



The following guidelines were created to assist development applicants with understanding the solid waste service requirements for new multiple residential developments and residential uses within mixed-use developments. The objectives of these guidelines are:

1. To ensure these essential site use facilities are thoughtfully incorporated into building and site design at the initial stages of design,
2. Facilities will fully accommodate anticipated recycling and garbage service needs for the development, and
3. Collection operations will function safely and effectively.

This document should be used with, and not in place of all applicable B.C. Building Codes and City Bylaws.

The primary goals for achieving functional on-site solid waste facilities include:

- ✓ Building and site design supports convenient access to recycling and garbage services.
- ✓ Adequate storage area is provided for the size and type of development, and type and frequency of collection services to be provided.
- ✓ Sufficient space and clearance are provided for service collection vehicles to conveniently access loading areas including required turn movements, clearance heights, and drive aisle widths to complete operations.
- ✓ Site design for anticipated operations minimizes impacts to:
 - entrances to parking and loading areas,
 - accessible routes of travel for pedestrians and cyclists through the site,
 - neighbouring properties, and
 - roadways including sidewalks, bikeways, and vehicle traffic movements.

Determining facility design, access and collection operations requirements:

1. Determine the type of service and anticipated collection provider.
2. Calculate the amount of space required for the type of development, number of units, and anticipated frequency of collection.
3. Review the design guidelines and Metro Vancouver resources for guidance on facility design, operations functionality, and access route requirements.
4. Develop and submit a **Solid Waste and Recycling Site Plan** as part of the development application design package.

Development Application Plan Drawing Checklist

Development application submissions should include a **Solid Waste and Recycling Site Plan** that addresses the key components for solid waste, recycling and organics storage design, in addition to access and operational requirements. The following must be provided:

- Type of solid waste service operation anticipated (i.e., City provided service, private waste hauler) and potential frequency of collection services.
- Type of solid waste storage facility (i.e., centralized, individual bin storage areas) based on size and type of development.
- Location and size of the solid waste facility in the building to accommodate the required number of carts for garbage, recycling, and organics.
- Distance between storage facility and loading area (set-out area) to be used on collection days.
- Identified accessible route of travel for building occupants to reach the solid waste storage facility.
- Dimensions for identified access route for collection vehicles including widths, heights and turning radii. Swept path diagrams may be requested for sites where on-site collection is required or where positioning vehicles are anticipated to be used.
- Identified movements of collection vehicle onto and through the site including anticipated movements of positioning vehicles (i.e., jitney trucks) to move bins to set-out locations or temporary staging area on collection day.

For sites where waste storage facilities are more than 55 m from loading area where collection operations occur, the plan must include:

- Location and size of the temporary staging area for interim storage of carts or dumpsters on collection day.

The information identified in the checklist is needed to understand functionality of the proposed building and site design to meet the needs for solid waste storage and collection vehicle operations.

A proponent may propose an alternative approach to the guidelines outlined, if rationale is provided for the proposed design and the proposal meets the primary goals for achieving functional on-site solid waste facilities and addresses any potential safety or access issues.

Policies and Resources

CITY OF NEW WESTMINSTER
(newwestcity.ca/bylaws)

[Engineering Fees and Rates Bylaw 7553, 2013](#)

[Solid Waste Regulation Bylaw 7634, 2014](#)

[Zoning Bylaw – General Regulations \(190\)](#)

[Development Permit Area Guidelines](#)

NEW WESTMINSTER RESOURCES
(newwestcity.ca/garbage_recycling)

[Cart Placement for Pick-up](#)

Contact:
Engineering Operations
604-526-4691
engops@newwestcity.ca

METRO VANCOUVER
(metrovancover.org > [Services > Solid Waste > About Solid Waste Services > Reports & Resources](#))

The following resources are available from Metro Vancouver:

[Guide to Estimate Recycling and Garbage Bins Required in a Multi-unit Building \(2015\)](#)




[Specifications for Recycling and Garbage Amenities in Multi-Family and Commercial Developments \(2015\)](#)



Service Delivery

New Westminster provides automated curbside collection for garbage, recycling and organics. The City service for garbage, recycling and organics is mandatory for single-detached properties. Recycling and organics by City services is also mandatory for multiple residential buildings. Multiple residential unit buildings may request garbage collection by the City. This request requires approval by Engineering Operations to ensure the site design meets cart storage and automated collection conditions.

