

B6 Waste management

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Waste Management

1. Background

This chapter of Penrith Development Control Plan 2014 (Penrith DCP) provides objectives and controls to promote sustainable and efficient waste management outcomes across all phases of the development process, including demolition, construction and ongoing use of the development.

The provisions in this chapter support statutory requirements, as well as the priorities in Council's Waste and Resource Recovery Strategy, including Council's commitment to:

- reduce waste generation per capita/week
- achieve high levels of diversion from landfill
- provide solutions for household and problem waste
- reduce the incidence of litter
- reduce the incidence of illegal dumping
- provide waste collection and service infrastructure responsive to State Government directions.

It is important that waste infrastructure and servicing is considered early in the site planning and design process. This will help to ensure the provision of a safe and efficient waste collection service, as well as high quality built form outcomes and good residential and public amenity.

Council considers waste management of high importance for the protection and enhancement of both the natural and built environment, and is a recognised leader in sustainable, efficient, safe and cost competitive waste practices.

More broadly, the provisions of this chapter promote the principles of Circular Economy, which refers to minimising the use of new materials and resources and ensuring that materials can be reused in the future. Circular Economy principles include designing out waste and pollution, reusing products and materials for as long as possible, and regenerating natural systems- helping natural processes and letting nature thrive.

1.1 Application

This chapter applies to all development proposals, including but not limited to proposals that involve demolition, earthworks, construction, subdivision, change of use, and alterations and additions.

Development types referred to in this chapter have the same meaning as the NSW Standard Instrument.

1.2 Other plans and documents, and relevant legislation

This chapter is to be read in conjunction with:

- other relevant chapters of Penrith DCP
- Council's Guidelines for Waste Infrastructure

Council's Guidelines for Waste Infrastructure provides further guidance for waste management for a range of development types, and supports the implementation of the objectives and controls in this chapter.

The following state legislation and policies also apply:

- NSW Environment Protection Authority (EPA's) Waste Classification Guidelines
- Department of Planning, Industry and Environment's *NSW Waste and Sustainable Materials Strategy 2041*, dated 1 June 2021.
- *The Protection of the Environment Legislation Amendment (FOGO Recycling) Act 2025 No 1*.

Note: The *Protection of the Environment Legislation Amendment (FOGO Recycling) Act 2025* mandates the collection of food organics and garden organics (FOGO) waste from residential development and certain non-residential developments.

The mandate comes into effect in stages from:

- **1 July 2030** for residential development
- **1 July 2026, 1 July 2028 and 1 July 20230** for certain non-residential development (based on weekly residual waste capacity of a development.)

Council's Guidelines for Waste Infrastructure includes information on how FOGO can be considered to ensure buildings are future proofed to accommodate FOGO and to minimise the need to retrofit buildings.

Applicants are encouraged to contact Council's Waste and Resource Recovery department to discuss FOGO provisions ahead of the mandate.

1.3 General objectives

The objectives of this chapter are:

- a) To facilitate sustainable waste management in the City of Penrith and promote best practice waste and resource recovery processes, initiatives, and ongoing management in accordance with Council's Waste and Resource Recovery Strategy.
- b) To minimise the overall environmental impacts of waste by reducing waste generation during all stages of development
- c) To assist in achieving Federal and State Government waste minimisation targets as set out in the *Waste Avoidance and Resource Recovery Act 2001* and *NSW Waste and Sustainable Materials Strategy 2041*.
- d) To encourage waste management and infrastructure to be addressed early in the site planning and design stage of development to achieve superior built form, streetscape and amenity outcomes.
- e) To ensure that new developments can be serviced safely and efficiently, and with minimal disruption to public amenity.

1.4 Lifting the bar

The following represent some ways in which applicants can demonstrate additional commitment to waste avoidance and management expressed in this Plan. Demonstration of this commitment may lead to Council considering variation of development controls.

Applications that vary the development controls listed in this chapter will need to demonstrate that the proposed development complies with the objectives relevant to the development controls it seeks to vary.

- reduce the volume of demolition and construction waste going to landfill by 76%
- demonstrate ongoing commitment to waste avoidance and reduce the volume of waste generated by occupants of the development by:
 - setting a target for commercial uses
 - setting a target for industrial uses
 - setting a target for residential/domestic uses

- setting a target for Council's buildings/facilities, consistent with targets established in the *NSW Waste and Sustainable Materials Strategy 2041*.
- monitor waste generated, recovered and/or sent to landfill by installing a Building Management System.

