



**City of Hamilton**  
**PUBLIC WORKS COMMITTEE**  
**AGENDA**

**Meeting #:** 21-016  
**Date:** November 1, 2021  
**Time:** 1:30 p.m.  
**Location:** Due to the COVID-19 and the Closure of City Hall (CC)

All electronic meetings can be viewed at:

City's Website:

<https://www.hamilton.ca/council-committee/council-committee-meetings/meetings-and-agendas>

City's YouTube Channel:

<https://www.youtube.com/user/InsideCityofHamilton> or Cable 14

Carrie McIntosh, Legislative Coordinator (905) 546-2424 ext. 2729

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**Pages**

**1. CEREMONIAL ACTIVITIES**

**2. APPROVAL OF AGENDA**

(Added Items, if applicable, will be noted with \*)

**3. DECLARATIONS OF INTEREST**

**4. APPROVAL OF MINUTES OF PREVIOUS MEETING**

4.1. October 18, 2021

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**5. COMMUNICATIONS**

**6. DELEGATION REQUESTS**

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14.1. Closed Session Minutes - October 18, 2021

Pursuant to Section 9.1, Sub-sections ((i), (j) and (k) of the City's Procedural By-law 21-021, and Section 239(2), Sub-sections (i), (j) and (k) of the *Ontario Municipal Act, 2001*, as amended, as the subject matter pertains to a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the City or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; a trade secret or scientific, technical, commercial or financial information that belongs to the City or a local board and has monetary value or potential monetary value; and a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the City or a local board.

15. **ADJOURNMENT**



## PUBLIC WORKS COMMITTEE MINUTES 21-015

1:30 p.m.  
Monday, October 18, 2021  
Council Chambers  
Hamilton City Hall  
71 Main Street West

**Present:** Councillors A. VanderBeek (Chair), N. Nann (Vice-Chair), J.P. Danko, J. Farr, L. Ferguson, T. Jackson, S. Merulla, E. Pauls and M. Pearson

**Absent with Regrets:** Councillor T. Whitehead – Leave of Absence

### THE FOLLOWING ITEMS WERE REFERRED TO COUNCIL FOR CONSIDERATION:

**1. Amendment to Solid Waste Management By-Law 20-221 (PW20066(a)) (City Wide) (Item 10.1)**

**(Pearson/Merulla)**

- (a) That the amending By-law attached as Appendix “A” to Report PW20066(a) amending By-law 20-221, being a By-law to Provide for and Regulate a Waste Management System for the City of Hamilton, and which has been prepared in a form satisfactory to the City Solicitor, be enacted and effective immediately by Council; and
- (b) That Staff take all steps necessary to update set fines for By-law 20-221 attached as Appendix “B” to Report PW20066(a), being a By-law to Provide for and Regulate a Waste Management System for the City of Hamilton.

**Result:** Motion **CARRIED** by a vote of 9 to 0, as follows:

YES - Ward 2 Councillor Jason Farr  
YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
YES - Ward 4 Councillor Sam Merulla

YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**2. Winterizing Public Washrooms - Winter Operations (PW21031(a)) (City Wide) (Item 10.2)**

**(Nann/Danko)**

- (a) That the park washroom locations listed in Appendix "A" *as amended and* attached to Report PW21031(a) be approved under a two-year pilot program to operate 16 of the recommended winter washroom locations for the 2021-2022 winter season (for which 4 are portable toilets) running from October 1 to May 1 and that the remaining recommended locations begin operation in the 2022-2023 winter season after capital upgrades are complete;
- (b) That Staff report back to Council in the Summer of 2023 with the results of the two- year pilot program;
- (c) That the Capital Budget of \$168,125 be approved to support the capital upgrade requirements of the pilot program as outlined in Appendix "A" attached to Report PW21031(a) to be funded from the Unallocated Capital Levy Reserve (#108020);
- (d) That the Capital Budget of \$172,500 be approved to support security infrastructure for the pilot program as outlined in Appendix "A" attached to Report PW21031(a) to be funded from the Unallocated Capital Levy Reserve (#108020);
- (e) That the operating costs of \$5,250 to support security monitoring during the two-year pilot program as outlined in Appendix "A" attached to Report PW21031(a) to be funded from the Tax Stabilization Reserve (#110046); and
- (f) That the operating costs of \$671,200 be approved to support the sites during the two-year pilot program as outlined in Appendix "A" attached to Report PW21031(a) to be funded from the Tax Stabilization Reserve (#110046);

**Result: Motion as AMENDED CARRIED by a vote of 8 to 0, as follows:**

NOT PRESENT - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla

YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**3. Design of Mountain Brow Multi-Use Pathway between Fennell Avenue and Sam Lawrence Park (Ward 8) (Item 11.1)**

**(Danko/Nann)**

WHEREAS, the Mountain Brow Multi-Use Pathway Feasibility Study was approved by Public Works Committee on July 12, 2018, and staff have been working to implement the design and construction of the trail;

WHEREAS, an important Mountain Brow Multi-Use Pathway connection is planned to link Fennell Avenue to the Keddy Access Trail, and an active transportation route is planned to connect the Keddy Access Trail eastward to Sam Lawrence Park;

WHEREAS, the creation and improvement of active transportation corridors to encourage cycling and walking throughout the city are supported by the Pedestrian Mobility Plan, the Transportation Master Plan, and the Recreational Trails Master Plan; and,

WHEREAS, the Ward Councillor has identified this initiative to be a priority in Ward 8;

THEREFORE, BE IT RESOLVED:

- (a) That the conceptual design for the Mountain Brow Multi-Use Pathway and active transportation route project for the section between Fennell Avenue and Sam Lawrence Park at a capital cost of \$150,000 be funded from the Ward 8 Special Capital Re-investment Reserve Fund (108058) to the Mountain Brow Path project ID 4401756703; and,
- (b) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

**Result: Motion CARRIED by a vote of 8 to 0, as follows:**

NOT PRESENT - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nringer Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

#### 4. Kenilworth Traffic Circle Beautification (Ward 4) (Item 11.2)

##### (Merulla/Farr)

WHEREAS, the renovation of the Kenilworth Traffic Circle will increase civic pride and create an attractive entry feature into Ward 4;

WHEREAS, the installation of a large water feature, as well as tree and perennial plantings and the design and inclusion of a "Welcome" sign will provide the level of beautification desired by residents of Ward 4; and,

WHEREAS, there is currently no funding for the proposed enhancements;

THEREFORE, BE IT RESOLVED:

- (a) That the funding for the Kenilworth traffic circle upgrades, at a cost of \$275,000, be funded from project 4242009401 to support the redesign of the Kenilworth traffic circle by installing a water feature, perennial plantings, and signage, be approved;
- (b) That \$15,667 for the annual planting and maintenance of the floral beds and water feature upkeep be added to the Environmental Services Division's 2022 annual base operating budget; and,
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents for the purchase, installation and maintenance of the Kenilworth traffic circle design with such terms and conditions in a form satisfactory to the City Solicitor.

**Result: Motion CARRIED by a vote of 9 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**5. Installation of Traffic Calming Measures at Various Locations throughout Ward 7 (Item 11.3)****(Pauls/Jackson)**

WHEREAS, residents are requesting the installation of speed cushions on various roadways throughout Ward 7, via neighbourhood engagement, to address roadway safety concerns as a result of speeding and cut-through traffic;

THEREFORE, BE IT RESOLVED:

- (a) That Transportation Operations and Maintenance staff be authorized and directed to install traffic calming measures on the following roadways as part of the 2022 Traffic Calming program:
  - (i) Byng Street, between Upper Wellington Street and Naples Boulevard, Hamilton (1 speed cushions);
  - (ii) Massena Drive, between Rymal Road East and Byng Street, Hamilton (2 speed cushions);
  - (iii) Acadia Drive, between Ridgemount Drive and Mapleridge Drive, Hamilton (2 speed cushions);
- (b) That all costs associated with the installation of traffic calming measures be funded from the Ward 7 Minor Maintenance Account (4031911607) at an upset limit, including contingency, not to exceed \$35,000; and,
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

**Result: Motion CARRIED by a vote of 9 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
YES - Ward 4 Councillor Sam Merulla  
YES - Ward 6 Councillor Tom Jackson  
YES - Ward 7 Councillor Esther Pauls  
YES - Ward 8 Councillor John-Paul Danko  
YES - Ward 10 Councillor Maria Pearson  
YES - Ward 12 Councillor Lloyd Ferguson  
YES - Chair - Ward 13 Councillor Arlene VanderBeek  
NOT PRESENT - Ward 14 Councillor Terry Whitehead

**6. Installation of Traffic Calming Measures on Pinehill Drive (Ward 9) (Added Item 11.4)****(Jackson/Pauls)**

WHEREAS, residents are requesting the installation of speed cushions on Pinehill Drive to address roadway safety concerns as a result of speeding and cut-through traffic;

THEREFORE, BE IT RESOLVED:

- (c) That Transportation Operations and Maintenance staff be authorized and directed to install traffic calming measures on the following roadways as part of the 2022 Traffic Calming program:
  - (iv) Pinehill Drive, between Trinity Church Road and Fletcher Road (7 speed cushions);
- (d) That all costs associated with the installation of traffic calming measures be funded from the Ward 9 Minor Maintenance Account 4031911609 at an upset limit, including contingency, not to exceed \$49,000; and,
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

**Result: Motion CARRIED by a vote of 9 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**7. Renegotiation of the City of Hamilton Contract C11-64-20 for Waste Diversion Containers (PW21058/FCS21092) (City Wide) (Item 14.1)****(Ferguson/Pearson)**

- (a) That the direction provided to staff in Closed Session, respecting Report PW21058/FCS21092, regarding the City of Hamilton Tender C11-64-20 for waste diversion containers be approved; and,
- (b) That Report PW21058/FCS21092 respecting the City of Hamilton Tender C11-64-20 for waste diversion containers remain confidential.

**Result: Motion CARRIED by a vote of 7 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 NOT PRESENT - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 NOT PRESENT - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**FOR INFORMATION:**

**(a) CHANGES TO THE AGENDA (Item 2)**

The Committee Clerk advised of the following change to the agenda:

**7. CONSENT ITEMS**

7.1 Waste Management Advisory Committee Minutes - May 10, 2021

**11. MOTIONS**

11.4. Installation of Traffic Calming Measures on Pinehill Drive (Ward 9))

**(Pearson/Nann)**

That the agenda for the October 18, 2021 Public Works Committee meeting be approved, as amended.

**Result: Motion CARRIED by a vote of 9 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 YES - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**(b) DECLARATIONS OF INTEREST (Item 3)**



There were no declarations of interest.

**(c) APPROVAL OF MINUTES OF THE PREVIOUS MEETING (Item 4)**

**(i) October 4, 2021**

**(Pauls/Farr)**

That the Minutes of the October 4, 2021 meeting of the Public Works Committee be approved, as presented.

**Result: Motion CARRIED by a vote of 8 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 NOT PRESENT - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**(d) CONSENT ITEMS**

**(i) Waste Management Advisory Committee Minutes - May 10, 2021  
(Added Item 7.1)**

**(Danko/Nann)**

That the Waste Management Advisory Committee Minutes of May 10, 2021, be received.

**Result: Motion CARRIED by a vote of 8 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 NOT PRESENT - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

**(e) DISCUSSION ITEMS (Item 10)****(i) Winterizing Public Washrooms - Winter Operations (PW21031(a))  
(City Wide) (Item 10.2)****(Ferguson/Pauls)**

That Appendix "A" to Report PW21031(a) respecting Winterizing Public Washrooms - Winter Operations, be amended to include the washrooms at Spring Valley, with financial information to be added to the amendment before the next Council meeting.

**Result: Amendment CARRIED by a vote of 8 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
 YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
 YES - Ward 4 Councillor Sam Merulla  
 YES - Ward 6 Councillor Tom Jackson  
 YES - Ward 7 Councillor Esther Pauls  
 YES - Ward 8 Councillor John-Paul Danko  
 NOT PRESENT - Ward 10 Councillor Maria Pearson  
 YES - Ward 12 Councillor Lloyd Ferguson  
 YES - Chair - Ward 13 Councillor Arlene VanderBeek  
 NOT PRESENT - Ward 14 Councillor Terry Whitehead

For further disposition of this matter, refer to Item 2.

**(f) GENERAL INFORMATION / OTHER BUSINESS (Item 13)****(i) Amendments to the Outstanding Business List (Item 13.1)****(Pearson/Ferguson)**

That the following amendments to the Public Works Committee's Outstanding Business List, be approved:

**(a) Items Requiring a New Due Date:**

## 13.1.a.a.

Roadway Safety Measures on Aberdeen Avenue from Queen Street to Longwood Road

Item on OBL: AZ

Current Due Date: November 1, 2021

Proposed New Due Date: November 15, 2021

## 13.1.a.b.

Municipal Class Environmental Assessment and Conceptual Design of Ancaster Elevated Water Reservoir

Item on OBL: AAP

Current Due Date: October 18, 2021

Proposed New Due Date: November 15, 2021

13.1.a.c.

Correspondence from Jim MacLeod, Vice President, Ancaster Village Heritage Community requesting the creation of a

Community Safety Zone (CSZ)

Item on OBL: ABH

Current Due Date: November 1, 2021

Proposed New Due Date: November 15, 2021

**Result: Motion CARRIED by a vote of 9 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr

YES - Vice Chair - Ward 3 Councillor Nrinder Nann

YES - Ward 4 Councillor Sam Merulla

YES - Ward 6 Councillor Tom Jackson

YES - Ward 7 Councillor Esther Pauls

YES - Ward 8 Councillor John-Paul Danko

YES - Ward 10 Councillor Maria Pearson

YES - Ward 12 Councillor Lloyd Ferguson

YES - Chair - Ward 13 Councillor Arlene VanderBeek

NOT PRESENT - Ward 14 Councillor Terry Whitehead

**(g) PRIVATE AND CONFIDENTIAL (Item 14)**

**(Pearson/Jackson)**

That the Committee move into Closed Session respecting Item 14.1 Pursuant to Section 9.1, Sub-sections (i), (j) and (k) of the City's Procedural By-law 21-021, and Section 239(2), Sub-sections (i), (j) and (k) of the Ontario Municipal Act, 2001, as amended, as the subject matter pertains to a trade secret or scientific, technical, commercial, financial, or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; a trade secret or scientific, technical, commercial, or financial information that belongs to the municipality or local board and has monetary value or potential monetary value; and a position, plan, procedure, criteria, or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board

**(i) Renegotiation of the City of Hamilton Contract C11-64-20 for Waste Diversion Containers (PW21058/FCS21092) (City Wide) (Item 14.1)**

For further disposition on this matter, refer to Item

**(h) ADJOURNMENT (Item 15)**

**(Ferguson/Pearson)**

That there being no further business, the Public Works Committee be adjourned at 2:58 p.m.

**Result: Motion CARRIED by a vote of 7 to 0, as follows:**

YES - Ward 2 Councillor Jason Farr  
YES - Vice Chair - Ward 3 Councillor Nrinder Nann  
NOT PRESENT - Ward 4 Councillor Sam Merulla  
YES - Ward 6 Councillor Tom Jackson  
YES - Ward 7 Councillor Esther Pauls  
NOT PRESENT - Ward 8 Councillor John-Paul Danko  
YES - Ward 10 Councillor Maria Pearson  
YES - Ward 12 Councillor Lloyd Ferguson  
YES - Chair - Ward 13 Councillor Arlene VanderBeek  
NOT PRESENT - Ward 14 Councillor Terry Whitehead

Respectfully submitted,

Councillor A. VanderBeek  
Chair, Public Works Committee

Loren Kolar  
Legislative Coordinator  
Office of the City Clerk

## 6.1(a)

### Request to Speak to Committee of Council

Submitted on Monday, October 25, 2021 - 2:28pm

==Committee Requested==

**Committee:** Public Works Committee

==Requestor Information==

**Name of Individual:** Tim Corcoran and Brian Page

**Name of Organization:** Molok North America

**Contact Number:** [REDACTED]

**Email Address:** [tim.corcoran@molokna.com](mailto:tim.corcoran@molokna.com),  
[brian.page@molokna.com](mailto:brian.page@molokna.com)

**Mailing Address:** [REDACTED]

**Reason(s) for delegation request:** We, Molok North America Ltd would like to address Council on November 1st at the Public Works meeting regarding The City of Hamilton's Requirements for Design of New Developments and Collection being tabled.

The main points we would like to table are as follows:

1. The decrease in haulage costs resulting in crane lifted containment
2. The space savings afforded to sites that implement crane lifted containment over fork lifted
3. The ability of crane lifted containment to meet the requirements of The Planning Act, our ability to have "facilities designed to have regards for accessibility for persons with disabilities"

## 6.1(a)

4. Our ability to provide a proven a third party tested climate control waste container using only Mother Nature which emits no odours.
5. A WIN/WIN/WIN solution for the City, the Developer and the Environment  
The elimination of any alternatives, specifically crane lifted that provide implementable solutions for both the developers and the municipality while meeting the provincial mandate of densification, should be considered. By doing this ensures Hamilton stays at the forefront while meeting the environmental needs of the future.

**Will you be requesting funds from the City? No**

**Will you be submitting a formal presentation? Yes**

October 27<sup>th</sup>, 2021  
City of Hamilton  
Department of Public Works  
Public Works Committee

Reference Public Works meeting November 1<sup>st</sup>.

Good afternoon,

It has been brought to our attention that The City of Hamilton is revising its Waste bylaws. A terrific opportunity to look to the future and ensure all potential solutions are reviewed and implemented to address the various climate change initiatives being introduced globally.

Upon reviewing the recommendations, we (Molok North America) have some questions and concerns we would like to address.

There seems to be a significant bias towards a type of receptacle - fork lifted – (1936 technology) and brand - Earth Bin - that precludes alternative options and limits competition, that in most cases meet and or exceed the stated requirements.

When we consider the definition of in-ground as stated at the beginning of the document, our product meets the requirements, but is not mentioned nor is there a picture or detail drawing of it? Would it not present a fairer option to allow alternative in ground or semi-underground options? Provide competition and ensure a fair market pricing and value?

The loading area as defined is very specific to front load dumpsters. In fact, throughout the document one is led to assume that nothing other than a fork-lifted dumpster or a cart will be permitted. The only deviation is with Earth Bin – *a bit of a* conflict of interest on the part of the City when no other option is provided and promoting only one provider of a product by name.

\*In section 2.3 – eligible and ineligible properties is a bit confusing. It seems that everything is noted as eligible, however, later in the report it contradicts that or adds some caveats. Can the city be clearer on what falls under the proposed new bylaw?

In section 2.6 it states the committee worked within various legislations, one being the Planning Act. Within the Planning act it requires that all waste receptacles be accessible for people regardless of age, demographic, size or disability. The measurements that are outlined on page 38 - conventional dumpsters - don't meet the accessibility guidelines, nor do the measurements on page 42 – Earth Bin - specified by them? How can these be accepted under the planning act? And Molok® not even considered when it does meet the accessibility guidelines?

The Planning Act, Section 41

### **Approval of plans or drawings**

(4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (12), the Tribunal has approved one or both, as the council may determine, of the following:

- 1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (7) (a), **including facilities designed to have regard for accessibility for persons with disabilities.**

2. Drawings showing plan, elevation and cross-section views for each building to be erected, except a building to be used for residential purposes containing fewer than 25 dwelling units, which drawings are sufficient to display, (f) **facilities designed to have regard for accessibility for persons with disabilities.** R.S.O. 1990, c. P.13, s. 41 (4); 2002, c. 9, s. 56 (1); 2006, c. 23, s. 16 (3, 4); 2009, c. 33, Sched. 21, s. 10 (9); 2016, c. 25, Sched. 4, s. 5; 2017, c. 23, Sched. 5, s. 80.

(7) As a condition to the approval of the plans and drawings referred to in subsection (4), a municipality may require the owner of the land to,

- (a) provide to the satisfaction of and at no expense to the municipality any or all of the following:

#### **4.1 Facilities designed to have regard for accessibility for persons with disabilities.**

7. Vaults, central storage and collection areas and other facilities and enclosures for the storage of garbage and other waste material

Again, in section 3.1 it states, “access to Waste Diversion Programs and disposal of Garbage must be accessible to all occupants”

3.1.1 Refers to Waste Storage, which is all inside and requires significant infrastructure, expense and strain on the environment – electricity, exhaust, air conditioning which run contrary to the green initiatives being introduced. Why would alternatives that don't require any of the infrastructure not be an option? Providing advantages to the developer and cost savings to the occupants? A 2-year odour and temperature study conducted by Earth Rangers indicated that there was significantly less odour than the climate controlled room resulting in less odour, reduced cost and from the Molok units with a reduced cost and impact on the environment. The full study and author can be made available if requested, however, please find attached an executive summary.

3.1.6 indicates a developer may opt out of city service but only at the cities discretion – what circumstances would allow for this? This seem to inhibit competition which as stated in a recent Global News piece was one of the reason waste service costs rose, that was stated as an excessive amount and which councillors were concerned as there would be an added cost to the residence.

Within in numerous articles noting what space is required for waste storage, waste allocation, staging and more. Each one is based on fork lifted dumpsters and carts and requires significant space based on number of residences and /or occupants.

The space required can be quite significant and runs contrary to the Provincial requirements of densification. Limiting development opportunities. There are alternatives that allow developers and the City to meet the Provincial mandate of densification. These provide the opportunity to both parties to collaborate in order to maximize their development opportunities – increased units - and ensure that all occupants have the stated access (within 100 meters return) to the waste?

By using these alternatives it allows for a higher return on investments for the developer and the city and the environment. The developer will be able to use less land for waste and recycling at a



lower cost for pick ups, be able to increase density on the site which results in increased revenue. The City will in turn will receive increase tax revenue from the site because of the increased density on the site, reduced number of pickups which in turn decreases the wear and tear on the pickup vehicles. With regards to the environment, since there will be less need for the number of pickups it will decrease the amount of exhaust fumes. All of this results in a WIN WIN WIN situation over the use of fork lifted and carts.

If we use the example - 25 dwelling unit and used a crane lifted system the space required would be that of a parking space – 9'x18'. Within this space would be 1 M5000 for waste, 1 M5000 for mixed recycling and 1 MOrganic. The capacity provided would allow for biweekly service instead of weekly. Reducing frequency, cost and the environmental impacts, freeing up more space while ensuring an assessable waste area.

Please see the picture attached.





In the Province of Quebec crane lifted service is offered through the municipalities to no fewer than 14 municipalities including Montreal and Quebec City to multi-residential occupants.

In fact, Vaudreuil Dorion makes crane lifted mandatory through their bylaws, moving towards environmentally responsible options that save valuable space and provide accessible options for the residence. Very similar to the trend we have been seeing in Europe for the past 20 years. A move to crane lifted away from fork lifted.







The aesthetically pleasing design and appearance combined with the crane lifted removal allow for greater flexibility in placement, ensuring the receptacles are conveniently located for all users. Whether in an island, front yard or other high visibility location. Providing safety and convenience for the users.

Finally, Molok North America has been operating in Hamilton for the past 15 years. There are over 150 units in service and more than 50 locations ranging from school, gas bars, quick service restaurants like Tim Hortons, commercial plazas, condo's, multi-residential properties and Places of Worship. That is a tremendous amount of goodwill that will be impacted by the changes outlined in the revised Bylaw.

All of whom have adopted our system to increase their efficiencies and onsite space plus reduce truck traffic and expense. Will the city allow others to introduce environmentally responsible solutions into their developments as others have while meeting the provincial densification and city requirements while looking to environmental solutions for the future?

Thank you for your attention to this and we look forward to further discussion.

Tim Corcoran  
Vice President, Business Development  
Molok North America Ltd.



## Additional information and pictures below

Earth Rangers study executive summary. Full study available upon request.

March 21,2018

The Earth Rangers Centre for Sustainable Technology (ERC) was retained to complete an independent study of the Molok in-ground waste and organics storage system for its ability to buffer changes in outdoor temperature and thus reduce odours.

The following two (2) findings are discussed in more detail in the report below and represent a testing over one (1) year of measurements.

**FINDING 1:** Temperatures measured from 50" from the top to the bottom of both the waste and organics Moloks at all times were lower than the average temperature of our temperature controlled waste room. From the top to 25" below the top, temperatures were on average lower than that of our conditioned waste room 78.7% of the time.

**FINDING 2:** At no time did odours, measured by our calibrated odour meter, directly outside the Molok exceed that of our temperature controlled waste room

Overall, our findings indicate that the Molok outperformed our temperature controlled waste room in slowing decomposition by keeping waste and organics at lower temperatures and reducing odours emanating from Moloks.

Tim Corcoran  
Vice President  
Molok North America

**Gavin Yeung, H.Bsc., MBA, LEED®AP, CPMP, BCxP**  
Manager, Earth Rangers Centre For Sustainable Technology

**eMail:** [gyeung@earthrangers.com](mailto:gyeung@earthrangers.com)

**Office:** 905.417.3447 x 2228

**Mobile:** 416.859.4994

[9520 Pine Valley Drive | Woodbridge, ON L4H 2Z6](#)



Additional pictures of multi-residential installations in various locations in Canada

### Quebec Multi-Residential Examples



**MOLOK**

### Alberta Multi-Residential Examples



### Niagara Region Multi-Residential Examples





### Hamilton area Multi-Residential Examples







# Semi-Underground Waste Containment







# Worldwide



Over 40 countries!



# Crane Lifted Semi-Underground Systems for Solid Waste and Recyclables

Crane lifted semi-underground containers are a **new generation** waste solution offering a more **efficient**, and **sustainable** means of collecting waste, recyclables and even organics



# Decreased Haulage Costs

1.5 – 2 times the capacity due to natural vertical compaction  
= 9-12 yards instead of 6 yards



*Gravity  
naturally  
compacts  
waste!*

One M-5000 Molok<sup>®</sup> container equals  
**2** - 6 yard dumpsters  
**27** - 240 litre carts

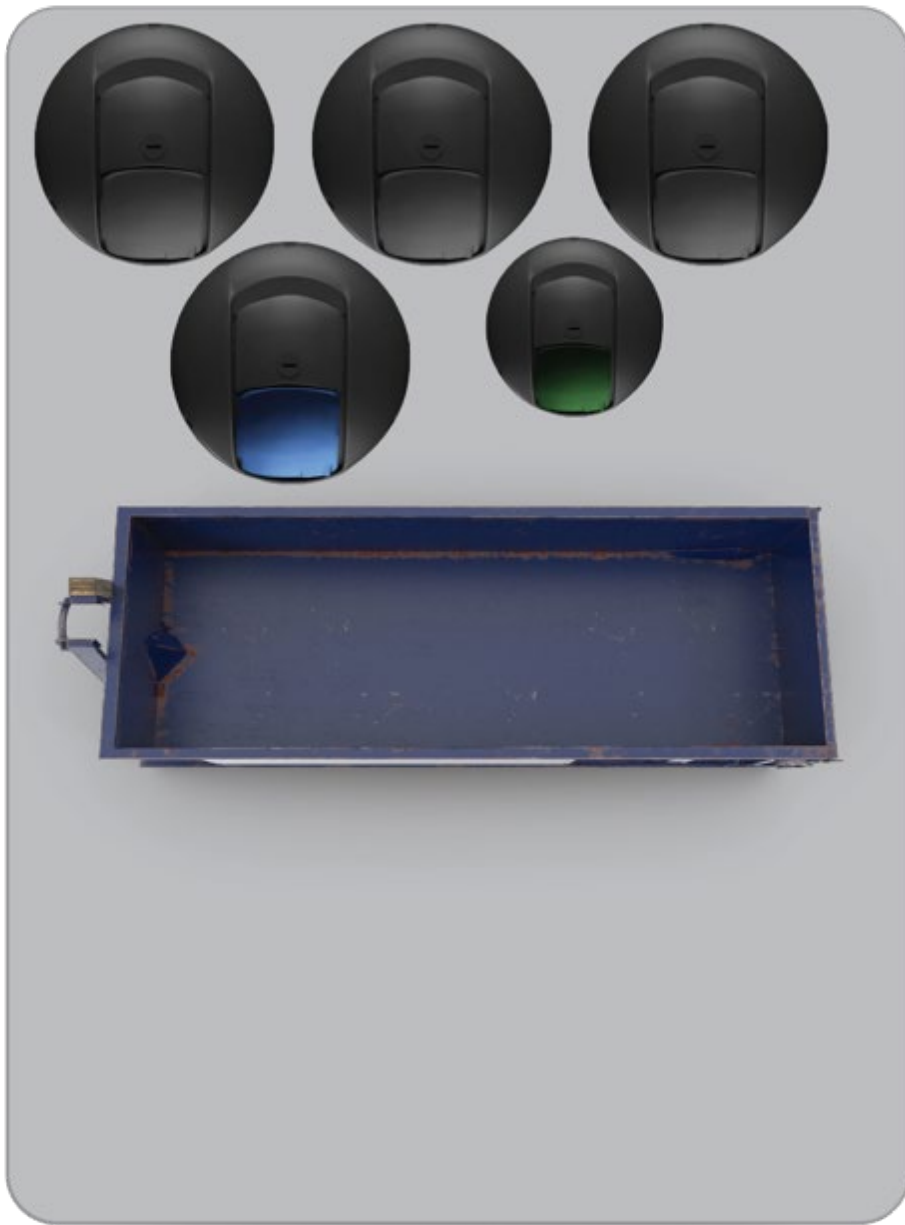


# Space Savings

The allowance for one 6 yard fork-lifted dumpster.  
5 metre square = 53.8 square feet

Within that space, we can place  
2 M-5000 and 1 M-Organic containers  
That will provide enough capacity for 90 people with  
weekly service - 7/8 days.

*With space to spare!*





# Accessibility

The Planning Act requires “including facilities design to have regard for accessibility for persons with disabilities”.



Molok<sup>®</sup> is within the accessibility height requirement of 38 – 42 inches.





