

Advisory Committee of Council Staff Report



To Accessibility Advisory Committee
Date Tuesday, April 16, 2024
Subject **Downtown Waste Project**

Recommendation

1. That Staff proceed with the Downtown Waste Project Design Guideline using the universal design and accessibility considerations summarized in this report; or
 2. That Staff add to the Downtown Waste Project Design Guideline consideration for the following universal design and accessibility requirements before proceeding: (list to be drafted during meeting)
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Executive Summary

Purpose of Report

Updated waste infrastructure is being planned as part of the Downtown Infrastructure Renewal Program (DTIRP). Through the last [Solid Waste Management Master Plan update \(2021\)](#) and subsequent public engagement in 2023 under the [Downtown Waste Project](#), staff have identified preferred solutions for public space containers to service the pedestrian realm and for communal containers to serve residential, commercial, and institutional properties. A Downtown Waste Project Design Guideline is being prepared which further details specifications for public space containers and communal containers, including accessibility specifications from the City's [Facility Accessibility Design Manual \(2015\)](#) (FADM). The purpose of this report is to present relevant aspects from the Downtown Waste Project Design Guideline to the AAC for feedback.

Key Findings

- General requirements for both new public space containers and new communal containers, as related to accessibility, include uniformity of each type of container, consistency of order of containers, space to approach or travel past containers, limits on protrusion, height of openings, controls, and handles, ability to operate with one hand and limited mobility, visibility and legibility of markings, including Braille, contrast and glare requirements for finishes, location not interfering with accessible parking or transit stops, spacing standards to provide adequate access to all properties, adequate street lighting, and regular maintenance.
- Communal containers have additional accessibility-related requirements around temporary barriers during emptying, textures and transitions of the ground surface, electronic access, and ease of use for its access door.

- Public space containers have additional accessibility-related requirements around opening size, shape, position, orientation, and a requirement to not have openings covered.

Strategic Plan Alignment

This report supports objective 12, Make downtown a vibrant place for everyone, within the People and Economy theme by providing guidance on how to best prepare downtown Guelph to manage waste for the coming decades within the context of the overall DTIRP, including by making streetscapes more accessible reducing clutter due to cart and public space container set out.

This report supports the Environment theme by implementing waste management systems that improve the local environment through reducing litter, odour, and pests and have positive lifecycle impacts through waste elimination, reduction, and diversion.

Financial Implications

Financial implications are being developed and will be presented to Council in a future Staff Report.

Report

Downtown Collection Area

Guelph's Downtown Collection Area is roughly the triangle created by Norfolk Street, Woolwich Street, and the Metrolinx rail easement; a map is provided in Attachment 1. Within this area, City waste collection is provided 6 days per week and properties are permitted to use either waste carts or shared public space containers. Both carts and public space containers are collected by an automated collection truck which lifts and empties each container. Public space containers remain within the pedestrian realm for use at all times while carts are required by bylaw to be removed from downtown streets by 10:30 a.m. and set out no earlier than 5:00 p.m. Figure 1 and 2 below depict the existing carts and public space containers, respectively.

Figure 1 Example of **existing** carts



Figure 2 Example of **existing** public space containers



The Downtown Collection Area has multiple issues with waste, including crowding of sidewalks with waste containers and overflowing waste, pests, odours, poor aesthetics, improper sorting, and poor waste diversion performance. Through the [Solid Waste Management Master Plan Downtown Service review \(2021\)](#), it was recommended that waste from the pedestrian realm and from properties should be managed separately. With further refinement through the [Downtown Waste Project \(2023\)](#), communal underground containers were identified as the preferred option for waste from properties. Staff expect to bring recommendations on new public space containers and communal containers to Council in June 2024 to allow waste management infrastructure to be integrated with the overall Downtown Infrastructure Renewal Program (DTIRP).

The DTIRP includes upgrades to roads, sewers, watermains, sidewalks, cycling facilities, and the streetscape within a portion of the Downtown Secondary Plan area that includes the Downtown Collection Area. The program will take place over 2026 to 2036 or later and will be administered through multiple contracts over this time, each covering a section of street. For example, the first sections planned for construction are Wyndham Street North from Carden Street to north of Cork Street, Wyndham Street North from St. George's Square to Woolwich Street, and Quebec Street. The contracts for each section will include the design and construction of waste management infrastructure along with the other upgrades.

