



North America's multi-family
waste equipment specialists

Keeping your chute together since 1999

PROPOSED SOLID WASTE MANAGEMENT PLAN FOR

DUNDAS & SIXTH LINE

3000 Sixth Line and 21 Dundas Street West, Oakville, ON

c/o DANIELS CORPORATION

Date:	December 2024
Prepared by:	Jason Tower, B.E.S., E.M.P.D CanAm Waste jason@canamwaste.ca T: 647.492.0318

1.0 INTRODUCTION

DANIELS CORPORATION has made a zoning and site plan application to the Region of Halton and Town of Oakville for the development of a multi-family residential complex consisting of three mid-rise buildings and two townhouse blocks.

- Building “A”, is a proposed eight (8) storey building with 174 units
- Building “B”, is a proposed eight (8) storey building with 152 units
- Building “C”, is a proposed nine (9) storey building with 197 units
- Townhouse block 1 is a proposed three (3) storey building with 9 units
- Townhouse block 2 is a proposed three (3) storey building with 8 units

As part of the development review process, the Region of Halton waste management department requests that a solid waste management plan be undertaken to advise on how the development deals with the waste, recycling and organics that will be generated from occupancy. In addition, the report must propose a system for separating and collecting recyclable materials.

This report will provide the relevant information to assist Daniels Corporation in meeting the Region of Halton’s waste management objectives.

2.0 GENERAL INFORMATION

Person Preparing Plan:	Jason Tower, B.E.S., E.M.P.D Partner, CanAm Waste E: jason@canamwaste.ca
Date Prepared:	December 2024
Address of Development:	3000 Sixth Line and 21 Dundas Street West, Oakville, ON
Building Use:	Multi-family residential

Figure 1 – Concept Drawing



Figure 2 – Overall Site Layout

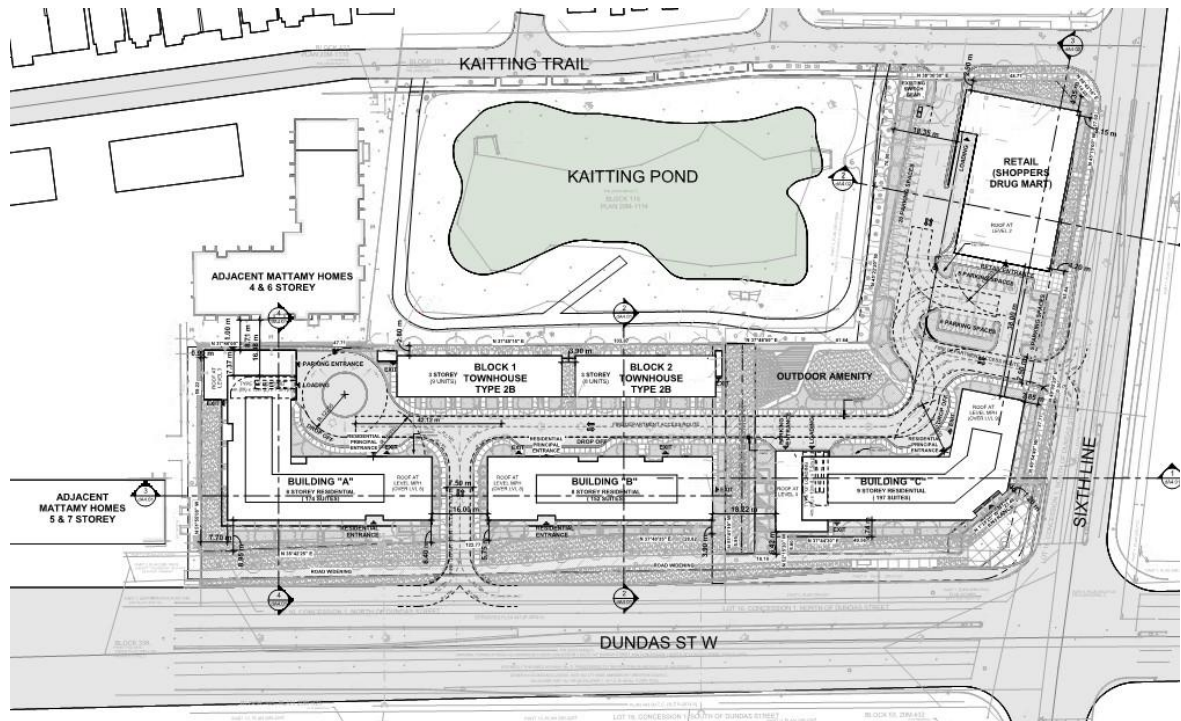


Figure 3 – Site Map



3.0 CONSTRUCTION WASTE

Ontario Regulation 103/94 (O. Reg. 103/94 Source Separation Programs) applies to the industrial, commercial and institutional (IC&I) sector, including construction projects such as the one proposed in this report. The builder of a "construction project" (a person who is undertaking the construction project on their own behalf or on behalf of another) that consists of the construction of one or more buildings with a total floor area of at least 2,000 square metres is subject to *O. Reg. 103/94* and must implement a source separation program.

The builder is responsible for implementing a source separation program or ensuring that a source separation program is implemented. The source separation program must be in place before construction work begins at the site. For the purposes of determining when construction begins at the site, it generally begins at the point foundations for the building(s) is/are being dug. Where, however, a building is going to be constructed in phases (e.g. one builder constructs the outer shell and another contractor constructs the inner shell), construction for the second phase begins when the builder begins construction on the second phase. During the construction period, the incorporation of recycling throughout the site will be promoted through contract documentation.

