENERATION

Manor houses and multi-dwelling housing

An average household within a development with multiple dwellings generates waste volumes outlined in Table 2 below:

Table 2: Waste generation from multi-dwelling housing with smaller or reduced outdoor space/ garden.

неібнт (мм)	ДЕРТН (ММ)	WIDTH (MM)
Recycling	120	240
Green waste (Garden and food)	50-120	100-240
Residual	120	240

Source: Better practice guide for resource recovery in residential developments, NSW EPA, April 2019 and City of Sydney, Guidelines for Waste Management in New Developments.

Boarding houses, co-living housing, group homes and hostels

Waste generation from service-managed residential accommodation can vary depending on stay duration, occupant waste separation knowledge and facilities provided (shared or individual kitchen, bathroom, laundry). The management of these residential accommodation types is required to provide access to waste services including recycling, organics and residual waste bins. Table 3 provides waste generation rates from these service-managed developments and bin capacity is to be designed to accommodate these waste volumes.

Table 3: Waste generation volume from service-managed residential accommodation

3A. SERVICE MANAGED ROOM - INDIVIDUAL KITCHEN, BATHROOM AND LAUNDRY		
WASTE TYPE	VOLUME/WEEK (L)	VOLUME/FORTNIGHT (L)
Recycling	60	120
Organic	40 (plus landscaping)	80 (plus landscaping)
Residual	40	80

3B. SERVICE MANAGED ROOM – SHARED KITCHEN, BATHROOM, LAUNDRY FACILITIES		
WASTE TYPE	VOLUME/WEEK (L)	VOLUME/FORTNIGHT (L)
Recycling	40	80
Organic	30 (plus landscaping)	60 (plus landscaping)
Residual	30	60

Source: Development Control Guidelines -Operational Waste Management for Multiple Dwelling Developments, Lake Macquarie City Council

Seniors housing-Independent living units

Independent living units provided as seniors housing may be provided in a variety of forms. This guideline relates to independent living units for both low and medium density as identified in the Seniors Housing Design Guide prepared by NSW Planning and Environment dated November 2023.

Waste generation rates from independent living units are based on the number of bedrooms contained within each unit and are outlined in **Table 4**.

Table 4: Waste generation volume from independent living units

	VOLUME/WEEK (L) BY UNIT TYPE		
WASTE TYPE	1 bedroom	2 bedroom	3 bedroom or greater
Recycling	80	100	120
Organic	25	25	50
Residual	80	100	120

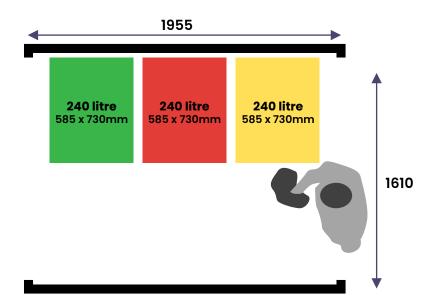
MASTE & RECYCLING STORAGE AREA

Individual waste storage area

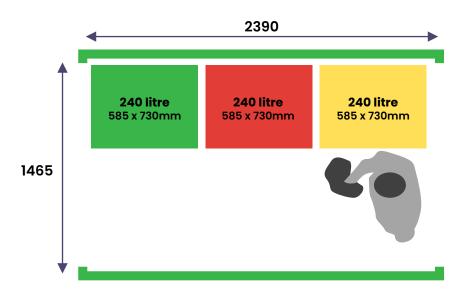
Waste storage areas are to be identified on a Site Plan and located:

- · At the rear of the residential dwelling
- · A screened area to the side or front yard of the building. If the waste storage area is located at the front of the property the waste storage must be suitably screened or incorporated into the building design for visual amenity.
- With appropriate width to ensure bins can be moved to the waste collection point.

Figure 1 below provides an example of the dimensions for a waste storage area



Storage for 1 set of 240 litre bins



Storage for 1 set of 240 litre bins (sideways)

Figure 1: Waste storage area design for residential dwelling.

The waste storage area does not form part of the private open space requirements for the development.

All attached multi-dwelling housing must have access between their waste storage area and the waste collection point that does not involve carting bins through the habitable part of the dwelling. If bins are stored behind the dwelling the waste route must be around the side of the building or through the garage/courtyard. Figures 1 and 2 provide representation of how waste storage areas may be designed for attached dwellings to facilitate carting of bins to a kerbside collection point.