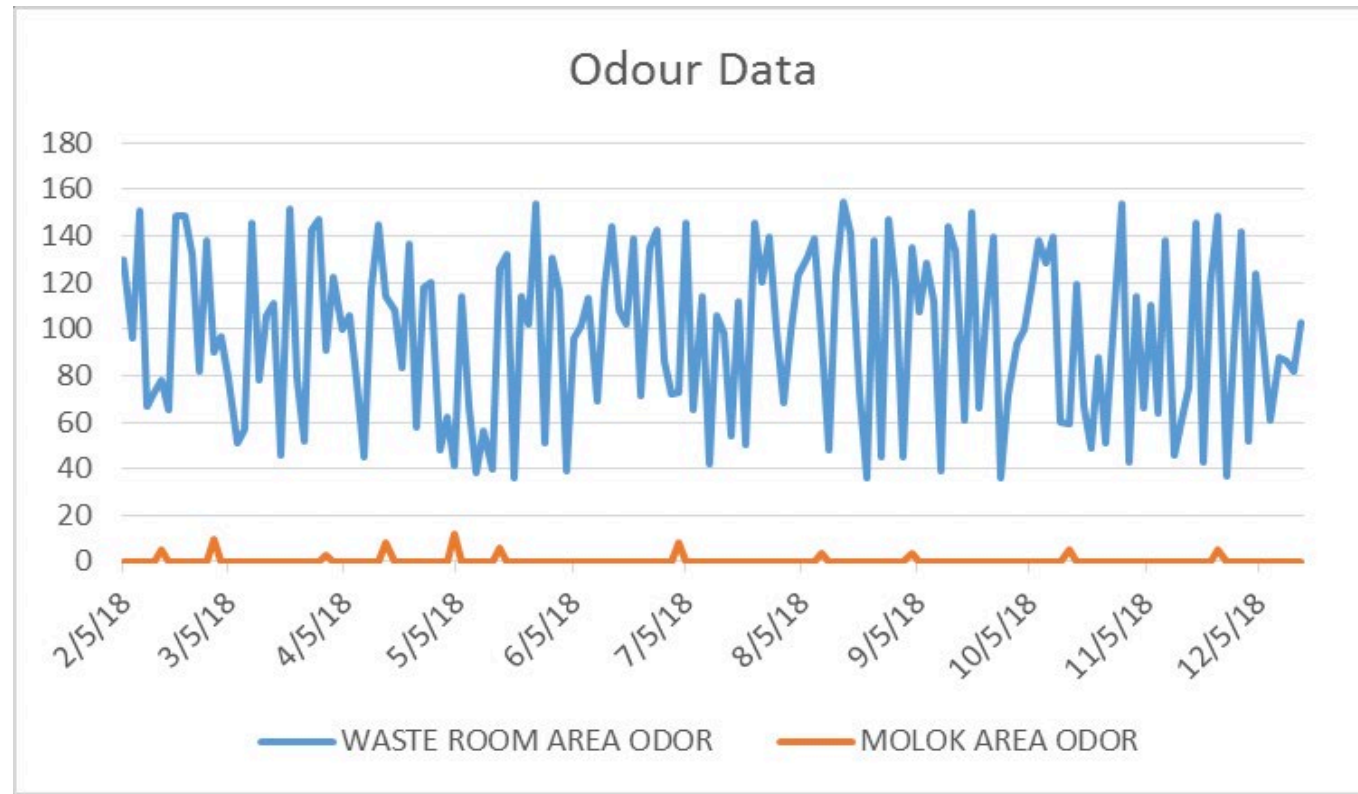
# Results

On average, temperatures are lower in the Molok® container compared to the Earth Rangers' conditioned waste room.

	Avg. Temp. (°C)							
	Waste Molok Container				Organics Molok Container			
	TOP OF BIN	25" from TOP	50" from TOP	BOTTOM	TOP OF BIN	25" from TOP	50" from TOP	BOTTOM
Jan	0.9	0.7	0.9	3.2	0.4	0.2	1.3	2.4
Feb	-0.6	-0.3	0.1	2.2	1.7	1.5	0.7	1.5
Mar	0.2	-0.3	0.2	1.6	2.1	1.8	1.2	2.0
Apr	9.0	7.3	6.4	5.4	11.9	12.9	7.8	7.1
May	12.2	11.6	10.8	9.1	14.8	14.4	13.4	11.0
Jun	20.4	18.4	16.8	13.8	22.3	20.9	21.5	17.9
Jul	22.4	21.3	20.2	17.4	24.6	24.0	21.4	19.5
Aug	21.9	20.9	19.9	18.5	23.6	23.0	19.6	19.7
Sep	20.7	19.3	18.0	18.0	22.6	21.7	19.0	18.8
Oct	16.2	15.5	15.4	16.5	17.2	16.7	16.4	16.1
Nov	Malfunction in Data Logger				9.3	9.3	9.3	11.0
Dec	0.6	0.6	1.1	2.9	1.2	1.3	3.2	5.0
Fall	11.1	10.5	10.6	11.7	11.9	11.6	11.6	12.4
Winter	-0.3	-0.3	0.2	2.1	1.0	0.8	1.1	2.1
Spring	11.8	10.4	9.4	7.9	14.3	14.2	12.0	10.2
Summer	21.6	20.4	19.2	17.6	23.4	22.7	20.1	19.3

# Results

Odours were consistently lower in the Molok® container.



# Win – Win - Win



- **Win:** Developers have more space
- **Win:** City of Hamilton increase tax revenue base
- **Win:** The environment, reduced service frequency/truck traffic/lower carbon footprint



## 6.1(b)

### Request to Speak to Committee of Council

Submitted on Monday, October 25, 2021 - 9:10am

==Committee Requested==

**Committee:** Public Works Committee

==Requestor Information==

**Name of Individual:** Mike Collins-Williams

**Name of Organization:** West End Home Builders'  
Association

**Contact Number:** [REDACTED]

**Email Address:** [mikecw@westendhba.ca](mailto:mikecw@westendhba.ca)

**Mailing Address:**

1112 Rymal Road East  
Hamilton, ON  
L8W 3N7

**Reason(s) for delegation request:** To Speak to the City of Hamilton's Public Works Committee meeting on November 1st, 2021, regarding the proposed Waste Design Requirements.

**Will you be requesting funds from the City?** No

**Will you be submitting a formal presentation?** Yes

November 1, 2021

**Public Works Committee**

Committee of Council – City of Hamilton

**West End Home Builders' Association | Concerns on Proposed Waste Design Requirements Policy**

The West End Home Builders' Association (WE HBA) has appreciated working with City of Hamilton Public Works Staff, and we appreciate the time Staff have taken to work with industry. However, our association still has significant concerns with the policies, as they directly contrast to the City achieving the ambitious density targets that council has expressed a desire to see city-wide. As proposed, the current policies will result in a city-wide loss of residential intensification units, including rendering some sites within the city undevelopable (as expressed in Appendix A). **WE HBA is asking that the Public Works Committee direct City Staff to continue to work with our association and the Hamilton Burlington Society of Architects on refining these policies to address and resolve our concerns.**

As our city proceeds through the GRIDS 2 / MCR process, and City Council considers and the implementation of a significant increase in the city-wide intensification rate (ranging from 60-80%) over the next 30 years, Hamilton cannot afford limiting intensification potential on economically viable sites, as would be done currently through this proposal. The densities that Council and City Staff have placed on the table for consideration require a paradigm shift to happen across all City departments. Getting these waste design requirements right is an important first step to accomplishing both the intensification the city wishes to see, alongside a well-designed built form that allows for the reduction in hardscaping on sites which is also needed to facilitate better stormwater management practices and climate change adaptation.

In particular, a summary of the outstanding issues WE HBA has with the proposed policies are as follows:

*Turn-around size requirements*

- WE HBA maintains that the size is excessive given the consideration our City has to prioritize intensification and increase densities within existing communities. Our members are disappointed this requirement has not been reduced, but rather reaffirmed, as it creates challenges for tight infill redevelopment sites. Rather than limiting developable areas on infill sites, the City should investigate operational flexibility as opposed to these design changes to address concerns. Some examples of operational flexibility the City could consider are: the use of smaller waste pickup vehicles in high density areas, use of flag-persons or rearview cameras to facilitate truck reversals, and utilizing emerging technologies in waste collection and diversion such as crane collection services. Should operational flexibility not be considered, WE HBA would point the City of Hamilton towards the City of Toronto as an example of a municipality that only requires front end collection for developments above 31 units, as opposed to the 6 Hamilton is currently proposing.

*Storage Requirements*

- For higher density developments, especially condo towers, providing enough space for 8 days of waste storage requires a significant amount of room dedicated solely to waste. In our member's experience, this is also not a desired length of time to store such a significant amount of waste on



site. In these cases, our members have often opted for private pickup to reduce both the length of time the waste is stored in the building and the amount of space required for storage. In cases of high-density developments, the requirement to meet the guidelines will significantly limit the unit count of a building, and as such allowances for private pickup should be made.

#### *Allowances for Private Pick-up*

- WE HBA appreciates that City Staff have agreed that in some cases private pickup will be permitted. Our membership would appreciate the opportunity to continue to work with City Staff to develop a framework for how developers can apply for and receive private pick-up. Our members have significant concerns about the current policy as worded because it does not outline clear criteria or provide certainty for how a development would qualify. This is important as allowing for private pick-up will assist our members address site constraints, community concerns, and will provide for the flexibility of multiple pickups per week to address storage capacity challenges. Our members understand that the success of private pickup implementation will require enhanced efforts on the developers' part to communicate better with future residents about their waste collection services and diversion opportunities. WE HBA would point to two municipalities as examples that Hamilton could adapt policies from. The Region of Waterloo provides a garbage rebate program for developments that do not receive municipal pick-up, whereas the City of Ottawa registers a clear declaration regarding private pick-up on title.

The future of Hamilton will be shaped by how we intensify our existing neighbourhoods. These policies are a perfect example of how all aspects of the City of Hamilton need to work together to facilitate future growth and city building. The West End Home Builders' Association appreciates that City Staff recognize there are outstanding aspects of this policy that our industry cannot support. **Our association would like to request that further work between our association and the Public Works Department occur to help us collaborate in getting these policies right. We believe that through working collaboratively together we can bring these policies to a place that works for the industry, Council, and City Staff.** Appended to this report under Appendix A, Council will find a series of examples the WE HBA has collaborated on with the Hamilton Burlington Society of Architects. These drawings show the significant impacts these requirements will have on our City's built form. We look forward to further dialogue with Staff and Committee to resolve these issues.

Sincerely,



Michelle Diplock, MPI  
Manager of Planning & Government Relations  
West End Home Builders' Association



**Appendix A** – Drawings Showing Implications of the Proposed  
Waste Design Requirements



**GENERAL LEGEND**

- BUILDING FOOTPRINT
- BUILDING EXIT AND/OR ENTRANCE
- EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
- PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**SITE SUMMARY : BASED ON THE DRAFT 'CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION'**

**3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS**

- 6 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (3) WASTE BINS (5 m<sup>2</sup> STORAGE EACH) BASED ON 'TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS'
- (3 X 5m<sup>2</sup>) = 15m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS (7 SPACES LOST)
- REDUCTION OF BUILDING AREA AND RESIDENTIAL UNITS DUE TO HAMMERHEAD SPACE REQUIREMENTS (MIN. 6 UNITS LOST)
- LOADING AREA IMPEDES EXITING AND EGRESS AT THE REAR OF THE BUILDING
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

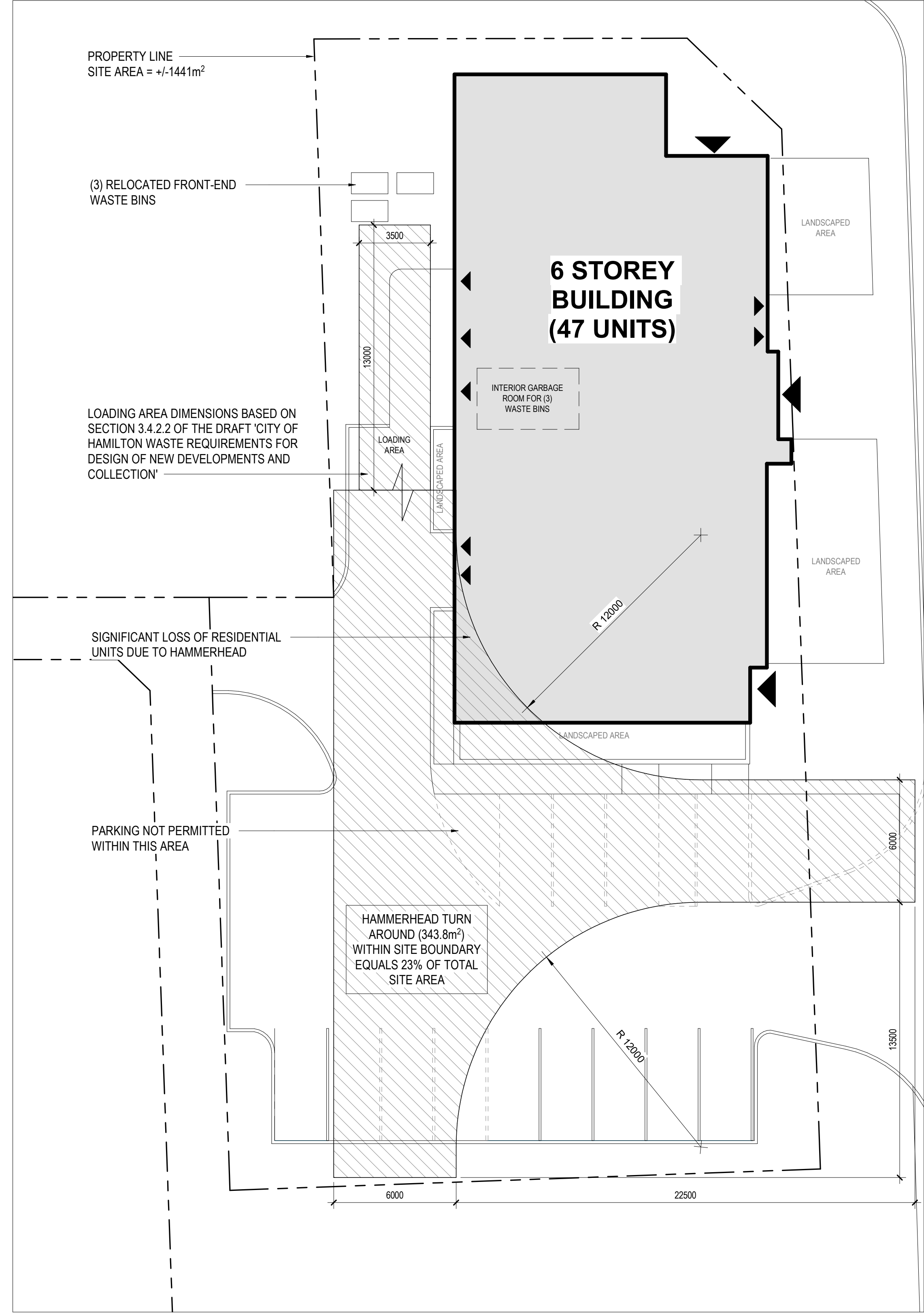
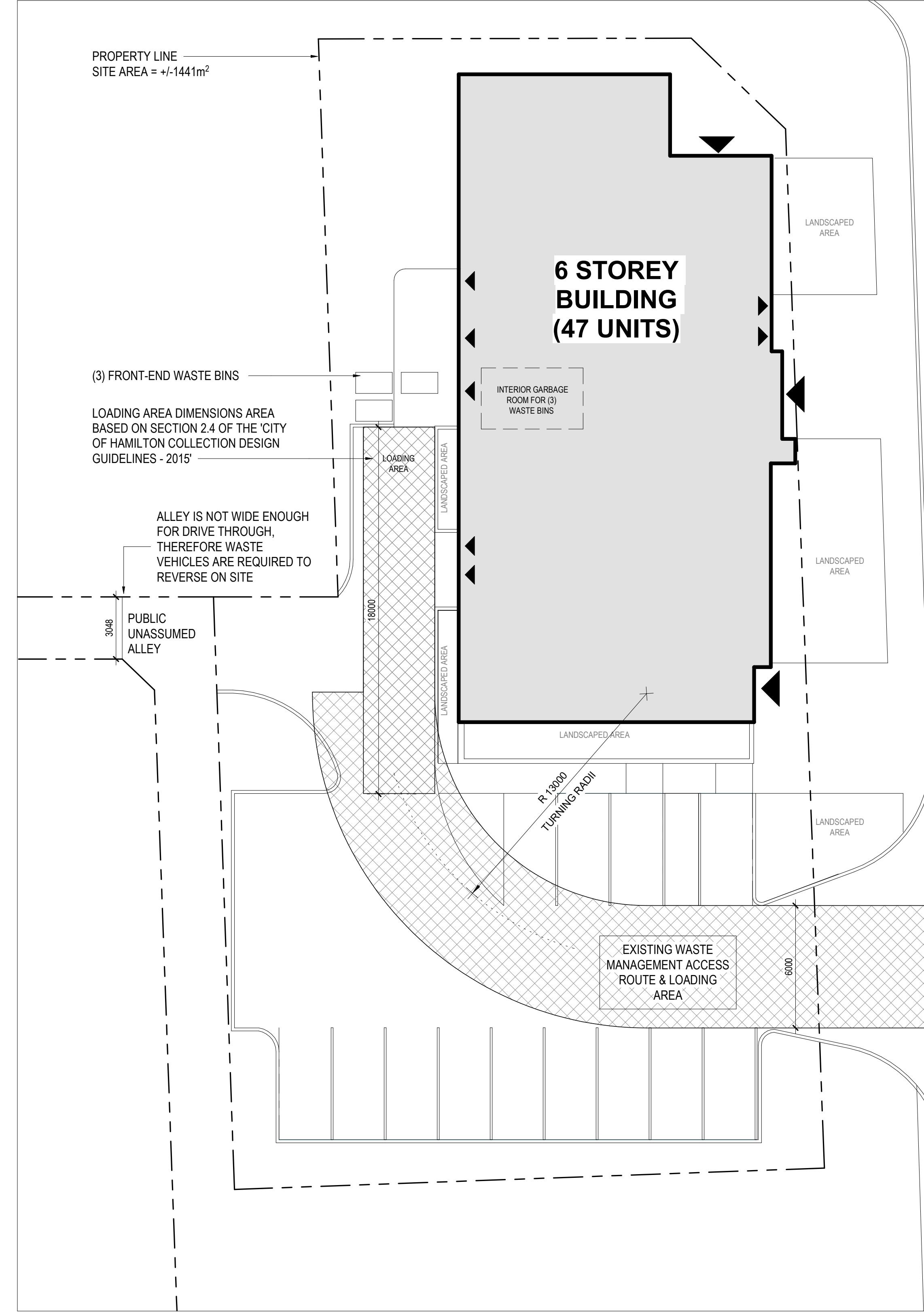
**TOTAL LOSSES:**

**47 UNITS IS REDUCED BY 6 TO 41 UNITS BASED ON BUILDING AREA CLEAR OF HAMMERHEAD**

**13 PARKING SPACES IS REDUCED TO 7**

**REDUCTION OF PARKING MEANS FURTHER REDUCTION OF UNITS (BASED ON SECTION 5.6 OF BY-LAW 05-200 ASSUMING UNITS AS >50m<sup>2</sup>, AT 0.5 PER UNIT A FURTHER REDUCTION OF 14 UNITS OCCURS)**

**47 UNITS - 6 UNITS - 14 UNITS = 27 UNITS TOTAL**



**GENERAL NOTES:**

1. The Architect bears no responsibility for the interpretations of these documents by the Contractor. Upon written application the Architect will provide written and graphic clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.
2. Drawings are not to be scaled for construction. Contractor to verify all existing conditions and dimensions required to perform the Work and report any discrepancies with the Contract Documents to the Architect before commencing work.
3. Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

No.	Description	Date
1	Issued For	2016/01/31

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**SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC.**

**GARBAGE STANDARDS - SITE PLANS**

**1430 Main St.**

Project No.: XXXX  
 Scale: As indicated  
 Drawn By: Author  
 Checked By: Checker

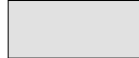



1 1430 MAIN STREET - EXISTING CONDITIONS  
 A0.01 1:150

2 1430 MAIN STREET - PROPOSED HAMMERHEAD IMPACTS  
 A0.01 1:150

**A0.01**



**GENERAL LEGEND**

-  BUILDING FOOTPRINT
-  BUILDING EXIT AND/OR ENTRANCE
-  EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
-  PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**SITE SUMMARY : BASED ON THE DRAFT 'CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION'**

3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS'

- 4 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS (5 m<sup>2</sup> STORAGE EACH) BASED ON 'TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS'
- (2 X 5m<sup>2</sup>) = 10m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS
- REDUCTION OF BUILDING AREA AND UNITS DUE TO HAMMERHEAD SPACE REQUIREMENTS
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

**TOTAL LOSSES:**

**45 UNITS IS REDUCED TO 41 UNITS BASED ON BUILDING AREA CLEAR OF HAMMERHEAD**

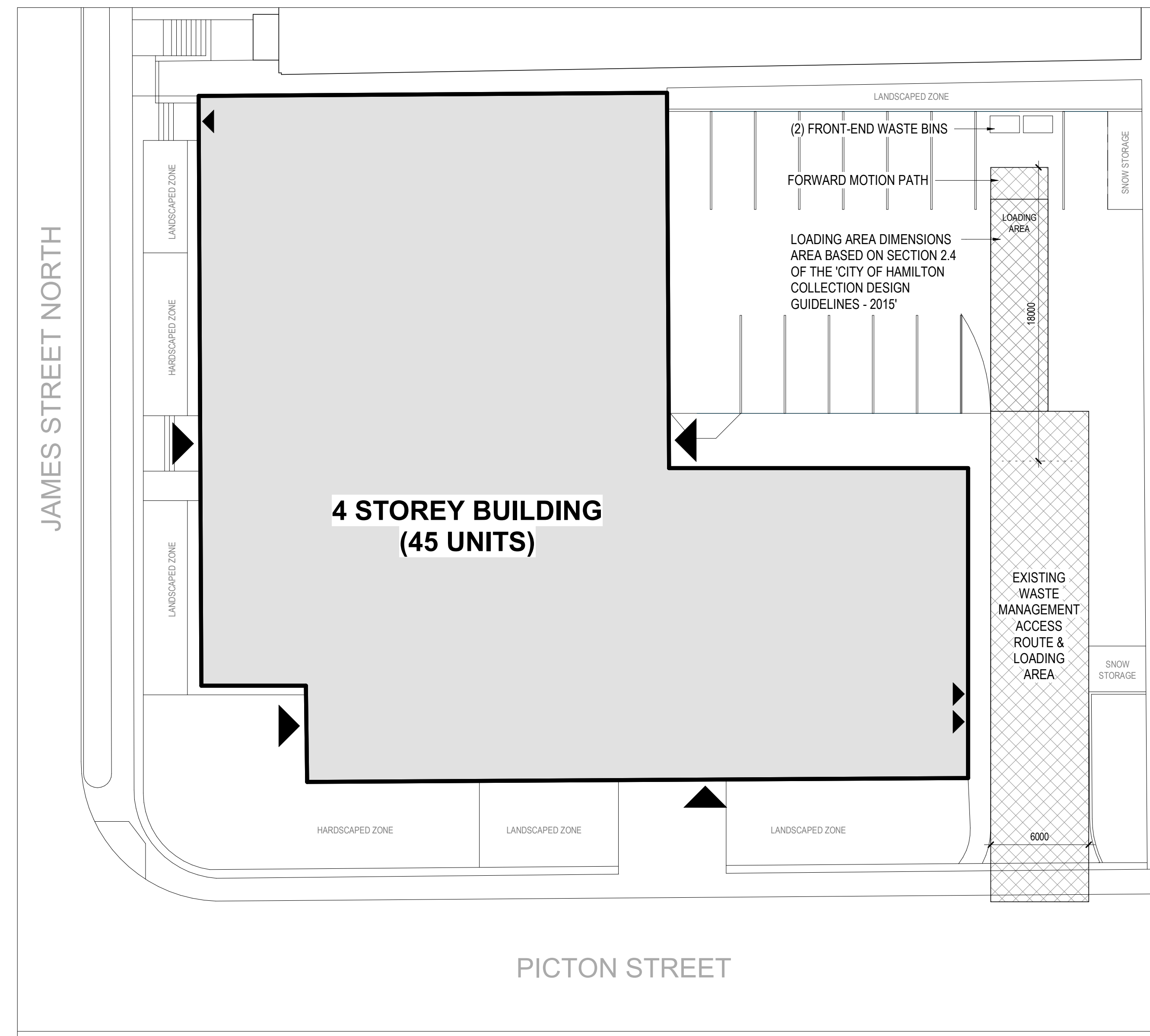
**16 PARKING SPACES IS REDUCED TO 7**

**REDUCTION OF PARKING MEANS FURTHER REDUCTION OF UNITS (BASED ON SECTION 5.6 OF BY-LAW 05-200 ASSUMING UNITS AS >50m<sup>2</sup>, AT 0.5 PER UNIT A FURTHER REDUCTION OF 14 UNITS OCCURS)**

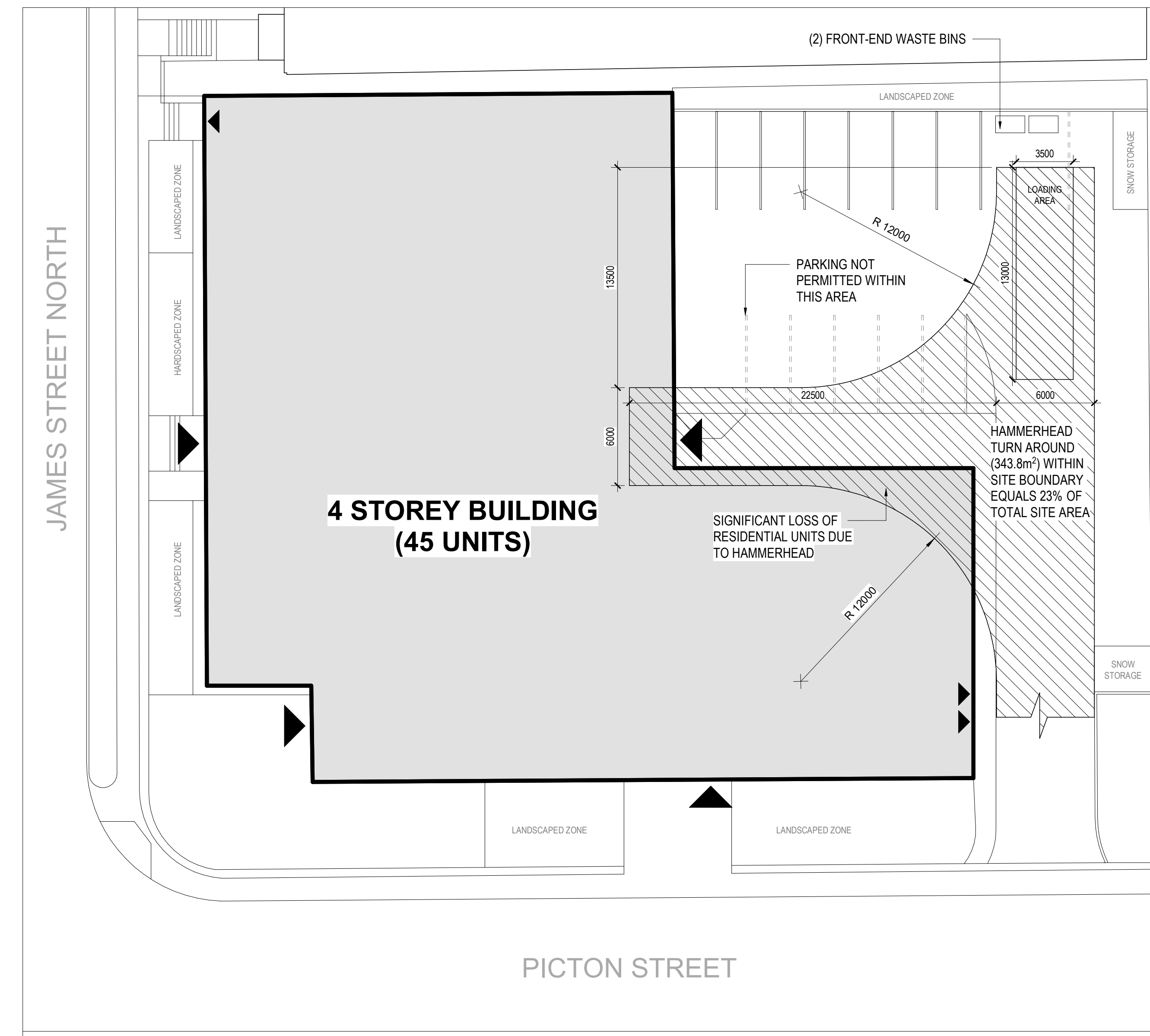
**45 UNITS - 4 UNITS - 14 UNITS = 27 UNITS TOTAL**

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1 500 JAMES ST N - EXISTING CONDITIONS  
A0.02 1:200



2 500 JAMES ST N - PROPOSED HAMMERHEAD IMPACTS  
A0.02 1:200

No.	Description	Date
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**SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC.**

**GARBAGE STANDARDS - SITE PLANS**

**500 JAMES STREET N.**

Project No.:	XXXX
Scale:	As indicated
Drawn By:	Author
Checked By:	Checker

**GENERAL LEGEND**

-  BUILDING FOOTPRINT
-  BUILDING EXIT AND/OR ENTRANCE
-  EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
-  PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**SITE SUMMARY : BASED ON THE DRAFT 'CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION'**

**3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS'**

- 3 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS (5 m<sup>2</sup> STORAGE EACH) BASED ON TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS'
- (2 X 5m<sup>2</sup>) = 10m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- THE CURRENT PARKING CONSTRAINS WOULD ENCOUNTER SIGNIFICANT LOSS OF PARKING CAPACITY DUE TO HAMMERHEAD SPACE REQUIREMENTS
- REDUCTION OF BUILDING AREA AND UNITS DUE TO HAMMERHEAD SPACE REQUIREMENTS (12 UNITS LOST)
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