According to the Regulation, the following items must be incorporated into the construction source separation program:

- Cardboard (corrugated)
- Brick & Portland cement concrete

Additional items that should be considered, but are not mandatory include:

- Wood
- Drywall
- Other relevant materials

It will be the responsibility of the construction project manager to ensure that all local regulations are adhered to, and proper separation procedures are in place to maximize recycling of construction waste.

The following section outlines the requirements governing large construction projects with respect to Waste Audits and Waste Reduction Work Plans under *O. Reg. 102/94*. This project subject to the following section from <https://www.ontario.ca/laws/regulation/940102>

PROGRAM

Waste Reduction Work Plan

- a) Do not burn or bury rubbish on site.
- b) Promote care in stripping of formwork to avoid damage to false work materials, thereby extending the reuse of wood materials.
- c) Identify haulers and recycling companies and establish participants.
- d) Establish effective education and information programs for on-site workers.
- e) Establish reduction, reuse and on-site separation activities.
- f) Investigate Blue Box pick up in the area during summer months to recycle soft drink cans.
- g) Review how waste is produced vs. management policies and practices.
- h) Review how waste is managed, and how it can be better managed.
- i) Review timing and frequency of waste collections.
- j) Establish formal agreements with subcontractors and suppliers to participate in waste reduction and separation programs.

Waste Reduction Work Plan

- k) Post plan on site where most workers will see it.
- l) Allow any worker to view plan, upon request.
- m) Identify person(s) responsible for source separation.
- n) Provide display sign to identify waste reduction methods to be used on site.
- o) Establish Waste Reduction Committee, if warranted.
- p) Identify Waste Collection Company who will separate any recyclable materials & dispose of only non-recyclables at a licensed landfill.

Waste Reduction Work Plan

- q) Prepare Container Log to monitor actual waste generated, trades responsible, hauler and final disposition of waste.
- r) Evaluate incorporation of specified materials to provide feedback to Architect.

4.0 PROJECTED WASTE GENERATION QUANTITIES & COMPOSITION FOR THE RESIDENTIAL CONDOMINIUMS

4.1 Residential Condominiums

Daniels Corporation proposes to have three (3) CanAm Waste TriSorter Recycling System (automated waste, recycling and organics system) installed at each mid-rise tower to assist residents and property management in handling waste, recyclables and organics using one (1) chute as indicated on the architectural drawings – with resident access located on each residential floor of occupancy. Townhouse residents in Block 1 and Block 2 will travel down the stairs to the P1 Level where each block will have its own waste, recycling and organics storage rooms.

The materials designated for collection include recyclable paper fibres such as newspaper, magazines, household fine paper, telephone directories, cardboard and boxboard containers. Recyclable containers will be collected as a commingled stream. This container stream (commingled) will include glass bottles and jars, ferrous food, beverage, aerosol and empty paint cans, aluminum cans and rigid foil products, polycoated cartons and aseptic drinking boxes, PET (#1) and HDPE (#2) bottles and jugs.

The system will also accommodate organics collection using Region of Halton supplied organics carts (currently 95 gallon).

For up to date information on method and type of each collection item, please refer to the “Apartment Resident Waste Diversion Guide” document as published by the Region of Halton and can be accessed by:

<http://www.halton.ca/getmedia/0e2574d5-c18e-4351-be54-1c5773754a15/PW-apartment-resident-waste-diversion-guide.pdf.aspx>

Additionally, the Region of Halton also publishes the “Put Waste in its Place” flyer for apartment residents. This document can be accessed on the Region of Halton website, or by:

<http://www.halton.ca/Repository/Put-Waste-In-Its-Place-Apartments>

The proposed recycling program, with additions or deletions to the program may be included by the time that occupancy occurs as indicated by the contracted waste hauler and/or municipality. Additionally, the separations by chute may change and will be determined at time of installation.

The reviewed is also aware and has incorporated where possible, the design requirements by the Region of Halton as outlined in their document: “Development Design Guidelines for Source Separation of Solid Waste”, as amended from time to time.

The TriSorter recycling system as installed by CanAm Waste is a specialized chute extension that uses one chute to direct, via a resident controlled keypad located on each floor, materials into one of three containers in the waste handling room – garbage, commingled recyclables, and organics. With the TriSorter, building residents have the convenience of garbage, recycling and organics disposal on each floor – making each material AS CONVENIENT as the other.