2. Waste Management Plan

Objectives

- a) To ensure waste and materials are appropriately managed during all stages of development, and for the life of the development.
- b) To minimise the overall environmental impact of waste by reducing the amount of construction and demolition waste going to landfill.
- c) To promote the reuse of materials and principles of Circular Economy.

Controls

1. A Waste Management Plan must be submitted with all development applications. A template Waste Management Plan is available on Council's website at the below link, and is recommended to be used:
https://www.penrithcity.nsw.gov.au/images/documents/forms/Waste_Management_Plan_Application_Form.pdf
2. A Waste Management Plan must include details of:
 - i. the types and volumes of waste and recyclables expected to be generated as a result of the development. This includes during all stages of development, including demolition, construction, and the ongoing use of the development.
 - ii. how waste and recyclables will be stored and managed on the site, including quantity and size of bins on the site, storage areas, collection areas, waste infrastructure, and collection arrangements.
 - iii. how residual waste and recyclables (that are unable to be reused or recycled) are to be disposed of. Evidence such as invoices for waste disposal or recycling services shall be retained and made available for inspection by Council staff upon request.
3. A Waste Management Plan must be supported by scaled plans that identify all waste and recycling storage areas and/or infrastructure (as

required by this chapter), identify the waste collection point for the development, and identify the path of travel from the nominated storage area to the designated waste collection point

4. For residential development with 5 or more dwellings (including shop top housing) a Waste Management Plan shall be prepared by a suitably qualified or experienced waste consultant (experienced in the appropriate management of waste and recycling streams generated by developments.)

3. Residential development

Section 3.1 applies to all types of residential development, including applications that involve residential subdivision.

3.1 General

Objectives

- a) To ensure that developments can be serviced safely and efficiently by Council's standard waste service, and in accordance with contractual provisions.
- b) To provide waste and recycling storage and collection areas and associated waste infrastructure that respond to Council's Waste and Resource Recovery Strategy, and are appropriate for the type and scale of development.
- c) To ensure that waste and recycling storage and collection areas and associated infrastructure are suitably designed and located to minimise negative impacts on the streetscape, and maintain a high level of residential amenity.
- d) To maximise the reuse and recycling of materials through appropriate provision and design of waste recycling areas for each dwelling type.

Controls

1. Applications involving residential subdivision must comply with Part A of Council's Guidelines for Waste Infrastructure.

2. Waste bin collection/storage areas and associated infrastructure must be located, sized and designed in accordance with the following:
 - i. located where its use and operation will not adversely impact the amenity of development occupants in terms of noise and odour.
 - ii. located within the basement footprint for residential flat building developments, and on ground level for multi dwelling housing.
 - iii. if the waste bin storage area is to be used as the collection point (for multi-dwelling housing) it must be located and designed to meet the applicable requirements for servicing.
 - iv. designed to complement the design of both the development and surrounding streetscape.
 - v. designed to be sufficient in size to accommodate all required waste bins associated with the development.
 - vi. designed to cater for all waste streams (e.g. residual, recycling, bulky waste) as relevant to the development type.
 - vii. designed to provide sufficient space onsite to ensure that adequate room is provided to manoeuvre, clean and maintain all bins for the development.
 - viii. designed to provide sufficient space onsite for any required equipment to manage waste, bins (including washing and cleaning) and the bin storage area.
 - ix. designed so that the area is free from obstructions so as not to restrict the movement and servicing of bins.
 - x. designed to provide an aisle space of 1.2m to access and manoeuvre bins. Relevant accessibility requirements must be met.
 - xi. In determining the layout and size of the bin storage area, consideration should be given to whether bins are required to be rotated. If bins are to be rotated, additional room size to aisle width will be required to manoeuvre bins.
 - xii. floors must be constructed of concrete at least 75mm thick and graded and drained to a Sydney Water approved drainage fitting.
 - xiii. the floors must be finished to a smooth even surface.

- xiv. the walls must be constructed of solid impervious material.
 - xv. the ceilings must be finished with a smooth faced non-absorbent material capable of being cleaned.
 - xvi. walls, ceilings and floors must be finished in a light colour.
 - xvii. be provided with an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock.
 - xviii. a close fitting and self-closing door openable from within the room.
 - xix. be constructed to prevent the entry of vermin.
 - xx. be provided with adequate light and ventilation. The light source must be through controlled light switches located both outside and inside the room.
3. Dwelling kitchens shall be designed with sufficient space (or an alternate location) for the interim storage of organic waste, other recyclable waste and non-recyclable waste. It should be of sufficient size to hold at least a single day's waste and to enable source separation of garbage, recyclables and compostable materials.