**TOTAL LOSSES:**

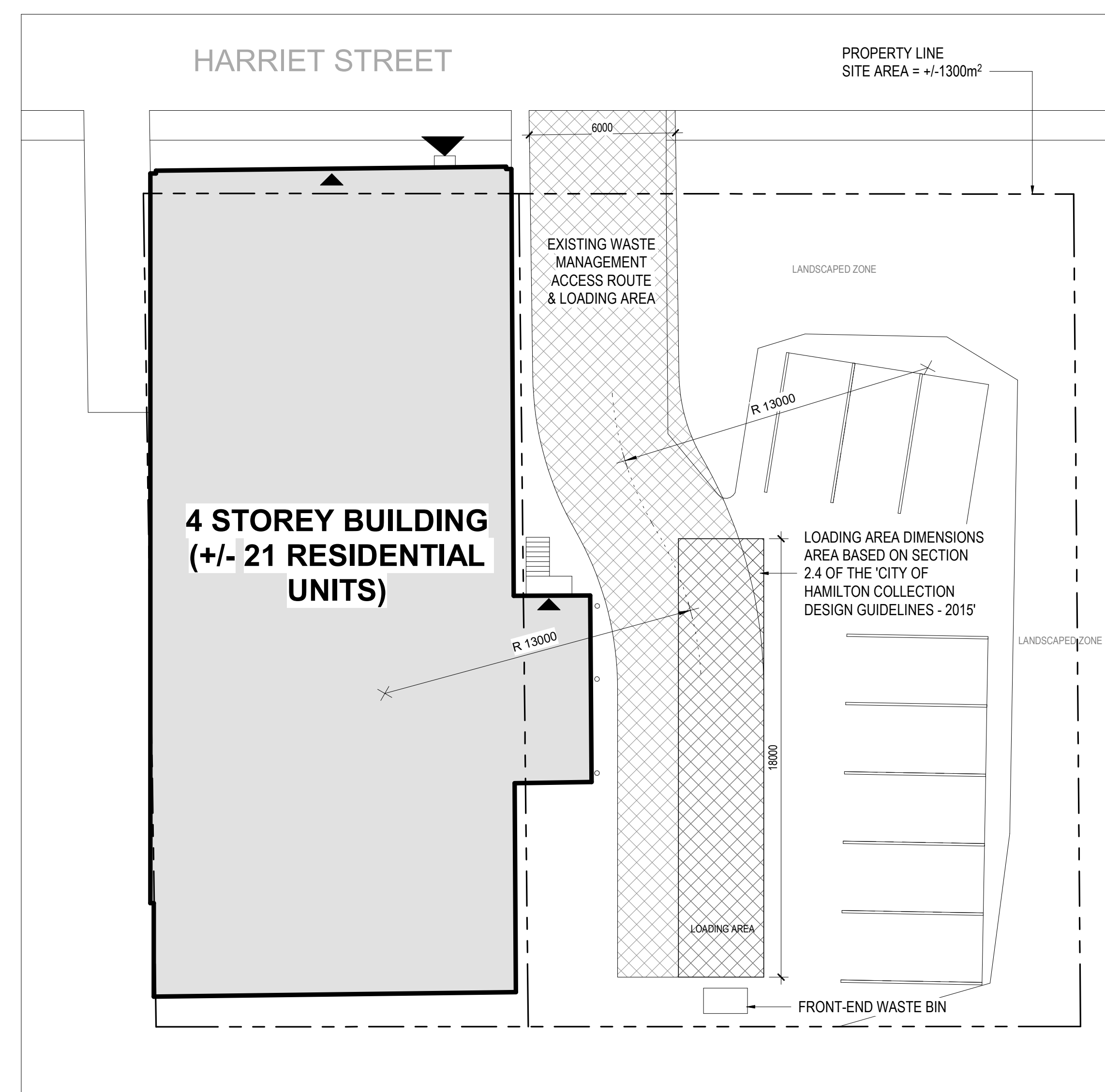
**POTENTIAL FOR 21 UNITS IS REDUCED TO 9 UNITS BASED ON BUILDING AREA CLEAR OF HAMMERHEAD**

**MAJOR DEMOLITION TO EXISTING BUILDING WOULD BE REQUIRED**

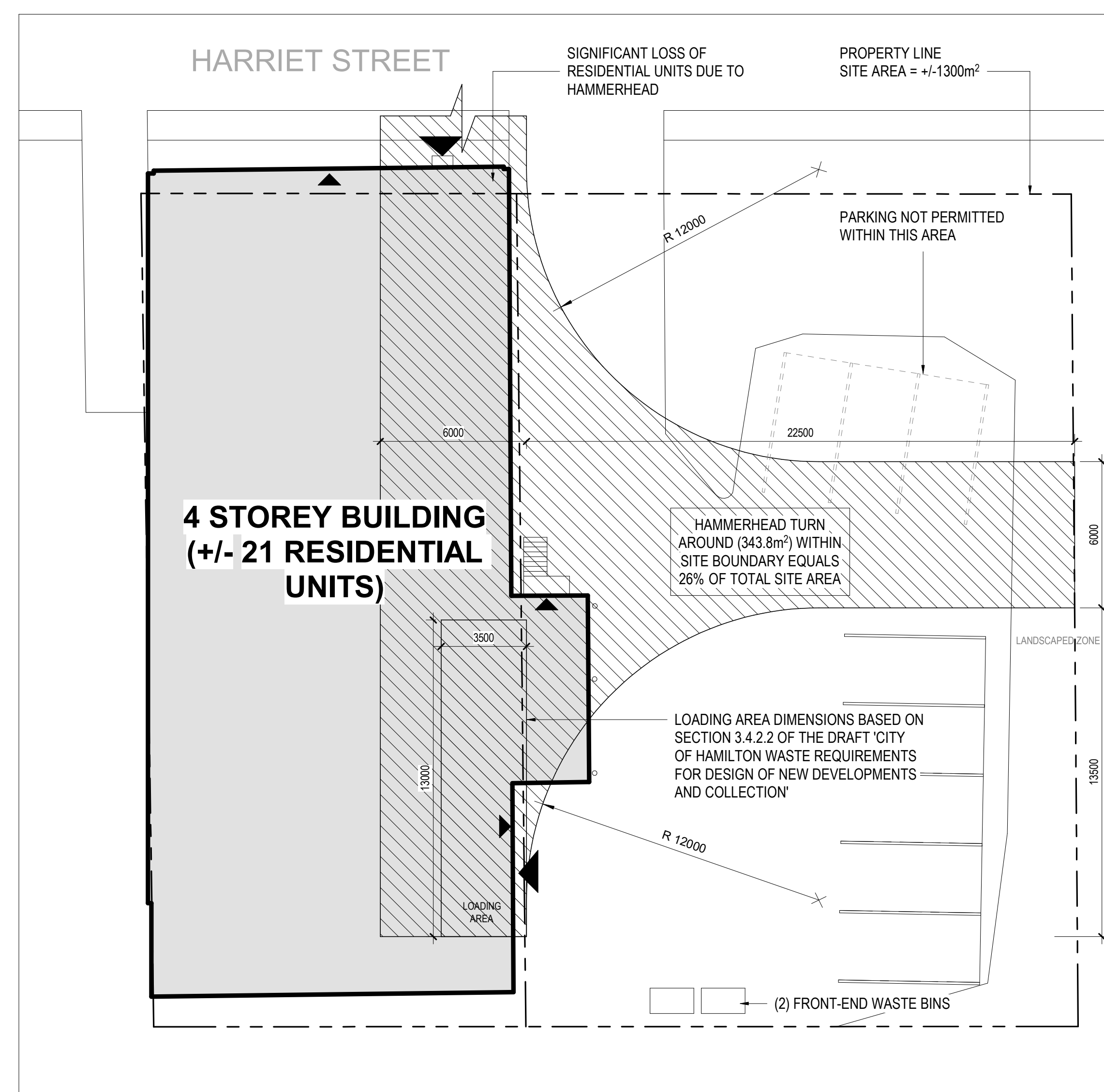
**8 EXISTING PARKING SPACES IS REDUCED TO 5**

**GENERAL NOTES:**

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**1** 29 HARRIET - EXISTING CONDITIONS  
A0.03 1:150



**2** 29 HARRIET - PROPOSED HAMMERHEAD IMPACTS  
A0.03 1:150

No.	Description	Date
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**GARBAGE STANDARDS - SITE PLANS**

**29 HARRIET STREET**

Project No.:	XXXX
Scale:	As indicated
Drawn By:	Author
Checked By:	Checker



**GENERAL LEGEND**

-  BUILDING FOOTPRINT
-  BUILDING EXIT AND/OR ENTRANCE
-  EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
-  PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**CONCEPTUAL SITE PLAN**

98m DESIRED FUTURE BUILDING HEIGHT AS OUTLINED BY THE CITY OF HAMILTON

**SITE SUMMARY : BASED ON THE DRAFT 'CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION'**

3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 6 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS (5 m<sup>2</sup> STORAGE EACH) BASED ON 'TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS'
- (2 X 5m<sup>2</sup>) = 10m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS AND INCREASED BUILDING FOOTPRINT TO ALIGN WITH GOALS OF INTENSIFICATION (13 SPACES LOST)
- REDUCTION OF BUILDABLE AREA AND RESIDENTIAL UNIT ALLOWANCE DUE TO LIMITED PARKING CAPACITY
- ADDITIONAL STOREYS BASED ON ZONING HEIGHT LIMITS WOULD MEAN THE BUILDING FALLS INTO 'LARGE MULTI-RESIDENTIAL' GARBAGE REQUIREMENTS AND WOULD REQUIRE MORE SPACE FOR GARBAGE
- EXISTING NEIGHBOURING BUILDING WOULD REQUIRE DEMOLITION
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

**TOTAL LOSSES:**

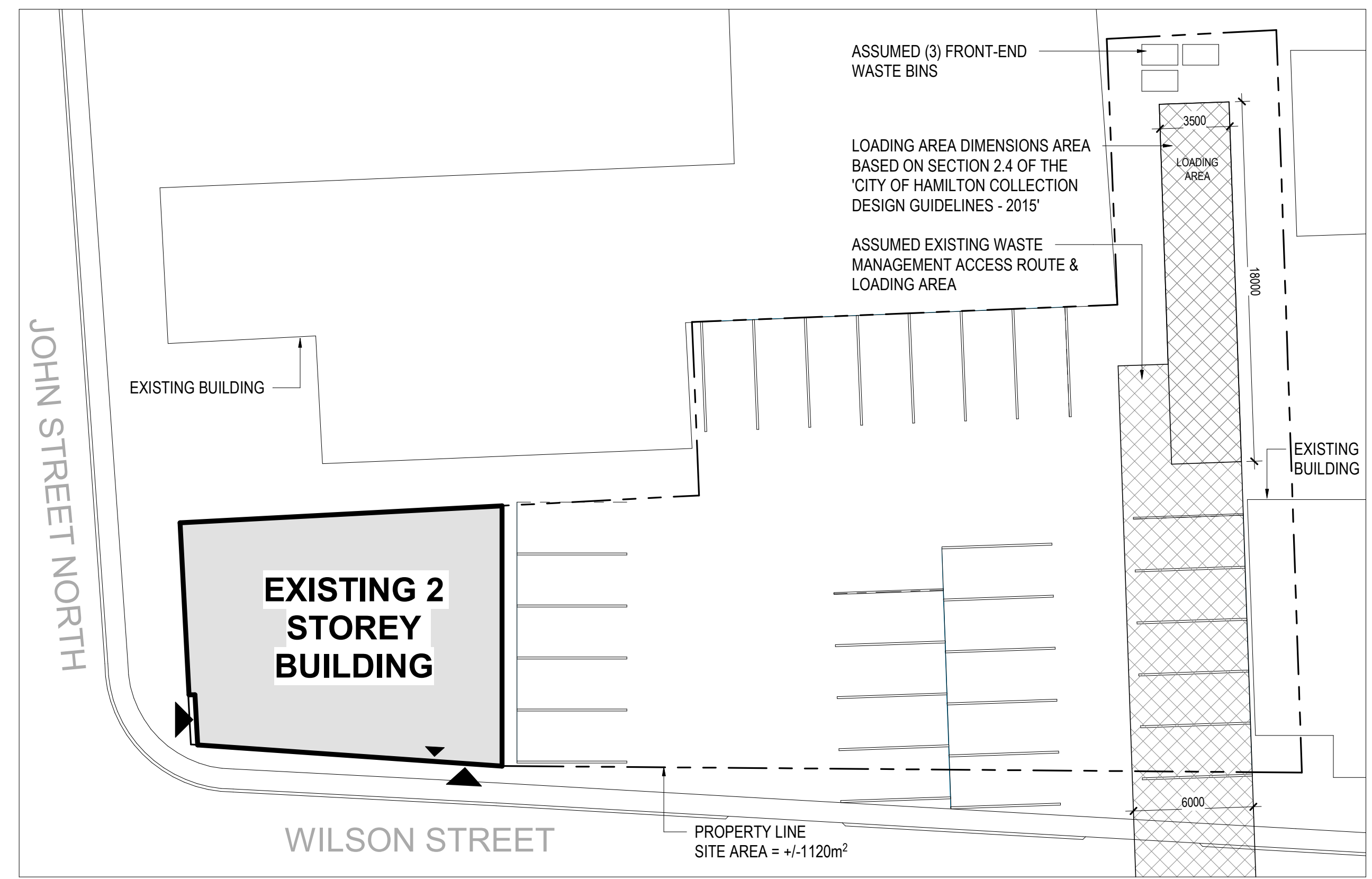
**26 PARKING SPACES IS REDUCED TO 13**

**REDUCTION OF PARKING MEANS REDUCTION OF POTENTIAL UNITS**

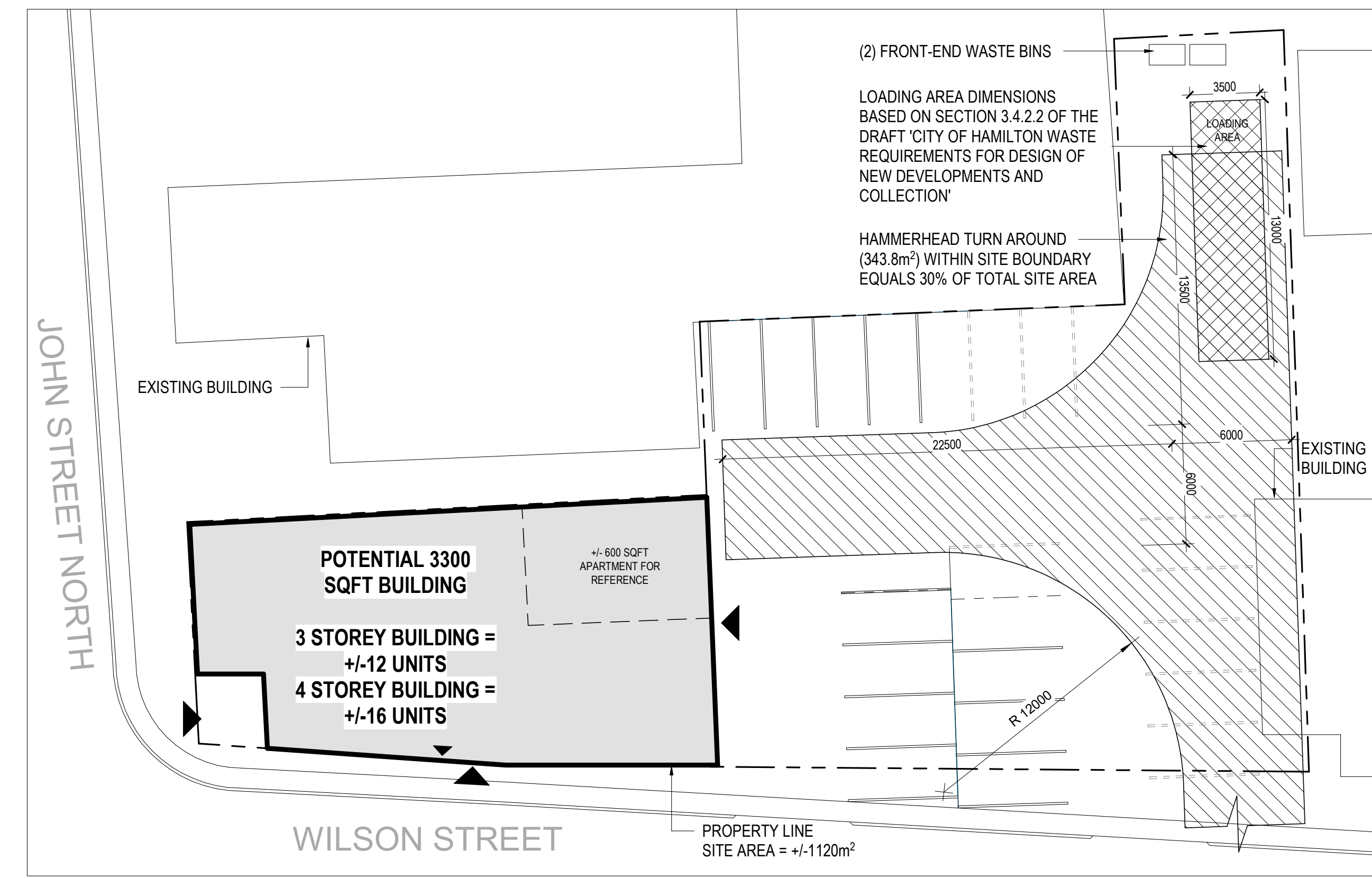
**INCREASES TO THE OVERALL BUILDING HEIGHT WOULD ALSO INCREASE THE PARKING AND GARBAGE REQUIREMENTS**

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1  
A0.04 92 JOHN STREET - EXISTING CONDITIONS  
1:200



2  
A0.04 92 JOHN STREET - PROPOSED HAMMERHEAD IMPACTS  
1:200

No.	Description	Date
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145 King Street East | Hamilton | Ontario | L8N 1B1 | 389 789 2211  
www.toms-mcnally.ca

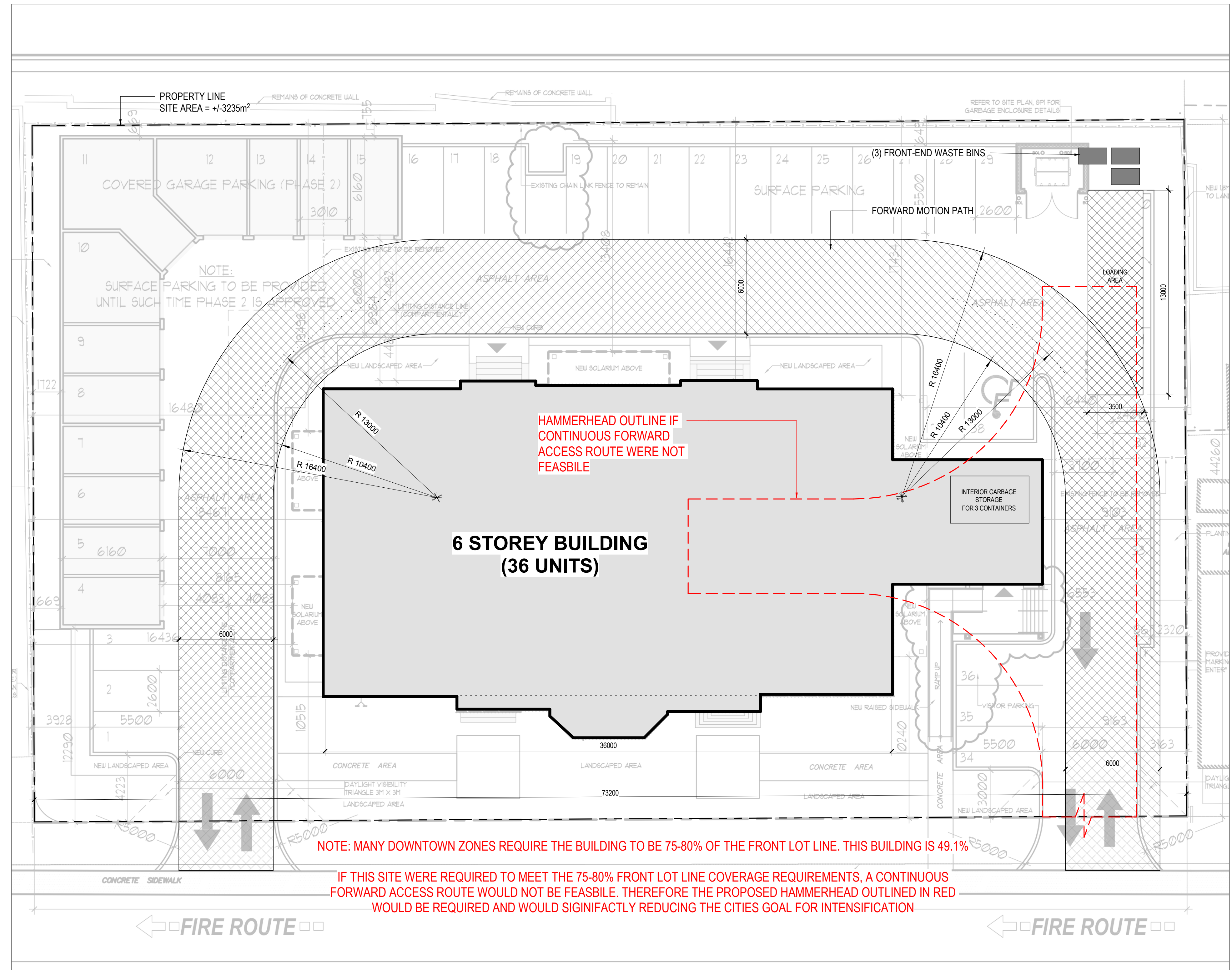
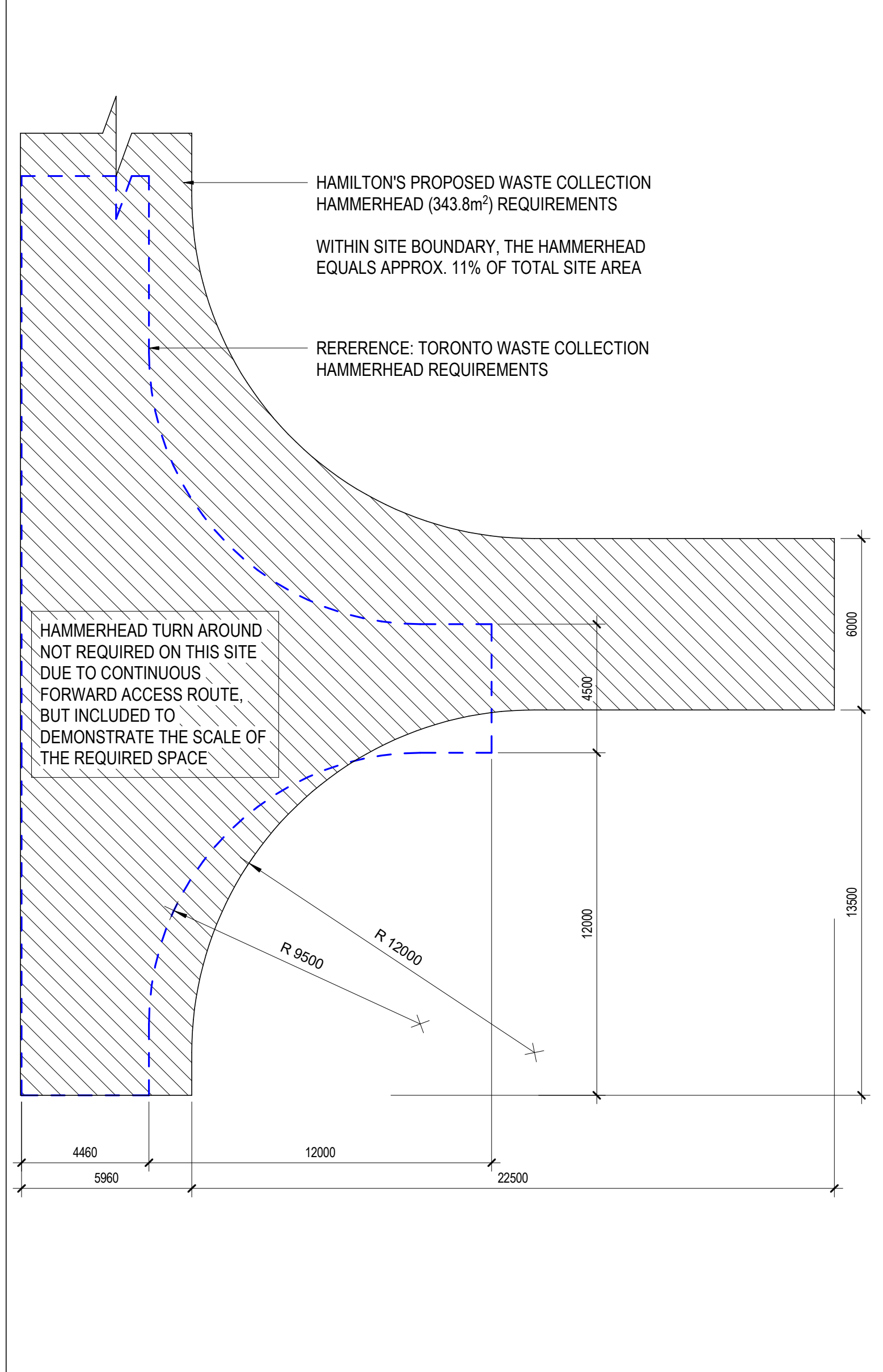
**GARBAGE STANDARDS - SITE PLANS**

92 JOHN ST

Project No.:	XXXX
Scale:	As indicated
Drawn By:	Author
Checked By:	Checker



**COMPARING WASTE COLLECTION DESIGN REQUIREMENTS**  
 DIAGRAM SCALE IS 1:500



1  
 A0.05 WITTON LOFTS - EXISTING CONDITIONS  
 1:150

- GENERAL NOTES:
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  3. Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

No.	Description	Date
1	Issued For	2016/01/01

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**SITE PLAN PROVIDED BY LINTACK ARCHITECTS**

**GARBAGE STANDARDS - SITE PLANS**

Witton Lofts

Project No.: XXXX  
 Scale: 1:150  
 Drawn By: Author  
 Checked By: Checker

**A0.05**



## CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION

### 3.1.4 Vehicle Movement Throughout the Access Route

#### 3.1.4.1 Access Route Dimensions

The Access Route shall be designed to allow for continuous forward movement of Waste Collection Vehicles throughout the Development, including the radius of a cul-de-sac turning circle. The only exception to having continuous forward motion is when the Waste Collection Vehicle is entering or exiting a Loading Area as described in sections 3.4 *Design Requirements for Multi-Residential Townhouse Developments* and 3.5 *Design Requirements for Multi-Residential Buildings*. Changes of direction on the Access Route must have turning radii of at least 10.4 metres for the inside of the curve, and 13 metres for the outside of the curve if the curb or sidewall is higher than 0.375 metres. The Access Route may have a Turning Radius of 9.4 metres for the inside of the curve and 12 metres for the outside of the curve if the curb is shorter than 0.375 metres and, if the City will permit a portion of the Waste Collection Vehicle to hang over areas not designated as Access Routes as indicated on plans during movement. Please refer to "Appendix 7: Turning Radius" for reference.

#### 3.1.4.2 Continuous Forward Motion

To confirm that Waste Collection Vehicles can travel throughout the Development in a forward motion, the Development Application must include a copy of the site plan with the travel path of the Waste Collection Vehicle throughout the Development. This travel path must be generated by software approved by the City (for example AutoTurn). The dimensions of City of Hamilton Waste Collection Vehicles is included in "Appendix 1: Diagrams of Waste Collection Vehicle". If, in the opinion of the City, continuous forward motion is not possible due to site constraints, Waste Collection Vehicles will be permitted to make a three-point turn using an approved turnaround area consistent with "Appendix 3: Acceptable Turnaround". Use of a turnaround area will only be permitted on Developments with one Private Road and meet all the following criteria:

- Have no more than one entrance;
- The one Private Road terminates with a dead-end;
- Reversing of collection vehicles is only made on the turnaround area; and
- Collection of Waste from all Dwelling Units can occur by the Waste Collection Vehicle making no more than one three-point turn

#### 3.1.6.2 Denial of Private Waste Collection Services

If staff determine that a Development does not have site constraints that make it impossible to meet the applicable Design Requirements, then the request to retain Private Waste Collection Services will be denied and the Developer will be obligated to meet the applicable Design Requirements.

### 3.2.1 Waste Storage

Developers must provide at minimum, 2.5 square metres for waste storage for each Dwelling Unit to store waste between collection days. The Storage Area must be exclusive of living space, such as in the garage, be fully enclosed, be large enough to accommodate two Blue Boxes, a Green Cart, a Garbage Container, and a Yard Waste Container and the layout will be at the discretion of the City. The Storage Area must not be located in the front yard of the property.

### 3.5.3 Waste Loading Areas

#### 3.5.3.1 Requirements for Loading Areas

Large Multi-Residential Buildings will receive Front-End Collection Services for all Waste and small Multi-Residential Buildings will receive Front-End Collection Services for Garbage. Submitted drawings must include for all Multi-Residential Buildings a Loading Area that can be serviced by a Front-End Loading Waste Collection Vehicle as well as Bulk Loading Waste Collection Vehicles. A paved route on private property connecting the Loading Area with the Storage Area and the travel route of the Front-End Containers from the Storage Area to the Loading Area must be indicated on submitted drawings. Movement of Front-End Containers over public property is not permitted. Requirements of the Loading Area that must be included in submitted drawings include (refer to "

## CITY OF TORONTO REQUIREMENTS FOR GARBAGE, RECYCLING AND ORGANICS COLLECTION SERVICES FOR NEW DEVELOPMENTS AND REDEVELOPMENTS.