Figure 4 - Proposed Floor Panel Configuration & Chute Door Set-Up - TriSorter



Figure 5 – Typical Chute Layout

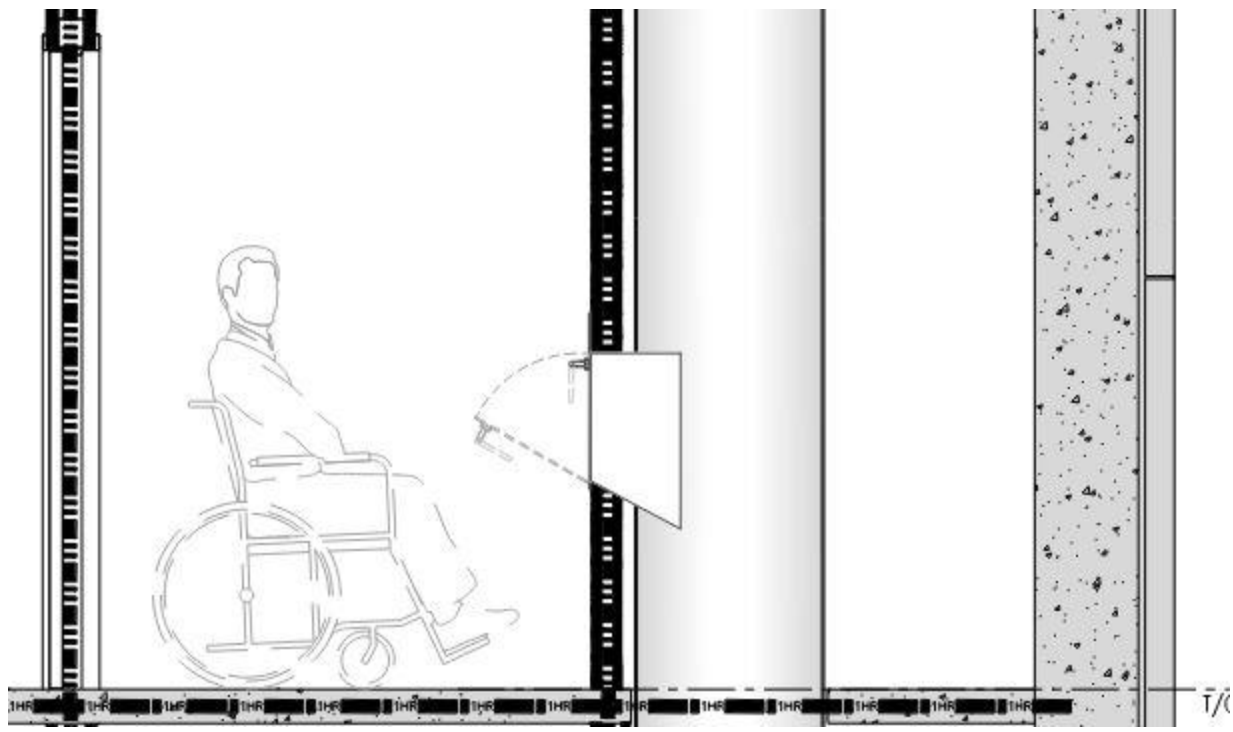
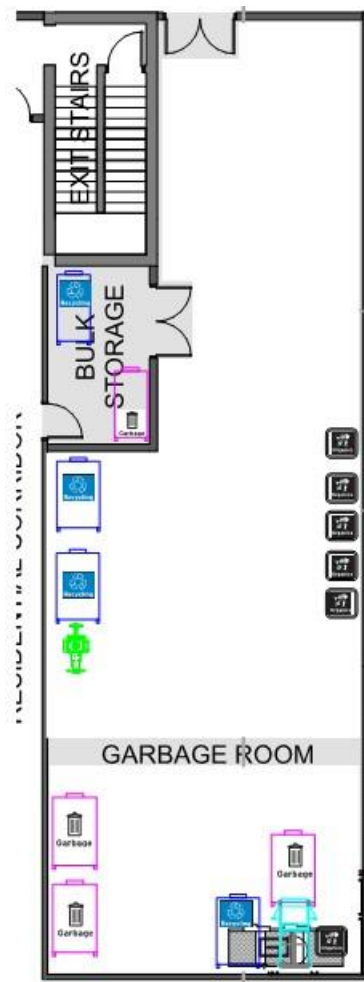


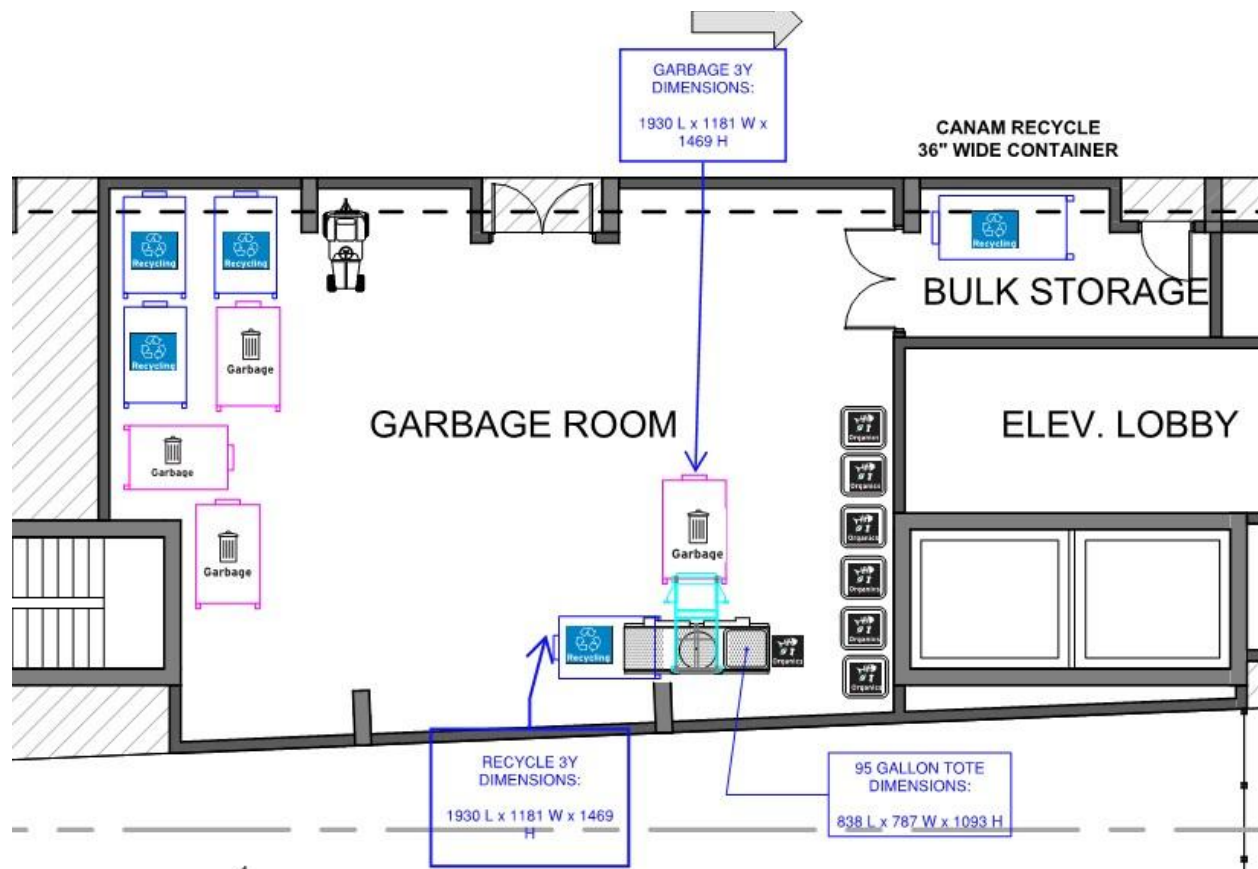
Figure 6 – Building “A” Ground Floor Garbage Room