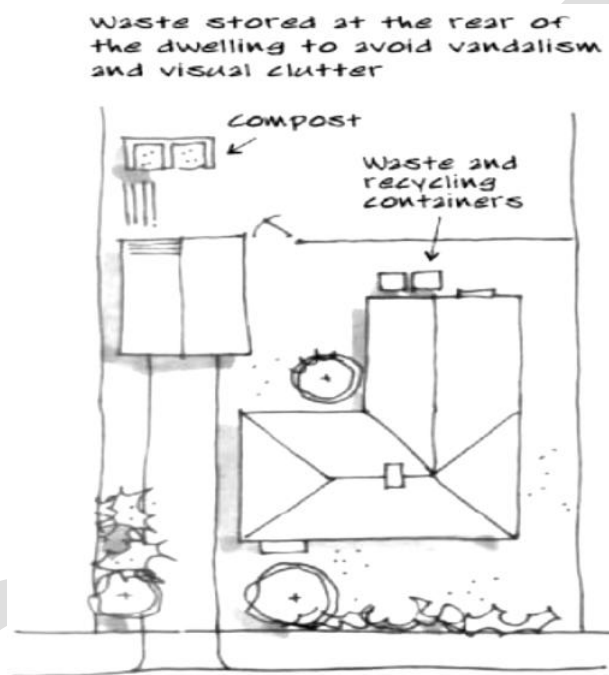
3.2 Single dwellings, dual occupancies, semi-detached and attached housing

Controls

1. Applications for single dwellings, dual occupancies, semi-detached and attached housing must comply with Part A of Council's Guidelines for Waste Infrastructure.
2. A waste storage area must be provided for each dwelling of sufficient size to accommodate Council's full bin allocation, and is to be identified on the application plans. Council's bin allocation per dwelling comprises one 140L residual bin (red lidded), one 240L recycling bin (yellow lidded) and one 240L food garden organics bin (green lidded).
3. Waste storage areas need to:
 - i. be in an easily accessible location on the site
 - ii. provide unobstructed access to Council's collection point (kerbside)

- iii. be located outside of the front setback area and not be visually prominent from public areas
- iv. be located to ensure that bins do not need to travel through dwellings when being moved from the storage area to collection point
- v. located to avoid vandalism, nuisance and visual clutter
- vi. have access to a cold water supply for the cleaning of bins.

Figure 1 Example of location of waste storage area



3.3 Multi dwelling housing and manor houses

Controls

1. Applications for multi dwelling housing and manor houses must comply with Part B of Council's Guidelines for Waste Infrastructure.
2. Developments containing 5 or more dwellings per lot must provide a communal waste storage area and bulky waste collection area in accordance with Part B of Council's Guidelines for Waste Infrastructure.
3. Developments containing 4 or less dwellings per lot, the controls under Section 3.2 of this chapter apply and are to be complied with, and a communal waste storage area and bulky waste collection area is not required, except in the following circumstances:

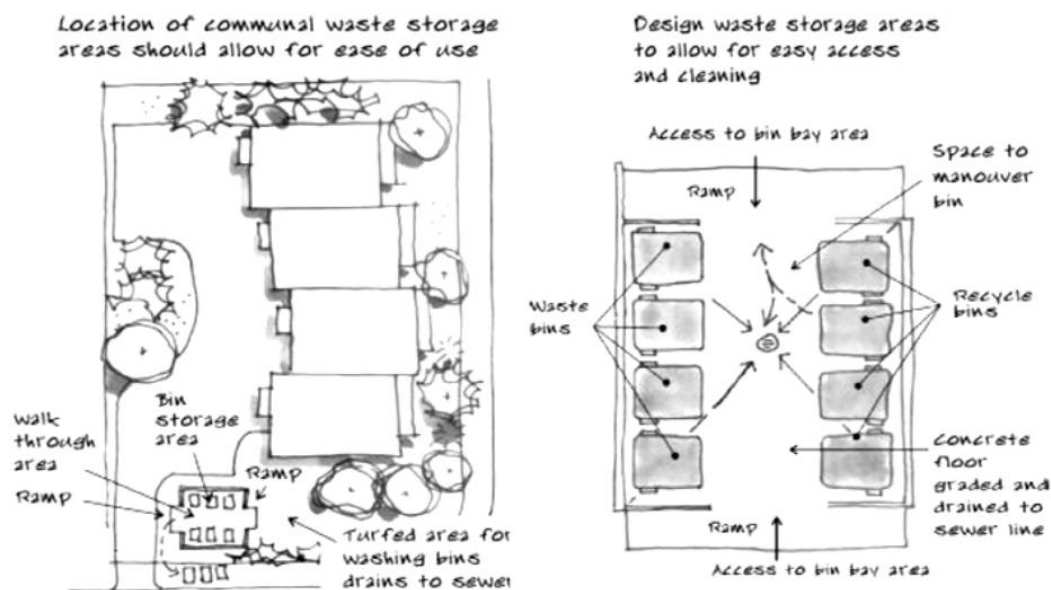
- i. the number of bins would not fit comfortably on the street frontage, or where placement of bins along the nature strip would have a detrimental effect on residential amenity, or
 - ii. where the characteristics of the site restrict or impede access to the collection site.
- 4. Communal waste storage areas must be sufficient in size to accommodate all required waste bins associated with the development. This is to be achieved through the provision of a waste storage area either at ground level or within the basement footprint of the development which:
 - iii. provides direct and convenient access for the occupants of the development
 - iv. allows for the safe and direct transfer of all waste bins from the waste bin storage area to the collection point;
 - v. does not impact the amenity of occupants within and adjoining the development in relation to visual amenity, noise and odour;
 - vi. does not interfere with the car parking (on or off-street), driveways, footpaths, landscaping and any existing trees and vegetation.
 - vii. the waste bin storage area is to be designed in accordance with Section 3.1 of this chapter.
 - viii. swept paths demonstrating adequate manoeuvring area are to be provided with the application.