Table 1: Typical solid waste delivery services and storage area considerations

	One and Two Residential & Some Multiple Residential Unit Sites	Multiple Residential Units (Townhouse, Infill, Low-rise buildings)	Residential Sites with high quantity of units & Mixed-use Sites (Residential Component)
 Garbage	City automated curbside collection for garbage.	May apply for City automated curbside collection ¹ OR private waste hauler.	Private waste hauler.
 Recycling	City automated curbside collection for recycling.	City automated curbside collection for recycling OR private waste hauler ² .	Private waste hauler.
 Organics	City automated curbside collection for food scraps.	City automated curbside collection for food scraps OR private waste hauler ²	Private waste hauler.
Storage area and set-out considerations:	Carts are stored on the property and set out at the curb/lane on collection day.	Review is required to ensure enough storage space is provided for the number of carts needed, AND there is enough set-out space for automated curbside collection. Space planning may determine a centralized solid waste storage area is needed, and/or use of dumpsters for garbage collection is desirable.	A centralized storage area is used for most large residential developments. Separate solid waste storage areas (i.e., residential, commercial) is required for mixed-use sites.

1 Property owner/resident of multiple residential developments may apply for the City's Garbage Collection Program. Agreement is subject to approval by Director of Engineer under section 3.2 of the Solid Waste Regulation Bylaw and the site must meet specific storage space and collection operation conditions. Engineering Fees and Rates apply.


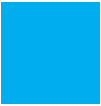
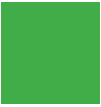
2 Upon application to the City for an exemption to allow property owners to use a private waste hauler for collection of recycling and organics.

Carts Requirements

Garbage, recycling and organics carts are provided by the City for the properties that qualify for and are using the City’s automated curbside collection services. Table 2 outlines the typical number of carts by program and number of dwelling units. The size and quantity of carts may increase depending on usage of the residents. Additional carts can be requested from the City, subject to service charges. Properties that use private waste hauling services are provided carts by their service provider.

Additional information on estimating recycling and garbage needs for large residential developments is available in Metro Vancouver’s [Guide to Estimate Recycling and Garbage Bins Required in a Multi-unit Building \(2015\)](#).

Table 2: Typical carts requirements by number of units

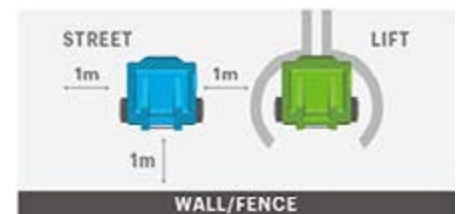
	One and Two Residential	Multiple Residential Units	Residential sites with high quantity of units & Mixed-use sites
 Garbage	One 120 L or 240 L cart per service charge	One 240 L cart per 2 dwelling units, OR one dumpster	Carts, dumpsters and/or compactors as per service provider.
 Recycling	One 120 L or 240 L cart per service charge	Three 360 L carts per 12 dwelling units	Carts, dumpsters and/or compactors as per service provider.
 Organics	One 120 L or 240 L cart per service charge	One 240 L carts per 49 dwelling units	Carts as per service provider.

Conditions for Automated Curbside Collection

To be serviced by the City’s automated curbside collection program, several conditions must be met:

- Sufficient storage space to store the minimum number of carts (e.g., three 240 L) within the property for the type and frequency of collection service provided.
- Sufficient set-out space is available to place the carts at the curb or off the lane on collection days while maintaining:
 - ✓ 6 m wide lane/street width
 - ✓ 1 m clear space on all sides of each cart including between cart and any wall, fence, poles, or parked cars.
 - ✓ 3 m clear space above each cart

Due to site constraints and/or limited space to set-out carts on collection day, not all multiple residential properties can be serviced by automated curbside collection vehicles. If the conditions cannot be met, a centralized storage facility with shared carts or private waste collection service will be required to service the site.