Based on the current architectural design of the building, the garbage room for Building “A” is located at ground level. The waste handling storage room design will permit enough room to install a properly laid out TriSorter, compactor, and relevant garbage, recycling and organics containers. Shop drawings will be provided by the supplier.

For the ground floor residents and for large items not designed to travel down the chute, there is a bulky items room located off the residential corridor of the building on the ground floor. This room is approximately 13 square metres. Front end loading containers for both garbage and recycling will be placed in this room, as well as a 95 gallon organics container.

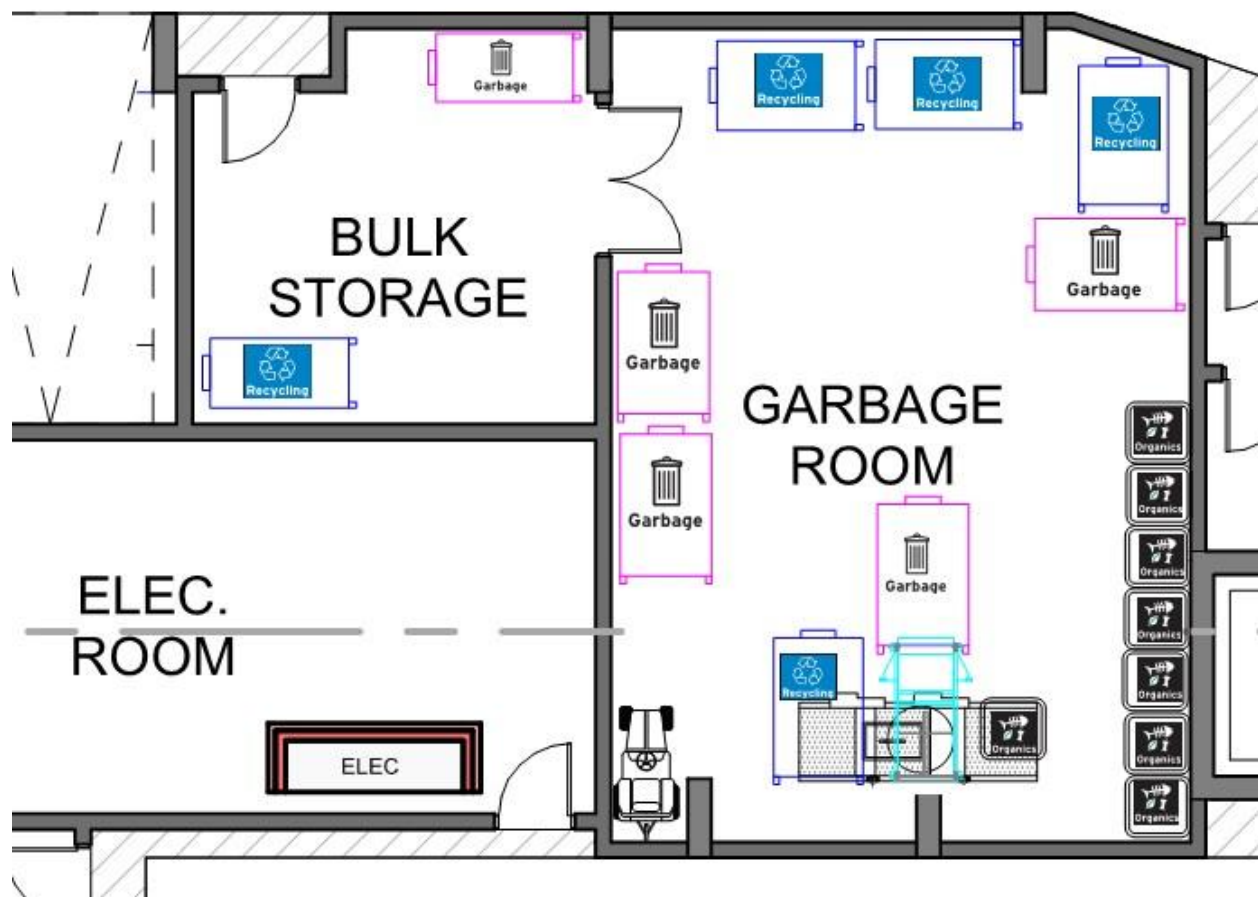
Figure 7 – Building “B” P1 Level Garbage Room



Based on the current architectural design of the building, the garbage room for Building “B” is located at the P1 level. The waste handling storage room design will permit enough room to install a properly laid out TriSorter, compactor, and relevant garbage, recycling and organics containers. Shop drawings will be provided by the supplier.

For large items not designed to travel down the chute, there is a bulky items room located off the residential corridor of the building on the ground floor. This room is approximately 13 square metres. Front end loading containers for both garbage and recycling will be placed in this room.