LAST REVISED MAY 2021

### MULTIPLE HOUSEHOLD COLLECTION & STORAGE

Residential developments with 9 and up to 30 units are eligible for multiple household bins for garbage, recycling and organic materials at the discretion of Solid Waste Management Services.

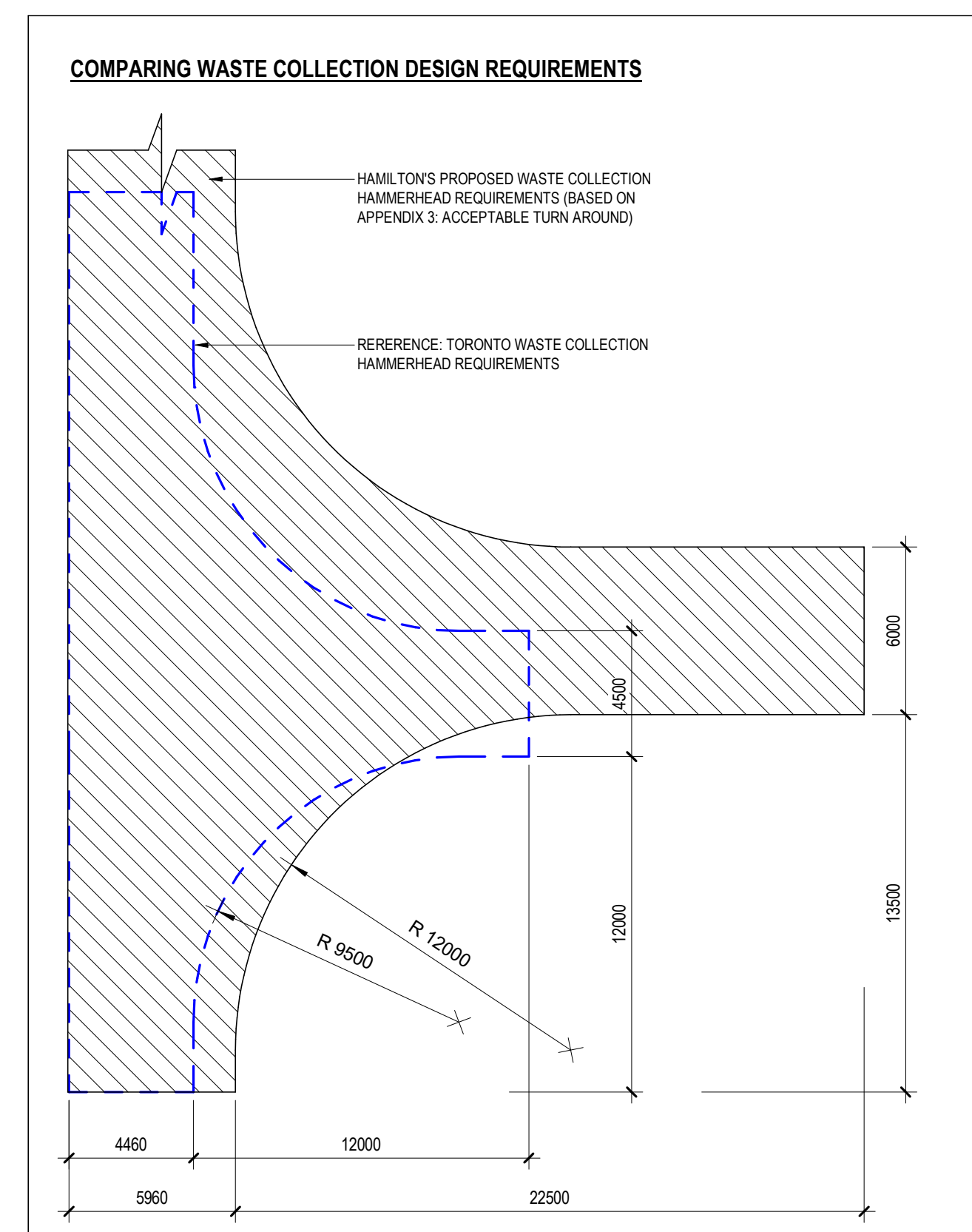
Front-end collection services will be provided to large residential developments (31 units and above) for garbage, recycling and organics materials.

#### Bin Collection & Storage Requirements

Multiple household bin collection service is typically established at buildings with less than 31 units and/or townhouse complexes, unless otherwise approved by the General Manager. The multiple household bin collection system uses 95 gallon containers compatible with City vehicles for the collection of garbage and recyclable materials.

#### Bins

- The multiple household bin(s) must be obtained from the City of Toronto.
- An onsite staff/maintenance person is required to move the bins from the garbage/recycling/organics storage room to the collection point which will be curbside.
- All billing matters related to the City of Toronto solid waste collection services are the responsibility of the Condominium Corporation/Property Management.



#### GENERAL NOTES:

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3. Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

No.	Description	Date
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**TOMS + MCNALLY**  
DESIGN | ARCHITECTURE | URBANISM | CONSTRUCTION

145 King Street East | Hamilton | Ontario | L8N 1B1 | 389 788 2211  
www.toms-mcnally.ca

### GARBAGE STANDARDS - SITE PLANS

#### City of Toronto Reference

Project No.: XXXX  
Scale: 1 : 200  
Drawn By: Author  
Checked By: Checker



**SITE SUMMARY : BASED ON THE DRAFT 'CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION'**

3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 16 STOREYS = LARGE RESIDENTIAL
- GARBAGE, RECYCLING AND GREEN CARTS
- >12 GARBAGE CONTAINERS (UNCOMPACTED)
- 6 (+?) GARBAGE CONTAINERS (COMPACTED)
- 12 RECYCLING ORGANIC CONTAINERS
- 3 ORGANIC FRONT END CONTAINERS

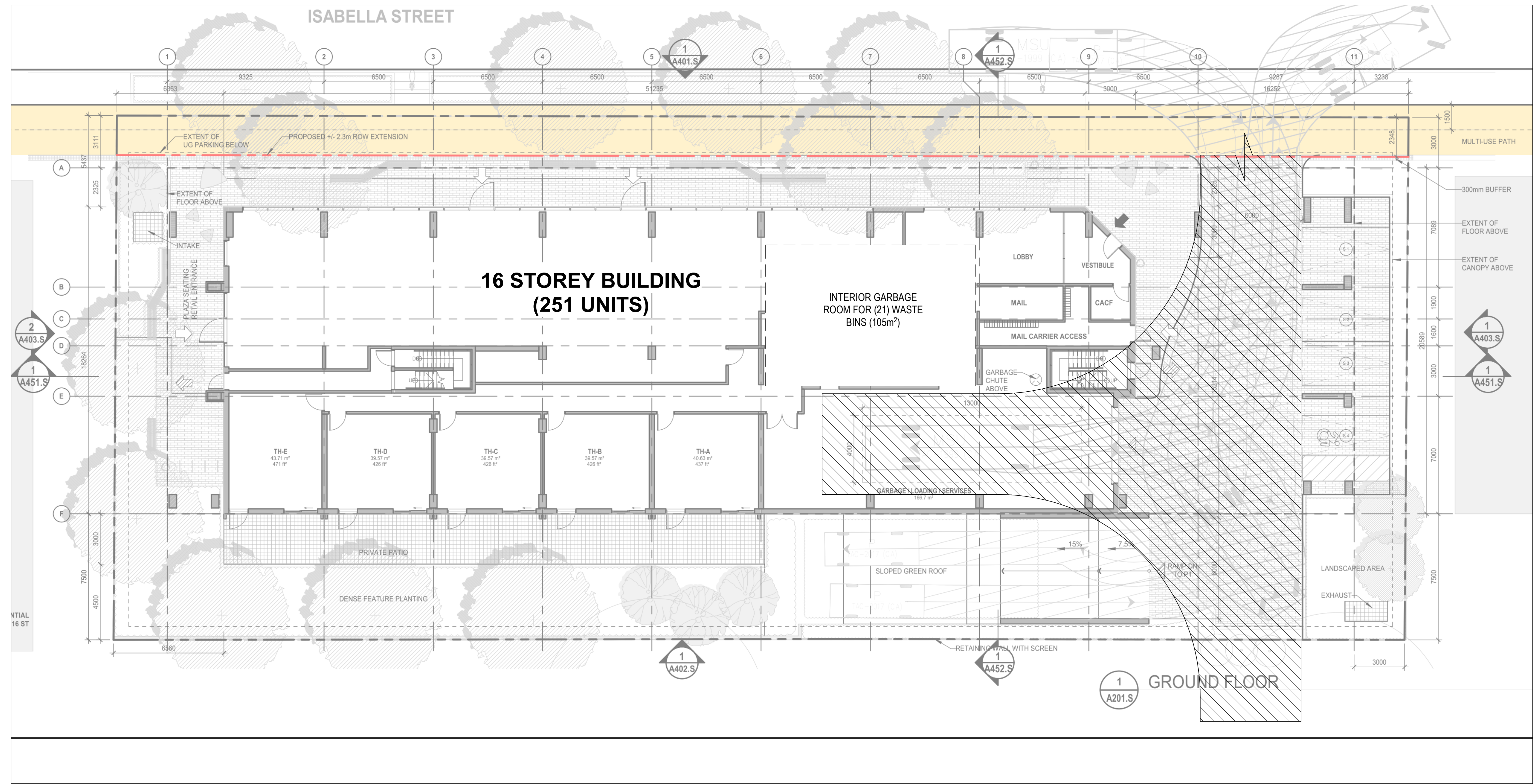
= 21 CONTAINERS @ 5m2 EACH  
= 105 m2 STORAGE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD IF THE PROJECT WERE IN HAMILTON:**

- LOSS OF UNITS AND OVERALL BUILDABLE AREA DUE TO REQUIRED HAMMERHEAD
- LOSS OF UNITS DUE TO SPACE REQUIREMENTS FOR INTERIOR GARBAGE STORAGE
- PROJECT WOULD REQUIRE SIGNIFICANT REDESIGN IF PLANNED FOR THE CITY OF HAMILTON

GENERAL NOTES:

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**TOMS + MCNALLY**  
DESIGN | ARCHITECTURE | URBANISM | CONSTRUCTION

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www.toms-mcnally.ca

**SITE PLAN PROVIDED BY BDP QUADRANGLE**

**GARBAGE STANDARDS - SITE PLANS**

**Isabella - Ottawa**

1 SITE PLAN - Isabella (Ottawa)  
A0.07 1:150

Project No.: XXXX  
Scale: As indicated  
Drawn By: Author  
Checked By: Checker





# City of Hamilton Proposed Waste Design Guidelines

WE HBA Comments and Concerns – November 1<sup>st</sup>, 2021



# Introduction



- ▶ As proposed, the City's new Waste Collection Guidelines present significant challenges for infill sites on a City-wide basis.
- ▶ WE HBA believes the guidelines conflict with the objectives of the GRIDS 2 / MCR process and the objectives of both the Provincial Policy Statement and the Provincial Growth Plan.
- ▶ The proposed guidelines will increase the amount of land required in new developments that is solely dedicated to waste storage and collection which necessitates land-use compromises. These compromises include reductions ranging from:
  - ▶ Number of units (this could render some infill sites undevelopable)
  - ▶ Number of parking spaces
  - ▶ Amount of greenspace per development
  - ▶ Density per site

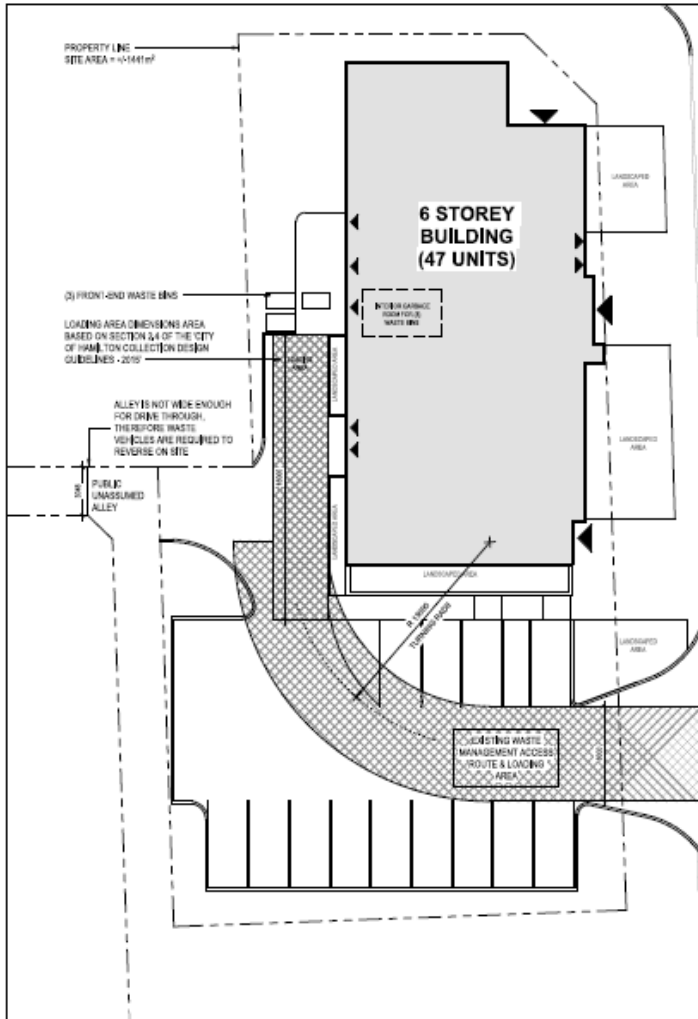




**SITE SUMMARY - BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION**

3.5 DESIGN REQUIREMENTS FOR MULTIRESIDENTIAL BUILDINGS

- 6 STOREYS = SMALL MULTIRESIDENTIAL BUILDING
- FRONT END LOADING FOR GARAGE
- (2) WASTE BINS (5 m<sup>2</sup> STORAGE EACH) BASED ON TABLE 7: NUMBER OF GARAGE CONTAINERS FOR MULTIRESIDENTIAL BUILDINGS\*
- (3) X (5m<sup>2</sup>) = 15m<sup>2</sup> INTERIOR STORAGE SPACE



1 1430 MAIN STREET - EXISTING CONDITIONS  
1:100

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS (7 SPACES LOST)
- REDUCTION OF BUILDING AREA AND RESIDENTIAL UNITS DUE TO HAMMERHEAD SPACE REQUIREMENTS (MIN. 6 UNITS LOST)
- LOADING AREA IMPEDES EXITING AND EGRESS AT THE REAR OF THE BUILDING
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

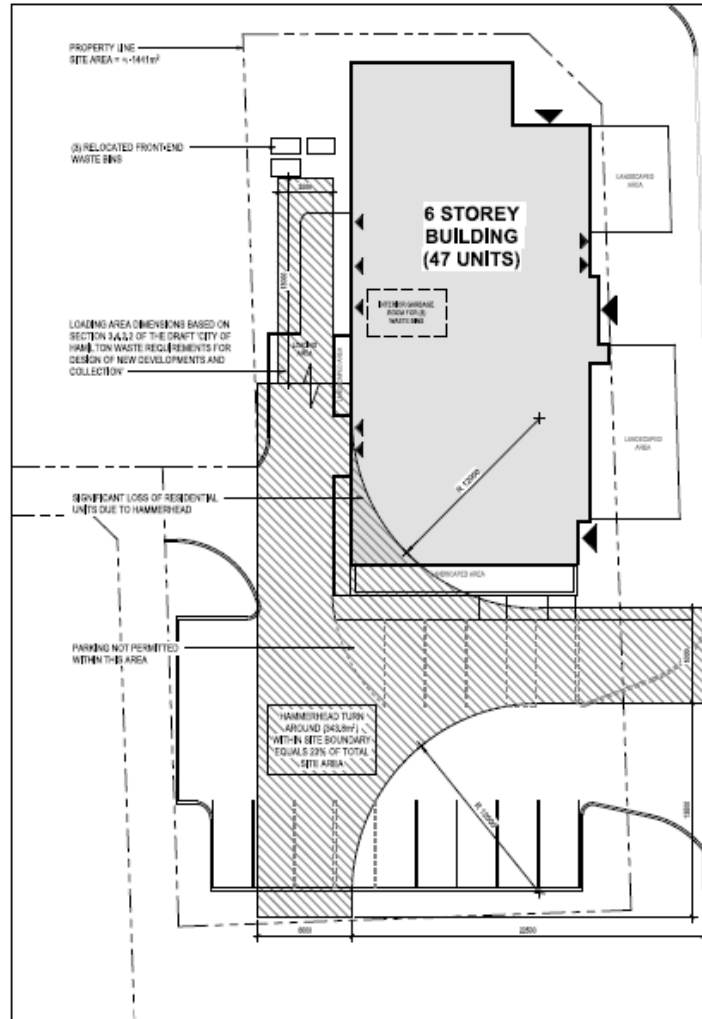
**TOTAL LOSSES:**

47 UNITS IS REDUCED BY 6 TO 41 UNITS BASED ON BUILDING AREA CLEAR OF HAMMERHEAD

13 PARKING SPACES IS REDUCED TO 7

REDUCTION OF PARKING MEANS FURTHER REDUCTION OF UNITS (BASED ON SECTION 5.6 OF BY-LAW 95-200 ASSUMING UNITS AS >50m<sup>2</sup>, AT 6.5 PER UNIT A FURTHER REDUCTION OF 14 UNITS OCCURS)

47 UNITS - 6 UNITS - 14 UNITS = 27 UNITS TOTAL

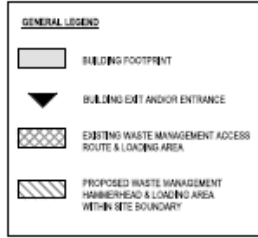


2 1430 MAIN STREET - PROPOSED HAMMERHEAD IMPACTS  
1:100

SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC.

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

1430 Main St.



**SITE SUMMARY - BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION**

3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 4 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS (3m<sup>2</sup> STORAGE EACH) BASED ON TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS
- (2 X 5m<sup>2</sup>) = 10m<sup>2</sup> WASTE BIN STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS
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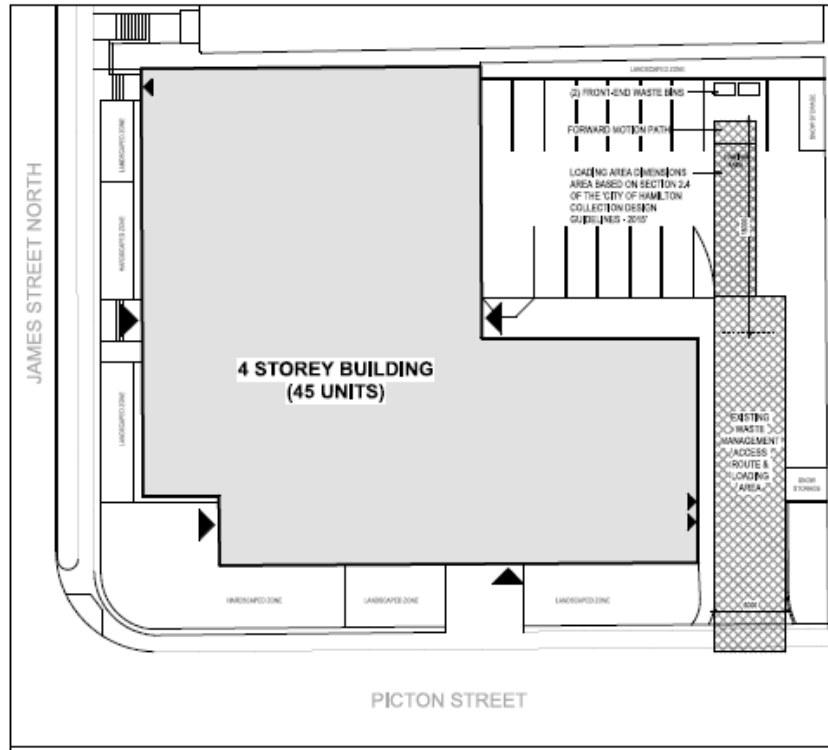
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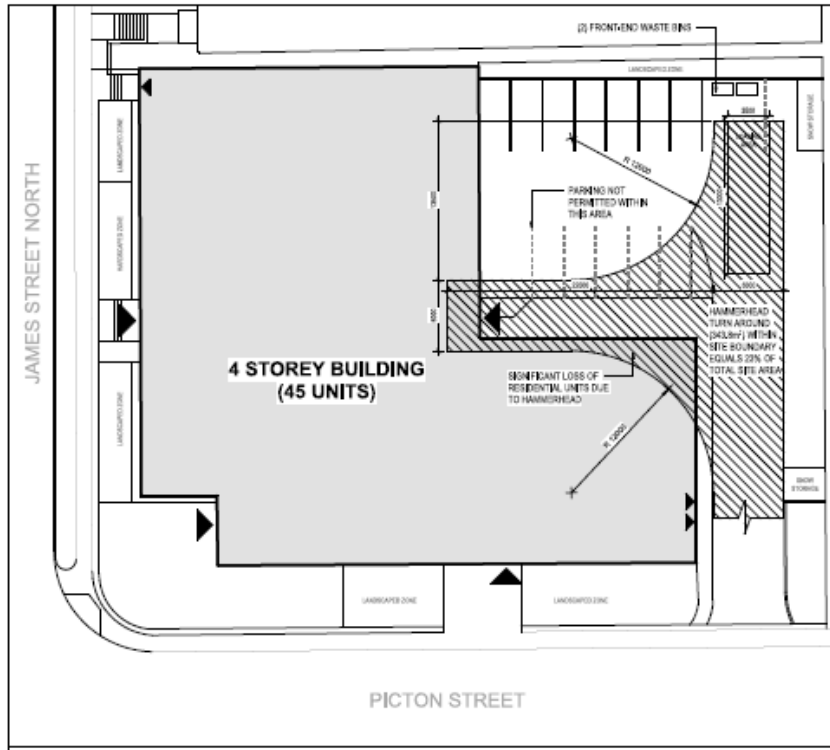
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1 500 JAMES ST N - EXISTING CONDITIONS  
1:200



2 500 JAMES ST N - PROPOSED HAMMERHEAD IMPACTS  
1:200

SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC,

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

500 JAMES STREET N.

# Alternatives for Consideration

- ▶ Smaller turnaround size requirements will make it easier for infill developments to conform with the policy.
- ▶ Multi-week pick-up for large residential buildings is a key consideration for how to improve the City's standards.
- ▶ Allowing the reversal of trucks using flag persons or rear-view cameras.
- ▶ Private waste pick-up should have a clear process to follow for how a developer can qualify for it. Currently the standards proposed are ambiguous and appear discretionary.
- ▶ What other municipalities are doing:
  - ▶ Region of Waterloo provides a [garbage rebate program](#) for developments that do not receive municipal pick-up.
  - ▶ City of Ottawa registers a [warning on title](#): "Warning: Solid waste collection will not be provided by the City of Ottawa and in no case shall there be a reduction in property taxes or exemption of user fees for solid waste."
  - ▶ City of Toronto only requires [front end collection for developments above 31 units](#), as opposed to the 6 Hamilton is proposing.



# Key Take-Away

WE HBA wishes to have more time to work with staff on:

- ▶ Continuing to address the challenges imposed by the T-turnaround design and storage size requirements, as well as not permitting the reversal of trucks.
- ▶ Develop a policy framework for developers to apply for and receive private pickup that does not need to comply with City standards. This framework needs to include clear identification of who is responsible for decision making about how the waste policy is implemented. WE HBA would recommend that this responsibility rest with Planning Committee.
- ▶ Find ways to address the challenges of multi-residential buildings that require multiple pick-ups per week.

## 6.1(c)

### Request to Speak to Committee of Council

Submitted on Tuesday, October 26, 2021 - 4:38pm

==Committee Requested==

**Committee:** Public Works Committee

==Requestor Information==

**Name of Individual:** Graham McNally

**Name of Organization:** Toms + McNally Design

**Contact Number:** [REDACTED]

**Email Address:** [graham@toms-mcnally.ca](mailto:graham@toms-mcnally.ca)

**Mailing Address:**

145 King Street East

Hamilton, ON

L8N 1B1

**Reason(s) for delegation request:** New waste design standards.

**Will you be requesting funds from the City?** No

**Will you be submitting a formal presentation?** Yes

# HBSA Comments

regarding

# Waste Standards

Public Works Committee – November 1, 2021

---



# Three principle concerns:

1. Proposed Standards create uncertainty for projects where stated requirements can't be met.
  2. Effect on the ability to construct middle density housing.
  3. Updated standards received last week.
-

# Standards Shape the Built Environment

---



Photos by : ANDY BILLMAN  
<https://www.bbc.com/news/in-pictures-57349499>





Photo : Helen Bradley

# Uncertainty

1

Private vs Public pick up is at the discretion of staff.

2

Per updated standards received last week, "City recognizes flexibility will be required in older urban areas..."

Can flexibility be built into the standards?

# Middle Density Housing

1

Front end collection required for any building with more than 6 units

2

Continuous forward motion or t-turn – no backing into public ROW

Latest version received last week:

"The City recognizes, in particular, that flexibility will be required in older urban areas as well as with respect to infill development where application of the Design Requirements could conflict with other City land use planning and urban design objectives.



**GENERAL LEGEND**

-  BUILDING FOOTPRINT
-  BUILDING EXIT AND/OR ENTRANCE
-  EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
-  PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**SITE SUMMARY - BASED ON THE DRAFT CITY OF HAMILTON MULTI-REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION**

3.3 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 6 STOREYS - SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (3) WASTE BINS (5 m<sup>3</sup> STORAGE EACH) BASED ON TABLE 7 NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS
- (3) X (3m<sup>3</sup>) = 15m<sup>3</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

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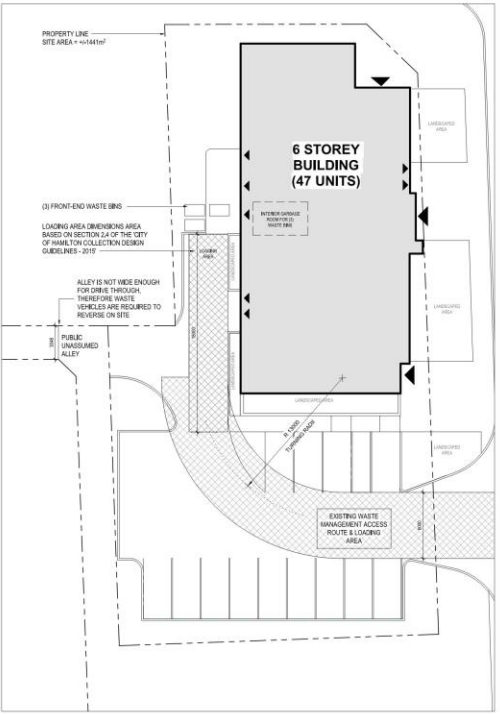
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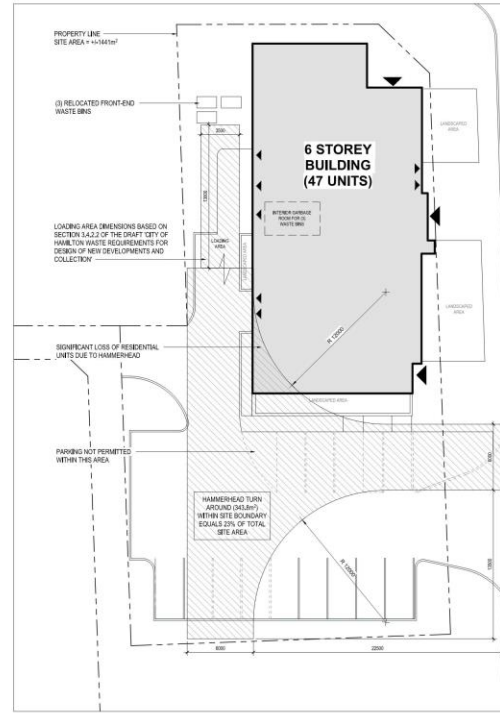
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1 1430 MAIN STREET - EXISTING CONDITIONS  
1/100



2 1430 MAIN STREET - PROPOSED HAMMERHEAD IMPACTS  
1/100

SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC.

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

1430 Main St.

**GENERAL LEGEND**

	BUILDING FOOTPRINT
	BUILDING EXIT AND/OR ENTRANCE
	EXISTING WASTE MANAGEMENT ACCESS ROUTE & LOADING AREA
	PROPOSED WASTE MANAGEMENT HAMMERHEAD & LOADING AREA WITHIN SITE BOUNDARY

**SITE SUMMARY:** BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION

**3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS**

- 4 STOREYS - SMALL MULTI-RESIDENTIAL BUILDINGS
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS @ m<sup>2</sup> STORAGE EACH BASED ON TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS
- (2 X 5m<sup>2</sup>) = 10m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

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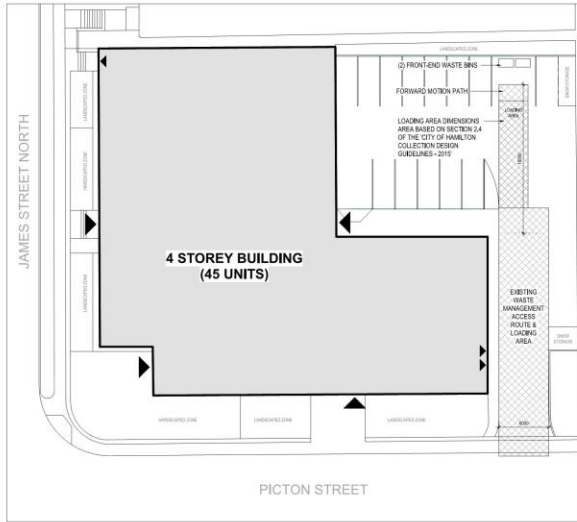
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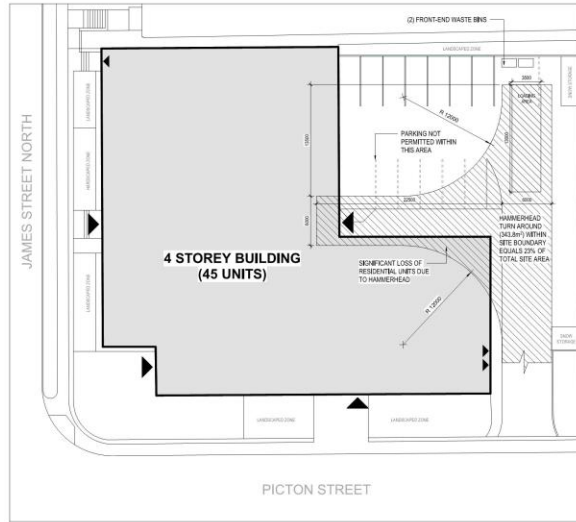
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1 500 JAMES ST N - EXISTING CONDITIONS  
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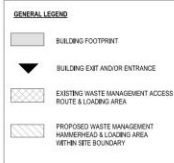


2 500 JAMES ST N - PROPOSED HAMMERHEAD IMPACTS  
1:200

SITE PLAN PROVIDED BY INVIZIJ ARCHITECTS INC.