Examples of cart set-out clearances.

Definitions

“Centralized solid waste facility” means designated area where shared carts are located and accessible by all occupants of a building.

“Collection cart” means a garbage, recyclable materials, yard trimmings and food scraps container identified for its appropriate use and equal to or less than 360 L in volume, specially designed for automated collection vehicles.

“Curbside Collection” means the City’s regularly scheduled automated collection of recyclable material or garbage from a residential dwelling unit fronting the public or private street or lane.

“Loading Area” means area used for collection vehicles to service carts or dumpsters on collection day.

“Multiple Residential Unit” means a building or portion of a building containing three or more dwelling units, but in the case of mixed used development, may contain any number of dwelling units so long as it complies with regulation of the specific zone. (as defined in the Solid Waste Regulation Bylaw 7634, 2014)

“Solid Waste” means garbage, food scraps, yard trimmings and recyclable materials.

“Temporary Staging Area” means an on-site space that is used for the interim placement of carts or dumpsters on collection days.

Solid Waste Storage Facility and Access Route Design Guidelines

The following tables outline guidelines for the location and design of solid waste storage facilities, on-site collection and loading areas, access routes for waste trucks, and temporary staging areas used on collection day.

It is important that components 1 to 4 are considered during the site and building design phase in order to ensure waste storage facilities are accessible, functional for building occupants and waste service providers, and meet space requirements for size and type of development.

1 Design the Storage/Collection Area

ELEMENT	DESIGN GUIDELINES												
Size	<ul style="list-style-type: none"> » Sufficiently sized to accommodate required number and type of garbage, recycling, and organics containers for the uses/users, size of development, and type and frequency of collection services. » Configured to allow each storage container to be individually accessible so as to be removed and replaced without having to take out other containers. 												
Location	<ul style="list-style-type: none"> » Located at-grade or ground level. If an at-grade facility is not possible, the facility should be placed no more than one level down from grade. » Located adjacent to the area where collection vehicles are allowed to access and collection operations are to occur, or within 55 m of loading area used on collection day. If the solid waste storage facility is more than 55 m from the designated loading area, a temporary staging area should be provided to place carts on collection days. » Located in an area such that noise and odour impacts to occupants and neighbouring developments are minimized. 												
Access for occupants	<ul style="list-style-type: none"> » Conveniently located and fully accessible to <u>all</u> occupants of the development and collection service operators. 												
Security and Features	<ul style="list-style-type: none"> » Sufficiently secure to minimize pest and wildlife access, and protected from unlawful entry. » Well lit, both as a security measure and for ease of access and use. » Have access to a washing area with a sanitary sewer drain and water supply. 												
Typical Collection Cart Sizes	<table border="1"> <tbody> <tr> <td>120 L</td> <td>Width: 0.48 m</td> <td>Length: 0.55 m</td> <td>Height: 0.95 m</td> </tr> <tr> <td>240 L</td> <td>Width: 0.62 m</td> <td>Length: 0.70 m</td> <td>Height: 1.10 m</td> </tr> <tr> <td>360 L</td> <td>Width: 0.64 m</td> <td>Length: 0.88 m</td> <td>Height: 1.13 m</td> </tr> </tbody> </table> <p>Sizes provided are typical and may vary depending on service provider.</p>	120 L	Width: 0.48 m	Length: 0.55 m	Height: 0.95 m	240 L	Width: 0.62 m	Length: 0.70 m	Height: 1.10 m	360 L	Width: 0.64 m	Length: 0.88 m	Height: 1.13 m
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2 Design the Collection/Loading Area

On-site loading areas are where service vehicles will stop to empty carts on collection day. It is recommended that this collection occurs on the property if the development has centralized storage facilities, a large number of carts or dumpsters, and enough space to accommodate the function.

With automated collection and the mix of containers used, loading and collection areas must be able to accommodate a mix of truck sizes and designs. Trucks must have plenty of height clearances and room for turning.