Figure 8 – Building “C” P1 Level Garbage Room



Based on the current architectural design of the building, the garbage room for Building “C” is located at P1 level. The waste handling storage room design will permit enough room to install a properly laid out TriSorter, compactor, and relevant garbage, recycling and organics containers. Shop drawings will be provided by the supplier.

It should be noted that there is no double door present in the garbage room on the drawings, and needs to be inserted for container movement.

For large items not designed to travel down the chute, there is a bulky items room located off the residential corridor of the building on the ground floor. This room is approximately 13 square metres. Front end loading containers for both garbage and recycling will be placed in this room, as well as a 95 gallon organics container.

4.2 TOWNHOUSE BLOCKS 1 & 2

There is one planned waste, recycling and organics handling room in the P1 level for each townhouse block. Currently each room is approximately 10 square metres for Block 1, and 18 square metres for Block 2.

Block 1 should be expanded in order to permit a 2yard garbage, 2yard recycling and 95 gallon organics container to be placed inside the room. Additional space should also be considered for other waste programs such as textiles and HHW collection.

All residents will travel less than 100m to the chute access point located either on the ground or P1 level garbage rooms

The materials designated for collection include recyclable paper fibres such as newspaper, magazines, household fine paper, telephone directories, cardboard and boxboard containers. Recyclable containers will be collected as a commingled stream. This container stream (commingled) will include glass bottles and jars, ferrous food, beverage, aerosol and empty paint cans, aluminum cans and rigid foil products, polycoated cartons and aseptic drinking boxes, PET (#1) and HDPE (#2) bottles and jugs. Organics collection will be in Region of Halton supplied 95 gallon totes.

For up to date information on method and type of each collection item, please refer to the “Apartment Resident Waste Diversion Guide” document as published by the Region of Halton and can be accessed by:

<http://www.halton.ca/getmedia/0e2574d5-c18e-4351-be54-1c5773754a15/PW-apartment-resident-waste-diversion-guide.pdf.aspx>

Additionally, the Region of Halton also publishes the “Put Waste in its Place” flyer for apartment residents. This document can be accessed on the Region of Halton website, or by:

<http://www.halton.ca/Repository/Put-Waste-In-Its-Place-Apartments>

The proposed recycling program, with additions or deletions to the program may be included by the time that occupancy occurs as indicated by the contracted waste hauler and/or municipality. Additionally, the separations by chute may change and will be determined at time of installation.

The reviewed is also aware and has incorporated where possible, the design requirements by the Region of Halton as outlined in their document: "Development Design Guidelines for Source Separation of Solid Waste", as amended from time to time.

Figure 7 – Block 1 Townhouse – P1 Level Collection Room

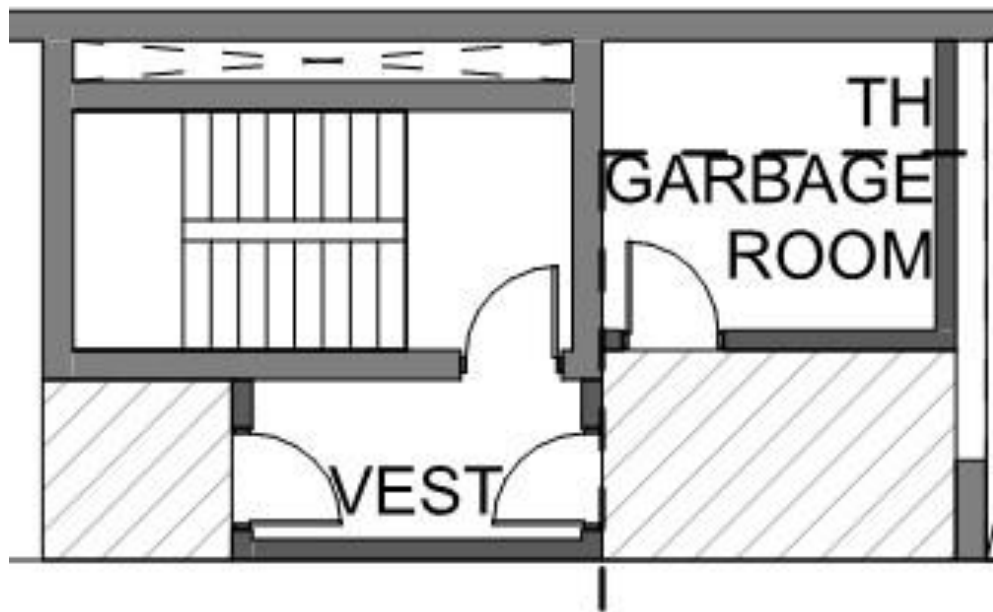
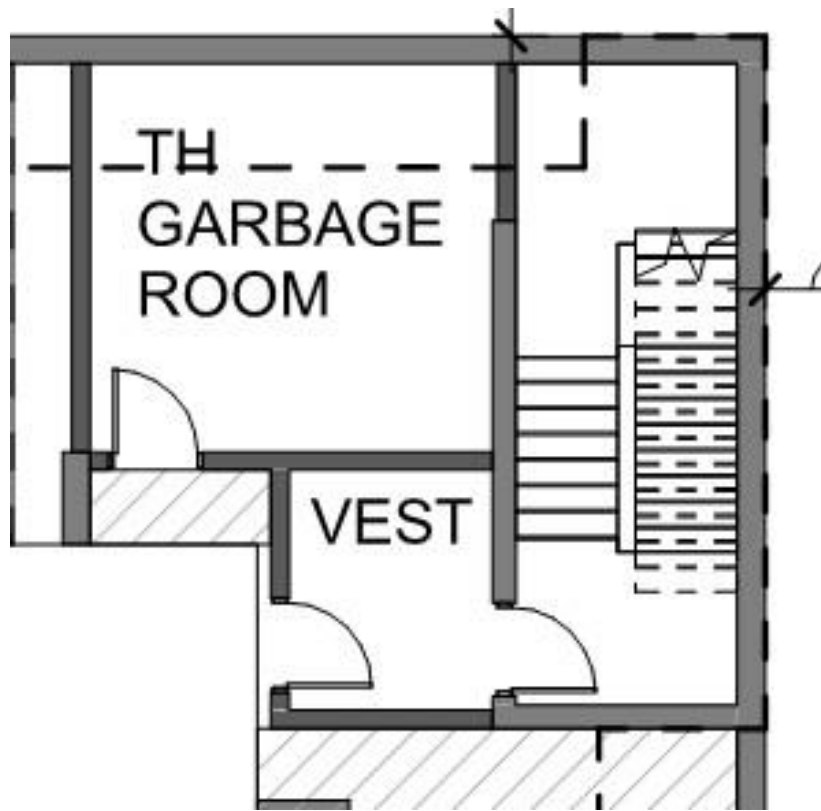