Note: The *Protection of the Environment Legislation Amendment (FOGO Recycling) Act 2025* mandates the collection of FOGO waste from residential development by 1 July 2030.

The size and dimensions of communal waste storage areas may need to be increased to accommodate the storage of FOGO bins. Council's Guidelines for Waste Infrastructure provides further details, including design guidance on how to accommodate FOGO bins.

Applicants are encouraged to design for FOGO to avoid the need to retrofit developments.

Figure 2 Communal waste storage area location layout



5. Where the waste storage area will be secured, the locking mechanism installed must be an Abloy system employed by Council. The installation of the locking system and the supply of keys will be at the developer's cost. Refer to Council's Guidelines for Waste Infrastructure for further operational details.
6. In determining the size and number of the waste bins, Council will have regard to the need for either on-site access by collection vehicles or the requirement for bins to be wheeled to the collection point for collection by a contractor. If transferred to the street for collection, the body corporate or a caretaker must be responsible for the movement of bins to their collection point and their subsequent return.
7. Where onsite collection is required to service the development, adequate and safe access must be provided for Council's Standard Waste Collection Vehicles and waste collection staff as follows:
 - i. The site must be designed to allow collection vehicles to enter and exit the site in a forward direction with limited manoeuvring and reversing on-site.
 - ii. The route of travel (including vehicle manoeuvring areas) for the waste collection vehicle to the collection point is to satisfy the typical dimensions of heavy rigid vehicle. This also includes adequate vehicle

clearance for the vehicle. Australian Standard AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities provides typical dimensions, turning circles and clearance heights.

- iii. The route of travel for the waste vehicle is to be adequately surfaced and of sufficient strength to support the waste collection vehicle.
 - iv. The grades of entry and exit ramps must not exceed the capabilities of the waste collection vehicle and are to comply with AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.
 - v. The waste collection point and parking area for the waste vehicle is to be clearly nominated with dimensions on the site plan. The collection point is to be of sufficient space to accommodate and safely manoeuvre all required waste bins.
 - vi. Access to the nominated waste collection point for the development is to be designed to ensure that Council's standard waste vehicle can safely access and manoeuvre within the site. Typical dimensions (and turning circles) for a heavy rigid vehicle are provided within AS 2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.
8. Where onsite collection is not possible because of topographic or access constraints, and/or restrictive site dimensions, adequate arrangements need to be made for the convenient, safe and direct access between the waste storage room and the collection point. These arrangements are recommended to be discussed at a pre-lodgement meeting with Council.
9. For developments where onsite collection is required or where Council collectors are required to enter a site for the purpose of waste collection services, an agreement will be required to be entered into with Council. This agreement is to be entered into with Council giving power and authority to Council to enter the; and for the purpose of waste services. Council is also to be provided with indemnity against any future claims for damage and loss.

3.4 Boarding houses, co-living housing and group homes

Controls

1. Applications for boarding houses, co-living housing and group homes must comply with Part B of Council's Guidelines for Waste Infrastructure.
2. Where an application proposes a development with 3-storeys or more, the controls in section 3.5 of this chapter apply and must be complied with.