Design Guideline

The Downtown Waste Project Design Guideline is under development to document the requirements for new public space containers and communal containers during the design and construction phases of the DTIRP. The guideline will be used to determine which products are selected and how they may be sited within the new streetscapes. During the design and construction phases of the DTIRP, the accessibility considerations in the Downtown Waste Guideline, the FADM, and other best practices will be implemented by designers and contractors. As a guideline, the Downtown Waste Project Design Guideline does not cover detailed design for specific situations, rather it sets the requirements that should be incorporated during later design and construction work. In highly constrained situations where multiple design requirements conflict, it may not be possible to fully implement the Downtown Waste Project Design Guideline as originally drafted and designers may need to find other ways of meeting accessibility and universal design needs. Designers would still be mandated to comply with the FADM and AODA and solutions would be developed in consultation with the City's Accessibility staff as needed.

Accessibility and universal design-related requirements have been summarized in this report. The purpose of this report is to discuss these requirements and capture feedback that will help the City implement accessible and universal design for waste containers during the DTIRP.

The Guidelines begin with General Requirements, then discuss aspects specific to communal containers and public space containers, respectively.

General requirements

- **Three streams** available at each container location, with consistent order and identifying markings.

- **Fixed locations** (while public space containers may be detached and moved from time to time, communal containers with underground components cannot be).
- **Uniformity** of products to provide consistent user experience.
- **Distribution:** Approximately 20 clusters of communal containers are envisioned, targeting access within 50-100 metres of each property. An additional approximately 50 more public space containers are envisioned targeting access to either type of container within 25-50 metres of any place (the City is seeking communal containers that control access for bagged waste and large items from properties while permitting small items from the pedestrian realm). Figure 3 provides a visualization of this density.
- **Adjacent features:** Containers do not interfere with transit stops, commonly used mobility transit locations, or accessible parking spots. A list of common mobility transit locations (e.g., Norfolk Medical Centre) listed in the Design Guideline is included as Attachment 2. For accessible parking spots, containers would not be placed in within 2 metres of an accessible parking spot as required by the FADM.
- **Visibility:** Provide adequate street lighting and sightlines around containers
- **Maintenance:** Containers will be cleaned and maintained following manufacturer’s recommendations and information about how to make a maintenance request will be posted on or near containers.
- **Accessibility:** Table 1 summarizes relevant guidance from the FADM.

Figure 3 Illustration of proposed density of containers. Locations shown are to demonstrate spacing only and are not proposed locations of any containers.