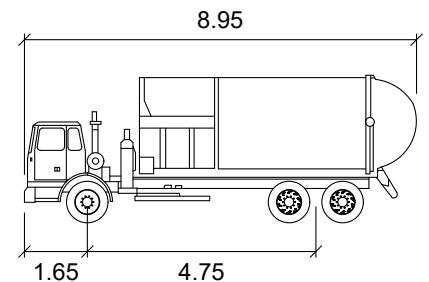
Note: Properties serviced by the City’s automated collection service, will stage carts on the street or off the lane as long as there is enough space to properly set-out the number of carts on collection day.

ELEMENT	DESIGN GUIDELINES
Vehicle Access	» Located such that service vehicles are not required to reverse onto a public road. If reversing is the only option, it must not compromise building structure, traffic operations and safety or pedestrian and cyclist safety.
Size	» Should accommodate the number of containers used in the building.
Clearance	» Maintain a minimum dimension: Width: 6.0 m Length: 15.0 m Height: 7.5 m » All clearances are to be unencumbered and unrestricted by fixtures such as sprinkler systems, meters, surveillance cameras, mirrors, landscaping, etc.
Surface	» Accommodate a 28-tonne collection vehicle.

Typical Collection Vehicles

New Westminster uses a side loading vehicle for automated curbside collection of garbage, recycling and organic materials. The City truck size is identified below. Collection vehicles by private services will have different sizes and dimensions. If the site is not intended to be serviced by City collection vehicles, then private collection vehicle dimensions must be applied.

ELEMENT	DESIGN GUIDELINES
City Vehicle for Automated Collection Service	<p>Size: SU9/medium Size</p> <p>Loading: Side</p> <p>Length: 8.95 m</p> <p>Width: 2.44 m</p> <p>Height: 3.5 m</p>
Privately Contracted Trucks (Typical)	<p>Size: Varies</p> <p>Loading: Front/Top/Back/Side</p> <p>Length: 10.0 to 14.0 m</p> <p>Width: 2.44 to 4.0 m</p> <p>Height: 3.5 to 6.0 m</p>



Please consult a private hauler to confirm their vehicle requirements.

3 Design the Service Vehicle Access Route

A service vehicle access route will need to be identified where service vehicles are expected to access an on-site loading area where carts or dumpsters will be emptied and/or where positioning vehicles (e.g., jitney trucks) are to be used to move carts or dumpsters from the solid waste facility to the temporary staging area on collection days.

ELEMENT	DESIGN GUIDELINES
Site Access and Circulation	<ul style="list-style-type: none"> » Configured to allow collection vehicles to enter the site and leave in a forward motion. » Situated to minimize interface with pedestrian and cyclist routes of travel, vehicle access to the building's main parking area, including underground parkade and visitor parking areas. » Have a minimum width of 6 m at the site access points. » Configured to accommodate movement and operations of collection service provider vehicles and/or positioning vehicles (i.e., jitney trucks)
Slope	<ul style="list-style-type: none"> » Ensure the slope along the length of the access route does not exceed 6%.
Vehicle Clearances	<ul style="list-style-type: none"> » Maintain minimum dimensions throughout the entire access route: Height: 4.5 m Width: 4.5 m » Have a minimum turning radius of 12.5 m throughout entire access route.

4 Design the Temporary Staging Area

A temporary staging area is required on the property when the solid waste facility is more than 55 m from the designated loading area used on collection day.

The temporary staging area is where carts and dumpsters will be placed on collection day reducing the distance operators travel to bring carts or dumpsters to the vehicle to empty. The staging area reduces the length of trips by the operator and time needed to complete operations. Having a temporary staging area also helps ensure carts do not block sidewalks, driveways, parking spaces, or vehicle and bicycle lanes.

ELEMENT	DESIGN GUIDELINES
Size	<ul style="list-style-type: none"> » Have a foot print equal to at least 50% of the garbage and recycling storage space allocations, or sized to accommodate maximum number of carts serviced by type and collection frequency.
Location	<ul style="list-style-type: none"> » Located on-site and does not encroach or impede sidewalks, on-site pedestrian or cycling pathways, or driving areas. » Located at ground level within 55 m of the loading area to be used on collection day.
Slope	<ul style="list-style-type: none"> » Have a level and hard surface floor. » Connected to the loading area by a level grade or continuous slope of no more than 6%.