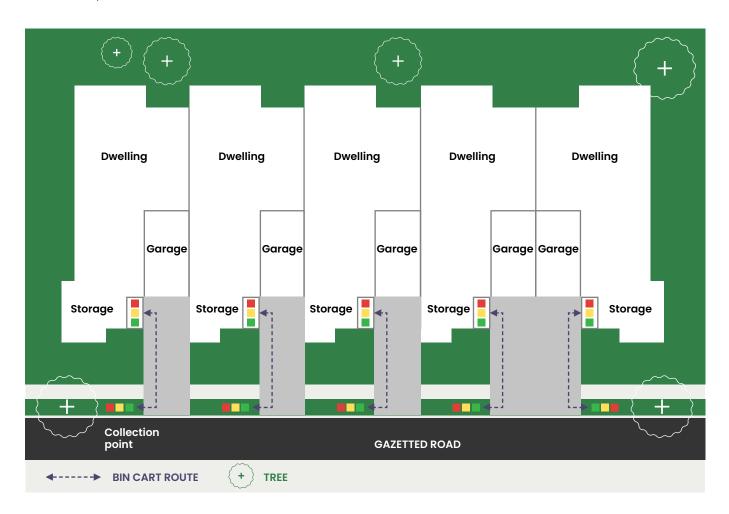


Figure 1: Waste storage area and kerbside waste collection point for multi-dwelling housing.



Figure 2: Waste storage area and kerbside waste collection point for multi-dwelling housing

Waste storage area – communal

Larger multi-dwelling residential developments or complexes, including independent living units, may benefit from or require communal waste storage areas to enable appropriate waste management to all dwellings or buildings.

Communal waste storage areas may be provided in the following circumstances

- Development where the number of bins would not fit on the street frontage
- Where site characteristics make access to the street difficult for individual dwelling occupants
- Where status of the road (eg heavy traffic) requires on-site waste collection access

The communal area should be capable of accommodating Council's required number of standard waste bins and for the development as a whole. In determining the layout and size of the waste storage area consideration should be given be given to whether bins are required to be rotated. If bins are to be rotated, additional area will be required along with aisle width to manoeuvre bins.

Any communal waste storage area is to be:

- Located less then 30m from all residential units
- Located to ensure the carting route to the waste collection point is safe and convenient with no steps or steep gradients.
- Designed as a freestanding structure with or without a roof enclosure
- Effectively integrated into the built form of the development and landscape design
- Unobstructed access to the waste storage area is required with a minimum access width of 1.2m
- Floor is to be non-slip

Figure 3 shows an example of how a manor house multi-residential building may utilise a communal waste storage area and kerbside collection.

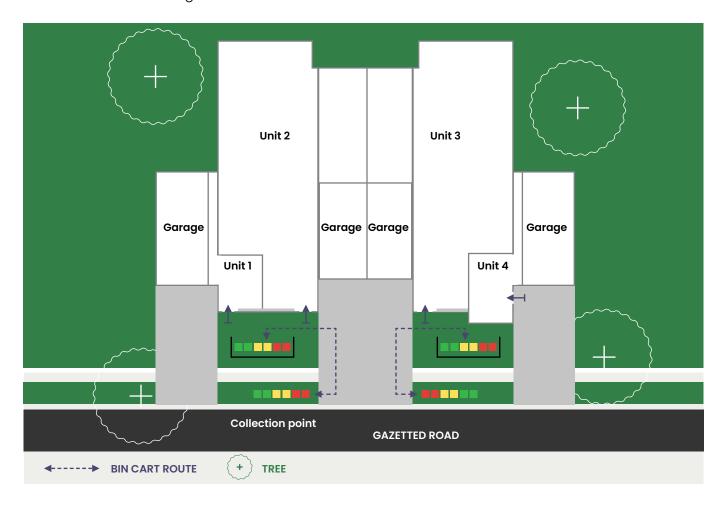


Figure 3: Communal waste storage area for a manor house.

Seniors housing-Independent living units

Where communal waste storage areas are proposed for independent living units provided as seniors housing the waste storage area is to be designed with the following requirements, in addition to the aforementioned,

- Accessible by a continuous path of travel from the entrance of each independent living unit it is servicing
- · Screened with an easily accessible entrance and covered.



Figure 4: Example of communal waste storage area as part of independent living unit complex (Seniors Housing Design Guide, NSW Planning and Environment)

INASTE COLLECTION POINT

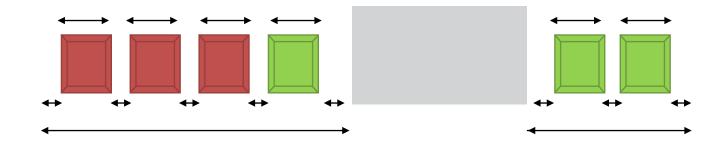
Waste collection point

Each multi-dwelling and serviced-managed residential accommodation development will need to consider whether waste collection can be undertaken from the kerbside or on-site. Consideration of the location of waste collection points will depend on

- 1. Volume of waste from the development whether the number of bins is too great for the street frontage for Council's kerbside collection
- 2. Size of the proposed development bin cartage distances are too great for occupants and require consolidated storage on site.