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

500 JAMES STREET N.



**SITE SUMMARY:** BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION

3.5 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 3 STOREYS = SMALL MULTI-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS IS  $10^3$  STORAGE EACH BASED ON TABLE 7: NUMBER OF GARBAGE CONTAINERS FOR MULTI-RESIDENTIAL BUILDINGS
- (2 X  $5m^2$ ) =  $10m^2$  INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

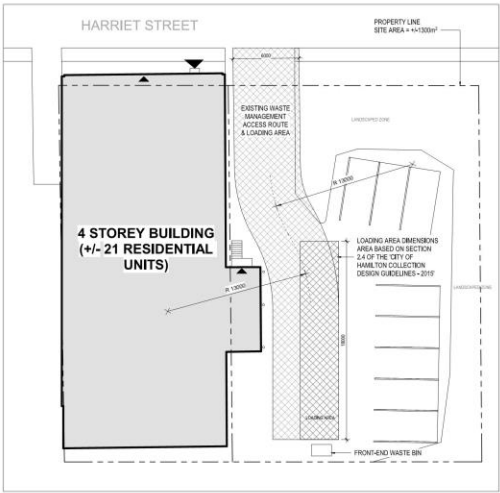
- THE CURRENT PARKING CONSTRAINTS WOULD ENCOUNTER SIGNIFICANT LOSS OF PARKING CAPACITY DUE TO HAMMERHEAD SPACE REQUIREMENTS
- REDUCTION OF BUILDING AREA AND UNITS DUE TO HAMMERHEAD SPACE REQUIREMENTS (12 UNITS LOST)
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

**TOTAL LOSSES:**

**POTENTIAL FOR 21 UNITS IS REDUCED TO 9 UNITS BASED ON BUILDING AREA CLEAR OF HAMMERHEAD**

**MAJOR DEMOLITION TO EXISTING BUILDING WOULD BE REQUIRED**

**8 EXISTING PARKING SPACES IS REDUCED TO 5**



DRAWING PREPARED BY  
TOMS + MCNALLY DESIGN

29 HARRIET STREET



**CONCEPTUAL SITE PLAN**

Min DESIRED FUTURE BUILDING HEIGHT AS OUTLINED BY THE CITY OF HAMILTON

**SITE SUMMARY:** BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION

3.0 DESIGN REQUIREMENTS FOR MULT-RESIDENTIAL BUILDINGS

- 6 STOREYS = SMALL MULT-RESIDENTIAL BUILDING
- FRONT END LOADING FOR GARBAGE
- (2) WASTE BINS (4' STORAGE EACH BASED ON TABLE 7 'NUMBER OF GARBAGE CONTAINERS FOR MULT-RESIDENTIAL BUILDINGS')
- 2 X 5m<sup>2</sup> = 10m<sup>2</sup> INTERIOR STORAGE SPACE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD**

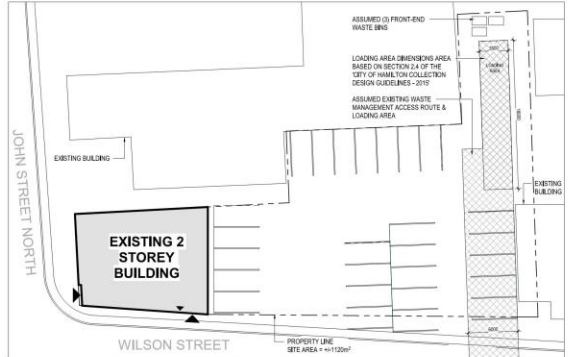
- SIGNIFICANT LOSS OF PARKING DUE TO HAMMERHEAD SPACE REQUIREMENTS AND INCREASED BUILDING FOOTPRINT TO ALIGN WITH GOALS OF INTENSIFICATION (13 SPACES LOST)
- REDUCTION OF BUILDABLE AREA AND RESIDENTIAL UNIT ALLOWANCE DUE TO LIMITED PARKING CAPACITY
- ADDITIONAL STOREYS BASED ON ZONING HEIGHT LIMITS WOULD MEAN THE BUILDING FALLS INTO 'LARGE MULT-RESIDENTIAL' GARBAGE REQUIREMENTS AND WOULD REQUIRE MORE SPACE FOR GARBAGE
- EXISTING NEIGHBOURING BUILDINGS WOULD REQUIRE DEMOLITION
- GOALS FOR INTENSIFICATION WOULD BE REDUCED DUE TO PROPOSED HAMMERHEAD REQUIREMENTS

**TOTAL LOSSES:**

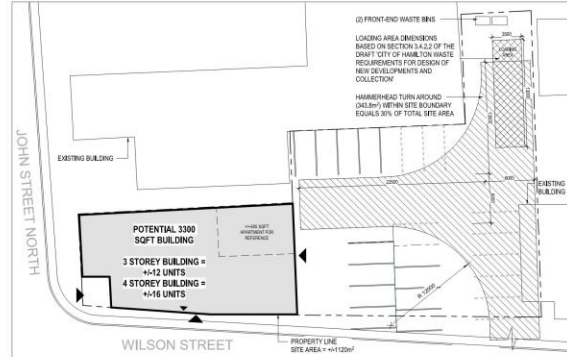
**26 PARKING SPACES IS REDUCED TO 13**

**REDUCTION OF PARKING MEANS REDUCTION OF POTENTIAL UNITS**

**INCREASES TO THE OVERALL BUILDING HEIGHT WOULD ALSO INCREASE THE PARKING AND GARBAGE REQUIREMENTS**



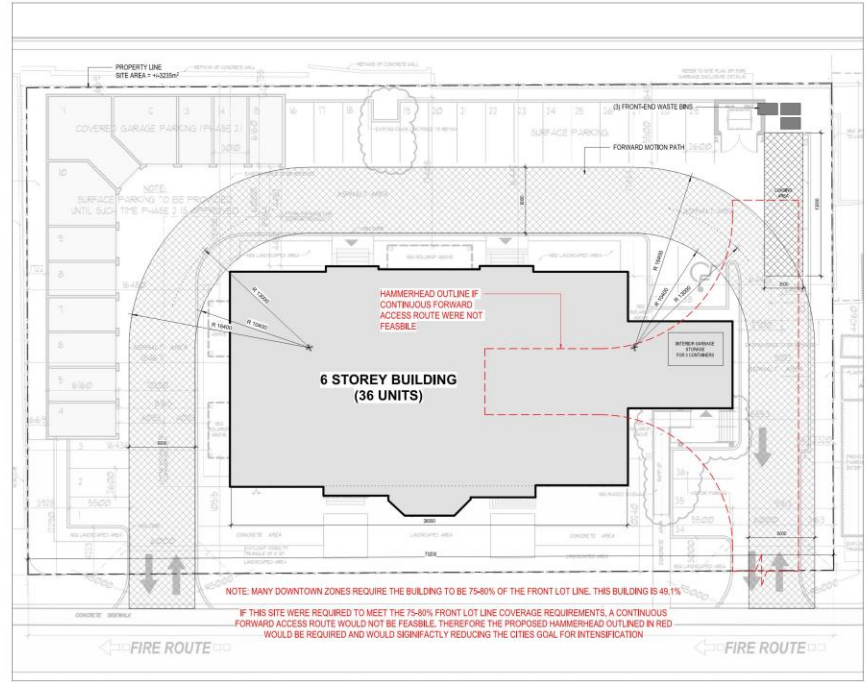
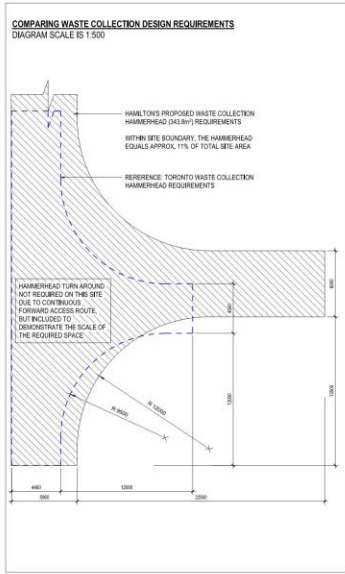
1 92 JOHN STREET - EXISTING CONDITIONS  
1:200



2 92 JOHN STREET - PROPOSED HAMMERHEAD IMPACTS  
1:200

DRAWING PREPARED BY  
TOMS + MCNALLY DESIGN

92 JOHN ST



SITE PLAN PROVIDED BY LINTACK ARCHITECTS

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

Witton Lofts

1 PLAN  
 WITTON LOFTS - EXISTING CONDITIONS

## CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION

### 3.1.4 Vehicle Movement Throughout the Access Route

#### 3.1.4.1 Access Route Dimensions

The Access Route shall be designed to allow for continuous forward movement of Waste Collection Vehicles throughout the Development, including the radius of a cut-de-sac turning circle. The only exception to having continuous forward motion is when the Waste Collection Vehicle is entering or exiting a Loading Area as described in sections 3.4 Design Requirements for Multi-Residential Townhouse Developments and 3.5 Design Requirements for Multi-Residential Buildings. Changes of direction on the Access Route must have turning radii of at least 13.4 metres for the inside of the curve, and 13 metres for the outside of the curve if the curb or sidewalk is higher than 0.375 metres. The Access Route may have a Turning Radius of 5.4 metres for the inside of the curve and 12 metres for the outside of the curve if the curb is shorter than 0.375 metres and, if the City will permit a portion of the Waste Collection Vehicle to hang over areas not designated as Access Routes as indicated on plans during movement. Please refer to **Appendix 7: Turning Radius** for reference.

#### 3.1.4.2 Continuous Forward Motion

To confirm that Waste Collection Vehicles can travel throughout the Development in a forward motion, the Development Application must include a copy of the site plan with the travel path of the Waste Collection Vehicle throughout the Development. This travel path must be generated by software approved by the City (for example AutoTurn). The dimensions of City of Hamilton Waste Collection Vehicles is included in **Appendix 1: Diagrams of Waste Collection Vehicle**. If, in the opinion of the City, continuous

forward motion is not possible due to site constraints, Waste Collection Vehicles will be permitted to make a three-point turn using an approved turnaround area consistent with **Appendix 1: Acceptable Turnaround**. Use of a turnaround area will only be permitted on Developments with one Private Road and meet all the following criteria:

- Have no more than one entrance;
- The one Private Road terminates with a dead-end;
- Reversing of collection vehicles is only made on the turnaround area; and
- Collection of Waste from all Dwelling Units can occur by the Waste Collection Vehicle making no more than one three-point turn

#### 3.1.6.2 Denial of Private Waste Collector Services

If staff determine that a Development does not have site constraints that make it impossible to meet the applicable Design Requirements, then the request to retain Private Waste Collection Services will be denied and the Developer will be obligated to meet the applicable Design Requirements.

### 3.2.1 Waste Storage

Developers must provide at minimum, 2.5 square metres for waste storage for each Dwelling Unit to store waste between collection days. The Storage Area must be exclusive of living space, such as in the garage, be fully enclosed, be large enough to accommodate two Blue Boxes, a Green Cart, a Garbage Container, and a Yard Waste Container and the layout will be at the discretion of the City. The Storage Area must not be located in the front yard of the property.

### 3.5.3 Waste Loading Areas

#### 3.5.3.1 Requirements for Loading Areas

Large Multi-Residential Buildings will receive Front-End Collection Services for all Waste and small Multi-Residential Buildings will receive Front-End Collection Services for Garbage. Submitted drawings must include for all Multi-Residential Buildings a Loading Area that can be serviced by a Front-End Loading Waste Collection Vehicle as well as Bulk Loading Waste Collection Vehicles. A paved route on private property connecting the Loading Area with the Storage Area and the travel route of the Front-End Containers from the Storage Area to the Loading Area must be indicated on submitted drawings. Movement of Front-End Containers over public property is not permitted. Requirements of the Loading Area that must be included in submitted drawings include (refer to "

## CITY OF TORONTO REQUIREMENTS FOR GARBAGE, RECYCLING AND ORGANICS COLLECTION SERVICES FOR NEW DEVELOPMENTS AND REDEVELOPMENTS.

LAST REVISED MAY 2021

### MULTIPLE HOUSEHOLD COLLECTION & STORAGE

Residential developments with 9 and up to 30 units are eligible for multiple household bins for garbage, recycling and organic materials at the discretion of Solid Waste Management Services.

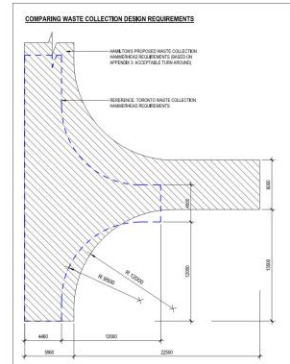
Front-end collection services will be provided to large residential developments (31 units and above) for garbage, recycling and organics materials.

#### Bin Collection & Storage Requirements

Multiple household bin collection service is typically established at buildings with less than 31 units and/or townhouse complexes, unless otherwise approved by the General Manager. The multiple household bin collection system uses 95 gallon containers compatible with City vehicles for the collection of garbage and recyclable materials.

#### Bins

- The multiple household bin(s) must be obtained from the City of Toronto.
- An onsite staff/maintenance person is required to move the bins from the garbage/recycling/organics storage room to the collection point which will be curbside.
- All billing matters related to the City of Toronto solid waste collection services are the responsibility of the Condominium Corporation/Property Management.



DRAWING PREPARED BY  
TOMS + MCNALLY DESIGN

City of Toronto Reference



**SITE SUMMARY - BASED ON THE DRAFT CITY OF HAMILTON WASTE REQUIREMENTS FOR DESIGN OF NEW DEVELOPMENTS AND COLLECTION**

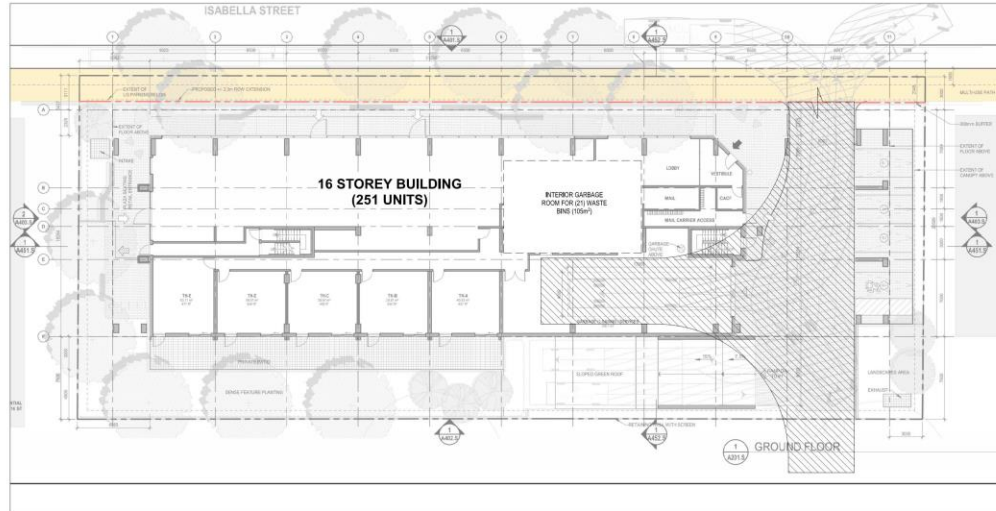
3.3 DESIGN REQUIREMENTS FOR MULTI-RESIDENTIAL BUILDINGS

- 16 STOREYS + LARGE RESIDENTIAL
- GARBAGE, RECYCLING AND GREEN CARTS
- +12 GARBAGE CONTAINERS (NON-COMPACTED)
- 6 (+7) GARBAGE CONTAINERS (COMPACTED)
- 12 RECYCLING ORGANIC CONTAINERS
- 3 ORGANIC FRONT END CONTAINERS

+ 21 CONTAINERS @ 340 EACH  
+ 108 M3 STORAGE

**SITE RESULTS DUE TO PROPOSED DRAFT HAMMERHEAD IF THE PROJECT WERE IN HAMILTON:**

- LOSS OF UNITS AND OVERALL BUILDABLE AREA DUE TO REQUIRED HAMMERHEAD
- LOSS OF UNITS DUE TO SPACE REQUIREMENTS FOR INTERIOR GARBAGE STORAGE
- PROJECT WOULD REQUIRE SIGNIFICANT REDESIGN IF PLANNED FOR THE CITY OF HAMILTON



1 SITE PLAN - Isabella (Ottawa)  
1:100

SITE PLAN PROVIDED BY BDP QUADRANGLE

DRAWING PREPARED BY TOMS + MCNALLY DESIGN

Isabella - Ottawa

# Recent Update

1

Most recent update was received last week.

In order to respect the process & the considerable staff effort in preparing the standard, we respectfully request time to review the updated proposed standards.

# Suggestions

- 1 Defined parameters for Private/Public collection.
- 2 Smaller vehicles.
- 3 More attention paid to medium density – standard addresses greenfield and towers, but relatively silent on medium density.
- 4 More time to address outstanding items.



Hamilton

## HAMILTON CYCLING COMMITTEE (HCyC) MINUTES

Wednesday, September 1, 2021

5:45 p.m.

Virtual Meeting

**Present:** Chair: Chris Ritsma  
 Vice-Chair: William Oates  
 Members: Jeff Axisa, Roman Caruk, Sharon Gibbons, Jane Jamnik, Yaejin Kim, Ann McKay, Cora Muis, Gary Rogerson, Cathy Sutherland, Kevin Vander Meulen, Christine Yachouh

**Absent with**

**Regrets:** Kate Berry, Joachim Brouwer, Jessica Merolli, Councillor Esther Pauls, Councillor Terry Whitehead.

**Also Present:** Trevor Jenkins, Project Manager, Sustainable Mobility  
 Peter Topalovic, Program Manager, Sustainable Mobility  
 Daryl Bender, Project Manager, Sustainable Mobility  
 Danny Pimentel, Active Transportation Technologist

### (a) APPROVAL OF AGENDA

The chair advised of the following changes to the agenda:

**Changes to the Order of Items:**

That Item 10.2, a motion respecting the Truck Route Master Plan Proposal, be moved up on the agenda to be considered with Item 9.3, a Citizen Committee Report respecting the Truck Route Master Plan Proposal.

**(Oates/Rogerson)**

That the agenda of the July 7, 2021 meeting be approved, as amended.

**CARRIED**

**(b) DECLARATIONS OF INTEREST**

None

**(c) APPROVAL OF MINUTES OF PREVIOUS MEETING****(i) July 7, 2021 (Item 3.1)****(Sutherland/McKay)**

That the minutes of the July 7, 2021 meeting of the Hamilton Cycling Committee be approved, as presented.

**CARRIED**

**(d) CORRESPONDENCE****(i) Correspondence from the Hamilton Police Services Board with regards to the City of Hamilton dated April 20, 2021, with respect to Bill 148, Doored but Not Ignored Act, 2019 (Item 4.1)****(Oates/Caruk)**

That the correspondence from the Hamilton Police Services Board with regards to the City of Hamilton correspondence dated April 20, 2021, with respect to Bill 148, Doored but Not Ignored Act, 2019, be received.

**CARRIED**

**(ii) Correspondence from Nimesh Patel, Project Manager for the Upper Wellington Environmental Assessment with respect to the Draft Upper Wellington Motion (Item 4.2)****(Oates/Caruk)**

That the correspondence from Nimesh Patel of the Upper Wellington Environmental Assessment team, be received and referred to the consideration of Item 11.1

**CARRIED**

**(iii) Correspondence from Stuckless Consulting with an update on the Gender and Cycling Research Project (Item 4.3)****(Oates/Caruk)**

That the correspondence from Stuckless Consulting providing an update on the Gender and Cycling Research Project, be received.

**CARRIED**

**(e) STAFF PRESENTATIONS****(Oates/Axisa)**

That the Staff Presentations be received:

**(i) Updates on Project Completed in 2021 (Item 8.1)**

D. Pimentel provided an update on the cycling projects completed as of July 2021. Eight projects have been completed to date. Committee members asked questions about plans for Stone Church Road, McMaster Innovation Park, and Dundurn Road. The Committee asked if staff could provide an update on counter data at a future meeting.

**(ii) Complete, Livable, Better Streets Design Manual (Item 8.2)**

T. Jenkins provided an overview of the ongoing Complete, Livable, Better Streets Design Manual. The Committee discussed different infrastructure treatments where pedestrians and cyclists may mix.

**CARRIED**

**(f) DISCUSSION ITEM****(i) Virtual Roundtable Discussion with the Advisory Committee for Persons with Disabilities' Transportation Working Group (Item 9.1)****(Oates/Jamnik)**

Be it resolved that Cora Muis and Roman Caruk attend the Roundtable Discussion with the Advisory Committee for Persons with Disabilities' Transportation Working Group on behalf of the Committee.

**CARRIED**

**(ii) Planning and Project Update (Item 9.2)**

Staff provided the Committee with a written update on 2021 planned cycling infrastructure projects. Members noted support of the Hatt Street installation, and offered constructive feedback about accessing the arena and the loading zone in front of a business. Concerns were raised about the paved shoulders installed along Brock Road. Staff will report back with more information on the Centre Road project at a future meeting.

**(Yachouh/Caruk)**

That the Planning and Project Update be received.

**CARRIED**



**(iii) Citizen Committee Report – Truck Route Proposal Motion (Item 9.3)  
and Truck Route Master Plan Input (Item 11.2)**

**(Ritsma/Caruk)**

WHEREAS the proposed Truck Route Master plan includes trucks on roads included in the cycling master plan and urban streets where cycling is likely to take place;

WHEREAS the proposed Truck Route Masterplan includes truck routes 7am-7pm which is the most common time cyclists and pedestrians will be utilizing roads, and in parts of the year this is after dark which is far more dangerous for cyclists and pedestrians;

WHEREAS the Hamilton Cycling Advisory Committee recommended at its October 7, 2020 meeting that the proposed truck route changes not include streets where cycling is likely to take place; and,

WHEREAS there are alternative routes for trucks to take such as small detours and longer ones around the Burlington Bay, Lincoln Alexander Parkway, Red Hill Valley Parkway, Highway 403 and Burlington St, while cyclists cannot take detours to avoid trucks under the current plan.

**THEREFORE, BE IT RESOLVED:**

- (a) That truck routes not be allowed on streets listed as “Daytime only (7am – 7pm) under the draft proposed truck route map;
- (b) That truck routes be removed from Rymal Road within the urban area and Garner Road from Glanaster to Highway 6; and
- (c) That the Committee draft a Citizen Committee Report to Public Works Committee regarding recommendations on the truck route as it relates to cycling and active transportation that connects to cycling.

**CARRIED**

**(Ritsma/Rogerson)**

That the draft Citizen Committee Report respecting the Truck Route Proposal Motion be endorsed, subject to updates to the dates.

**CARRIED**

**(iv) All Advisory Committee Meeting – HCyC Presentation (Item 9.4)**

C. Yachouh provided an overview of the presentation they planned to present at the All Advisory Committee Meeting on September 27, 2021.

**(g) NOTICE OF MOTION****(i) Upper Wellington Environmental Assessment Network Connectivity Motion (Item 11.1)**

WHEREAS the City is currently doing an Environmental Assessment along Upper Wellington between Limeridge Road and Stone Church Road;

WHEREAS Hamilton's cycling master plan includes cycling infrastructure over the Lincoln Alexander Parkway along Upper Wellington Street;

WHEREAS it is important that cycling infrastructure connect to existing infrastructure in order to develop increased ridership;

WHEREAS a cycling lane over the Lincoln Alexander Parkway would connect the planned cycling infrastructure south of the Parkway to that north of the Parkway;

WHEREAS a connection over the overpass is a key component of a minimum grid of cycling infrastructure on the Hamilton mountain;

WHEREAS there is currently no north-south crossing over the Parkway closer than West 5th to the west and Upper Sherman to the east;

WHEREAS it is possible to reduce the number of car lanes on the bridge along Upper Wellington;

WHEREAS it is possible to consider having only two lanes, along with a center turning lane, all along Upper Wellington from Lime Ridge Road to Stone Church Road to match Upper Wellington to the south of Stone Church Road;

WHEREAS having four traffic lanes and with no cycle lane does not fit the goal of balancing infrastructure on the overpass; it instead prioritizes automobile transportation with respect to north-south connections on the Hamilton mountain;

WHEREAS a multi-use pathway slows down commuter cycling traffic;

WHEREAS a multi-use pathway causes unease for both cyclists and pedestrians; and,

WHEREAS pedestrians with ear-buds do not hear the bells of cyclists

**THEREFORE, BE IT RESOLVED:**

(a) The road improvements on Upper Wellington Street from Limeridge Road to Stone Church Road include cycling infrastructure over the Lincoln Alexander Parkway; and,

(b) That the cycling infrastructure be clearly separated (e.g. separated facility) from the pedestrian traffic along Upper Wellington.

**(ii) Barton & Fifty Road Environmental Assessment Cycling Infrastructure (Item 11.3)**

WHEREAS Barton Street East, between Fruitland Road and Fifty Road, and Fifty Road, between South Service Road and Highway 8, are on the cycling master plan;

WHEREAS Barton Street East in this area has multiple schools;

WHEREAS Fifty Road makes cycling connections to Niagara and Grimsby cycling lanes;

WHEREAS bi-directional cycling lanes are not best practice due to safety concerns; and,

WHEREAS the Cycling Advisory Committee has heard complaints regarding multi-use cycling paths.

**THEREFORE, BE IT RESOLVED:**

(a) That Barton Street East cycling lanes be separated and protected and make connections to the local schools in the area;

(b) That Barton Street East cycling lanes be in the direction of expected automobile traffic;

(c) That Fifty Road cycling lanes cross the QEW bridge and connect to Winona; and,

That Fifty Road cycling lanes be extended to the South Service Road to connect to cycling lanes east of the City of Hamilton.

**(iii) Bike Lane Asphalt (Item 11.4)**

WHEREAS road works, emergencies, development, construction, utilities and other events require removal of asphalt and/or concrete in bicycle lanes;

WHEREAS asphalt is typically patched quickly then properly repaired at a later date;

WHEREAS work requiring removal of asphalt and/or concrete can take months or years;

WHEREAS bicycles require a smoother surface, both for safety and quality of ride; and,

WHEREAS there are various examples of uncomfortable and unsafe patchwork on key pieces of cycling infrastructure.

**THEREFORE, BE IT RESOLVED:**

- (a) That all asphalt and concrete repairs impacting a bicycle lane, bicycle trail, bicycle route, or other bicycle infrastructure be repaired and/or patched immediately after road work is complete to the same pre-repair quality or better, regardless of whether the entire project is complete or in progress.

**(h) GENERAL INFORMATION / OTHER BUSINESS****(i) New Staff Liaison**

D. Pimentel will be the new Staff Liaison for the Committee, effective after this meeting.

**(ii) 2022 HCyC Budget Submission**

The Committee will need to approve its 2022 budget request at the November meeting. Members should think about potential projects in advance of the October meeting.

**(i) ADJOURNMENT**

**(Oates/Vander Muelen)**

That, there being no further business, the meeting adjourned at 7:40 p.m.

Respectfully submitted,

Chris Ritsma  
Chair, Hamilton Cycling Committee

Trevor Jenkins  
Project Manager, Sustainable Mobility  
Transportation Planning, Planning & Economic Development





# Hamilton

## NOTES

### **Keep Hamilton Clean and Green Advisory Committee**

Tuesday, September 21<sup>st</sup>, 2021

5:00 P.M.

Due to the COVID-19 and the Closure of City Hall

Electronic meeting can be viewed at:

City's YouTube Channel:

<https://www.youtube.com/user/InsideCityofHamilton>

Present:	Chair:	Heather Donison
	Vice-Chair:	Paulina Szczepanski
	Members:	Lennox Toppin
		Marisa DiCenso
		Kerry Jarvi
		Diana Meskaukas
		Felicia Van Dyk

Absent with Regrets:	Jen Baker
	Leisha Dawson

Absent:	Councillor N. Nann
	Brenda Duke
	Michelle Tom

Also Present:	Diane Butterworth, Policy & Program Analyst, Business Programs
	Raffaella Morello, Senior Project Manager
	Florence Pirrera, Project Manager, Business Programs
	Whitney Slattery, Clean & Green Coordinator, Business Programs
	Theresa Phair, Community Liaison Coordinator

**Keep Hamilton Clean and Green  
Committee**

**September 21<sup>st</sup>, 2021**

**Minutes**

**Page 2 of 2**

Pursuant to Section 5.4(4) of the City of Hamilton's Procedural By-law 18-270 at 5:30pm the Staff Liaison to the Committee advised those in attendance that quorum had not been achieved within 30 minutes after the time set for the Keep Hamilton Clean and Green Committee therefore, the Staff Liaison to the Committee noted the names of those in attendance and the meeting stood adjourned.