3.5 Residential flat buildings

Controls

1. Applications for residential flat buildings must comply with Part C of Council's Guidelines for Waste Infrastructure.
2. Waste storage and collection infrastructure must be designed in accordance with Part C of Council's Guidelines for Waste Infrastructure.
3. Onsite collection is required to service the development. Adequate and safe access must be provided for Council's Standard Waste Collection Vehicles and waste collection in accordance with Council's Guidelines for Waste Infrastructure, and the following:
 - i. The route of travel must be designed to allow collection vehicles to enter and exit the site in a forward direction with limited manoeuvring and reversing on-site.
 - ii. The route of travel (including vehicle manoeuvring areas) for the waste collection point is to satisfy the typical dimensions of heavy rigid vehicle. This also includes adequate vehicle clearance for the vehicle. Australian Standard AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities provides typical dimensions and turning circles.
 - iii. The route of travel for the waste vehicle is to be adequately surfaced and of sufficient strength to support the waste collection vehicle.
 - iv. The grades of entry and exit ramps must not exceed the capabilities of the waste collection vehicle and are to comply with AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.

- v. The waste collection point and parking area for the waste vehicle is to be clearly nominated with dimensions on the site plan. The collection point is to be of sufficient space to accommodate and safely manoeuvre all required waste bins.
 - vi. Access to the nominated waste collection point for the development is to be designed to ensure that Council's standard waste vehicle can safely access and manoeuvre within the site. Typical dimensions (and turning circles) for a heavy rigid vehicle are provided within AS 2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.
4. A waste storage area must be provided and located within the basement footprint of the development. For larger developments, multiple storage areas may be required. The storage area is to be sufficient in size to accommodate all required bins associated with the development. The following matters need to be addressed:
- i. The bin storage area is to be designed in accordance with Section 3.1 of this Chapter.
 - ii. Additional storage space for bulky items is to be provided for the development.
 - iii. Swept paths demonstrating adequate manoeuvring area are to be provided with the application.
5. Developments comprising 3 or more storeys are required to provide an integrated waste chute system that:
- i. provides a separate chute for both residual (red bins) and recyclables (yellow bins)
 - ii. provides waste disposal points on each residential level of the development located within a high trafficked area for residential use and close to the central elevator core
 - iii. larger recyclable goods are to be placed in a separate location identified by the strata management for collection
 - iv. the chute is designed to minimise noise and fire risk is reduced.

- v. the chute is completely enclosed and fire-rated and comply with the BCA.
 - vi. the chute is to terminate in a garbage and recycling room and discharge directly into a receptacle.
 - vii. the waste chute service room must be located directly under where the chute terminates. The room will need to accommodate the entire fleet of bins allocated to the development.
 - viii. A separate waste chute room located in the basement will need to accommodate the entire fleet of bins allocated to the development and supporting infrastructure in accordance with Part C of Council's Guidelines for Waste Infrastructure
 - ix. A site caretaker/manager will be required to transfer all bins from the bin storage room to the collection room located on ground floor.
6. Council may consider an alternative solution to the waste chute system for developments comprising three or more storeys if the applicant can demonstrate that:
- i. the alternative system provides a convenient method for the transfer of waste to a centralised location within the basement/ground floor
 - ii. adequate room is provided to cater for the storage and easy access to all waste bins required for the size of the proposed development
 - iii. residents are not required to walk to the ground floor with waste and dispose of the waste within designated bins.
7. A waste services room is to be provided so that:
- i. it is accessible for residents on each residential level of the development. The waste services room will include the access to the residual and recyclable chute with provisions for cardboard storage
 - ii. the maximum travel distance from any dwelling to the waste services room is not to exceed 75m

- iii. the waste service room must be of adequate size to accommodate the required access to chutes or waste infrastructure assigned to the development
 - iv. the room is to be designed to accommodate waste generation rates projected for the development.
8. The onsite collection point is to be clearly nominated on the site plan which accompanies the development application. The collection point is to only temporarily store waste bins so that they can be serviced. The waste bin holding area is to be located fully within the development site. Consideration will be given to multiple waste bin holding areas for larger developments. The collection point is to be designed so that:
- i. it is of sufficient size to accommodate all required waste bins for the development
 - ii. it is located at ground level away from pedestrian entrances of the development and habitable windows (including both the development and adjoining dwellings)
 - iii. It is to be clearly separated from car parking bays (on or off street), footpaths and landscaped areas
 - iv. The bin-carting route is to ensure that bin transfer complies with the requirements of Work Health and Safety legislation
 - v. The bin-carting route is to be:
 - direct and as short as possible
 - solid, concrete and non-slip
 - paved and be a minimum of 2m wide
 - free from obstructions and not require bins to be carried over any steps
 - a maximum of 75m in length and a maximum grade of 7%
 - For larger bins (660L and 1100L) the maximum length of the route of travel is 10m.
9. Where on-site collection is not possible because of topographic or access constraints, and/or restrictive site dimensions, adequate

arrangements need to be made for the convenient, safe and direct access between the waste storage room and the collection point. These arrangements are recommended to be discussed at a pre-lodgement meeting with Council.