Figure 8 – Block 2 Townhouse – P1 Level Collection Room



5.0 MATERIAL STORAGE & COLLECTION

The installation of the recycling system allows tenants to recycle materials and organics as conveniently as they dispose of garbage. Garbage, recyclable papers & containers (currently collected by the municipality as “commingled”), and organics all go down the chute. Resident control panels for each residential floor will be located next to the chute door and will separate the garbage, recyclables and organics.

A control panel on each floor of the mid-rise enables the resident to instruct the system, located at the bottom of the TriSorter chute, to direct materials into the appropriate container below – see illustration above. Labelling on the floor control panel will read “Garbage”, “Recyclables” and “Organics”.

For Building “A” and Building “B” there is one Type “G” loading bay located on the Ground Level. Collection for both – mid-rise and townhouse block buildings will take place in this area.

Building “C” will have a Type “G” loading space as well.

Staff will move the containers from the Building “A” and Building “B” mid-rise and townhouse block rooms to the type “G” loading bay located on the north side of Building “A” on the ground floor. Building “A” will have a bin buddy container mover to assist in the movement of the containers, and Building “B” will have a properly specified tractor for the same function.

The containers will then be staged for collection in the Type G loading bay. An onsite staff/maintenance person will be responsible for moving and jockeying the containers into the proper position for collection.

For additional safety of the maintenance staff, the chute will have a manual lock out feature at the bottom of each chute. The CanAm Ram Blocker™, will allow maintenance staff the added safety and security by providing the ability to “close down” the garbage chute – either when the containers are empty, or during servicing or emergency. Under the TriSorter, a compactor and 3 cubic yard bin will handle the garbage. Recyclable paper and containers will be collected in a 3yard front end loading container provided by the building. Organic materials will be collected in 95 gallon totes provided by the Region. The system is adaptable to front end loading organics should the municipality change the method of collection for this material.

Additionally, all waste handling rooms shall be equipped with these additional features:

- ✓ Each chute will be equipped with a wash down system
- ✓ Each garbage room will be equipped with electrical provisions for serviceability
- ✓ Each garbage room will be equipped with a hose bib and floor drain
- ✓ Each garbage room can be equipped with W.E.E.E. cabinets for future collection of Waste and Electronic Equipment
- ✓ Each garbage room can be equipped with a textiles cabinet for residents to drop-off for collection by a local charity or local business to aid in the diversion of materials from landfill

Figure 10 – Building B and C - Tractor for Container Movement



Figure 11 – Building A – Bin Buddy for Container Movement



Based on the following unit counts, the appropriate type, size and quantity of containers are proposed as follows:

Building “A” Mid-Rise – 8 floors, 176 units

- Four (4), 3 cubic yard compaction containers
- Four (4) 3 cubic yard recyclables containers
- Eight (8) 95 gallon toters for organic materials
- One (1) 2yard non-compaction garbage container for bulky items room
- One (1) 2yard recycling container for bulky items room

Building “B” Mid-Rise – 8 floors, 152 units

- Four (4), 3 cubic yard compaction containers
- Four (4) 3 cubic yard recyclables containers
- Eight (8) 95 gallon toters for organic materials
- One (1) 2yard non-compaction garbage container for bulky items room
- One (1) 2yard recycling container for bulky items room

Building “C” Mid-Rise – 9 floors, 197 units

- Four (4), 3 cubic yard compaction containers
- Four (4) 3 cubic yard recyclables containers
- Eight (8) 95 gallon toters for organic materials
- One (1) 2yard non-compaction garbage container for bulky items room
- One (1) 2yard recycling container for bulky items room

Townhouse blocks 1 and 2 – 9 and 8 units respectively

- Two (2), 2 cubic yard non compaction containers (one in each room)
- Two (2) 2 cubic yard recyclables containers (one in each room)
- Two (2) 95 gallon toters for organic materials (one in each room)

The calculations for the quantity of containers are based on the Region of Halton guidelines. In addition, they also take into consideration the seasonal fluctuations in

garbage & recycling generation rates based on historical performance of similarly performing properties across the Greater Toronto Area (GTA) over the past 25 years.

Property management staff will be responsible for moving the recyclables, garbage and organics bins from each of the garbage rooms to the type “G” collection areas.