Respectfully submitted,

Whitney Slattery  
Clean and Green Coordinator  
Business Programs  
Environmental Services



# INFORMATION REPORT

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	November 1, 2021
<b>SUBJECT/REPORT NO:</b>	Hamilton Water Leak Detection Program (PW21063) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Dave Alberton (905) 546-2424 Ext. 1090
<b>SUBMITTED BY:</b>	Nick Winters Director, Water and Wastewater Operations Public Works Department
<b>SIGNATURE:</b>	

## COUNCIL DIRECTION

Not Applicable

## INFORMATION

Introduction

The City of Hamilton's (City) water system is one of Canada's oldest and most complex. It includes six (6) water distribution systems, 2,031 kms of water mains, 13,425 hydrants, 16,115 valves, and 154,964 service connections.

Public drinking water utilities treat and distribute billions of litres of safe drinking water every day. Ideally the total volume of water produced by each utility would be equal to the volume of water that reaches (and is accurately billed) to the consumers, but this is never the case.

Drinking water that has been produced by the City that is lost before it reaches the customer is called non-revenue water (NRW). NRW can occur through physical losses (leaking and broken pipes), from unbilled authorized consumption (including water used by Hamilton Water for operational purposes such as watermain flushing), and from water used for firefighting. NRW can also come from water meter inaccuracies, data

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OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 2 of 7**

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handling errors, illegal connections and theft. A significant contributor to the City's NRW is leaking and broken watermains. On average, from 2012 to 2020, the City experienced over 300 watermain breaks per year. Due to Hamilton's unique geography and often rocky porous ground there are many watermain leaks and breaks that do not surface and have the potential to remain undetected for years. These hidden leaks account for a large amount of NRW and can be far more damaging to the pipe network, with erosion of pipe bedding leading to major pipe breaks, damage to foundations of roads and possibly even damage to bridges, buildings, etc.

Currently, NRW represents about 26% of the water produced or imported by the City, which is significantly higher than the industry standard of 15%. The table below shows the percentage of NRW in each of the City's water distribution systems from 2018 to 2020.

System	2018	2019	2020
Carlisle	12%	8%	12%
Fifty Road	45%	43%	31%
Freelton	26%	31%	23%
Greenville	36%	35%	33%
Lynden	33%	47%	42%
Woodward	28%	27%	26%
OVERALL	28%	29%	26%

The financial consequences of NRW are multiple and include:

- Lost Water, Wastewater and Storm Rate revenue from unbilled consumption and theft; and,
- Unnecessary operational costs to produce and distribute drinking water (treatment chemicals, energy, etc.).

Staff estimate that \$820,000.00 in annual savings can be achieved by reducing NRW to industry standards.

#### Hamilton Water's Leak Detection Program Pre-2021

Historically, Hamilton Water's programs to control NRW included:

- a residential water meter replacement program (lifecycle replacement);
- a robust water meter maintenance program; and,
- a reactive leak detection program.

**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 3 of 7**

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Reactive leak detection means that leaks are identified and repaired after receiving a call or complaint related to low water pressure, noise in pipes, or a visual water leak. Hamilton Water did not have a robust proactive leak detection program with dedicated staff, formal processes, and appropriate technology. Any proactive leak detection was 'filler work' completed when staff had available time, using the basic equipment that was available, and generated inconsistent results. A combination of factors often resulted in the excavation of dry holes (holes where there are no leaks to repair), which added unnecessary costs to annual maintenance programs.

#### Leak Detection Pilot Projects

Beginning in 2019, Hamilton Water initiated pilot projects for proactive leak detection using leading-edge leak detection technology. The pilots allowed Hamilton Water to test the technology in the field, and to develop a cost/benefit analysis to support the procurement of technology and implementation of a formal proactive leak detection program.

The pilot areas covered approximately 400km of water main and were aligned with geographical areas of concern (where water leaks often do not typically surface due to subsurface rock and porous soil). The pilot projects resulted in 185 potential leaks being found. After further investigation, 177 of the 185 potential leaks were verified as true leaks that required action. 153 leaks were on City infrastructure (water mains, valves, water service lines), and 24 leaks were on private infrastructure (water service lines). The accuracy of the piloted technology was greater than 95%. Repairs have been completed for all of the leaks on City infrastructure, and 11 of the private leaks.

Year	# of Potential Leaks	# of Verified Leaks	# of Public Leaks	# of Private Leaks	% Accuracy
2019	114	110	96	14	96.5%
2020	71	67	57	10	94.4%
Total	185	177	153	24	95.7%

#### Hamilton Water's New Proactive Leak Detection Program

Based on the success of the pilot projects, Hamilton Water issued a request for proposals in July 2020 for the procurement of leak detecting equipment, which includes 100 correlating data loggers, a hand-held probe, and the associated software. This equipment was purchased in December 2020 and Hamilton Water began designing an in-house water leak detection program. The new program was launched as a trial in early 2021, with the goal of assessing leaks across the City's entire water system by the end of the year. The program was resourced by temporarily reallocating 1.65 full time

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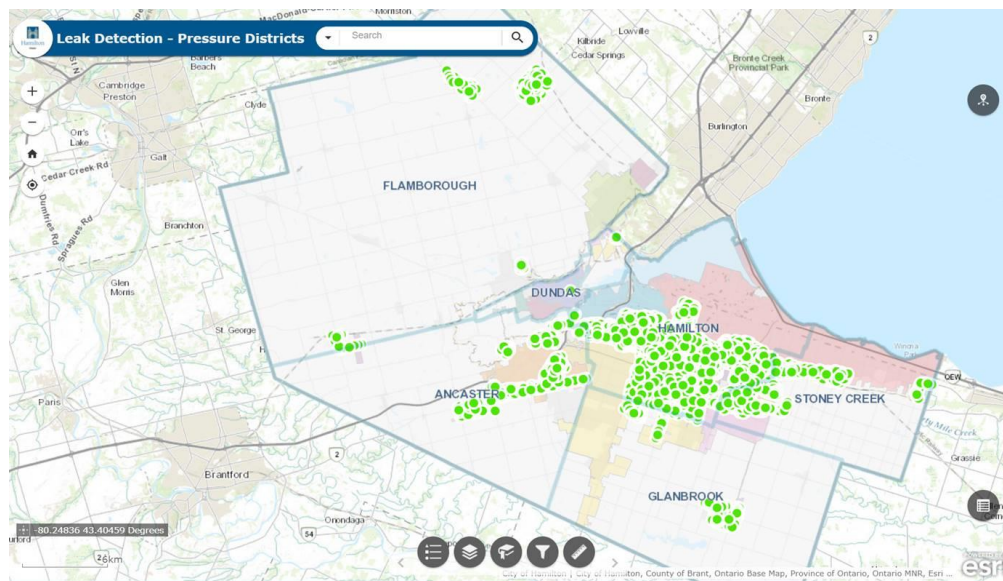
**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 4 of 7**

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equivalents (FTE) from business units within the Water Distribution and Wastewater Collection Section.

During a typical deployment approximately 80 loggers are installed in a defined area by magnetically attaching them to fire hydrants and isolation valves. This allows each logger to listen for and record leak noise approximately 100 metres in each direction. The loggers are programmed to correlate at three (3) different times between 2:00 a.m. to 4:00 a.m., when water usage and traffic noise are typically minimal resulting in less interference and more accurate readings. The loggers are removed the next day and the data collected by the loggers is downloaded to the software application. The software application then identifies locations with potential leaks, which are programmed for focused field investigations by staff. These field investigations identify the leaking infrastructure (e.g. watermain, public portion water service, private portion water service), and pinpoint the exact leak location.

As of September 1, 2021, the loggers have been deployed at 4,200 locations with 78 potential leaks identified. Of the 78 potential leaks, 75 have been verified as true leaks (62 on City infrastructure and 13 on private infrastructure), resulting in an accuracy of 96.2%. Repairs have been completed for all of the leaks on City infrastructure, and five (5) of the private leaks. The following map shows where the leak detection program has been active across the City, as of September 1<sup>st</sup>, 2021.



Map showing the locations of the Leak Detection Deployment

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**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 5 of 7**

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### Climate Change

On March 27, 2019, the City unanimously declared a climate emergency. Hamilton Water is a key stakeholder on the Corporate Climate Change Task Force and is one of the largest energy users in the City. In 2020, Hamilton Water produced 77,575,890 m<sup>3</sup> of water. Hamilton Water worked with the Energy, Fleet and Facilities Division to determine that the energy required to produce 1 m<sup>3</sup> of water is approximately 0.2 kWh. A robust proactive water leak detection program will reduce energy consumption at the water treatment plant and outstations.

### Return on Investment

Return on investment (ROI) is a widely used measure to compare the effectiveness of a purchase or project. The proactive leak detection program utilizes the following resources:

- 1.4 FTE – Two (2) Water Distribution Operators (annual cost)
- 0.25 FTE – One (1) Water Distribution Supervisor (annual cost)
- Proactive Leak Detection Equipment (one-time cost)

Based on the resources utilized, the 2021 Proactive Leak Detection Program cost is \$288,000.

Expense	Costs
Leak Detection Equipment	\$123,000.00
1.65 FTE / year	\$165,000.00
<b>Total Costs</b>	<b>\$288,000.00</b>

To determine the ROI, Hamilton Water leverages a watermain leak calculator that accounts for several factors. Hamilton Water has determined that on average 1 – 6” watermain leak will result in 500 m<sup>3</sup> of NRW per day. Based on the public watermain leaks that have been repaired in 2021 (as of September 1), the ROI for the Proactive Leak Detection Program was eight (8) months.

Average NRW per watermain leak	500 m <sup>3</sup> / day
Cost of NRW	\$0.10 / m <sup>3</sup>
Daily cost of NRW	\$50.00
Total watermain leaks repaired	61
Total volume of NRW eliminated	3,403,500 m <sup>3</sup>
Estimated NRW saved to September 1, 2021	\$340,350.00
<b>Return on Investment</b>	<b>8 months (August 2021)</b>

**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 6 of 7**

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Moving forward, the projected annual cost of the Proactive Leak Detection Program cost is \$165,000 based on staffing costs.

#### Issues/Challenges

Private water service line leaks are detected using the leak detection technology. Private leaks usually occur between the water shut off (at property line) and the water meter. These leaks are considered NRW because the leaking water is not registered by the water meter, and not billed to the property owner. To date, most of the verified private leaks have been on substandard (lead) water service lines.

The identification of a private leak can be challenging as residents are not generally impacted by the leak since there is no visible water pooling or leaking into their property, and there is usually no noticeable reduction in water pressure. Generally, the repair of private side leaks can be costly, and the property owner may be unwilling to incur the cost to repair or replace their service line since the repair does not provide a direct benefit to them. The average cost to completely replace a private water service line ranges from \$2,000 to \$4,000 depending on the length of the private water service line and the type of soil on the property.

A formal process for communicating private side leaks was created to support the proactive leak detection program. Once a potential private leak has been identified, a letter is mailed to the property owner to notify them of the potential leak with the recommendation to schedule an on-site meeting with Water Distribution staff to locate the leak. If a private leak has been verified, another letter is mailed to the property owner to advise them of the process and timeline for the repair to be completed.

As of September 1, 2021, only 16 of the 37 (43.2%) verified private leaks have been repaired by the property owner. All of these repairs involved the complete replacement of a lead water service line. To date, Hamilton Water has focused on educating property owners where private leaks have been verified and no enforcement action has been taken.

Hamilton Water does have some enforcement tools available in existing by-laws including provisions in the Property Standards By-law 10-221, Sec 14(1) where a property owner can be compelled to complete the repairs. If repairs are required and they are not completed in a timely manner, an investigation by Municipal By-law Enforcement could result in a Property Standards Order. Where there is non-compliance with a Property Standards Order, the City has the ability to complete the work on private property and add the costs to the property's tax bill.

**SUBJECT: Hamilton Water Leak Detection Program  
(PW21063) (City Wide) - Page 7 of 7**

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In some circumstances, the Property Standards By-law also allows Hamilton Water to turn off the water service for a property (notably where there are concerns about health and safety or property damage resulting from a water leak).

**Next Steps**

The following list of next steps are planned to support the proactive water leak detection program, pending available resources:

- A request for two (2) permanent FTEs to provide full time program support has been included in the 2022 Water, Wastewater, & Storm Rate Budget for consideration by Council;
- Annual proactive leak detection scan across the entire City;
- Identify, investigate, and eliminate other sources of non-revenue water (water meter inaccuracies, data handling errors, illegal connections and theft);
- Complete a process improvement project to identify, improve, and control the proactive leak detection program; and,
- Determine an appropriate enforcement / incentive strategy for private leaks that are not repaired in a timely manner.

**APPENDICES AND SCHEDULES ATTACHED**

None



Hamilton

# **Hamilton Water's Proactive Water Distribution System Leak Detection Program**

**PUBLIC WORKS COMMITTEE**

**November 1, 2021**

## Presentation Overview

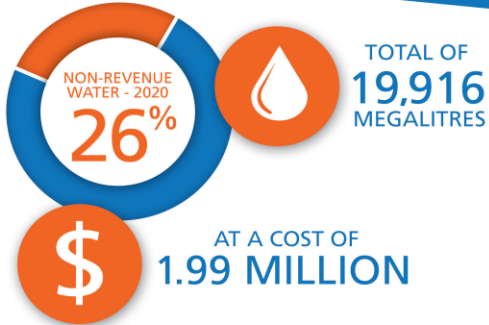
- 1) Non-Revenue Water (NRW) Review
- 2) Leak Detection Program – Prior to 2021
- 3) Proactive Leak Detection Program
  - Pilot Study (2019/2020)
  - Technology Procurement
  - Climate Change
  - Results to Date
  - Return on Investment
  - Private Infrastructure Leaks
- 4) Next Steps





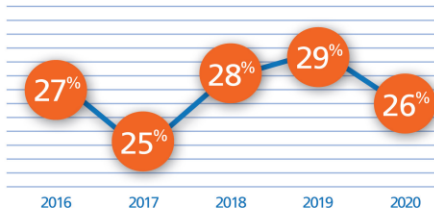
# Non-Revenue Water

- Drinking water that is “lost” before it reaches the customer
- NRW - physical losses, unbilled authorized consumption, operational purposes
- Above average NRW
- NRW - \$1.99M in 2020
- Estimated savings \$820,000/year if NRW went from 26% to 15%



TOTAL OF  
**19,916**  
MEGALITRES

### YEAR OVER YEAR NON-REVENUE WATER



### NON-REVENUE PER SYSTEM - 2020





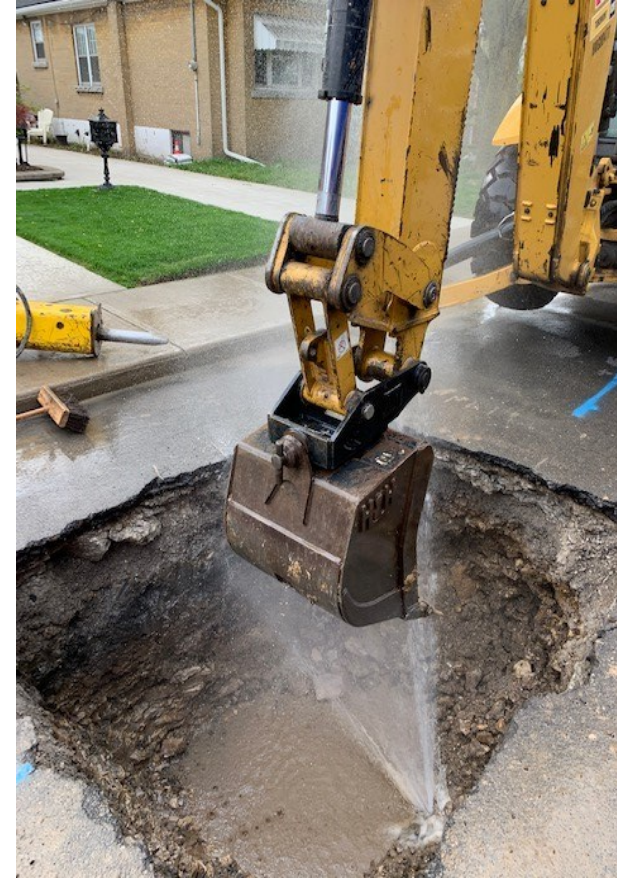
## Leak Detection Program - Prior to 2021

- Reactive leak detection program
- Traditional geophone method
- Operator focused leak detection – day time
- Accuracy issues / dry holes
- Some leaks do not surface due to the unique geography and often rocky porous ground
- No robust proactive leak detection program due to technology and resources



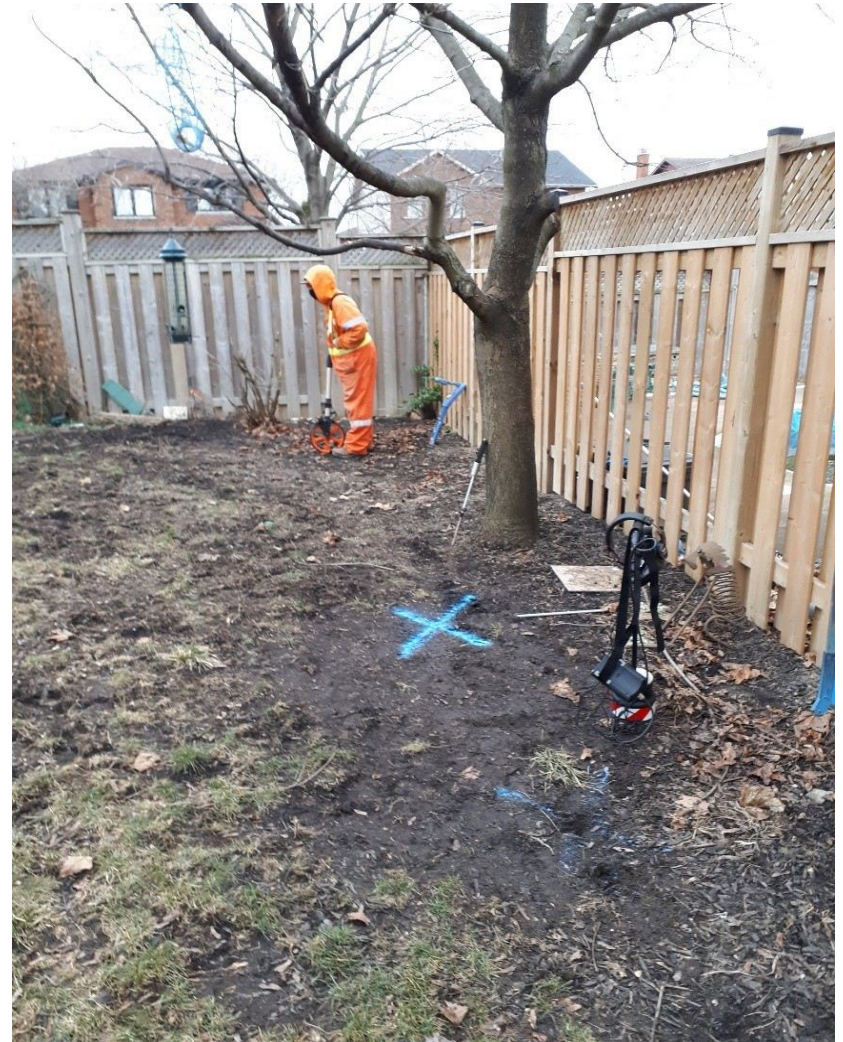


# Soil Conditions - Non-Surfacing Leaks





# Non-Surfacing Leaks



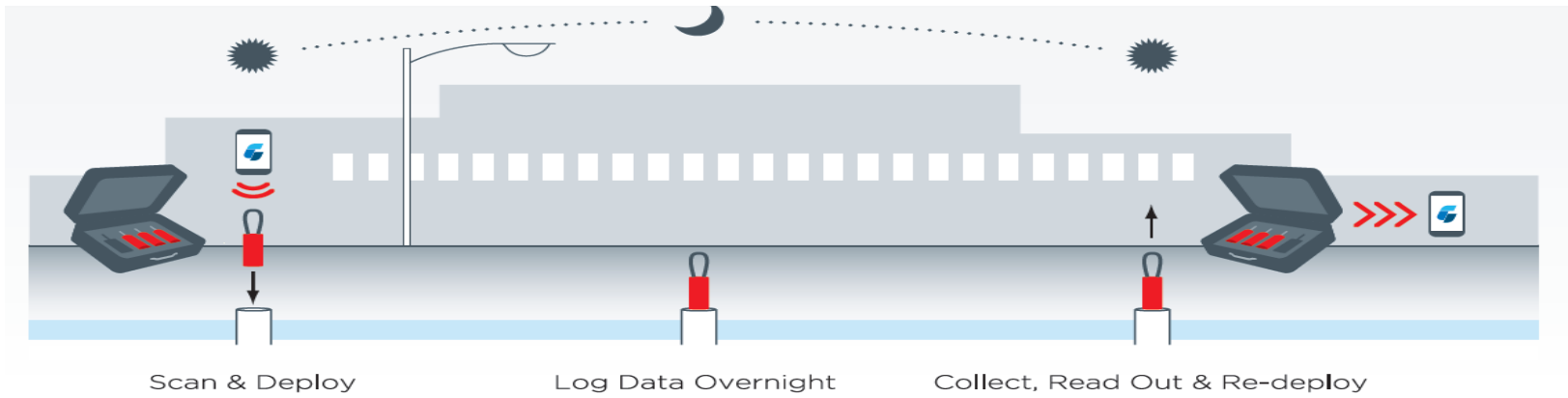
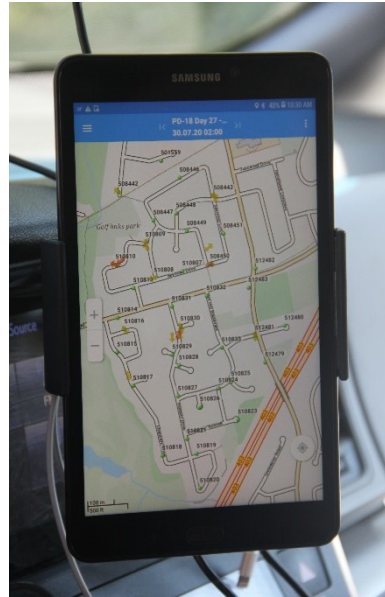


## Proactive Leak Detection - 2019 / 2020 Pilot Study



- Test technology in the field
- Develop a cost/benefit analysis to support the procurement of technology
- Minimize NRW, energy consumption and risk
- Leak detection of 400 km of watermain
- 177 public & private leaks found
- Accuracy of the technology 95.5%

# Proactive Leak Detection Process

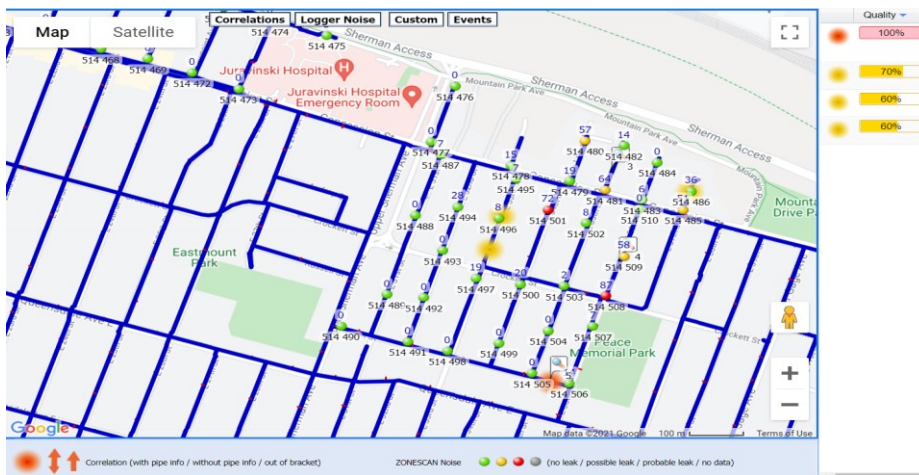




# Proactive Leak Detection Watermain Leak Example – East 36<sup>th</sup> St



- Leak detection completed - April 28, 2021
- Leak confirmed - 6" watermain break
- Leak repaired - May 2, 2021
- Estimated daily NRW - 508 m<sup>3</sup>
- Estimated daily cost of NRW - \$50.80
- Total Volume NRW Eliminated (May 3 to Sept 1) – 61,976 m<sup>3</sup> (\$6,197)





# Proactive Leak Detection Leak Example – Private Water Service Leak



- Leak detection completed - April 28, 2021
- Leak confirmed - ½" lead water service
- Leak repaired – September 8, 2021
- Estimated daily NRW - 66 m<sup>3</sup>
- Estimated daily cost of NRW - \$6.60



# Climate Change Emergency – Energy Reduction

Hamilton

## Hamilton declares a climate change emergency



'We're urging you to step it up,' says Lynda Lukasik. 'I don't know how else to put it'



Samantha Craggs · CBC News · Posted: Mar 18, 2019 4:58 PM ET | Last Updated: March 19, 2019



Students in B.C. protested this month, urging decision makers to take bigger actions around climate change. (Rafferty Baker/CBC)

17 comments

The city of Hamilton has joined a handful of Canadian municipalities by declaring a climate emergency.

Pending a final city council vote, the city has vowed to treat climate change as an existential crisis. It will establish a task force across numerous departments and try to achieve net zero carbon emissions by 2050.

- March 27, 2019, Hamilton declared a climate change emergency
- Hamilton Water is the largest energy users in the City of Hamilton
- 0.20 kWh to produce 1m<sup>3</sup> of water
- Unit Rate of electricity-\$/kWh - \$0.10

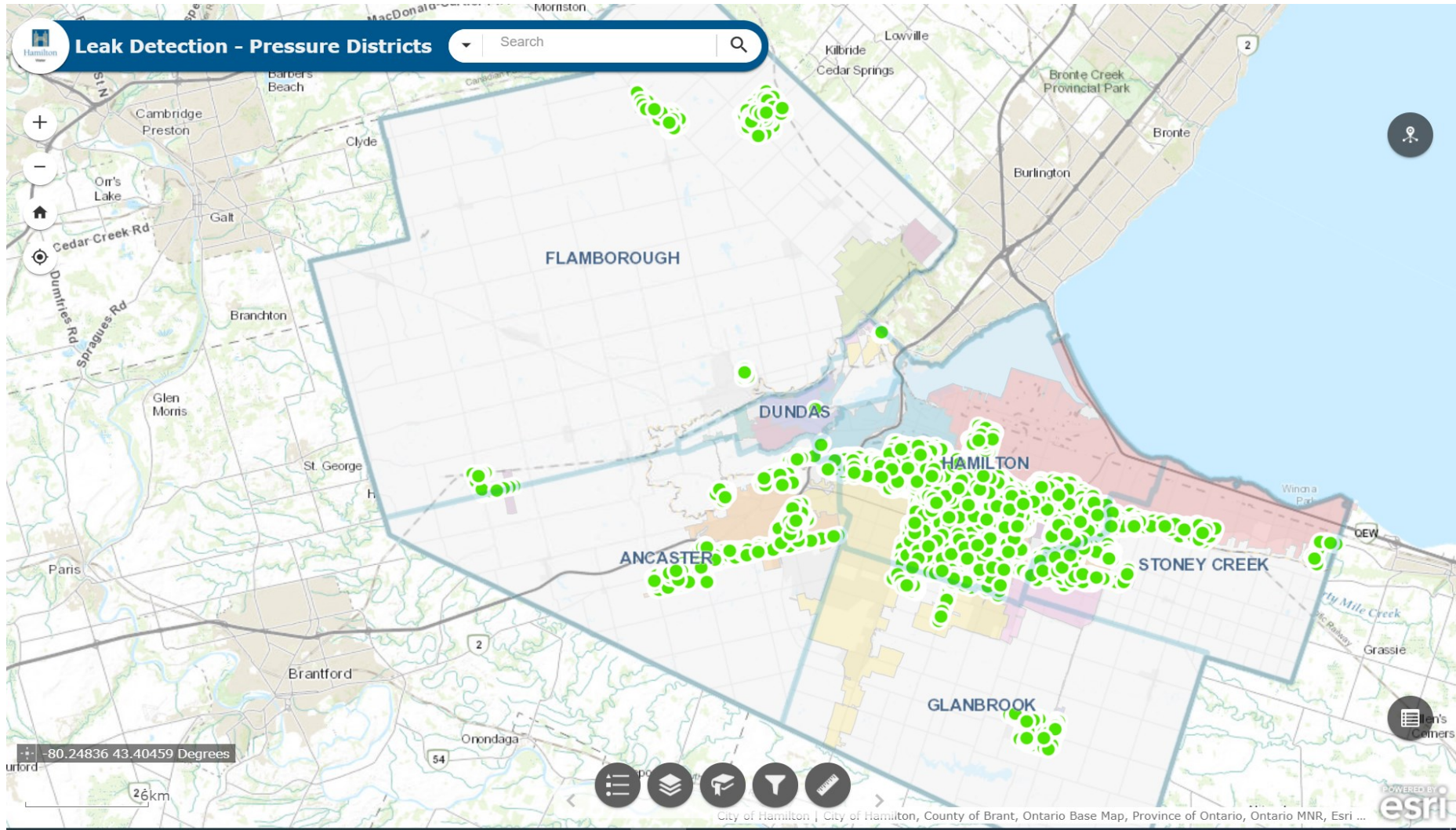
## Proactive Leak Detection – Results to Date

Year	# of Possible Leaks	# of Verified Leaks	# of Public Leaks	# of Private Leaks	% Success Rate
2019	114	110	96	14	96.5%
2020	71	67	57	10	94.4%
2021 (Jan 1 to Sept 1)	78	75	62	13	96.1%
<b>Total</b>	<b>263</b>	<b>252</b>	<b>215</b>	<b>37</b>	<b>95.8%</b>





# Proactive Leak Detection – Results to Date



## Proactive Leak Detection – Return on Investment



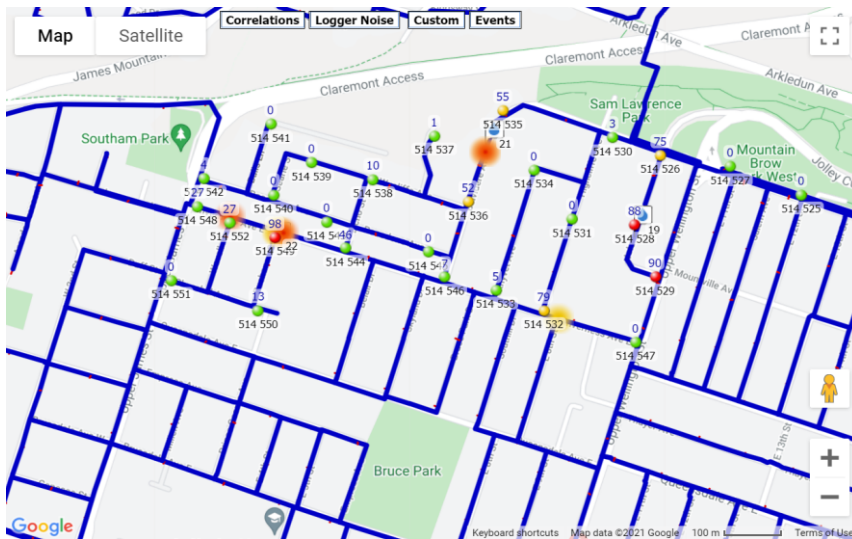
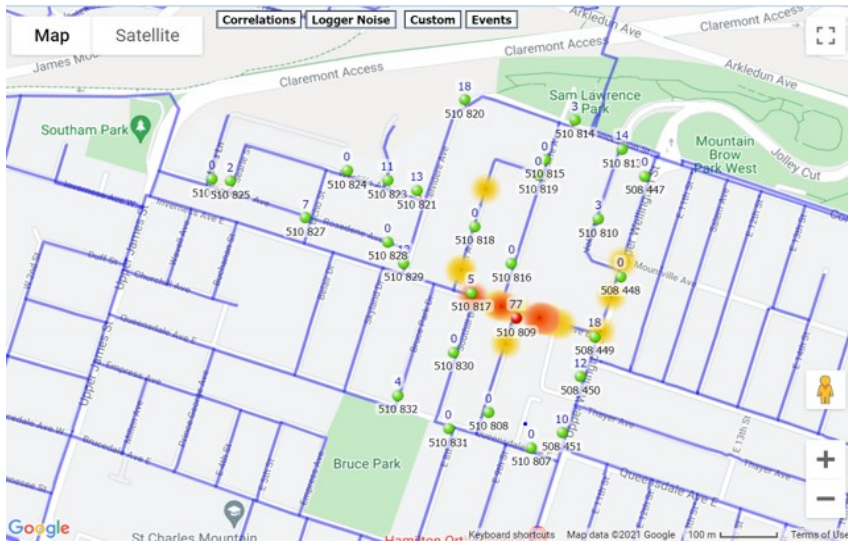
Proactive LD Program Resources	Costs
Proactive LD Equipment (1 time cost)	\$123,000.00
1.65 FTE (annual cost)	\$165,000.00
<b>Total Costs</b>	<b>\$288,000.00</b>

Return on Investment Calculation	
Average NRW per watermain break	500 m <sup>3</sup> / day
Cost of NRW / m <sup>3</sup>	\$0.10
Average daily cost of NRW	\$50.00
Total watermain leaks repaired	61
Total Volume of NRW Eliminated	3,403,500 m <sup>3</sup>
Estimated NRW saved to Sept 1, 2021	\$340,350.00
<b>Return on investment</b>	<b>8 months (Aug 2021)</b>



## Proactive Leak Detection - Annual Scan

- Proactive leak detection in the Centremount neighbourhood (Ward 8)
- Completed proactive leak detection in 2019 and 2021.
- 2 leaks found in October 2019
- 4 leaks found in May 2021
- Annual proactive leak detection scan across entire City



# Proactive Leak Detection – Private Infrastructure leaks



**City of Hamilton - Hamilton Water**  
 330 Wentworth Street North  
 Hamilton, Ontario L8L 5W2  
 P: 905.546.2489  
 www.hamilton.ca

May 6, 2021



**Re: Confirmed Private Water Service Leak** [REDACTED]

During a recent leak detection investigation, a leak was identified by City staff on the water service line at this address. Further investigation has confirmed that the leak is located on the private portion of the water service line. The private portion of the water service line is located between the property line and the water meter. Since the leak is located on the privately-owned asset, the repair or replacement of this water service line is the responsibility of the homeowner.