10. For developments where on-site collection is required or where Council collectors are required to enter a site for the purpose of waste collection services, an agreement will be required to be entered into with Council. This agreement is to be entered into with Council giving power and authority to Council to enter the site; and for the purpose of waste services. Council is also to be provided with indemnity against any future claims for damage and loss.
11. A separate area shall be provided for the storage and collection of bulky waste (such as old cardboard boxes) and old or discarded furniture/appliances. The sizing of the bulky waste area needs to be capable of holding the bulky waste generated from the development between scheduled pickups. The bulky waste area needs to be located near to the on-site loading bay).
12. Council will consider alternate and innovative waste management systems for high density developments which deliver sound town planning and environmental outcomes for the development and broader community. The applicant is encouraged to discuss innovative solutions with Council's Waste Management team and during Council's pre-lodgement meeting service.

Note: The *Protection of the Environment Legislation Amendment (FOGO Recycling) Act 2025* mandates the collection of FOGO waste from residential development by 1 July 2030.

Council's Guidelines for Waste Infrastructure provides further details on how FOGO can be considered to ensure buildings are future proofed to accommodate FOGO and to minimise the need to retrofit buildings. Applicants are encouraged to design for FOGO to avoid the need to retrofit developments.

4. Mixed use development

Controls

1. Applications for mixed use development must comply with the provisions in Part C of Council's Guidelines for Waste Infrastructure.
2. A residential component of a mixed use development is to comply with the controls in Sections 3.1 and 3.5 of this chapter.
3. Commercial, industrial or non-residential components of a mixed use development must comply with Section 5 of this chapter.
4. A residential component of a mixed use development must provide separate and enclosed waste and recycling storage and collection facilities for residential and non-residential tenancies located adjacent to the truck loading bay.

5. Industrial, commercial and non-residential

Controls

1. Applications for industrial, commercial and non-residential development must comply with Part D of Council's Guidelines for Waste Infrastructure. Part E of the Guidelines also provides supporting information on automated waste infrastructure and should be referred to.
2. Building comprising 3 or more storeys and not containing dwellings, a suitable system for the interim storage and transportation of waste and recyclables from each storey to the waste storage/collection area is to be integrated within the building's design.
3. Waste and recycling storage and collection areas shall be:
 - i. flexible in their design so as to allow for future changes in the operation, tenancies and uses
 - ii. located away from primary street frontages, where applicable
 - iii. suitably screened from public areas so as to reduce the impacts of noise, odour and visual amenity

- iv. designed and located to consider possible traffic hazards (pedestrian/vehicular) likely to be caused by the storage and collection of waste.
4. The following features shall be considered in the design of waste storage and collection areas:
- i. dry recyclables including containers, paper, cardboard and toners for printers and photocopiers should be separated from other waste, for recycling
 - ii. food scraps should be placed in specialised containment bins and collected on a regular basis (particularly where large volumes of perishable wastes are generated)
 - iii. refrigerated garbage rooms should be provided where there are large quantities of perishable wastes and infrequent collections
 - iv. clinical or hazardous and liquid waste should be placed in specialised containment bins and collected by specialised services.
5. Grease traps must be provided where there is a likelihood of liquid waste entering the drainage systems (contact Sydney Water to obtain trade waste requirements).
6. Communal storage/collection facilities are recommended where the design makes it difficult for all tenants to have ready access to a collection point, or the site characteristics restrict vehicle entry.
7. Where a communal facility exists, each tenant should have a designated area which is clearly signposted.
8. Should a collection vehicle be required to enter the property, the driveway and manoeuvring area must be suitable for a collection vehicle in terms of both its strength and design.
9. The system for waste management must be compatible with the collection service(s) to be used whether Council or private contractor.
10. Swept paths demonstrating adequate manoeuvring area are to be provided with the application.

5.1 Lifting the bar

The following represent some ways in which applicants can demonstrate additional commitment to the development specific waste management controls expressed in this chapter. Demonstration of this commitment may lead to Council considering variation of development controls. Applications that vary the development controls listed in this section will need to demonstrate that the proposed development complies with the objectives relevant to the development controls it seeks to vary.

