Vantage

188 Cannon Street East

Design Review Panel Presentation

03/08/2024

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Executive Summary

Introduction

Arcadis (Architects) has prepared this Design Review Panel presentation on behalf of Hamilton 188 GP Inc c/o Vantage Developments Inc. for the development proposed on the lands muncipally known as 188 Cannon Street East and 134-136 Ferguson Avenue North, in Hamilton ON for Design Review Panel.

Summary

The Intent of this document is to:

1) Introduce the site context, planning principles and adjacent developments.

2) Illustrate the design evolution of this project.

3) Describe the proposed architectural vision and landscape vision for the site, including massing, materiality, height and character.

4) Support with History, Heritage Cultural Assessment.

5) Support with Functional Servicing Memo.

Site Analysis

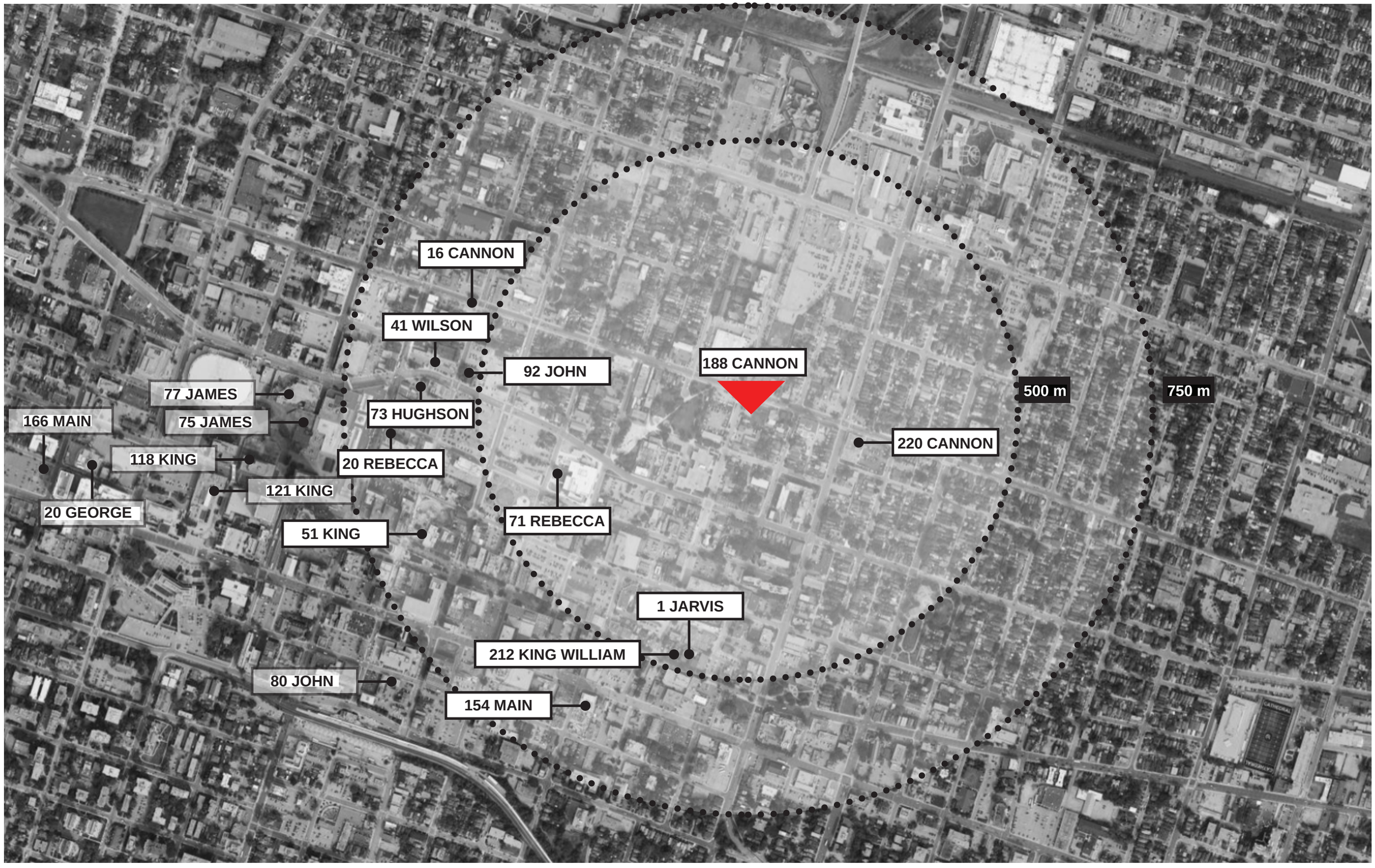
Adjacent Developments

Context Map

Site Views

Building Heights Across Surrounding Neighbourhoods

Adjacent Developments



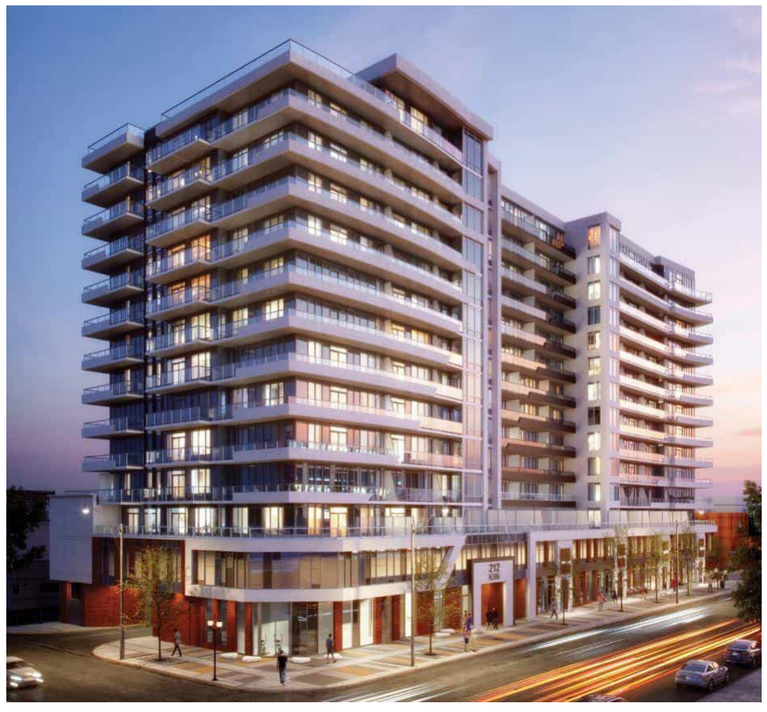
Adjacent Developments

220 Cannon Street East

1 Jarvis Street

92 John Street North

71 Rebecca Street



212 King William Street

73 Hughson Street North

Adjacent Developments

16 Cannon Street East

154 Main Street

51 King Street East

41 Wilson Street

20 Rebecca Street

Context Map


Cannon St E
Mary St
3 STO.
3 STO.
1 STO.
3
4
2
1
Cannon St E
SITE
188 Cannon St
7
Wellington St N
12 STO.
8
3 STO.
1 STO.
5
6
Ferguson Ave N
Cathcart St
1 STO.
Cannon St
Kelly St
3 STO.
Kelly St
Wellington St N
Evans St
Wilson St
West Avenue N
3 STO.
6 STO.
18 STO.
3 STO.
3 STO.
Wilson St
2 STO.
Rebecca St

Site Views

1 Looking West to the Corner of Cannon Street East and Ferguson Avenue North

2. Looking South to the corner of Cannon Street East and Ferguson Avenue North

3. Looking East to the Corner of Cannon Street East and Ferguson Avenue North

4. Looking South to the corner of Cannon Street East and Ferguson Avenue North

Site Views

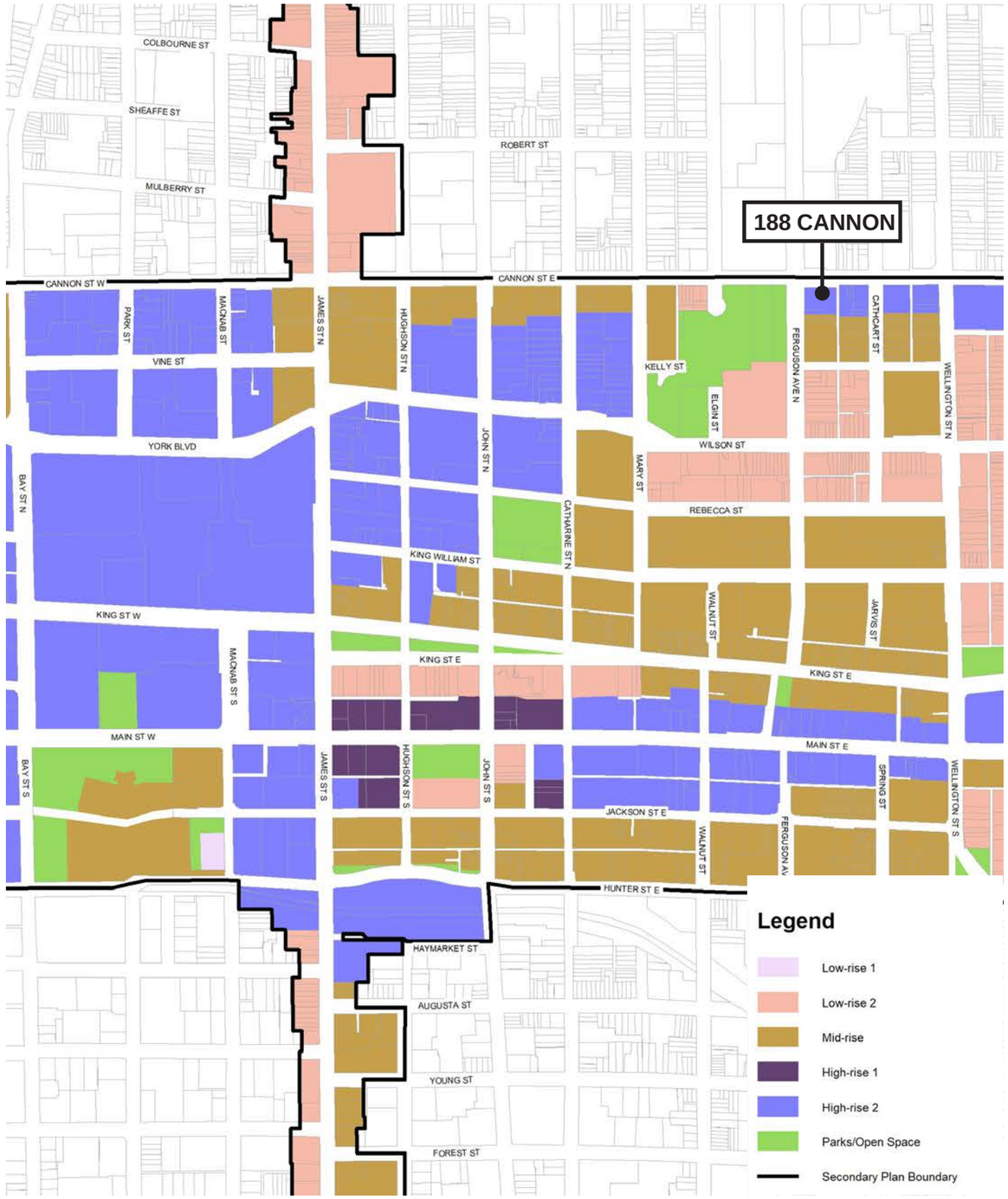
5 Looking North on Ferguson Avenue North

6 Looking East at the corner of Kelly Street and Ferguson Avenue North

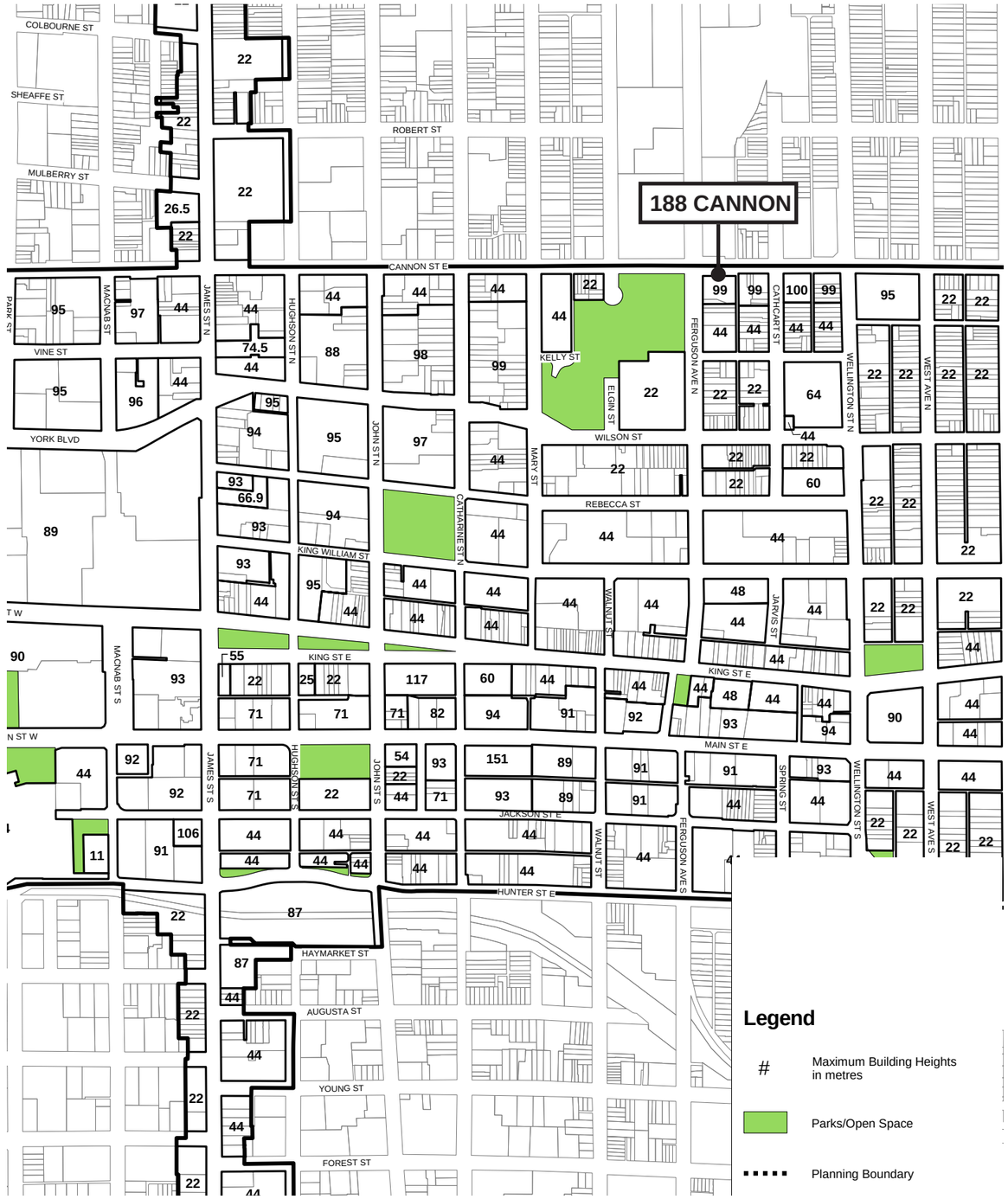
7. Looking East on Cannon Street East

8. Looking North on Cathart Street

Building Heights Across Surrounding Neighbourhood



Downtown Hamilton Secondary Plan
Map B 6.1-2, Maximum Building Heights



Zoning By-law No. 05-200
Schedule F-Figure 1, Maximum Building Heights

Design

Cultural Heritage Executive Summary

EXECUTIVE SUMMARY

Background

This Cultural Heritage Impact Assessment ("CHIA") has been prepared by ERA Architects Inc. ("ERA") on behalf of Hamilton 188 GP Inc. for the properties at 188 Cannon Street East and 134-136 Ferguson Avenue North, in Hamilton (the "Site").

The Site currently consists of a vacant commercial (formerly industrial) lot at 188 Cannon Street East and two residential lots containing a pair of 1886 row houses at 134-136 Ferguson Avenue North. This CHIA was prepared to accompany a development application for the Site.

Heritage Status

The properties at 134-136 Ferguson Avenue North are listed on the City of Hamilton's Heritage Register. In 2014, they were identified as "character defining properties" in the Downtown Built Heritage Inventory (the "Inventory"). None of the properties on the Site are presently designated under the *Ontario Heritage Act* (the "OHA").

The following listed heritage properties are considered adjacent to the Site, according to the definition set out under the Urban Hamilton Official Plan (Chapter G) and are identified as "character defining properties" in the Inventory:

- 61, 63, 65, 67, 71, 75 and 77 Cathcart Street (c. 1883-1921); and
- 195, 197 and 199 Cannon Street East (c. 1870-1890).

These properties contain vernacular house-form buildings dating from the late 19th and early 20th centuries.

Cultural Heritage Value

According to ERA's evaluation of the Site against Ontario Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest ("O. Reg 9/06"), the properties at 134-136 Ferguson Avenue are candidates for designation under Part IV of the OHA on the basis of their design, associative and contextual value.

Proposed Development

The proposed development contemplates significant *in-situ* retention and adaptive reuse of the row houses at 134-136 Ferguson Avenue North. The retained portions of the houses will be integrated beside a new 32-storey residential building with 5-storey podium.

Impact of Proposed Development

No negative impacts on the cultural heritage value and attributes of on-site resources is anticipated.

No negative impacts on the cultural heritage value of adjacent listed properties are anticipated. Net new shadows in the afternoon and evening hours will be cast on adjacent Cannon Street listed properties, however these shadows are not considered significant from a heritage perspective.

Conservation Strategy

The primary conservation treatment for the heritage buildings on the Site is substantial in-situ retention, rehabilitation for retail use, and removal of rear wings to accommodate new programming on the Site. Conservation design strategies are proposed within the new construction.

Mitigation and Considered Alternatives

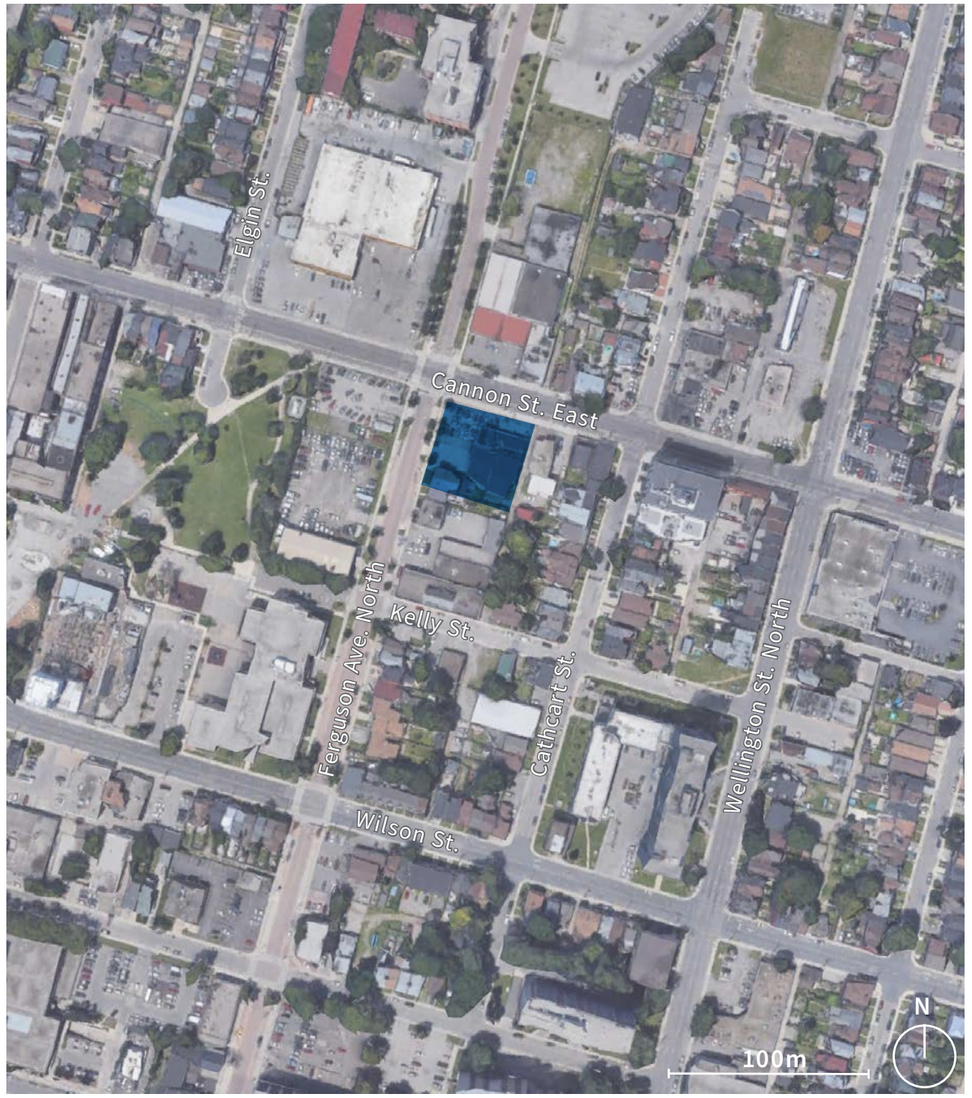
The proposed development has been designed to conserve the cultural heritage value of the Site, while mitigating impacts to adjacent properties. Earlier iterations of the design considered removing the row houses on the Site to accommodate vehicular access from Ferguson Avenue North.

Conclusion

The proposed development will conserve the cultural heritage value of on-site and adjacent heritage resources. The proposed residential development is appropriately sited, massed and articulated to mitigate impacts to on-site and adjacent house-form buildings. As the design process progresses, the design team will continue exploring opportunities for further refinement of the material treatment and interface between the retained row houses and new construction.

1 INTRODUCTION

1.1 Location Plan



Aerial image showing the Site shaded in blue (Google Earth, 2023; annotated by ERA).

Project Narrative

Parti

The proposed development is a thoughtful reaction to the intensification coming from Hamilton's downtown region and conforms with the most recent version of the Urban Hamilton Official Plan.

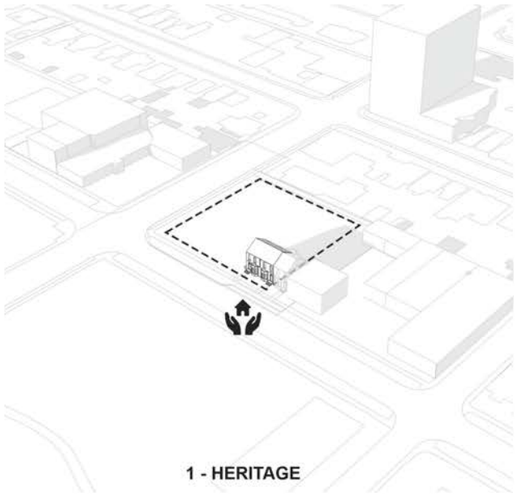
Positioned in a prominent corner of Ferguson and Cannon Street, The podium has a strong street presence and contemporary expression. It's materiality evokes its residential character, a suitable response to a future park extension west of the site.

The podium features a folded ribbon articulation. As the podium approaches the two, character row houses, the building sets back meaningfully, both at grade and above offering an urban gesture of recognition. The historical row houses' tridimensionality is preserved. As an additional gentle gesture, the bay window element present in them and many other relevant historical buildings across the city is echoed by the angled brick cladding on the podium.

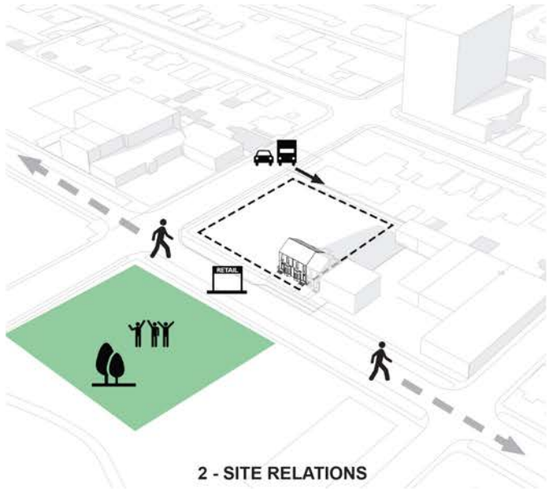
Along the sidewalk, on both streets, the ground floor presents a balance between solid materials and visual porosity, securing sensory interest. Amenities, building entrances, and uses ensure façade activation and eyes on the street. Taking particular advantage of the Ferguson Street Pedestrian Corridor, retail is indicated as a potential use of the heritage component.

Atop the podium, a simple yet delicate tower intends to feel light and glazed. Balconies are minimized to meet energy consumption best practices, yet the tower's fin articulation creates a feel of wraparound, tying all facades together.

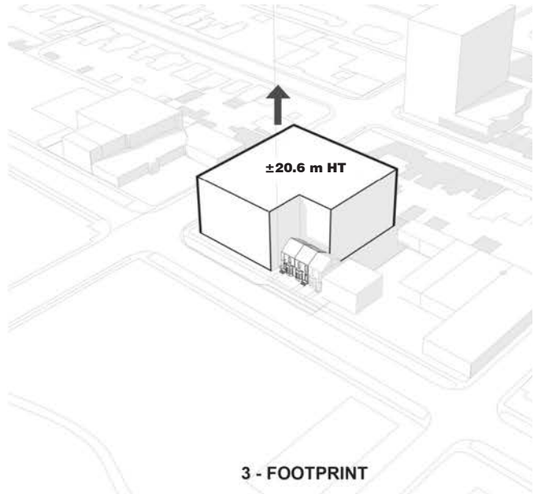
The tower light character is intentional since the building form aims to have the podium and its street relation as its main protagonist.



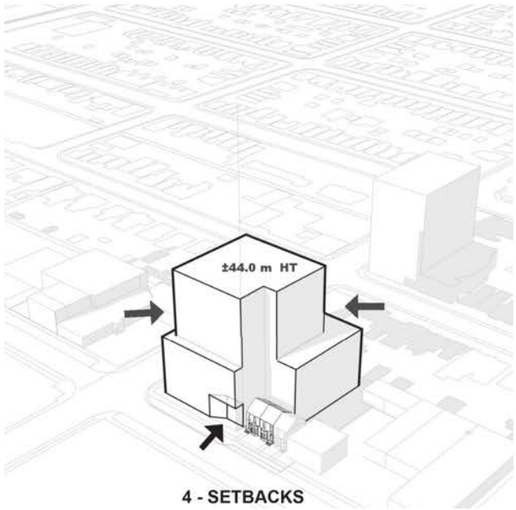
1 - HERITAGE



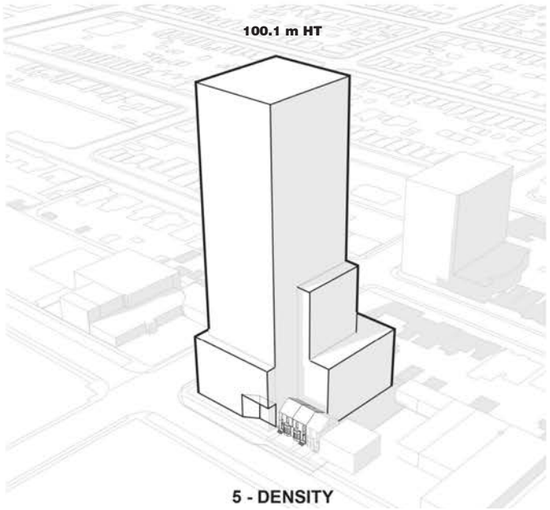
2 - SITE RELATIONS



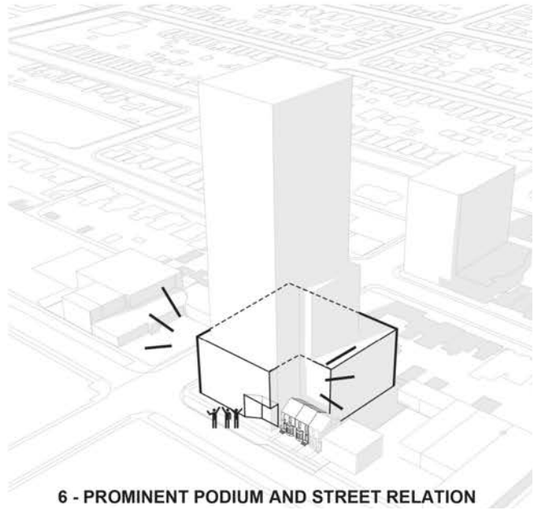
3 - FOOTPRINT



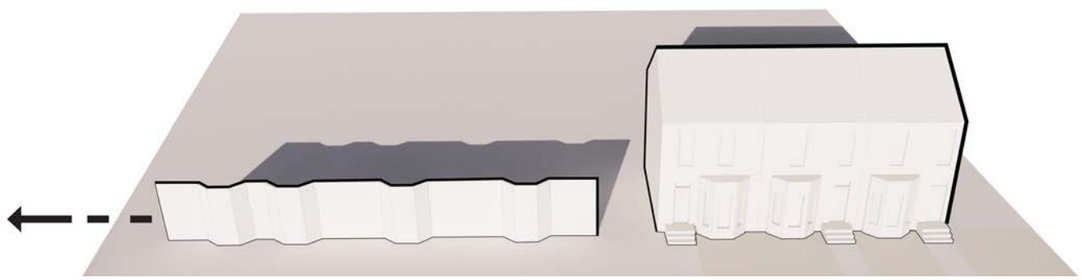
4 - SETBACKS



5 - DENSITY



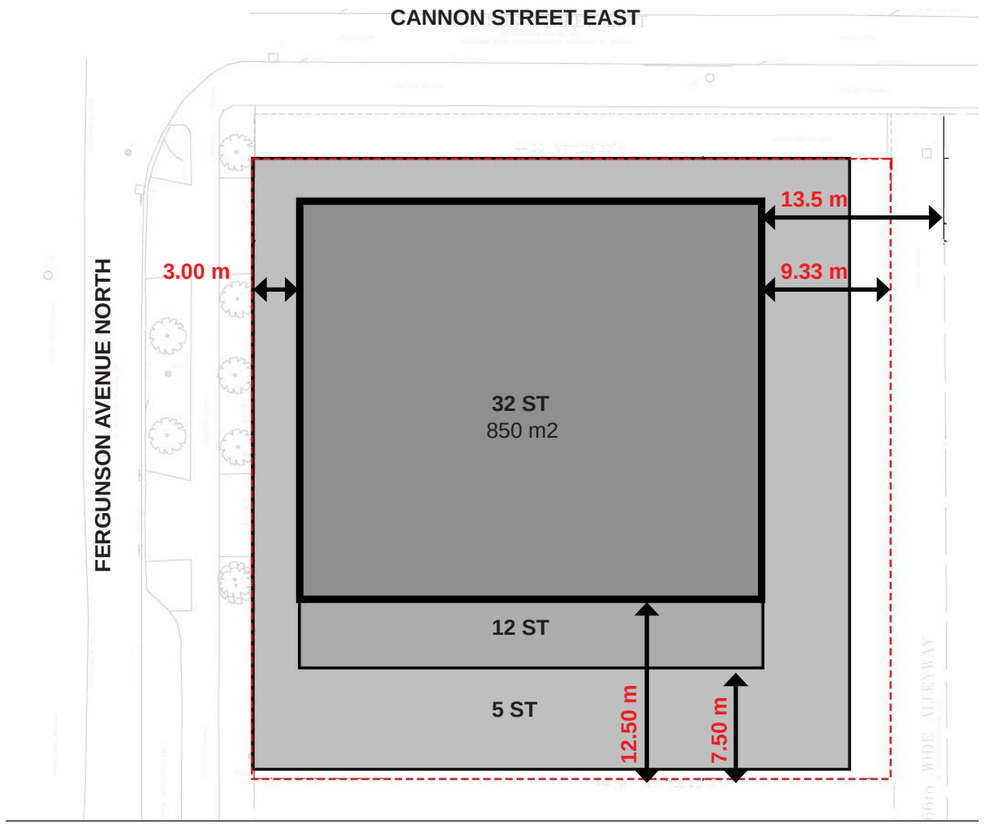
6 - PROMINENT PODIUM AND STREET RELATION



BAY WINDOW INTERPRETATION

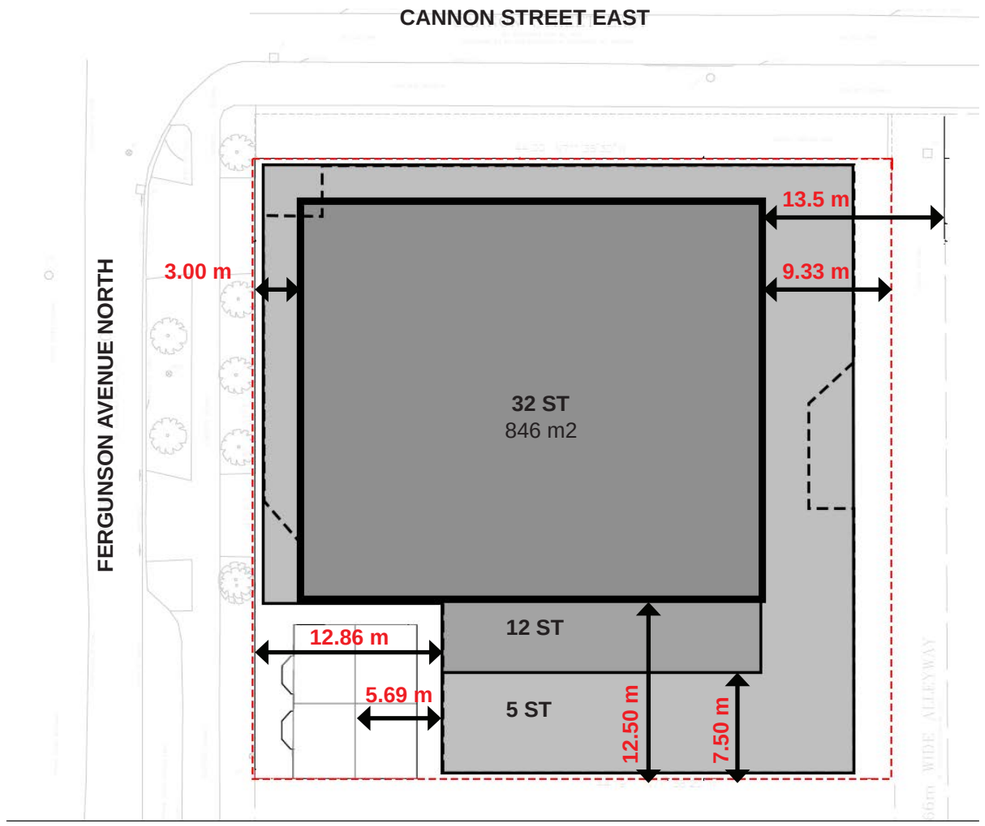
ROW HOUSES

Design Evolution



FORMAL CONSULTATION

Zero lot line setback West and North property line.



DESIGN REVIEW PANEL

Notched setback of 12.86 m preserving hisoric row houses

Setback of 5.69 m from top of pitch roof to podium

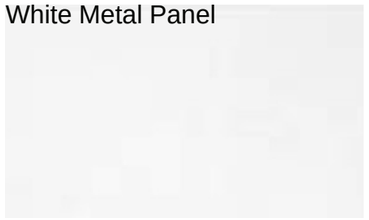
Angled facade element as gesture to historic row houses

Architectural Vision

Architectural Vision

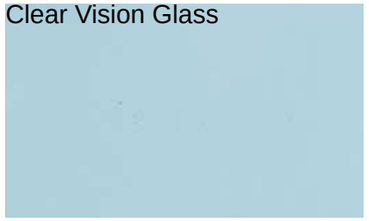
Architectural Vision

White Metal Panel

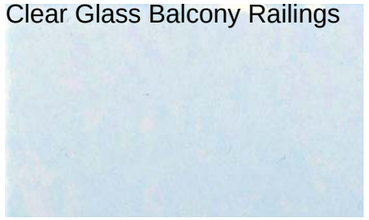


Spandrel Glass

Clear Vision Glass



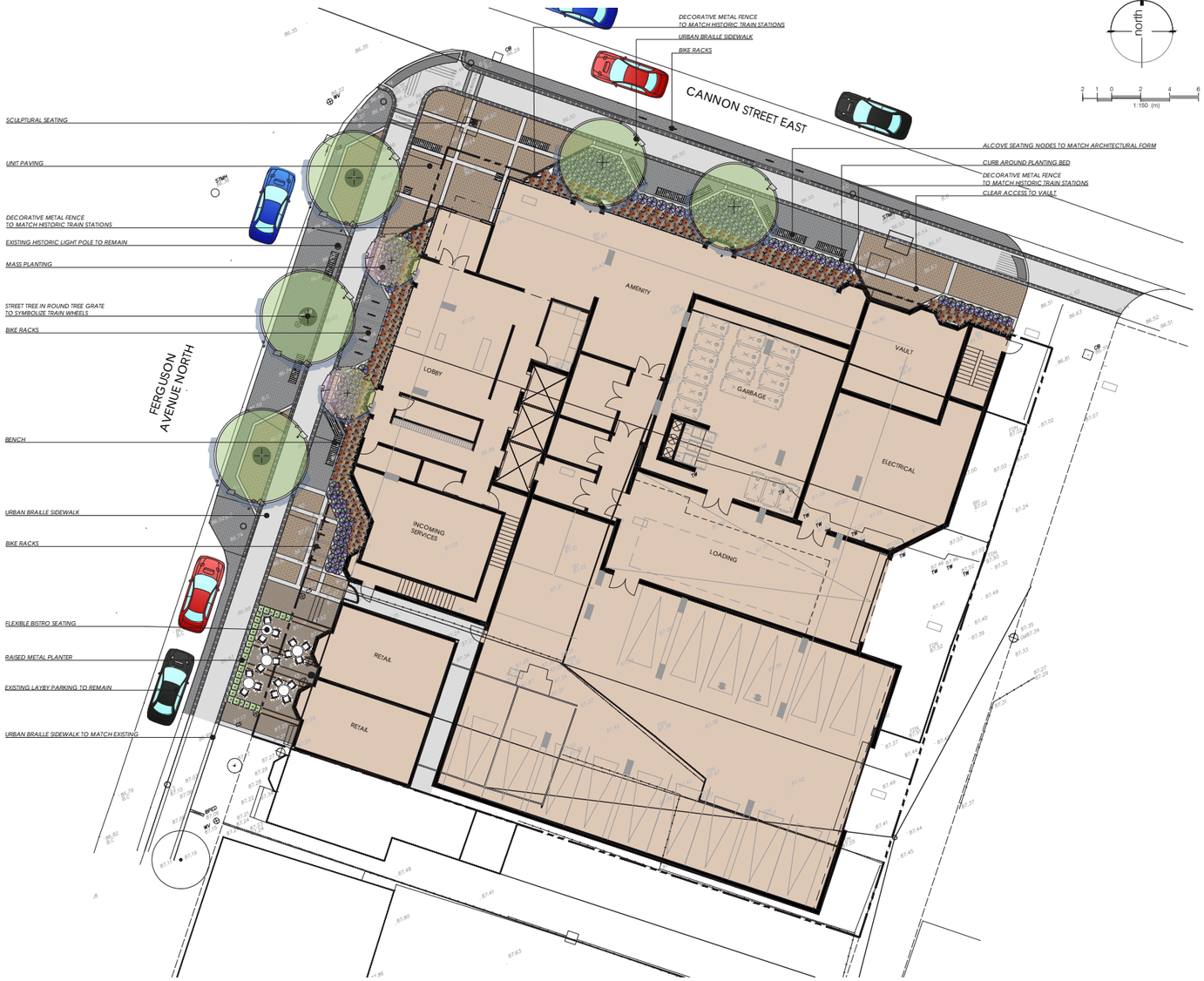
Clear Glass Balcony Railings



Dark Grey Metal Panel

Precast w/ Ironspot Brick Face

Landscape Vision




Flexible bistro seating


Round tree grates represent train wheels

Urban Brialle


Alcove seating nodes to represent the historic townhouse alcoves


Heritage paving pattern and colour


Concrete cube seats


Bike racks to represent front of train grill


Benches

project

188 Cannon Street E and
134-136 Ferguson Ave N
Hamilton, Ontario

March 7, 2024

adesso design inc.
landscape architecture

69 John Street South, Suite 250
Hamilton, ON L8N 2B9
t. 905.526.8876
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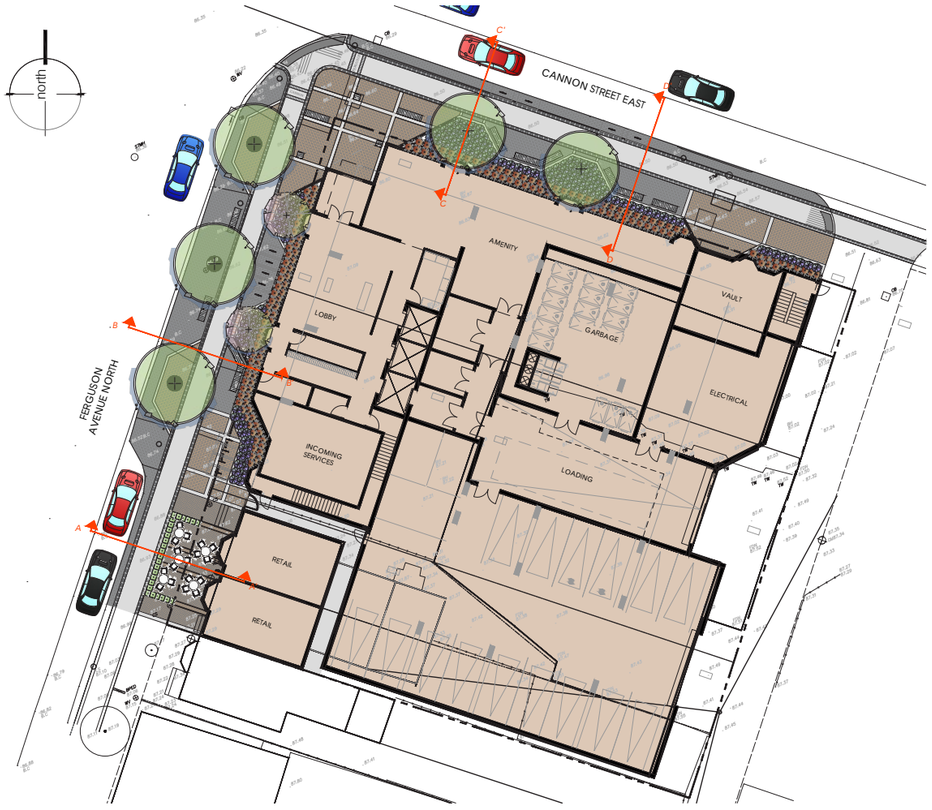
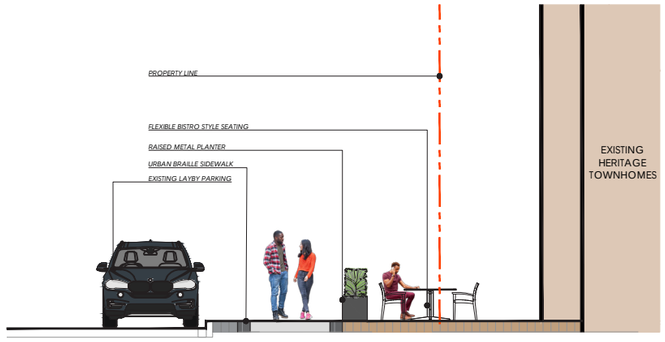
Landscape Vision

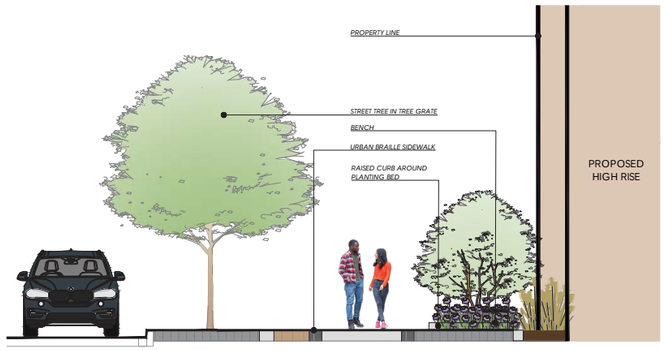


SECTION AA'



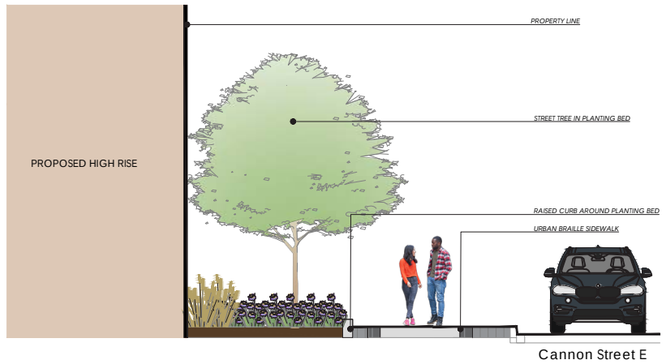
Ferguson Avenue North

SECTION BB'



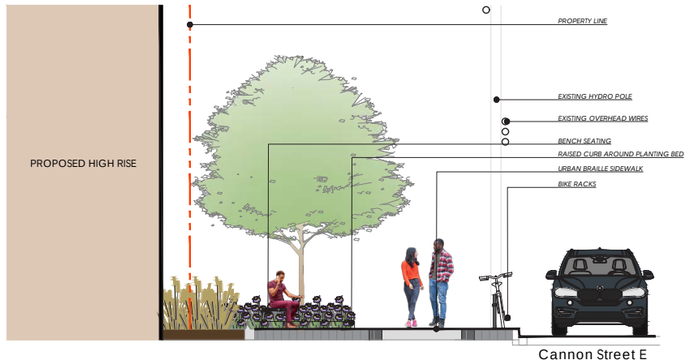
Ferguson Avenue North

SECTION CC'



Cannon Street E

SECTION DD'



Cannon Street E

project
188 Cannon Street E and
134-136 Ferguson Ave N
Hamilton, Ontario

March 7, 2024

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landscape architecture

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Conclusion

Appendix

Statistics

Isometric Study

Floor plans, Sections and Elevations

Sun Shadow Study

Visual Impact Assessment

Tree Protection Plan

Urban Design Brief

Planning Support Documents

Wind Report

Functional Servicing Memo

Cultural Heritage Impact Assessment

Statistics

SITE AREA: 1,887.9 m²

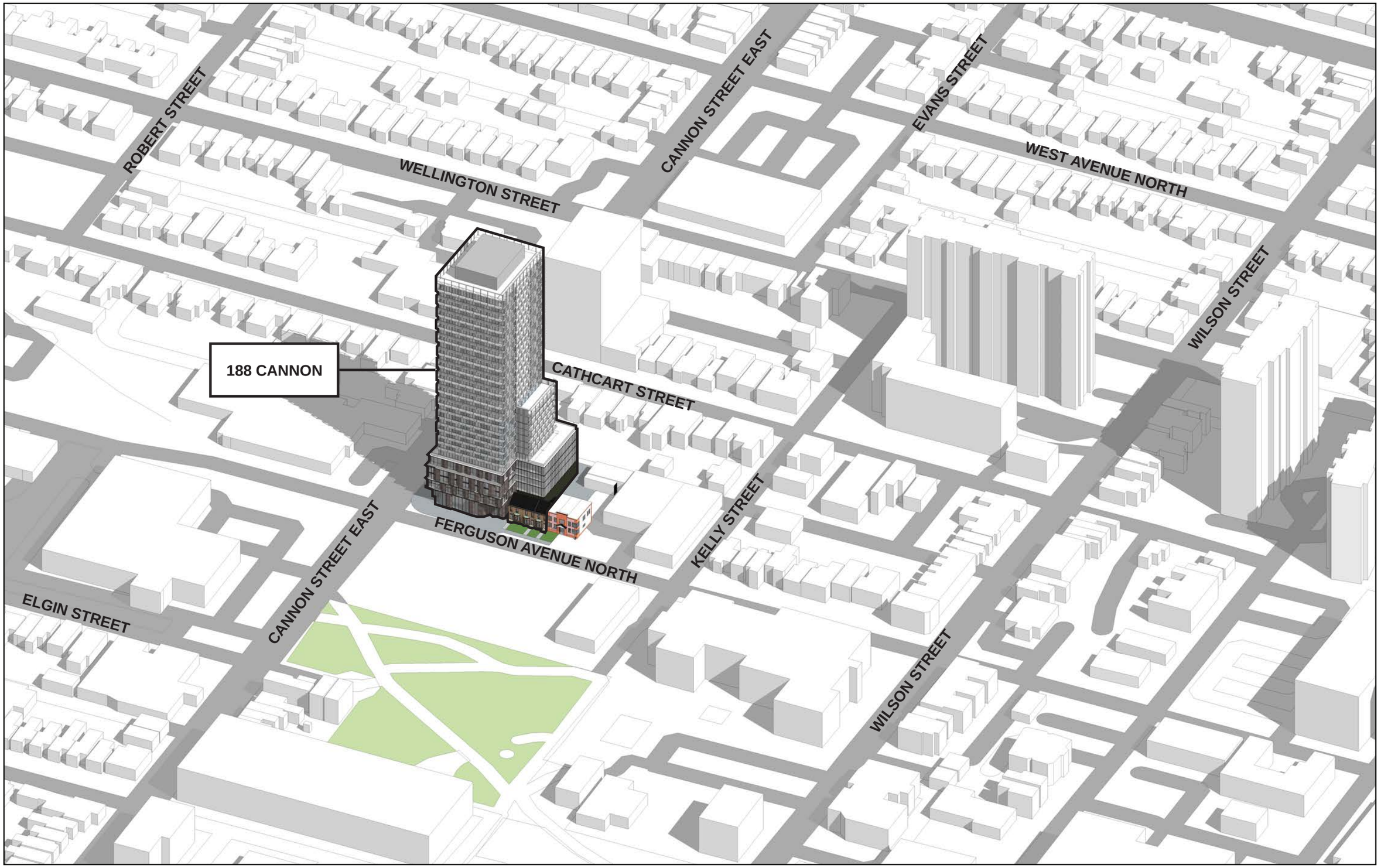
GFA:	26,663 m²
GCA:	32,724 m²
FSI:	14.1
FLOORS	32
HEIGHT:	100.1 m

UNITS:	384
1B:	52%
2B:	43%
3B	5%

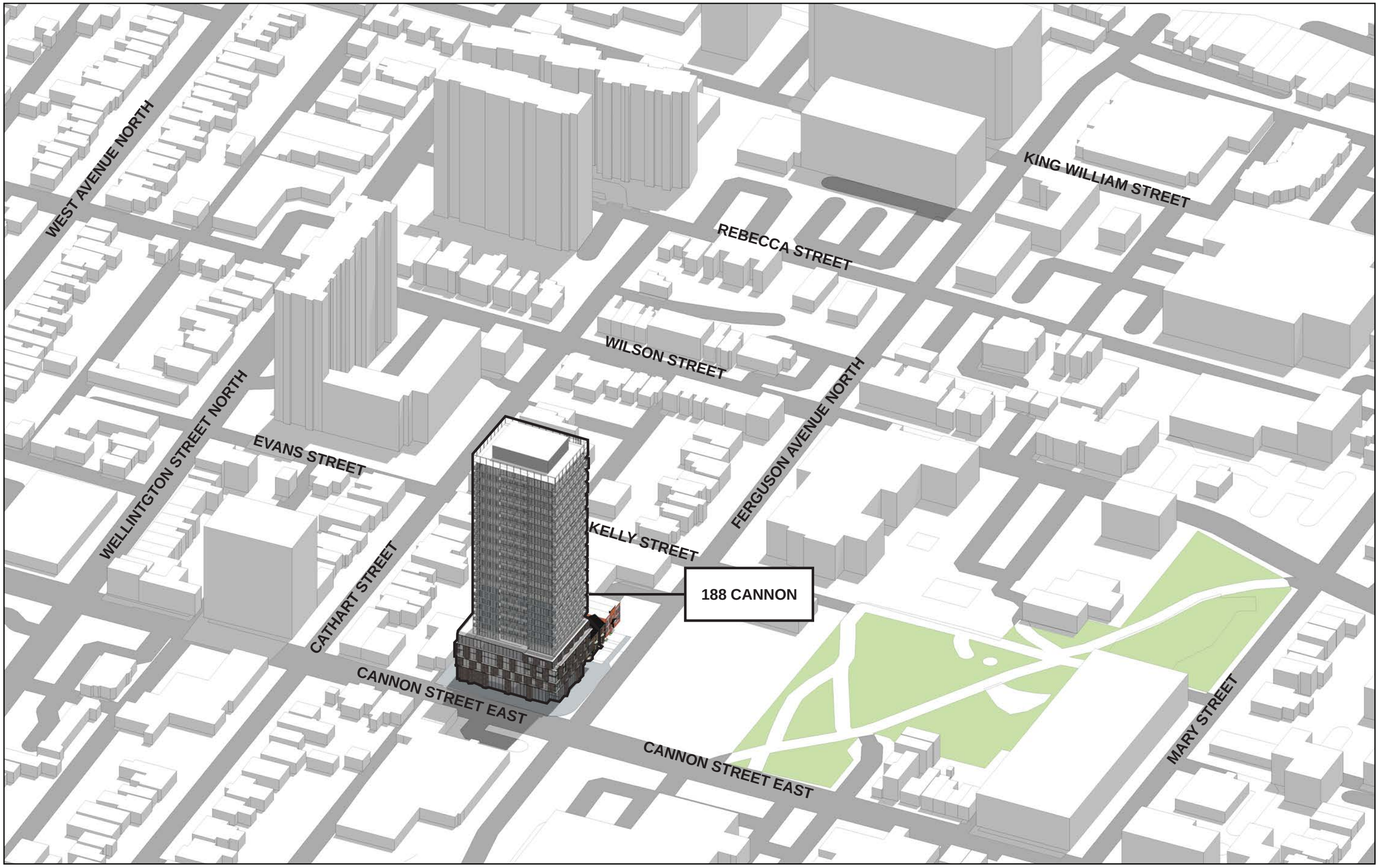
PARKING:	134 (0.35 STALL/UNIT)
BIKE PARKING	
RESIDENT	192 (0.50 SPACE/UNIT)
VISITOR	5 (0.01 SPACE/UNIT)