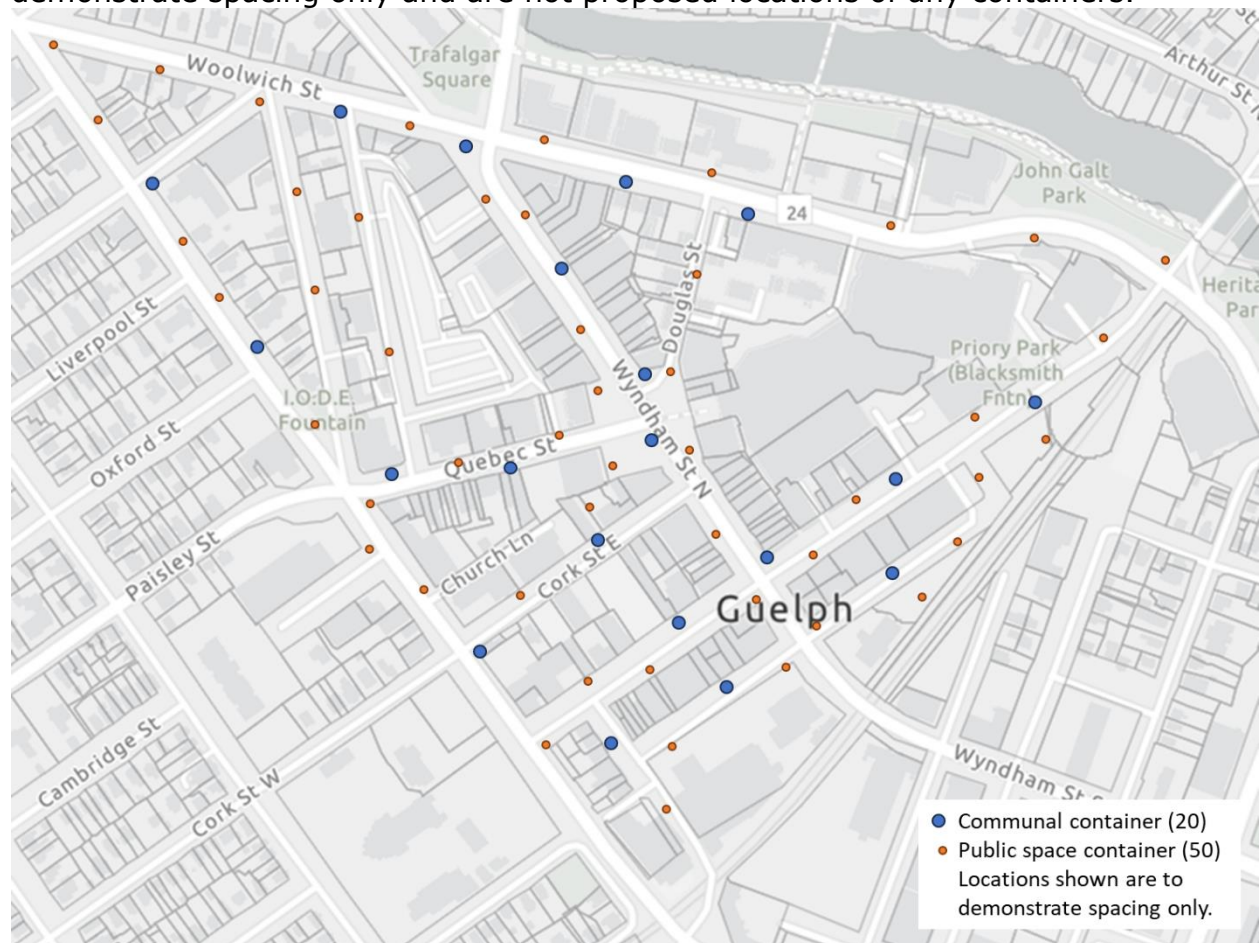


Table 1 FADM guidance

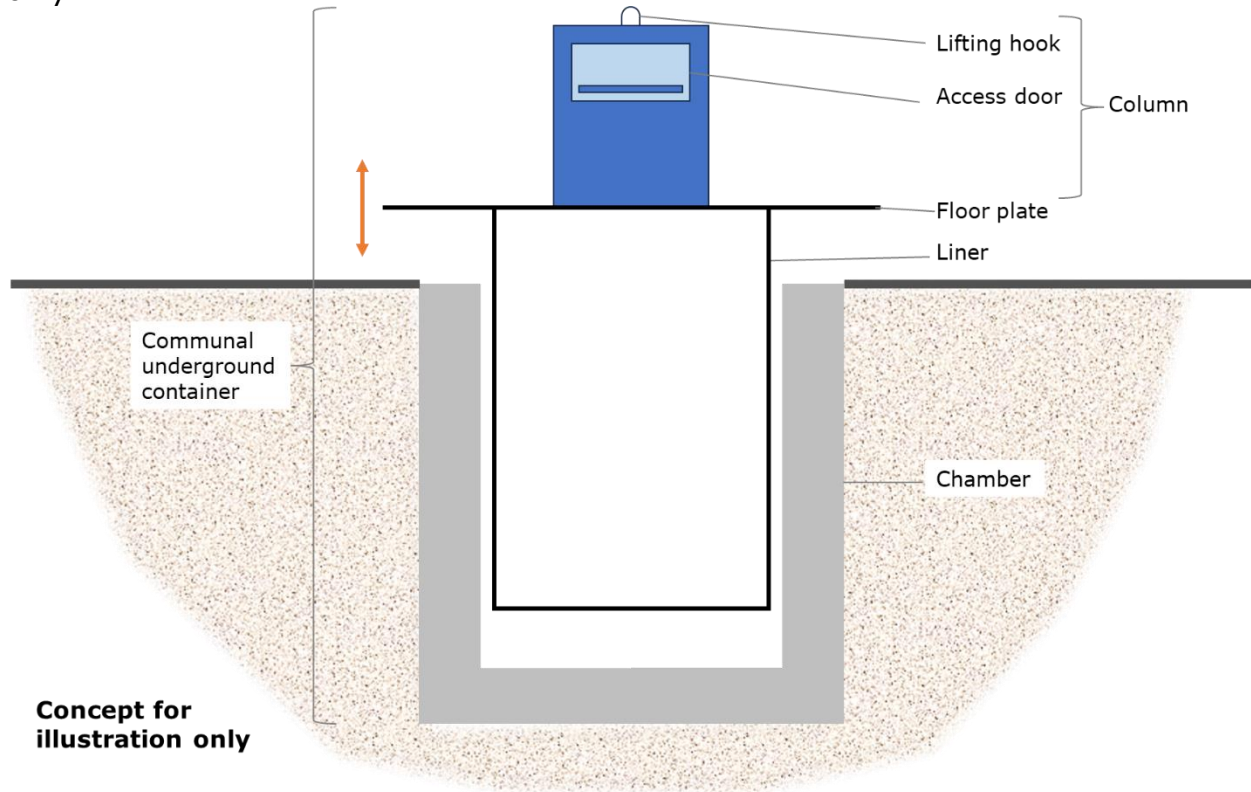
Consideration	2015 FADM reference	2015 FADM requirement/ interpretation
Approach	4.1.1	1.37 metres of space along the front of the container for a parallel approach to minimize reach requirements. Users should not have to reach more than 25.5 centimetres to access handles, openings, or other interfaces
Floor transitions	4.1.2	Vertical transitions from surrounding paving to floor plate or other surfaces must be less than 6 millimetres
Floor textures	4.1.2	Any textured floor plate must not have spaces greater than 13 millimetres wide in one direction (that could entrap a cane or wheel), must be oriented with the long dimension perpendicular to dominant direction of travel
Protrusions	4.1.3	Containers, including temporary barriers, must be cane-detectable by having their leading edges located less than 68 centimetres above the ground. If leading edges are higher they must protrude no more than 30 centimetres into pedestrian areas
Clearances	4.1.4	1.83 metres of clearance around vertical elements in the directions where possible and at least 1.22 metres in all cases
User controls	4.4.2	<p>Openings, handles, and other controls should be between 90 and 110 centimetres from the ground.</p> <p>In general, containers should be designed to be operable using one hand in a closed fist (i.e., no requirement for fine finger control, tight grasping, pinching, or twisting of the wrist).</p> <p>If a foot pedal is available, it should not be the sole method of opening.</p> <p>Access door must be able to remain open on its own during use (i.e., not require a second hand to hold it open).</p> <p>For public space containers, free, front-facing openings should be provided (i.e., no flaps or access doors).</p>

Consideration	2015 FADM reference	2015 FADM requirement/ interpretation
Visibility and legibility	4.4.2, 4.4.7	<p>A combination of colours, symbols, and words should be used to mark the use of each container and control required to use it. Lettering should be clear and legible.</p> <p>Controls and handles should include tactile markings and be coloured in contrast to their surroundings to allow easier identification and differentiation.</p> <p>Grade 2 Braille should be included on public space containers and communal containers as close to the 1.2 to 1.5 metre specification for room signage as practical. For example, this may be above the openings on a public space container.</p> <p>Screens should be lit at least 100 lux.</p>
Finishes	4.1.2	<p>Finishes should achieve colour contrast with the environment and with handles and controls. Finishes must not create glare.</p>
Parking	4.3.12	<p>Allow for 2 metres of clearance around accessible parallel parking spots and not encroach upon access aisles provided for other types of accessible parking.</p>
Transit accessibility	4.5.10	<p>Do not encroach on transit stops or shelters, including 1.22 metres of clearance around shelters.</p>

Communal collection container requirements

Figure 4 depicts an example of a communal underground container (note: not all models have all features shown).

Figure 4 Diagram of communal underground container. Concept for illustration only.