- Incorporate and install a Building Management System which monitors the ongoing sustainability measures of the building and its occupants, such that it monitors the amount of recyclable waste and other waste being generated/collected as well as the amount that is disposed for recycle/reuse or sent to landfill.
- Reduce the volume of demolition, construction and fit out waste, including excavation, going to landfill by 76%.

6. General Controls

Background

Waste minimisation needs to be an integral component of the design and construction phases of a development. Issues that should be considered early in the development process include:

- ensuring project management of the site includes minimising waste generation, requiring the appropriate storage and timely collection of waste materials, and maximising re-use or recycling of materials
- selecting materials to maximise re-use and recycling of existing materials
- Ensuring the right quantity of materials are delivered at the right time in the construction process to avoid damage and wastage, and returning unused materials
- considering the re-use and recycling of any new materials at the end of the development's life.

Significant reductions in waste to landfill and cost-savings can be made at the demolition, earthworks and/or construction stage of a development by implementing the waste management plan.

Objectives

To encourage waste avoidance and resource recovery through planning, re-use and recycling by:

- a) Improving project management of demolition or construction works to facilitate on-site source separation and appropriate collection of waste.
- b) Ensuring that developments are designed to incorporate waste minimisation measures by facilitating source separation on site, the storage and collection of wastes and recyclables and providing maximum opportunities to use recycled materials.
- c) Minimising the total material resources used and encouraging the selection and use of materials with low environmental impact over the lifecycle of the building.
- d) To ensure new developments are designed to maximise resource recovery through measures and features that promote waste avoidance, source separation and recycling.
- e) To ensure new developments incorporate waste storage and waste collection areas that are accessible, safe and convenient for both occupants and service providers.
- f) To promote measures which will ensure all waste streams are stored and handled appropriately to minimise adverse environmental, health and amenity impacts and which minimise risk to health and safety for all associated with waste collection and handling.
- g) To reduce illegal dumping through providing well designed and appropriate bulky waste storage areas within the development.

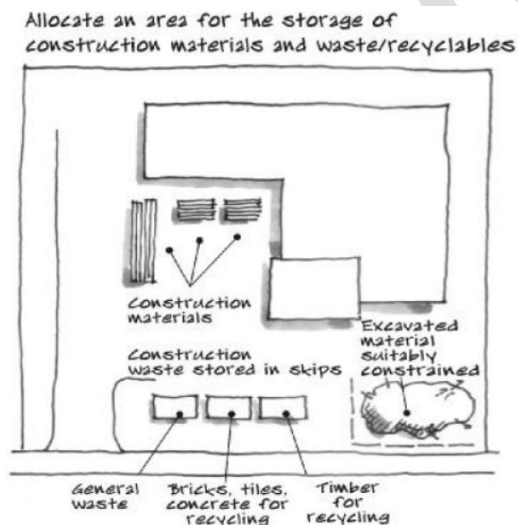
6.1 Site Management

Controls

1. Proposals involving demolition and/or construction (including earthworks) are to include a Waste Management Plan which addresses the following issues (in addition to the matters outlined in Section 2 of this chapter):
 - i. minimising site disturbance and eliminating unnecessary excavation
 - ii. Where applicable, stripping topsoil from areas subject to excavation and storing it on site for re-use
 - iii. identifying all waste likely to result from the works on site and opportunities for the reuse or recycling of materials
 - iv. Where construction is proposed, determining:
 - opportunities for the use of prefabricated components and recycled materials
 - approximate volumes of materials to be used and incorporating these volumes into a purchasing policy so that the correct quantities are purchased
 - delivery arrangements of materials so that materials are delivered 'as needed' to prevent the degradation of materials through weathering and moisture damage
 - opportunities to return excess materials to the supplier or manufacturer
 - v. considering the method of demolition to be utilised so that selective deconstruction is implemented, enabling effective recycling of materials
 - vi. Identifying the area(s) on site to be used for the storage of materials, separating the areas for recycling and disposal (giving consideration to access, slope, drainage, location of waterways, stormwater outlets and vegetation)

- vii. Ensuring that separated materials are to be kept uncontaminated to guarantee the highest possible reuse value
- viii. Considering where excess fill material will be disposed of, the quantity and quality of the excess material and the method of transport to be used
- ix. Identifying and providing measures to prevent the occurrence of windblown litter, dust and stormwater pollution
- x. Where applicable, ensuring that
 - Contractors are arranged for the transport, processing and disposal of waste and recycling
 - Evidence, such as weighbridge dockets and invoices for waste disposal or recycling services, is retained and available for presentation to Council Officers upon request

Figure 3 Identify areas on site for storage of materials, waste and recyclables



6.2 Selection of building materials

Controls

1. Applicants should select materials that maximise re-use and recycling of existing materials. Materials with low embodied energy properties and/or materials that have been salvaged/recycled for the construction/fit out of the development are encouraged.