AMENITY:	3,745 m²
LANDSCAPE AREA:	207.57 m²

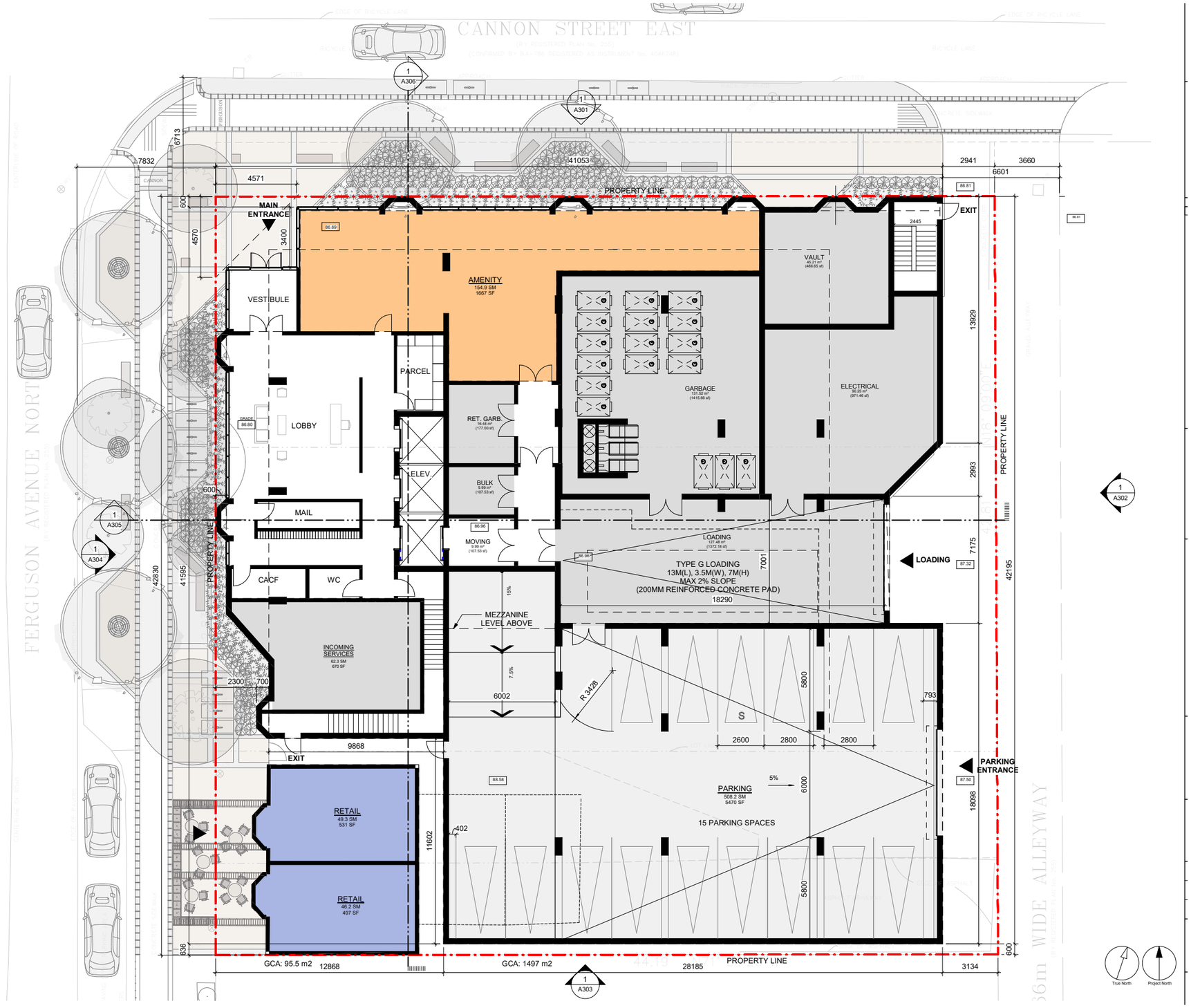
Isometric View - Southwest



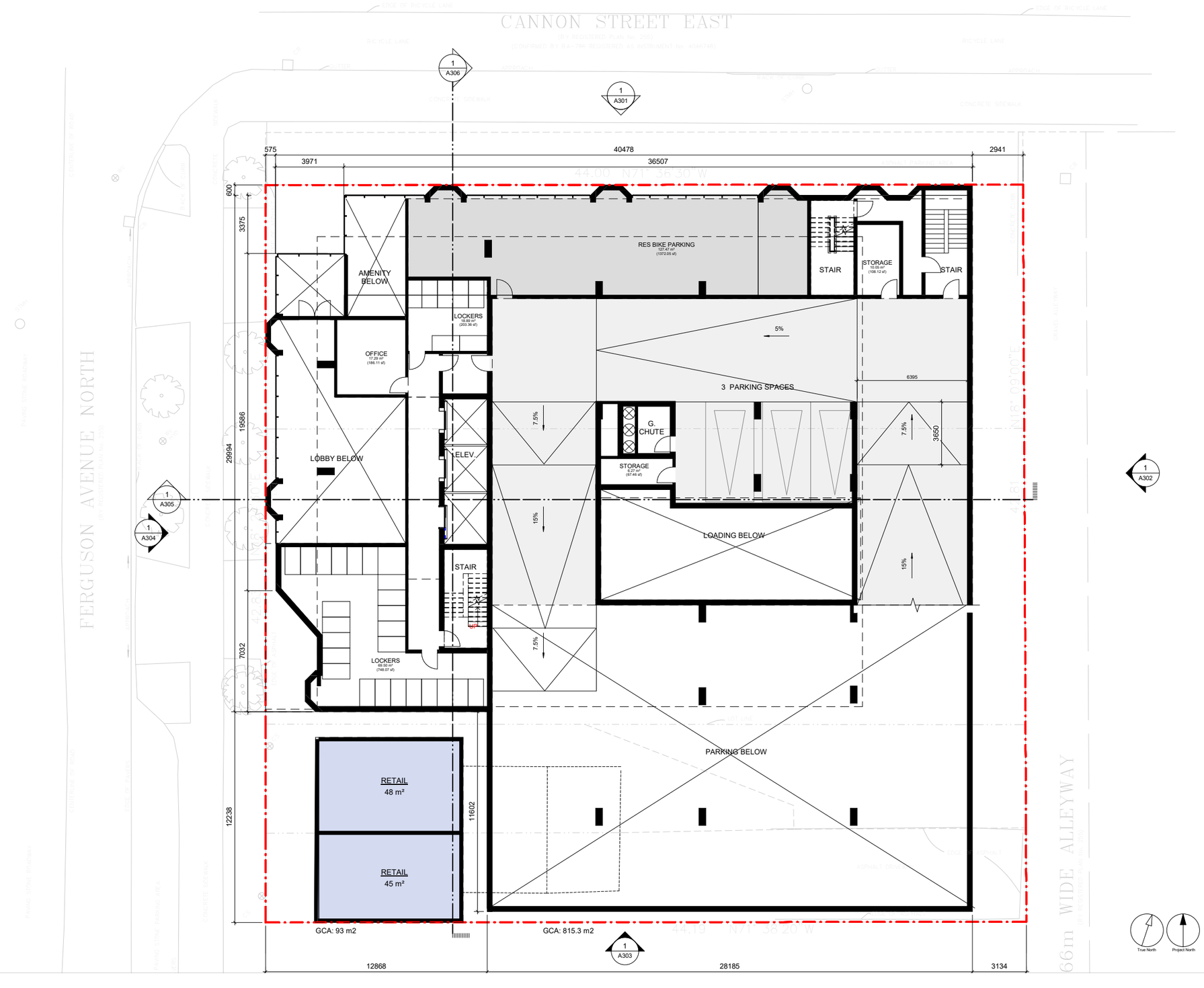
Isometric View - Northwest



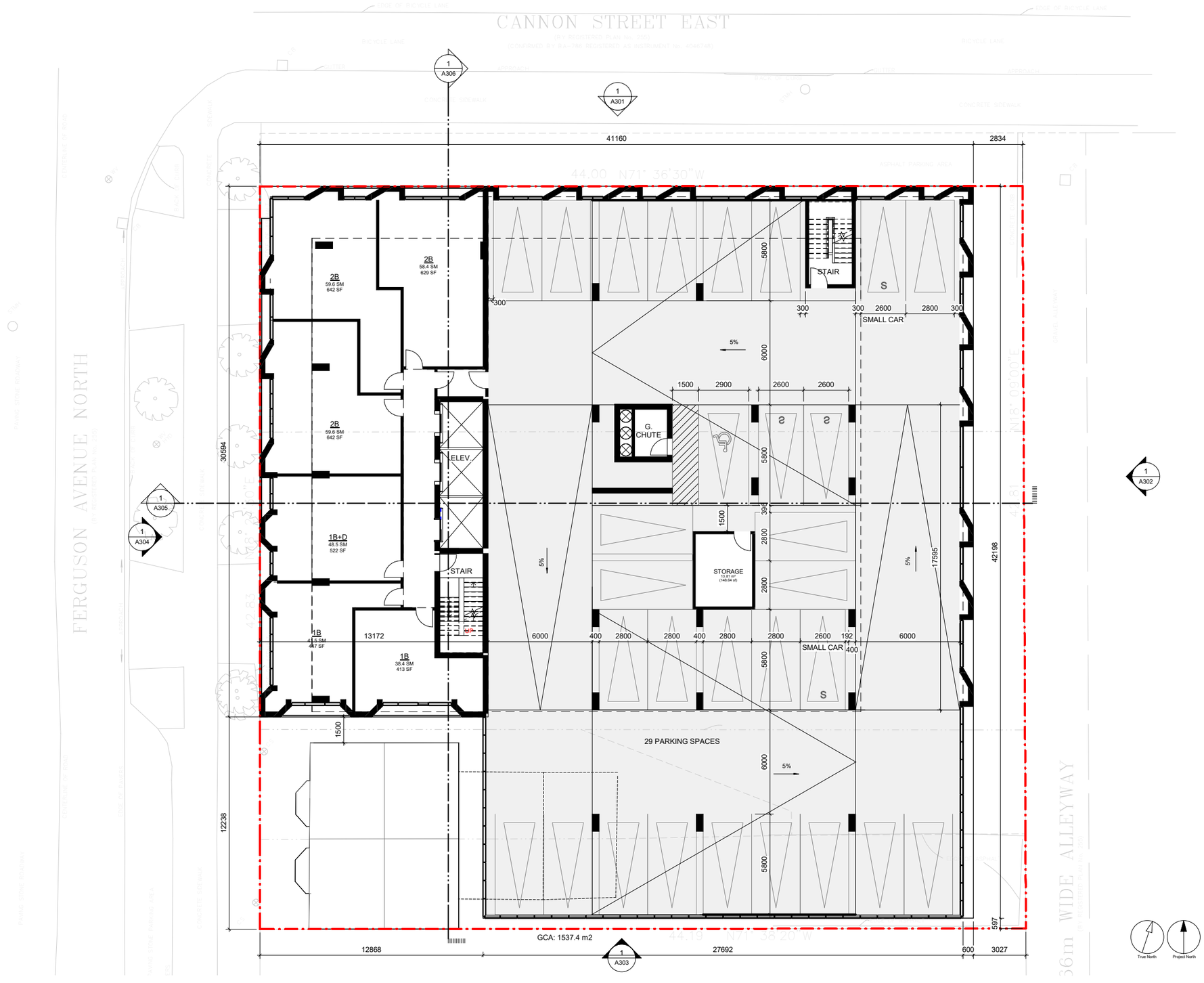
Floor Plans - Ground Floor / Site Plan



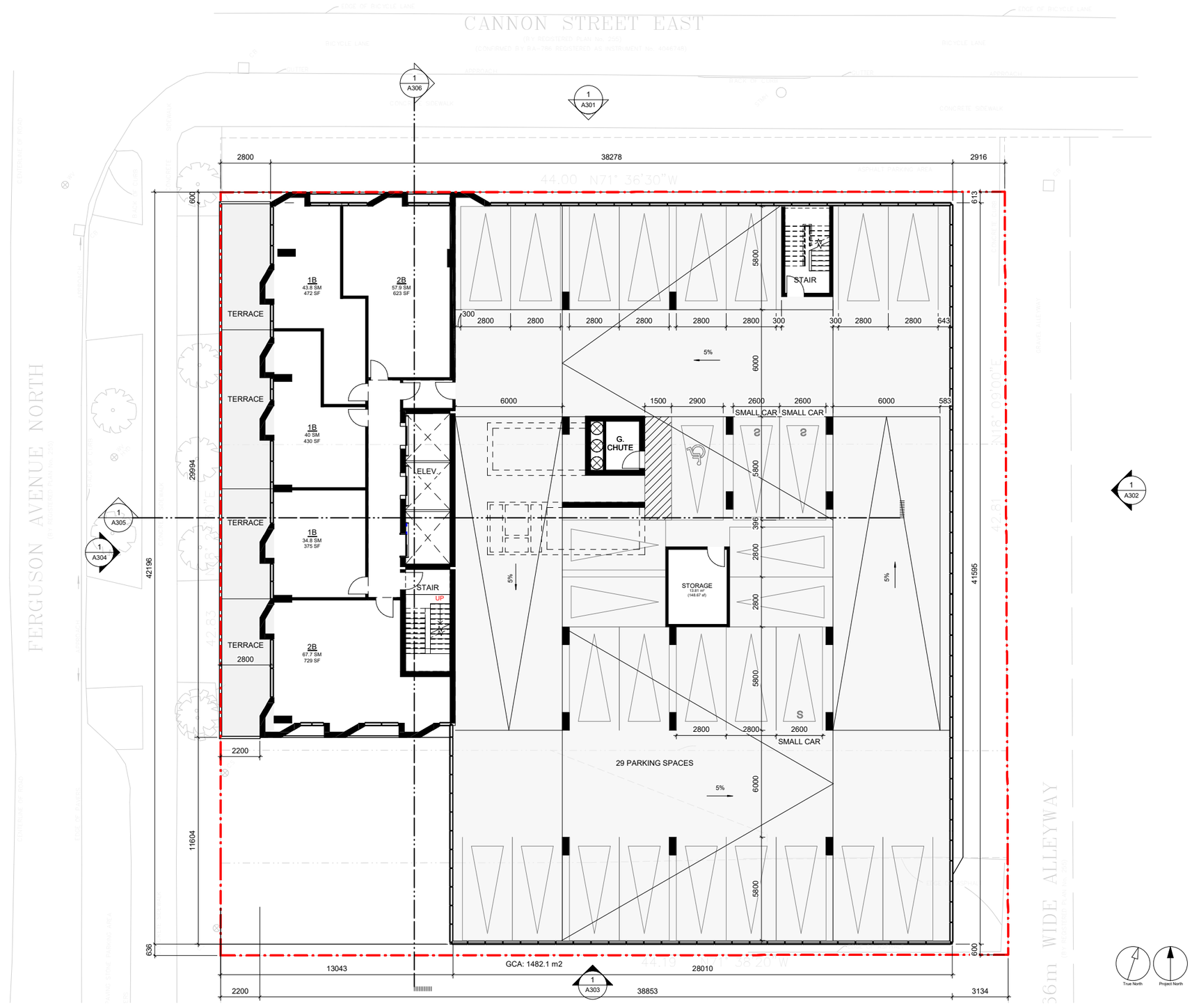
Floor Plans - Level Mezzanine



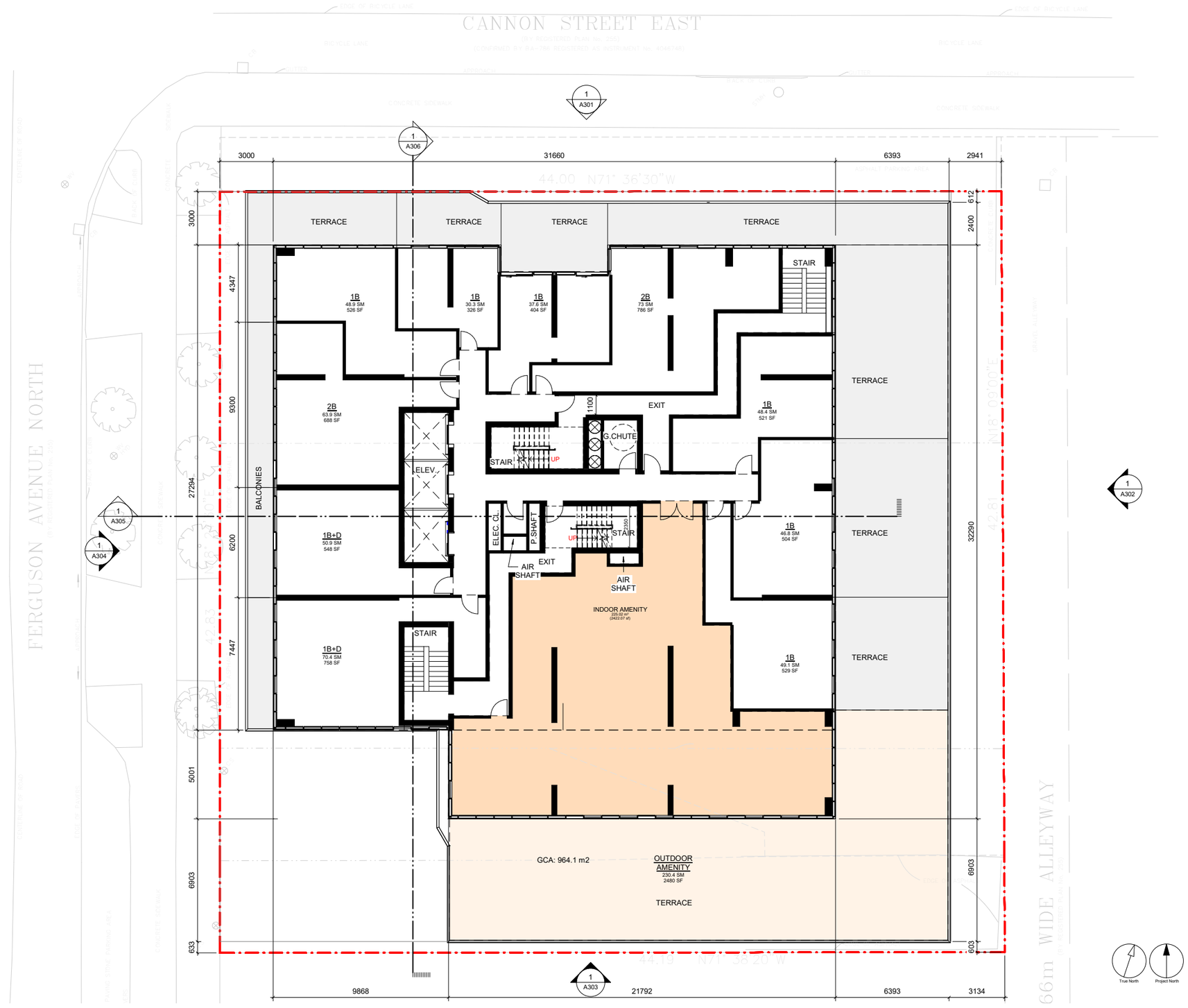
Floor Plans - Level 2-4



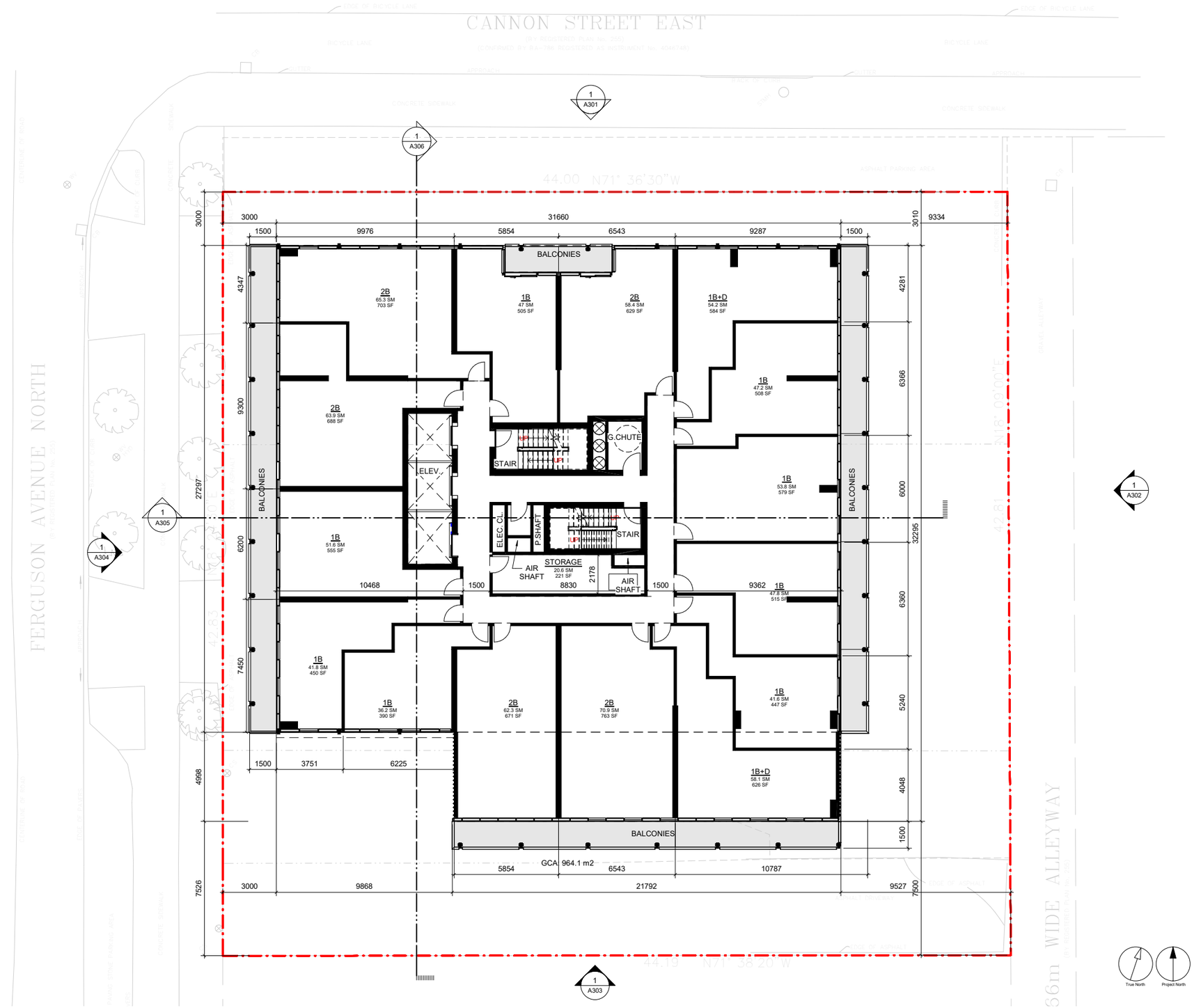
Floor Plans - Level 5



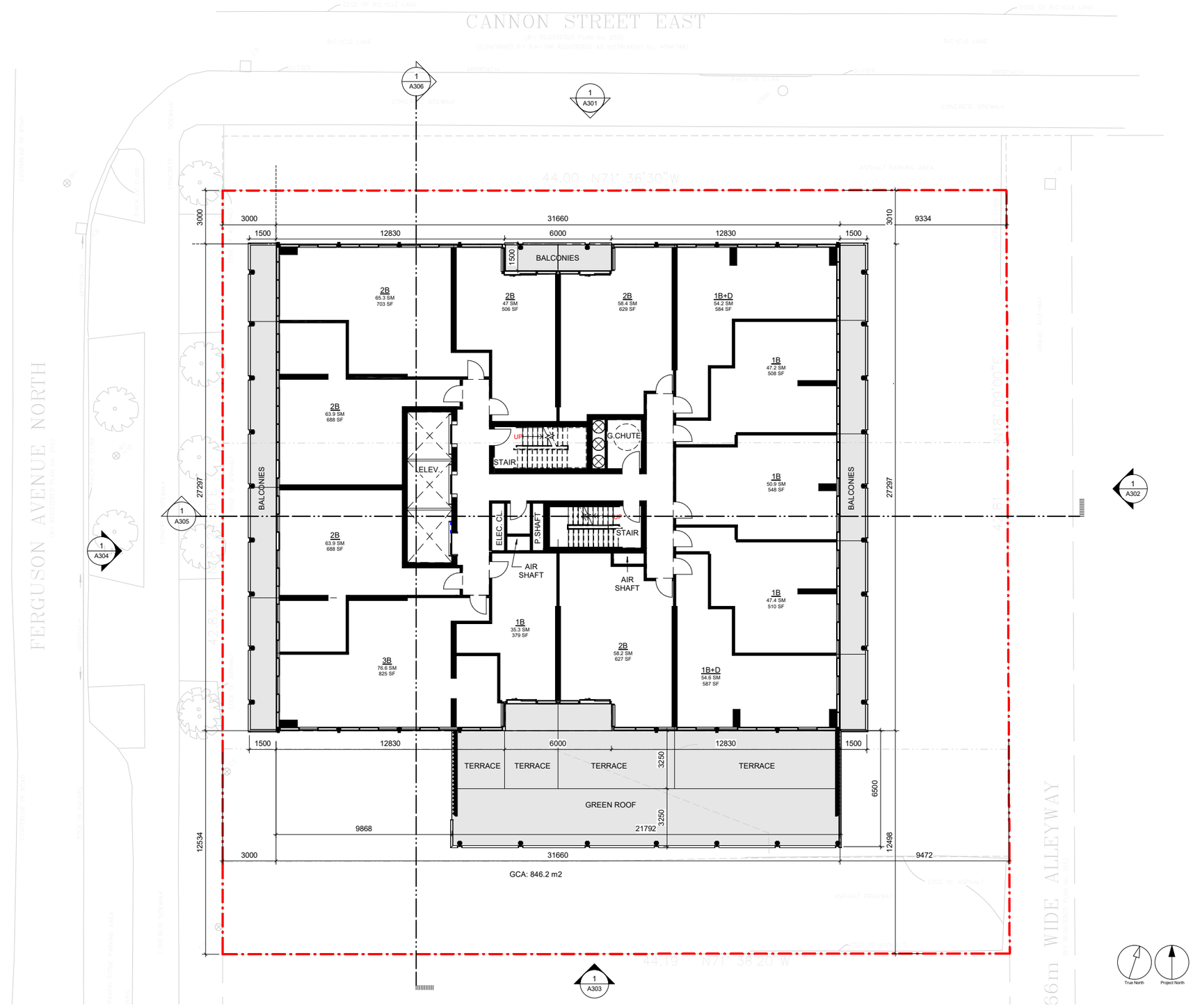
Floor Plans - Level 6 Amenity



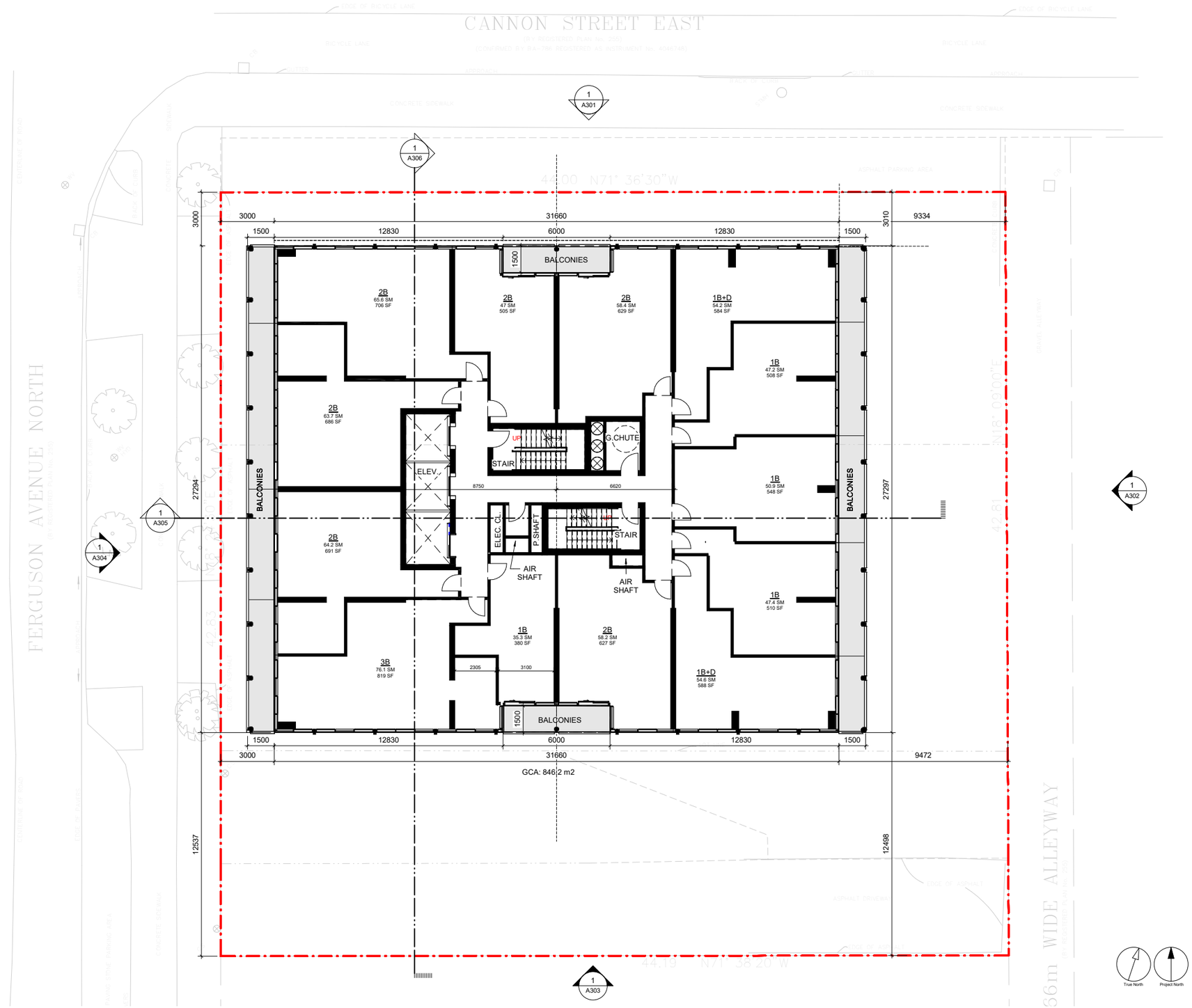
Floor Plans - Level 7-12



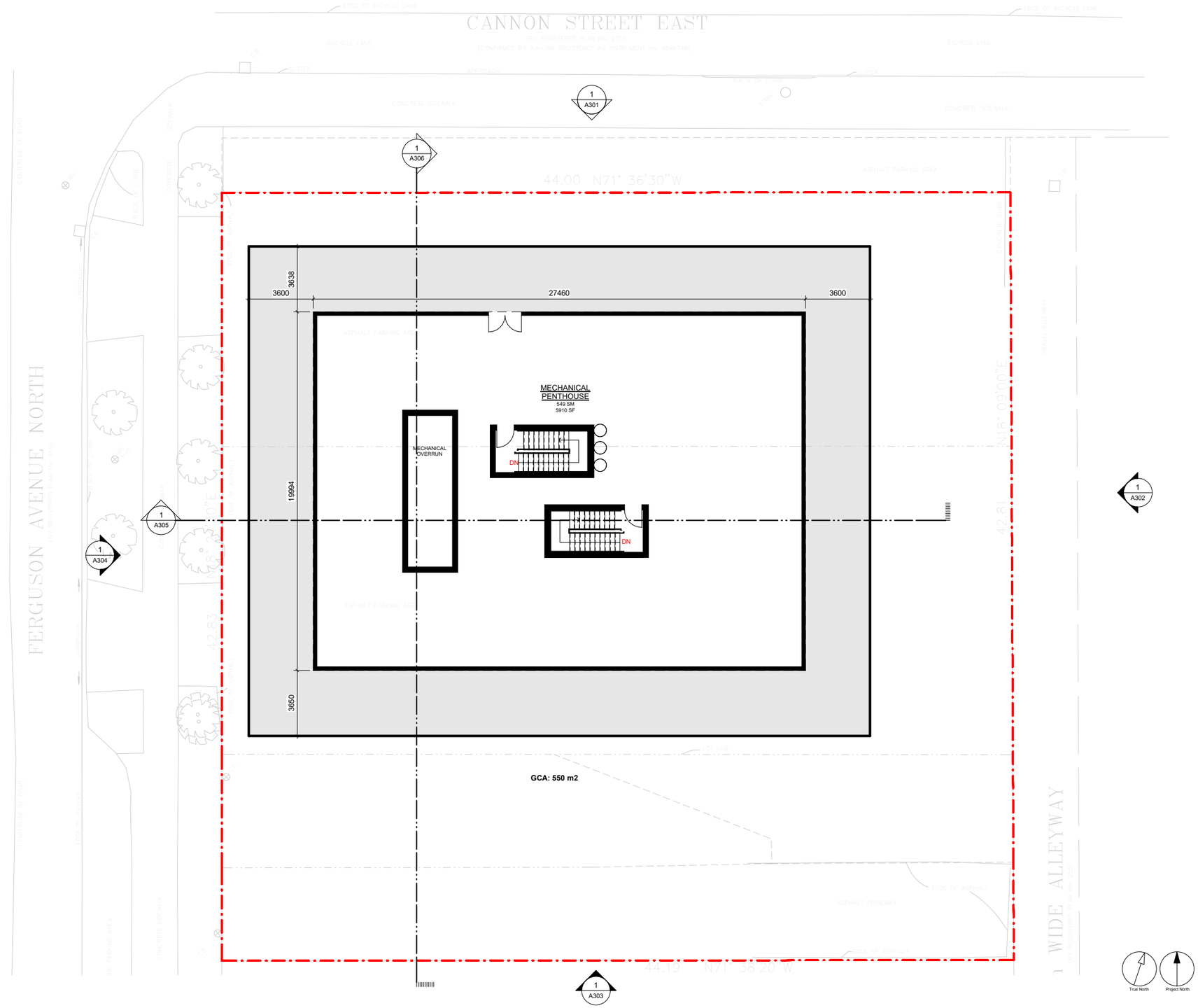
Floor Plans - Level 13



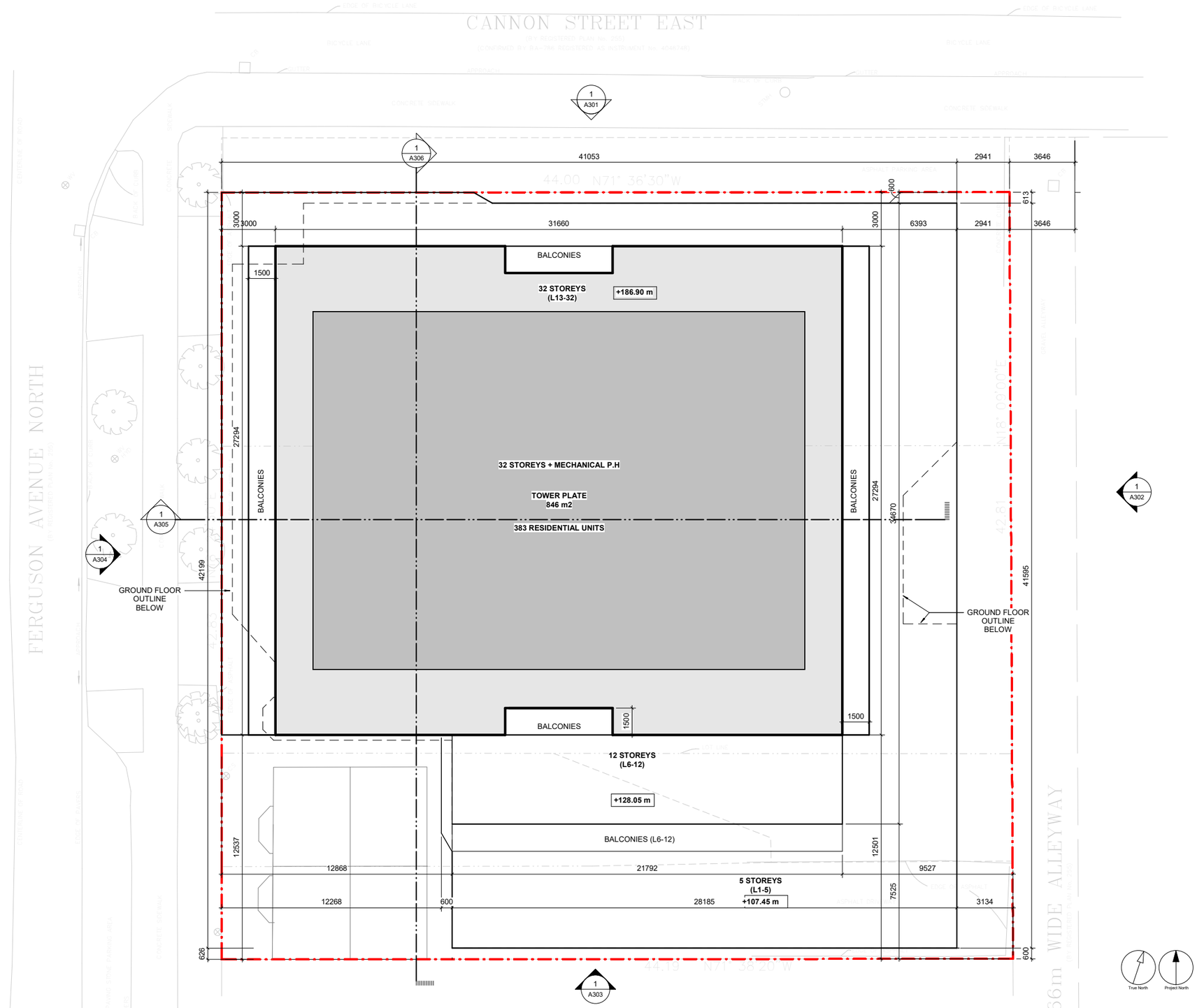
Floor Plans - Level 14-32



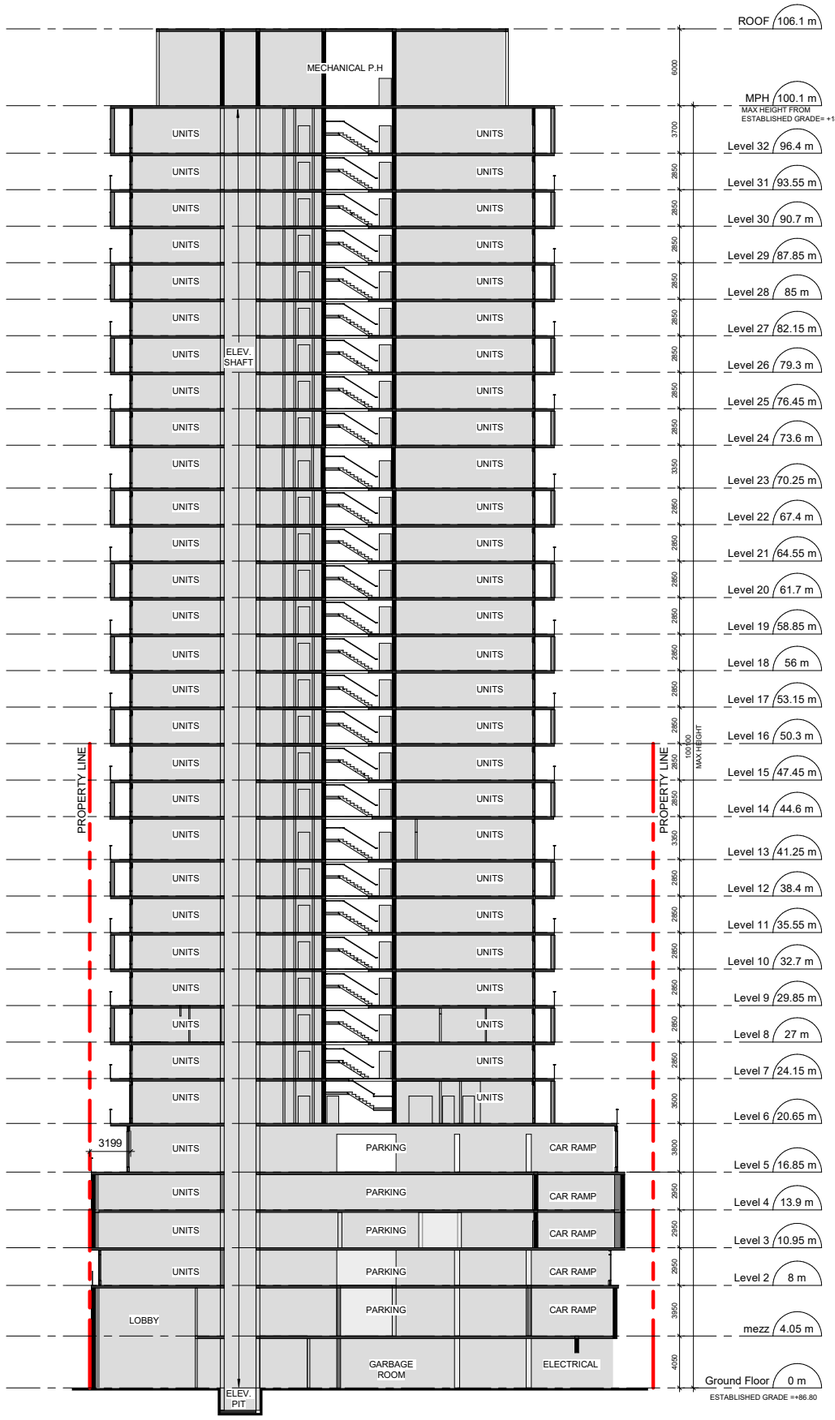
Floor Plan - MPH



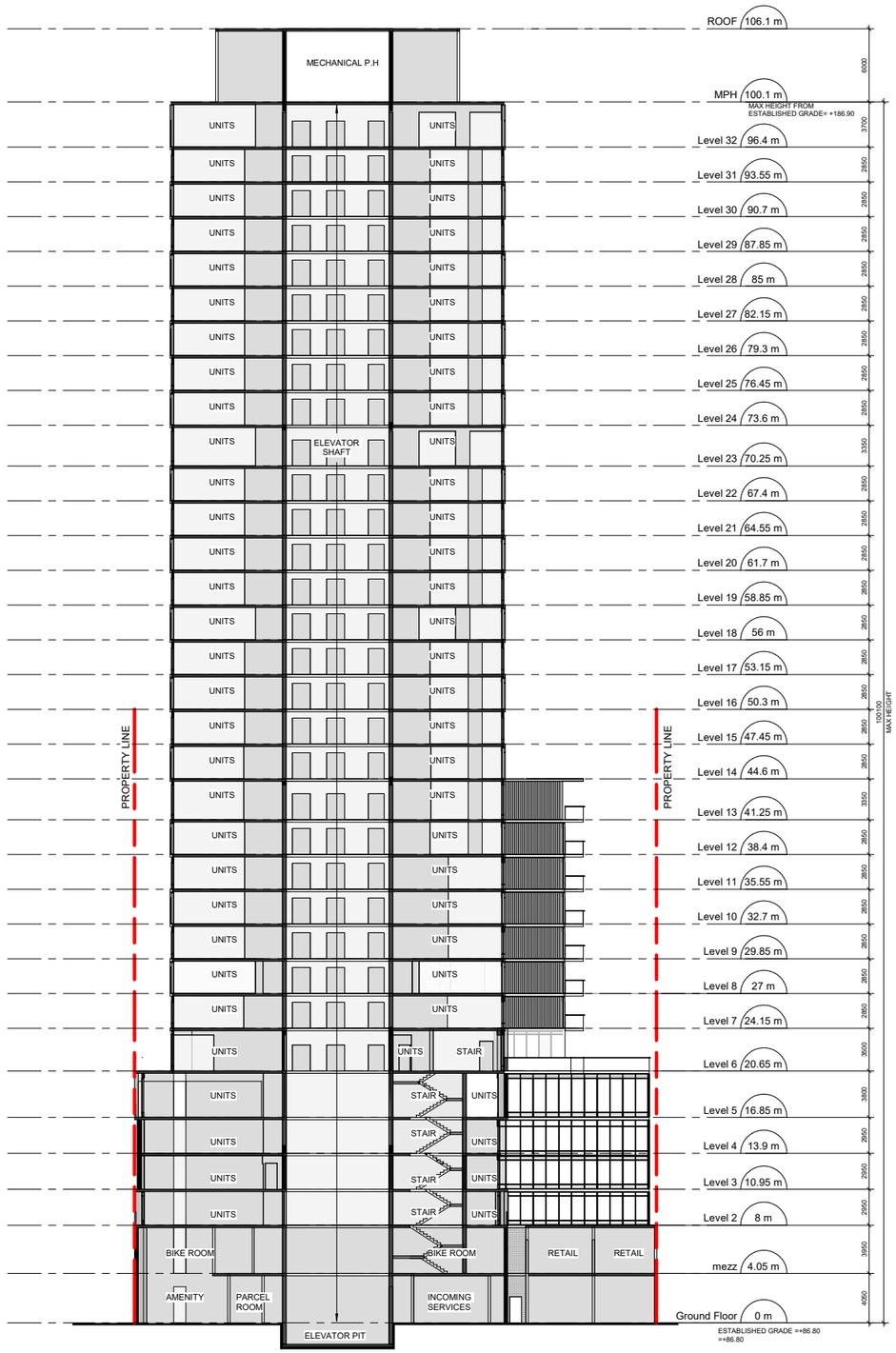
Floor Plans - Roof



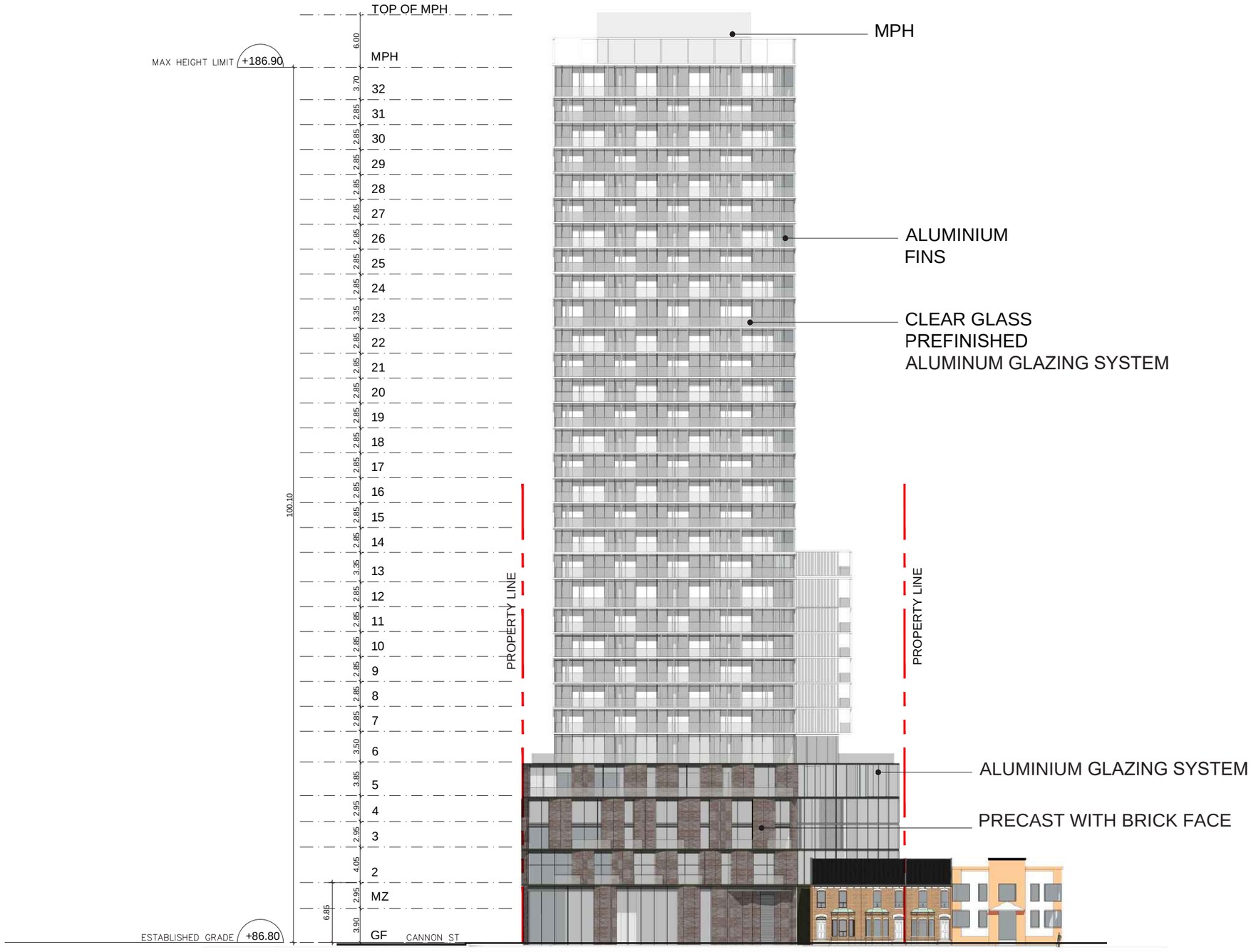
Section - East-West



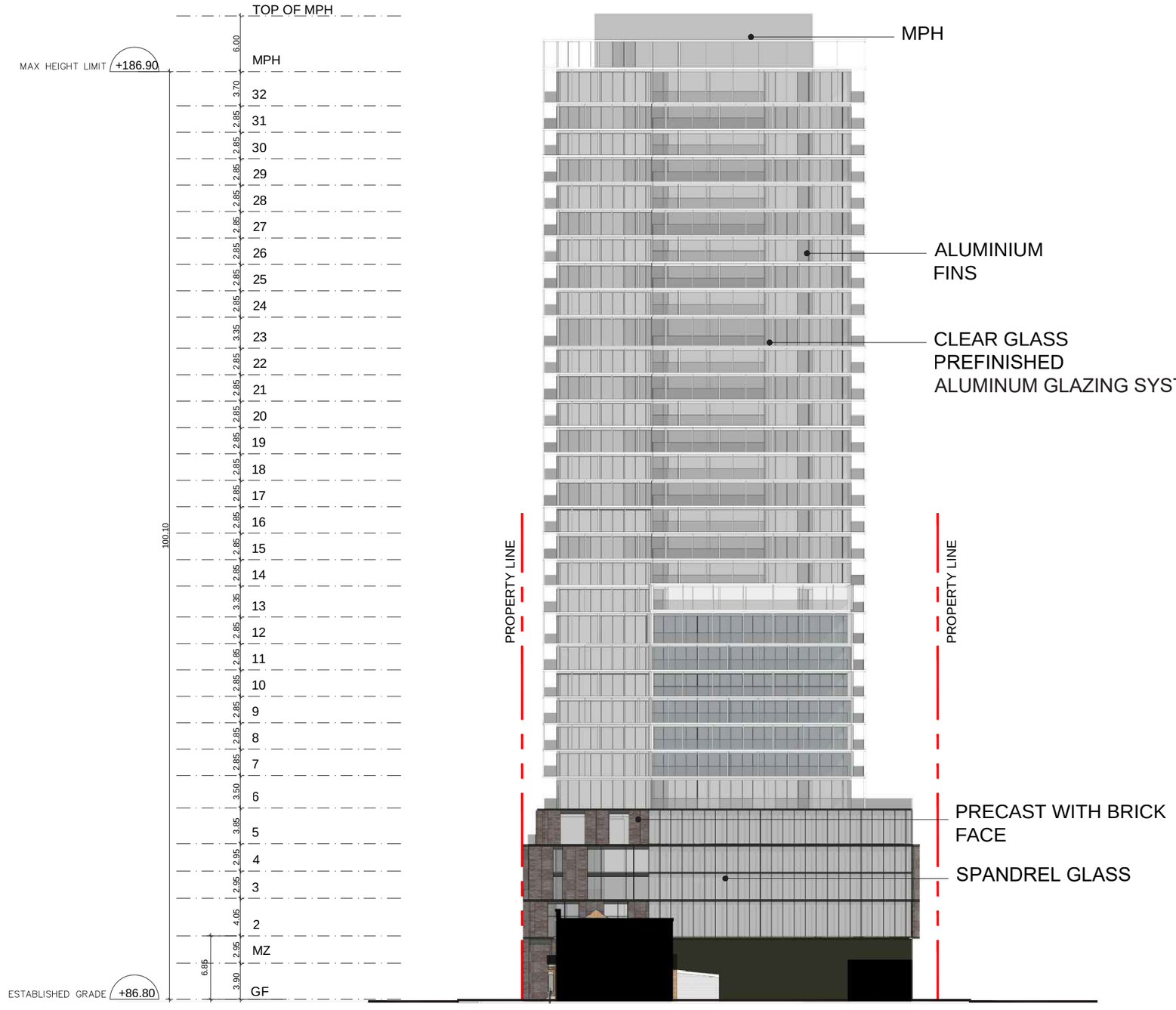
Section - North-South



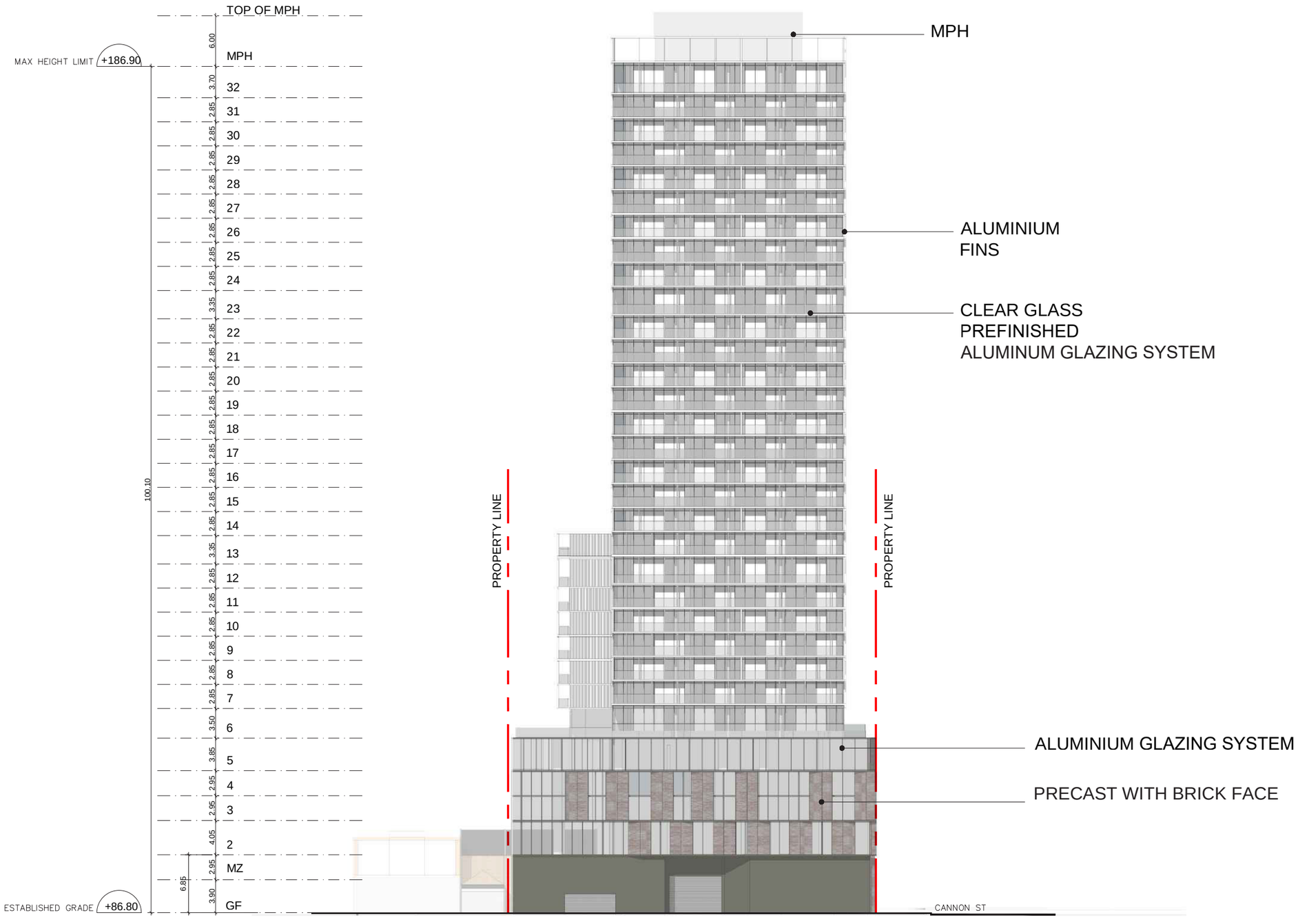
Proposed West Elevation



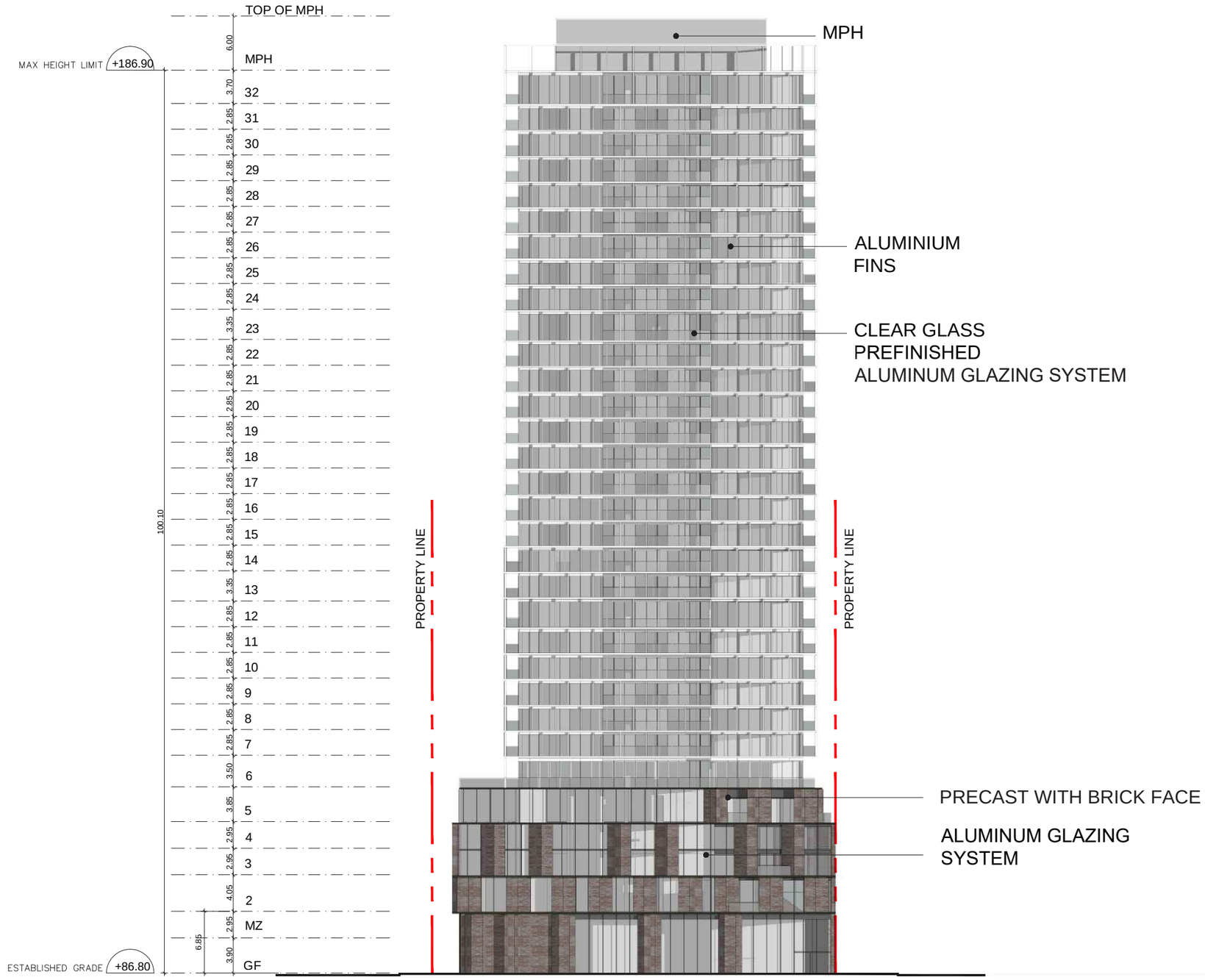
Proposed South Elevation



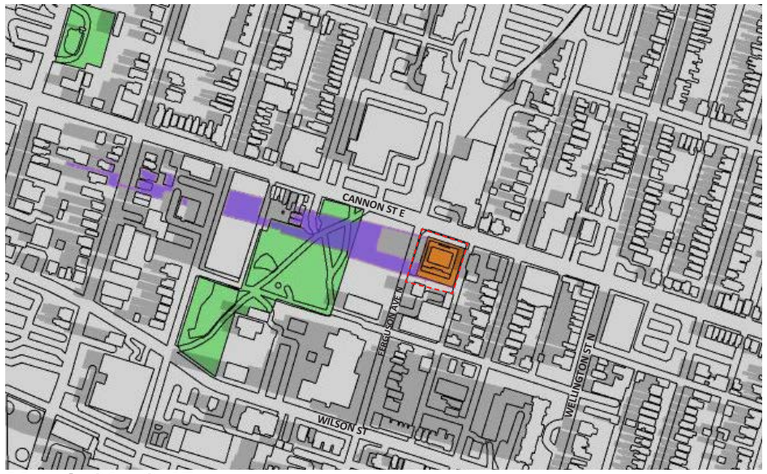
Proposed East Elevation



Proposed North Elevation



Sun Shadow Study - March 21st 8:45 am - 1:00 pm



March 21 - 8:45 am

March 21 - 9:00 am

March 21 - 10:00 am

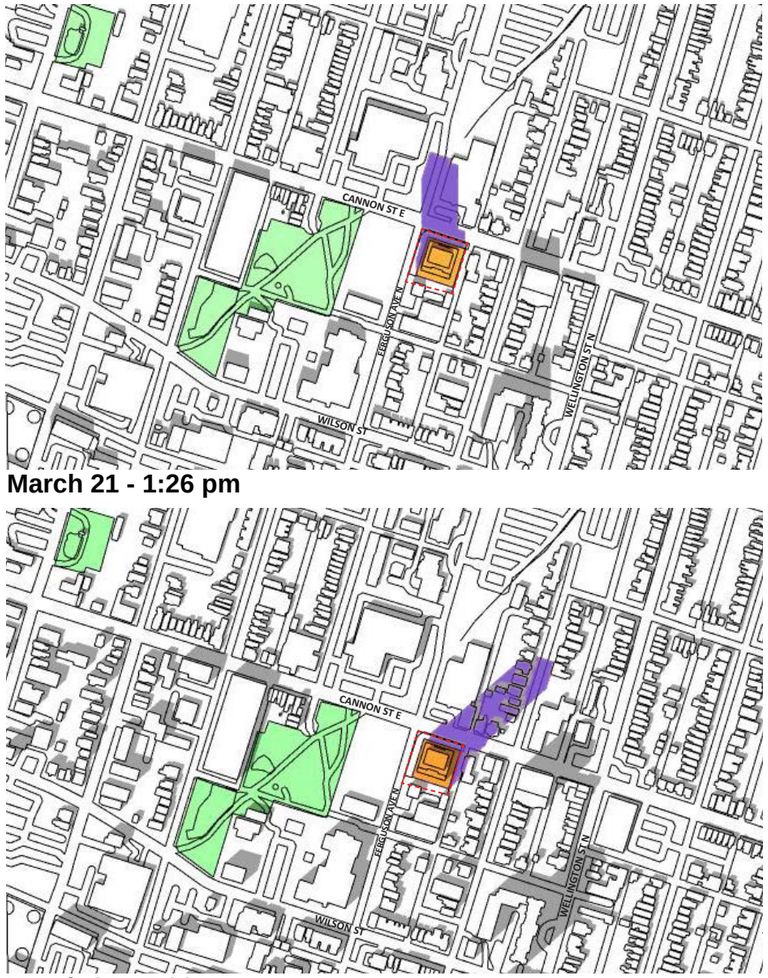
March 21 - 11:00 am

March 21 - 12:00 pm

March 21 - 1:00 pm

SITE BOUNDARY | EXISTING SHADOWS | PROPOSED SITE SHADOWS/ NET SHADOWS | AS OF RIGHT SHADOWS | PROPOSED SITE PLAN | AS OF RIGHT MASSING | OVERLAPPING SHADOWS

Sun Shadow Study - March 21st 1:26 pm - 6:00 pm



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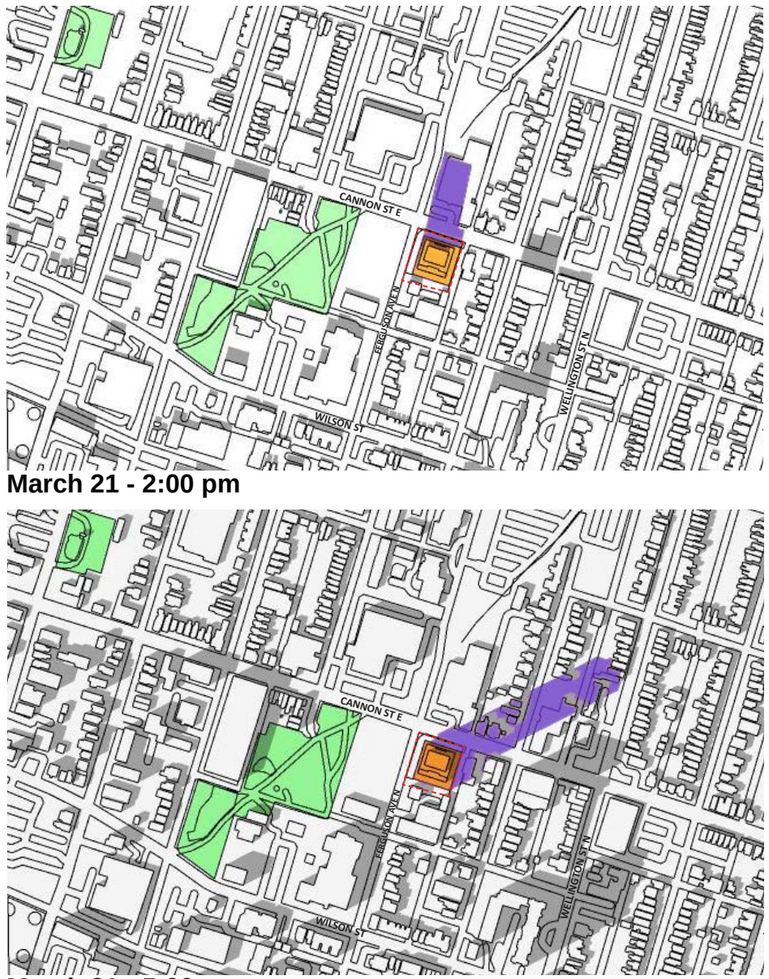
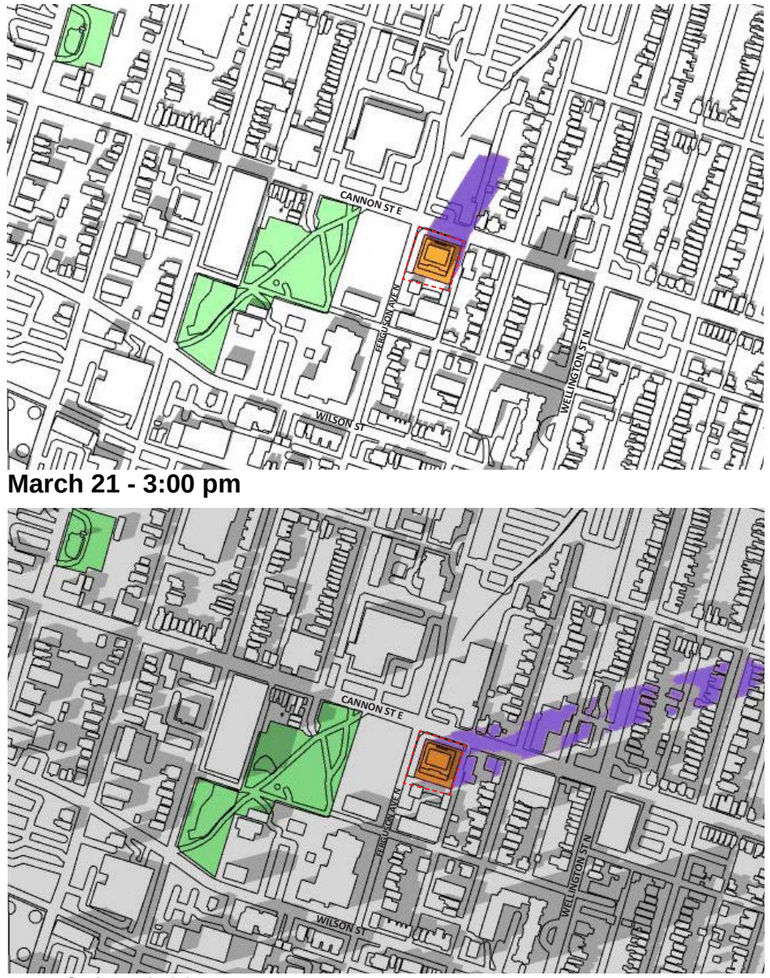


March 21 - 2:00 pm



March 21 - 3:00 pm

March 21 - 4:00 pm

March 21 - 5:00 pm

March 21 - 6:00 pm

SITE BOUNDARY

EXISTING SHADOWS

PROPOSED SITE SHADOWS/ NET SHADOWS

AS OF RIGHT SHADOWS

PROPOSED SITE PLAN

AS OF RIGHT MASSING

OVERLAPPING SHADOWS

Visual Impact Assessment

Before: Looking East on Cannon Street East

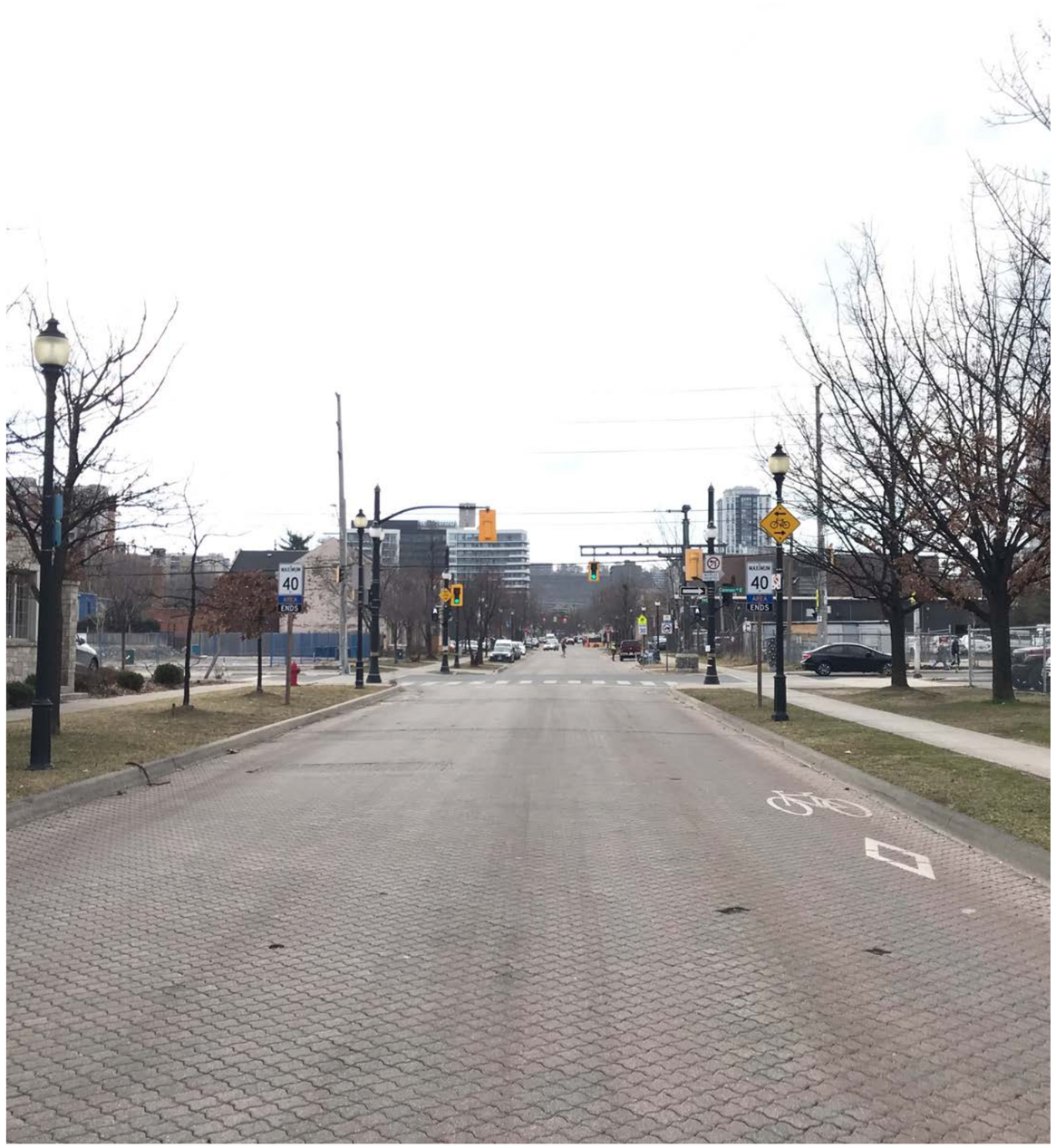
After: Looking East on Cannon Street East

Visual Impact Assessment

Before: Looking West on Cannon Street East

After: Looking West on Cannon Street East

Visual Impact Assessment



Before: Looking South on Ferguson Avenue North

After: Looking South on Ferguson Avenue North

Visual Impact Assessment

Before: Looking North on Ferguson Avenue North

After: Looking North on Ferguson Avenue North

URBAN DESIGN BRIEF

188 Cannon Street East and
134-136 Ferguson Avenue North
Hamilton, ON

March 2024

Urban Design Brief

Prepared for:

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C/O Vantage Developments Inc.