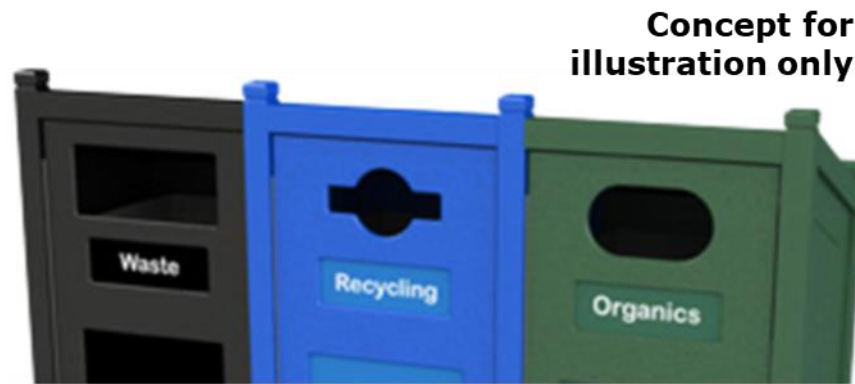
The following requirements also apply for communal containers:

- **Temporary barriers during emptying:** A temporary fence is preferred to protect the open chamber during emptying and a cane-detectable barrier is preferred to delineate the work area during emptying.
- **Textures and transitions:** The ground surface of the floor plate should meet the FADM requirements for floor transitions and textures.
- **Electronic access:** Containers should be lockable with electronic access cards/fobs issued to users by the City.
- **Access door** should stay open during use and handles should be usable with one hand only using a closed fist per the FADM.

Public space container requirements

Figure 5 below shows an example of a public space container which accords to best practices.

Figure 5 Example of a public space container. Concept for illustration only.



The following additional requirements are made for communal containers:

- **Opening shapes** should be unique to each stream to improve visual identification.
- **Opening size** should allow small amounts of waste from pedestrian realm but prevent bagged waste or large items from properties from being disposed of.
- **Opening orientation and position:** Openings should be on the front side of the container at a height prescribed by the FADM.
- **No obstructions:** Openings should be open and not covered with a flap or door.

Financial Implications

At this stage in design, financial implications cannot yet be calculated. Financial implications will be presented to Council in a future Staff Report.

Consultations

Staff consulted internally and externally during the preparation of this report.

The Downtown Waste Working Group, consisting of members representing residents, businesses, and community services met from May to September 2023 to review past studies, develop the criteria, and select design concepts to be used for public engagement. Staff extend thanks to public and internal members of this group for your participation.

Specific City divisions consulted during this project include:

- Corporate and Community Safety
- Design and Construction
- Economic Development
- Facilities and Energy Management
- Finance
- Guelph Public Library
- Guelph Transit
- Parking
- Planning and Building Services
- Public Works
- Solid Waste Resources

Dillon Consulting prepared the original Downtown Service Review of the Solid Waste Management Master Plan Update, attended the Downtown Waste Working Group, and provided other support for the project.

Presentations were also made to the City's Downtown Coordination Group and the DGBA.

Public engagement on the shortlisted design alternatives was completed in July and August of 2023 and included a doorknocking campaign, social media posts, pop-up engagement events downtown, and an online survey on Have Your Say which received 245 responses.

Announcements will continue to be published on the [downtown waste collection page on guelph.ca](#), the [Downtown Waste Project Have Your Say site](#), and through public notices as required.

A council report is anticipated in June 2024 to present and make recommendations following the work of the Solid Waste Management Master Plan and Downtown Waste Project.

Attachments

Attachment-1 Downtown Collection Area map

Attachment-2 List of mobility transit locations

Departmental Approval

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This report was approved by:

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Attachment 1

**SCHEDULE A - "Downtown Collection Area"
of By-law Number (2019) – 20392**

The "Downtown Collection Area" means the area of the City depicted on the following map within the boundaries created by the thick line:



Attachment 2

List of popular mobility transit locations

- IF Shoe Store
- RBC
- 85 Norfolk St
- CIBC
- St. George's Square
- Pharmasave Wyndham
- 55 Cork Street
- Hope House
- Market Fresh
- Guelph Public Library Main Branch
- City Hall
- Guelph Central Station
- Sleeman Centre
- River Run Centre
- Bio Ped
- 180 Wyndham Street
- 2 Quebec Street
- 21 Surrey Street
- St. George's Anglican Church
- Knox Presbyterian Church
- Royal City Mission
- St. Andrew Presbyterian Church
- Lakeside Downtown Church
- Farmers' Market