The City is notifying you of the following:

- The leak from your private side water service may cause damage to your property, neighbouring properties, city infrastructure, and other underground utilities.
- The Property Standards By-law 10-221, Sec 14(1) states that *"the private plumbing system and every plumbing fixture shall be maintained and free from leaks and defects."* If repairs are required and they are not completed in a timely manner, an investigation by Municipal By-law Enforcement could result in a Property Standards Order.
- **The water leak needs to be repaired, at the homeowners' expense within 6 months of receiving this letter.**
- If the leak has not been repaired within the 6-month period, the City of Hamilton will turn off the water to the property until the City is able to complete the repair on the private property. Under the Property Standards By-law the cost of the repair + 33% will be added to your tax bill.
- If the water service line at this address is substandard (alloy/lead) you qualify for the Lead Water Service Replacement Loan Program.

If you have any questions or require any additional information, please contact us at 905-546-2489.

Hamilton Water  
 Water Distribution & Wastewater Collection





## Next Steps



- FTEs included in 2022 Water, Wastewater & Storm Rate Budget for consideration by Council
- Annual proactive leak detection scan across entire City
- Review and investigate other sources of minimizing non-revenue water
- Complete a process improvement to improve on the proactive leak detection program




Hamilton





**CITY OF HAMILTON**  
**PUBLIC WORKS DEPARTMENT**  
**Waste Management Division**

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	November 1, 2021
<b>SUBJECT/REPORT NO:</b>	Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Ryan Kent (905) 546-2424 Ext. 7686
<b>SUBMITTED BY:</b>	Angela Storey Director, Waste Management Public Works Department
<b>SIGNATURE:</b>	

### RECOMMENDATION

That Appendix "A" attached to Report PW21061 respecting the City of Hamilton Waste Requirements for Design of New Developments and Collection be approved.

### EXECUTIVE SUMMARY

The City of Hamilton (City) Waste Management Division is responsible for reviewing and providing comments on development applications related to waste collection and diversion. To guide City comments, Staff use the document titled Solid Waste Collection Design Guidelines for Developments (Design Guidelines). The purpose of the Design Guidelines is to ensure that new developments within the City are designed to permit safe and efficient waste collection and to provide residents with uniform access to waste collection services and diversion programs provided by the City. The Design Guidelines include information such as the required space for waste storage and waste collection for different types of developments, required access dimensions for waste collection vehicles and waste container requirements based on the size of developments. Over the last number of years, development in the City has evolved with higher density and requests for full diversion accessibility. This has resulted in a need

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 2 of 13**

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to revise the Design Guidelines to provide updated direction to Staff that incorporates new types of development such as stacked townhouses and large multi-residential developments with several towers and / or hundreds of units.

The process to review the Design Guidelines included an internal staff working group, benchmarking against other municipalities and external consultation with the development industry. This process is now complete and the changes to the Design Guidelines include:

- restricting turnaround areas;
- removing non-waste related uses from truck turnaround areas (such as snow storage);
- removing the ability to self-declare for private waste collection;
- Staff providing permission for developments to receive private waste collection;
- curbside collection dependent on dwelling units having sufficient waste storage and set out areas;
- requiring waste storage areas be large enough to store eight days' worth of waste including bulk items;
- including maximum round trip walking distance of 100 metres to dispose of waste;
- requiring multi-residential buildings with at least 30 dwelling units and 7 storeys to have a chute system with three individual chutes;
- allowing townhouse developments to use in-ground containers compatible with City waste collection vehicles;
- require loading areas to increase in size based on number of front-end containers being used;
- requiring multi-residential buildings to use pads on private property to set out carts; and
- requiring commercial and residential waste to be separated in mixed-use developments.

Most of the changes to the revised Design Guidelines included as Appendix "A" attached to Report PW21061 are supported or agreeable by all stakeholders; however, there are some recommended changes that the development industry does not support. Staff took into consideration all concerns provided by the development industry and worked to have a number of them updated however a few remain where the development industry feel that the City's Design Guidelines are too rigid. Based on the review process, Staff have justified the revised Design Guidelines as they support safe and efficient waste collection and improve residents' accessibility to the City's waste diversion programs. The Design Guidelines were also revised to reflect best practices used by other municipalities.

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**SUBJECT: Update to Hamilton’s Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 3 of 13**

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The purpose of Report PW21061 is to seek approval for the revised document titled Waste Requirements for Design of New Developments and Collection included as Appendix “A” attached to Report PW21061.

**Alternatives for Consideration – Page 12**

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

Financial: The current waste collection contract does not include the collection of organic or recyclable container materials in front-end containers; however, the revised Design Guidelines included as Appendix “A” attached to Report PW21061 allow for this service to be provided. In preparation for this proposed change, Staff secured set pricing for these services with the City’s current waste collection contractor. The set pricing for these services is confidential, as it has been negotiated through the City’s waste collection contract. As developments of this nature take time to build, the costs for the added service will not be realized for some time, 2023 at the earliest. Once these costs are realized, Staff will include budget impacts as part of the annual tax operating budget process. It is estimated, based on historical data such as the number of buildings that come onto City service annually, and other factors that the annual budget impact is in the range of \$40,000. This budget impact includes current program costs for recycling and organics collection at multi-residential buildings partially offsetting any increased costs relating to the front-end container collection for recycling and organics as identified in Report PW21061.

Staffing: N/A

Legal: N/A

**HISTORICAL BACKGROUND**

The Design Guidelines were most recently revised in 2015. Prior to that, there were updates in 2011 and 2007. The Design Guidelines are included as an appendix to the City’s Site Plan Guidelines that guide all development applications subject to site plan approval. The City’s Site Plan Guidelines are maintained by Planning and Economic Development (PED) and include guidelines for other Divisions as appendices such as Tree Preservation Details and Landscape and Grading Plan Requirements.

**POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

The details included in Appendix “A” attached to Report PW21061 have been drafted while considering the City’s objectives laid out in Hamilton’s Official Plan, Urban Design

**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 4 of 13**

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Guidelines and the Comprehensive Development Guidelines and Financial Policies. These objectives include promoting intensification, infill and higher density developments to grow the City's housing supply.

Once approved, the Design Guidelines will be used to inform reviews that are underway to policies that the City uses to direct new development including the Site Plan Guidelines and the Zoning By-law.

The revised Design Guidelines support the first two guiding principles approved as part of the City's Solid Waste Management Master Plan:

1. The City of Hamilton must lead and encourage the changes necessary to adopt the principle of waste minimization.
2. The Glanbrook landfill is a valuable resource. The City of Hamilton must minimize residual waste and optimize the use of the City's diversion and disposal facilities.

## **RELEVANT CONSULTATION**

The following groups have been consulted and are supportive of all or most of the recommendations being made to the revised Design Guidelines:

- Public Works Department – Waste Management Division – Waste Collections
- Planning and Economic Development Department – Growth Management Division, Planning Division, Transportation Planning and Parking Division and Building Division
- Corporate Services Department – Legal and Risk Management Services Division
- Corporate Services Department – Financial Planning Administration & Policy Division
- Waste Management Advisory Committee
- City Housing Hamilton

Presentations related to the revised Design Guidelines, were made to the Development Industry Liaison Group on January 11, 2021, and May 11, 2021, to the West End Home Builder's Association (WEHBA) on February 1, 2021, and to both the WEHBA and the Hamilton/Burlington Society of Architects (HBSA) on July 26, 2021. These presentations were made to inform the development industry of the proposed changes and feedback was received and reviewed by Staff. Staff responded to all feedback to identify if changes could be made or would remain as recommended and provided justification as applicable. Staff are very thankful for the development industry's participation in the process to update the Design Guidelines and are confident that



**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 5 of 13**

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flexibility included in the Design Guidelines will allow for collaboration during the review of future development applications.

**ANALYSIS AND RATIONALE FOR RECOMMENDATION****Purpose of Design Guidelines and Internal Review**

The purpose of the Design Guidelines is to ensure that new developments within the City are designed to permit safe and efficient waste collection and to provide residents with uniform access to waste collection and diversion programs provided by the City. As development in the City has changed over time, this has resulted in a need to revise the Design Guidelines to provide updated direction to Staff that incorporates new types of development such as stacked townhouses and large multi-residential developments with several towers and / or hundreds of units.

To identify specific issues and determine solutions to be included in the revised Design Guidelines, a multi-divisional working group was formed with Staff from the Public Works and PED Departments. This working group met throughout 2020 and 2021 and identified the most prominent issues related to the Design Guidelines. This included pieces such as waste collection vehicles reversing too frequently and too far on private roads. PED staff also provided insight on objectives identified in City planning policies, such as the Official Plan, including promoting intensification, infill and higher density developments to grow the City's housing supply.

To assist Staff in determining solutions for the noted concerns, a scan of similar policies for other municipalities was undertaken. These municipalities included: Toronto, Peel Region, Halton Region, Guelph, Richmond Hill, Brantford, London and Vancouver. These discussions resulted in the working group reaching consensus on how these issues would be addressed in the revised Design Guidelines to be named City of Hamilton Waste Requirements for Design of New Developments and Collection.

This process is now complete and the following changes to the Design Guidelines are recommended:

- Include information on the transition of the blue box program to producer responsibility and that this transition may require additional changes to how blue box material is stored and collected in the future;
- Provide limited ability for truck turning radii to allow for the vehicle to overhang curbs;
- Require development applications to include the proposed travel path of waste collection vehicles on site plans;
- Restrict the number of turnaround areas a waste collection vehicle will use on private roads and when turnaround areas will be permitted;

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 6 of 13**

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- Remove the ability of parking, snow storage and dwelling units to be located where waste collection vehicles reverse;
- Remove the ability to self-declare a development to receive private waste collection;
- Require the development industry to receive permission from staff to allow a development to receive private waste collection and not meet the Design Guidelines;
- Include that for a development to receive curbside collection all dwelling units within the development must have sufficient individual storage and set out areas for waste;
- Remove the ability of developments to use piles for the set out and collection of waste;
- Require dwelling units in townhouse developments that cannot receive curbside collection to use shared front-end containers and carts for the storage and collection of waste;
- Provide the ability for townhouse developments to use in-ground containers permitted the containers are compatible with City waste collection vehicles;
- Specific size requirements for waste storage in development types (i.e. multi-residential buildings, townhouse developments etc.);
- Require waste storage areas to be large enough for eight days of waste;
- Require waste storage areas to be large enough for bulk waste;
- Require that developments must be designed so residents do not need to travel more than 100 metres (round trip) to dispose of waste;
- Permit the allowance for loading areas to be located internally within buildings and underground;
- Require loading areas to have sufficient area for all front-end containers that are set-out on collection day;
- Require multi-residential buildings receiving cart service to set-out carts on private property on pads;
- Require multi-residential buildings that contain at least 30 dwelling units and have at least 7 storeys to have a chute system with three individual chutes; and
- Require residential and commercial waste to be separated in mixed-use developments.

#### External Consultation

External consultation on the Design Guidelines concluded on September 3, 2021, and included the WEHBA providing detailed comments on the draft Design Guidelines. Table 1 provides an overview of the comments received by Staff from the development industry throughout the consultation process and how Staff responded to the comments. The consultation process resulted in the development industry not fully supporting the following pieces: truck turnaround area size, how private waste collection will be permitted and dimensions for waste storage. Additionally, the development industry

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 7 of 13**

noted an overarching concern that the draft Design Requirements are in direct conflict with provincial and City intensification targets. In response to this concern, PED Staff have reviewed the draft Design Guidelines and have noted that there is sufficient flexibility incorporated in the draft Design Guidelines to accommodate for circumstances where conflicts could arise, and specifically with respect to intensification in established urban areas.

Table 1: Summary of Comments

Area of Concern	Development Industry Comment	Staff Response	Agree or Keep As is (✓ or X)
Policy conflict	Design Guidelines must be reviewed with other policy changes by other groups i.e. Growth Management.	PED staff will consider the Design Guidelines when revising policies.	✓
Limiting truck reversals	Design Guidelines must allow either flexibility in the allowance of truck reversals or allow for private waste collection.	Design Guidelines revised to allow for private waste collection based on staff evaluation.	✓
Loss of units	Design Guidelines will reduce number of new units and profitability of the development industry.	Consideration has been given to reduce the loss of units.	✓
Turnaround areas	Truck turnaround areas are too large and will result in a loss of units.	Additional turnaround area provided in Design Guidelines to add flexibility. Size of turnaround areas are based on size of collection vehicles – no room for reduction and are similar to the requirement of other municipalities.	X
Private collection	Private waste collection should remain an option	Design Guidelines revised to allow for private waste collection based on site specific staff evaluation.	X

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 8 of 13**

Waste storage	Waste storage area of 2.5m <sup>2</sup> for houses should be accommodated in liveable spaces or garages.	Waste storage between collection days in liveable space is not permitted. Design Guidelines allow for waste storage in garages.	✓
Waste storage	Waste storage areas for multi-residential buildings should not be required to store the equivalent of 8 days of waste.	The size of the waste storage areas in the Design Guidelines are based on the service level that the City currently provides including weekly collection of garbage and dual stream recycling.	X
Chute infrastructure	The requirement for 4 separate chutes may result in a loss of units.	Design Guidelines revised to require 3 chutes including a separator.	X
Effective date	Complete development applications received by the City prior to the effective date should not be subject to the Design Guidelines	Design Guidelines revised so that complete development applications received prior to effective date will not be subject to Design Guidelines.	✓

The following information speaks to rationale for not changing components of the Design Guidelines following the consultation process.

#### Turnaround Area Dimensions

The Design Guidelines include maintaining the current dimensions for turnaround areas that are included in the current Guidelines. The justification for not changing the dimensions of the turnaround area included in the Design Guidelines is that these dimensions represent the minimum amount of space required for a City waste collection vehicle to make a three-point turn and as such, these cannot be reduced.

The development industry has expressed the concern that the dimensions for the turnaround area is excessive and will result in a loss of units. The development industry has not commented that the dimensions of the turnaround area can be reduced and still accommodate waste collection vehicles but has suggested the City should change how waste is collected to use less space. These suggestions include using smaller collection vehicles and using additional Staff where trucks reverse. The rationale for why these suggestions were not entertained by Staff is that they will result in significant



**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 9 of 13**

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increased costs to the City such as purchasing new collection vehicles, vehicles that cannot hold as much waste or employing additional full-time employees (FTEs).

Collection vehicles currently used by the City and its contractor range in capacity from 25 to 40 cubic yards. The cost to purchase a 6 cubic-yard collection vehicle is approximately \$180,000. This cost does not include the impact on collection efficiency of using collection vehicles that do not align with the standards of the current fleet (i.e. number of times the vehicle would have to attend a transfer station to discharge in a day). If all routes serviced by City forces are eventually required to include an additional FTE to accommodate this request, this would result in an additional nine FTEs. Accommodating this request would also result in renegotiating contract pricing with the City's waste collection contractor.

#### Private Waste Collection

The Design Guidelines include the revision that Staff will determine whether a development should be permitted to be designed in a manner that does not comply with the Design Guidelines. The current Guidelines do not provide staff with any authority over this and provides the development industry with full ability to decide to opt out of City waste collection and design sites that cannot accommodate this service. Rationale for this change includes that it has become common practice for the development industry in Hamilton to design new developments in ways that prioritize maximizing density over operational functionality. An indication of how common this practice is can be seen by the fact that in the first six months of 2021, Staff received 107 development applications for developments that are permitted to receive City waste collection (i.e. multi-residential buildings and townhouse developments) with only 47 being designed so the City could provide waste collection. This practice results in the City being unable to service these developments and reduces resident accessibility to City waste services. This is a concern as residents of properties unable to receive City waste collection often opine this is a disservice to them as it results in a lack of accessibility to diversion programs and it often results in greater costs to residents. Private waste collection is not paid for by property taxes but through methods such as condominium fees which residents pay in addition to property taxes. To assist in making this determination, Staff will consider factors such as the size and shape of the property.

#### Dimensions for Waste Storage

The Design Guidelines include revised minimum dimensions for waste storage areas in multi-residential buildings and townhouse developments receiving shared waste collection. The current Guidelines include dimensions for waste storage areas; however, the dimensions have been updated to be consistent with industry best practices. The rationale for increasing these dimensions includes that a lack of storage space is often a barrier to participation in diversion programs. Superintendents of

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 10 of 13**

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buildings have expressed concern over lack of storage space for green carts as a reason for not participating in the organics program and residents have expressed that a lack of containers is a barrier to participation in diversion programs. To inform the 2020 update to Hamilton's Solid Waste Management Master Plan, a survey was

provided to receive resident feedback on a series of topics including barriers to participating in diversion programs. One of the survey questions directed to residents in multi-residential buildings was what prevents you from separating your waste into garbage, recycling, compost and other materials? This question had multiple answers that residents could select with the two most popular being Not enough organics containers (43.3%) and Not enough recycling containers (38.5%). The greatest barrier to having a sufficient number of diversion containers at multi-residential buildings is lack of storage space for containers.

The revised dimensions have been calculated based on the following waste generation rates:

- garbage set out limits for multi-residential buildings established in the City's Waste By-law;
- industry-wide accepted recycling generation rates for multi-residential buildings;
- a forecasted generation rate of one mini bin per week per multi-residential unit for organic waste; and
- a need for the storage of bulk (furniture) waste in between collection days.

The revised dimensions include that waste storage areas are large enough to store eight days' worth of waste as waste collection is provided by the City once per week for each stream. The additional day of waste storage has been included in case waste collection is delayed for any reason such as the loading space being inaccessible.

#### Chute Infrastructure and New Services

The Design Guidelines include a new requirement that all new multi-residential buildings with 30 or more dwelling units and 7 or more storeys must be designed so that separation of four waste streams (garbage, organics, containers and fibres) can occur on each floor. The rationale for requiring this new service for buildings with 7 storeys or more, is that these buildings are considered high-rises according to Hamilton's Official Plan. Buildings with less than 7 storeys are considered either low or mid-rises. The rationale for requiring this new service for buildings with 30 or more dwelling units, is this is consistent with where other municipalities have determined waste generation rates require the use of front-end containers. To achieve this, the Design Guidelines include that these buildings must be designed with three separate waste chutes. The required configuration of three chutes included in the Design Guidelines is:

- One chute for garbage disposal with all chute doors being black in colour;
- One chute for organics disposal with all chute doors being green in colour; and

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 11 of 13**

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- One chute with a bi-sorter for disposal of both fibre and container recycling with all chute doors being blue in colour.

The current Guidelines do not include requirements for separate chutes only that garbage chutes are permitted. The rationale for requiring waste chutes to

accommodate different waste streams is to increase waste diversion in multi-residential buildings. Historically, these buildings have had low diversion rates especially when compared to single-family homes. A contributing factor to these buildings performing poorly is the ease in which garbage can be disposed of in chutes on each floor and the effort required to take recycling and organics to a waste storage area located somewhere in the building other than on each floor.

Initially, staff proposed four separate chutes, one for each waste stream; however, the development industry requested that this number be reduced, and that tri-sorters be included as an option. Although staff complied with the request to reduce the number of chutes, the request to allow for tri-sorters was not granted. Bi-sorters and tri-sorters are systems that allow for a single waste chute to sort more than one type of waste through a diverter at the bottom of the chute. Bi-sorters can sort two waste streams and tri-sorters can sort three waste streams. The primary reason for permitting blue box material to be disposed of through a separate chute with a bi-sorter, is Ontario is in the process of transitioning the blue box program to an individual producer responsibility framework with Hamilton scheduled to transition its blue box program on April 1, 2025. With this transition, Hamilton will no longer have control over the blue box program and will no longer be financially responsible for the contamination of the blue box. Additionally, once transition occurs, producers could choose to have a single-stream recycling program or continue with the current dual stream system. Using a bi-sorter for recycling allows for program flexibility while minimizing the impact on new developments. As the City will no longer have control over the blue box program it should also make every effort to minimize how much blue box material the City manages that is improperly disposed of by residents. Committing a single chute to the disposal of blue box material will minimize this impact.

To accommodate the chute infrastructure proposed in Appendix "A" attached to Report PW21061, new services are required. These services are collecting organic material and recycling container material in front-end containers. Staff have proposed amending the Solid Waste By-law to accommodate these changes; however, as of the writing of Report PW21061, these services have not been approved by Council. By approving Recommendation (b) in Report PW21061, Council will be approving these new services.

**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 12 of 13**

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Ongoing Assessment of the Design Guidelines

Moving forward, Waste Management and PED Staff will meet regularly to assess the implementation of the revised Design Guidelines and address any conflicts that may arise between the Design Guidelines and planning policies. Inter-department Staff will also meet on an as needed basis to evaluate concerns with the application of the Design Guidelines with specific development applications. This may result in Staff determining that flexibility is needed in applying the Design Guidelines to a specific development application to ensure that its application does not conflict with the

character of the street, the urban design and density objectives of the applicable land use policies, existing heritage features and / or the existing surrounding context. This flexibility will serve as a tool to be used by Staff, not the Development Industry, to both maintain a consistent look and feel of neighbourhoods and to best deliver waste programs and collection services to residents.

**ALTERNATIVES FOR CONSIDERATION**

Council could decide not to approve the recommendation of Report PW21061 but choose to approve the addition of organics and recycling collection using front end bins for multi-residential buildings. Council would direct Staff to amend the proposed Design Guidelines by adding sections contained within Appendix "A" attached to Report PW21061 related to the updated service.

Financial: The financial implications of this alternative are the same as approving the recommendation to approve the new Design Guidelines included as Appendix "A" attached to Report PW21061.

Staffing: N/A

Legal: N/A

**ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

**Healthy and Safe Communities**

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

**Clean and Green**

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

**Our People and Performance**

Hamiltonians have a high level of trust and confidence in their City government.