Prepared by:

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Urban Design Brief

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DISCLAIMER:

The text, images, and conceptual designs within this document are representations of the intended vision and character of the development. They are not literal interpretations of design decisions and should not be seen as the only method in which the design intent can be implemented. Refinements to the concepts contained herein will occur based upon the City of Hamilton's review.

Urban Design Brief

PART 1 - DESCRIPTION & ANALYSIS

Urban Design Brief

1.1 INTENT OF DOCUMENT

This Urban Design Brief has been prepared on behalf of Hamilton 188 GP Inc. C/O Vantage Developments Inc. as a component of the planning approval process for their subject lands at 188 Cannon Street East and 134-136 Ferguson Avenue North, located between Ferguson Ave North and Cathcart Street.

The Urban Design Brief provides direction for the implementation of the development vision identified for the subject lands within the Downtown Hamilton Secondary Plan. The brief describes the design principles and objectives that will guide the built form of major structuring elements in the development including the building, streetscape, and the residential and retail interface. The brief identifies aspects of the design that will integrate the proposed development into the public realm and surrounding neighbourhood.

The proposed development is guided by the Urban Hamilton Official Plan (UHOP), specifically Section 6.1 Downtown Hamilton Secondary Plan (OPA 102) as part of Volume 2, Chapter B - Hamilton secondary plans dated March 2023. This design brief also identifies key principles from the Hamilton Downtown Mobility Streets Master Plan as they relate to the development and surrounding community. The proposed development has been carefully designed with the following urban design principles in mind:

- Create mixed-use developments.
- Introduce pedestrian amenities along the length of the street including generous sidewalks, special paving and street trees.
- Provide main entrances and windows on the street-facing walls of buildings, with entrances at grade.
- Generally locate surface parking at the rear or in an underground structure of the buildings.
- Ensure access at grade level to residential and commercial uses.
- Locate buildings along the street line, with the heights to be consistent with existing buildings and per the Building Heights map B.6. 1-4.
- Enhance the streetscape and public realm.

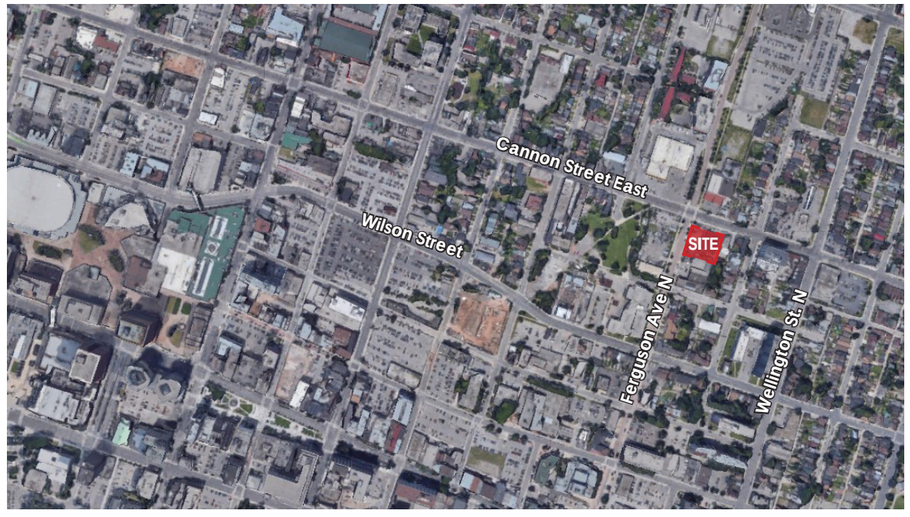


Fig 1. KEY MAP: 188 Cannon Street East

The Urban Design Brief encompasses landscape and built-form guidelines that address both public and private realm elements, fostering a pedestrian-centric development. It serves to illustrate how the design of the subject lands aligns with the objectives of the Downtown Hamilton Secondary Plan and the Hamilton Downtown Mobility Streets Master Plan, particularly in relation to Cannon Street East.

These points are further described in Parts 2 & 3 of this brief.

Urban Design Brief

1.2 Site Context

The subject site is located at 188 Cannon Street East and 134-136 Ferguson Avenue North in the City of Hamilton. The site is intended to be developed as one and will be referred to as 188 Cannon Street East throughout this brief. The subject site is located at the southeast corner of Cannon Street East and Ferguson Avenue North, within the downtown Hamilton boundary. The property is approximately 1887.90m2 and has the follow street frontage lengths:

Cannon Street East:	41.053m
Ferguson Ave N:	42.83m (includes existing rowhouses)

The property is bounded by:

North:	Cannon Street East
East:	Alleyway and automotive shop located at 192 Cannon Street East
South:	Office space at 130 Ferguson Ave and Kelly Street
West:	Used car sales business and Beasley Park (Proposed expansion of Beasley Park into 154-156 cannon street E)

The majority of the existing site is currently a vacant lot with two historical townhomes in the south west corner of the site. The townhomes have been listed as historical buildings, and will be incorporated into the overall design of the development. The development will adhere to the Downtown Hamilton Secondary Plan guidelines by incorporating mixed uses, enhancing public streets and spaces, promoting downtown living, while respecting the design and heritage of the community (6.1.3 Objectives).

The subject site is surrounded by the minor arterial street, Cannon Street East, to the North and Ferguson Avenue North, to the West. The proposed development is zoned as the Downtown Residential (D5) and is surrounded by mixed zones including but not limited to Community Park (P2), Community Shopping and Commercial etc. (H) Downtown Central Business District (D1), Community Institutional (I2), and other downtown residential areas (D5).
(Source: Hamilton interactive zoning mapping dated July 11, 2022)

The diversity of the neighbourhood is shown to the right and on page 4 highlighting surrounding properties and notable sites within the developments walkable radius of 0.5km and 1km.

Existing Site at 188 Cannon Street E

Beasley Park to the West

Beasley Community Center

Hamilton GO Station

Existing low density residential

Cannon Street West of Site

Ferguson Ave North, South of site

Cathedral Highschool

Urban Design Brief

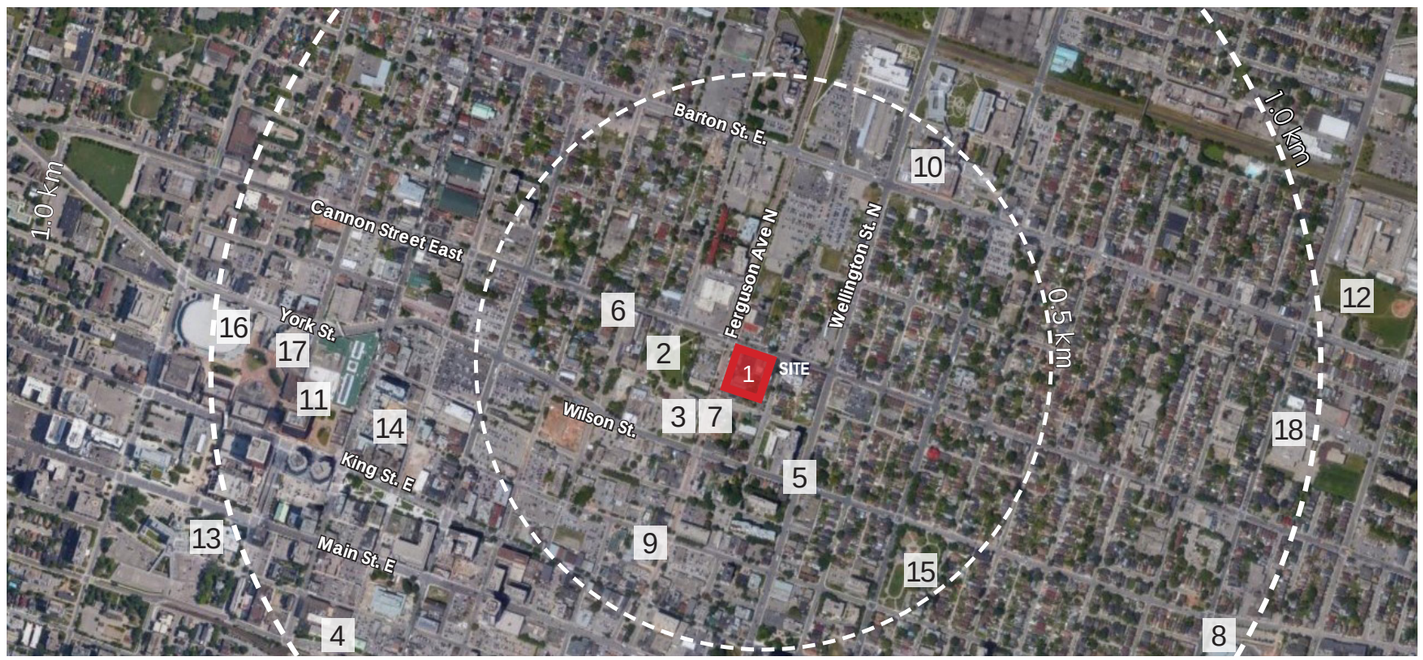
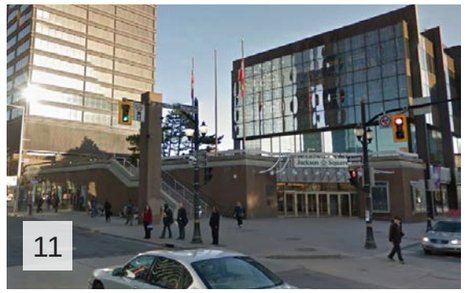


Fig 2. Context Map

Theatre Aquarius

Hamilton General Hospital



Jackson Square

Woodlands Park

Hamilton City Hall

King William Street restaurants & commercial

Tweedsmuir & JC Beemer Park

First Ontario Centre

Hamilton Farmers Market & Library

Norman Pinky Lewis Recreation Centre

Urban Design Brief

Cannon Street, classified as a minor arterial roadway and future mobility street as per the Downtown Hamilton Secondary Plan and Hamilton Downtown Mobility Plan, serves as a notable division between Downtown Hamilton and the neighbouring residential land-use to the North. This distinction offers unique opportunities to enhance linkages to the downtown core through the proposed development.

Parking availability along Cannon Street East and Ferguson Avenue North is limited. Cannon street supports on street parking during off-peak hours and minimal street parking is available on Ferguson Ave. Ferguson Avenue, designated as a Traditional Street primarily serves as a residential corridor, while Cannon Street serves as a main connector to the greater Hamilton area and operates as a transport truck route connecting to the City's industrial northeast sector (Hamilton Truck Route Master Plan).

Cannon Street boasts a designated two-way bike lane along the south side of the laneway while Ferguson Avenue utilizes a shared bike lane along the western road edge. These bike lanes are complemented by nearby Hamilton bike share depots located at Beasley Park and Ferguson Avenue N. The current bike infrastructure provides ample opportunities for sustainable transportation for both current, and future residents of the neighbourhood.

Currently, there is minimal existing softscape surrounding the subject site with the exception of small canopy deciduous trees within the Ferguson Avenue sodded right-of-way. No existing trees are present within the north side of the side south along Cannon Street as a result of the current condition consisting of a concrete sidewalk, concrete splash edge, and overhead utilities.

The existing neighbourhood is a vibrant mixed-use area offering a wide range of opportunities for work, dining, entertainment and everyday essential needs within walking distance. The context map on page 4 notes a handful of the surrounding sites within a 1.0 km radius of the subject site.

In addition to the amenities marked on the context map, Cannon Street benefits from being along a viable transit route, with the closest transit stop, ID 3001, being less than 50m from the site. The proposed development allows for convenient connections to public transit providing residents access to the entirety of Hamilton and opportunities to travel outside the city boundary via the Hamilton GO station and Macnab Bus Terminal, both within 15-20-minute walking distance from the site.

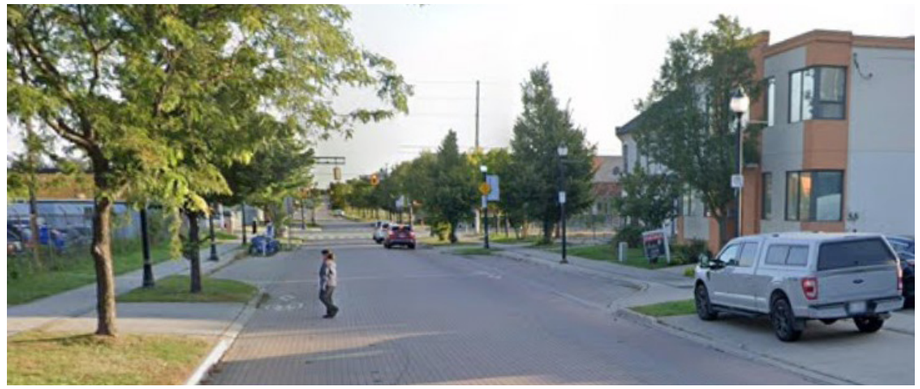


Fig 3. Ferguson Ave on-street parking and bike share

Fig 4. Bike lanes on Cannon Street East

Fig 5. Existing street trees on Ferguson Ave

Urban Design Brief

PART 2 - POLICY REQUIREMENTS & DESIGN GUIDELINES

Urban Design Brief

2.1 KEY POLICIES & MASTER PLANS

2.1.1 URBAN HAMILTON OFFICIAL PLAN

The development follows the objectives in the latest Urban Hamilton Official Plan (UHOP). This urban design brief touches on the following key principles and directions to guide development as outlined in 2.1 Our future Hamilton (OPA 167) and 1.4 Principles of the official plan:

- Compact and healthy urban communities that provide opportunities to live, work, play, and learn (1.4 Principles of the official plan and 2.1 Direction #2).
- Concentrate new development within existing built-up areas and within a firm urban boundary (2.1 Direction #3).
- Design neighbourhoods to improve access to community life (2.1 Direction #5).
- Expand transportation options through the development of complete streets that encourage travel by foot, bike and transit, and enhance efficient inter-regional transportation connections (2.1 Direction #7).
- Maximize the use of existing buildings, infrastructure, and vacant or abandoned land (2.1 Direction #8).
- Maintain and create attractive public and private spaces and respect the unique character of existing buildings, neighbourhoods and communities, protect cultural heritage resources, and support arts and culture as an important part of community identity (2.1 Direction #10).

The proposed development adheres to following Urban Design Principles expressed in section 3.3.1 Urban Deigns Goals - section 3.3.2.4 in Volume 1 - Chapter B - Communities:

a) organizing space in a logical manner through the design, placement, and construction of new buildings, streets, structures, and landscaping;

b) recognizing that every new building or structure is part of a greater whole that contributes to the overall appearance and visual cohesiveness of the urban fabric;

c) using materials that are consistent and compatible with the surrounding context in the design of new buildings;

d) creating streets as public spaces that are accessible to all;

f) including transitional areas between the public and private spaces where possible through use of features such as landscaping, planters, porches, canopies, and/or stairs;

g) creating public spaces that are human-scale, comfortable, and publicly visible with ample building openings and glazing.

The proposed development at 188 Cannon Street East is compatible with the surrounding mixed uses and incorporates the directions and objectives of the UHOP. The development is located within an under-utilized paved lot with no aesthetic or community value. As the subject site is located within the urban boundary, the development will intensify areas already designated for growth, minimizing the impact of sprawl. The design increases usable public space on the subject site through the addition of a defined pedestrian zone and an active street frontage that incorporated street trees, sculptural seating, and decorative paving. Ground level entrances and glazing provide a strong visual and physical connection between the public and private spaces and provide a high level of pedestrian comfort and amenities.

The building and streetscape design provides a visual connection to the neighbourhood's history through the use of historical forms and materials as well as the significant preservation and adaptive use of the historical townhomes on site.

Urban Design Brief

2.1.2 DOWNTOWN HAMILTON SECONDARY PLAN

The proposed design for 188 Cannon Street East adheres to the policies and principals of Section B.6.1 Downtown Hamilton Secondary plan (OPA 102) dated March 2023.

The applicable designation for the subject property is 'Downtown Residential' on Map B.6 1-1 -Downtown Hamilton Land Use Plan (Figure 6). The proposed development adheres to the following Downtown Hamilton Secondary Plan Principals (6.1.2):

a) Use public realm improvements as a catalyst for revitalization.

c.) Promote Downtown living.

d.) Build on existing strengths.

e.) Downtown is healthy and safe.

Section 6.1.3.1 Respect design and heritage:

a.) Conserve and enhance the built heritage resources and cultural heritage landscapes of Downtown Hamilton.
(source: UHOP, Vol 2 B.6.1.2)

The proposed development incorporates these principles through the design of an inviting and safe public interface. Providing designated pedestrian zones that are visually and physically separated from vehicular traffic. The site emphasizes pedestrian and cyclist connection and walkability to the nearby downtown core and community amenities surrounding the site. The development builds on existing strengths by working within an infill site and preserving historical buildings on-site while honouring community values through thoughtful design.

The proposed development provides a unique living opportunity in the heart of the City as well as providing a mixed use development with historical character. The proposal respects the design and features of the surrounding area while enhancing the framework of the neighbourhood.

The proposed development will be compatible with the design of the surrounding developments and will implement urban design features already present within downtown core. The subject site is designated as High-rise and Mid-rise which permits the tallest building height as stipulated within the Downtown Secondary Plan Area. The maximum building height permitted on the subject lands of 188 Cannon Street East, and 136 Ferguson Avenue North as per Schedule F of the 05-200 Zoning By-law.

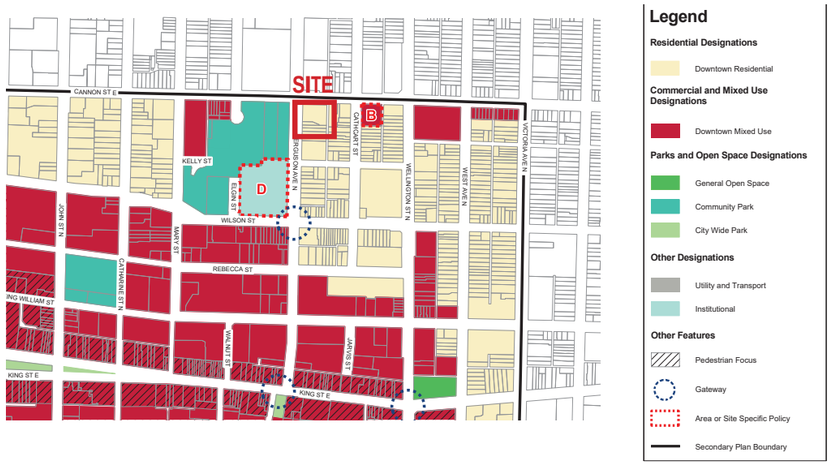


Fig 6. Top. Downtown Hamilton Land Use Plan
(source: Urban Hamilton Official Plan, Volume 2, Map B.6.1-1, August 2019

Fig 7. Bottom. Downtown Hamilton Building Heights Plan
(source: Urban Hamilton Official Plan, Volume 2, Map B.6.1-4, August 2019)

Urban Design Brief

2.2 URBAN DESIGN POLICIES & GUIDELINES

2.2.1 SITE PLAN GUIDELINES

The development has been guided by Section 6.4 of the Site Plan Guidelines outlining design and planning considerations, zoning by-law compliance, and various technical standards for multiple unit residential developments. The proposed design adheres to the principles outlined in the City of Hamilton Site Plan Guidelines, ensuring the proposed development is accessible, safe & functional, while integrating into the surrounding built form environment.

2.2.2 HAMILTON DOWNTOWN MOBILITY STREET MASTER PLAN

Cannon Street East and Ferguson Avenue North have been identified within the Downtown Mobility Street Master Plan (DMSMP). Cannon Street East is designated as a Mobility Street, incorporating solutions for efficient through transportation, while maintaining pedestrian focused streets that provide links to surrounding neighbourhoods. Ferguson Avenue North is designated as a traditional street, maintaining its unique character and heritage. These enhancements aim to create vibrant, pedestrian-friendly areas that reflect Hamilton's rich history while meeting modern urban needs. (source: DMSMP Page 3 & 5)

Cannon Street E and Ferguson Ave N intersection is identified as a key pedestrian crossing on page 5 of the DMSMP. The site is located within the Beasley neighbourhood which is identified as a pedestrian priority area due to its neighbourhood parks, community center, and elementary schools. Per the master plan, the following principles for movement and pedestrian priority apply to Cannon Street East and Ferguson Ave North:

- Prioritize pedestrian movement and the pedestrian environment.
- Create an 'Urban' Streetscape Profile.
- Create an Organized and Legible Pedestrian Environment.
- Incorporate urban braille at key pedestrian intersections and within Pedestrian Priority Areas.

(source: DMSMP Page 6, Movement & Pedestrian Priority)

The streetscape design for both street frontages comply with the City of Hamilton's vision as described in the DMSMP. The site design prioritizes the vision of creating mixed-use developments, culturally diverse urban streets that link important surrounding amenities, provide an efficient route through the city, while delineating Hamilton's north end from the Downtown core.

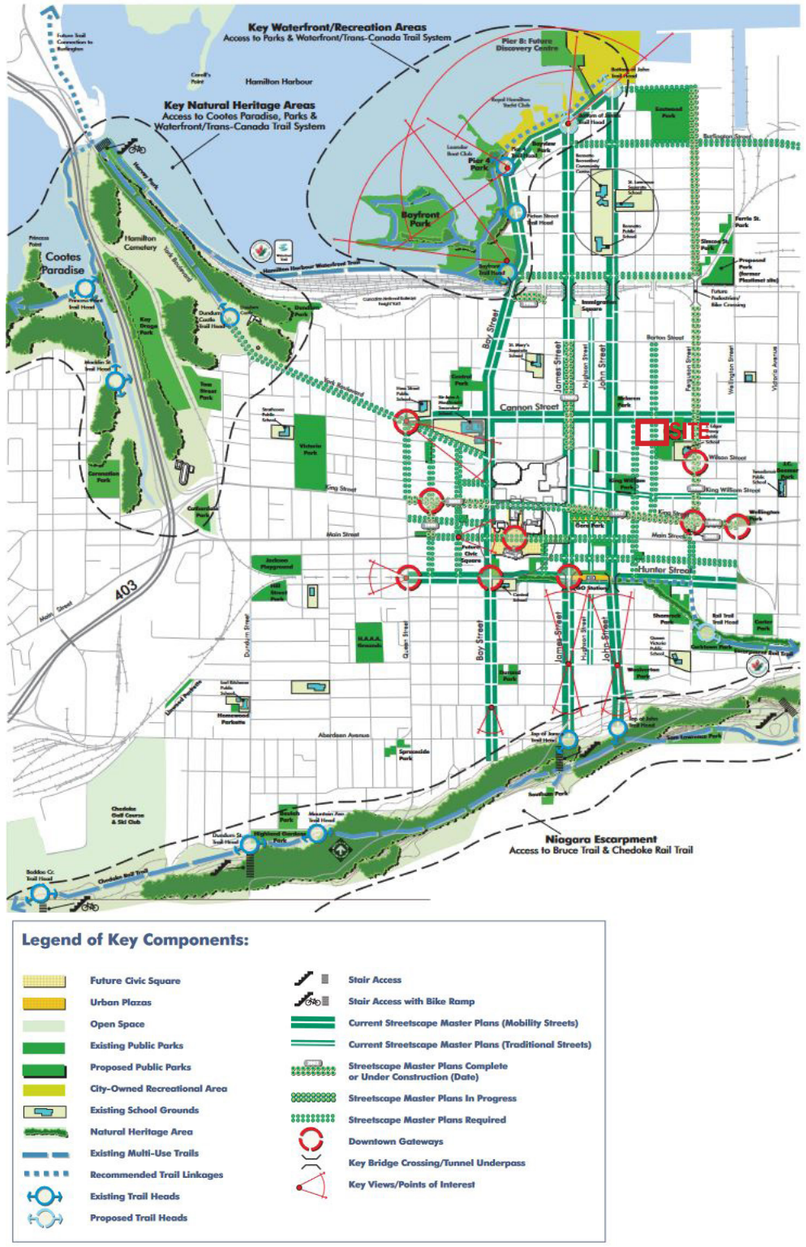


Fig 8. Mobility street map
(source: Downtown Mobility Street Master Plan Part 1)

Urban Design Brief

2.2 URBAN DESIGN POLICIES & GUIDELINES

2.2.3 CITY OF HAMILTON CO-ORDINATED STREET FURNITURE GUIDELINES

The City of Hamilton Co-ordinated Street Furniture Guidelines created in August 2015, was developed to improve the image and identity of the City's streetscape and provide visual coherence contributing to a high-quality public realm.

The subject site will adhere to the Street Furniture Guidelines and will incorporate the Urban Braille system of tactile markings and pavement types. The design will also provide benches and bicycle racks within the street tree/ furniture zone of the streetscape.

The streetscape on Cannon Street East and Ferguson Avenue North will follow the prescribed four pedestrian zone system configuration which will include a buffer zone, street tree/furniture zone, walkway zone, and frontage zone. Urban braille will be incorporated into the streetscape design to ensure a barrier free environment.

2.2.4 BEASLEY NEIGHBOURHOOD HERITAGE

The proposed site is located in the Beasley neighbourhood and falls within the Beasley Heritage inventory project created by the Beasley neighbourhood association and undertaken as a draft by the City of Hamilton in July 2022. The proposed streetscape design will incorporate heritage and community values to create a modern space that connects the community to it's historical roots.

Historically, a railway ran down Ferguson Ave, past the subject site. Today, the former railway line is acknowledged along Ferguson Avenue by installations representing railway crossing gates and maintained sections of embedded track. In addition to the rail history, the surrounding lands hold landscape and built form heritage value. Beasley Park is noted as a Cultural Heritage Landscape and historical townhouses are located on site which will be preserved and integrated into the developments framework through thoughtful design.

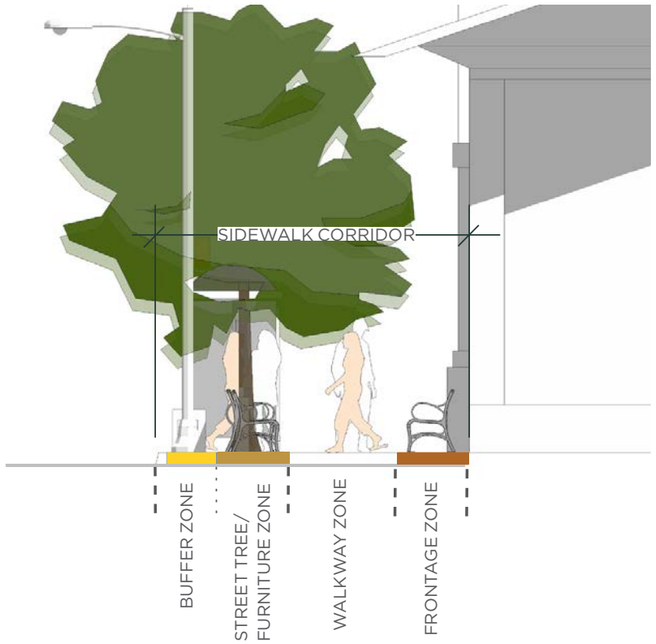


Fig 9. Pedestrian Zone Configuration 1.
(source: City of Hamilton Co-Ordinated Street Furniture Guidelines. 2.3

Fig 10. Ferguson Avenue Crossing Gates

Urban Design Brief

PART 3 - SITE DESIGN & ANALYSIS

Urban Design Brief

3.0 SITE DESIGN & ANALYSIS

The site plan design has been guided by Section 6.4 of the City's Site Plan Guidelines, design consideration for multiple unit residential developments.

The general design goal is to achieve an appropriate mixed use building that:

- Faces the building towards the street
- Respects the ground level pedestrian scale and access
- Provides an enhanced streetscape and public interface.

3.1 SITE DESIGN

The subject site at 188 Cannon Street East proposes a 32 storey residential tower and ground level retail that will occupy the existing heritage townhomes. The residential portion of the development proposes 383 residential units with a total of 25,989 ^{2} of GFA above grade. The total building height, excluding the mechanical penthouse, is 100.1m, which is below the height of the escarpment. The ground level is a combination of residential entrances, indoor amenities, parking, garbage, loading and mechanical rooms. 95.50m ^{2} of retail/commercial space has been proposed within the re-purposed heritage townhomes that face onto the street frontage of Ferguson Avenue North. These retail units will activate the street frontage, increase pedestrian interest and provide a sense of place.

The main lobby for the residential tower is located at the corner of Cannon Street East and Ferguson Avenue creating a centralized and easily accessible node for visitors and residents. The site has been designed to focus on sustainable modes of transportation such as cycling and walking. The lobby and indoor amenity space have been orientated along the building edge to enhance safety by enabling people inside to monitor the surroundings contributing to a comfortable and inviting public realm. A daylight triangle at the corner of Ferguson and Cannon further enhances the safety for both vehicular and pedestrian users.

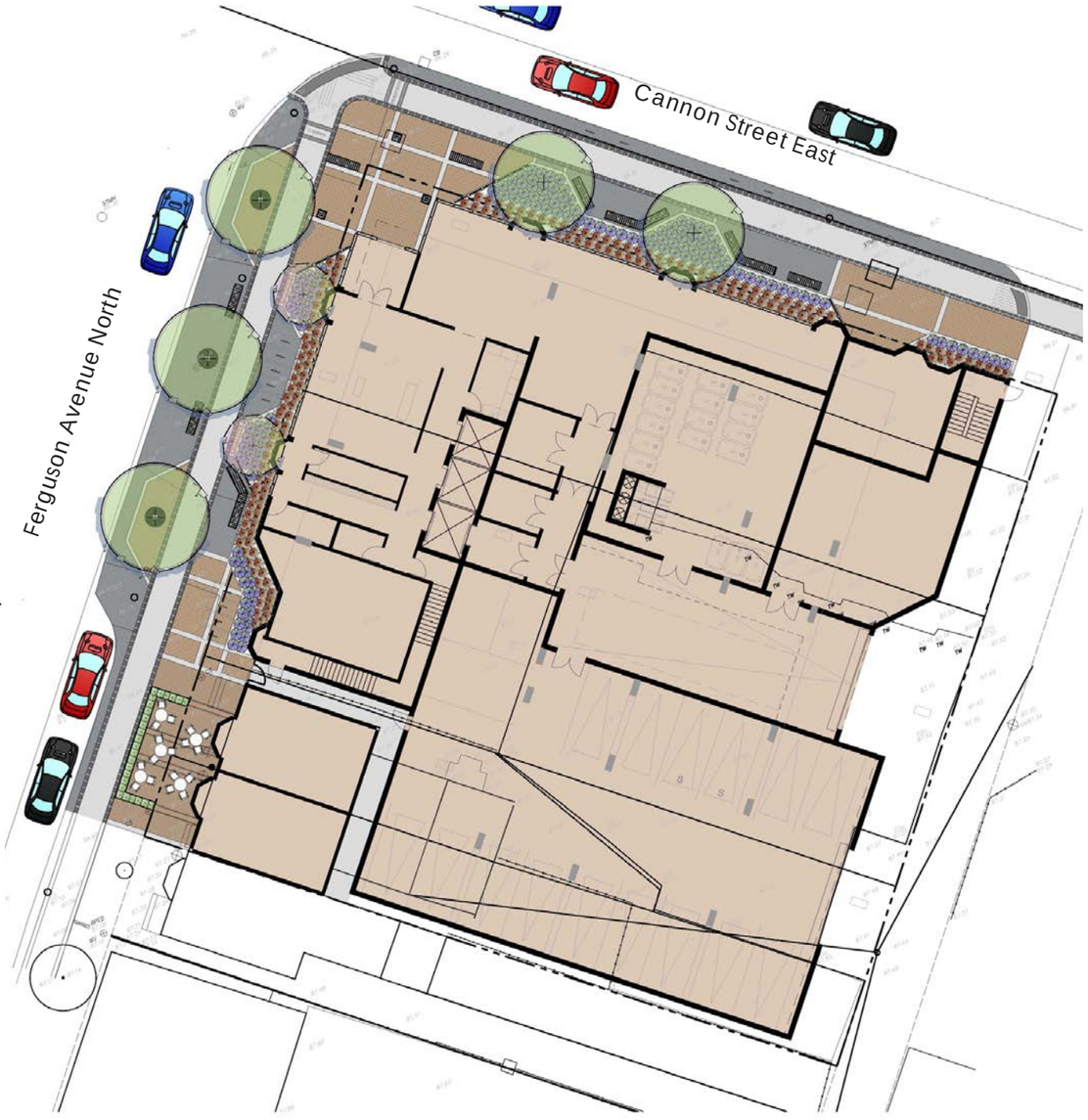


Fig 11. Landscape Plan

Urban Design Brief

3.2 BUILDING DESIGN

The proposed development is located within a key infill site. The architectural design focuses on activating the surrounding streetscape and enhancing the pedestrian experience within the public realm. The development complies with the most recent version of the Urban Hamilton Official Plan and is a well-considered response to the intensification emanating from Hamilton's downtown area.

The 32-storey mixed use proposal is positioned at a prominent corner of Ferguson Avenue and Cannon Street. The podium has a strong street presence and contemporary expression. Its materiality evokes its residential character, a suitable response to a future park extension west of the site.

As shown in Figure 13, The building's 5 storey base features a folded ribbon articulation. As the podium approaches the character row houses, the building sets back meaningfully, both at grade and above, offering an urban gesture of recognition. The two historical row houses' historical form is not only preserved but accentuated. As an additional tribute, the bay window element present in them and many other relevant historical buildings across the city is echoed by the angled brick cladding on the podium.

Fig. 12 Building Rendering

Along the sidewalk, on both streets, the ground floor presents a balance between solid materials and visual porosity, securing sensory interest. Amenities and building entrances ensure facade activation and eyes on the street. Taking advantage of the Ferguson Street Pedestrian Corridor, character retail is indicated as a potential use of the heritage component.

Respecting the Niagara Escarpment, a simple yet delicate tower atop the podium intends to feel light and respectful to its surroundings. The height of the building, excluding the mechanical penthouse, is 100.1 meters, ensuring that the building follows Hamilton guidelines and maintains the integrity of the escarpment's visual impact. Balconies are minimized to meet energy consumption best practices, yet the tower's fin articulation creates a feel of wraparound, tying all facades together. The tower light character is intentional since the building form aims to have the podium and its street relation as its main protagonist.

Fig. 13 Contextual Reference

Urban Design Brief

3.3 BUILDING RENDERINGS

Fig. 14 Building Renderings

Urban Design Brief

3.4 BUILDING MASSING & HEIGHTS

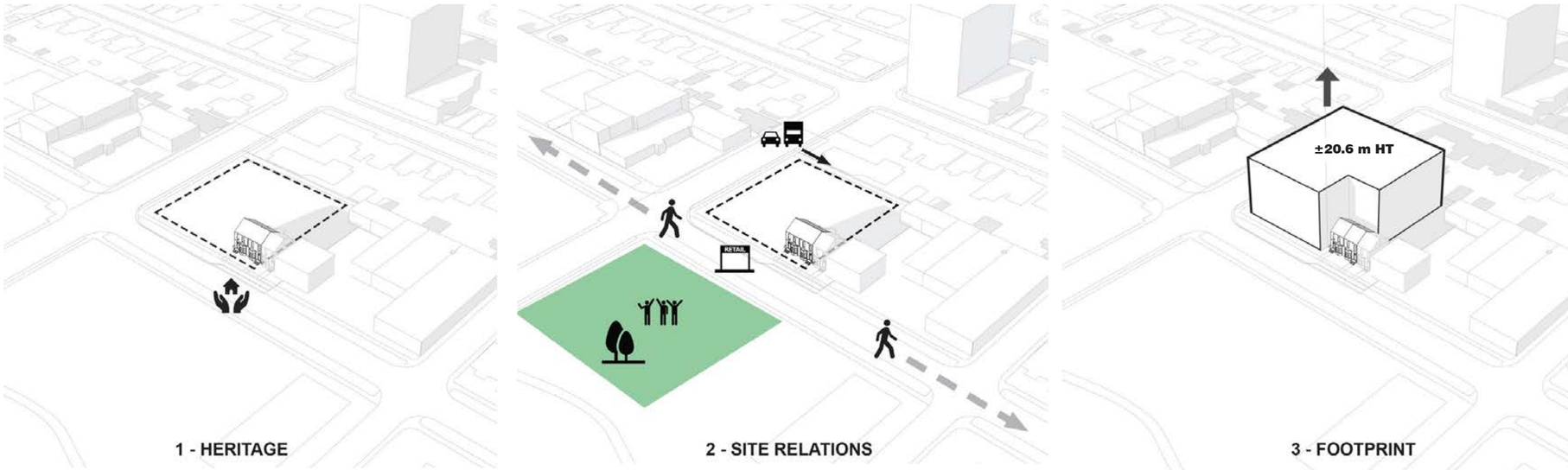


Fig 15. Building Massing Diagram

Urban Design Brief

3.5 PARKING, LOADING, AND WASTE MANAGEMENT

The vehicular entrance, situated off Cannon Street East, will be shared with the neighbouring property on the East side of the subject site. The building and site has been thoughtfully designed to accentuate this entrance while simultaneously screening vehicular usage (loading zone, on-site parking, garbage pick-up) from the public realm.

Surface parking on-site is located within the building footprint and will not be visible at grade from Cannon Street E or Ferguson Avenue N. Existing street parking will remain along Ferguson Avenue N servicing the retail/commercial units located within the heritage townhomes. To promote pedestrian-friendliness around the site, waste management facilities have been strategically placed within the ground floor of the podium, shielded from street view.

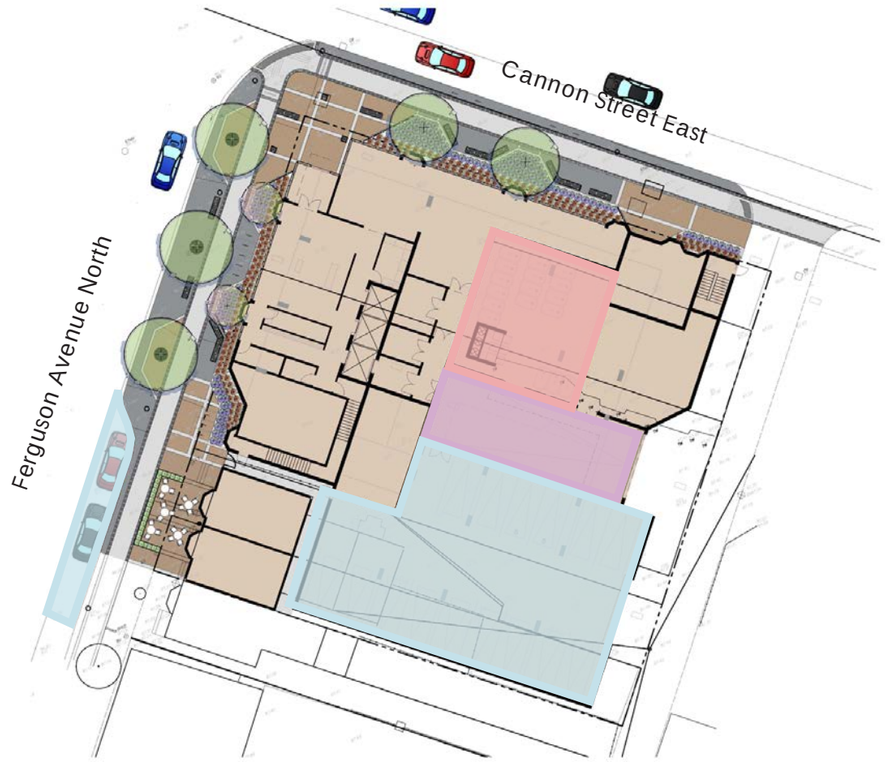


Fig. 16 Loading, Parking, and Waste Management Diagram

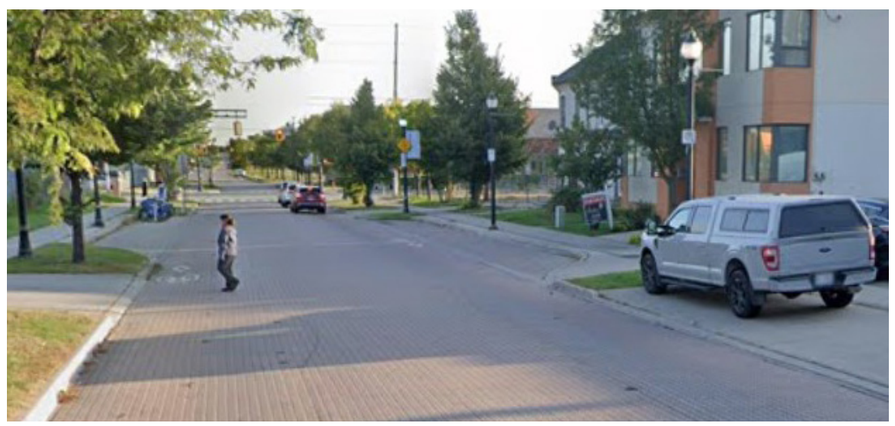


Fig. 17 Ferguson Avenue North Street Parking

Urban Design Brief

3.6 BUILDING ELEVATIONS

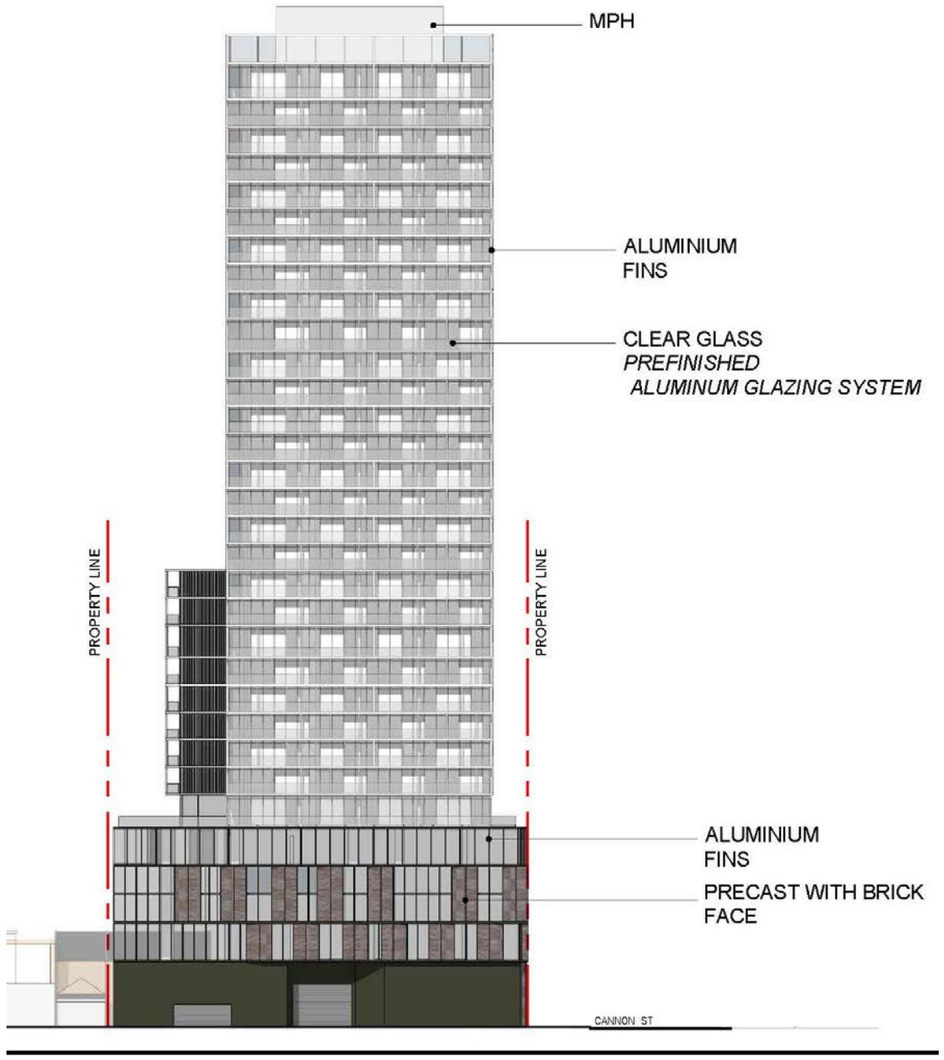


Fig 18. East Elevation

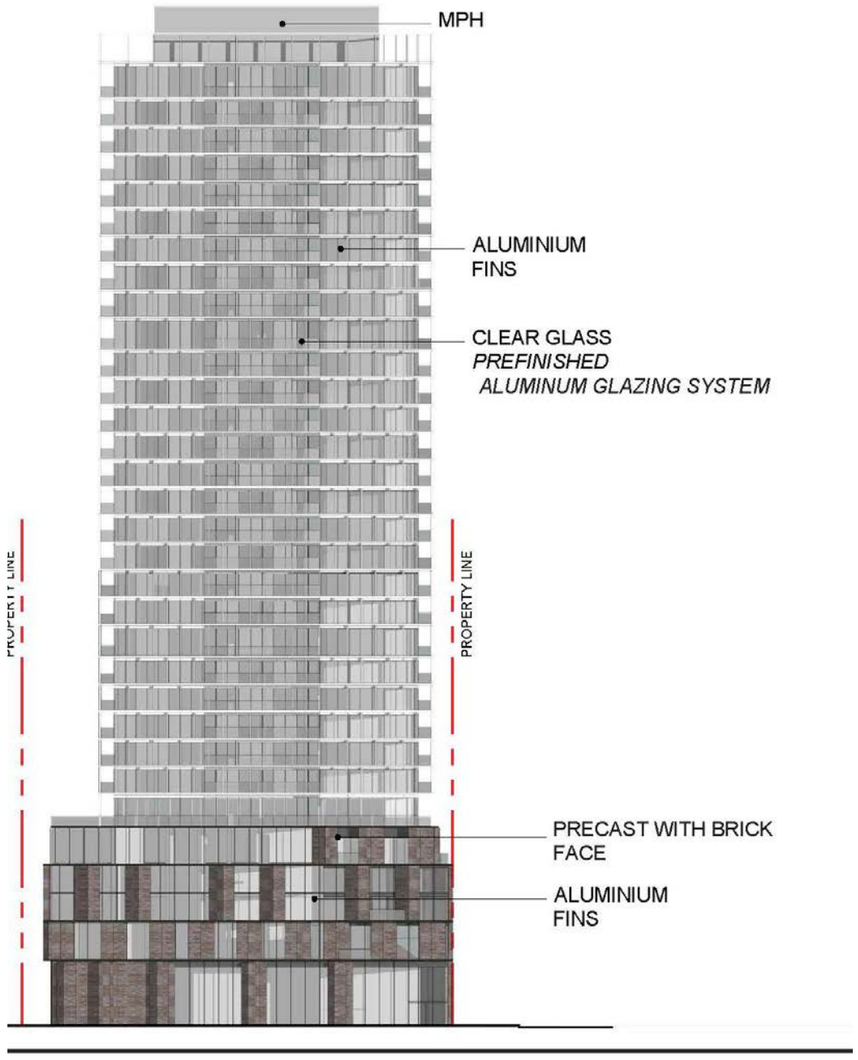


Fig 19. North Elevation

Urban Design Brief

3.6 BUILDING ELEVATIONS

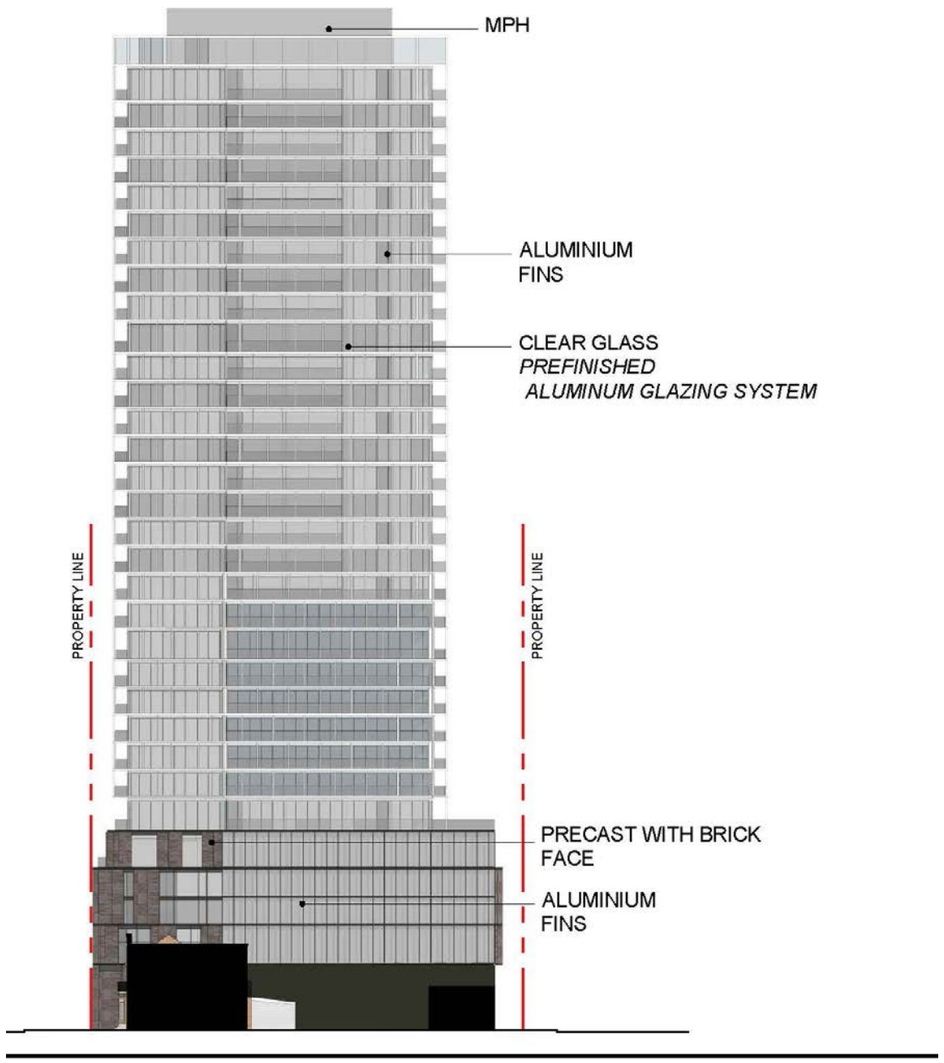


Fig 20. South Elevation

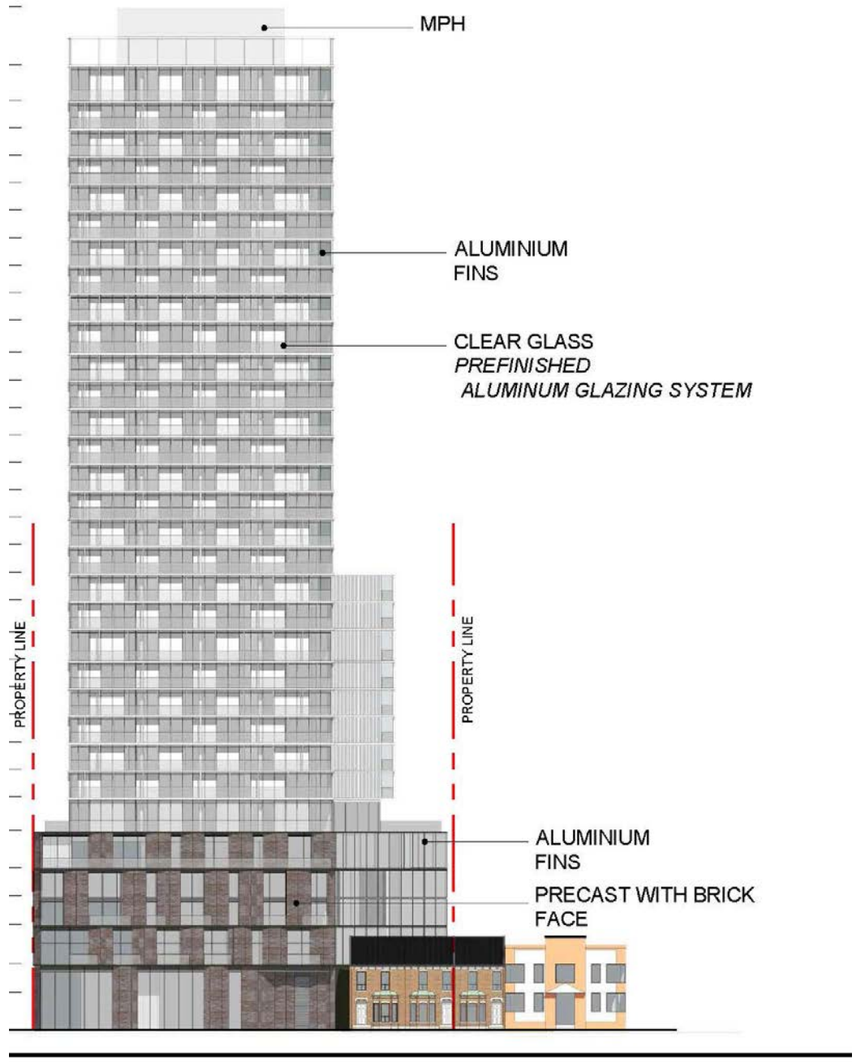


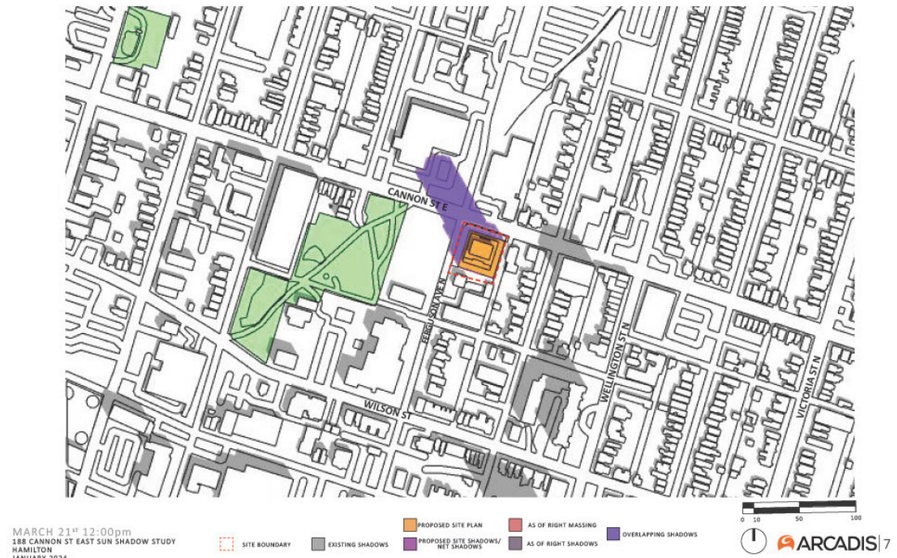
Fig 21. West Elevation

Urban Design Brief

.7 SHADOW STUDY

Fig. 22 Shadow Study: March 21st

Urban Design Brief



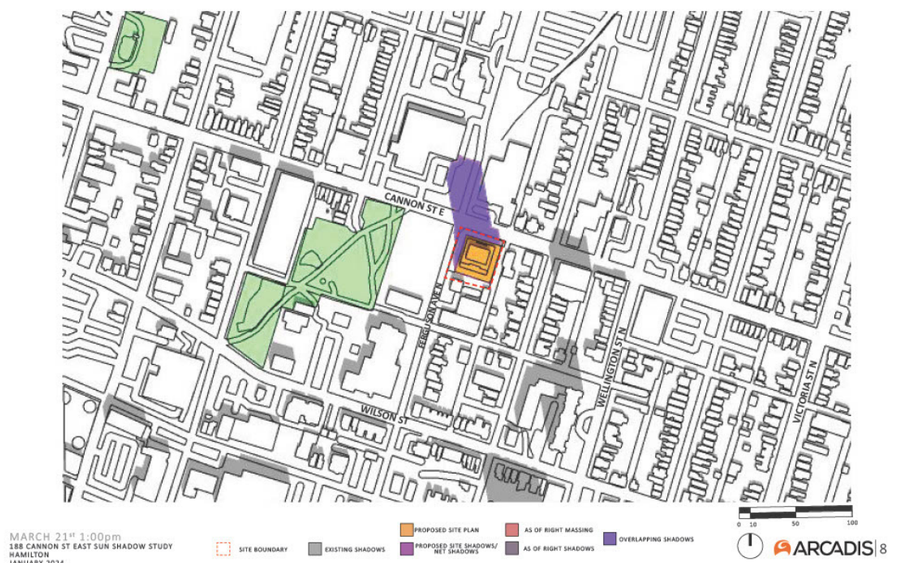


Fig. 23 Shadow Study: March 21st

Urban Design Brief

Fig. 24 Shadow Study: March 21st

Urban Design Brief

3.8 CIRCULATION DESIGN

The streetscape design prioritizes pedestrian movement on and off site, ensuring that both Ferguson Avenue and Cannon Street have accessible sidewalks and pedestrian entrances.