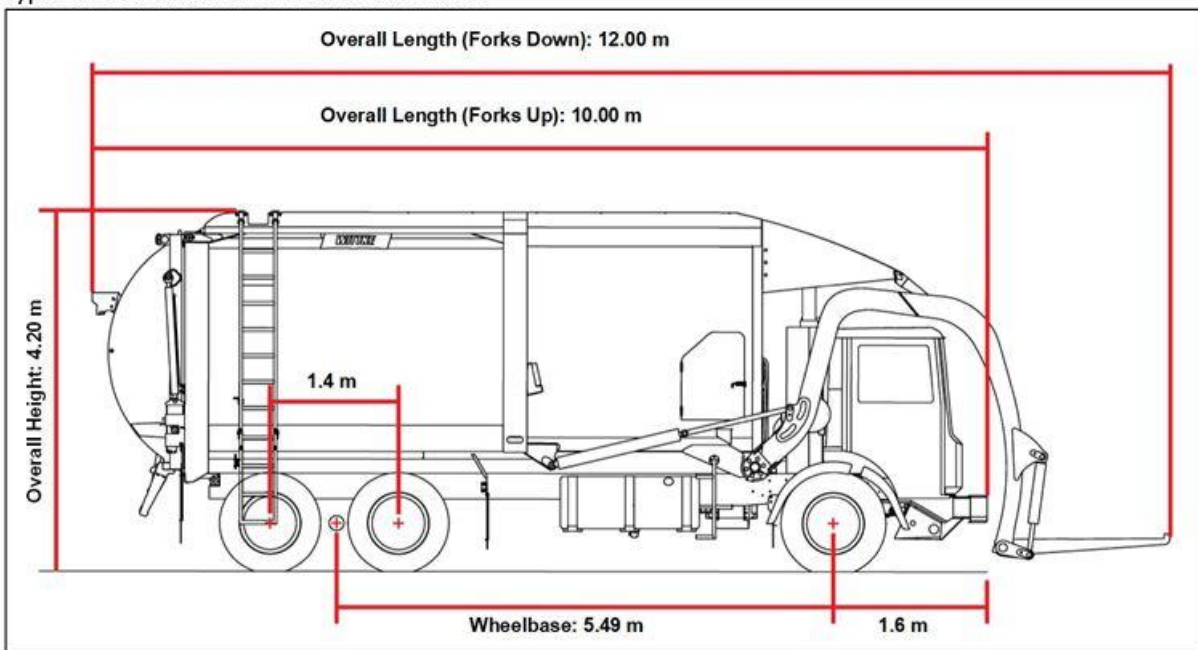
There are not any collection vehicle height restrictions present in this area and is 7.5m clear height. Waste, recycling and organic collection frequency will be based on a schedule by the Region of Halton.

Additionally, each garbage room and chute will be cleaned and sanitized on a contract basis as required to reduce odours and build up. To further assist with this process, the residential garbage room will be equipped with an odour control system.

Appropriate signage with educational materials from property management will be prominently displayed on the wall and in the complex common area.

Figure 11 - Garbage collection vehicles

Typical Front-End Waste Collection Vehicle*



**These are approximate dimensions. Actual dimensions vary.*

The architectural drawings sufficiently show a collection area that is suitable for front end loading through contracted garbage and recycling vehicles.

A trained on-site staff member will be available to maneuver bins for the collection driver at each loading area and also act as a flagman when the truck is reversing. In the event the on-site staff is unavailable at the time the Region of Halton collection vehicles arrive at the site, the collection vehicle will leave the site and not return until the next scheduled collection day.