Kerbside waste collection by Council

Mobile garbage bins are to be placed on the kerb of the public road at the front of the property. All kerbside bin presentation areas are to accommodate 2x 240l bins for each residential dwelling with bins spaced 500mm apart. See Figure 5 below.



NUMBER OF BINS	KERBSIDE WIDTH REQUIRED (WITHOUT DRIVEWAY/OBSTRUCTIONS) (MM)
2	2670
4	4840
6	7010
8	9180
10	11350
12	13520

Figure 5: Kerbside width required for residential bin collection

All kerbside waste collection points must not be obstructed by driveway access or street trees. Waste collection points are to be located with the following

- 2000mm clearance from the base/trunk of any street tree
- 500mm clearance from any driveway or accessway to the property.

Figure 6 provides a diagram of the clearance zone required for waste collection by Council's waste collection vehicle

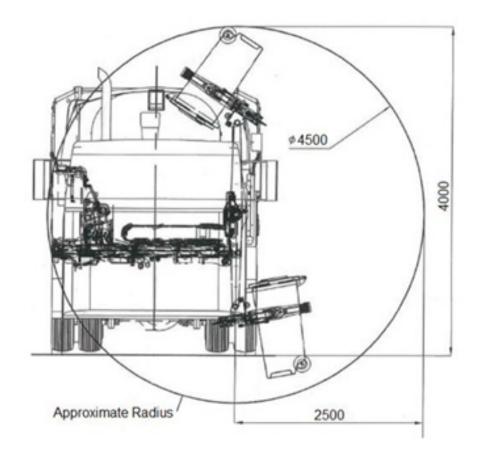


Figure 6: Clearance required for collection arm of waste collection vehicle.

On-site waste collection

Where on-site waste collection is deemed appropriate all internal access or private roads are to be designed to accommodate the nominated waste collection vehicle. The internal access route and turning circles are to be designed in accordance with Australian Standard AS 2890.2:2018 Offstreet Commercial Vehicle Facilities.

The on-site waste collection point is to be designed with the following

- · A minimum horizontal distance of 1m is to be provided behind the waste collection point to enable collection
- Provided on level ground and separated from other trafficable areas
- Enable the waste collection vehicle to enter and exit the waste collection point in a forward direction.
- Pavement and gutters are to be designed to carry the weight of the waste collection vehicle.

Figure 7 shows an example of how a multi-dwelling residential development may provide an onsite waste collection point for a communal waste and recycling storage area.

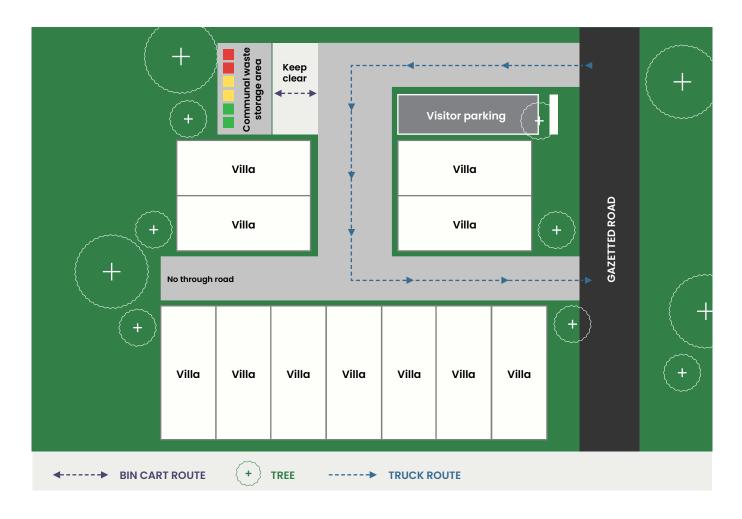


Figure 6: On-site waste collection point from a communal waste and recycling storage area.

INTERNAL INASTE STORAGE

Internal waste storage

The source of most waste in households is the kitchen area. The kitchen of each residential dwelling is to have a waste cupboard of sufficient size to hold two day's generation of waste and recycling.

The waste cupboard should have at least 3 separated containers for co-mingled recyclables (glass, plastic containers, paper), food waste and residual waste.

Figure 7 provides examples of a waste cupboard with separated containers





Figure 7: Waste cupboard with separate containers for waste streams.

USEFUL RESOURCES

Useful resources

Department of Planning, Industry and Environment 2020, Low Rise Housing Diversity Design Guide, https://www.planning.nsw.gov.au/policy-and-legislation/housing/low-rise-housing-diversitycode/design-guides-for-low-rise-housing-diversity

NSW EPA 2019, Better practice guide for resource recovery in residential developments, https://www.epa.nsw.gov.au/your-environment/waste/local-council-operations/resources-forlocal-councils

NSW Planning and Environment 2023, Seniors Housing Design Guide, https://www.planning.nsw.gov.au/policy-and-legislation/housing/housing-sepp/seniors-housing