These features create seamless pedestrian circulation as outlined within the Downtown Hamilton Secondary Plan, section 6.1.6.2 Pedestrian Focus Streets. The site design prioritizes pedestrian-friendly design through broad sidewalks, urban braille sidewalk delineation, and street amenities such as benches, planting, bike racks, and sculptural seating.

The addition of high branching deciduous trees along the boulevard enhances both pedestrian safety and the overall aesthetic of the street frontage as shown in the landscape design section of this brief. Notably, there is only one vehicular entrance to the site, located at the northeastern corner of the development on Cannon Street East. This single entrance point effectively keeps the majority of the street frontage available for safe pedestrian use. Multiple ground-level entrances are provided without obstructing the perimeter sidewalk traffic along Cannon Street or Ferguson Avenue.

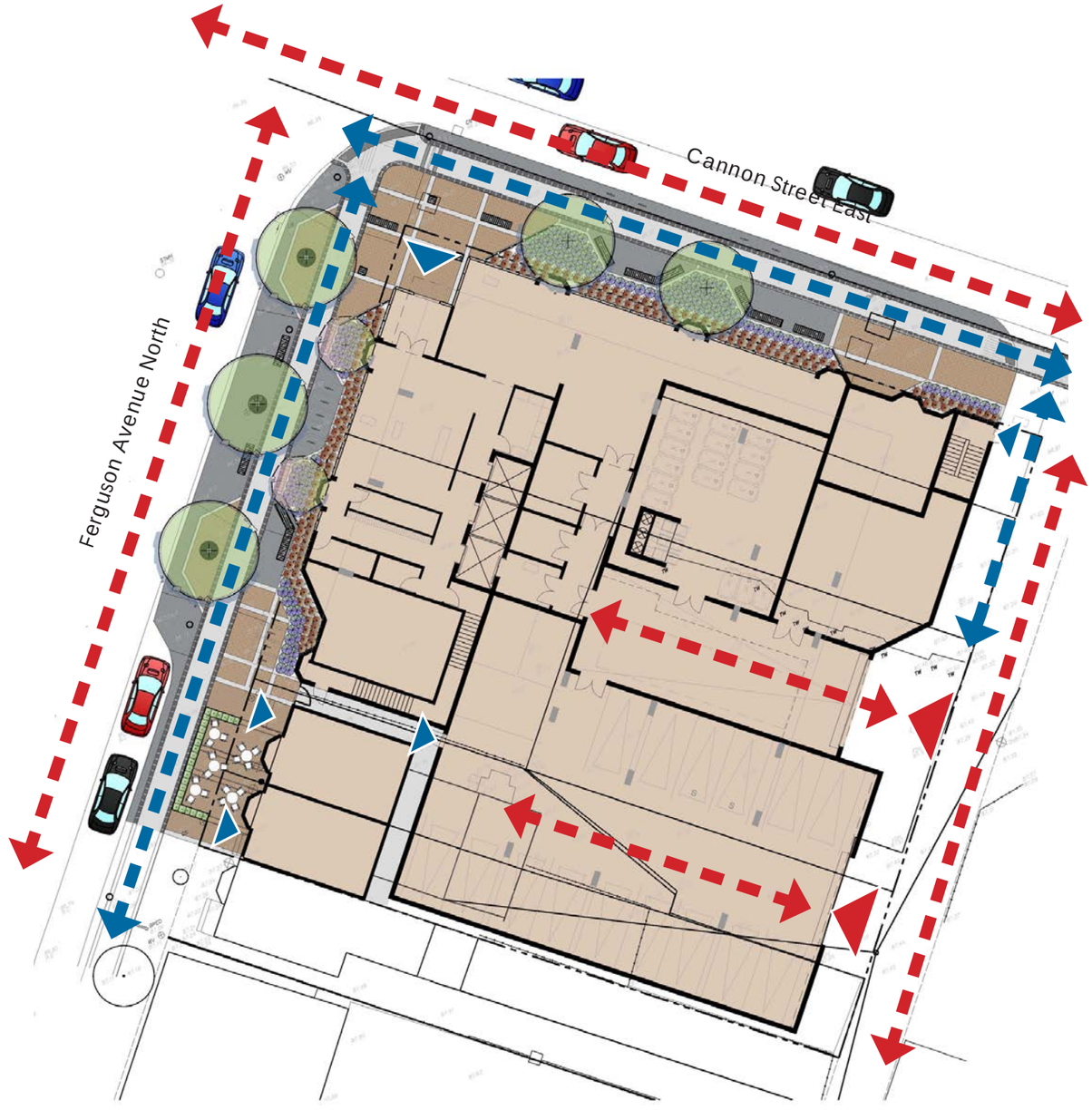


Fig. 25 Circulation Plan

Urban Design Brief

3.9 LANDSCAPE DESIGN

The landscape design blends functionality and historical roots to create a landmark site in the Beasley neighbourhood. It embraces the urban environment while providing spaces for passersby and residents to enjoy the streetscape. The nodal seating areas encourage group seating and social interaction, while individual benches cater to those who prefer solitary moments. Bistro-style seating near the historic townhouses provides social space for the community to connect to their past and enjoy the outdoor urban environment.

The landscape design incorporates elements that symbolize the area's history and play off forms and colours that remain in the preserved townhouses. Red brick unit paving and shapes that mimic the townhouses bay windows connect the modern street design to the historic neighbourhood. The use of sculptural furniture, train-style metal fencing, round tree grates, and trapezoidal bike racks provide homage to the historic Ferguson railroad. All the elements work together to create a unique sense of place for the community.

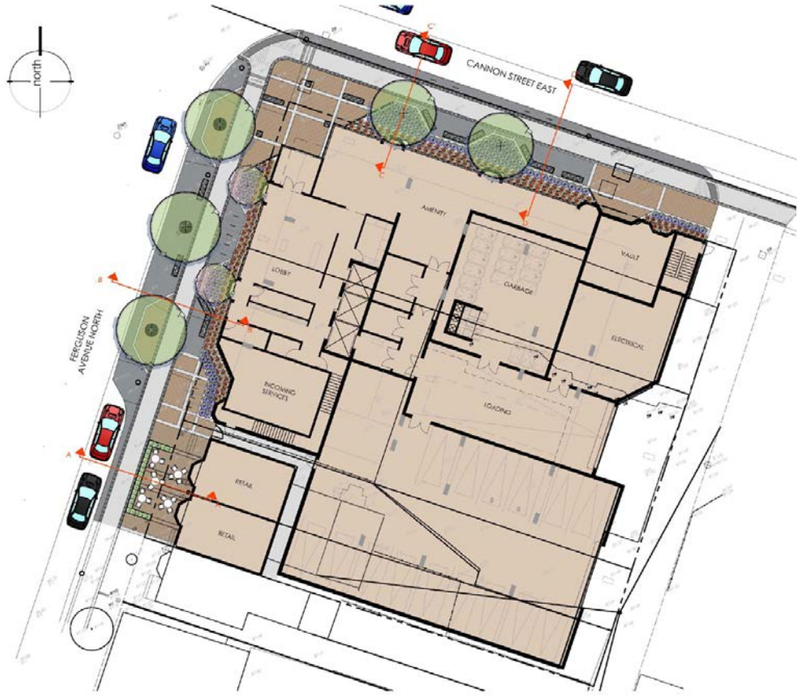
Street trees are provided along Ferguson Avenue North and are strategically placed to provide ample shade and preservation of the existing historic light posts. Cannon Street East is not conducive to traditional street trees due to existing overhead wires. Small flowering trees are provided in planting beds along the building frontage to visually break up the building face and provided comfortable shaded seating areas.

Urban braille along both Ferguson Avenue and Cannon Street creates an inclusive and barrier free environment for pedestrians. In addition to the urban braille, the streetscape follows the zones as set out in the City of Hamilton Co-Ordinated Street Furniture Guidelines including the buffer zone, street tree/furniture zone, walkway zone and frontage zone to create a safe and comfortable streetscape.

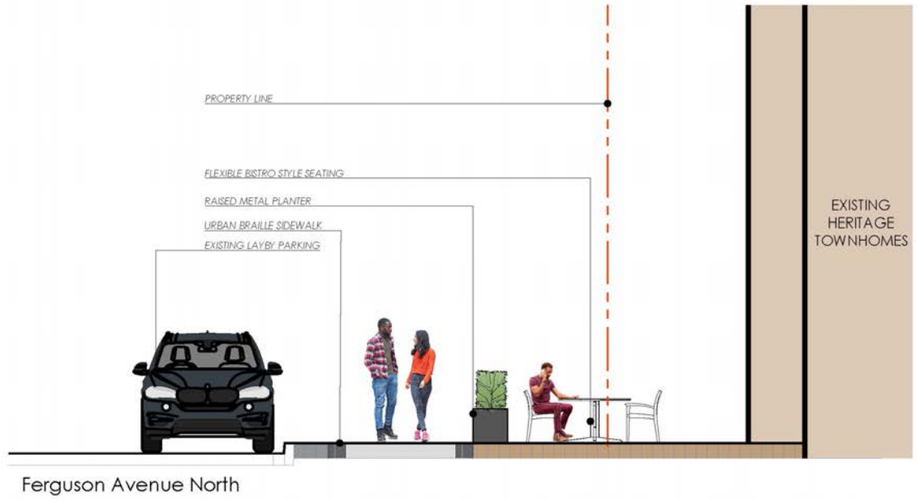
Fig. 26 Landscape Plan

Urban Design Brief

.10 STREETSCAPE SECTIONS



SECTION AA'



SECTION BB'

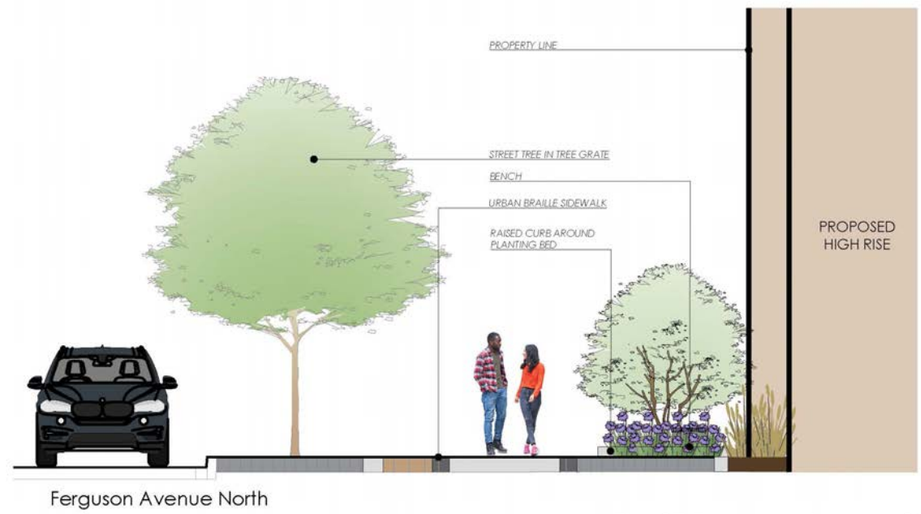
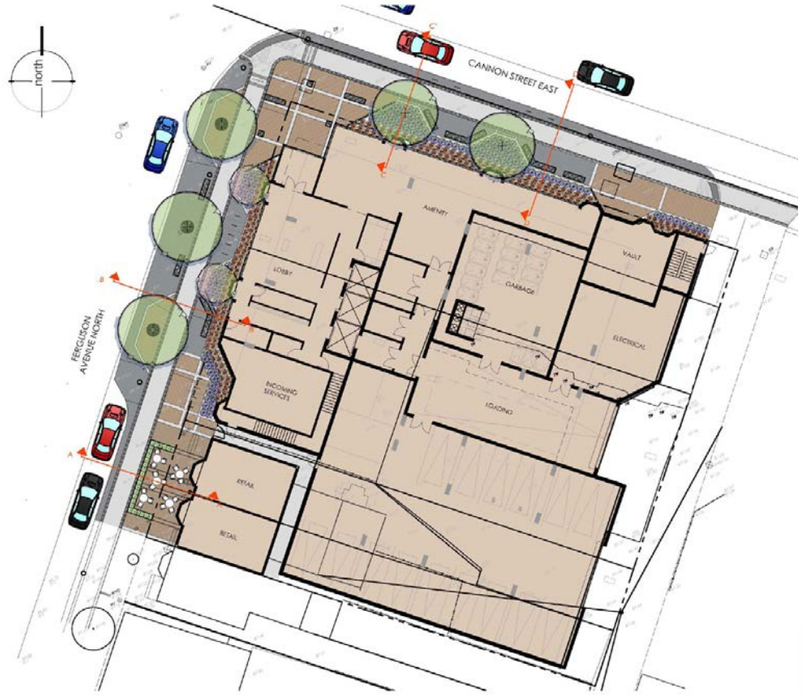


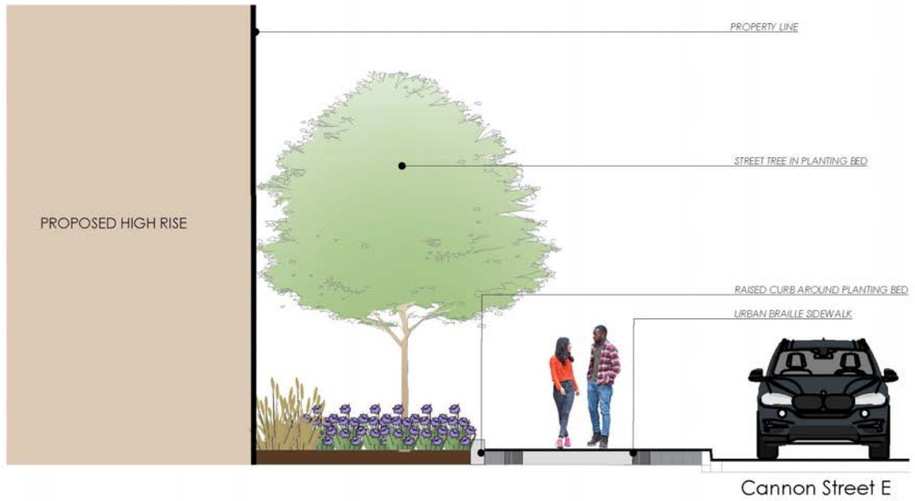
Fig. 27 Ferguson Avenue Streetscape

Urban Design Brief

3.10 STREETSCAPE SECTIONS



SECTION CC'



SECTION DD'

Fig. 28 Cannon Street Streetscape

Urban Design Brief

PART 4 - CONCLUSION

Urban Design Brief

4.0 CONCLUSION

In summary, the proposed development at 188 Cannon Street East has merit and can be supported for the following reasons:

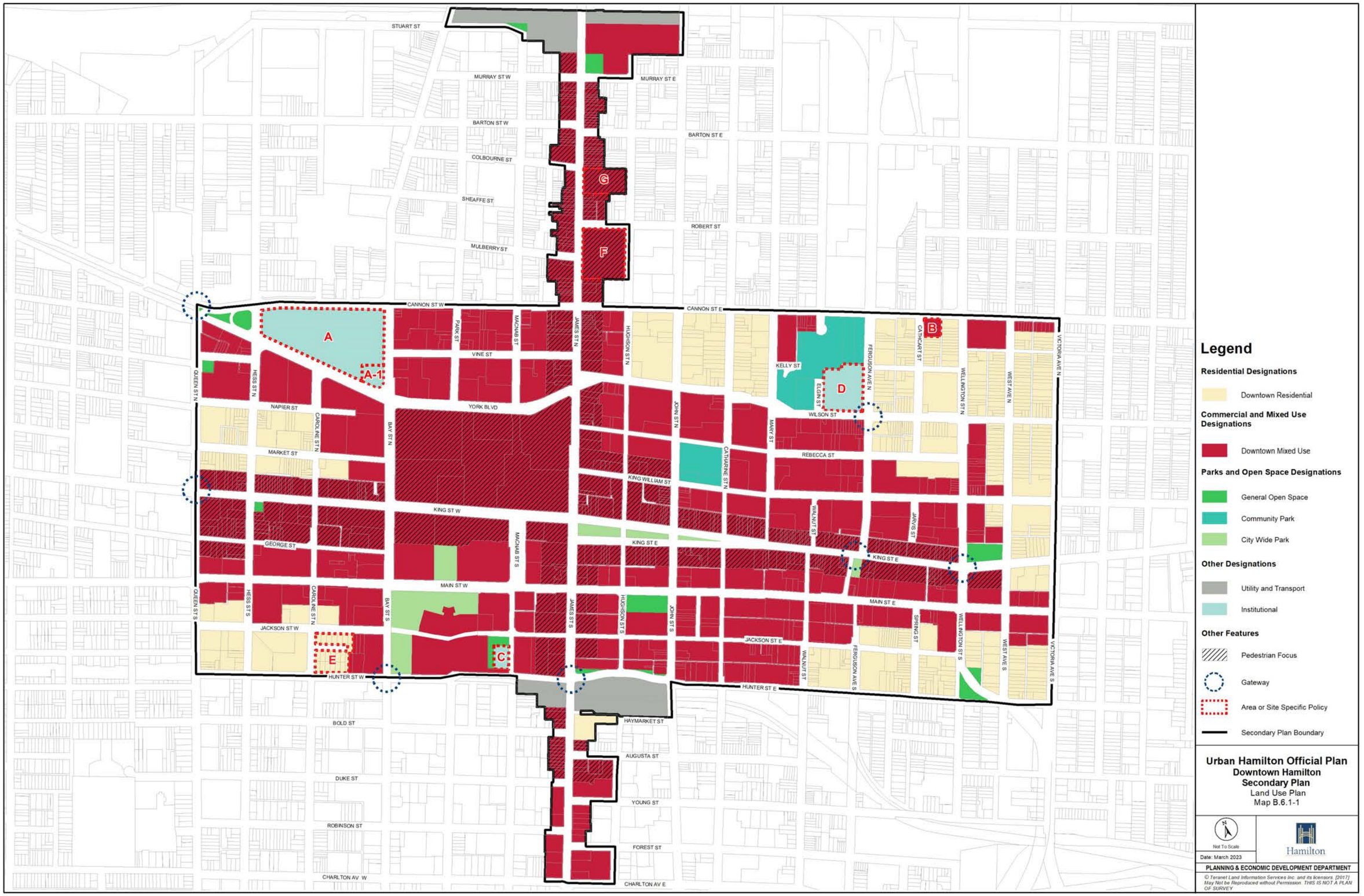
It conforms to the Downtown Hamilton Secondary Plan to provide:

- a building that respects the surrounding building heights and materials.
- a mixed use development (residential high-rise and retail space within the historical townhomes).
- ground level pedestrian access.
- a well designed building with proper proportion along all street frontages.
- a safe pedestrian realm with an enhanced boulevard and streetscape design.

The development is designed in accordance with the City's vision for the Downtown Urban Growth Centre and will contribute to the transformation of Hamilton's downtown core into an urban community.

The purpose of the Urban Design Brief is to guide the proposed development on the basis of good site planning with specific discussions on community structure, streetscape design and built form. Measures of appropriateness and fit have been sourced from the City of Hamilton's Urban Design Guidelines and Policies. Subject to completion of the planning approvals process and refinement of the development concept, detailed design will be implemented through the final site plan approvals process.

Planning Support Documents



Legend

Residential Designations

- Downtown Residential

Commercial and Mixed Use Designations

- Downtown Mixed Use

Parks and Open Space Designations

- General Open Space
- Community Park
- City Wide Park

Other Designations

- Utility and Transport
- Institutional

Other Features

- Pedestrian Focus
- Gateway
- Area or Site Specific Policy
- Secondary Plan Boundary

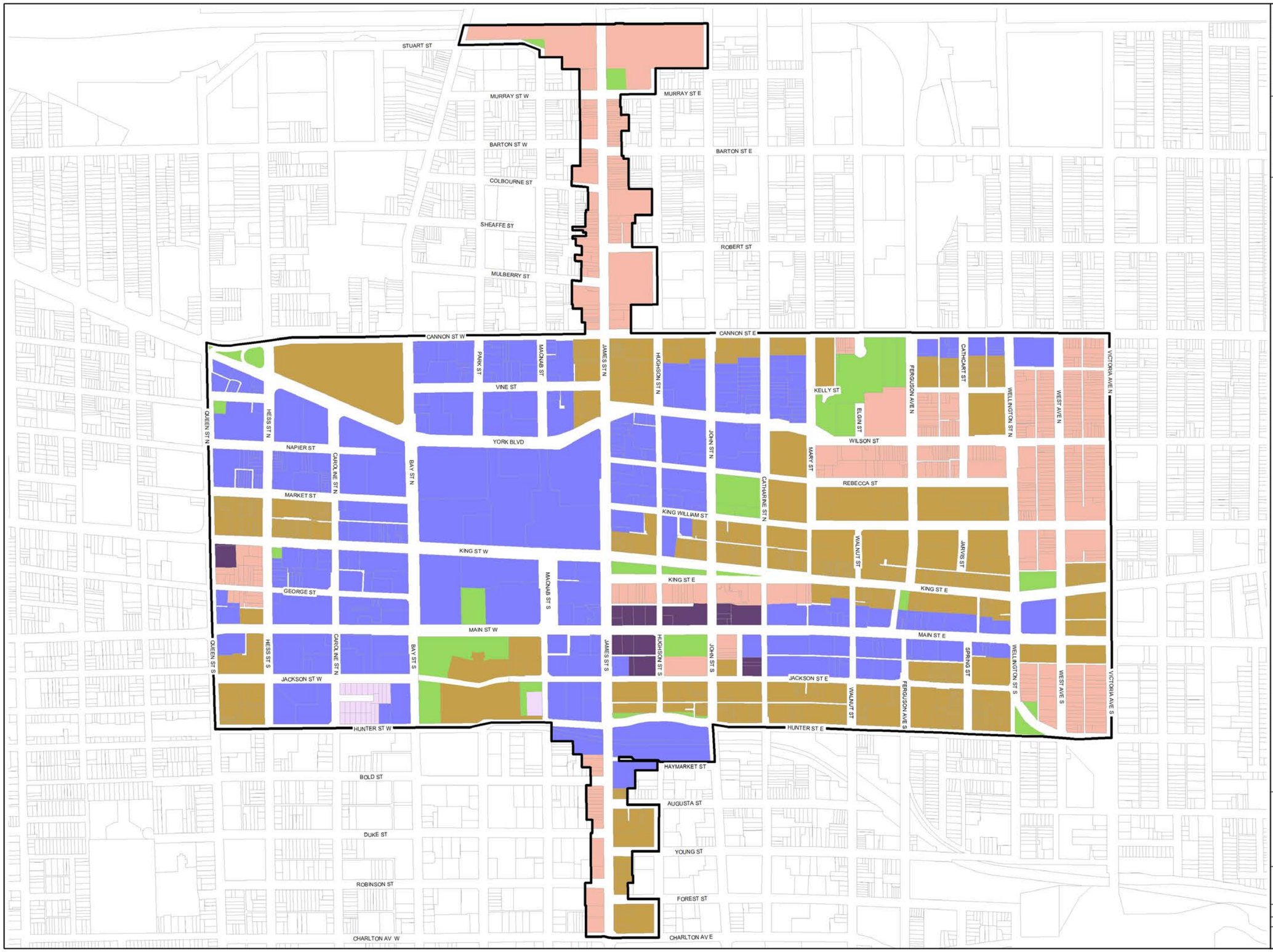
Urban Hamilton Official Plan
Downtown Hamilton Secondary Plan
Land Use Plan
Map B.6.1-1

Not To Scale
Date: March 2023

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Support Documents



NOTE: Maximum Building Heights within the Downtown shall be no greater than the height of the top of the Escarpment in accordance with Policy B.6.1.4.9.

NOTE: This Map is implemented through specific zoning provisions and Figure 1, Schedule F - Special Figures of Zoning By-law 05-200

Legend

- Low-rise 1
- Low-rise 2
- Mid-rise
- High-rise 1
- High-rise 2
- Parks/Open Space
- Secondary Plan Boundary

Urban Hamilton Official Plan
Downtown Hamilton
Secondary Plan
Maximum Building Heights
Map B.6.1-2

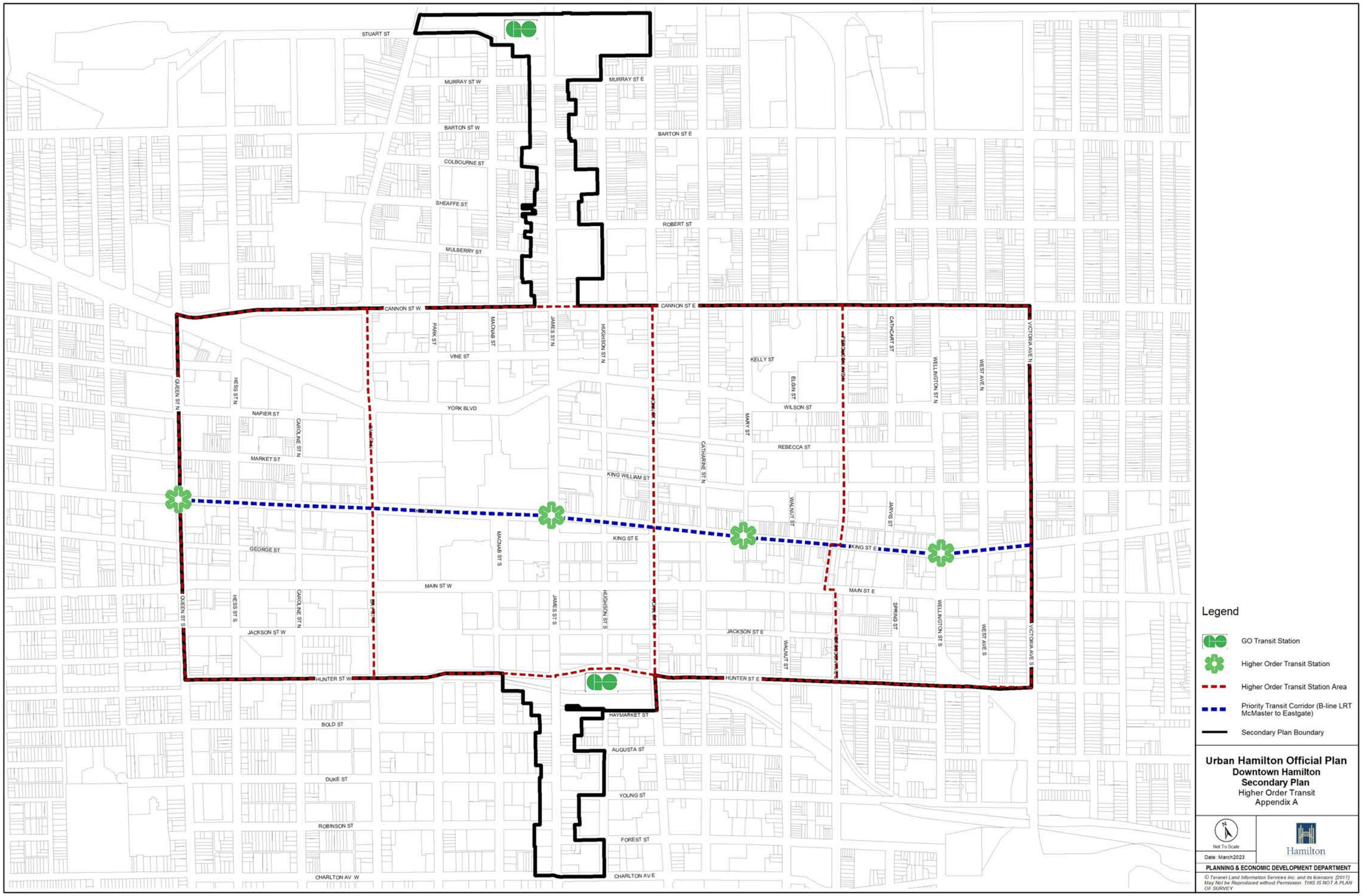
Not To Scale

Date: March 2023

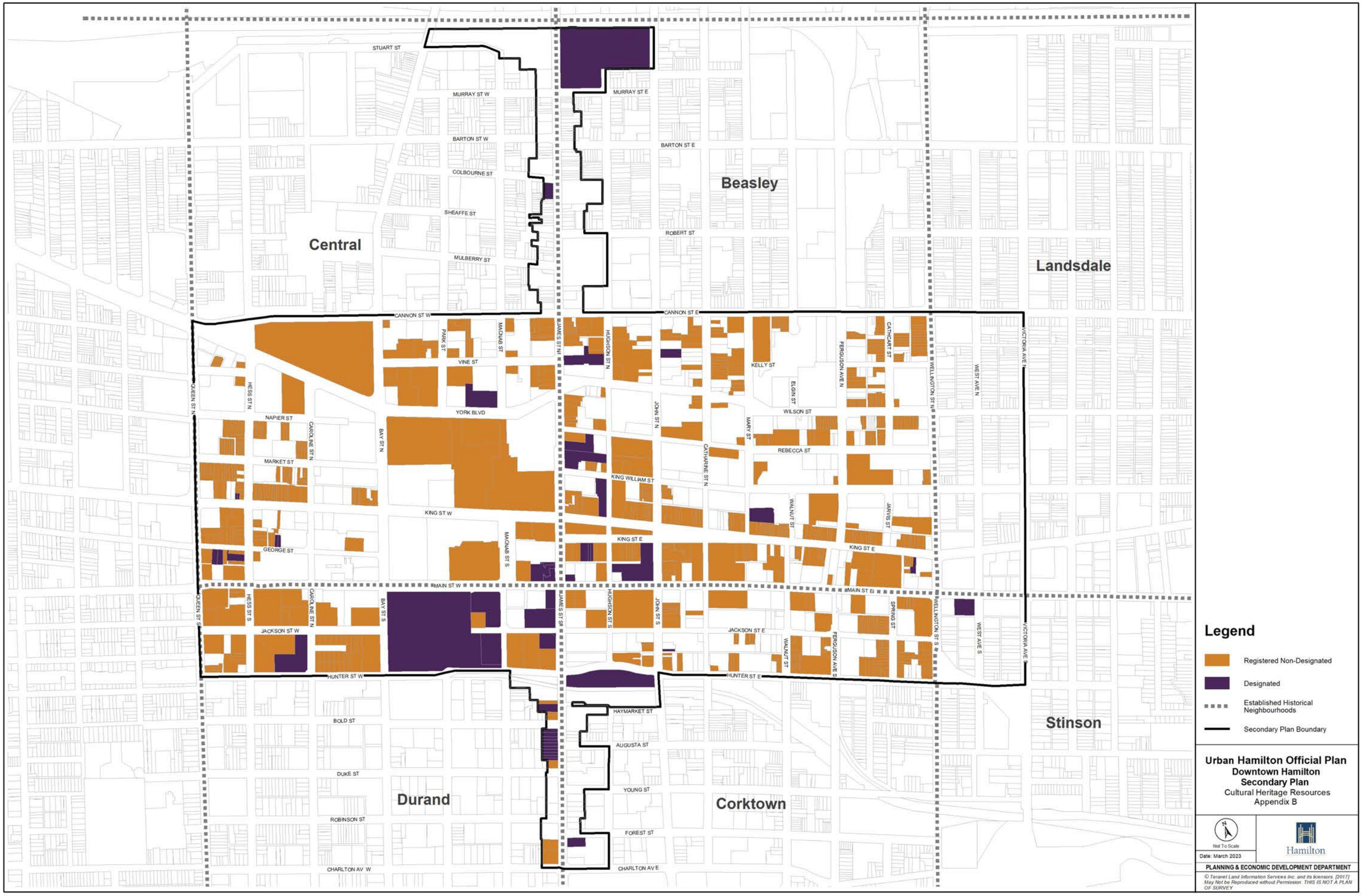
Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

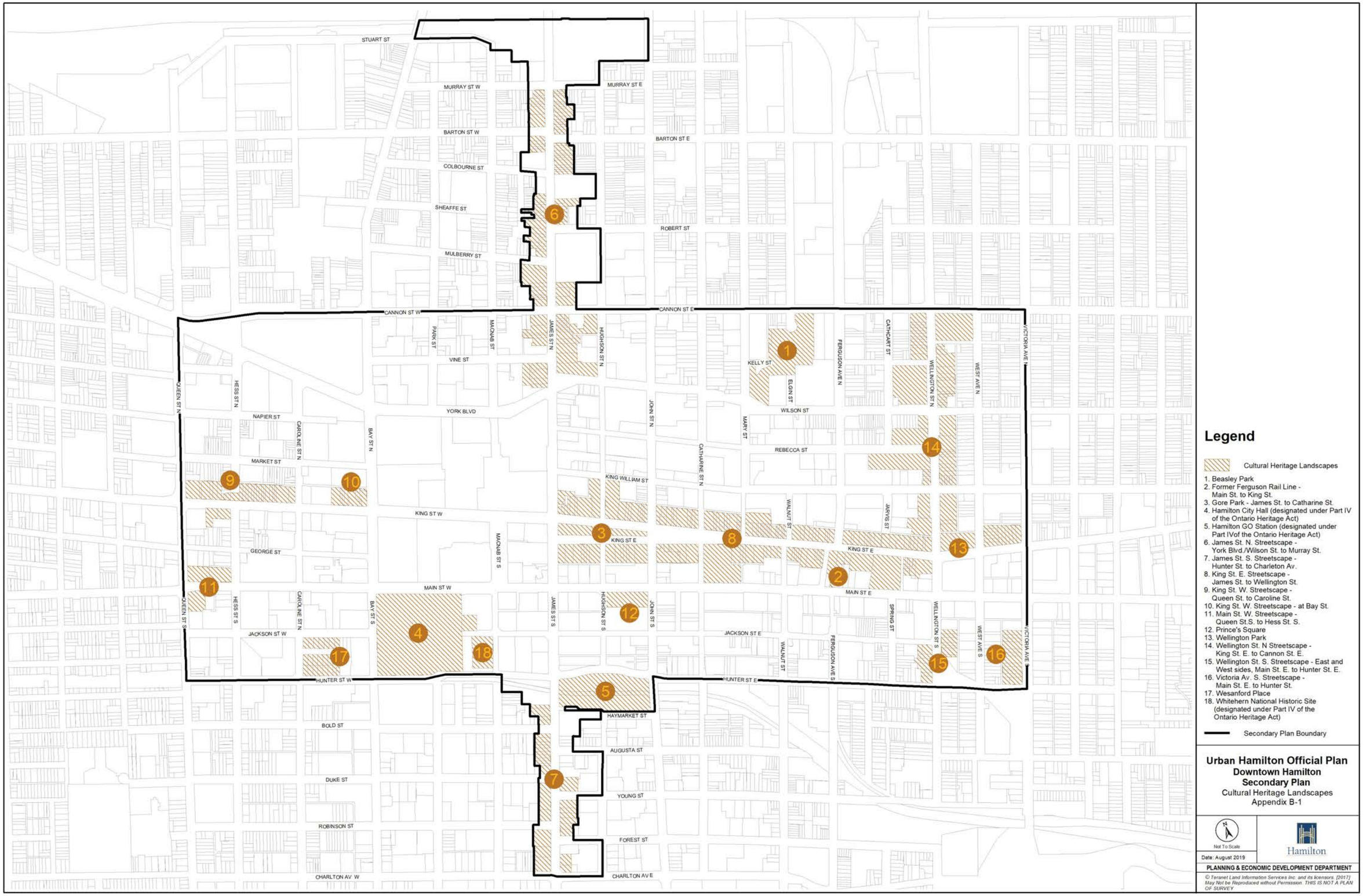
Planning Support Documents



Planning Support Documents



Planning Support Documents



Legend

Cultural Heritage Landscapes

1. Beasley Park
2. Former Ferguson Rail Line - Main St. to King St.
3. Gore Park - James St. to Catharine St.
4. Hamilton City Hall (designated under Part IV of the Ontario Heritage Act)
5. Hamilton GO Station (designated under Part IVof the Ontario Heritage Act)
6. James St. N. Streetscape - York Blvd./Wilson St. to Murray St.
7. James St. S. Streetscape - Hunter St. to Charleton Av.
8. King St. E. Streetscape - James St. to Wellington St.
9. King St. W. Streetscape - Queen St. to Caroline St.
10. King St. W. Streetscape - at Bay St.
11. Main St. W. Streetscape - Queen St.S. to Hess St. S.
12. Prince's Square
13. Wellington Park
14. Wellington St. N Streetscape - King St. E. to Cannon St. E.
15. Wellington St. S. Streetscape - East and West sides, Main St. E. to Hunter St. E.
16. Victoria Av. S. Streetscape - Main St. E. to Hunter St.
17. Wesanford Place
18. Whitehern National Historic Site (designated under Part IV of the Ontario Heritage Act)

Secondary Plan Boundary

Urban Hamilton Official Plan
Downtown Hamilton Secondary Plan
Cultural Heritage Landscapes
Appendix B-1

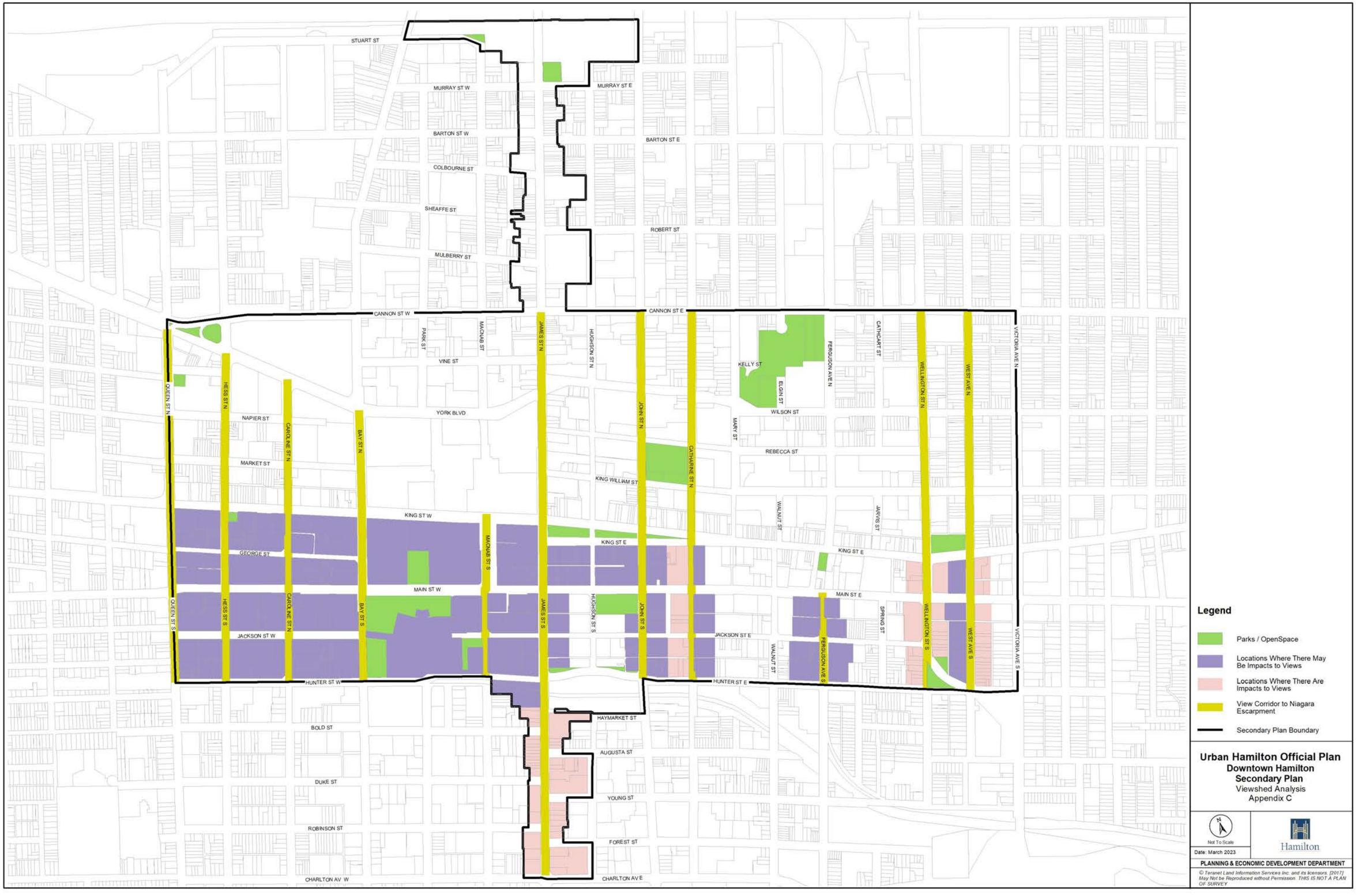
Not To Scale

Date: August 2019

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Support Documents



Planning Support Documents

Note: Measurements are in meters above sea level.

Legend

- Downtown Elevation Study Lines
- Secondary Plan Boundary

Urban Hamilton Official Plan
Downtown Hamilton Secondary Plan
Niagara Escarpment Height
Appendix D

Not To Scale
Date: March 2023

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Support Documents

NOTE: Building Heights are represented by the number illustrated on the map. All Building Heights are in metres.

Legend

#	Maximum Building Heights in metres
	Parks/Open Space
▪▪▪▪▪	Planning Boundary

Schedule F - Figure 1
Zoning By-law No. 05-200
Maximum Building Heights

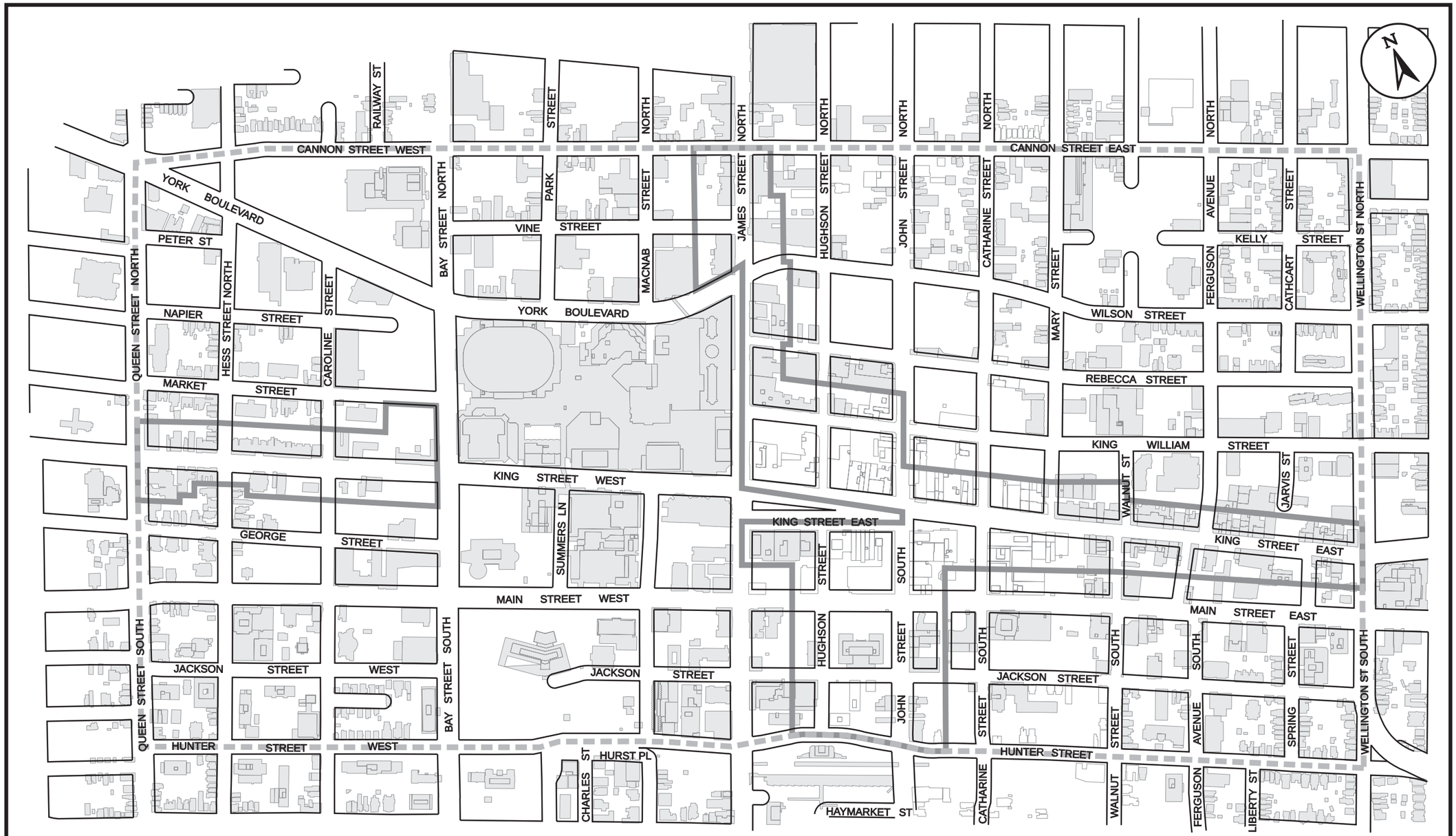
Not To Scale

Date: March 2018

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Planning Support Documents



Legend

Planning Boundary

Heritage Character Zone

Note: The blocks shown represents the Right of Way and does not illustrate the actual road width

Figure 2:
Heritage Character Figure

Hamilton
Planning & Economic Development Department

N:\1T&c\1.Downtown_Renewal_Division\Downtown zoning by-law\Heritage Character Figure.cdr

Planning Support Documents

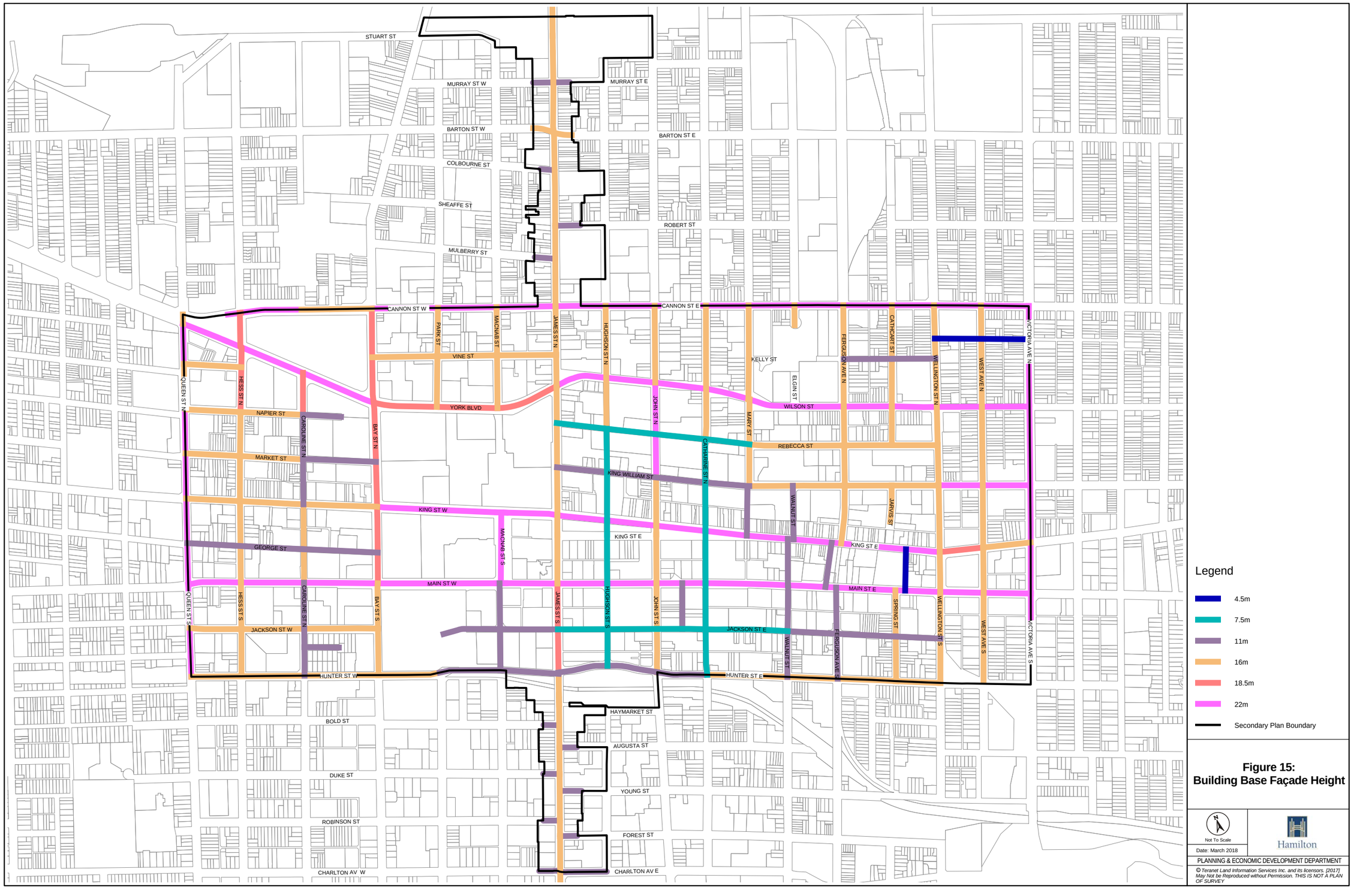


Figure 15:
Building Base Façade Height

Not To Scale

Date: March 2018

Hamilton

PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Wind Report

GRADIENTWIND
ENGINEERS & SCIENTISTS

March 1, 2024

Hamilton 188 GP Inc. c/o Vantage Developments Inc.
9 Kintyre Avenue,
Toronto, ON M4M 1M2

Re: Pedestrian Level Wind Opinion Letter
188 Cannon Street East, Hamilton, ON
GWE File No.: 24-021 PLW OL

Gradient Wind Engineering Inc. (Gradient Wind) was retained by Hamilton 188 GP Inc. c/o Vantage Developments Inc. to undertake a preliminary pedestrian wind assessment for the proposed residential development located at 188 Cannon Street East in Hamilton, Ontario. This letter intends to provide a professional opinion regarding anticipated pedestrian wind conditions for the site based on drawings provided by Arcadis Architects Inc. in February 2024, consideration of existing and approved surrounding developments, statistical knowledge of the Hamilton wind climate, and experience with similar projects in Hamilton.

The development site is located on the southeast corner of the intersection of Cannon Street East and Ferguson Ave North. In the near-field, the site is surrounded primarily by low-rise residential buildings in all directions, with a 12-storey building at 80 Cathcart Street to the southeast and an 18-storey building to the south at 125 Wellington Street North. The far-field surroundings (beyond the near-field and within a two-kilometre radius) are mostly characterized by low-rise suburban exposure in all directions, with Lake Ontario located at approximately 2.0 kilometres distant in the north quadrant, the Hamilton escarpment at less than 1.5 kilometres in the south quadrant, and the denser Hamilton downtown core n the southwest quadrant. The site wind conditions are also influenced by the local wind climate, defined statistically in a figure following the main text.

The proposed development comprises a 32-storey tower building with an approximate rectangular planform. Two existing 2-storey retail spaces are retained at the southwest corner of the site. A loading area, surface parking, and four levels of above-ground parking are accessed via the alleyway along the

GRADIENTWIND
ENGINEERS & SCIENTISTS

east elevation. The ground floor comprises a lobby to the northwest fronting Cannon Street East, an indoor amenity to the north, and building support services in the remaining spaces. Levels 2-5 comprise residential units along the west elevation, in addition to the internal parking. The floorplate sets back from all elevations at Level 6, accommodating outdoor and indoor amenities to the southeast, and residential units with private terraces elsewhere. The residential floorplate rises to the full height, with a setback from the south at Level 13, and is completed with a mechanical penthouse.

Pedestrian wind comfort is determined by three main factors, including (i) the geometry and orientation of the study building, (ii) shielding and channeling effects created by the massing and relative spacing of surrounding buildings, and (iii) the alignment of the study building with respect to statistically prominent wind directions. For Hamilton, the most common winds occur from the southwest, followed by those from the northeast. The directional preference and relative magnitude of wind speed change somewhat from season to season.

Prominent southwesterly and northeasterly winds will approach the site with minimal obstruction due to the low-rise surrounding massing in these directions, notably to the immediate west with the adjacent open park and parking space, however, the more distant downtown core and escarpment will also serve to buffer these winds. The proposed development will rise significantly above the surrounding massing, resulting in the capture and redirection of higher-level wind flows toward the grade, although this will be somewhat mitigated by the tower setback from the podium façade along all elevations at Level 6.

Overall, the various sidewalk and parking areas along Cannon Street East and Ferguson Avenue North (Tags A & B) are generally expected to be comfortable for standing or better during the summer and strolling or walking during the winter, with the windiest conditions occurring at the intersection where prevailing winds will accelerate around the northwest corner of the building. The noted conditions are acceptable. Closer to the building façade and including the building access points (Tags B & C) conditions are expected to be slightly calmer with added protection provided by the study building, generally being comfortable for standing or strolling on a seasonal basis, with modestly windier conditions possible at the building corners. Should the primary lobby entrance at the northwest building corner exceed the standing criterion, a wraparound canopy would be recommended. The alleyway to the east and private yards to the south of the building (Tags E & F) are somewhat more sheltered from prevailing winds and expected to be suitable primarily for sitting during the summer and standing or better during the winter, which is acceptable.

Wind Report

Concerning the Level 6 outdoor amenity (Tag G), the terrace is exposed to prominent southwesterly and northeasterly wind, hence, it is expected to experience a mix of sitting and standing conditions during the summer. To ensure conditions suitable for sitting or more sedentary activities over the full terrace, it will likely be necessary to provide mitigation, such as raised perimeter guards and overhead pergolas near seating areas, particularly in the southeast corner area, where windier conditions are likely to occur.

Overall, the site is expected to experience minor exceedances of the wind comfort criteria with conventional mitigatory solutions being applicable. The foregoing opinions are based on knowledge and experience of wind flow patterns around buildings. While these statements are expected to be reliable for the site as a whole. This concludes our preliminary assessment. Please advise the undersigned of any questions or comments.

Sincerely,

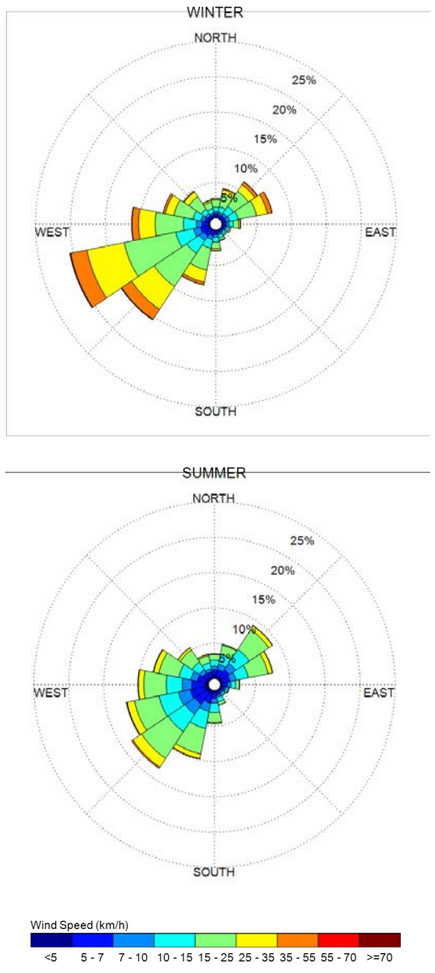
Gradient Wind Engineering Inc.