Table 1 below identifies building materials that can be reused/recycled. Examples include concrete that utilises slag and fly ash content, structural and reinforced steel that uses recycled steel content and bulk insulation products that contain recycled content, such as recycled glass in glass-wool.

Table 1 Materials and their potential for reuse and recycling

Material	Reuse or recycling potential
Concrete	Reused for filling, levelling, or road base
Bricks	Can be cleaned for re-use or rendered over or crushed for use in landscaping and driveways
Roof tiles	Can be cleaned and reused or crushed for use in landscaping and driveways
Hardwood beams	Reused as floorboards, fencing or furniture or sent to second hand timber suppliers
Other timber	Reused as formwork, bridging, blocking and propping, mulching or sent to second hand timber suppliers
Doors, windows, fittings	Sent to second hand building suppliers
Glass	Reused as glazing or aggregate for concrete production
Synthetic rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Overburden	Power screened and used as top soil
Garden waste	Can be used for mulching, composting
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removed for recycling, returned to supplier
Excavated material	Reused on site or disposal to approved site
Plumbing and metal fittings	Recycled off-site

6.3 Design for waste minimisation

Controls

1. The design of developments shall incorporate principles on how waste can be minimised in the design by:
 - i. incorporating the use of modular components
 - ii. minimising excavation and fill (see the Land management section in the Environmental Chapter of this DCP)

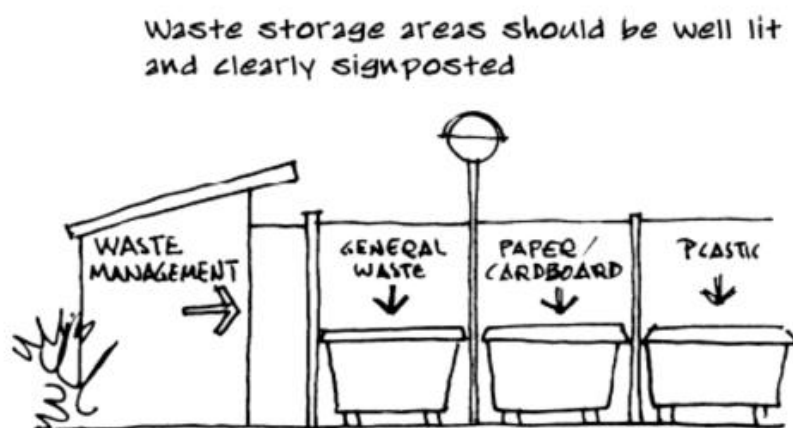
- iii. using prefabricated frames, trusses and cladding
- iv. using standard material sizes or negotiating with manufacturers for the supply of non-standard material sizes
- v. selecting materials that do not require finishes
- vi. grouping wet areas together to minimise the amount of pipe work required
- vii. implementing measures to prevent the occurrence of windblown litter, dust and stormwater pollution
- viii. incorporating existing trees/shrubs into the landscape plan
- ix. designing for de-construction
- x. designing waste storage areas complementing the development and the surrounding streetscape.

6.4 Management of waste storage and collection areas

Controls

1. Administrative arrangements for ongoing waste management must be provided, including signs.
2. Waste storage and/or collection areas (including individual containers) should be suitably signposted so as to ensure appropriate use.
3. The responsibility for the ongoing management of waste facilities must be determined prior to the commencement of construction work on a development.

Figure 4 Waste storage/collection areas



6.5 Lifting the bar

The following represent some ways in which applicants can demonstrate additional commitment to the general waste management controls expressed in this Plan.

Demonstration of this commitment may lead to Council considering variation of development controls. Applications that vary the development controls listed in this section will need to demonstrate that the proposed development complies with the objectives relevant to the development controls it seeks to vary.

- Ensure the design and fit out of the development is above the 4 star rating under Green Star or 4.5 star rating under the Australian Building Greenhouse Rating system, now part of the National Australian Built Environment Rating System (NABERS), depending on the type of development
- Reduce the use of timber from old growth forests, rainforests and forests/plantations which do not have certified environmentally responsible forest management practices. Applicants need to demonstrate that a significant percentage of the timber and composite timber products used in the building and construction works is from Forest Stewardship Council Certification, utilises reused or recycled timber or is specified using the Friends of the Earth 'Good Wood Guide' 9th Edition
- Reduce the volume of demolition, construction and fit out waste, including excavation, going to landfill by 76%.