Figure 12 – Building “A”, “B” and Townhouse Blocks Shared Collection Area

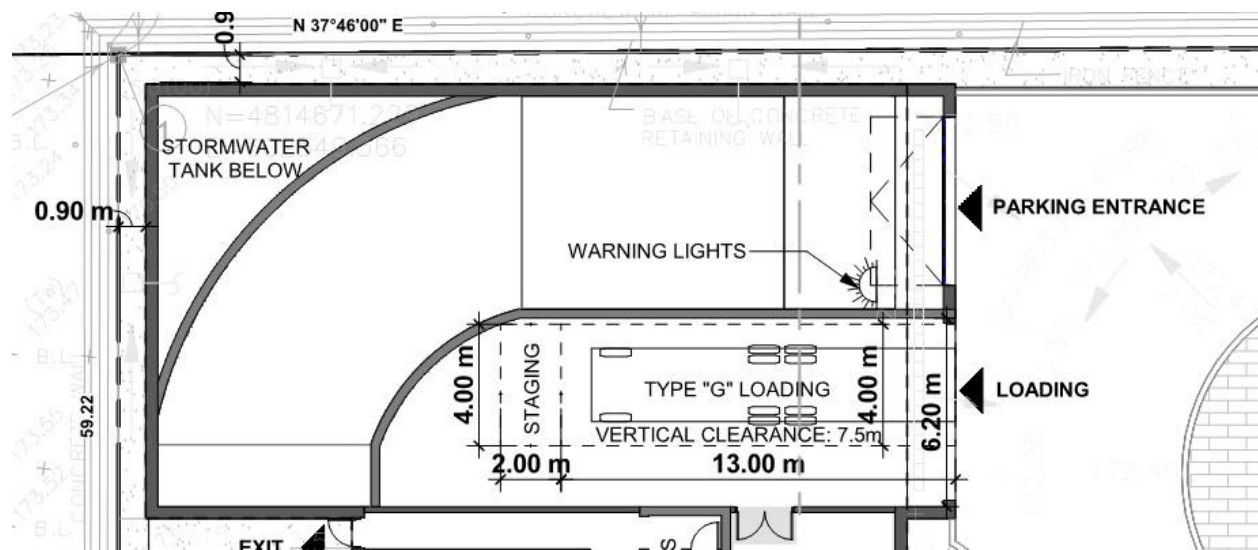
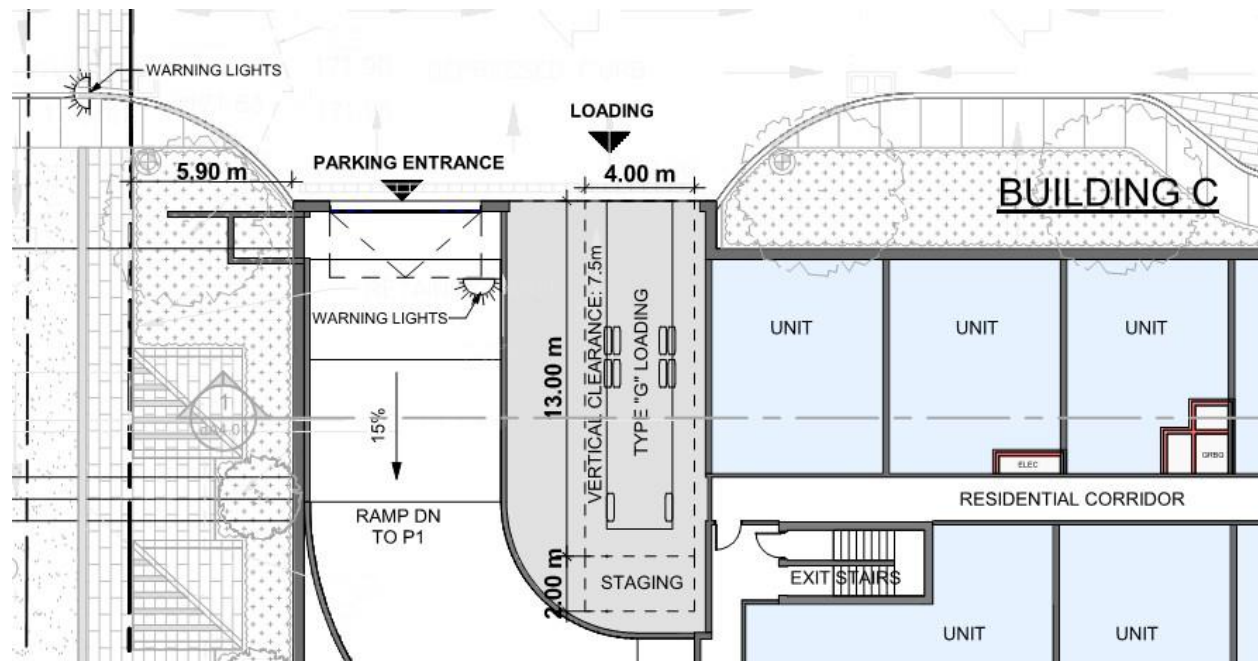


Figure 13 – Building “C” Collection Area



6.0 RESIDENT COMMUNICATIONS & SPECIAL MATERIALS

Upon occupancy, property management will provide residents with an information package that will provide an overview of the waste management program.

The package will include:

- ✓ Recycling instruction card that describes what materials are acceptable
- ✓ How the waste, recycling & organics collection system works. This information will be prepared by the recycling system installer
- ✓ An information card on how to manage household special wastes such as liquid wastes, paints, solvents and batteries. These will be obtained in advance from the Region of Halton;
- ✓ Instructions about handling and transporting large volume waste such as cardboard and used appliances; and

Some waste reduction options, which property management should consider, includes the following:

- ✓ Regular promotion and feedback to residents regarding the recycling program and waste handling issues (e.g. newsletter, notices, and meetings).
- ✓ A recycling bin to be placed at the resident's mailbox area to collect unwanted junk mail and flyers. Property management staff will then empty the paper in the recycling carts.
- ✓ Property management will encourage the Board of Directors to initiate an annual collection of reusable goods and textiles on a periodic basis (e.g. annual closet cleanup). The materials accumulated could then be collected from a social organization such as The Salvation Army or Goodwill Industries.

-
- ✓ Special waste such as paints, fluorescent tubes, solvents, batteries that are generated by property management staff will be safely stored in the residential garbage room located on the ground floor level. As necessary, property management will transport these materials to a Region operated hazardous waste drop-off center to ensure proper management and disposal, or consult www.regeneration.ca for additional locations.
 - ✓ The Region of Halton operates Household Hazardous Waste depots and can be located by accessing the following link:

<http://www.halton.ca/For-Residents/Recycling-Waste/Halton-Waste-Management-Site#q4>

Figure 14 – Sample Resident Instruction Sheet

**TriSorter Recycling System**

INSTRUCTIONS

Everyone can contribute to environmental sustainability and reduce our carbon footprint. By using the CANAM TriSorter Recycling System, you are helping achieve waste diversion targets and making your building a leader in environmental responsibility.



OPERATION

- 1 When READY light is on, select GARBAGE, RECYCLABLES or ORGANICS button
- 2 The selected button light will blink briefly, then remain on. Wait 5 seconds and then deposit material down the chute.
- 3 If IN USE light and one of GARBAGE, RECYCLABLES or ORGANICS is on. Then wait for lights to turn off and the READY light to turn on.

INDICATOR LIGHTS

IN USE
Indicates system in use on another floor

MAINTENANCE
Indicates maintenance being completed
DO NOT USE

READY
Indicates TriSorter is ready for use



DO NOT dispose of loose items in a chute system

Items should be bagged and securely tied

DO NOT Insert large bags that won't easily fit through the door

DO NOT insert cardboard down the chute.

DO NOT insert burning cigarettes or flammable items in chute system



647.492.0318 info@canamwaste.ca www.canamwaste.ca



The information presented in our plan is based on information gathered and observations made by CanAm Waste Products Inc. based on

There is no warranty expressed or implied that the plan uncovers all potential issues associated with the management of waste and recycling at

END OF REPORT