Cristiano Kondo, MESc.,
Junior Wind Scientist

Andrew Sliasas, M.A.Sc., P.Eng.,
Principal

24-021 PLW OL

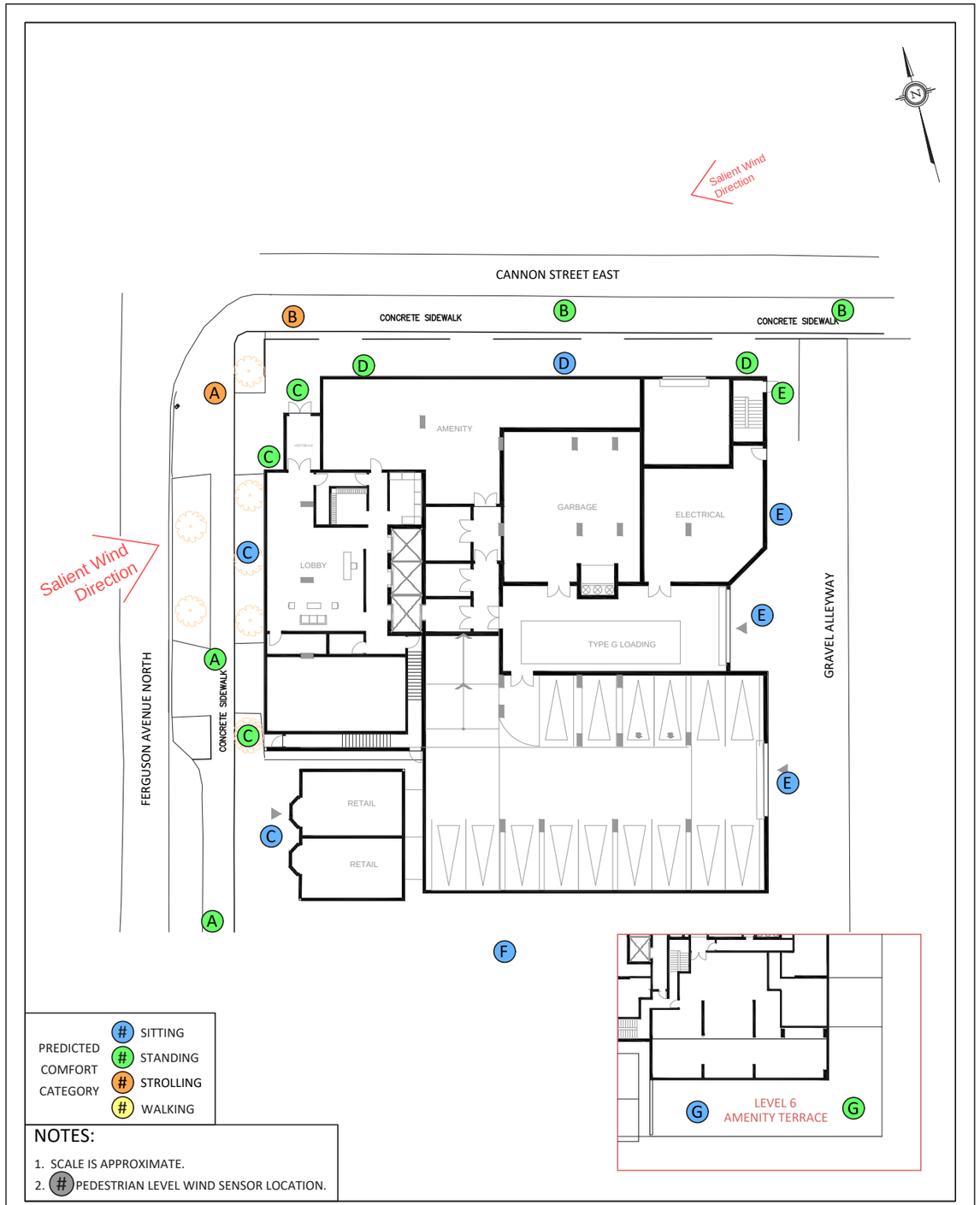
SEASONAL DISTRIBUTION OF WINDS FOR VARIOUS PROBABILITIES
HAMILTON INTERNATIONAL AIRPORT, HAMILTON, ONTARIO



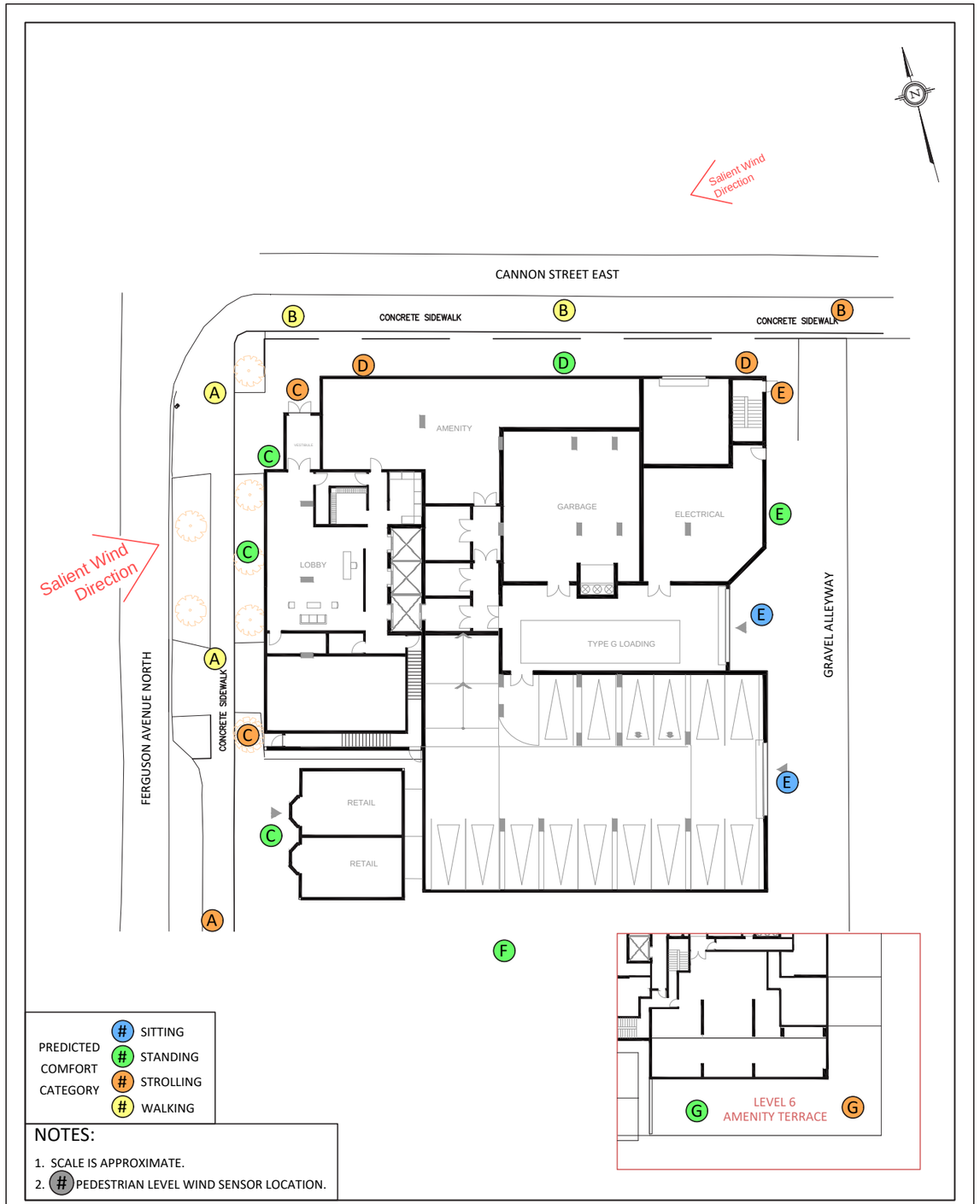
Notes:

1. Radial distances indicate the percentage of time of wind events.
2. Wind speeds are mean hourly in km/h measured at 10 m above the ground.

Wind Report



GRADIENTWIND ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT: 188 CANNON STREET EAST, HAMILTON PEDESTRIAN LEVEL WIND ASSESSMENT		DESCRIPTION: FIGURE 1: SITE PLAN SUMMER - PEDESTRIAN COMFORT PREDICTIONS
	SCALE: N.A.	DRAWING NO.: GW24-021-PLWOL-1	
	DATE: MARCH 1, 2024	DRAWN BY: C.K.	



GRADIENTWIND ENGINEERS & SCIENTISTS 127 WALGREEN ROAD, OTTAWA, ON 613 836 0934 • GRADIENTWIND.COM	PROJECT: 188 CANNON STREET EAST, HAMILTON PEDESTRIAN LEVEL WIND ASSESSMENT		DESCRIPTION: FIGURE 2: SITE PLAN WINTER - PEDESTRIAN COMFORT PREDICTIONS
	SCALE: N.A.	DRAWING NO.: GW24-021-PLWOL-2	
	DATE: MARCH 1, 2024	DRAWN BY: C.K.	

Functional Servicing Memo

A. J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS

March 8, 2024

City of Hamilton
Growth Management Division
City Hall, 71 Main Street W., 6th Floor
Hamilton, ON L8P 4Y5

Attn: (*Monir Moniruzzaman, P.Eng)*

Re: 188 Cannon Street East– Functional Servicing Memo
City of Hamilton

A.J. Clarke and Associates Ltd. (AJC) have been retained by 188 Hamilton GP Inc., c/o Vantage Developments Inc. to prepare a *Functional Servicing Memo* in support of the proposed re-development of 188 Cannon Street East in the City of Hamilton for your consideration and approval.

This brief will investigate the existing services located along the frontage of the development to provide sufficient sanitary, water and stormwater quantity and quality control to meet the City criteria for the redevelopment Plan.

A copy of the Site Plan for the project, prepared by ARCADIS, is attached in **Appendix A**.

1. General

The proposed re-development site consists of a thirty-two-storey tower with a five-storey base with commercial units on the first floor and 384 residential units above. This development is bound by Cannon Street East to the North, Ferguson Avenue North to the West and Alley way to the East. The proposed site is comprised of 0.189 ha. It is legally described as Lots 70, and part of Lots 69 & 71, Registered plan No. 255. The location is depicted in **Figure 1**.

25 Main Street West, Suite 300, Hamilton, Ontario, L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
Toronto Line: 905 845-0606
e-mail: ajc@ajclarke.com

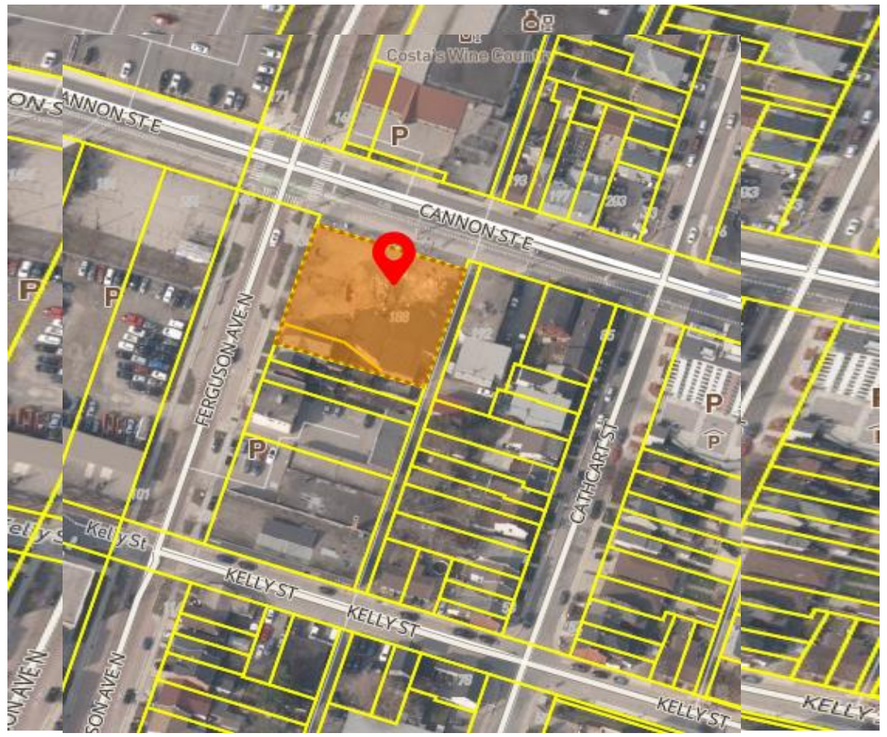


Figure 1 - Site Location Plan

There are two 2-storey buildings currently built on the property. The existing garage and paved parking area cover the rest of the property. The topography is characterized as having a gradual slope draining towards Cannon Street East from North and Ferguson Avenue North from West. The drainage area is almost equally split between Ferguson Avenue North and Cannon Street East.

The proposed site plan for this development is contained within **Appendix A** for reference. The objective of this report is to illustrate how the proposed development can be serviced for water, sanitary and stormwater using existing infrastructure and to make recommendations on the requirements of stormwater management.

2. Existing Services

The subject lands are fully developed and there is existing mainline infrastructure on Cannon Street East from North and Ferguson Avenue North from West that services the existing buildings and area.

Functional Servicing Memo

The following services exists on **Ferguson Avenue North**:

- 200mm watermain.
- 250mm sanitary sewer draining northerly.
- 525mm storm sewer draining northerly.

The following services exists on **Cannon Street East:**

- 200mm watermain.
- 300mm combined sewer for sanitary connection draining easterly.

Currently, 188 Cannon Street East is being serviced by the infrastructure on Ferguson Avenue North, as well as the two 2 storey houses (134 & 136 Ferguson Avenue North).

The proposed redevelopment is designed to be serviced from Ferguson Avenue North.

3. Watermain

The existing 200mm watermain on Ferguson Avenue North will be utilized for this site.

Details of the proposed watermain layout are shown on the Preliminary Plan of Services contained within **Appendix A**. It should be noted that the proposed watermain connection to the mainline is 200mm in diameter.

Recent hydrant testing was not available at this time and as such capacity will be confirmed once available. However, the hydrant nearest the site (130 Ferguson Ave N) was tested by City staff on July 23, 2012 and yielded a theoretical flow available at 20 psi of 3577 igpm (~271 L/s). These results would suggest adequate capacity in the existing system to service this development. This will be confirmed once hydrant testing is feasible. If the update results suggest a lack of capacity then a watermain hydraulic analysis will take place to determine the necessary works to achieve the required capacity. It should be noted that based on OBC calculations and City target rates this development is only anticipated to require 150 L/s in fire flow capacity.

It is anticipated that this site can be serviced for water in accordance with the requirements of the City of Hamilton based on connections to the existing municipal watermains adjacent to the site.

4. Sanitary Sewers

The residential dwellings along with the commercial units will be serviced for sanitary flows through an existing 250mm sanitary sewer on Ferguson Avenue North. The proposed 200mm

sanitary lateral will connect to the sanitary sewer system. Below shows the wastewater assessment from the site based on preliminary site information provided by the Architect.

Wastewater Assessment:

Apartments, Condominiums, Other Multi-family Dwellings – per person = 275 volume, L/d

From section 3.1.17.1 'Occupant Load Determination' clause (b), "two persons per sleeping room or sleeping area in a *dwelling unit or suite*",

141	studio and one-bedroom units	= 282 people
59	one-bedroom + den units	= 236 people
163	two-bedroom units	= 652 people
1	two-bedroom + den units	= 6 people
20	three-bedroom units	= 120 people
	Total	= 1,296 people

= 1,296 people x 275 L/day = 356,400 L/day = 4.125 L/s (0.004m^3/s)

Converting this population to a density, and given the site area of 0.189 ha, a population density of 6860 pp/ha has been assigned for the development. The peak Factor shall be obtained using the Babbitt Formula:

M = 5/P^0.2
where M = peak factor where 2<M<5
P = number of persons in thousands contributing to the sewer

However, through discussions with City staff on similar projects in the combined sewershed a peaking factor of 2 was used as a peaking factor near 5 exceeded the predevelopment storm flow rates. Based on the population per area hectares and a peaking factor of 2, the sanitary design flow from the site was calculated to be 10.92 L/s (0.011m^3/s). The sanitary sewer design sheet is contained within **Appendix C** for reference.

5. Stormwater Assessment

Recent topographic survey of the subject lands is contained within **Appendix A;** completed by A.J. Clarke and Associates Ltd. signed January 12, 2024. The topography of the existing site is characterized as having gradual slopes draining outwards towards Ferguson Avenue North and Cannon Street East. The site is almost entirely impervious in the pre-development conditions. As mentioned above the drainage area is split for the site fronting Ferguson Avenue North and Cannon Street East. However, under proposed conditions most of the site will drain towards Ferguson Avenue North. As such, the 2-year pre-development rate was determined using the

Functional Servicing Memo

drainage areas directed to Ferguson Avenue North and ultimately the allotted capacity to this mainline sewer. The pre-development drainage rate for Ferguson Avenue North was calculated using MIDUSS v2 – the results can be seen in **Table 1** below; as well, output files for this analysis can be found in **Appendix B**. The Chicago 3-hour storm with Mount Hope IDF parameters was used for analysis and the results of these simulations are contained below. The model has been run for a 2-year storm event.

Table 1: Pre- Development Hydrologic Simulation Summary – Ferguson Avenue North

Return Period (year)	**2**
Peak Flow Rate (m^3/s)	**0.015**

Under the proposed conditions, the site will be entirely impervious, thus keeping the post-development condition the same as the pre-development condition. A 525mm storm overflow sewer within Ferguson Avenue North can be used to service the site for storm connection. Although the percent imperviousness for the drainage areas will not change from pre to post development conditions, the site is located within the combined sewershed and therefore quantity control is required to control the post development peak flows for the 100-year post development event to the 2-year pre-development flow rate less the anticipated increase in sanitary flows prior to discharging from the site.

The Preliminary Plan of Services, in **Appendix A**, shows the existing storm sewers along the frontage of the site and the proposed connection for the development.

Per the Sanitary Design Calculation Sheet (**Appendix C**) and Wastewater Assessment, the anticipated sanitary flows for the site equals 10.92 L/s (0.011 m^3/s) out letting to Ferguson Avenue North. This has been determined using a population density based off the Architectural unit counts in the tower as well as a peaking factor of 2. The target rate was then determined to be 0.004 m^3/s. This was determined by subtracting the post development sanitary flows from the 2-year pre-development target rate for each catchment area.

Pre-dev (0.015 m^3/s) – post-dev. San. flows (0.011 m^3/s) = **0.004 m^3/s as a Target Rate.**

Underground storage has been proposed on site in the form of a cistern within the building foundation. Orifice control will be used in the form of a 35mm orifice release and will be placed at the downstream outlet of cistern, to provide the required stormwater quantity control. An overflow pipe will be provided above the 100-year water elevation in the cistern should there be a blockage to provide outlet relief. The storm event under proposed conditions has been modeled in MIDUSSv2_ to estimate the required storage to achieve 2 year pre-development peak flow rates less the anticipated increase in sanitary flows as a target outflow during a 100-year storm event, in the post-development condition. The Chicago 3-hour storm with Mount Hope IDF parameters for a 100-year storm event was used for analysis and the results of these simulations are contained in **Table 2,** below. The MIDUSSv2_ results are attached in **Appendix B**.

Table 2: Post- Development Hydrologic Simulation Summary – Ferguson Avenue North

Inflow to Storage (m^3/s)	Outflow from Storage (m^3/s)	Target Flow (m^3/s)	Required Underground storage (m^3)	Orifice diam. (mm)
0.078	**0.004**	**0.004**	**102**	**35**

For the tower out letting to John Street North, proposing a 35mm outlet control orifice will restrict the flows to 0.004m^3/s and in combination with the anticipated sanitary flows does not exceed the total allowable release rate of 0.015m^3/s. A storage requirement of 102 m^3 will be required on site which will be provided by the noted Cistern.

Minor storm flows will be captured by roof drainage prior to out letting to the above cistern within the building and ultimately to the existing 525mm pipe storm overflow sewer within Ferguson Avenue North. A storm sewer design calculation sheet for the proposed underground network has been attached in **Appendix C**.

6. Erosion and Sediment Control Procedures

Siltation from surface runoff from the site can be prevented with the use of silt fences, placed along the boundaries, where runoff will accumulate. Other localized areas may also require sedimentation control fencing, which would be determined at the construction stage. It will also be necessary to prevent silt from entering the storm sewer system via street catch basins. A silt sack or equivalent can be inserted under the grate of each street catch basin.

In order to reduce the amount of sediment reaching the street, it is suggested that the grade at the property line be left approximately 200mm below the top of the curb until such time as ground cover is about to be established. This will aid in the settlement of sediment, thus reducing sediment flow to the streets. Should building activity over the entire site not commence soon after the underground servicing and the roadworks are complete, arrangements should be made to temporarily seed those areas not covered with vegetation.

Regular monitoring of the site controls and periodic maintenance will be required to ensure that the erosion and sediment controls remain effective. All practices shall be in accordance with the "Erosion and Sediment Control Guidelines for Urban Construction", GGHA CAs, December 2006.

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7. Recommendations and Conclusions

The recommendations and conclusions of this report concerning the ability to service this development for storm, sanitary and water are as follows:

a. Grading will be carried out in accordance with the City of Hamilton engineering design standards.

b. A 250mm storm combined sewer pipe and a 525mm Pipe storm overflow sewer within Ferguson Avenue North exist with the capacity to service the proposed development's stormwater and sanitary flow. Stormwater management will be required to control 100-year post-development peak flows to match 2-year pre-development conditions less the anticipated increase in sanitary flows for each catchment area. The required stormwater quantity control can be provided by the cistern storage unit; with orifice control proposed on the cistern outlet. Cistern storage was proposed due to constraints with insufficient subsurface space. Quality control will not be required on site as there are no opportunities for contamination to enter the system from the proposed building footprints.

c. An existing 200mm watermain exists within Ferguson Avenue North to service the development. Hydrant flow testing will be completed to demonstrate sufficient flow within the system to provide both domestic and fire flow requirements.

d. Erosion and sediment control measures are proposed to ensure that the amount of silt eroded from the subject development during rainfall events is kept to a minimum.

All of which is respectfully submitted.

Brad Clarke, P.Eng.

APPENDIX A:

Site Plan

Topo Plan

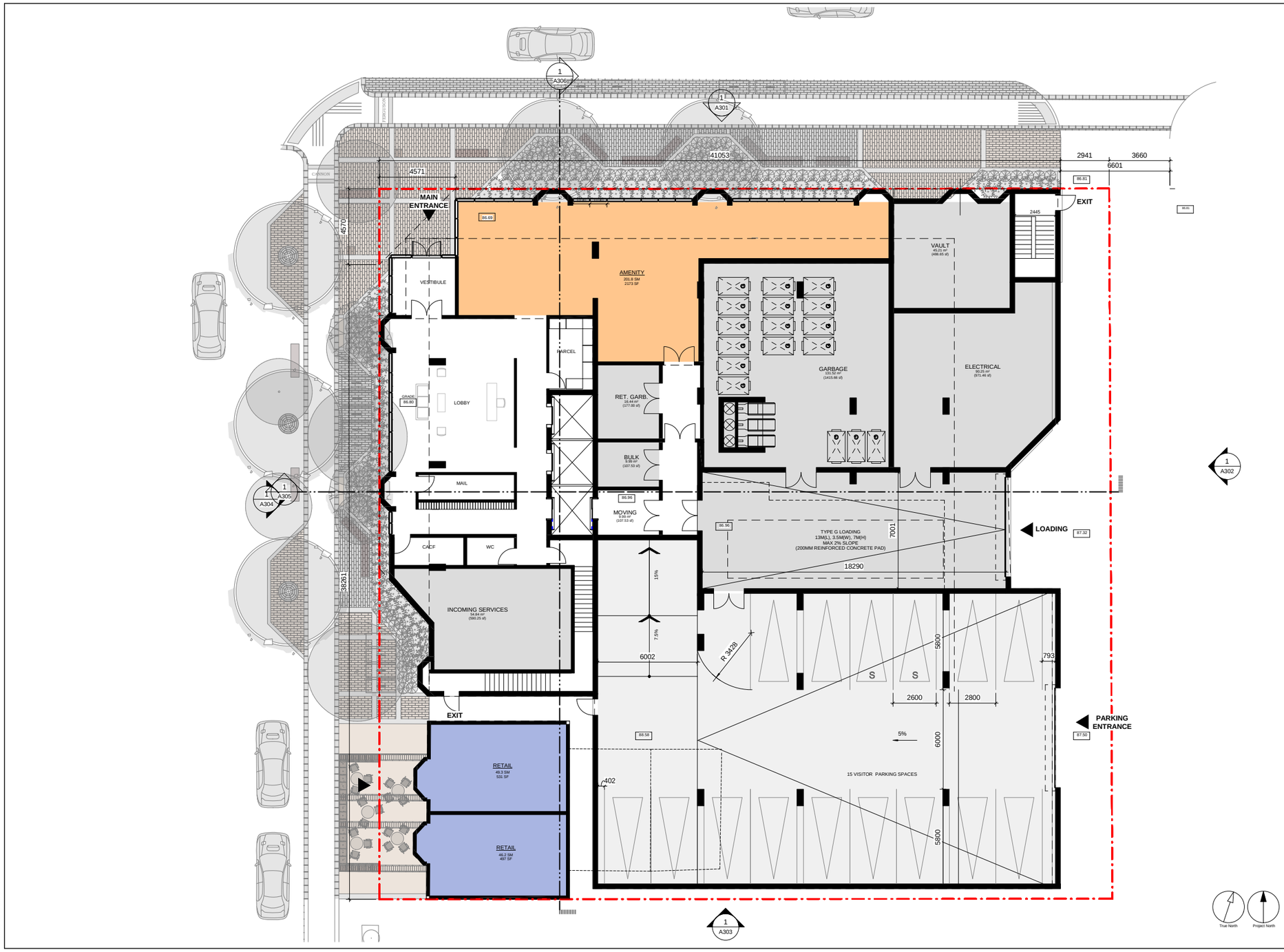
Preliminary Servicing Plan

Preliminary Grading Plan

Preliminary Erosion and Sediment Control Plan

Preliminary Storm Drainage Area Plan

Functional Servicing Memo



2024-03-05 12:04:39 PM

CLIENT
Vantage Development Corporation

ISSUES

No.	DESCRIPTION	DATE

CONSULTANTS

SEAL

ARCADIS
55 St. Clair Avenue West - 7th Floor
Toronto ON M4V 2Y7 Canada
tel 416 596 1930
www.arcadis.com

PROJECT
188 Cannon St. E
188 Cannon St. E
134-136 Ferguson Ave. N
Hamilton, ON

PROJECT NO:
145796

DRAWN BY:	CHECKED BY:
ES	
PROJECT MGR:	APPROVED BY:
ES	

SHEET TITLE
GROUND FLOOR / SITE PLAN

SHEET NUMBER
A201

ISSUE

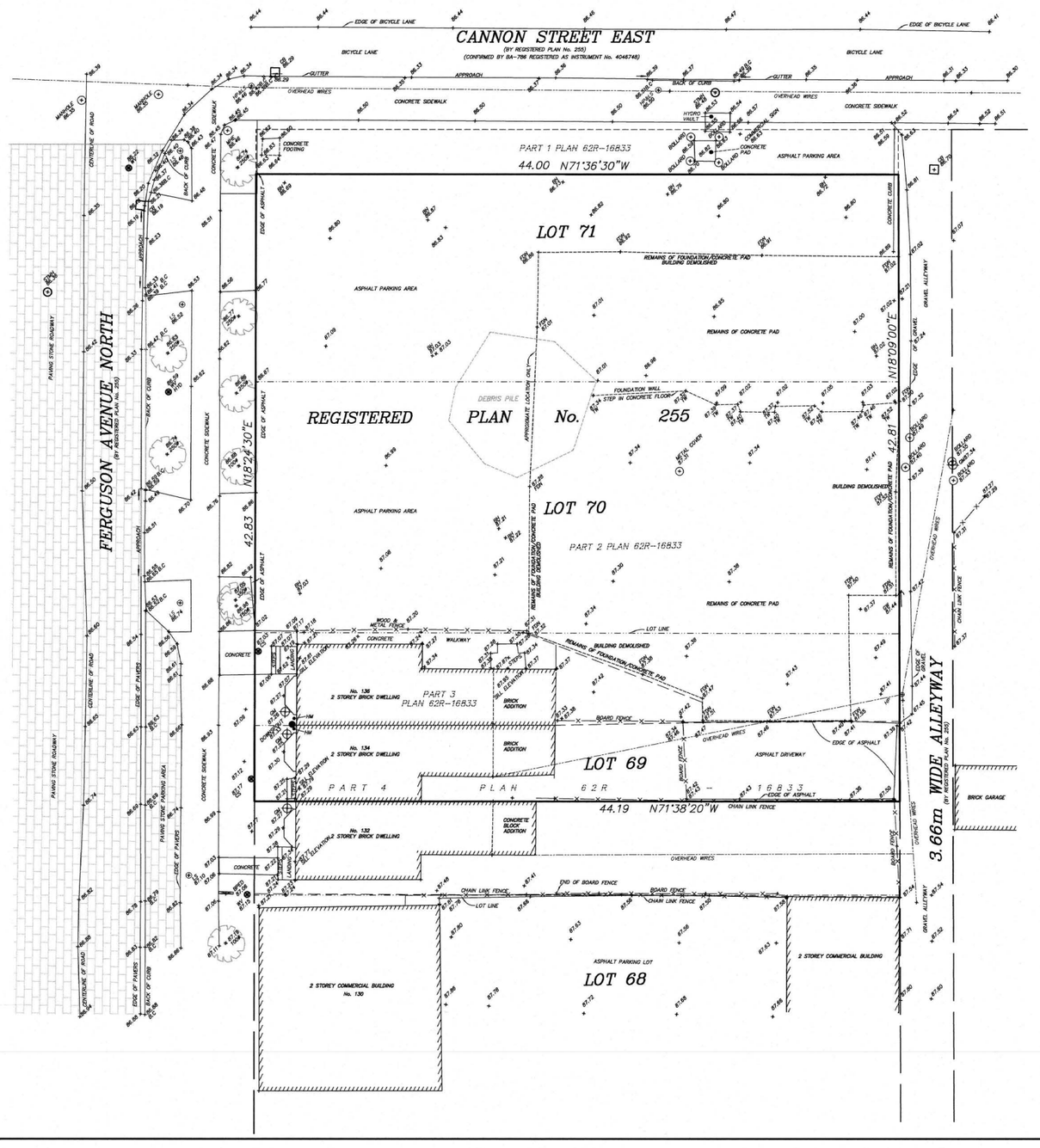
Autodesk Docs://ACA-001457/96-188 Cannon St/145796-188C-Arch/05-01-MAN-A22.rvt

SCALE CHECK
10mm
1m

Functional Servicing Memo

SKETCH SHOWING ELEVATIONS & EXISTING CONDITIONS OVER
188 CANNON STREET EAST
IN THE
CITY OF HAMILTON
SCALE 1:200
0 5 10 metres

THE ABOVE LANDS ARE LEGALLY DESCRIBED AS:
LOT 70 AND PART OF LOTS 69 & 71
REGISTERED PLAN No. 255



R-4880A

NOTE:
THE BOUNDARY INFORMATION SHOWN ON THIS SKETCH IS BASED ON COMPILED SURVEY INFORMATION FROM THE LAND REGISTRY OFFICE AND ON FILE IN THIS OFFICE – IT IS NOT BASED ON AN ACTUAL FIELD SURVEY

NOTE:
ELEVATION & EXISTING CONDITION INFORMATION SHOWN ON THIS SKETCH WERE OBTAINED BY ACTUAL FIELD SURVEY DATED DECEMBER 20, 2023

BENCH MARK

CITY OF HAMILTON
MONUMENT No: 07720100049

RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.

ELEVATION= 85.227m CGVD 28:78

LEGEND:

B.C	DENOTES BACK OF CURB
WV	DENOTES WATER VALVE
HYD	DENOTES HYDRANT
CB	DENOTES CATCH BASIN
STMH	DENOTES STORM MANHOLE
HP	DENOTES HYDRO POLE
LS	DENOTES LIGHT STANDARD
GW	DENOTES GUY WIRE
BPED	DENOTES BELL PEDESTAL
CS	DENOTES CURB STOP
HM	DENOTES HYDRO METER
MHE	DENOTES ELECTRIC MANHOLE
BH	DENOTES BOREHOLE
FDN	DENOTES TOP OF REMAINS OF FOUNDATION OR CONCRETE PAD
GM	DENOTES GAS METER
250ø	DENOTES DIAMETER (mm)
	DENOTES DECIDUOUS

METRIC:
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

JANUARY 12, 2024
DATE

ASSOCIATION OF ONTARIO LAND SURVEYORS
N. P. MUTH
2038
NICHOLAS P. MUTH
ONTARIO LAND SURVEYOR

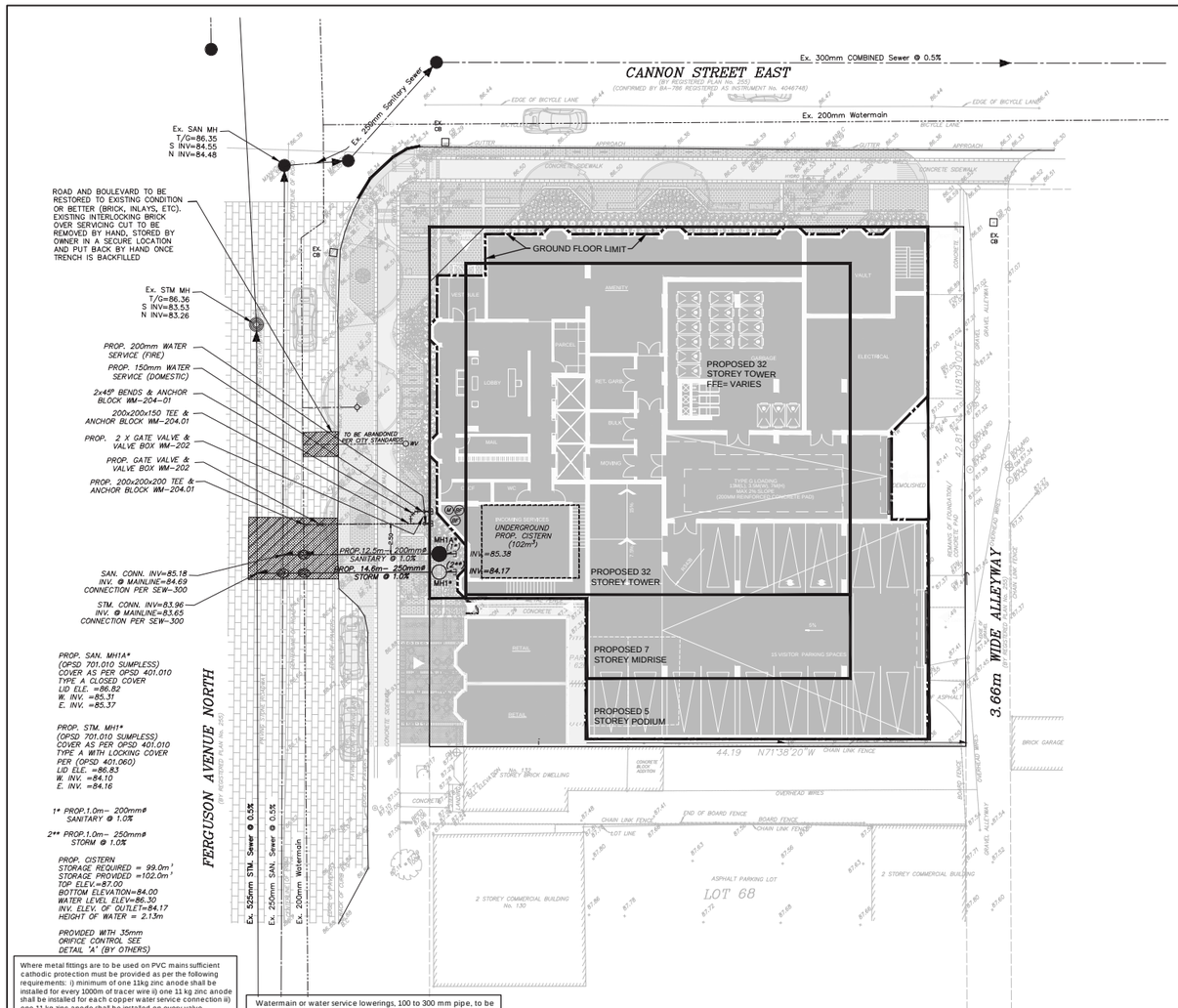
A. J. Clarke and Associates Ltd.
SURVEYORS • ENGINEERS • PLANNERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO, L8P 1H1
TEL. 905-528-8761 FAX 905-528-2289
email: ajc@ajclarke.com

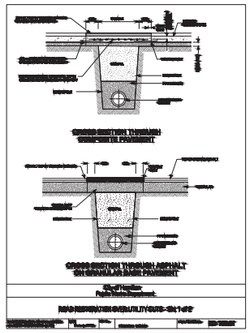
DRAWN BY:	CHECKED BY:	PROJECT No.	INDEX No.
MW	NPM	178262D	R-4880A

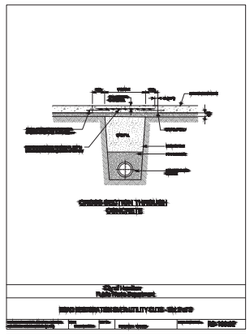
H:\Jobs\H-1to-5\HP\1255\188 Cannon Street E (178262D)\Current\R-4880A.dwg

Functional Servicing Memo

188 CANNON STREET EAST







NOTE:
FOR LAYOUT LOCATION OF BUILDINGS, ACCESS ROADS, PARKING AREAS, CURBS, SIDEWALKS, WHEELCHAIR RAMPS, RETAINING WALLS, ETC. REFER TO SITE PLAN .

STANDARD NOTES

A. SEWERS

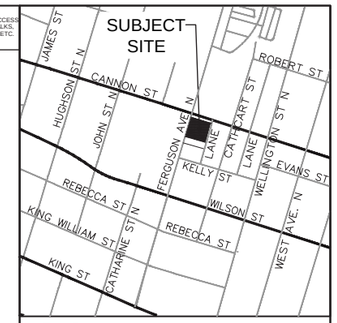
1. SANITARY & STORM SEWERS
a) Construction of storm sewers and private drains shall be in accordance with City Standards & Specifications Manual (Latest Edition) and Ministry of Environment (MOE) Guidelines (Latest Edition).
b) All proposed sewers, throughout their length from the main sewer to the building or place to be drained is to be laid, as nearly as practical, in a straight line in a trench at a right angle to the main sewer.
c) Proposed sewer inverts must be provided including the slope of the pipe.
d) Minimum allowable velocity 0.75 m/s for sanitary sewers and 0.80 m/s for storm sewer. Maximum allowable velocity 2.75 m/s for sanitary sewers and 3.65 m/s for storm sewers.
e) Sewer bedding, cover and backfill to be as per OPSD 802.010 with Granular 'A' material for both the bedding and cover.
f) On private property the minimum cover is to be no less than 1.2m.
g) Alternate materials may be acceptable provided approval has first been obtained from the City / Engineer.
h) Minimum horizontal separation between sewer and watermain to be 2.5m. Minimum vertical separation to be 0.50m when a watermain passes over or under a sewer and 0.25m when a watermain passes over a sewer.
i) PVC pipe will require special construction procedures as per City specifications. All sewers to be flushed prior to video inspection.
j) Manhole frames and covers shall be as per OPSD 401.010 (Storm-open, Sanitary-closed).
k) Sanitary sewer (200mm to 375mm dia.) shall be PVC pipe , CSA B182.2, SDR-35.
l) Storm sewer (300mm to 600mm dia.) shall be PVC pipe, CSA B182.2, SDR-35.
m) Storm sewer> 600mm dia. shall be concrete pipe. CSA A257.2 (as specified).
n) PVC (sanitary and storm) sewers are to be tested for deflection (mandrel passage) after installation. Sanitary sewers shall also be tested for leakage (low air pressure). Prior to assumption by the City, pipe deflection testing shall be repeated.
o) Catch basin connections to be 250mm dia. PVC pipe CSA B182.2, SDR-35 unless otherwise noted.
p) All manholes to be sumpless.

B. WATER SERVICES

1. WATER SERVICES
a) Construction of watermains and private services shall be in accordance with City Standards & Specifications Manual (latest edition) and Ministry of Environment (MOE) Guidelines (latest edition).
b) Water services are to be installed perpendicular to the existing City watermain and straight into the building.
c) PVC pipe in sizes 100mm through 300mm shall be Class 150 DR18 conforming to AWWA C900.
PVC watermain/service material, cathodic protection, tracer wire etc. must be as per Form 400.
d) For watermain deflection (PVC pipe):
i) maximum allowable deflection of 1.5 degrees per joint for up to 250mm diameter (the maximum allowable pipe deflection to be 1/2 the manufacturer's recommendations).
ii) each joint shall be deflected an equal amount.
e) All system components are to be either to City of Hamilton Standards or Ontario Provincial Standard Drawing (OPSD). Where a City Standard exists it shall be used in the place of the OPSD standard.
f) A scheduled Watermain shut down shall be at the discretion of the City and subject to the following:
i) Maximum 4 hours shut down of existing main at a time convenient to the City of Hamilton and abutting users.
ii) Contractor to give 48 hour prior notification using the "City of Hamilton Notice of Shutdown" for all affected areas.
iii) In the event a scheduled shutdown is canceled by the City of Hamilton, the contractor shall have no claims against the City.
g) Curb stops are to be installed on all water services.
h) Water services to be installed with a minimum cover of 1.6m.
i) Bedding and backfill as per WM-200.01 and WM-200.02 Granular 'A' material for mains and services greater than 50mm.
j) All new watermains are to be swabbed in accordance with City specifications
2. VALVE & VALVE BOX
a) All valve boxes to be set to proposed grade.
b) Gate valves and valve boxes for 100mm to 300mm as per WM-202.
3. ANCHOR BLOCKS
a) Anchor or thrust blocks are to be installed at all water service elbows, tees, plugs etc. For 300 mm diameter water services and smaller, anchor blocks are to be as per WM-204.01. For water services greater than 300 mm, anchor blocks are to be as per WM-204.02 to WM-204.13 as applicable.

C. ROADWORKS

1. COMPACTION REQUIREMENTS
a) All bedding and backfill material, road sub-grades, and generally all material used for lot grading and fill sections etc., shall be compacted to min. 100% SPD unless otherwise specified.
b) All granular road base materials shall be compacted to 100% S.P.D.
c) For all sewers and watermains in fill sections, the compaction shall be certified by a geotechnical engineer prior to laying of pipe.
2. PAVEMENT STRUCTURE
a) Pavement structure to be 40mm HL3, 65 mm HL8 on 150mm Granular 'A' and 350mm Granular 'B', TYPE II 100% crushed aggregate for Heavy Duty Sections.



KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049
RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.
ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.			
1.	For DESIGN REVIEW PANEL	B.C.	08/03/2024

REVISIONS

GENERAL NOTES
1 TENDERERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.
2 ALL ROCK LINE INDICATIONS SHOWN ON THE PLAN MUST BE VERIFIED BY THE CONTRACTOR.
3 CONTRACTOR SHALL VERIFY LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SEWERS AND WATERMAINS, PRIVATE SEWER DRAINS AND WATER SERVICES, GASMAINS, CABLE TV, HYDRO AND TELEPHONE DUCTS, ETC., AT START OF CONSTRUCTION.

Where metal fittings are to be used on PVC mains sufficient cathodic protection must be provided as per the following requirements: i) minimum of one 11kg zinc anode shall be installed for every 1000m of tracer wire ii) one 11 kg zinc anode shall be installed for each copper water service connection iii) one 11 kg zinc anode shall be installed on every valve, hydrant, bend, tee, sleeve, reducer, plug, cap, joint restraint, coupling, etc., connected to the PVC pipe.

RAINWATER LEADERS
All building roof drainage shall be directed to the storm sewer Cistern via the internal mechanical drainage system. All internal building drainage components shall be constructed as per the requirements of the Ontario Building Code.

SPECIAL NOTES
SN1. Existing utilities and underground services shown are approximate locations only. This drawing does not indicate all potential utilities and services. Contractor is responsible to have all utilities and services staked out by their respective locate and servicing companies prior to commencing work on site.
SN2. All existing utilities, services, and structures, etc. that are in conflict with proposed site services, to be relocated by others, unless otherwise indicated.
SN3. Removals and/or relocations of the existing utilities (i.e. hydro, communication, fiber optic cables, gas, etc.) shall be in strict accordance with the approved and "Issued for Construction" drawings prepared by qualified professional.

1. Internal water meter installations to be as per WM-210 with meter installed at floor level.
2. In accordance with the City of Hamilton Backflow Prevention By-law #10-103, a backflow prevention device must be installed and maintained on all existing and/or proposed water services to industrial, commercial, institutional properties and also multi-residential buildings over the height of 3 stories to prevent the flow of contaminants into the municipal drinking water system. Selection of the required backflow prevention device, specific to a property for a water service line that is 50mm or greater is to be determined through a "Cross Connection Survey", carried out by a qualified individual, under the terms and timelines, as described within the By-law. All Backflow Prevention Devices must be selected, and maintained in accordance with the City of Hamilton's Backflow Prevention By-law # 10-103 the manufacturer's specifications and the guidelines set out in the most recent version's of the AWWA Canadian Cross Connection Control manual and the CSA. B64.10 / 07 / B64. 10.1-07 Standards.
3. If a fire service is proposed to a building, the service must be protected against backflow in accordance with the CSA and Ontario Building Code. The backflow device must be installed at the service point of entry and shall be either a double check detector assembly or a reduced pressure detector assembly with a detector meter which is capable of measurements in cubic metres.

Watermain or water service lowerings, 100 to 300 mm pipe, to be as per WM-204.13.
Connection of the new 200 mm PVC water service to the municipal main is to be as per cut in tee and sleeve as per WM-207. 04.
The building's water meter (master meter) must be located at the service point of entry, at floor grade and be installed as per WM-210.
All existing water meters on systems to be abandoned must be removed and salvaged by the City of Hamilton. The servicing contractor should contact the water and Wastewater Section, Public Works Department at 905 546-2424 X4426 to arrange for the work.

All unused water services are to be properly abandoned. For services 50 mm and less "Water Service abandonment"
(i) Close mainstop
(ii) Remove curb stop.
(iii) Cut and crimp water service at either end.
For water services greater than 50 mm, using a tee and sleeve, the tee shall be removed and replaced with a section of pipe and sleeve. The replacement section of pipe shall be of the same material as the existing mainline watermain. Where a tapping valve was used the applicant should contact the City for further direction.

NOTE:
EXISTING SEWER LOCATIONS AND INVERTS WERE DERIVED FROM CITY OF HAMILTON ENGINEERING DRAWINGS INDEXED AS 03-H-30(1), 87-H-1, 5 & 99-W-38-_2. LOCATIONS OF SEWERS AND INVERTS ARE APPROXIMATE ONLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND IN THE FIELD MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

Molded PVC fittings for pipe sizes 100mm to 300mm shall conform to AWWA C900 and certified to CSA B137.2.

Fabricated fittings 250mm and 300mm shall be manufactured from segments of AWWA C900, Class 150 (DR18). PVC pipe bonded together and over-wrapped with fibreglass-reinforced polyester to meet the requirements of CSA B137.3.

For all sewers and watermains in fill sections, the compaction shall be certified by a Geotechnical Engineer prior to laying of pipe.

Minimum horizontal separation between water services/mains and sewer drains and municipal sewer mains shall be 2.5m measured from the closest pipe edge to closest pipe edge. Vertical separation where water service/main passes over a sewer drain or municipal sewer main must be a minimum of 0.25m unless greater separation is required to provide for proper bedding and structural support. Water services/mains passing under sewer drains or municipal sewer mains must have a separation of 0.5m between the invert of the sewer main/drain and the crown of the waterservice/main. All water services to be installed with a minimum of 1.6m cover. Sewer drains to be installed with a minimum cover of 2.20m at the property line below the final road grade or at such higher elevation only as may be necessitated by the level of the main sewer. On private property the minimum cover for sewer drains is to be no less than 1.2m.

Sewer Notes
All catch basins are to be as per OPSD 705.010 (single) and/or OPSD 705.020(double) modified with a gos trap as per SEW-304.
All existing unused sewers to property being redeveloped, in whole or in part, must be removed from municipal property i.e. road allowance etc., with an appropriate repair to which it connected, and either removed from private property or abandoned in accordance with City minimum requirements i.e. plugging at either end with a minimum 300 mm concrete.

Upon completion of installation, the Contractor shall perform a pressure test on the watermains as per FORM 400.

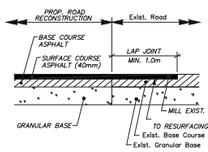
Tracer wire shall be installed with PVC pipe in accordance with Form 400. It shall be 12-gauge TW75, TWU75 or RW90XLPE coated copper and shall be positioned along the top of the pipe and fastened at 6 metre intervals. The wire is to be installed between each valve and/or the end of the new PVC watermain. Joints in the wire between valves are not permitted. At each gate valve a loop wire is to be brought up inside the valve box to the cap. The tracer wire shall be brought to the surface at the secondary valve on all fire hydrants. The tracer wire shall also be connected to the cathodic protection system as required.

Approval of this drawing is for material acceptability and compliance with municipal and provincial specifications and standards only. Approval and inspection by the City of the works does not certify the line and grade of the works and it is the owner's responsibility to have their Engineer certify this accordingly.

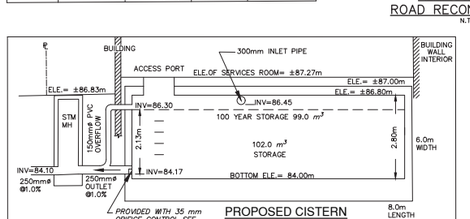
Testing Requirements for PVC Sewers
Infiltration/exfiltration testing will be carried out on all sanitary sewers, using either water or low air pressure in accordance with OPSS 410.07. 15.02.
PVC sanitary sewers shall be subjected to a mandrel test at the time when the sewer is accepted as complete by the City. Maximum allowable deflection of the mainline sewer shall be 5%. A deformation gauge (PIG) test in accordance with OPSS 410.07.15.05 shall be carried out a minimum of thirty days after the sewer trench has been backfilled or prior to paving of roadways.

A reduced pressure zone Backflow Preventer (WATTS SERIES 909 or approved equal) is required on the temporary supply lines used for filling and flushing or swabbing of watermains. Watermain is to be tested prior to connection to existing watermains using temporary caps or plugs. Pipe closures, where required, are to be supplied by the Contractor. The Contractor will also supply and install all adaptor pieces in order to connect to existing watermains. Upon completion of installation, the Contractor shall perform a pressure test on the watermains as per FORM 400.

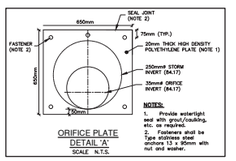
CROSSING SCHEDULE				
CROSSING No.	BOTTOM OF PIPE	TOP OF PIPE	DIFFERENCE	W/M LOWERING REQUIRED
C1	±84.70(SAN)	84.23 (STM)	0.47m	NO
C2	±84.50(WM)	84.25 (STM.)	0.25m	NO
C3	85.20 (SAN.)	±84.70(WM)	0.50m	NO



LAP JOINT FOR ROAD RECONSTRUCTION
N.T.S.



PROPOSED CISTERN
SCALE N.T.S.

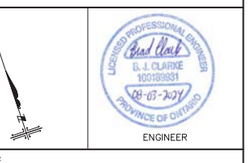


ORIFICE PLATE DETAIL 'A'
SCALE N.T.S.

LEGEND
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED DRIVEWAY LOCATION
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- GAS LINE
- BELL LINE
- HYDRO LINE
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- WATERMAIN TEE (PROPOSED / EXISTING)
- 45° WATERMAIN ELBOW (PROPOSED/EXISTING)
- PROPOSED CURB & GUTTER
- PROPOSED 1.5m SIDEWALK
- EXISTING CURB & GUTTER
- PROPOSED FENCE
- PROPOSED METAL SCREEN
- PROPOSED RETAINING WALL
- EXISTING LIGHT STANDARD
- PLUG (PROPOSED / EXISTING)
- PROPOSED CHECK VALVE CHAMBER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER PIPE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER PIPE
- EXISTING STORM MANHOLE
- PROPOSED WATER METER (100mm COMPOUND)
- PROPOSED BACKFLOW PREVENTER
- CROSSING INFORMATION
- RESTORATION AS PER CITY OF HAMILTON STANDARDS RD-100.01 & RD-100.02 & CITY OF HAMILTON ROAD CUT PERMIT

Contractor to clean existing roadways of sediments resulting from construction traffic from the site each day.

SCALE 1: 200
0 5 10 20 30



ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

A.J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

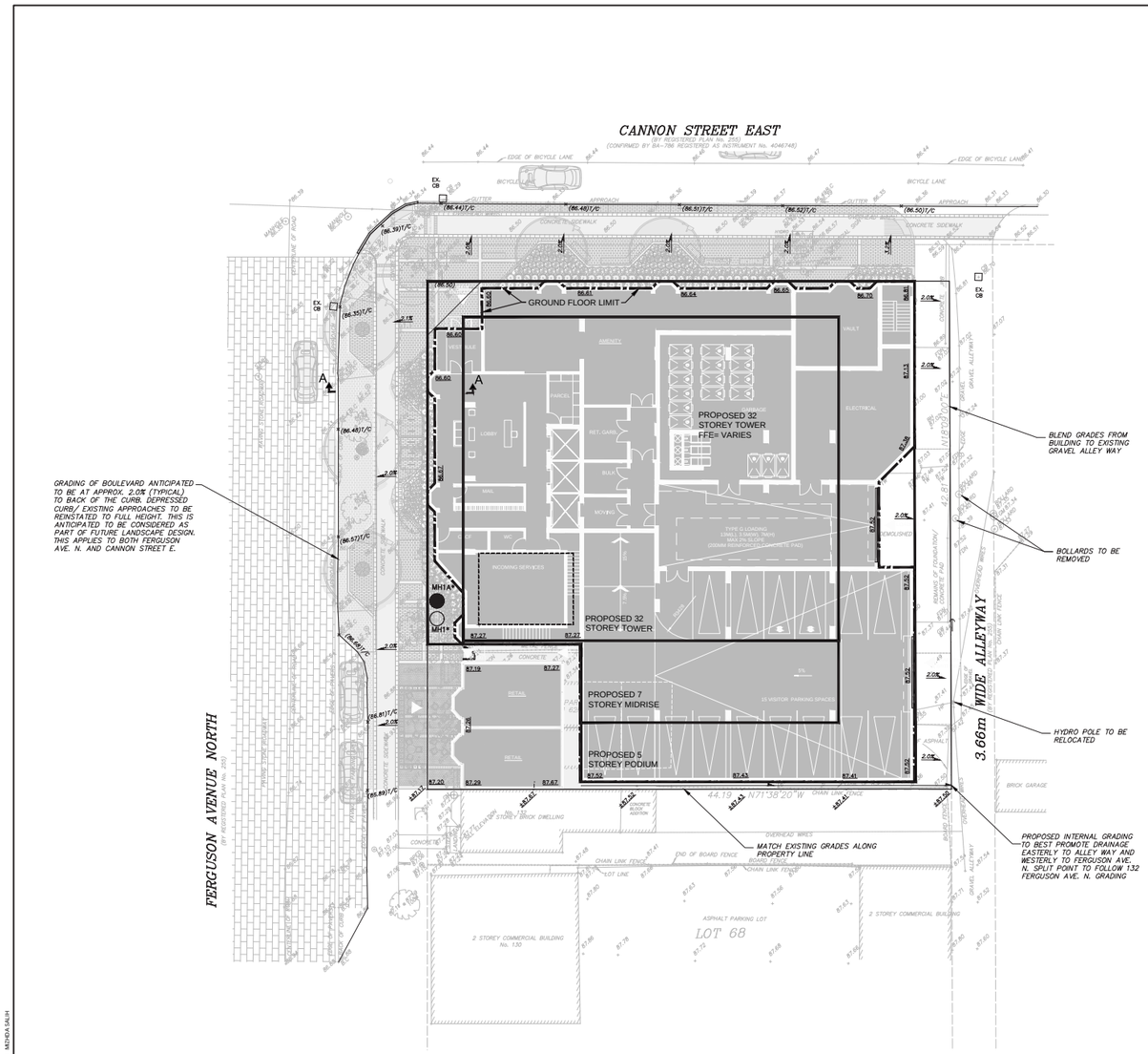
TITLE:
PRELIMINARY SERVICING PLAN

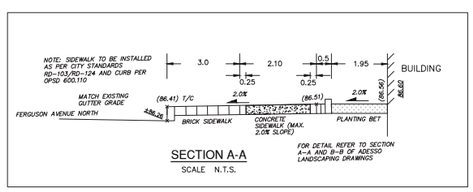
SCALE: 1: 200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 1

188 CANNON STREET EAST
H:\Jobs\2017 Projects\178262 188 Cannon St. E\16 Engineering\Design\Current\SASE PLAN(ALL.dwg 3/18/2024 10:00 AM MOHDA SALIH

Functional Servicing Memo

188 CANNON STREET EAST





LOT GRADING NOTES

GENERAL GRADING NOTES

1. Max. driveway grades to be 7.0%
2. Along adjoining properties grade to meet existing or proposed elevations with sodded slopes (min. 3H to 1V) and/or retaining walls as specified.
3. When matching to existing properties where a 2.0% grade cannot be achieved, a 1.5% grade is permitted provided a 150mm sub-drain is installed below the bottom of the swale and drained to a suitable outlet, (with a minimum 0.3m cover over the sub-drain), or other mitigation measures.
4. Top of foundation walls for buildings shall be 150mm (min) above finished grade.
5. All fill placed on lots shall be compacted to a minimum 95% SPD (unless otherwise recommended by the geotechnical engineer). All material shall be placed in layers not exceeding 300mm lifts.
6. Lot grading shall conform strictly with this plan. Any changes, unless approved prior to construction by the City, shall result in non acceptance by the City.
7. If grading is required on lands adjacent to the development which are not owned by the developer, then the developer must obtain written permission from the adjacent property owner to allow the developer to grade on the adjacent lands, otherwise retaining walls must be used.
8. The written permission required from the adjacent landowner shall be obtained prior to entering the lands. Should permission not be obtained or is withdrawn prior to commencing the work, then the developer shall limit his activities to the limits of the development site.
9. All retaining walls, walkways, curbs, etc., shall be placed a min. of 0.45m off the property line. All walls 1.0m or higher shall be designed by a P.Eng.
10. Should a retaining wall be required, the top of wall elevations shall be set 150mm above the proposed side yard swales.
11. Retaining walls 0.6m in height or greater require construction of a fence or guard rail at the top of the rear of the wall. Guards for retaining walls shall be designed and constructed in accordance with the requirements of exterior guards as contained in the Ontario Building Code.
12. Driveway and driveway approaches shall be located such that hydro vaults and other street furniture are a min. of 1.2m from the projections of the outside garage walls.
13. Concrete sidewalk as per OPSD 310.010 (125mm thickness, min. 30 MPa strength) with Granular 'A' base as required to provide a leveling course for the concrete. At driveways, concrete depth to be min. 175mm.

NOTES FOR GRADING

1. All work involved in the construction, relocation, repair of municipal services for the project shall be to the satisfaction of the City's manager, Development Engineering Approvals, Panning and Development Department. In addition, any changes in grades and catch basins require the approval of the City's manager, Development Engineering Approvals.
2. Fire route signs and 3-way fire hydrants shall be established to the satisfaction of the City Fire Department and at the expense of the owner.
3. Main driveway dimensions at the property line boundaries are plus or minus 7.5m unless otherwise stated.
4. All driveways from the property lines for the first 7.5m shall be within 5% maximum grade, thereafter all driveways shall be within 10% maximum grades unless otherwise noted.
5. The approval of this plan does not exempt the owners bonded contractor from the requirements to obtain the various permits/approvals normally required to complete a construction project, such as, but not limited to the following:
   - Building permits
   - Road cut permits
   - Approach Approval permits
   - Encroachment agreements (if required)
   - Sewer and water permits
   - Relocation of services
   - Committee of Adjustment
6. Abandoned accesses must be removed and the curb and boulevard restored with sod at the owner's expense to the satisfaction of the City's manager, Development Engineering Approvals.