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**SUBJECT: Update to Hamilton's Solid Waste Collection Design Guidelines for Developments (PW21061) (City Wide) - Page 13 of 13**

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**Built Environment and Infrastructure**

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**APPENDICES AND SCHEDULES ATTACHED**

Appendix "A" attached to Report PW21061 - City of Hamilton Waste Requirements for Design of New Developments and Collection



# UPDATE TO HAMILTON'S SOLID WASTE COLLECTION DESIGN GUIDELINES FOR DEVELOPMENTS

**Public Works Committee**

**November 1, 2021**

# BACKGROUND

- Solid Waste Collection Design Guidelines for Developments (Design Guidelines) guide staff comments on new developments
- Design Guidelines last revised in 2015
- Changes to the Guidelines needed due to a change in the way new developments are being designed



# PURPOSE OF DESIGN GUIDELINES

- Ensure new developments are designed and constructed to allow safe and efficient waste collection
- Secure resident accessibility to City's waste diversion programs
- Communicate a consistent design standard for new multi-residential construction projects to the development industry





# UPDATE PROCESS



## **Internal Working Group**

Planning and Economic Development, Waste Collections

## **Municipal Benchmarking**

Toronto, Peel Region, Halton Region, Niagara Region, Richmond Hill, London, Vancouver, Brantford, Guelph

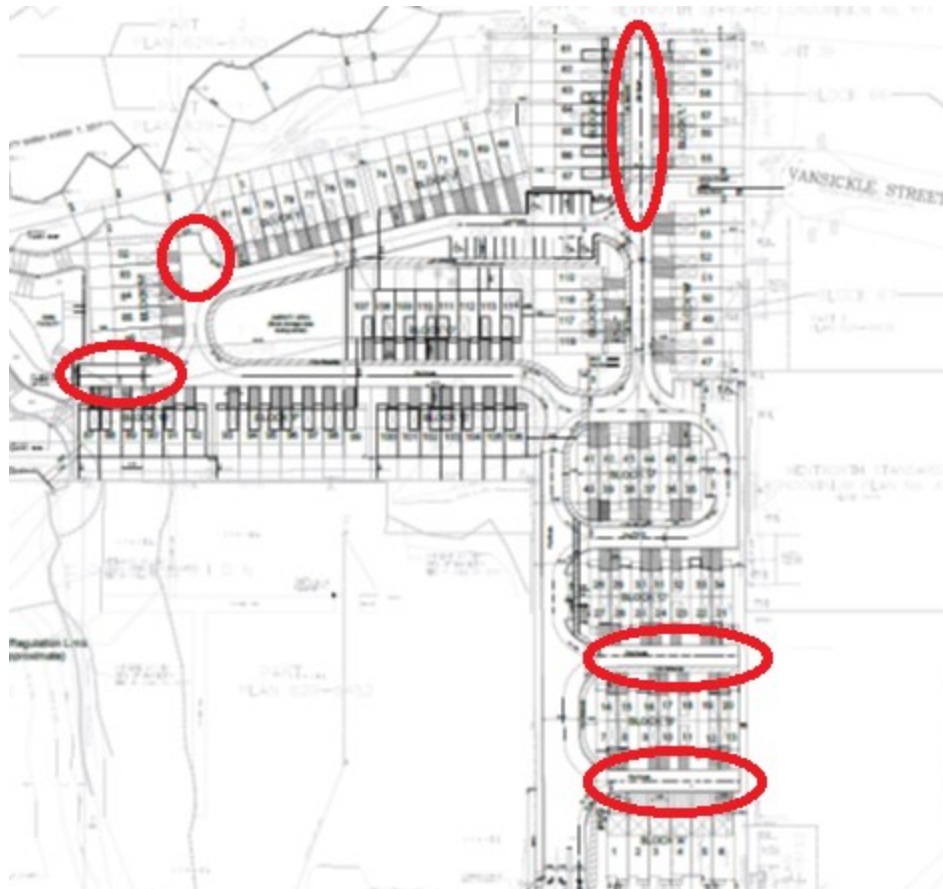
## **External Consultation**

West End Home Builder's Association, Hamilton / Burlington Society of Architects

# KEY DISCUSSION ITEMS

- Turnaround dimensions
- Private waste collection
- Waste storage
- Chute infrastructure

# TURNAROUND DIMENSIONS AND QUANTITY



# TURNAROUND DIMENSIONS

## How turnaround areas support the purpose of the Design Guidelines:

- Used by collection vehicles for three-point turns when continuous forward motion is not achievable

## Proposed:

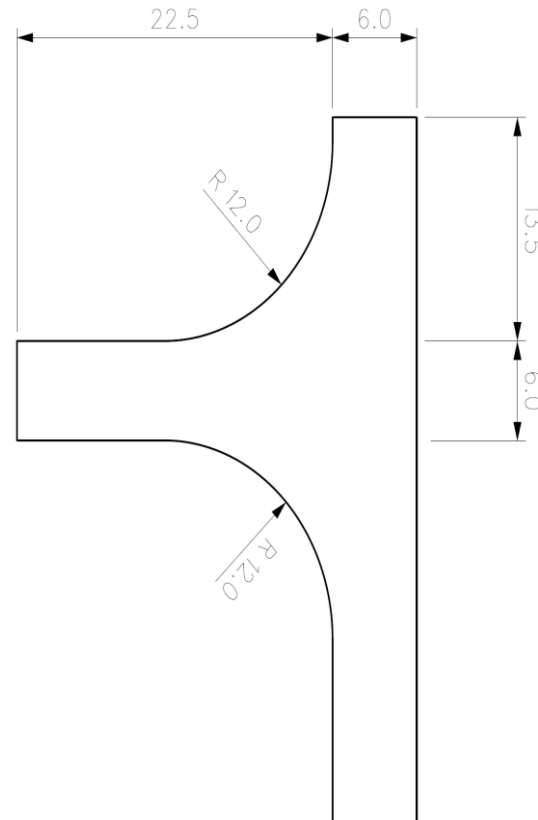
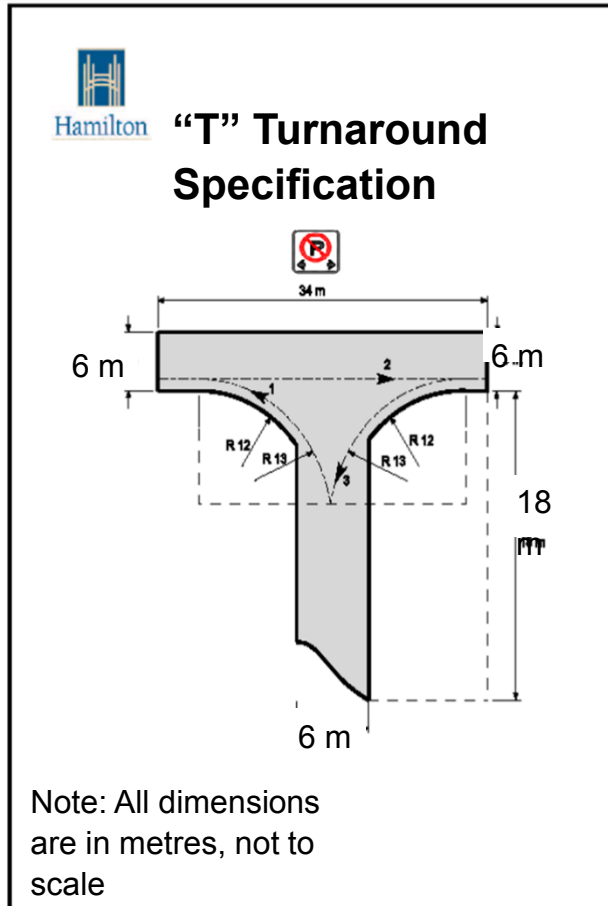
- Size of current turnaround area maintained
- Include new turnaround area for narrow sites
- No dwelling units or accessory uses fronting where collection vehicles reverse
- Limit of one turnaround area per development

## Rationale:

- Turnaround dimensions accommodate current collection vehicles
- Smaller turnaround areas would require purchasing smaller collection vehicles



# TURNAROUND DIMENSIONS



# PRIVATE WASTE COLLECTION

## How private waste collection supports the purpose:

- Restricting private waste collection increases resident accessibility to the City's waste diversion programs

## Proposed:

- Approval for new developments to be designed for private waste collection will come from staff
- PW and PED staff approval based on site constraints and applicable policies

## Rationale:

- Reduced impact on residents – more developments can receive waste collection and access to diversion programs through the City

# PRIVATE WASTE COLLECTION



# WASTE STORAGE DIMENSIONS

## **How waste storage supports the purpose of the Design Guidelines:**

- Sufficient on site waste storage is necessary to secure resident accessibility to waste diversion programs
- Hamilton's waste program requires storage of garbage, organics and two recycling streams with once / week collection for each

## **Proposed:**

- New developments must be designed to store eight days of waste
- Storage area includes bulk waste

## **Rationale:**

- Ensure sufficient waste containers on-site for program participation
- Decrease occurrences of bulk waste disposed at curb

# CHUTE INFRASTRUCTURE

## **How chute infrastructure supports the purpose of the Design Guidelines:**

- Chute systems capable of diverting waste support resident accessibility to waste diversion programs

## **Proposed:**

- One chute for garbage, one chute for organics and one chute with a bi-sorter for both recycling streams

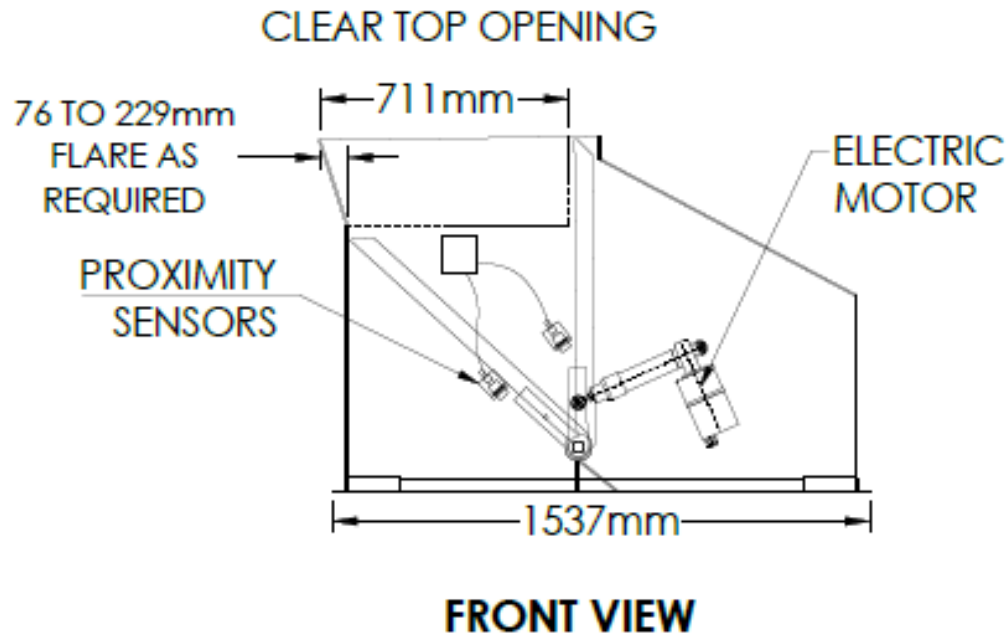
## **Rationale:**

- Removes barriers caused by chutes with sorters
- Provides flexibility with blue box transition
- Waste by-law updated to allow for this service



# CHUTE INFRASTRUCTURE

How bi-sorters operate:



# TRANSITION TO UPDATED POLICY

- Updated Design Guidelines will come into effect when approved by Council
- At that time, all development applications received by the City will be required to comply with the updated Design Guidelines
- Any complete development applications received prior to this date will **NOT** be required to comply with the updated Design Guidelines

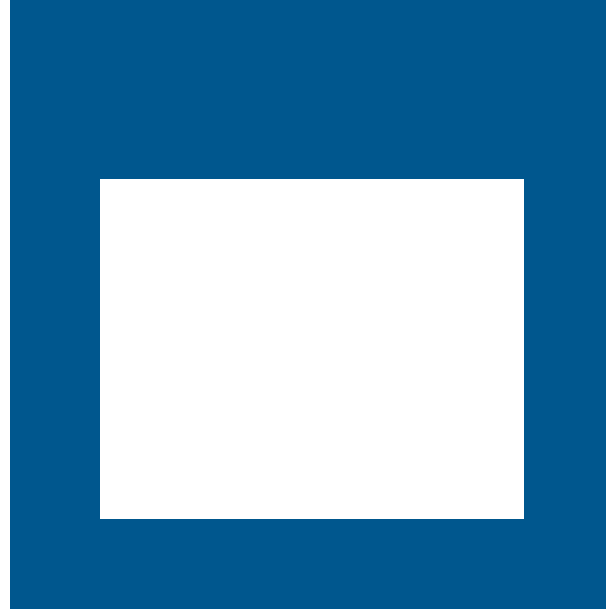


Staff are provided flexibility when applying the Design Guidelines to ensure developments:

- Conform to urban design and density objectives of applicable land use policies;
- Do not conflict with existing character of the street; and
- Are consistent with existing heritage features and / or surrounding context

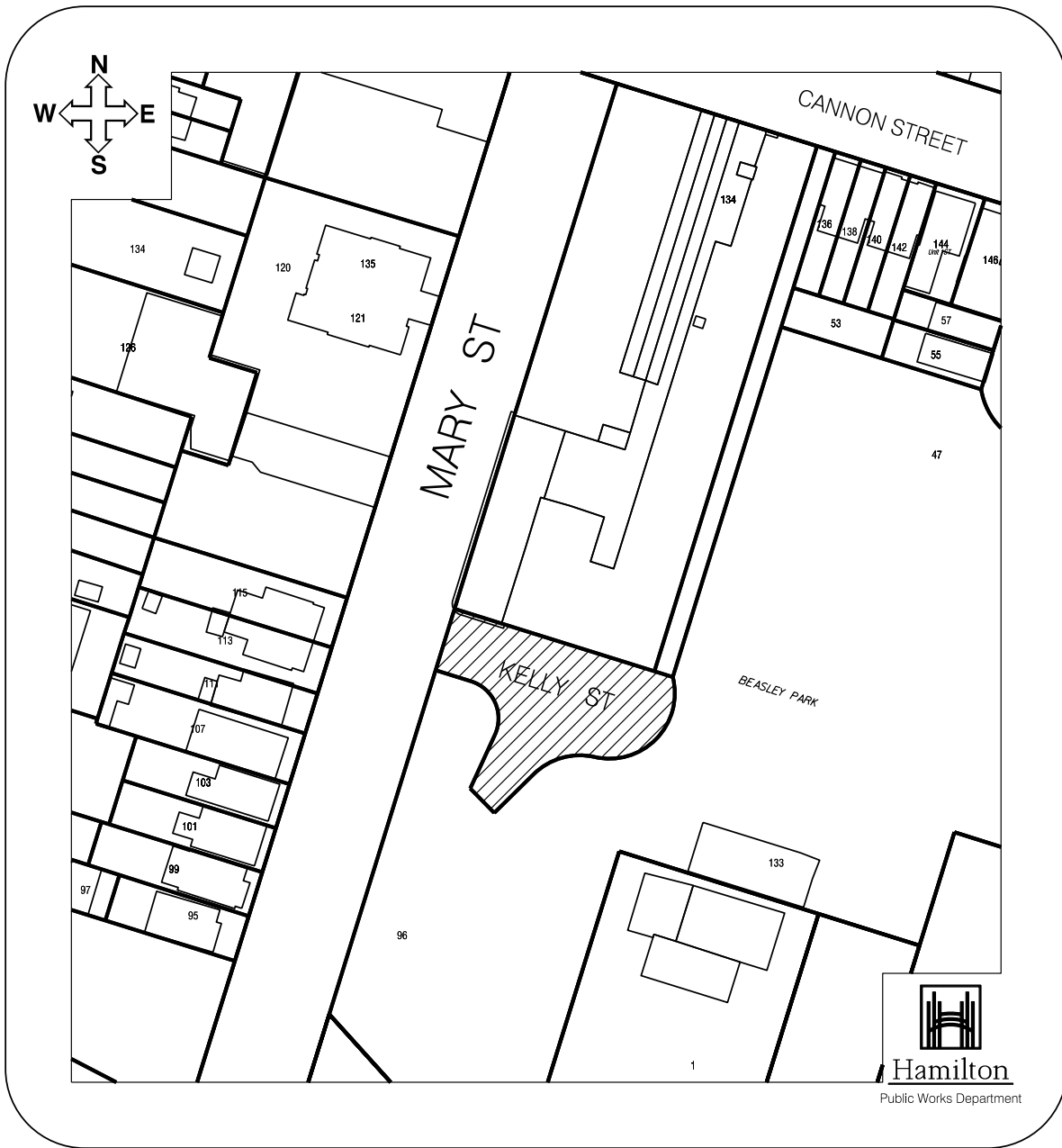
### Updated Design Guidelines:

- Uphold existing principles of safe and efficient waste collection and accessibility to waste diversion programs by residents
- Developed through extensive internal and external consultation with staff from PED and Waste Collections as well as the development industry;
- Will be applied with a similar collaborative approach; and
- Provide staff with flexibility when reviewing development applications and consultation with PED



THANK YOU





**LOCATION PLAN**

PROPOSED CLOSURE OF

**KELLY STREET**

CITY OF HAMILTON  
PUBLIC WORKS DEPARTMENT

**LEGEND**

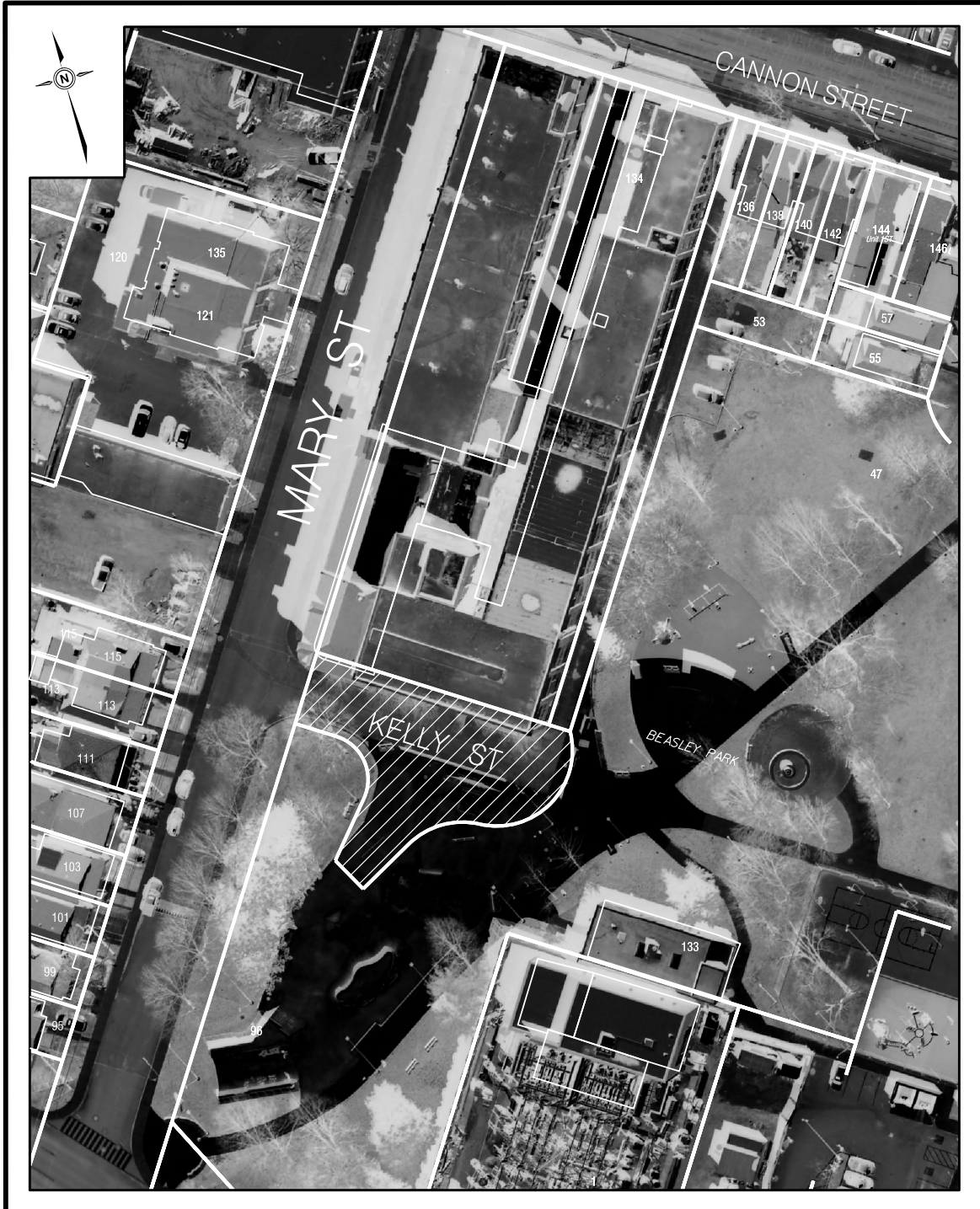


**SUBJECT LANDS**

DATE: April 16, 2021

Not to Scale | Sketch By: CF

REFERENCE FILE NO : PW21\_



PROPOSED CLOSURE OF KELLY STREET, HAMILTON

Geomatics & Corridor Management Section  
Public Works Department


LEGEND

 Lands to be Closed

NTS | 16/04/2021 | Sketch by: CF



**CITY OF HAMILTON**  
**PUBLIC WORKS DEPARTMENT**  
**Hamilton Water Division**

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	November 1, 2021
<b>SUBJECT/REPORT NO:</b>	Garner Road Pumping Station (HD018) Upgrades (PW21062) (Ward 12)
<b>WARD(S) AFFECTED:</b>	Ward 12
<b>PREPARED BY:</b>	Stuart Leitch (905) 546-2424 Ext. 7808 Trevor Marks (905) 546-2424 Ext. 6025
<b>SUBMITTED BY:</b>	Mark Bainbridge Director, Planning & Capital, Hamilton Water Public Works Department
<b>SIGNATURE:</b>	

### RECOMMENDATION

- (a) That the single source procurement, pursuant to Procurement Policy #11 – Non-Competitive Procurements, for additional consultancy services including project management, contract administration during construction, site inspection and commissioning/warranty services for the Garner Road Pumping Station (HD018) upgrades, at the upset limit of \$750,000 be awarded to R.V. Anderson and Associates and funded from Project ID No. 5141667421; and,
- (b) That the General Manager of Public Works, or their designate, be authorized and directed to negotiate, enter into and execute a contract and any ancillary documents required to give effect thereto with R.V. Anderson and Associates in a form satisfactory to the City of Hamilton Solicitor.

### EXECUTIVE SUMMARY

In April of 2020, R.V. Anderson and Associates was competitively procured through a Request for Proposal (C11-61-19) to provide Design and Contract Administration services for a capital upgrade to the Garner Road Pumping Station (HD018). The scope of work for the assignment was determined from a facility Condition Assessment

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**SUBJECT: HD018 Garner Road Pumping Station Upgrades  
(PW21062) (Ward 12) Page 2 of 4**

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Report, which indicated urgent electrical and process mechanical replacement and ancillary equipment based on very poor condition.

In the early stages of the design with the R.V. Anderson and Associates, the team examined constructability, sequencing, and hydraulic constraints to determine a list of options to address the pumping station needs. In addition, opportunities for increasing the capacity at the station were discussed to maximize station water output. This opportunity presents synergies that allow for a capital approach that combines the originally scoped project and increasing station capacity. The proposed solution allows for an increase in station capacity by replacing key station piping with a larger diameter, which enables the installation of larger pumps for enhanced station capacity and reliability for the medium term.

The constructability review highlighted the need to design a temporary pumping bypass system to supply Pressure District 18 during construction. A temporary bypass system is required due to Pressure District 18 being a closed district. As such, permitted station shutdown periods are very limited and therefore too risky to accommodate the major work required to complete the upgrade. It is anticipated that temporary bypass equipment and two (2) live-tap isolation 750 mm valves (line-stops) will be required to be onsite throughout the majority of the construction period. This scope was not included in the original design assignment with R.V. Anderson and Associates.

In order to construct the Garner Road Pumping Station (HD018) upgrades, this report recommends single source procurement for the consultant R.V. Anderson and Associates, whom are already procured for the design and contract administration services for this project. The value of this additional work is estimated to be \$750,000. Considering the proposed additional scope for this project, it is anticipated the project schedule will achieve the following milestones:

- Design complete Q1 - 2022
- Construction commencement Q3 - 2022
- Construction substantial performance Q1 - 2024

**Alternatives for Consideration – See Page 4**

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

Financial: This report is recommending that \$750,000 be added to the consultant R.V. Anderson and Associates Contract C11-61-19 from Project ID No. 5141667421 (Capital Upgrade to the Garner Road Pumping Station HD018) for project management, contract administration during construction, site inspection and commissioning/warranty services. The current Project ID No. 5141667421 includes sufficient budget to accommodate the additional design

**SUBJECT: HD018 Garner Road Pumping Station Upgrades  
(PW21062) (Ward 12) Page 3 of 4**

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and construction administration services, therefore no additional funds are required.

It is anticipated that the proposed enhanced scope for this project will increase the original construction estimate from \$2.5M to \$7.6M. The current Project ID No. 5141667421 includes sufficient budget to accommodate the additional construction costs, therefore no additional funds are anticipated.

Staffing: N/A

Legal: N/A

**HISTORICAL BACKGROUND**

The Garner Road Pumping (HD018) Station is located at 1131 Rymal Road, in the former Municipality of Ancaster. The pumping station draws water from Pressure District 6 (PD 6) to supply water to Pressure District 18 (PD 18). PD 18 also provides water to Pressure Districts 13 (PD 13), 14 (PD 14), and 15 (PD 15) via pressure-reducing valves (PRV), and to Pressure District 22 (PD 22) via the Lee Smith reservoir.

The pumping station houses four (4) high lift pumps, HLP01 and HLP02 (installed in 1979), and HLP03 and HLP04 (installed in 1983). The current station capacity is 23 ML/d. The reservoir consists of two (2) cells where the water level is controlled by an altitude valve located within the pumping station.

Upgrades for the original project scope, currently in design included replacing pumps HLP01 and HLP04 and ancillary equipment to improve the reliability of service.

The remaining two (2) existing pumps (HLP02 and HLP03) are sized at 22.5 ML/d each and will be replaced under a future competitive contract. With a phased approach, the station will be upgraded to move toward the water demand projections as identified in the 2020 Hydratek and Associates study.

**POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

This report is in accordance with By-law 20-205 Procurement Policy #11 – Non-Competitive Procurements.

**RELEVANT CONSULTATION**

- Finance and Administration, Corporate Services
- Procurement, Corporate Services has provided guidance as to adherence to the Procurement Policy.



**SUBJECT: HD018 Garner Road Pumping Station Upgrades  
(PW21062) (Ward 12) Page 4 of 4**

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## **ANALYSIS AND RATIONALE FOR RECOMMENDATION**

A 2020 hydraulic analysis by Hydratek and Associates confirmed station capacity at 46.6 ML/d water demand projections to the year 2031. As such, the original scope for the upgrades is proposed to be expanded as follows:

- Replace HLP01 and HLP04 – capacity increase from 23 ML/d up to 45 ML/d.
- Replace aging piping and station suction header – in order to achieve 45 ML/d capacity a larger diameter suction header is required.
- Replace Motor Control Center and other electrical components – in order to support larger capacity pump motors.

The station upgrades are required to replace aging pumps, valves, piping and ancillary equipment and to increase station capacity for growth in the community. The increased consultant design and construction administration costs associated with the enhanced scope identified in this report and the temporary bypass system with 750 mm live-tap isolation valves are necessary to safely facilitate the construction of the pumping station upgrades.

## **ALTERNATIVES FOR CONSIDERATION**

Several alternatives for depressurizing the suction and discharge header to allow for construction were evaluated by R.V. Anderson and Associates. Installing the temporary bypass system using 750 mm live-tap valves (line stops) to isolate the suction and discharge lines to the facility offers the safest means of ensuring pressure is maintained to PD 18. Therefore, alternative solutions are not recommended.

## **ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

### **Built Environment and Infrastructure**

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## **APPENDICES AND SCHEDULES ATTACHED**

N/A



## CITIZEN COMMITTEE REPORT

<b>To:</b>	Public Works Committee
<b>From:</b>	Hamilton Cycling Advisory Committee  <div style="text-align: right;">_____ Chris Ritsma, Chair</div>
<b>Date:</b>	November 1, 2021
<b>Re:</b>	Truck Route Masterplan Proposal

### Recommendation

That the City of Hamilton amend the Truck Route Master Plan draft proposal to avoid routes on the Cycling Master Plan, pedestrian oriented areas, unnecessary secondary detour routes, including the entire Downtown Secondary Plan Area and the future BLAST network, and maintain truck routes mostly to highways including the Highway 403, the QEW, Lincoln Alexander Parkway, Red Hill Valley Parkway, arterials with as few residential properties as possible, and Burlington Street.

In particular non-local truck routes should not follow:

- (a) All daytime only routes within the urban boundary; and,
- (b) Rymal Road, between Highway 6 and Upper Centennial Parkway.

### Background

At its October 7, 2020 meeting, the Hamilton Cycling Advisory Committee passed the following motion:

WHEREAS the Truck Route Master Plan is currently under review

THEREFORE, BE IT RESOLVED:

- (a) That the following feedback from the Hamilton Cycling Committee be forwarded to City Staff for consideration within the Truck Route Master Plan review:

- (i) That within the scope of the truck route masterplan review, truck routes, cycling routes, as identified in the cycling masterplan shall be avoided. This includes existing cycling infrastructure (for example Cannon Street), cycling routes identified for future cycling infrastructure construction (for example, Victoria Street), and cycling assumed likely cycling routes as identified by the Hamilton Cycling Advisory Committee;
- (ii) That additional accommodations be made on streets where a truck route must exist beside or intersecting existing or planned cycling infrastructure. For example, limiting the hours a truck route is usable or that the route is only usable outside peak times;
- (iii) That the highest safety features be added to cycling infrastructure along truck routes, wherever feasible. For example, additional separation of the cycle track/protected curb; and
- (iv) That any future changes to the truck routes that interact with cycling infrastructure shall be brought to the Cycling Advisory Committee.

At its September 1, 2021 meeting, the Hamilton Cycling Advisory Committee passed the following motion:

WHEREAS the proposed Truck Route Master plan includes trucks on roads included in the cycling master plan and urban streets where cycling is likely to take place;

WHEREAS the proposed Truck Route Masterplan includes truck routes 7am-7pm which is the most common time cyclists and pedestrians will be utilizing roads, and in parts of the year this is after dark which is far more dangerous for cyclists and pedestrians;

WHEREAS the Hamilton Cycling Advisory Committee recommended at its October 7, 2020 meeting that the proposed truck route changes not include streets where cycling is likely to take place; and,

WHEREAS there are alternative routes for trucks to take such as small detours and longer ones around the Burlington Bay, Lincoln Alexander Parkway, Red Hill Valley Parkway, Highway 403 and Burlington Street, while cyclists cannot take detours to avoid trucks under the current plan.

THEREFORE, BE IT RESOLVED:

- (a) That truck routes not be allowed on streets listed as “Daytime only (7am – 7pm) under the draft proposed truck route map;
- (b) That truck routes be removed from Rymal Road within the urban area and Garner Road from Glanaster Road to Highway 6; and,
- (c) That the Committee draft a Citizen Committee Report to Public Works Committee regarding recommendations on the truck route as it relates to cycling and active transportation that connects to cycling.

### **Analysis/Rationale**

The information presented at the Truck Route Master Plan Virtual Public Information Centre #2 on June 24, 2021, made a clear case that the urban streets of Hamilton’s downtown are not best suited to truck traffic. There are numerous downsides, especially related to cycling and pedestrian safety. Sidewalks are narrower than recommended within the modern context. Historic neighbourhoods have reduced sightlines which can make corners dangerous, multiplied by the already reduced visibility of trucks. Trucks have more weight to stop than a typical automobile, and therefore can be a significant risk to pedestrians and cyclist behind blind corners.

Truck traffic is already able to make local deliveries without truck routes. Truck routes are not required for these local deliveries. Local delivery paths can be directed through street design and additional signage.

Truck travel was shown to have the lowest rating on the many of the streets downtown and in the urban area.

Non-local trucks that need to detour can be given detour routes, and these detours do not need to be placed as full-time truck routes. Full-time truck routes could lead to reduced comfort and safety for cyclists and pedestrians.

The draft recommended Truck Route Master Plan truck route network presented at the Public Information Centre could be improved to better address the goals of the city including being the “best place to raise a child and age successfully” and encouraging residents to leave their automobiles behind for some trips in pursuit of addressing the climate emergency declared by the City on March 27, 2019. Large pieces of the Cycling Master Plan are parallel with the draft recommended truck route network.

# 11.1

## CITY OF HAMILTON

### MOTION

Public Works Committee: November 1, 2021

**MOVED BY COUNCILLOR J. FARR.....**

**SECONDED BY COUNCILLOR .....**

**Public Information Portal to Track Environmental Issues on City of Hamilton Projects**

WHEREAS, there is growing public interest to better track environmental issues which include public remediation projects conducted by the City of Hamilton,

WHEREAS, especially in older parts of the City and particularly north of Cannon Street, the historical industrial and light industrial uses, in many cases, have long since been built upon in eras where environmental standards were not as robust, and,

WHEREAS, of late, Council has made great strides in reporting regularly on environmental information on locally owned assets such as Chedoke Creek and Storm Water Overflow;

THEREFORE, BE IT RESOLVED:

That the appropriate staff from Public Works be requested to report back on the feasibility of a regularly updated one-stop easy access public information portal that would track environmental issues on City of Hamilton projects, including the need for remediation, clean-up, or ground-water diversion infrastructure.