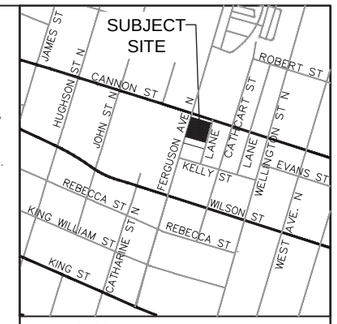
RAINWATER LEADERS

All building roof drainage shall be directed to the storm sewer lead via the internal mechanical drainage system. All internal building drainage components shall be constructed as per the requirements of the Ontario Building Code.

LEGEND

±000.00	EXISTING GRADE ADJACENT
000.00	ORIGINAL GROUND CONTOUR
*000.00	ORIGINAL GROUND ELEVATION (JAN 12, 2024)
(000.00)	PROPOSED GROUND ELEVATION
000.00	PROPOSED MIN. FINISHED GRADE AT DWELLING
	DIRECTION OF SURFACE DRAINAGE SWALE
	DIRECTION OF SHEET FLOW
000T.SO	SWALE INVERT ELEVATION
	DRIVEWAY LOCATION
	PROPOSED DRIVEWAY LOCATION
	PROPOSED HYDRANT
HP	EXISTING HYDRO POLE
HPLS	EXISTING HYDRO POLE & LIGHT STANDARD
LS	EXISTING LIGHT STANDARD
	PROPOSED LIGHT STANDARD
	PROPOSED HYDRO VAULT
	PROPOSED TRANSFORMER
	EXISTING HYDRO VAULT
	PROPOSED STREET LIGHT POWER SUPPLY
BPED	EXISTING BELL PEDESTAL
CPED	EXISTING CATV PEDESTAL

SCALE 1:200
0 5 10 20 30



KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049

RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.

ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.	For DESIGN REVIEW PANEL	B.C.	08/03/2024
1.	Preliminary Grading Plan	B.C.	02/02/2024

REVISIONS

GENERAL NOTES

1 TENDERERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.

2 ALL ROCK LINE INDICATIONS SHOWN ON THE PLAN MUST BE VERIFIED BY THE CONTRACTOR.

3 CONTRACTOR SHALL VERIFY LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SEWERS AND WATERMAINS, PRIVATE SEWER DRAINS AND WATER SERVICES, GASMAINS, CABLE TV, HYDRO AND TELEPHONE DUCTS, ETC., AT START OF CONSTRUCTION.

LICENSED PROFESSIONAL ENGINEER
B. J. CLARKE
100189931
08-07-2024
PROVINCE OF ONTARIO

ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

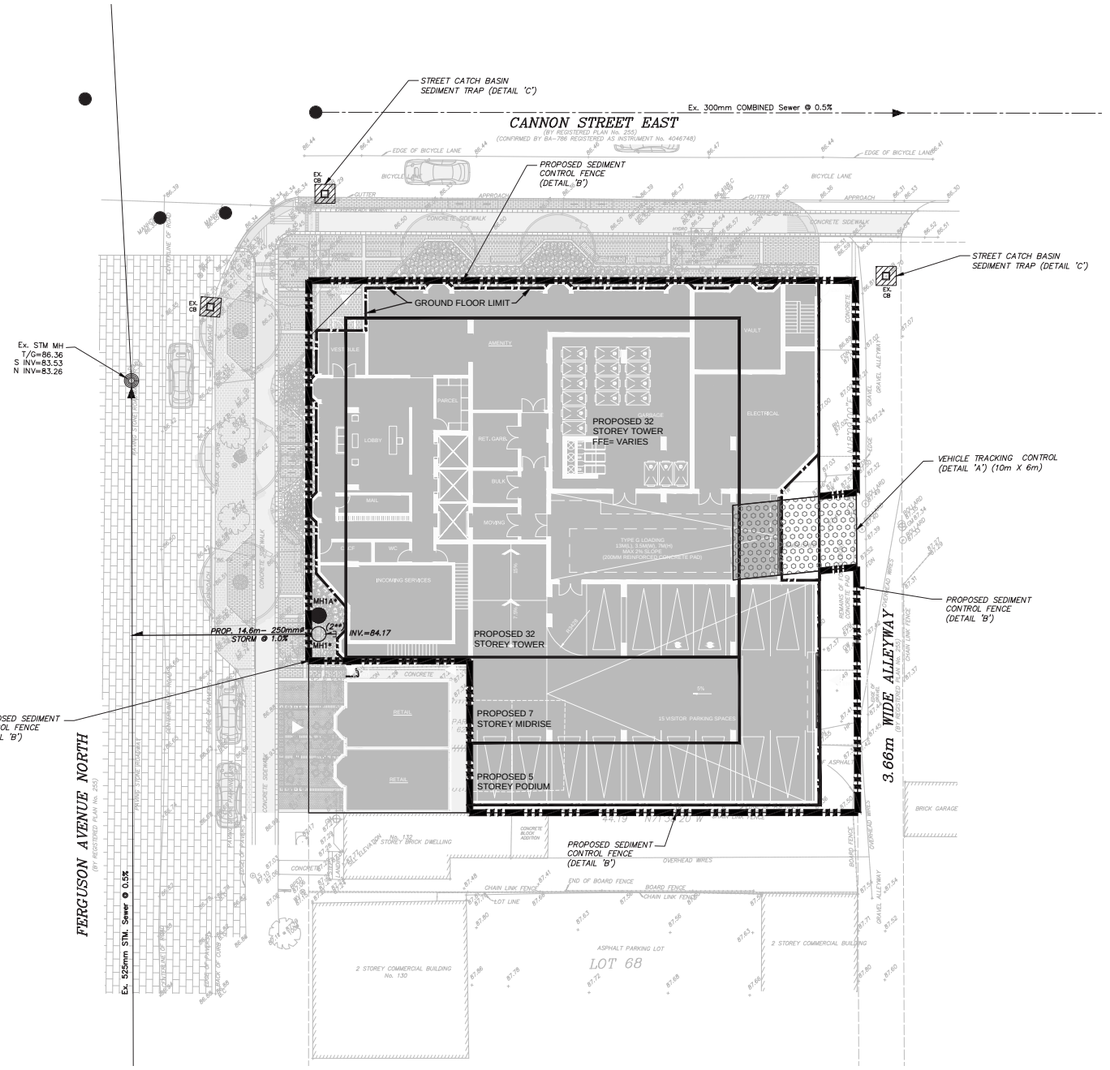
A.J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY GRADING PLAN

SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 2

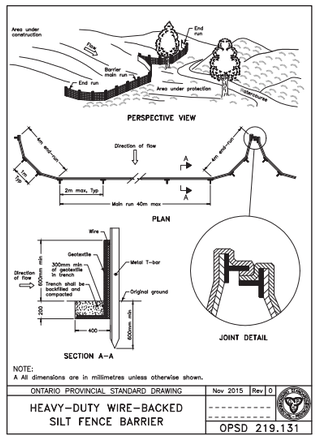
Functional Servicing Memo

188 CANNON STREET EAST

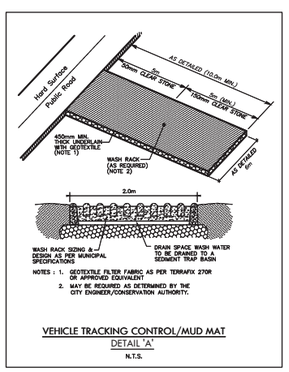


EROSION AND SEDIMENT CONTROL NOTES

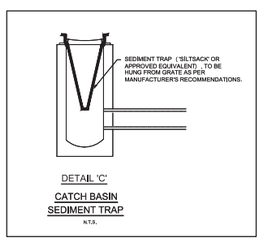
1. All erosion and sediment control measures (temporary sediment control fences, storm sewer bulkheads, work limit fences, sediment basins, etc.) must be installed prior to development and maintained throughout the construction process, until all disturbed areas have been revegetated. All ESC measures shall be installed as detailed on engineering drawings and as per 'Erosion & Sediment Control Guidelines for Urban Construction', GGHA CAs, December 2006.
2. Sediment control fences shall consist of non-woven filter cloth (Terrafix 270R or approved equivalent) buried 0.2m in the ground, 0.6m high and secured to wire farm fence with 'T' posts at min. 2.4m centres as per OPSD 219.131 and shall be placed where detailed. If excessive sediment buildup/blockage occurs (visual inspection) then replacement of the filter cloth is required.
3. Cut-off swales to be constructed where specified and periodically inspected to ensure that erosion does not occur.
4. Catch basin sediment control device, i.e. 'Siltsack' by ACF Environmental or approved equivalent, to be placed as per manufacturer's recommendations (see Detail 'C'). Regular maintenance is required ('Siltsack' sumps shall be inspected for sediment accumulation and filter cloth blockage on a weekly basis). These sediment traps are not to be removed until the curbs have been constructed and the boulevards sodded. Sediment traps shall also be placed at all rear yard catch basins and maintained until ground cover is established.
5. Regular maintenance for all catch basins (street & rear lot) is required (sediment traps and sumps shall be inspected for sediment accumulation, trash build-up and filter cloth blockage on a weekly basis and after any major rainfall event). Accumulated sediment shall be removed by mechanical means. Flushing of sediment into the storm sewer system is prohibited. If standing water remains in the catch basin 24 hours (minimum) after a storm then cleaning or replacement of the filter cloth is required.
6. Topsoil piles shall also be temporarily seeded to prevent erosion. Placement of vegetation shall be in accordance with OPSS. MUNI 804. Where required, erosion control blankets shall be placed as per OPSS. MUNI 804, at the direction of the City Engineer.
7. All erosion and siltation control measures shall be inspected weekly in addition to inspection after each rainfall event. All deficiencies shall be remedied to the satisfaction of the Engineer.
8. Any disturbed subdivision areas not scheduled for further construction within 45 days will be provided with a suitable temporary mulch and seed cover within 7 days of the completion of that particular phase of construction.
9. All disturbed external areas shall be revegetated with permanent cover (as detailed) within 7 days of the completion of that particular phase of construction.
10. Work limit snow fence shall consist of plastic snow fence supported by steel 'T' posts at min. 2.4m centres.)
11. Additional erosion and sediment control locations/measures may be required as determined by the City Engineer.
12. **Siltation control barriers shall be placed as detailed.**
13. **All siltation control measures shall be cleaned and maintained after each rainfall as directed and to the satisfaction of the City of Hamilton.**
14. **Additional silt control locations may be required as determined by the City of Hamilton.**



DETAIL 'B'
SEDIMENT CONTROL FENCE INSTALLATION
N.T.S.



VEHICLE TRACKING CONTROL/MUD MAT
DETAIL 'A'
N.T.S.

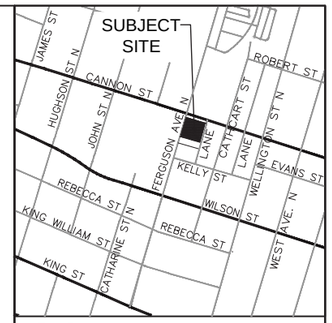


DETAIL 'C'
CATCH BASIN SEDIMENT TRAP
N.T.S.

LEGEND:

- PROPOSED VEHICLE TRACKING CONTROL (DETAIL 'A')
- SEDIMENT CONTROL FENCE (OPSD 219.131) (DETAIL 'B')
- STREET CATCH BASIN SEDIMENT TRAP (DETAIL 'C')

SCALE 1:200
0 5 10 20 30



KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049

RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.

ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.			
1.	For DESIGN REVIEW PANEL	B.C.	08/03/2024

REVISIONS

GENERAL NOTES

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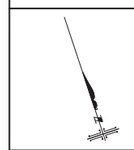
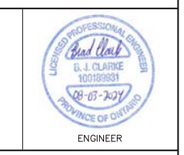




ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

A.J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

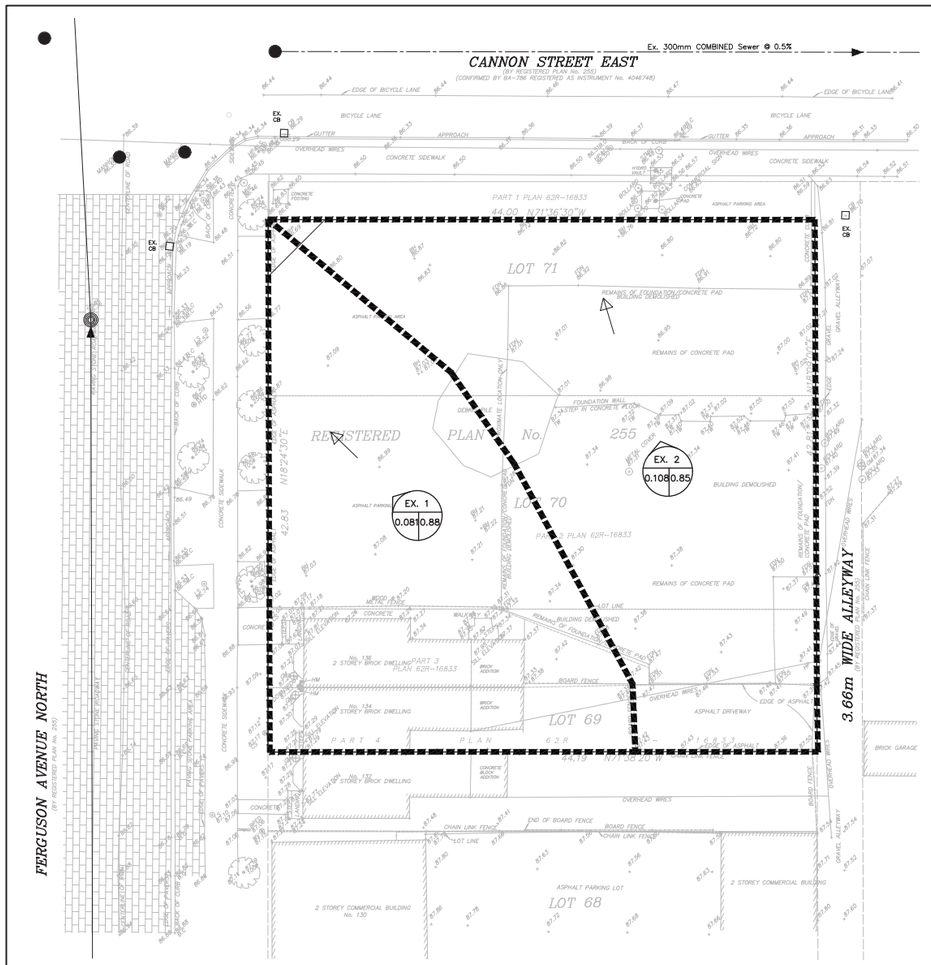
TITLE:
PRELIMINARY
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 3

188 CANNON STREET EAST
H:\Jobs\2021 Projects\13782\2 188 Cannon St. E\1 Engineering\Design\Current\SWM PLAN ALL.dwg 3/8/2024 10:00 AM MICHEA SALIH

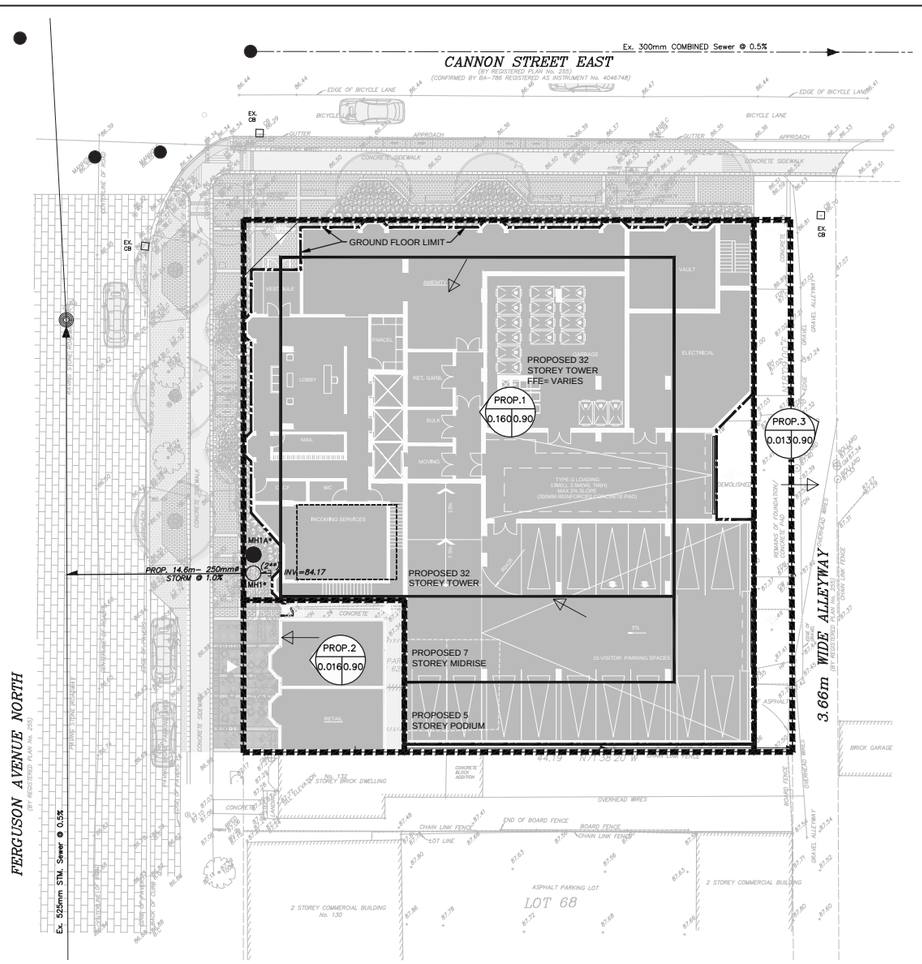
Functional Servicing Memo

188 CANNON STREET EAST



EXISTING CONDITION

TOTAL AREA = 1,890m²
EX.1 DRAINAGE AREA TOWARD FERGUSON AVENUE NORTH = 810m², C=0.88
EX.2 DRAINAGE AREA TOWARD CANNON STREET EAST = 1,080m², C=0.85



PROPOSED CONDITION

TOTAL AREA = 2,335m²
PROP.1 DRAINAGE AREA TOWARD FERGUSON AVENUE NORTH = 1,600m², C=0.9
PROP.2 DRAINAGE AREA TOWARD CANNON STREET EAST = 160m², C=0.9
PROP.3 DRAINAGE AREA TOWARD ALLEYWAY = 130m², C=0.9

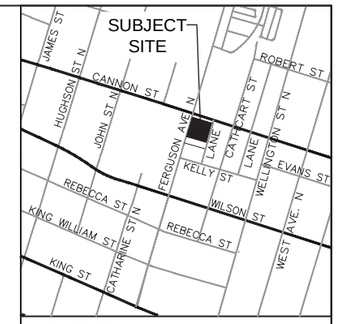
LEGEND

DRAINAGE AREA BOUNDARY

EX. | 1.00 | 0.75 — *DRAINAGE AREA NO.*, *RUNOFF COEFFICIENT (AVERAGE)*, *AREA IN HECTARES (TOTAL)*

PROP. | 1.00 | 0.75 — *DRAINAGE AREA NO.*, *RUNOFF COEFFICIENT (AVERAGE)*, *AREA IN HECTARES (TOTAL)*

SCALE 1:200
0 5 10 20 30



KEY PLAN N.T.S.

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City of Hamilton
Monument No. 07720100049

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ELEVATION= 85.227m CGVD 28:78

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5.			
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1.	For DESIGN REVIEW PANEL	B.C.	08/03/2024

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LICENSED PROFESSIONAL ENGINEER — B. J. CLARKE 100189931 — 08-03-2024 — PROVINCE OF ONTARIO

ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
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PROJECT NAME:
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A. J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY STORM DRAINAGE AREA PLAN

SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 4

APPENDIX B:

MIDUSS v2 Output Files

Functional Servicing Memo

```
"               MIDUSS Output ------------------------------------------------>"
"               MIDUSS version                            Version 2.25  rev. 473"
"               MIDUSS created                                September 12, 2013"
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"     180.000   Max. Storm length"
"    1500.000   Max. Hydrograph"
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"           1   Chicago storm"
"     646.000   Coefficient A"
"       6.000   Constant B"
"       0.781   Exponent C"
"       0.500   Fraction R"
"     180.000   Duration"
"       1.000   Time step multiplier"
"            Maximum intensity            74.099    mm/hr"
"            Total depth                  32.724    mm"
"           6   005hyd   Hydrograph extension used in this file"
" 33          CATCHMENT 102"
"           1   Triangular SCS"
"           1   Equal length"
"           1   SCS method"
"         102   No description"
"      93.000   % Impervious"
"       0.082   Total Area"
"      37.000   Flow length"
"       4.400   Overland Slope"
"       0.006   Pervious Area"
"      37.000   Pervious length"
"       4.400   Pervious slope"
"       0.077   Impervious Area"
"      37.000   Impervious length"
"       4.400   Impervious slope"
"       0.250   Pervious Manning 'n'"
"      80.000   Pervious SCS Curve No."
"       0.242   Pervious Runoff coefficient"
"       0.094   Pervious Ia/S coefficient"
"       5.969   Pervious Initial abstraction"
"       0.015   Impervious Manning 'n'"
"      98.000   Impervious SCS Curve No."
"       0.822   Impervious Runoff coefficient"
"       0.193   Impervious Ia/S coefficient"
"       1.000   Impervious Initial abstraction"
"                    0.015     0.000     0.000     0.000 c.m/sec"
```

Functional Servicing Memo

```
"             Catchment 102          Pervious   Impervious Total Area "
"             Surface Area           0.006      0.077      0.082      hectare"
"             Time of concentration  19.139     2.284      2.649      minutes"
"             Time to Centroid       135.952    103.104    103.816    minutes"
"             Rainfall depth         32.724     32.724     32.724     mm"
"             Rainfall volume        1.89       25.05      26.93      c.m"
"             Rainfall losses        24.810     5.826      7.155      mm"
"             Runoff depth           7.914      26.898     25.569     mm"
"             Runoff volume          0.46       20.59      21.04      c.m"
"             Runoff coefficient     0.242      0.822      0.781      "
"             Maximum flow           0.000      0.015      0.015      c.m/sec"
" 40          HYDROGRAPH Add Runoff "
"            4   Add Runoff "
"                      0.015     0.015     0.000     0.000"
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"                MIDUSS Output ----------------------------------------------->"
"                MIDUSS version                          Version 2.25  rev. 473"
"                MIDUSS created                             September 12, 2013"
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"             1   Chicago storm"
"     2317.400   Coefficient A"
"       11.000   Constant B"
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"        1.000   Time step multiplier"
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"           103   No description"
"       100.000   % Impervious"
"         0.160   Total Area"
"        20.000   Flow length"
"         2.000   Overland Slope"
"         0.000   Pervious Area"
"        20.000   Pervious length"
"         2.000   Pervious slope"
"         0.160   Impervious Area"
"        20.000   Impervious length"
"         2.000   Impervious slope"
"         0.250   Pervious Manning 'n'"
"        80.000   Pervious SCS Curve No."
"         0.000   Pervious Runoff coefficient"
"         0.094   Pervious Ia/S coefficient"
"         5.969   Pervious Initial abstraction"
"         0.015   Impervious Manning 'n'"
"        98.000   Impervious SCS Curve No."
"         0.914   Impervious Runoff coefficient"
"         0.193   Impervious Ia/S coefficient"
"         1.000   Impervious Initial abstraction"
```

Functional Servicing Memo

```
"                    0.078     0.000     0.000     0.000 c.m/sec"
"             Catchment 103          Pervious   Impervious Total Area "
"             Surface Area           0.000      0.160      0.160      hectare"
"             Time of concentration  8.780      1.374      1.374      minutes"
"             Time to Centroid       116.691    98.419     98.419     minutes"
"             Rainfall depth         86.135     86.135     86.135     mm"
"             Rainfall volume        0.00       137.82     137.82     c.m"
"             Rainfall losses        41.572     7.439      7.439      mm"
"             Runoff depth           44.563     78.695     78.695     mm"
"             Runoff volume          0.00       125.91     125.91     c.m"
"             Runoff coefficient     0.000      0.914      0.914      "
"             Maximum flow           0.000      0.078      0.078      c.m/sec"
" 40          HYDROGRAPH Add Runoff "
"            4   Add Runoff "
"                    0.078     0.078     0.000     0.000"
" 54          POND DESIGN"
"        0.078   Current peak flow    c.m/sec"
"        0.004   Target outflow    c.m/sec"
"        125.9   Hydrograph volume    c.m"
"          21.   Number of stages"
"        0.000   Minimum water level    metre"
"        2.500   Maximum water level    metre"
"        0.000   Starting water level    metre"
"            0   Keep Design Data: 1 = True; 0 = False"
"                  Level Discharge    Volume"
"                  0.000     0.000     0.000"
"                 0.1250   0.00086     6.000"
"                 0.2500   0.00128    12.000"
"                 0.3750   0.00159    18.000"
"                 0.5000   0.00185    24.000"
"                 0.6250   0.00208    30.000"
"                 0.7500   0.00229    36.000"
"                 0.8750   0.00248    42.000"
"                  1.000   0.00265    48.000"
"                  1.125   0.00282    54.000"
"                  1.250   0.00297    60.000"
"                  1.375   0.00312    66.000"
"                  1.500   0.00326    72.000"
"                  1.625   0.00340    78.000"
"                  1.750   0.00353    84.000"
"                  1.875   0.00365    90.000"
"                  2.000   0.00377    96.000"
"                  2.125   0.00389   102.000"
"                  2.250   0.00401   108.000"
"                  2.375   0.00412   114.000"
"                  2.500   0.00698   120.000"
"            2.   ORIFICES"
"                 Orifice   Orifice   Orifice Number of"
"                  invert coefficie  diameter  orifices"
"                    2.400     0.630     0.0750     1.000"
"             1.   LAYERS"
"                   Bottom    Aspect    Bottom       Top   Average"
"                     area     ratio elevation elevation sideslope"
"                   48.000     1.340     0.000     2.500     0.000"
"  Peak outflow                          0.004    c.m/sec"
"  Maximum level                         2.126    metre"
"  Maximum storage                     102.056    c.m"
"  Centroidal lag                        6.861   hours"
"                0.078     0.078     0.004     0.000 c.m/sec"
```

Functional Servicing Memo

APPENDIX C:

Storm Sewer Design Sheet

Sanitary Sewer Design Sheet

Functional Servicing Memo

A. J. Clarke and Associates Ltd.
25 Main Street West Suite 300, Hamilton, ON L8P 1H1
T: (905) 528-8761 F:(905) 528-2289

Municipality: CITY OF HAMILTON
Project : 188 Cannon Street East
Job No. : 178262
Date : February 29, 2024
Date Print: March 8, 2024
Design By : MS
Review By: BC

Storm Sewer Design Calculations

Manning's n = 0.013

DESCRIPTION	FROM MH	To MH	STORM EVENT	ADD AREA (ha)	CUMM AREA (ha)	C	AxC	CUMM. CxA	INITIAL TIME (min)	TIME IN PIPE (min)	CUMM. TIME (min)	INTENSITY (mm/hr)	EVENT FLOW (m^3/s)	ENTRE ADDITIONAL FLOW (If any)	DESIGN FLOW Q (m^3/s)	LENGTH (m)	DIAMETER (mm)	GRADE %	CAPACITY (m^3/s)	VELOCITY (m/s)	Design vs Capacity
1	Cis	MH1	2-yr	0.000	0.160	0.90	0.000	0.000	10.00	0.01	10.01	74.10	0.000	0.004	0.004	1.00	250	1.00	0.062	1.22	0.06
	MH1	Main	2-yr	0.000	0.000	0.90	0.000	0.000	10.01	0.20	10.21	74.05	0.000		0.004	14.60	250	1.00	0.062	1.22	0.06

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Functional Servicing Memo

A. J. Clarke and Associates Ltd.
25 Main Street West Suite 300, Hamilton, ON L8P 1H1
T: (905) 528-8761 F:(905) 528-2289

Municipality: CITY OF HAMILTON
Project : 188 Cannon street East
Job No. : 178262
Date : February 29, 2024
Date Print: March 8, 2024
Design By : MS
Review By: BC

SANITARY SEWER DESIGN CALCULATIONS

Per Capita Consumption =	360	L/CAP/D
Infiltration =	0.60	L/S/HA
D<600	0.015	
D>=600	0.013	

DESCRIPTION	FROM MH	TO MH	DENSITY DESCRIPTION	ADD AREA (ha)	CUMM. AREA (ha)	POPULATION DENSITY (people/ha)	POP.	CUMM. POP.	PEAK FACTOR	Q AVERAGE (L/s)	Q PEAK (L/s)	INFILTRATION (L/s)	TOTAL DESIGN FLOW (L/s)	LENGTH (m)	PIPE DIAMETER (mm)	GRADE %	MANNING 'n'	CAPACITY (L/s)	DESIGN vs CAPACITY	FULL VELOCITY (m/s)
	B	MH 1A	BLDG_TOWER	0.189	0.189	6860	1297	1297	2.00	5.40	10.81	0.11	10.92	1.00	200	1.00	0.0150	29.58	0.37	0.91
	MH 1A	MAIN	BLDG_TOWER	0.000	0.189	6860	0	1297	2.00	5.40	10.81	0.11	10.92	12.50	200	1.00	0.0150	29.58	0.37	0.91

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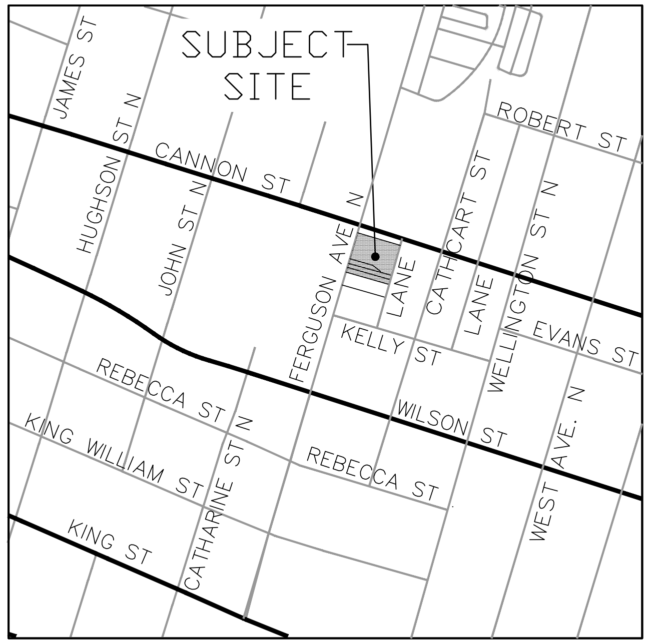
188 CANNON STREET EAST

CITY OF HAMILTON



188 CANNON STREET EAST, For DESIGN REVIEW PANEL

For Discussion

LIST OF DRAWINGS

GENERAL

178262-1	PRELIMINARY SERVICING PLAN
178262-2	PRELIMINARY GRADING PLAN
178262-3	PRELIMINARY EROSION & SEDIMENT CONTROL PLAN
178262-4	PRELIMINARY STORM DRAINAGE AREA PLAN

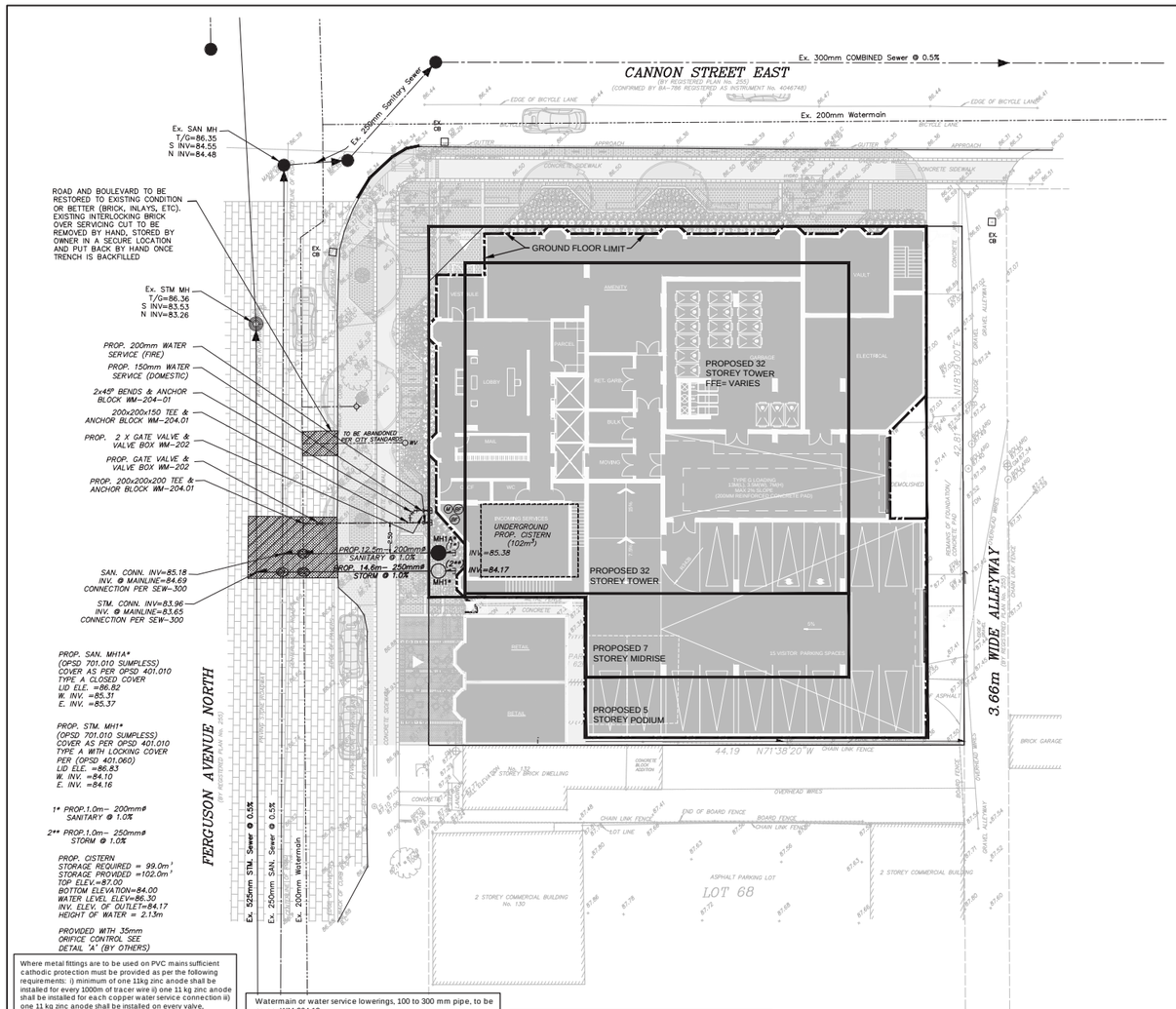
188 HAMILTON GP INC.,
c/o
VANTAGE DEVELOPMENTS INC.

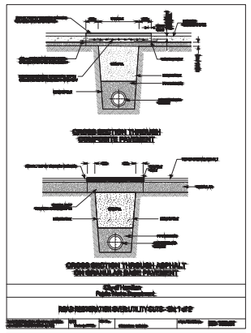
A. J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

188 CANNON STREET EAST

Functional Servicing Memo

188 CANNON STREET EAST





NOTE:
FOR LAYOUT LOCATION OF BUILDINGS, ACCESS ROADS, PARKING AREAS, CURBS, SIDEWALKS, WHEELCHAIR RAMPS, RETAINING WALLS, ETC. REFER TO SITE PLAN .

STANDARD NOTES

A. SEWERS

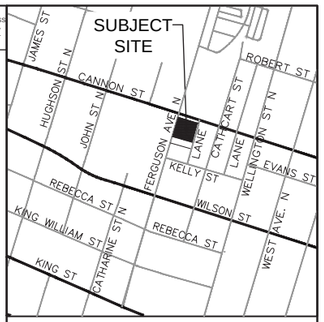
1. SANITARY & STORM SEWERS
a) Construction of storm sewers and private drains shall be in accordance with City Standards & Specifications Manual (Latest Edition) and Ministry of Environment (MOE) Guidelines (Latest Edition).
b) All proposed sewers, throughout their length from the main sewer to the building or place to be drained is to be laid, as nearly as practical, in a straight line in a trench at a right angle to the main sewer.
c) Proposed sewer inverts must be provided including the slope of the pipe.
d) Minimum allowable velocity 0.75 m/s for sanitary sewers and 0.80 m/s for storm sewer. Maximum allowable velocity 2.75 m/s for sanitary sewers and 3.65 m/s for storm sewers.
e) Sewer bedding, cover and backfill to be as per OPSD 802.010 with Granular 'A' material for both the bedding and cover.
f) On private property the minimum cover is to be no less than 1.2m.
g) Alternate materials may be acceptable provided approval has first been obtained from the City / Engineer.
h) Minimum horizontal separation between sewer and watermain to be 2.5m. Minimum vertical separation to be 0.50m when a watermain passes over or under a sewer and 0.25m when a watermain passes over a sewer.
i) PVC pipe will require special construction procedures as per City specifications. All sewers to be flushed prior to video inspection.
j) Manhole frames and covers shall be as per OPSD 401.010 (Storm-open, Sanitary-closed).
k) Sanitary sewer (200mm to 375mm dia.) shall be PVC pipe , CSA B182.2, SDR-35.
l) Storm sewer (300mm to 600mm dia.) shall be PVC pipe, CSA B182.2, SDR-35.
m) Storm sewer> 600mm dia. shall be concrete pipe. CSA A257.2 (as specified).
n) PVC (sanitary and storm) sewers are to be tested for deflection (mandrel passage) after installation. Sanitary sewers shall also be tested for leakage (low air pressure). Prior to assumption by the City, pipe deflection testing shall be repeated.
o) Catch basin connections to be 250mm dia. PVC pipe CSA B182.2, SDR-35 unless otherwise noted.
p) All manholes to be sumpless.

B. WATER SERVICES

1. WATER SERVICES
a) Construction of watermains and private services shall be in accordance with City Standards & Specifications Manual (latest edition) and Ministry of Environment (MOE) Guidelines (latest edition).
b) Water services are to be installed perpendicular to the existing City watermain and straight into the building.
c) PVC pipe in sizes 100mm through 300mm shall be Class 150 DR18 conforming to AWWA C900.
PVC watermain/service material, cathodic protection, tracer wire etc. must be as per Form 400.
d) For watermain deflection (PVC pipe):
i) maximum allowable deflection of 1.5 degrees per joint for up to 250mm diameter (the maximum allowable pipe deflection to be 1/2 the manufacturer's recommendations).
ii) each joint shall be deflected an equal amount.
e) All system components are to be either to City of Hamilton Standards or Ontario Provincial Standard Drawing (OPSD). Where a City Standard exists it shall be used in the place of the OPSD standard.
f) A scheduled Watermain shut down shall be at the discretion of the City and subject to the following:
i) Maximum 4 hours shut down of existing main at a time convenient to the City of Hamilton and abutting users.
ii) Contractor to give 48 hour prior notification using the "City of Hamilton Notice of Shutdown" for all affected areas.
iii) In the event a scheduled shutdown is canceled by the City of Hamilton, the contractor shall have no claims against the City.
g) Curb stops are to be installed on all water services.
h) Water services to be installed with a minimum cover of 1.6m.
i) Bedding and backfill as per WM-200.01 and WM-200.02 Granular 'A' material for mains and services greater than 50mm.
j) All new watermains are to be swabbed in accordance with City specifications
2. VALVE & VALVE BOX
a) All valve boxes to be set to proposed grade.
b) Gate valves and valve boxes for 100mm to 300mm as per WM-202.
3. ANCHOR BLOCKS
a) Anchor or thrust blocks are to be installed at all water service elbows, tees, plugs etc. For 300 mm diameter water services and smaller, anchor blocks are to be as per WM-204.01. For water services greater than 300 mm, anchor blocks are to be as per WM-204.02 to WM-204.13 as applicable.

C. ROADWORKS

1. COMPACTION REQUIREMENTS
a) All bedding and backfill material, road sub-grades, and generally all material used for lot grading and fill sections etc., shall be compacted to min. 100% SPD unless otherwise specified.
b) All granular road base materials shall be compacted to 100% S.P.D.
c) For all sewers and watermains in fill sections, the compaction shall be certified by a geotechnical engineer prior to laying of pipe.
2. PAVEMENT STRUCTURE
a) Pavement structure to be 40mm HL3, 65 mm HL8 on 150mm Granular 'A' and 350mm Granular 'B', TYPE II 100% crushed aggregate for Heavy Duty Sections.



KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049
RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.
ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.			
1.	For DESIGN REVIEW PANEL	B.C.	08/03/2024

REVISIONS

GENERAL NOTES
1 TENDERERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.
2 ALL ROCK LINE INDICATIONS SHOWN ON THE PLAN MUST BE VERIFIED BY THE CONTRACTOR.
3 CONTRACTOR SHALL VERIFY LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SEWERS AND WATERMAINS, PRIVATE SEWER DRAINS AND WATER SERVICES, GASMAINS, CABLE TV, HYDRO AND TELEPHONE DUCTS, ETC., AT START OF CONSTRUCTION.

ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

A.J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY SERVICING PLAN

SCALE: 1: 200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 1

Where metal fittings are to be used on PVC mains sufficient cathodic protection must be provided as per the following requirements: i) minimum of one 11kg zinc anode shall be installed for every 1000m of tracer wire ii) one 11 kg zinc anode shall be installed for each copper water service connection iii) one 11 kg zinc anode shall be installed on every valve, hydrant, bend, tee, sleeve, reducer, plug, cap, joint restraint, coupling, etc., connected to the PVC pipe.

RAINWATER LEADERS
All building roof drainage shall be directed to the storm sewer Cistern via the internal mechanical drainage system. All internal building drainage components shall be constructed as per the requirements of the Ontario Building Code.

SPECIAL NOTES
SN1. Existing utilities and underground services shown are approximate locations only. This drawing does not indicate all potential utilities and services. Contractor is responsible to have all utilities and services staked out by their respective locate and servicing companies prior to commencing work on site.
SN2. All existing utilities, services, and structures, etc. that are in conflict with proposed site services, to be relocated by others, unless otherwise indicated.
SN3. Removals and/or relocations of the existing utilities (i.e. hydro, communication, fiber optic cables, gas, etc.) shall be in strict accordance with the approved and "Issued for Construction" drawings prepared by qualified professional.

1. Internal water meter installations to be as per WM-210 with meter installed at floor level.
2. In accordance with the City of Hamilton Backflow Prevention By-law #10-103, a backflow prevention device must be installed and maintained on all existing and/or proposed water services to industrial, commercial, institutional properties and also multi-residential buildings over the height of 3 stories to prevent the flow of contaminants into the municipal drinking water system. Selection of the required backflow prevention device, specific to a property for a water service line that is 50mm or greater is to be determined through a "Cross Connection Survey", carried out by a qualified individual, under the terms and timelines, as described within the By-law. All Backflow Prevention Devices must be selected, and maintained in accordance with the City of Hamilton's Backflow Prevention By-law # 10-103 the manufacturer's specifications and the guidelines set out in the most recent version's of the AWWA Canadian Cross Connection Control manual and the CSA. B64.10 / 07 / B64. 10.1-07 Standards.
3. If a fire service is proposed to a building, the service must be protected against backflow in accordance with the CSA and Ontario Building Code. The backflow device must be installed at the service point of entry and shall be either a double check detector assembly or a reduced pressure detector assembly with a detector meter which is capable of measurements in cubic metres.

Watermain or water service lowerings, 100 to 300 mm pipe, to be as per WM-204.13.
Connection of the new 200 mm PVC water service to the municipal main is to be as per cut in tee and sleeve as per WM-207. 04.
The building's water meter (master meter) must be located at the service point of entry, at floor grade and be installed as per WM-210.
All existing water meters on systems to be abandoned must be removed and salvaged by the City of Hamilton. The servicing contractor should contact the water and Wastewater Section, Public Works Department at 905 546-2424 X4426 to arrange for the work.

All unused water services are to be properly abandoned. For services 50 mm and less "Water Service abandonment"
(i) Close mainstop
(ii) Remove curb stop.
(iii) Cut and crimp water service at either end.
For water services greater than 50 mm, using a tee and sleeve, the tee shall be removed and replaced with a section of pipe and sleeve. The replacement section of pipe shall be of the same material as the existing mainline watermain. Where a tapping valve was used the applicant should contact the City for further direction.

NOTE:
EXISTING SEWER LOCATIONS AND INVERTS WERE DERIVED FROM CITY OF HAMILTON ENGINEERING DRAWINGS INDEXED AS 03-H-30(1), 87-H-1, 5 & 99-W-38-_2. LOCATIONS OF SEWERS AND INVERTS ARE APPROXIMATE ONLY AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND IN THE FIELD MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

Molded PVC fittings for pipe sizes 100mm to 300mm shall conform to AWWA C900 and certified to CSA B137.2.

Fabricated fittings 250mm and 300mm shall be manufactured from segments of AWWA C900, Class 150 (DR18). PVC pipe bonded together and over-wrapped with fibreglass-reinforced polyester to meet the requirements of CSA B137.3.

For all sewers and watermains in fill sections, the compaction shall be certified by a Geotechnical Engineer prior to laying of pipe.

Minimum horizontal separation between water services/mains and sewer drains and municipal sewer mains shall be 2.5m measured from the closest pipe edge to closest pipe edge. Vertical separation where water service/main passes over a sewer drain or municipal sewer main must be a minimum of 0.25m unless greater separation is required to provide for proper bedding and structural support. Water services/mains passing under sewer drains or municipal sewer mains must have a separation of 0.5m between the invert of the sewer main/drain and the crown of the waterservice/main. All water services to be installed with a minimum of 1.6m cover. Sewer drains to be installed with a minimum cover of 2.20m at the property line below the final road grade or at such higher elevation only as may be necessitated by the level of the main sewer. On private property the minimum cover for sewer drains is to be no less than 1.2m.

Sewer Notes
All catch basins are to be as per OPSD 705.010 (single) and/or OPSD 705.020(double) modified with a gos trap as per SEW-304.
All existing unused sewers to property being redeveloped, in whole or in part, must be removed from municipal property i.e. road allowance etc., with an appropriate repair to which it connected, and either removed from private property or abandoned in accordance with City minimum requirements i.e. plugging at either end with a minimum 300 mm concrete.

Upon completion of installation, the Contractor shall perform a pressure test on the watermains as per FORM 400.

Tracer wire shall be installed with PVC pipe in accordance with Form 400. It shall be 12-gauge TW75, TWU75 or RW90XLPE coated copper and shall be positioned along the top of the pipe and fastened at 6 metre intervals. The wire is to be installed between each valve and/or the end of the new PVC watermain. Joints in the wire between valves are not permitted. At each gate valve a loop wire is to be brought up inside the valve box to the cap. The tracer wire shall be brought to the surface at the secondary valve on all fire hydrants. The tracer wire shall also be connected to the cathodic protection system as required.

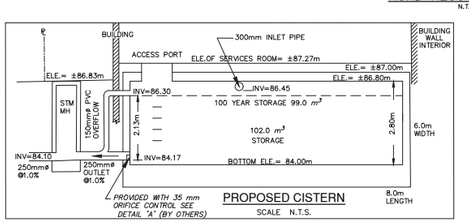
Approval of this drawing is for material acceptability and compliance with municipal and provincial specifications and standards only. Approval and inspection by the City of the works does not certify the line and grade of the works and it is the owner's responsibility to have their Engineer certify this accordingly.

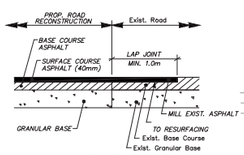
Testing Requirements for PVC Sewers
Infiltration/exfiltration testing will be carried out on all sanitary sewers, using either water or low air pressure in accordance with OPSS 410.07. 15.02.
PVC sanitary sewers shall be subjected to a mandrel test at the time when the sewer is accepted as complete by the City. Maximum allowable deflection of the mainline sewer shall be 5%. A deformation gauge (PIG) test in accordance with OPSS 410.07.15.05 shall be carried out a minimum of thirty days after the sewer trench has been backfilled or prior to paving of roadways.

A reduced pressure zone Backflow Preventer (WATTS SERIES 909 or approved equal) is required on the temporary supply lines used for filling and flushing or swabbing of watermains. Watermain is to be tested prior to connection to existing watermains using temporary caps or plugs. Pipe closures, where required, are to be supplied by the Contractor. The Contractor will also supply and install all adaptor pieces in order to connect to existing watermains. Upon completion of installation, the Contractor shall perform a pressure test on the watermains as per FORM 400.

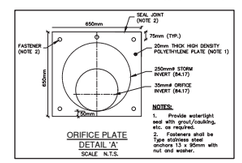
CROSSING No.	BOTTOM OF PIPE	TOP OF PIPE	DIFFERENCE	W/M LOWERING REQUIRED
C1	±84.70(SAN)	84.23 (STM)	0.47m	NO
C2	±84.50(WM)	84.25 (STM.)	0.25m	NO
C3	85.20 (SAN.)	±84.70(WM)	0.50m	NO

CROSSING SCHEDULE





LAP JOINT FOR ROAD RECONSTRUCTION
N.T.S.



ORIFICE PLATE DETAIL 'A'
SCALE N.T.S.

LEGEND
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED DRIVEWAY LOCATION
- SANITARY SEWER
- STORM SEWER
- WATERMAIN
- GAS LINE
- BELL LINE
- HYDRO LINE
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- WATERMAIN TEE (PROPOSED / EXISTING)
- 45° WATERMAIN ELBOW (PROPOSED/EXISTING)
- PROPOSED CURB & GUTTER
- PROPOSED 1.5m SIDEWALK
- EXISTING CURB & GUTTER
- PROPOSED FENCE
- PROPOSED METAL SCREEN
- PROPOSED RETAINING WALL
- EXISTING LIGHT STANDARD
- PLUG (PROPOSED / EXISTING)
- PROPOSED CHECK VALVE CHAMBER
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER PIPE
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER PIPE
- EXISTING STORM MANHOLE
- PROPOSED WATER METER (100mm COMPOUND)
- PROPOSED BACKFLOW PREVENTER
- CROSSING INFORMATION
- RESTORATION AS PER CITY OF HAMILTON STANDARDS RD-100.01 & RD-100.02 & CITY OF HAMILTON ROAD CUT PERMIT

Contractor to clean existing roadways of sediments resulting from construction traffic from the site each day.

SCALE 1: 200
0 5 10 20 30

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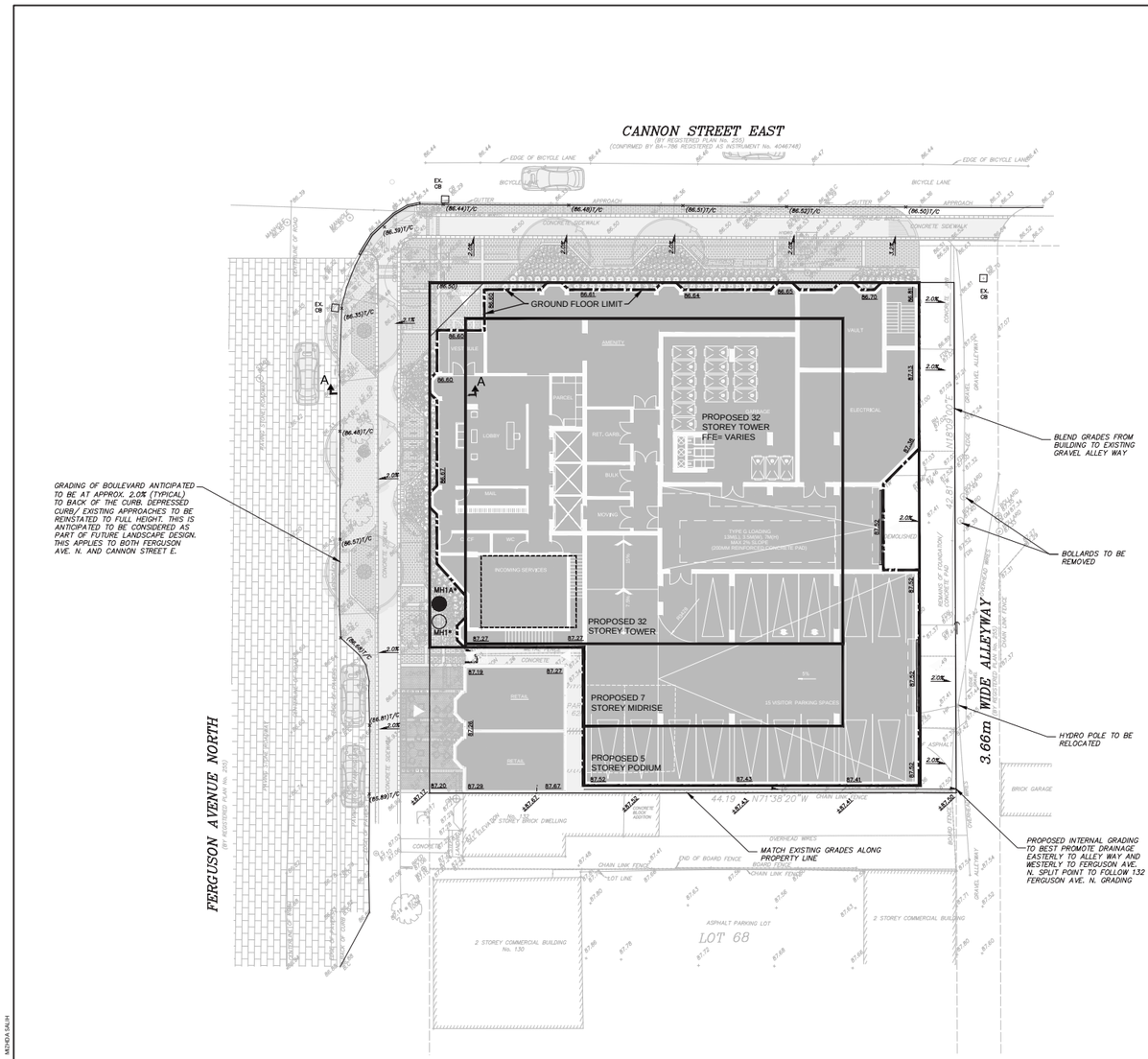
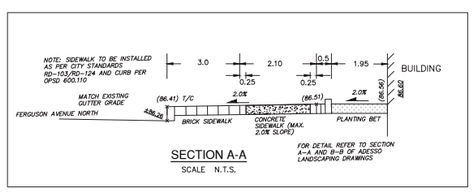
Functional Servicing Memo

188 CANNON STREET EAST





LOT GRADING NOTES

GENERAL GRADING NOTES

1. Max. driveway grades to be 7.0%
2. Along adjoining properties grade to meet existing or proposed elevations with sodded slopes (min. 3H to 1V) and/or retaining walls as specified.
3. When matching to existing properties where a 2.0% grade cannot be achieved, a 1.5% grade is permitted provided a 150mm sub-drain is installed below the bottom of the swale and drained to a suitable outlet, (with a minimum 0.3m cover over the sub-drain), or other mitigation measures.
4. Top of foundation walls for buildings shall be 150mm (min) above finished grade.
5. All fill placed on lots shall be compacted to a minimum 95% SPD (unless otherwise recommended by the geotechnical engineer). All material shall be placed in layers not exceeding 300mm lifts.
6. Lot grading shall conform strictly with this plan. Any changes, unless approved prior to construction by the City, shall result in non acceptance by the City.
7. If grading is required on lands adjacent to the development which are not owned by the developer, then the developer must obtain written permission from the adjacent property owner to allow the developer to grade on the adjacent lands, otherwise retaining walls must be used.
8. The written permission required from the adjacent landowner shall be obtained prior to entering the lands. Should permission not be obtained or is withdrawn prior to commencing the work, then the developer shall limit his activities to the limits of the development site.
9. All retaining walls, walkways, curbs, etc., shall be placed a min. of 0.45m off the property line. All walls 1.0m or higher shall be designed by a P.Eng.
10. Should a retaining wall be required, the top of wall elevations shall be set 150mm above the proposed side yard swales.
11. Retaining walls 0.6m in height or greater require construction of a fence or guard rail at the top of the rear of the wall. Guards for retaining walls shall be designed and constructed in accordance with the requirements of exterior guards as contained in the Ontario Building Code.
12. Driveway and driveway approaches shall be located such that hydro vaults and other street furniture are a min. of 1.2m from the projections of the outside garage walls.
13. Concrete sidewalk as per OPSD 310.010 (125mm thickness, min. 30 MPa strength) with Granular 'A' base as required to provide a leveling course for the concrete. At driveways, concrete depth to be min. 175mm.

NOTES FOR GRADING

1. All work involved in the construction, relocation, repair of municipal services for the project shall be to the satisfaction of the City's manager, Development Engineering Approvals, Panning and Development Department. In addition, any changes in grades and catch basins require the approval of the City's manager, Development Engineering Approvals.
2. Fire route signs and 3-way fire hydrants shall be established to the satisfaction of the City Fire Department and at the expense of the owner.
3. Main driveway dimensions at the property line boundaries are plus or minus 7.5m unless otherwise stated.
4. All driveways from the property lines for the first 7.5m shall be within 5% maximum grade, thereafter all driveways shall be within 10% maximum grades unless otherwise noted.
5. The approval of this plan does not exempt the owners bonded contractor from the requirements to obtain the various permits/approvals normally required to complete a construction project, such as, but not limited to the following:
   - Building permits
   - Road cut permits
   - Approach Approval permits
   - Encroachment agreements (if required)
   - Sewer and water permits
   - Relocation of services
   - Committee of Adjustment
6. Abandoned accesses must be removed and the curb and boulevard restored with sod at the owner's expense to the satisfaction of the City's manager, Development Engineering Approvals.

RAINWATER LEADERS

All building roof drainage shall be directed to the storm sewer lead via the internal mechanical drainage system. All internal building drainage components shall be constructed as per the requirements of the Ontario Building Code.

LEGEND

±000.00	EXISTING GRADE ADJACENT
000.00	ORIGINAL GROUND CONTOUR
+000.00	ORIGINAL GROUND ELEVATION (JAN 12, 2024)
(000.00)	PROPOSED GROUND ELEVATION
000.00	PROPOSED MIN. FINISHED GRADE AT DWELLING
	DIRECTION OF SURFACE DRAINAGE SWALE
	DIRECTION OF SHEET FLOW
000T.SO	SWALE INVERT ELEVATION
	DRIVEWAY LOCATION
	PROPOSED DRIVEWAY LOCATION
	PROPOSED HYDRANT
HP	EXISTING HYDRO POLE
HPLS	EXISTING HYDRO POLE & LIGHT STANDARD
LS	EXISTING LIGHT STANDARD
	PROPOSED LIGHT STANDARD
	PROPOSED HYDRO VAULT
	PROPOSED TRANSFORMER
	EXISTING HYDRO VAULT
	PROPOSED STREET LIGHT POWER SUPPLY
BPED	EXISTING BELL PEDESTAL
CPED	EXISTING CATV PEDESTAL

SCALE 1:200
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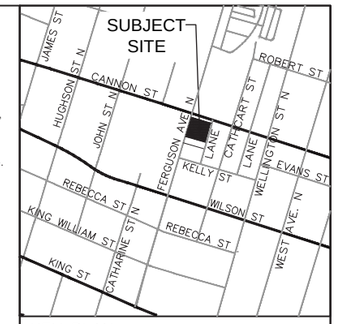

KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049

RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.

ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.	For DESIGN REVIEW PANEL	B.C.	08/03/2024
1.	Preliminary Grading Plan	B.C.	02/02/2024

REVISIONS

GENERAL NOTES

1 TENDERERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.

2 ALL ROCK LINE INDICATIONS SHOWN ON THE PLAN MUST BE VERIFIED BY THE CONTRACTOR.

3 CONTRACTOR SHALL VERIFY LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SEWERS AND WATERMAINS, PRIVATE SEWER DRAINS AND WATER SERVICES, GASMAINS, CABLE TV, HYDRO AND TELEPHONE DUCTS, ETC., AT START OF CONSTRUCTION.

LICENSED PROFESSIONAL ENGINEER
B. J. CLARKE
100189931
09-07-2024
PROVINCE OF ONTARIO
ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

A.J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY GRADING PLAN

SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 2

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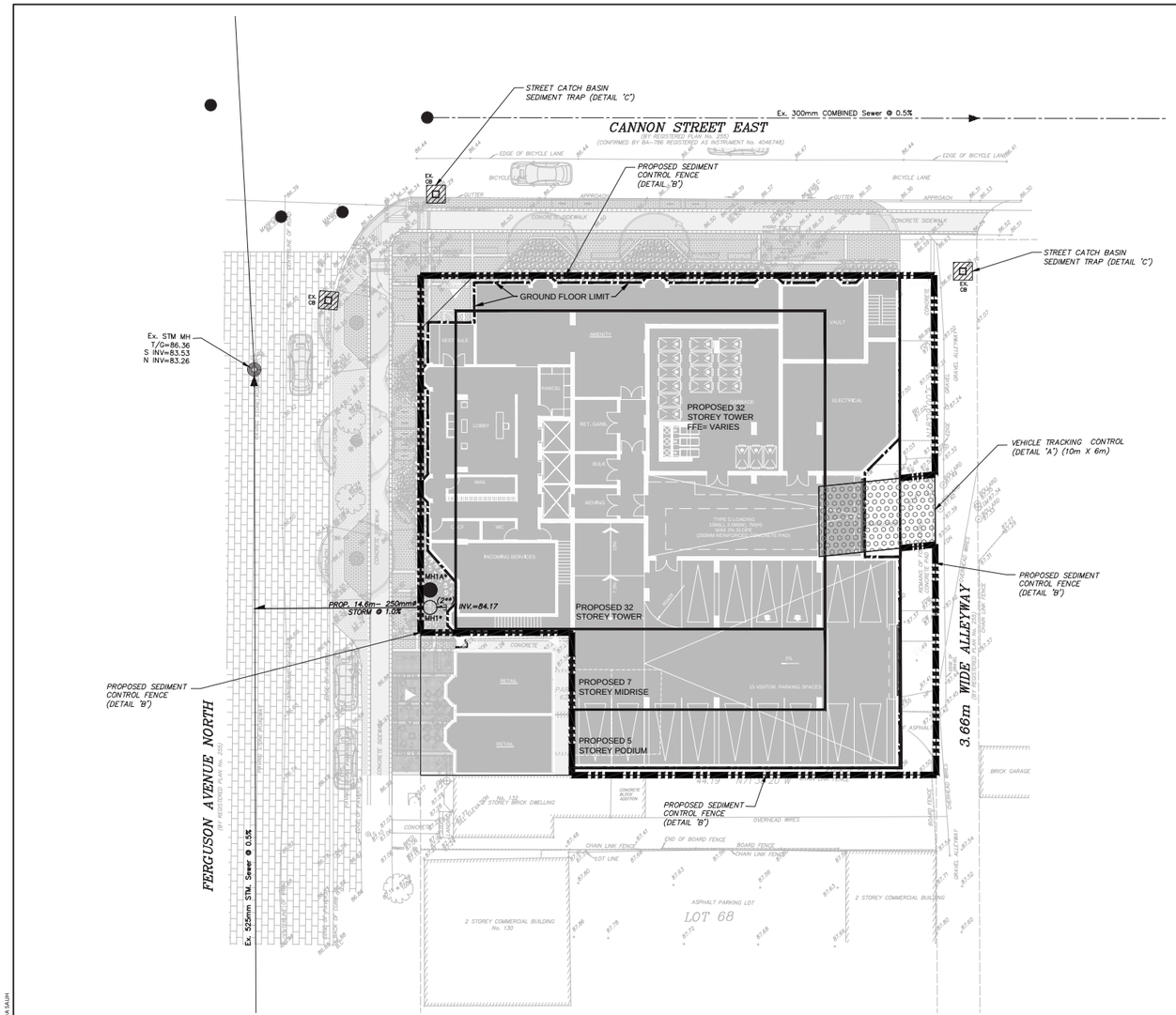
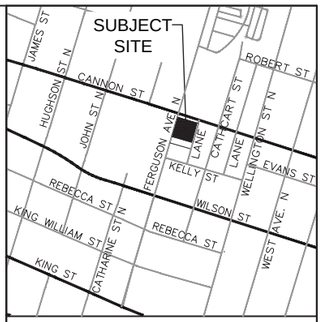
Functional Servicing Memo

188 CANNON STREET EAST



EROSION AND SEDIMENT CONTROL NOTES

1. All erosion and sediment control measures (temporary sediment control fences, storm sewer bulkheads, work limit fences, sediment basins, etc.) must be installed prior to development and maintained throughout the construction process, until all disturbed areas have been revegetated. All ESC measures shall be installed as detailed on engineering drawings and as per 'Erosion & Sediment Control Guidelines for Urban Construction', GGHA CAs, December 2006.
2. Sediment control fences shall consist of non-woven filter cloth (Terrafix 270R or approved equivalent) buried 0.2m in the ground, 0.6m high and secured to wire farm fence with 'T' posts at min. 2.4m centres as per OPSD 219.131 and shall be placed where detailed. If excessive sediment buildup/blockage occurs (visual inspection) then replacement of the filter cloth is required.
3. Cut-off swales to be constructed where specified and periodically inspected to ensure that erosion does not occur.
4. Catch basin sediment control device, i.e. 'Siltsack' by ACF Environmental or approved equivalent, to be placed as per manufacturer's recommendations (see Detail 'C'). Regular maintenance is required ('Siltsack' sumps shall be inspected for sediment accumulation and filter cloth blockage on a weekly basis). These sediment traps are not to be removed until the curbs have been constructed and the boulevards sodded. Sediment traps shall also be placed at all rear yard catch basins and maintained until ground cover is established.
5. Regular maintenance for all catch basins (street & rear lot) is required (sediment traps and sumps shall be inspected for sediment accumulation, trash build-up and filter cloth blockage on a weekly basis and after any major rainfall event). Accumulated sediment shall be removed by mechanical means. Flushing of sediment into the storm sewer system is prohibited. If standing water remains in the catch basin 24 hours (minimum) after a storm then cleaning or replacement of the filter cloth is required.
6. Topsoil piles shall also be temporarily seeded to prevent erosion. Placement of vegetation shall be in accordance with OPSS. MUNI 804. Where required, erosion control blankets shall be placed as per OPSS. MUNI 804, at the direction of the City Engineer.
7. All erosion and siltation control measures shall be inspected weekly in addition to inspection after each rainfall event. All deficiencies shall be remedied to the satisfaction of the Engineer.
8. Any disturbed subdivision areas not scheduled for further construction within 45 days will be provided with a suitable temporary mulch and seed cover within 7 days of the completion of that particular phase of construction.
9. All disturbed external areas shall be revegetated with permanent cover (as detailed) within 7 days of the completion of that particular phase of construction.
10. Work limit snow fence shall consist of plastic snow fence supported by steel 'T' posts at min. 2.4m centres.)
11. Additional erosion and sediment control locations/measures may be required as determined by the City Engineer.
12. **Siltation control barriers shall be placed as detailed.**
13. **All siltation control measures shall be cleaned and maintained after each rainfall as directed and to the satisfaction of the City of Hamilton.**
14. **Additional silt control locations may be required as determined by the City of Hamilton.**



KEY PLAN N.T.S.

BENCH MARK
City of Hamilton
Monument No. 07720100049

RIB WITH BRASS CAP
MONUMENT IS LOCATED AT THE EAST SIDE OF BAY FRONT PARK, 85m WEST OF THE CENTERLINE OF BAY STREET NORTH AND 22m SOUTHWEST OF THE CENTERLINE OF HARBOUR FRONT DRIVE.

ELEVATION= 85.227m CGVD 28:78

No.	Revision	By	Date
5.			
4.			
3.			
2.			
1.	For DESIGN REVIEW PANEL	B.C.	08/03/2024

REVISIONS

GENERAL NOTES

1. TENDERERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.
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ENGINEER
B. J. CLARKE
100189331
08-07-2024
PROVINCE OF ONTARIO

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

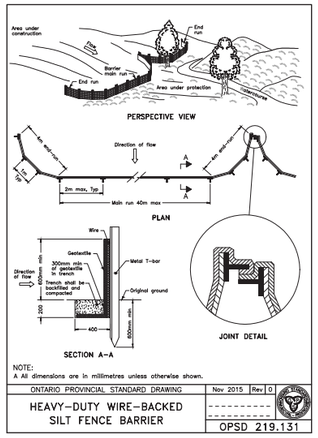
MUNICIPALITY:
CITY OF HAMILTON

PROJECT NAME:
188 CANNON STREET EAST

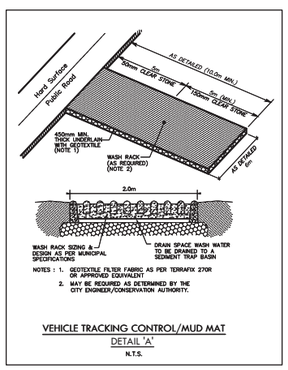
A. J. Clarke and Associates Ltd.
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY
EROSION & SEDIMENT CONTROL PLAN

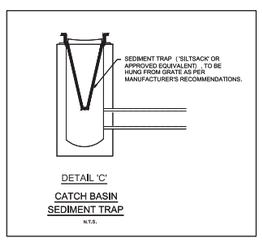
SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 3



DETAIL 'B'
SEDIMENT CONTROL FENCE INSTALLATION
N.T.S.



VEHICLE TRACKING CONTROL/MUD MAT
DETAIL 'A'
N.T.S.



DETAIL 'C'
CATCH BASIN SEDIMENT TRAP
N.T.S.

LEGEND:

- PROPOSED VEHICLE TRACKING CONTROL (DETAIL 'A')
- SEDIMENT CONTROL FENCE (OPSD 219.131) (DETAIL 'B')
- STREET CATCH BASIN SEDIMENT TRAP (DETAIL 'C')

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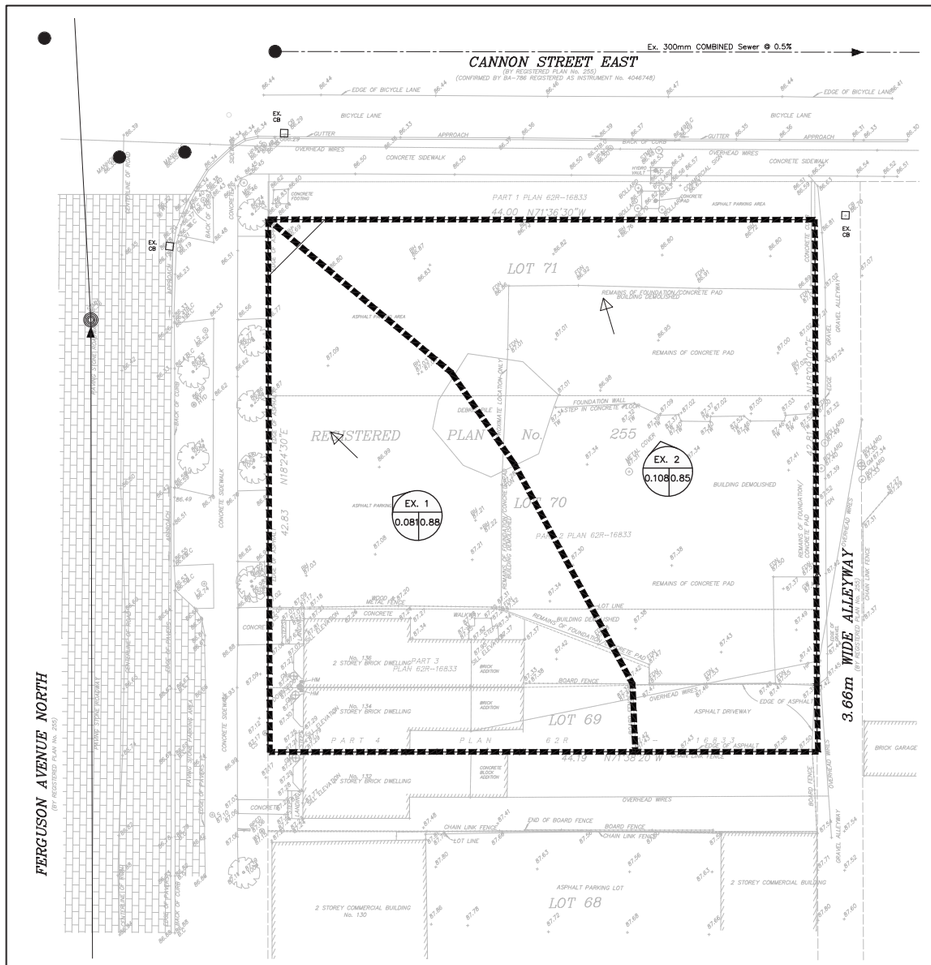
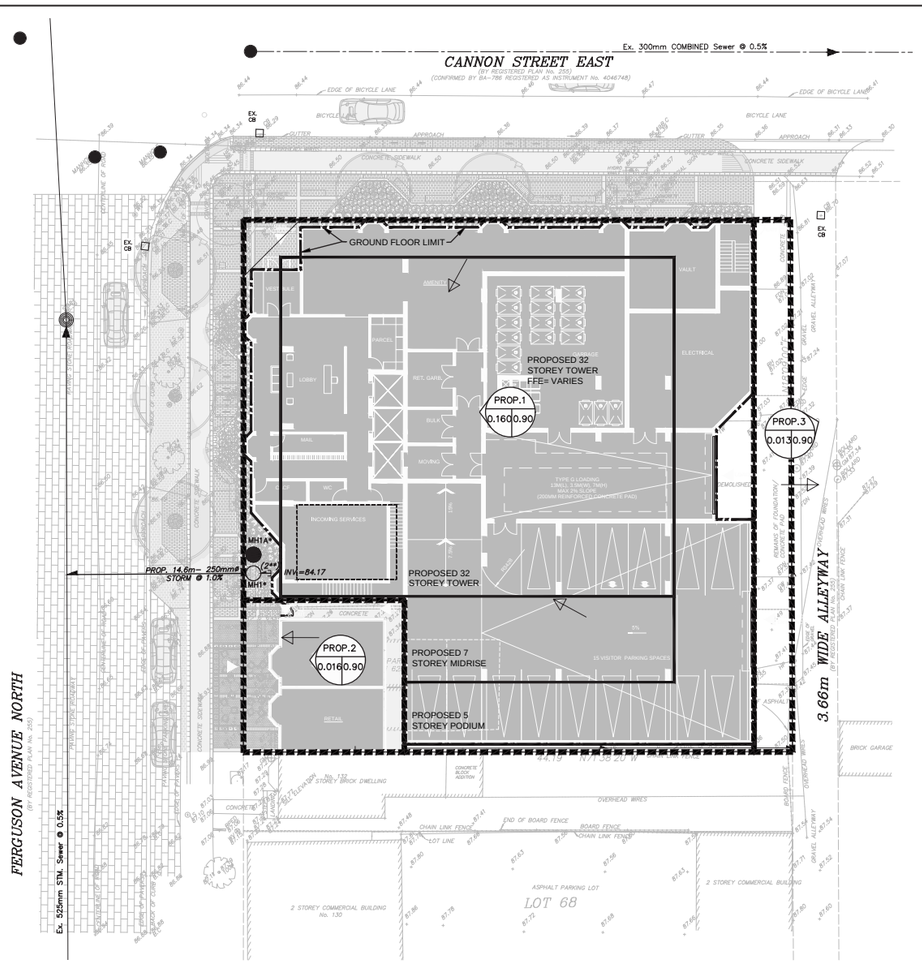
Functional Servicing Memo

188 CANNON STREET EAST



EXISTING CONDITION

TOTAL AREA = 1,890m²
EX.1 DRAINAGE AREA TOWARD FERGUSON AVENUE NORTH = 810m², C=0.88
EX.2 DRAINAGE AREA TOWARD CANNON STREET EAST = 1,080m², C=0.85



PROPOSED CONDITION

TOTAL AREA = 2,335m²
PROP.1 DRAINAGE AREA TOWARD FERGUSON AVENUE NORTH = 1,600m², C=0.9
PROP.2 DRAINAGE AREA TOWARD CANNON STREET EAST = 160m², C=0.9
PROP.3 DRAINAGE AREA TOWARD ALLEYWAY = 130m², C=0.9

LEGEND

DRAINAGE AREA BOUNDARY

EX. | 1.00 | 0.75 — *DRAINAGE AREA NO.*, *RUNOFF COEFFICIENT (AVERAGE)*, *AREA IN HECTARES (TOTAL)*

PROP. | 1.00 | 0.75 — *DRAINAGE AREA NO.*, *RUNOFF COEFFICIENT (AVERAGE)*, *AREA IN HECTARES (TOTAL)*

SCALE 1:200
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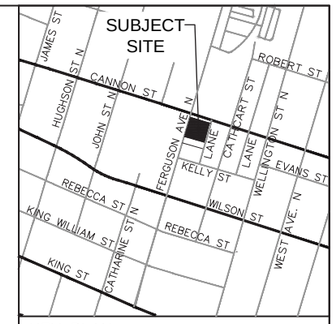

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LICENSED PROFESSIONAL ENGINEER — B. J. CLARKE 100189931 — 08-03-2024 — PROVINCE OF ONTARIO

ENGINEER

PROJECT OWNER:
188 HAMILTON GP INC.,
c/o VANTAGE DEVELOPMENTS INC.

NOT ISSUED FOR CONSTRUCTION

MUNICIPALITY:
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188 CANNON STREET EAST

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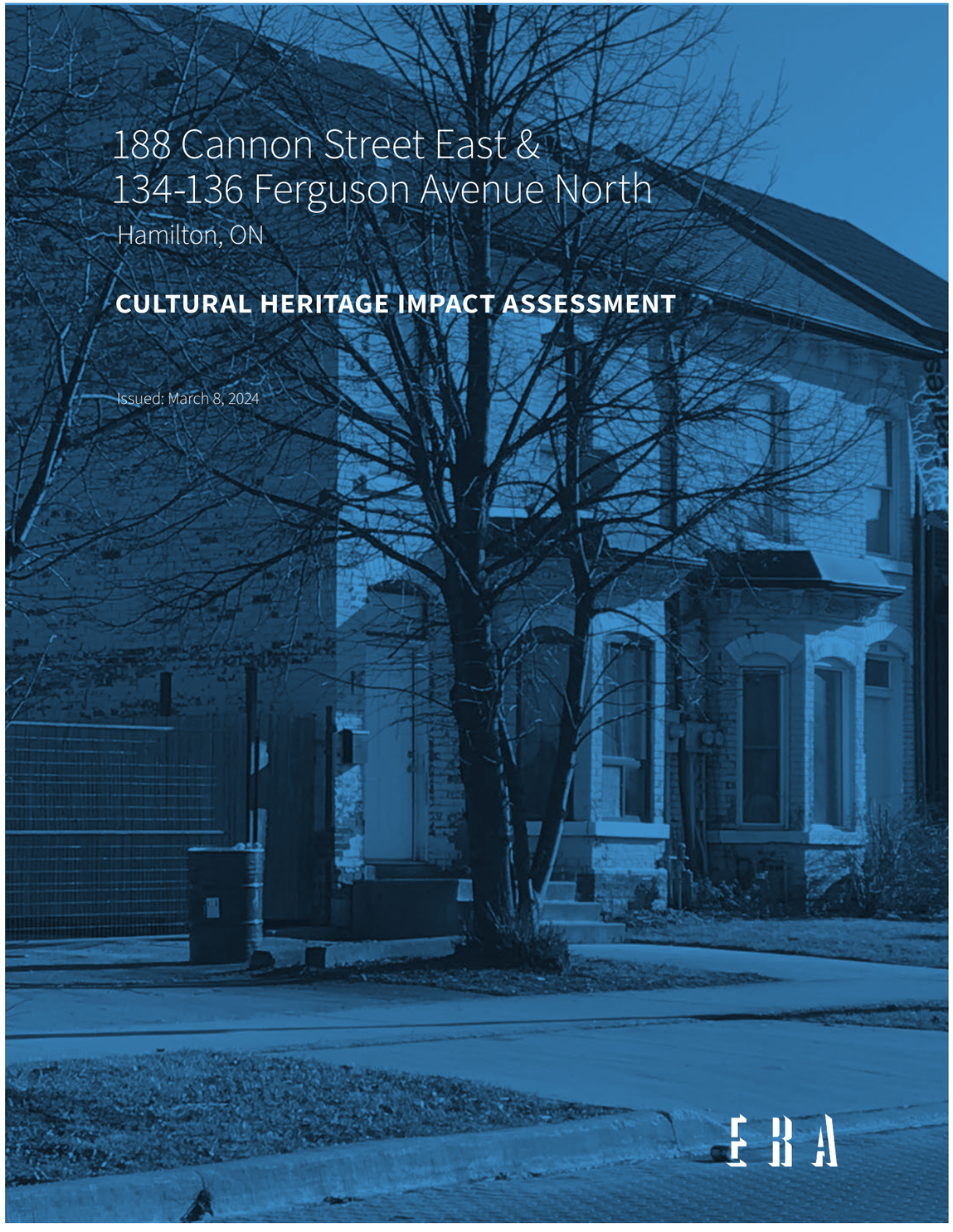
SURVEYORS • PLANNERS • ENGINEERS
25 MAIN STREET WEST, SUITE 300
HAMILTON, ONTARIO L8P 1H1
Tel: 905 528-8761 Fax: 905 528-2289
email: ajc@ajclarke.com

TITLE:
PRELIMINARY STORM DRAINAGE AREA PLAN

SCALE: 1:200	DATE: JANUARY 2024
DESIGN: B.C.	DRAWN: M.S.
DWG: 178262	SHT: 4

Cultural Heritage Impact Assessment



Project #	23-262-02
Prepared by	SI / JQ / KK / ZC

PREPARED FOR:

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Hamilton 188 GP Inc. C/O Vantage Developments Inc.
T: (647) 629-1336
E: sjiwani@vantagedevcorp.com

PREPARED BY:

ERA Architects Inc.
#600-625 Church St
Toronto ON, M4Y 2G1
416-963-4497

Cultural Heritage Impact Assessment

CONTENTS

EXECUTIVE SUMMARY

Background

This Cultural Heritage Impact Assessment ("CHIA") has been prepared by ERA Architects Inc. ("ERA") on behalf of Hamilton 188 GP Inc. for the properties at 188 Cannon Street East and 134-136 Ferguson Avenue North, in Hamilton (the "Site").

The Site currently consists of a vacant commercial (formerly industrial) lot at 188 Cannon Street East and two residential lots containing a pair of 1886 row houses at 134-136 Ferguson Avenue North. This CHIA was prepared to accompany a development application for the Site.

Heritage Status

The properties at 134-136 Ferguson Avenue North are listed on the City of Hamilton's Heritage Register. In 2014, they were identified as "character defining properties" in the Downtown Built Heritage Inventory (the "Inventory"). None of the properties on the Site are presently designated under the *Ontario Heritage Act* (the "OHA").

The following listed heritage properties are considered adjacent to the Site, according to the definition set out under the Urban Hamilton Official Plan (Chapter G) and are identified as "character defining properties" in the Inventory:

- 61, 63, 65, 67, 71, 75 and 77 Cathcart Street (c. 1883-1921); and
- 195, 197 and 199 Cannon Street East (c. 1870-1890).

These properties contain vernacular house-form buildings dating from the late 19th and early 20th centuries.

Cultural Heritage Value

According to ERA's evaluation of the Site against Ontario Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest ("O. Reg 9/06"), the properties at 134-136 Ferguson Avenue are candidates for designation under Part IV of the OHA on the basis of their design, associative and contextual value.

Proposed Development

The proposed development contemplates significant *in-situ* retention and adaptive reuse of the row houses at 134-136 Ferguson Avenue North. The retained portions of the houses will be integrated beside a new 32-storey residential building with 5-storey podium.

Impact of Proposed Development

No negative impacts on the cultural heritage value and attributes of on-site resources is anticipated.

No negative impacts on the cultural heritage value of adjacent listed properties are anticipated. Net new shadows in the afternoon and evening hours will be cast on adjacent Cannon Street listed properties, however these shadows are not considered significant from a heritage perspective.

Conservation Strategy

The primary conservation treatment for the heritage buildings on the Site is substantial in-situ retention, rehabilitation for retail use, and removal of rear wings to accommodate new programming on the Site. Conservation design strategies are proposed within the new construction.

Mitigation and Considered Alternatives

The proposed development has been designed to conserve the cultural heritage value of the Site, while mitigating impacts to adjacent properties. Earlier iterations of the design considered removing the row houses on the Site to accommodate vehicular access from Ferguson Avenue North.

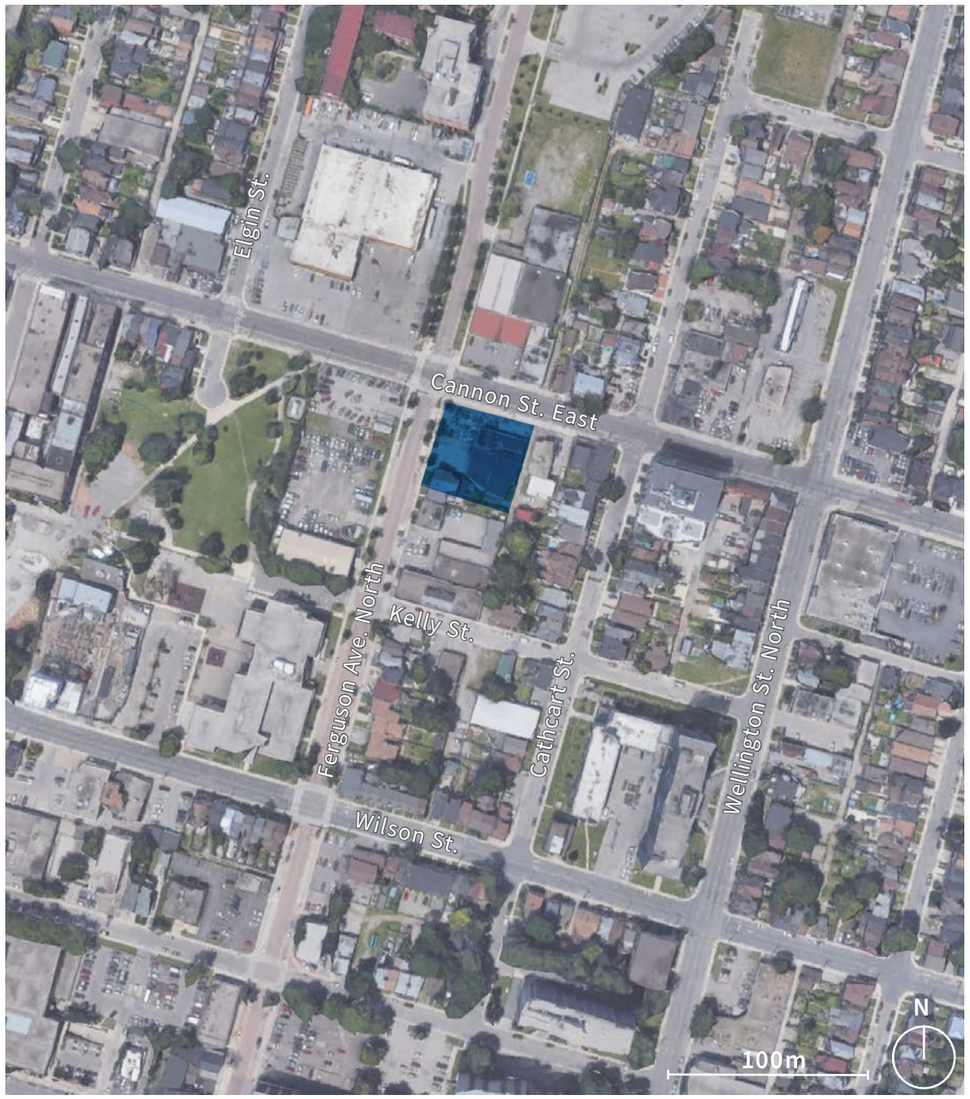
Conclusion

The proposed development will conserve the cultural heritage value of on-site and adjacent heritage resources. The proposed residential development is appropriately sited, massed and articulated to mitigate impacts to on-site and adjacent house-form buildings. As the design process progresses, the design team will continue exploring opportunities for further refinement of the material treatment and interface between the retained row houses and new construction.

Cultural Heritage Impact Assessment

1 INTRODUCTION

1.1 Location Plan



Aerial image showing the Site shaded in blue (Google Earth, 2023; annotated by ERA).

1.2 Site Plan

Aerial image showing the Site extents outlined in blue, with distinct portions of the row houses at 134-136 Ferguson Avenue North identified. Note: Satellite imagery is out of date; the 20th century industrial building at 188 Cannon Street East has since been demolished (Google Earth, 2022; annotated by ERA).

Cultural Heritage Impact Assessment

1.3 Site Description

The subject properties, municipally known as 188 Cannon Street East and 134-136 Ferguson Avenue North (the "Site"), are located at the southeast corner of Cannon Street East and Ferguson Avenue North in Hamilton's Beasley neighbourhood. The Site bounded to the north by Cannon Street East, to the west by Ferguson Avenue North, to the east by a laneway and to the south by 132 Ferguson Avenue North (the third attached house, which terminates the row and is not part of the Site).

The Site contains a vacant commercial lot (188 Cannon Street East) and a pair of adjoined row houses (134-136 Ferguson Avenue North), which form part of a three-unit row. The two houses on the Site are mirror images of one another, while the southernmost unit replicates the centre unit.

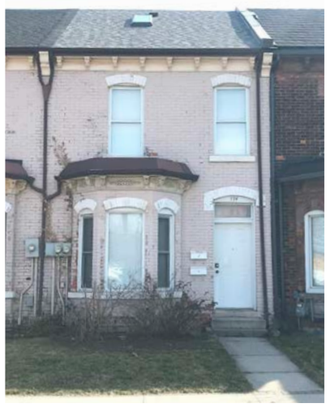
134 and 136 Ferguson Avenue are listed on the City of Hamilton's Heritage Register. The Heritage Register indicates that both dwellings were built in 1865, however the Downtown Built Heritage Inventory (the "Inventory") indicates that they were built in 1885. ERA's research concludes the properties were built in 1886. Both properties are considered as "character defining properties" in the Inventory.

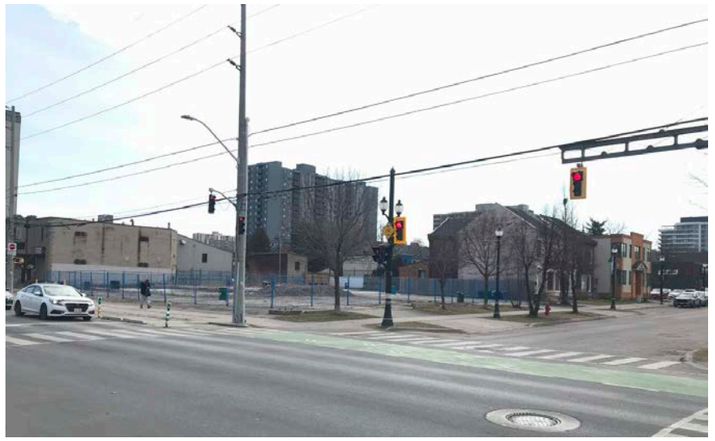
The row houses reflect a late Victorian-era vernacular style, constructed in red brick (over-painted)with buff brick segmentally arched brick headers on the principal (west) elevations. The dwellings are built on a L-shaped plan with an original rear wing, and an additional one-storey frame and brick addition behind. The buildings historically had gable-end parapet walls with integrated chimneys that extended above the roof-lines, however these were removed sometime after 1970. Each of the row houses is set back from the street and has a front lawn.

Decorative wooden brackets are located at the eaves on the principal elevations, as well as along the first-floor bay windows. Wood carvings are located at the frieze board of the bay-window and roofline on the west elevations.

From left to right: 136, 134 and 132 Ferguson Avenue North (ERA, 2024).


From left to right: 136 Ferguson Avenue North (ERA, 2024).


From left to right: 134 Ferguson Avenue North (ERA, 2024).


View of the Site from the intersection of Cannon Street East and Ferguson Avenue North, showing the vacant property at 188 Cannon Street East (ERA, 2024).

1.4 Context

The Site is located in the Beasley neighbourhood, which is the northeast section of downtown Hamilton, bounded by James, Wellington, Main Street and the CN railway line. Cannon Street is a main commercial thoroughfare characterized by both large and small-format commercial buildings. Residential uses are also located along Cannon Street East, including late 19th century low-rise vernacular dwellings (i.e. 197-195 Cannon Street East) and contemporary high-rise typologies (i.e. 220 Cannon Street East). Many vacant lots and paved parking areas characterize the immediately adjacent streetscape. The Good Shepherd Venture Centre is located opposite the Site on the northwest corner of Cannon Street East and Ferguson Avenue North. Beasley Park is located west of the Site on Elgin and Cannon Streets.

Ferguson Avenue North is characterized by mostly low-rise buildings dating from the late 1800s to the 2010s. A range of architectural styles are found among the Street's residential, commercial, industrial and institutional buildings. The Beasley Community Centre and Dr. J. E. Davey Elementary School, constructed in 2010, are located half a block south of the Site on the west side of Ferguson Avenue.

The Site is located in the Downtown Hamilton Secondary Plan area. 188 Cannon Street East and 136 Ferguson Avenue North are designated "High-Rise-2" and 134 Ferguson Avenue is designated "Mid-rise," according to Map B.6. 1-2, Urban Hamilton Official Plan.


Commercial property north of the Site opposite Cannon Street East ERA, 2024).


View east on Cannon St. East towards the Site, with view of residential towers in the background (ERA, 2024).


View of the properties east of the Site on Cannon St. East (ERA, 2024).


View southwest along Cannon St. East towards the Site (ERA, 2024).

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1.5 Adjacent Heritage Context

The following listed heritage properties are considered adjacent to the Site, according to the definition set out under the Urban Hamilton Official Plan (Chapter G). These properties were identified as "character defining properties" in the Inventory:

Opposite the Site on Cannon Street East:

- 195 Cannon Street East (c. 1890)
- 197 Cannon Street East (c. 1870)
- 199 Cannon Street East (c. 1870)

East of the Site on Cathcart Street:

- 61 Cathcart Street (c. 1884)
- 63 Cathcart Street (c. 1884)
- 65 Cathcart Street (c. 1884)
- 67 Cathcart Street (c. 1883)
- 73 Cathcart Street (c. 1921)
- 75 Cathcart Street (c. 1921)
- 77 Cathcart Street (c. 1890)

These properties contain vernacular house-form buildings built during a period of extensive industrial development in Hamilton. Refer to section 2.1.3 for additional historic context on the Beasley neighbourhood. Refer to images of adjacent properties on the following page.

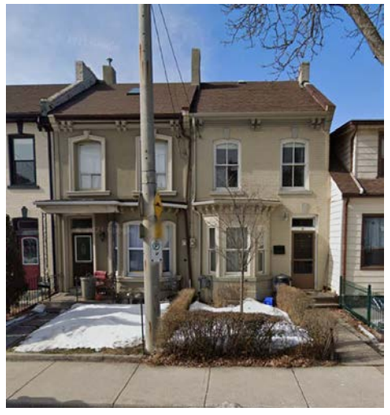
Adjacent: *In regard to cultural heritage and archaeology, those lands contiguous to, or located within 50 metres of, a protected heritage property.*

-Urban Hamilton Official Plan, Chapter G- Glossary

195 Cannon Street East (Google Streetview, 2021).

197-199 Cannon Street East (Google Streetview, 2022).

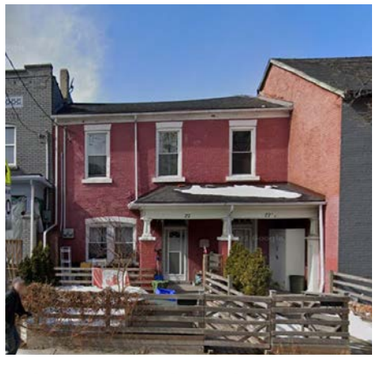
61 Cathcart (Google Streetview, 2022).



63-65 Cathcart Street (Google Streetview, 2021).

67 Cathcart Street (Google Streetview, 2022).

73-75 Cathcart Street (Google Streetview, 2022).



77 Cathcart Street (Google Streetview, 2021).

Cultural Heritage Impact Assessment

1.6 Present Owner and Contact Information

Shamil Jiwani
Hamilton 188 GP Inc. C/O Vantage Developments Inc.
T: (647) 629-1336
E: sjiwani@vantagedevcorp.com

1.7 Application History

This Cultural Heritage Impact Assessment (CHIA) was prepared to accompany the property owner's development application for the Site.

2 BACKGROUND RESEARCH AND ANALYSIS

2.1 Historic Context

2.1.1 Indigenous Past, Present, Future

This Site history was prepared from a non-Indigenous perspective, based on written and archaeological records, and written accounts of oral histories. It may not reflect or represent the full rich history of Indigenous peoples in this region.

The Site is located within the Dish with One Spoon Wampum Belt Covenant, an agreement between the Haudenosaunee Confederacy, the Anishinaabe, and allied nations to peaceably share and care for the resources around the Great Lakes, which encompasses southern Ontario, from the Great Lakes to Quebec, and from Lake Simcoe to the United States. Originally negotiated between the Anishinaabe and Haudenosaunee after the French and Indian War (1754-1763), newcomers were incorporated into the covenant over the years, most notably in 1764 with the Niagara Treaty, through which Indigenous Nations ratified the Royal Proclamation of 1763.

Hamilton has been home to Iroquoian and Anishinaabe Peoples from time immemorial. It is likely that the surrounding area was first inhabited shortly after the end of the Wisconsin Glaciation in ca. 13,000 BCE.[1] Today these lands are recognized as the traditional territories of the Haudenosaunee, Mississaugas of the Credit, and Huron-Wendat Nations.

Between the Middle Woodland Period (500 BCE to 500 CE) and Late Woodland Period (900 CE to 1650 CE) Iroquoian People settled along the western shores of Lake Ontario and the Grand River Valley, transitioning from a hunter-gatherer to settled agricultural society.[2] Between ca. 1100 and 1650 CE, the area was inhabited by the Neutral Confederacy, who referred to themselves as Chonnonton, which means "the people who tend or manage deer."[3]

1 Smith, K.P., et al, 1998. The Early and Middle Archaic Period in the Niagara Frontier. In Contributions to the Natural Sciences and Anthropology: Ferschrift in Honor of George Goodyear, edited by E. Both. Bulletin of the Buffalo Society of Natural Sciences.
2 Haines, H., Smith, D.G., Galbraith, D.A., and Theysmeyer, T. (2011). The Point of Popularity: A Summary of 10,000 years of Human Activity at the Princess Point Promatory, Cootes Paradise March, Hamilton, Ontario. Canadian Journal of Archaeology, 35, 232-257. https://www.researchgate.net/publication/235617443_The_Point_of_Popularity_A_Summary_of_10000_years_of_Human_Activity_at_the_Princess_Point_Promontory_Cootes_Paradise_Marsh_Hamilton_Ontario
3 Noble, W. (2015). The Neutral Confederacy. The Canadian Encyclopedia. https://www.thecanadianencyclopedia.ca/en/article/neutral

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Based on oral histories, between 900 CE and 1400 CE, the Anishinaabe People migrated from the Atlantic coast, in what is today known as Canada and the north-eastern United States, to the western shores of Lake Superior.[4] By the 17th century, the Mississaugas inhabited the lands on the north shores of Lake Huron and Georgian Bay. Following the retreat of the Haudenosaunee from southern Ontario, the Mississaugas migrated into the area in late 17th century, where the continued to follow a seasonal cycle of movement and resource harvesting along the area's rivers and lakes.[5] Hamilton is located within the territory covered by the "Between the Lakes Treaty" (No. 3), negotiated in 1784, amended 1792, between the Mississaugas of the Credit and the Crown, which allowed colonial settlement on the lands between lakes Erie, Huron, and Ontario.

2.1.2 Colonial Settlement & Development in Hamilton

Beginning in the 1790's, United Empire Loyalists began to settle in Wentworth County, taking advantage of the key geographic location near a network of waterways surrounding the Niagara Escarpment. Settlements surrounding these waterways contained a concentration of mills and the area grew rapidly in the early 1800s, supporting the area's status as an agricultural and milling centre, particularly in the communities of Ancaster and Dundas which were located in fertile river valley lands.[6,7]

In the late 1820's, the Burlington Canal was constructed through a sandstrip between Lake Ontario and Hamilton Harbour, increasing access to Hamilton and the shipping of agricultural products.[8] Hamilton was incorporated as a town in 1833 and as a city in 1846. In the early 1850s, lawyer, businessman and former Premier of the United Canadas (1854-1856) Sir Allan MacNab's Great Western Railway, was completed with its base in Hamilton, serving as a critical link towards New York and Michigan.[9] In 1865, the Grand Trunk Railway ("GTR") extended its Toronto-Sarnia line to Hamilton. Historic maps indicate GTR Shunting yards were developed north of the Site on Ferguson Avenue.

The Hamilton & Lake Erie Railway was completed in 1878. It linked the harbour communities of Port Dover and Hamilton. Its main station was located and Ferguson Avenue and King Street, making Ferguson Avenue a major north-south rail corridor.[10] The City of Hamilton continued to grow in population and prominence into the late 19th and early 20th century as a manufacturing and commercial centre.

2.1.3 Development & Change in Beasley

The Site is located in the Beasley Neighbourhood. The following historical overview of the neighbourhood is excerpted from the Historic Context Statement for Beasley prepared as part of the Hamilton Downtown Built Heritage Inventory (ERA, 2014).[11]

> *Beasley is one of the four original neighbourhoods of Hamilton. Its origins can be traced to the town's incorporation in 1833 and the establishment of the first ward boundaries. The neighbourhood was named after Richard Beasley, an early settler, who established a trading post in the late 18th century in the region. As with other historic downtown neighbourhoods, the land within its boundaries was employed for agricultural purposes before the town was settled. This changed in 1816, when the area bounded by Main, James, Wilson, and Mary streets was included within the town plan prepared by George Hamilton.* [...]
>
> *Hamilton's first businesses were established in Beasley by the second decade of the 19th century, around the area that became the Gore, on King Street East. By the mid-19th century, low-rise commercial buildings lined King and James, as well as other neighbouring streets. Beasley's role as the commercial core of Downtown Hamilton has continued since that time, in particular along King and James streets. It has, however,*

4 Benton-Banai, E. (1985). The Mishomis Book: The Voice of the Ojibway. Red Schoolhouse Publishing Co.
5 Mississaugas of the New Credit First Nation. (2018). The History of the Mississaugas of the New Credit First Nation. Oakville Historical Society. https://www.oakvillehistory.org/uploads/2/8/5/1/28516379/the-history-of-mncfn-final.pdf
6 Hamilton Public Library. "Historical Hamilton." https://www.hpl.ca/articles/historical-hamilton.
7 Cruikshank, Ken. "Dundas." The Canadian Encyclopedia. https://www.thecanadianencyclopedia.ca/en/article/dundas.
8 Maritime History of the Great Lakes. "The Burlington Canal." https://images.maritimehistoryofthegreatlakes.ca/details. asp?ID=63038
9 Baskerville, B. (2015). Great Western Railway. The Canadian Encyclopedia. https://www.thecanadianencyclopedia.ca/en/article/great-western-railway
10 Cooper, C. (N.D.) Hamilton & North Wester/ Lake Erie Railways. https://railway-pages.com/hamilton-north-western-lake-erie-railways
11 ERA (2014). Historic Context Statement for Beasley. Appendix A, Downtown Building Heritage Inventory.

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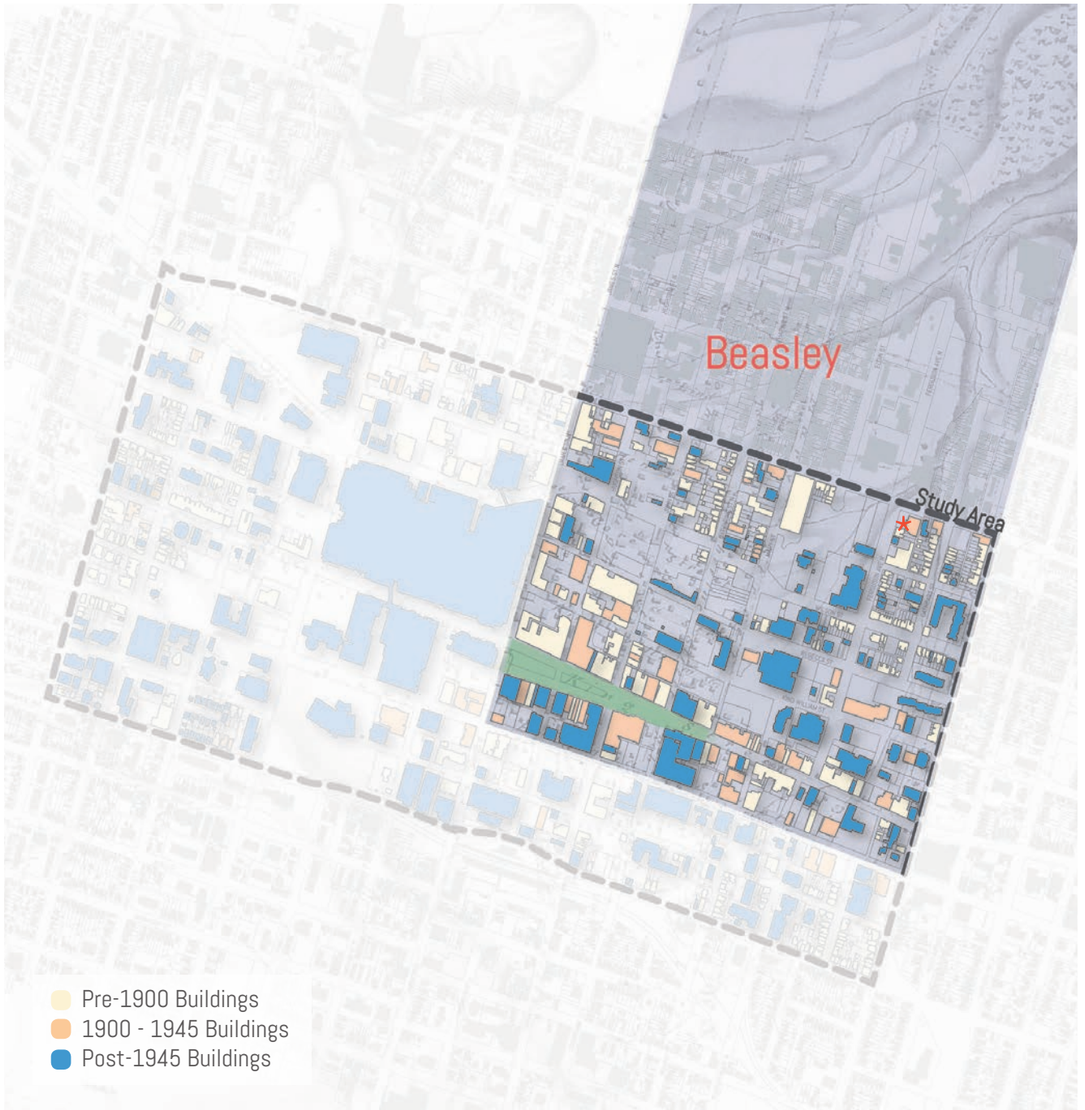
experienced a dramatic decline since suburbanization and the redevelopment of significant portions of Central, including the construction of Jackson Square.

In addition to being the focal point of early commerce in Hamilton, the city's first industries also began in Beasley and were concentrated in this neighbourhood, and in Central, for many decades. Small-scale industries began to appear as early as 1819, with the opening of a wagon and plough factory on King Street East. The early industries were small-scale, family-run operations, and included textile manufacturers, carriage and wagon works, breweries, distilleries, tanneries, lumber mills and small foundries, among other things, which served the growing city. The arrival of the Great Western Railway in 1853 spurred further industrial activity in the city and was a driver of development in the northern sections of downtown core, including Beasley, which were situated in relatively close proximity to the railway.

As was typical of manufacturing districts of the Victorian period, housing for workers was constructed, cheek-by-jowl, next to the industries and commercial establishments where the workers were employed. This gave rise to the role of Beasley as a self-sufficient, mixed-use neighbourhood and an arrival point for new immigrants, something that continues to the present.

Although the first half of the 20th century saw some new commercial and institutional development in Beasley, for example, the 12-storey Royal Connaught Hotel of 1916, various department stores and the Dominion Public Building of 1936, it marked the beginning of Beasley's decline. A new era of modern industrial development had begun, based around Hamilton Harbour. Residential and commercial development also began to decentralize, as transportation routes and the public transit system improved. Beasley was further affected by the re-development of portions of Central during the second half of the 20th century, as well as the construction of Jackson Square.

In spite of its decline over the course of the 20th century, Beasley has remained an important inner-city, mixed-use neighbourhood. Although much of its former industrial



2014: Figure 2 of the Beasley Historic Context Statement Border within the Downtown Built Heritage Inventory, showing a variety of building ages represented. The Site is starred in red. (ERA, Annotated 2024)

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land has been converted to surface parking, its residential and commercial roles continue, and a burgeoning arts, entertainment, and cultural scene is growing within its boundaries. Many important municipal social services are situated within Beasley and at the edge of the downtown core a skateboard park, school, and community centre have been established on former industrial land to serve its residents.

Numerous streetscape improvements have been introduced to Ferguson Avenue since the 1990s, including heritage interpretation that tells the story of railways in the neighbourhood.

Over the course of the last 10 years, development, including the tower at 220 Cannon Street East, and a proposed 6-storey building at 202 Cannon Street East, have been reshaping the Beasley neighbourhood.

1953: A high-profile locomotive derailment on Ferguson Avenue near Rebecca Street was responsible for injuring two crew members. City Council renewed efforts to remove at-grade rail from Ferguson Avenue in the 1980s (Hamilton Public Library).

1986: At-grade freight traffic on Ferguson Avenue, with various light industrial uses in the foreground. These uses sat cheek-by-jowl, next to residential uses (Vintage Hamilton Facebook).

2023: Aerial image showing industrial uses alongside residential uses in Beasley. View south across Cannon Street East between Elgin and Mary Streets (Google Earth, 2023).

2020s: Ferguson Avenue railway interpretation elements (Google Streetview).

1898: Fire Insurance Plan, plates 28-31. The Beasley neighbourhood and surrounding area saw rapid industrial development, rail infrastructure and modest housing development at the end of the 19th century. The Site is indicated in blue. The GTR Yards are shaded in yellow (McMaster University Archive).

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2.2 Site History

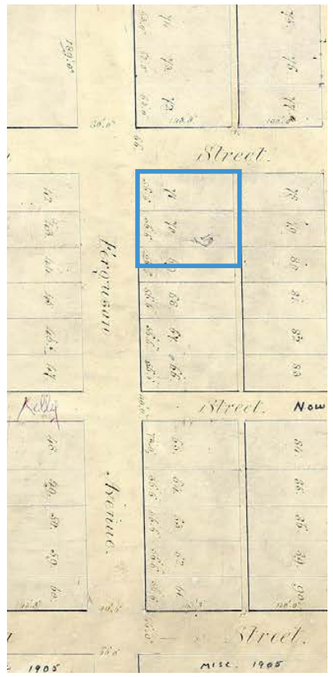
The Site is located on Lot 13, Concession II. The lands were originally granted to Peter Ferguson by the Crown in 1802.[12] Peter Ferguson was one of the earliest settlers at the Head-of-the-Lake. The Fergusons also owned land on Lot 12, Concession I, where they built their house at the corner of Cherry and Robert Streets. Cherry Street, Nelson Street and Henry Street were subsequently re-named Ferguson Avenue in Peter Ferguson's honour.[13,14]

In January 1854, Peter Ferguson's lands were surveyed and subdivided (Plan of Survey 255) by his son, Archibald. Several dozen lots and a gridded street pattern were introduced. Six lots were created on the east side of Ferguson Avenue, between Cannon and Kelley Streets, the block on which the Site is located. The Site forms part of lot 69, and the entirety of lots 70 and 71 (refer to survey, right).[15]

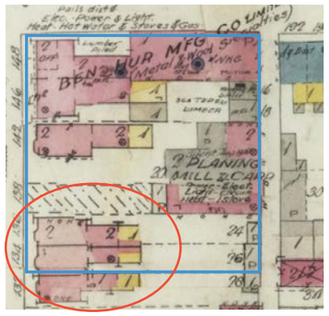
By 1870, the six lots on the west side of Ferguson Avenue had been built up, with the exception of one lot. Sutherland's 1870 directory lists the inhabitants as follows (from north to south):[16]

- #64: Hugh Murray (Murphy & Murray)
- Vacant Lot
- #70: Mrs. Ruth Armstrong
- #72: Benjamin Wagner, trunk maker
- #78: Colin Macrae, merchant
- #80: Charles Jones, commission merchant.

Further subdivision of the lots occurred in the decades that followed, as discussed in the following section.



1854: Plan of Survey of the property of Peter Ferguson. The Site is outlined in blue on lots 69, 70 and 71 (Ontario Land Registry Office #62).



1911: Fire Insurance Plan, Plate 31. The Site is outlined in blue. The row houses at 132-136 Ferguson Avenue North are circled in red (McMaster University, Annotated by ERA).

134-136 Ferguson Avenue North

Development & Occupants

In 1886, Ruth Armstrong (née Hetherington, b. 1826, England, d. 1902, Hamilton) commissioned notable builder and City Alderman, Thomas Allen, to construct three attached workers' row houses at present-day 132-136 Ferguson Avenue North, in place of the family's former single residence at 70 Ferguson Avenue North.[17]

12 Ontario Land Registry Office #62 (N.D.). Historical Book, Lot 13, Con. II (p. 76).
13 Plan of John Fergusons property in the City of Hamilton. McMaster University Archive. https://digitalarchive.mcmaster.ca/islandora/object/macrepo%3A71687
14 Houghton, M. (2002). Hamilton Street Names: An Illustrated History.
15 Ontario Land Registry Office #62. Plan of Survey for the Lands of Peter Ferguson.
16 Sutherland's 1871-1872 Directory. Hamilton Public Library.
17 23 Sep 1913. Experts Differ on Land Values: Ferguson Avenue Arbitration Continues Before Judge. The Hamilton Spectator (p. 1).

The cost to construct each dwelling on the Site was $600.[18] The 1887-1888 directories indicate the units were completed and occupied:

1. #70 (presently #132): S. J. Stratton, stenographer
2. #70½ (presently #134) Mrs. Arthur Armstrong
3. #70 (presently #136): Richard Hearne, tobacconist

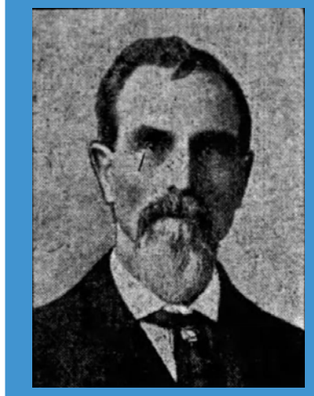
The addresses on Ferguson Avenue North were renumbered at the end of the 1880s. In 1890, the City of Hamilton Assessment Roll shows Ruth as the owner of 132, 134 and 136 Ferguson Avenue North. Ruth remained at #134, renting #132 to S.J. Stratton and #136 to David Tilley.[19] She continued to reside at #134 until her death in 1901, after which time her son, Arthur, an engineer with the GTR, is shown as the owner.

In 1912, owing to resident complains that "shunting depreciated the value of their property, and that the crashing of cars kept them awake at nights" the Railway Board ordered the GTR to either buy out residents or compensate them. The GTR's agent, E. Donald, made offers on the assessed value of dozens of properties, including to Arthur Armstrong, owner of 132 and 136 Ferguson Avenue North, for $1,160 and $1,200, respectively.[20] In the years that followed, lengthy arbitration took place, as owners disagreed with the price being offered for their homes.[21]

Despite the nuisances of nearby industry and rail, the properties at 134 and 136 Ferguson Avenue North were occupied by several different residents throughout the 20th century until the present day.[22] Several residents are known to have shaped the Beasley community and the wider city. These residents included Thomas Whitsed, who resided at 134 Ferguson Avenue North in the 1920s, and once served as vice president of local 176: International Printing Pressmen's Union; and T.B. Christie, resident of 136 Ferguson Avenue North beginning in 1896 and a machinist by trade who helped build St. Giles Presbyterian Church in 1912.[23,24]

18 Ibid.
19 5 Apr 1890. Assessment Roll. The Hamilton Spectator (p. 20).
20 6 Sep 1912. Grand Trunk Agent Ready to Close Deals. The Hamilton Spectator (p.1).
21 12 Oct 1913. Property Values: Witness Give Testimony in the Ferguson Avenue Arbitration. The Hamilton Spectator (p.12).
22 Note: based on a review of available directories.
23 Campbell, R. 23 Dec 1959. Labour Beat. The Hamilton Spectator (p.40).
24 31 Jul 1890. Laid the Cornerstone of New Presbyterian Church. The Hamilton Spectator (p. 12).

Thomas Allen



Thomas Allen (b. 1838, Devonshire, England, d. 1917, Hamilton, Ontario) was a builder and contractor in Hamilton. He was elected to City Council for several terms (1875-1880, 1884-1886, 1903-1907).

Upon arriving in Hamilton at the age of 19, he apprenticed with William Chisholm, learning the carpentry trade. Thomas then moved to Detroit, before returning to Hamilton to go into independent business. He is credited with building over 750 houses.

In 1887, Allen constructed a commercial block at James Street and Mulberry Street.

According to building permit announcements in the Hamilton Spectator archives, Allen's housing

Cont. on following page.

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Design

1898 fire insurance plans show each of the two-storey brick houses featured front bay windows and rear wings, with the end portion of the wing constructed of wood.[25] The houses were constructed in a late Victorian vernacular style, typical of contemporaneous row houses in Hamilton built to accommodate a growing population of workers.[26] Refer to the following page for a review of the late 19th century workers' row house typology.

The houses at 134 and 136 Ferguson Avenue North (along with the adjoining property at 132 Ferguson Avenue North) display modest architectural detailing, such as segmentally arched brick headers above windows and doors, eave brackets and frieze board carvings. The brackets demonstrate some Italianate influence.[27] Archival photographs of the properties show dichromatic brickwork along door and window lintels, however this has since been obscured with paint.

25 1898 Fire Insurance Plan. Plate 31. McMaster Digital Archive.
26 ERA (2014). Historic Context Statement for Beasley. Appendix A, Downtown Building Heritage Inventory.
27 McAlester, V., et. al. (2013). A field guide to American houses: the definitive guide to identifying and understanding America's domestic architecture. Revised and expanded edition/second edition. New York, Alfred A. Knopf.

1971 view south on Ferguson Avenue North with view of 132-134 Ferguson Avenue (far left) (Vintage Hamilton Facebook).

Thomas Allen (cont.)

typologies (from Victorian row houses to stately detached homes) spanned downtown neighbourhoods (like Beasley, Strathcona, and Corktown) and price points (construction costs ranged from ~$400-2,000). Allen's buildings appear relatively modest, demonstrating typical vernacular architecture of the era (1880s-early 1900s).

His obituary on the front page of the Hamilton Spectator on October 18, 1917 read:

> *[he] was more directly identified with the growth and expansion of the city than any other man who ever lived here*

Late 19th Century Workers' Row Houses

Based on a review of nearby precedents, typical features of these workers' row houses included:

- Modest two-storey scale.
- Multiple units attached, with repeating pattern of narrow frontages.
- Gable roof, with raised masonry parapets and chimneys dividing row houses.
- Brick materials.
- One-storey bay window with an offset main entrance.
- Modest architectural detailing (e.g. segmental arch window openings etc.)

Key Map (Google Earth, Annotated by ERA).

Nearby workers' row houses (refer to Key Map, left) (Google Streetview).

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188 Cannon Street East

During the latter half of the 19th century, following survey and subdivision of Peter Ferguson's Lands, 188 Cannon Street East was developed for residential uses. Circa 1905, The Ben Hur Manufacturing company constructed a 1-2 storey brick factory building.[28] As was typical in the neighbouhood, the industrial building abutted a former residential building at 142 Ferguson Avenue North. An access lane was provided to the back of the factory via Ferguson Avenue North, just north of #136.[29] Ben Hur produced and finished wooden millwork supplies, such as machine-made balusters as well as metal building materials.[30] The company's occupancy on the Site was relatively short, as they left in 1919, auctioning off all equipment and leaving the Site vacant through the 1920s.[31]

From the 1960s to 1990s the Site served as an auto-repair and car sales lot. 1960s aerial photographs confirm the residential building at 142 Ferguson Avenue North was removed by this time.

Most recently the property at 188 Cannon Street East served as a dry cleaning facility. All buildings on this part of the Site were demolished in 2023.

28 Fire Insurance Plan, Plate 31 (1911). Hamilton Public Library.
29 Ibid.
30 23 May 1907. Notice to Architects & Builders. The Hamilton Spectator (p. 20).
31 11 Jun 1919. Executors' Auction Sale. The Hamilton Spectator (p.20).

Executors' Auction Sale

Of valuable city property known as

The Ben Hur Mfg. Co.

Corner of Cannon street and Ferguson avenue, will be offered by public auction on

Saturday, June 14th.

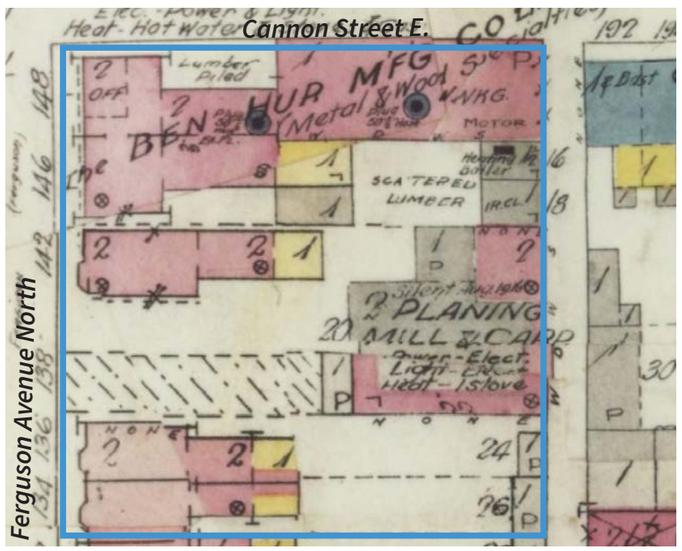
at 2 p.m., on the premises

Property has a frontage of 60 feet by 140 feet depth, more or less, on which is erected a one and two-story factory building, brick, and would be suitable for a garage, warehouse or factory. Also—

One 20 H.P. 60 cycle motor.
One wood-turning lathe.
One 4-spindle boring machine.
One 2-spindle shaper.
Shaftin, pulleys, and belting, etc.
All in the best condition.

For further particulars apply to BURROWS & GLADWELL, 11 Rebecca street, or to FRANK E. BURROWS, 146 Ferguson avenue north. Phone Regent 1738, or nights, Garfield 3326.

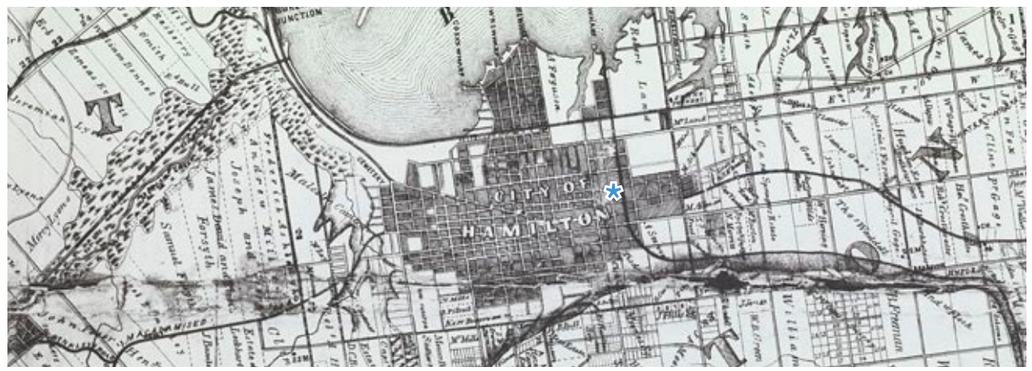
11 Jun 1919. Executors' Auction Sale. The Hamilton Spectator (p.20).



(LEFT) 1911: Fire Insurance Plan, Plate 31. The Site is outlined in blue (McMaster University, Annotated by ERA).

2.3 Research Materials

1851: Marcus Ferguson map of the City of Hamilton. The approximate Site location is indicated in blue, at the east extent of the built boundary of downtown (York University Archives).



1859: Robert Surtrees survey of the County of Wentworth. Lot 13, Concession II is included within the built boundary, having been subdivided by this time. The approximate Site location is starred in blue (Library and Archives Canada).

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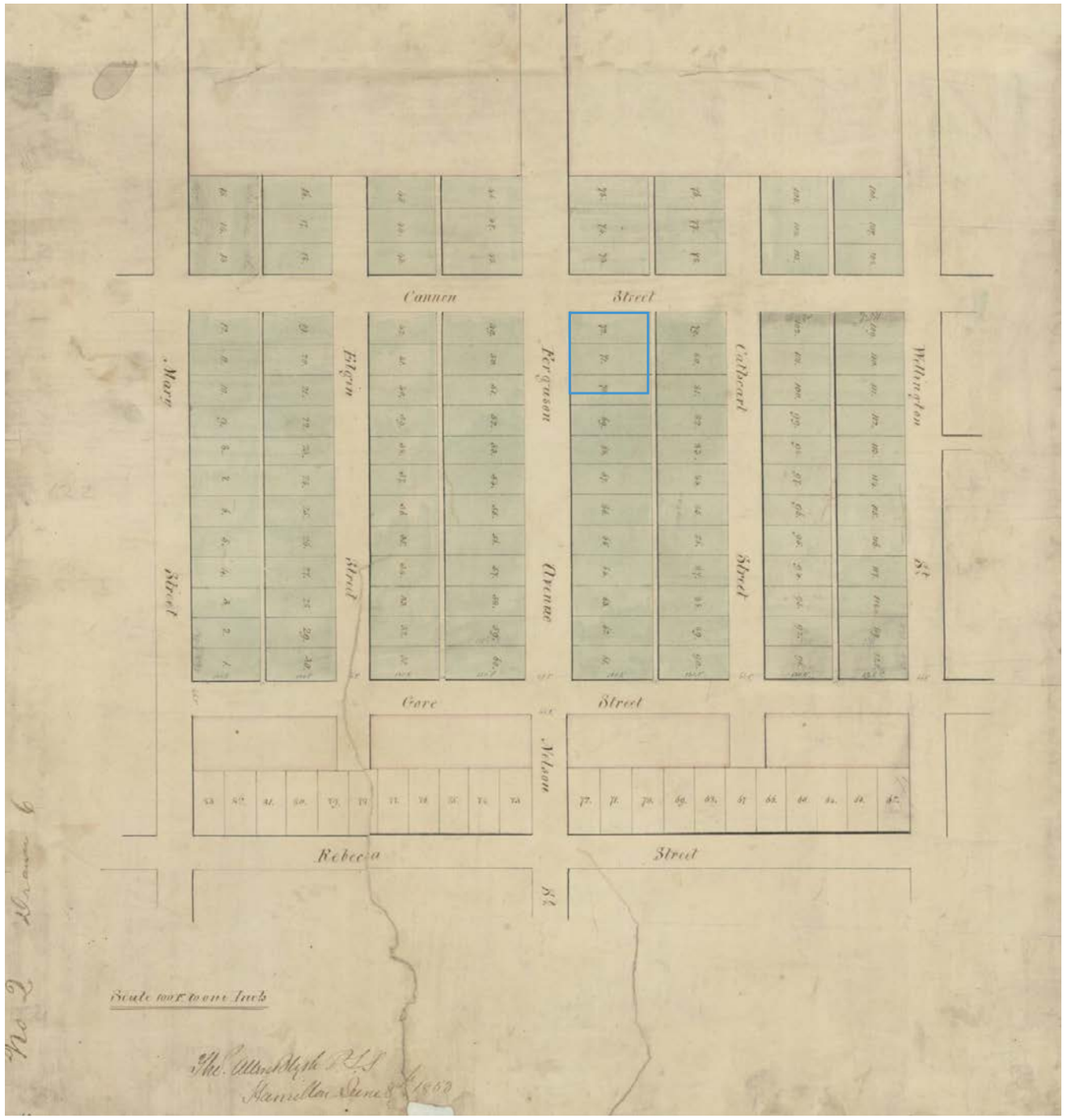
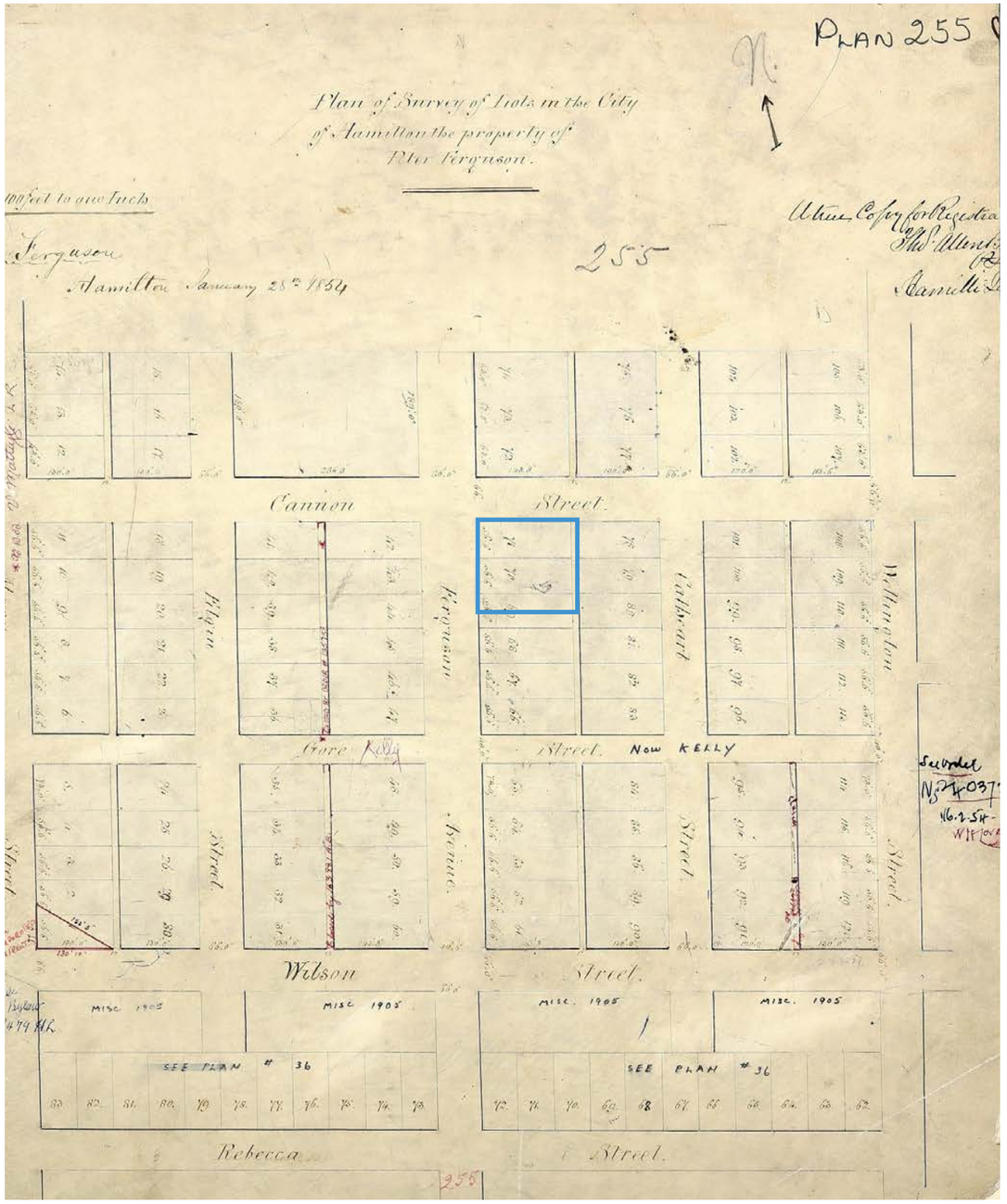


1853: Survey of a portion of Lot 13, Concession II, signed: "Ths. Allen Blyth P.L.S., Hamilton, June 8th 1853". The Site is outlined in blue. The lands were not ultimately subdivided according to this survey and instead were subdivided according to Survey Plan 255 (refer to following page) (McMaster University Archive).

Note: Gore Street is now referred to as Wilson Street.



1854: Plan of Survey of the property of Peter Ferguson. The Site is outlined in blue on lots 69, 70 and 71 (Ontario Land Registry Office #62).

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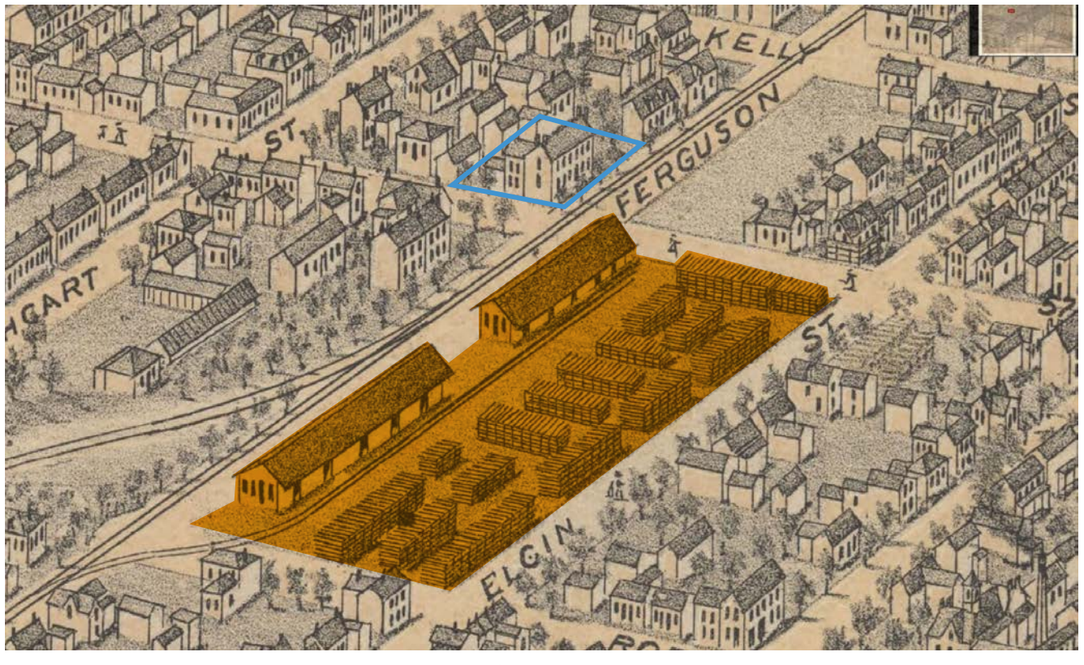
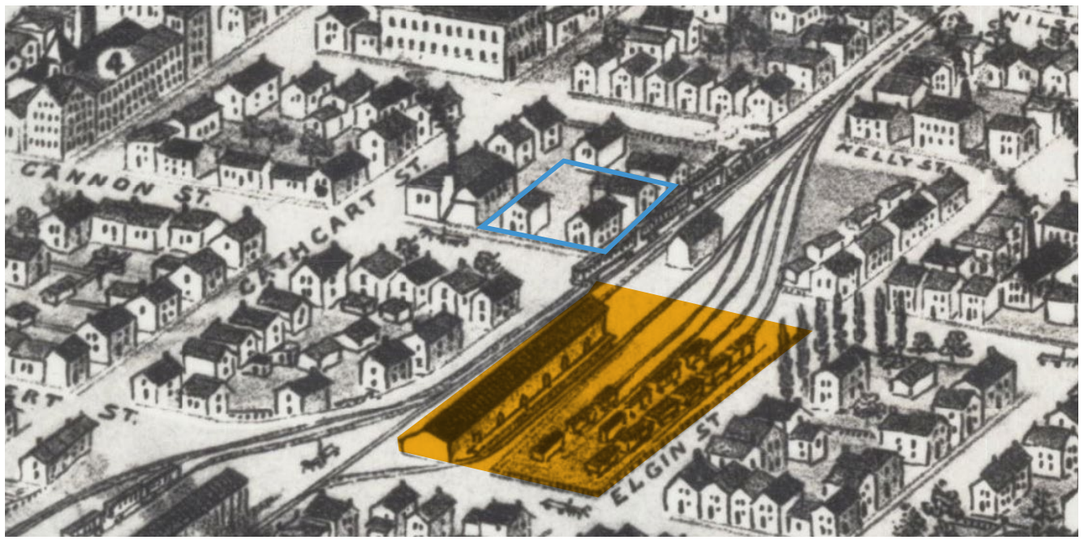
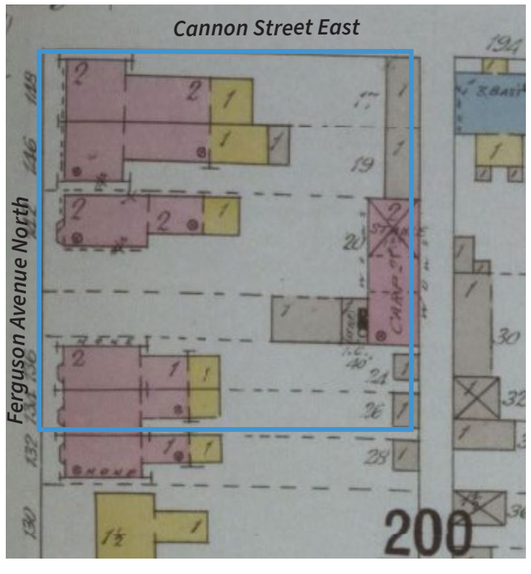


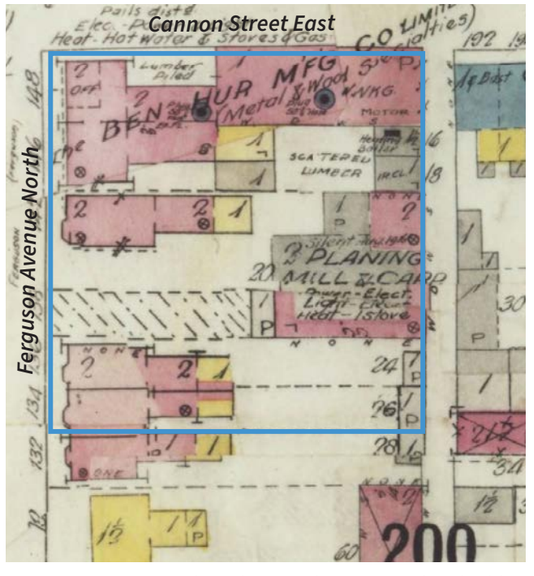
1876: Chicago Lithographing Company bird's eye view of Hamilton, view southwest. The Site is outlined in blue, nearby the GTR Yards, shaded in yellow (McMaster University, Annotated by ERA).



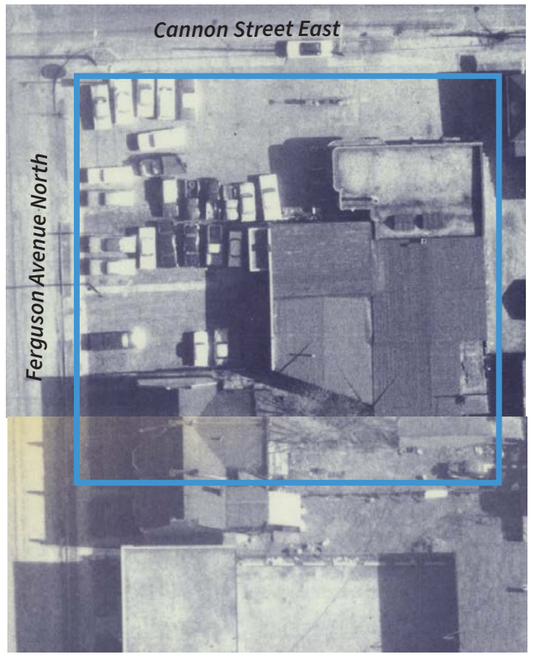
1893: Toronto Lithographic Company bird's eye view of Hamilton, view southwest. The Site is outlined in blue, nearby the GTR Yards, shaded in yellow (McMaster University, Annotated by ERA).



1898: Fire Insurance Plan, Plate 31. The Site is outlined in blue (McMaster University, Annotated by ERA).



1911: Fire Insurance Plan, Plate 31. The Site is outlined in blue (McMaster University, Annotated by ERA).



1969: Aerial photograph, with the Site outlined in blue (McMaster University, Annotated by ERA).

1999: Aerial photograph, with the Site outlined in blue(McMaster University, Annotated by ERA).

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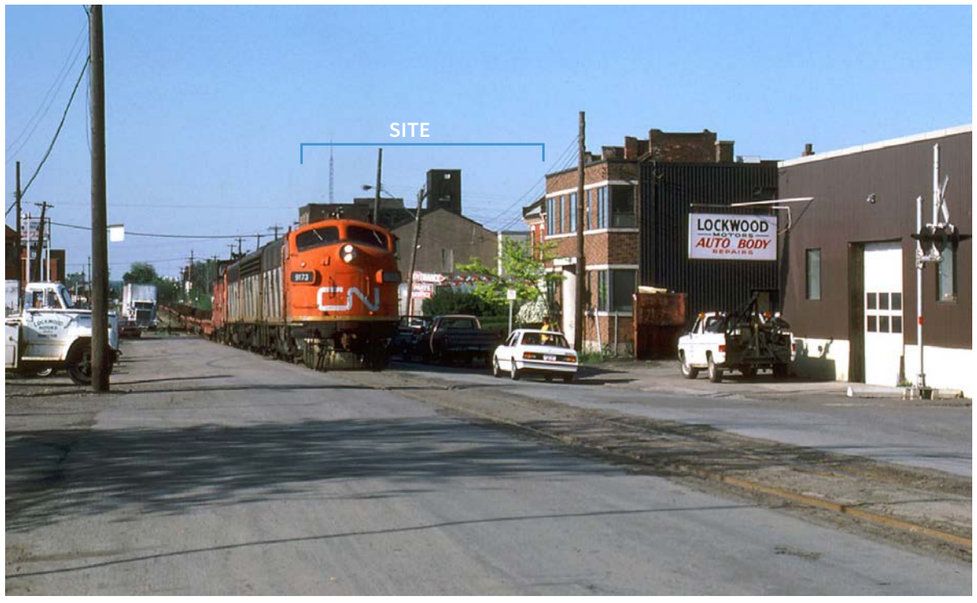
1970: View southeast of a passing locomotive on Ferguson Avenue. 136 Ferguson Avenue North on the Site is shaded in blue (Reg Button via Vintage Hamilton Facebook, Annotated by ERA).

1971: View southeast of a passing locomotive on Ferguson Avenue. 134 Ferguson Avenue North on the Site is shaded in blue (Reg Button via Vintage Hamilton Facebook, Annotated by ERA).



1986: View north of a passing locomotive on Ferguson Avenue. 132 Ferguson Avenue North with the Site in the background Facebook, Annotated by ERA).

2015: Streetview image showing the former industrial/commercial building on the Site at 188 Cannon Street East, and the north elevation of 136 Ferguson Avenue North (Google).

Cultural Heritage Impact Assessment

3 STATEMENT OF SIGNIFICANCE

3.1 Introduction

ERA's research and analysis concludes that the properties at 134 and 136 Ferguson Avenue North are candidates for designation under part IV of the OHA, owing to their design, associative and contextual value. The vacant property at 188 Cannon Street East does not hold significant cultural heritage value.

Refer to the following pages for an assessment according to Ontario Regulation 9/06 (O. Reg 9/06).

Value (quoted from O. Reg. 9/06)	Y/N	Assessment: 134 - 136 Ferguson Avenue North
1. The property has design value or physical value because it,		
i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,	Yes.	The properties are representative examples of late-Victorian-era workers' row houses, typical of those built throughout Hamilton's Beasley and Corktown Neighbourhoods between the 1870s and 1890s. This is expressed through their modest two-storey scale, narrow, replicated front elevations, gable roof, brick materiality and modest architectural detailing.
ii. displays a high degree of craftsmanship or artistic merit, or	No.	The properties display a typical degree of craftsmanship and artistic merit. The level of modest brick and wood detailing is typical of the late 19th century period. The buildings were built by a local builder, Thomas Allen. ERA's research to date has not identified any craftspeople or artisans involved in the construction of the building.
iii. demonstrates a high degree of technical or scientific achievement.	No.	The houses were built using brick construction methods typical for the period. They do not demonstrate a high degree of technical or scientific achievement.
2. The property has historical value or associative value because it,		
i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,	No.	Early and long-time residents of the row houses included Ruth and Arthur Armstrong and family, Thomas Whitsed and T.B. Christie, among others. Despite having made some contributions to the community, such as working at the GTR, co-leading Local 176, and helping to organize the building of St. Giles Church, it is ERA's professional opinion that they do not meet the threshold of significance under this criteria.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or	No.	The properties do not yield or have the potential to yield new information that contributes to an understanding of a community or culture.
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.	Yes.	The properties are associated with Thomas Allen (b. 1838 Devonshire, England, d. 1917, Hamilton, Ontario), a well-known Hamilton builder and long-serving City Alderman responsible for building over 750 homes in Hamilton. Allen's portfolio ranged from modest row houses to more stately single-detached homes. The buildings on the properties reflect Allen's portfolio of lower-scale workers' row houses. Allen's obituary on the front page of the Hamilton Spectator on October 18, 1917 read, "[he] was more directly identified with the growth and expansion of the city than any other man who ever lived here." ERA's research to date has not identified an architect associated with the properties.

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Value (quoted from O. Reg. 9/06)	Y/N	Assessment: 134 - 136 Ferguson Avenue North
3. The property has contextual value because it,		
i. is important in defining, maintaining or supporting the character of an area,	Yes.	The properties support the character of the Beasley neighbourhood, which includes fragmented pockets of low-rise late 19th century workers housing, abutting former industrial buildings and sites. While this portion of Ferguson Avenue North is mixed in character, the properties support the "cheek-by-jowl" pattern of residential and industrial development which was established in Beasley in the second half of the 19th century, as noted in the Beasley Historic Context Statement.
ii. is physically, functionally, visually or historically linked to its surroundings, or	Yes.	The properties at 134-136 Ferguson Avenue North are physically and historically linked to an adjoining row house at 132 Ferguson Avenue North. All three houses were built concurrently in 1886 by builder Thomas Allen for Ruth Armstrong, are physically linked and share the same design.
iii. is a landmark.	No.	The properties are not a landmark.

Value (quoted from O. Reg. 9/06)	Y/N	Assessment: 188 Cannon Street East
1. The property has design value or physical value because it,		
i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,	No.	N/A-188 Cannon Street East is a vacant lot.
ii. displays a high degree of craftsmanship or artistic merit, or	No.	N/A-188 Cannon Street East is a vacant lot.
iii. demonstrates a high degree of technical or scientific achievement.	No.	N/A-188 Cannon Street East is a vacant lot.
2. The property has historical value or associative value because it,		
i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,	No.	N/A- While the Site formerly housed industrial and commercial uses, it no longer communicates direct associations with themes, events, beliefs, persons, activities, organizations or institutions of significance to a community.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or	No.	188 Cannon Street East does not have the potential to yield information.
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.	No.	N/A-188 Cannon Street East is a vacant lot.
3. The property has contextual value because it,		
i. is important in defining, maintaining or supporting the character of an area,	No.	As a vacant lot, this property does not support the remnant 19th century industrial and residential character of Beasley.
ii. is physically, functionally, visually or historically linked to its surroundings, or	No.	The vacant property is not physically, functionally, visually or historically linked to its surroundings.
iii. is a landmark.	No.	The vacant property is not a landmark.

Cultural Heritage Impact Assessment

3.2 Statement of Significance

Statement of Cultural Heritage Value or Interest: 134-136 Ferguson Avenue North

Description

The properties at 134-136 Ferguson Avenue North are located on the east side of Ferguson Avenue, approximately 35 metres south of Cannon Street East. The properties contain two red brick row houses constructed in 1886. Each two-storey row house is located on a narrow lot, with a modest front yard setback. A third contemporaneous attached row house at 132 Ferguson Avenue North is not included in this Statement of Significance.

Heritage Value

The properties at 134-136 Ferguson Avenue North contain representative Victorian vernacular workers' row houses. Their two-storey scale, L-shaped footprint with rear wing, gable roof, narrow frontage and bay window with offset entrance are all typical of the type and style. The two row houses are mirror images of one another, symmetrical composition being another hallmark of the type and style. The row houses' red brick cladding and side-facing gable roofs are also typical and representative of contemporaneous workers' row houses. The buildings' dichromatic brickwork (mostly obscured with paint); decorative frieze board moulding; eave brackets; and segmentally arched brick window and door headers are intact and reflect typical modest architectural detailing of the era.

The properties are associated with Thomas Allen (b. 1838 Devonshire England, d. 1917, Hamilton, Ontario), a once well-known Hamilton builder and long-serving City Alderman, responsible for building over 750 homes in Hamilton. His obituary on the front page of the Hamilton Spectator on October 18, 1917 noted that, "[he] was more directly identified with the growth and expansion of the city than any other man who ever lived here." Allen's portfolio ranged from modest row houses to more stately single-detached homes. The buildings on the properties reflect Allen's portfolio of lower-scale workers' row houses.

The properties support the character of the Beasley neighbourhood, which includes fragmented pockets of low-rise residential development from the late 19th century, abutting former industrial buildings and sites. While this portion of Ferguson Avenue North is mixed in character, the properties support the "cheek-by-jowl" pattern of residential and industrial development, which was established in the neighbourhood in the second half of the 19th century, as noted in the Beasley Historic Context Statement.

The properties are physically and historically linked to an adjoining row house at 132 Ferguson Avenue North All three houses were built concurrently in 1886 by Thomas Allen for Ruth Armstrong, are physically linked, and share the same design.

Heritage Attributes

Key exterior attributes that express the value of 132-134 Ferguson Avenue North as representative examples of late-Victorian-era workers' row houses:

- Two-storey scale;
- Narrow frontage;
- Attached form with symmetrical, replicated design of principal elevations;
- Gable roof, with raised masonry parapet at the north elevation;
- Brick materials;
- One-storey bay window with an offset main entrance;
- Modest architectural detailing, including:
    - Dichromatic brickwork (obscured by paint);
    - Corbelling along north roof profile and decorative frieze board moulding;
    - Segmentally arched brick headers above windows and doors;
    - Eave brackets along the eaveline and bay window; and
    - Decorative frieze board carvings.

Key exterior attributes that express the value of 132-134 Ferguson Avenue North as reflective of the work of builder and City Alderman Thomas Allen:

- Vernacular architecture with modest detailing;

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- Attached row house form with symmetrical, replicated design of principal elevation, indicating the properties were built in multiples; and
- Brick materials.

Key attributes that express the value of 134-136 Ferguson Avenue North as supporting the late 19th-century mixed-use character of the Beasley neighbourhood include:

- Modest scale and attached row house form;
- Brick materials; and
- Location on the west side of Ferguson Avenue North, in proximity to industrial and commercial buildings.

Key attributes that express the value of 134-136 Ferguson Avenue North as being physically and historically linked to 136 Ferguson Avenue North include:

- Symmetrical, mirrored composition of the west elevations;
- Uniform front yard setback; and
- Uniform massing and roofline.

4 DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development substantially retains the row houses at 134-136 Ferguson Avenue *in-situ*, removing their rear wings and introducing a new 32-storey residential building to the north. The row houses are proposed to be rehabilitated for retail use.

At the base of the new construction, a 5-storey podium is proposed containing:

- A residential lobby fronting Ferguson Avenue North, with the main residential entrance at the corner of Cannon St. East and Ferguson Ave. North;
- Residential amenity space fronting Cannon Street East;
- Above-ground parking on the southeast portion of floors one through five; and
- Garbage and loading accessed at the east of the Site via the rear alleyway.

The ground floor is proposed to be articulated as a double-height space clad in glazing offset by articulated brick piers.

Residential units are proposed at levels 3-32. Stepbacks above the fifth floor are provided as follows:

- 3m along the north (Cannon Street E.) and west (Ferguson Avenue North) elevations;
- 6.4m along the east (laneway) elevation; and
- 6.9m along the south (row house) elevation.

An additional stepback of 6.5m is provided above the 12th floor on the south elevation. New massing is set back 1.5m behind the retained row houses and 1.5m to the north of the north elevation of 136 Ferguson Avenue North. The ground floor massing is set back at the building's southwest corner, along Ferguson Avenue North, in line with retained row houses. Refer to the full drawing set by Arcadis, dated March 2024.

The proposed landscape scheme introduces a hardscaped patio within the front yard setback of the retained row houses. Trees and soft landscaping are provided north of the row houses along Ferguson Avenue North and Cannon Street East. Refer to the landscape concept by Adesso Design Inc., dated March 2024.

View of proposed development from Beasley Park (Arcadis, 2024).

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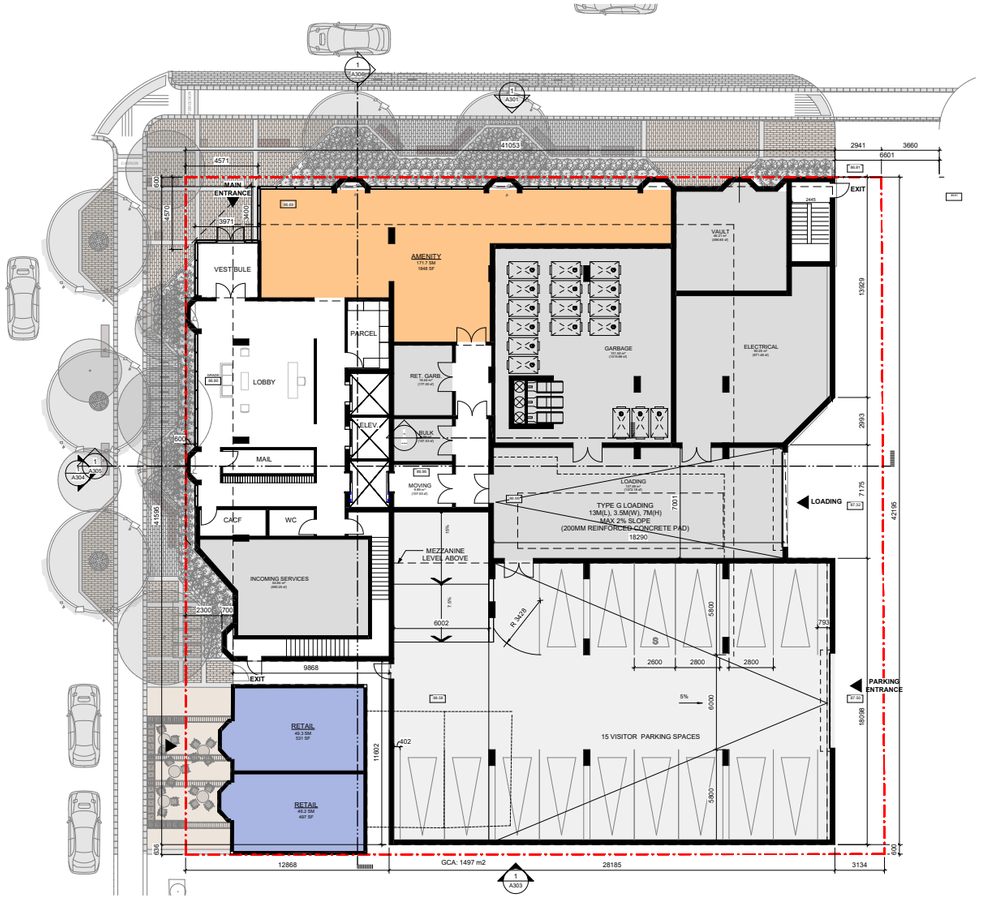
View of proposed west elevation and retained heritage building fabric along Ferguson Avenue North (Arcadis, 2024).

View of proposed west elevation and retained heritage building fabric along Ferguson Avenue North (Arcadis, 2024).



Proposed ground floor plan (Arcadis, 2024).

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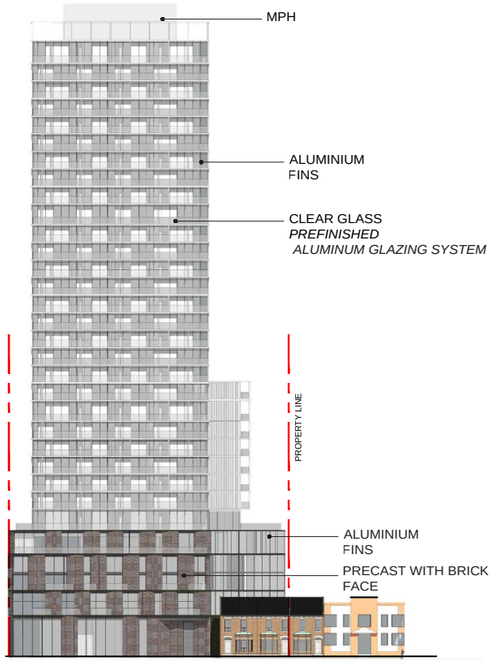
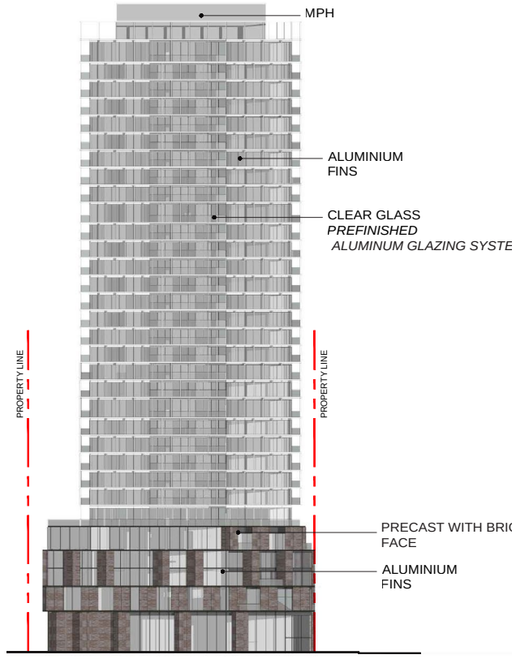
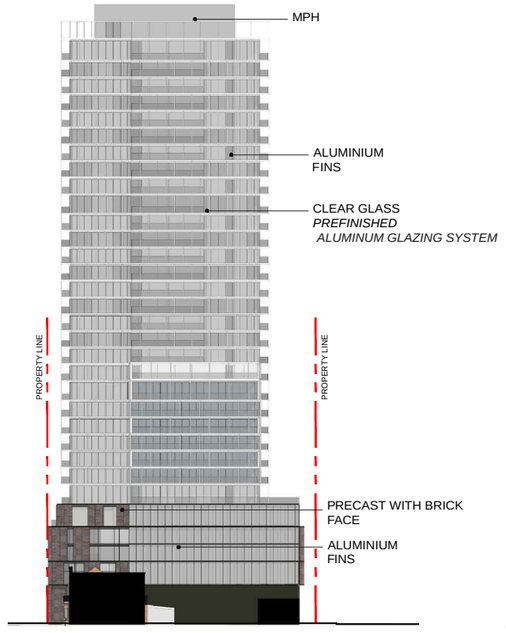


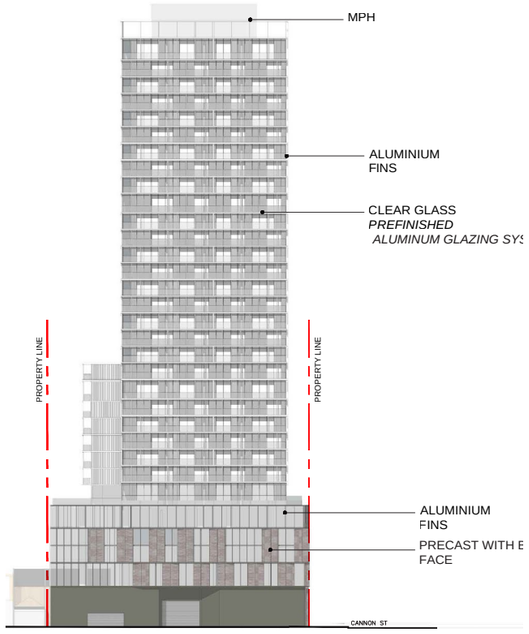
West elevation (Arcadis, 2024).



North elevation (Arcadis, 2024).



South elevation (Arcadis, 2024).



East elevation (Arcadis, 2024).

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5 CONSERVATION STRATEGY

5.1 Conservation Approach

The primary conservation treatment for the heritage buildings on the Site is substantial *in-situ* retention and rehabilitation of the row houses. New construction is designed to follow a set of Conservation Objectives.

5.2 Conservation Objectives

The following Conservation Objectives are high-level heritage-driven goals for the Site's redevelopment:

- A **Substantially retain the historic buildings on the Site.**
- B **Sensitively integrate the retained buildings into the proposed development.**
- C **Draw on a sympathetic material palette and design interface.**

These Conservation Objectives have informed the design process and are achieved within the proposed development as follows*:

- A1 Full *in-situ* retention of the front portion of both 134 and 136 Ferguson Avenue North, removing the rear wings.
- B1 Adaptive re-use of 134-136 Ferguson Avenue North.
- B2 Application of a conservation scope of work to bring the row houses up to a good state of repair, in line with documentary evidence (refer to the following section for a preliminary conservation scope of work).
- B3 Provision of a setback between the retained north elevation of 136 Ferguson Avenue North and new construction.
- B4 Increased at-grade setback of the podium adjacent to the retained buildings.
- B5 Contemporary, streamlined design and materiality of new construction behind the retained buildings, allowing for the heritage building fabric to remain visually prominent.
- B6 Podium alignment with datum lines at the eavesline and roofline of the retained buildings;
- C1 Reference to brick materiality of the retained row houses and nearby historic building fabric in the new podium.

Definitions from the *Standards & Guidelines for the Conservation of Historic Places in Canada* (2010):

***Preservation** involves protecting, maintaining and stabilizing the existing form, material and integrity of an historic place or individual component, while protecting its heritage value.*

***Restoration** involves accurately revealing, recovering or representing the state of an historic place or individual component as it appeared at a particular period in its history, while protecting its heritage value.*

***Rehabilitation** involves the sensitive adaptation of an historic place or individual component for a continuing or compatible contemporary use, while protecting its heritage value.*

**Refer to annotated render on the following page.*

Application of Conservation Objectives within the proposed development (Arcadis, 2024; Annotated by ERA).

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5.3 Conservation Scope

The following preliminary conservation scope of work is subject to further development, and will be detailed in a future Conservation Plan, submitted to Heritage Staff for review and approval:

- Retention of the front (west) portion of the row houses, including a portion of the north elevation return;
- Removal of the rear (east) wings (1 and 2 storey portions), providing a new wall to match heritage brick and roof repairs to match original heritage profile where the wing fabric is removed;
- Removal of exterior paint, and cleaning of masonry using non-abrasive methods;
- Replacement of all window units with wood windows to match heritage profile;
- Potential alterations (e.g. lowering of the front door sill, lowering of first floor) to allow for universal accessibility to the retail units;
- Potential upgrades to meet building code requirements for retail spaces, such as a secondary exit or structural reinforcement of floors;
- Replacement of the front doors with a sympathetic replacement;
- Repairs and repainting of wooden elements (e.g. eave brackets), as necessary;
- Repair (e.g. repointing) of masonry as necessary;
- Repair of roof as necessary;
- Installation of new metal flashing, rainwater leaders and downspouts;
- Installation of new metal roof at bay windows; and
- Installation of new asphalt shingles.

Documentary evidence, such as this c. 1971 photograph, will be referenced throughout the conservation process (Reg Button via Vintage Hamilton Facebook, Annotated by ERA).

5.4 Conservation Summary

The conservation strategy is consistent with the direction in the Provincial Policy Statement ("PPS 2020") and conforms to the cultural heritage policies in the City of Hamilton's Urban Official Plan.

The conservation scope will be detailed in a future Conservation Plan and implemented according to the best practices outlined in the *Standards & Guidelines for the Conservation of Historic Places in Canada*.

6 IMPACT OF PROPOSED DEVELOPMENT

6.1 Impacts to On-Site Heritage Resources

Destruction of Heritage Attributes

The proposed development is not anticipated to pose a negative heritage impact to any heritage attributes identified in the draft Statement of Significance (Section 3).

The proposed conservation scope retains the most publicly visible elements of the row houses, and rehabilitates the buildings for public-facing use. The legibility of the row houses three dimensional form is conserved through setbacks of new construction to the east and north, and a relief in massing on the southwest corner of the proposed podium in the form of an at-grade setback.

Unsympathetic Alterations

All conservation work will be sympathetic to the retained heritage buildings. The conservation scope, to be detailed in a forthcoming Conservation Plan, will be consistent with the *Standards and Guidelines,* while also allowing for universal accessibility and contemporary use.

Shadows

As the proposed new construction is located north of the heritage resources on the Site, no net new shadows are anticipated on the on-site heritage resources.

Isolation of Heritage Attributes

It is not anticipated that any heritage attributes identified in ERA's draft Statement of Significance will become isolated from their context or significant relationship. Due to the historically mixed-use nature of Beasley, the row houses on the Site have historically formed a fragmented pocket of low-rise residential development; they do not form part of a cohesive streetscape that would be interrupted by new development.

Obstruction of Views

There are no protected views on the Site or its immediate vicinity.

Negative impact on a cultural heritage resource include, but are not limited to:

Destruction of any, or part of any, significant heritage attributes or features;

Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance;

Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;

Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;

Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;

A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces;

Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

(Ontario Heritage Toolkit).

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Change in Land Use

The adaptive reuse of the row houses at 134-136 Ferguson Avenue North for retail uses is not anticipated to pose a negative heritage impact. Rehabilitation will appropriately conserve the residential nature of the house-form buildings, including through the maintenance of the front yard set backs, which are proposed to be adapted as a patio to serve retail uses.

Land Disturbances

The Site is located in an area of archaeological potential according to the Urban Hamilton Official Plan Appendix F-4. Any excavation or grading will be subject to the requirements set out in the OHA, the Official Plan and the City of Hamilton Archaeological Management Plan (2016).

6.2 Impacts to Adjacent Heritage Resources

The proposed development will not pose a negative impact to adjacent resources.

Destruction of Heritage Attributes

Heritage attributes have not been identified for the individually listed properties adjacent to the Site. Neighbourhood-wide heritage attributes are provided in the Beasley Historic Context Statement (ERA, 2014). None of the adjacent heritage attributes identified in the Historic Context Statement are anticipated to be destroyed.

Unsympathetic Alterations

No alterations are proposed that negatively impact adjacent heritage sites, or the heritage attributes identified for the surrounding area in the Beasley Historic Context Statement (ERA, 2014).

Shadows

Net new shadows will be cast on the adjacent Cannon Street East properties during the afternoon and evening hours. These shadows are not anticipated to alter the appearance of a heritage attribute or change the viability of a significant natural feature or plantings.

Isolation of Heritage Attributes

Heritage attributes have not been identified for the individually listed properties adjacent to the Site; no adjacent heritage property will become isolated as a result of the proposed development. None of the neighbourhood-wide heritage attributes provided in the Beasley Historic Context Statement (ERA, 2014) are anticipated to become isolated from their context.

Obstruction of Views

No obstruction of significant views is anticipated.

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7 ALTERNATIVES OR MITIGATION MEASURES

7.1 Overview

The proposed development has been designed to conserve the cultural heritage value of the Site, while mitigating impacts to adjacent properties. Refer to Section 5 for more information on the Conservation Goals and Objectives.

7.2 Considered Alternatives

Earlier iterations of the design considered removing the row houses on the Site to accommodate vehicular access from Ferguson Avenue North.

8 CONCLUSION

The proposed development will conserve the cultural heritage value of on-site and adjacent heritage resources. While the proposal contemplates the removal of the rear wings of both row houses, the public-facing front portion of the resources will be rehabilitated for public-facing retail uses, and will be subject to a conservation scope of work.

The proposed residential development is appropriately designed to mitigate impacts to on-site and adjacent house-form buildings. The 5-storey podium base sensitively transitions the tower element through setbacks and stepbacks and references the heritage context through the use of brick materiality and articulated piers at-grade. As the design process progresses, the design team will continue exploring opportunities for further refinement of the material treatment and interface between the retained row houses and new construction.

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9 PROJECT PERSONNEL

Samantha Irvine JD, CAHP is a Senior Associate with the heritage planning team at ERA, where she has overseen projects that impact culturally significant buildings, neighbourhoods and landscapes since 2015. She holds a BA in History and Sociology from McGill university (Great Distinction); MA degrees in Historical & Sustainable Architecture (NYU) and Sustainable Urbanism (Wales); and a JD from Queen's university. She is a member of the Ontario Bar Association and a former Fellow of Sustainable Urbanism with the Prince's Foundation in London, England.

Janice Quieta, OAA, MArch, LEED Green is a Senior Associate at ERA. She is an OAA registered architect, and a LEED Green Associate. She received her Master of Architecture degree from Dalhousie University after completing a Bachelor of Architectural Science degree at Toronto Metropolitan University (formerly Ryerson). Her graduate thesis examined the feasibility of retrofitting post-war residential towers in Toronto's St. Jamestown.

Kasper Koblauch MCIP, RPP is a Project Manager and planner at ERA with over seven years of public and private-sector professional planning experience. He holds a Master of Planning from Toronto Metropolitan University (formerly Ryerson university).

Zoe Chapin, MCIP, RPP is a heritage planner at ERA. She received her Masters of Urban Planning from McGill University, where she also completed a Bachelors of Arts in Geography-Urban Systems.

10 PHOTOGRAPHIC DOCUMENTATION

All photos by ERA dated March 5, 2024, unless otherwise indicated.

10.1 Site Photographs

West elevation. From left to right: 136, 134 and 132 Ferguson Avenue North. 132 Ferguson Avenue North is not part of the Site (ERA, 2024).

East elevation of 134 (left) and 136 (right) Ferguson Avenue North (ERA, 2024).

North elevation of 136 Ferguson Avenue North (ERA, 2024).

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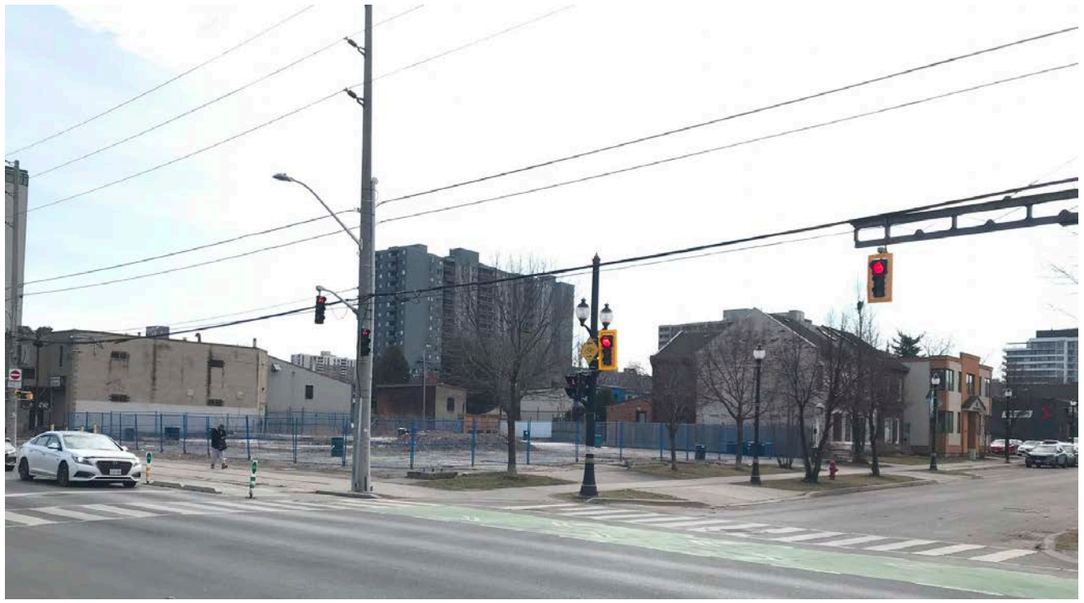

View of the Site from Cannon Street East and Ferguson Avenue North. The vacant 188 Cannon Street East is presently fenced off (ERA, 2024).

10.2 Context Photographs

View southeast towards the Site on Ferguson Avenue North at Cannon Street East (ERA, 2024).

View north on Ferguson Avenue North at Kelly Street (ERA, 2024).

View north on Cathcart Street at Kelly Street (ERA, 2024).

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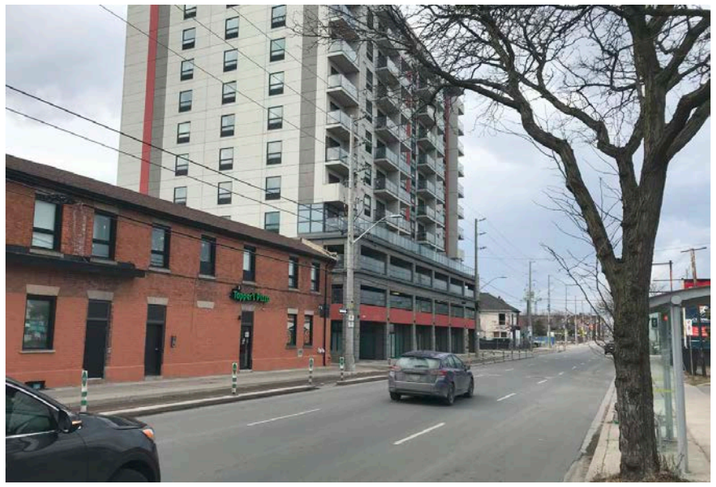
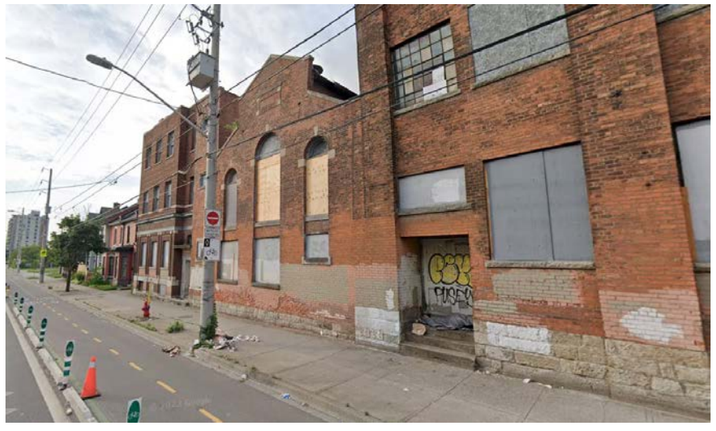


View west on Cannon Street East near the tower development at 220 Cannon Street East (ERA, 2024).



View east on Cannon Street East showing a former factory adjacent to row houses between Mary and Elgin Streets (Google, 2023).

View north across Cannon Street East, opposite the Site (ERA, 2024).

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12 APPENDICES

APPENDIX A

HISTORIC CONTEXT STATEMENT FOR BEASLEY (ERA, 2014)

BEASLEY: Historic Context Statement

Figure 1. Typical Beasley streetscape (SkyscraperPage.com, posted October 28, 2008; retrieved February 5, 2014)

Introduction

Beasley is located in the northeast section of Downtown Hamilton and is one of Hamilton's four original neighbourhoods. It covers 42 city blocks, between James and Wellington streets, and from Main Street East to the railway tracks, with Cannon Street East marking the boundary of the Downtown core.

A complex neighbourhood with a rich history and strong identity, Beasley encompasses much of the commercial core of the city and includes two main streets: King Street East (from International Village to Gore Park) and James Street North. It serves as an incubator for small businesses and is home to a growing number of music, theatre, and visual arts venues, as well as a large number of restaurants.

Since its origins, Beasley has functioned as a self-sufficient neighbourhood, comprising residential and commercial areas, social services, cultural organizations, and a range of facilities. Home to the city's first industrial district, it has served as an arrival point for new immigrants since the late 19th century.

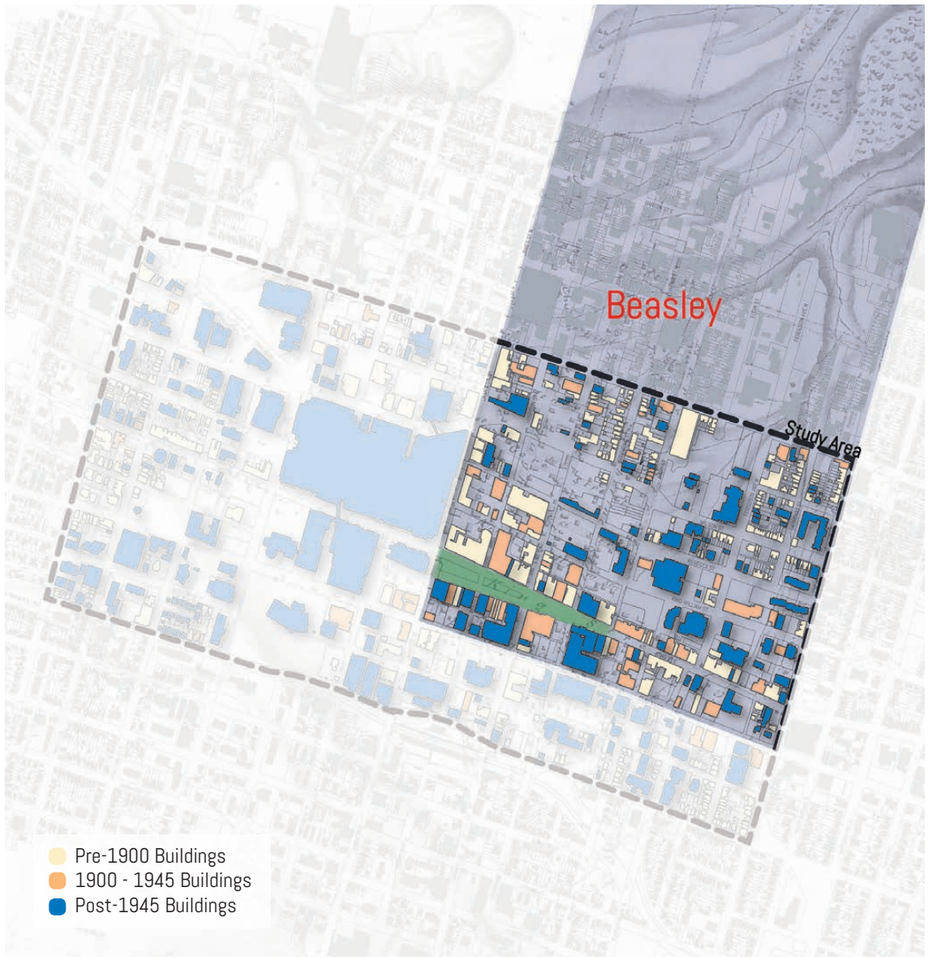

Figure 2. Beasly: Historic Context Statement Boarder within Downtown and extent of neighbourhood beyond study area (ERA)

Cultural Heritage Impact Assessment

Beasley is framed on its south and west sides by highly cohesive, low- to mid-rise commercial streetscapes. Its north and northeastern sections are largely residential, featuring a mixture of modest low- and high-rise residential buildings, dating from the mid-19th century to the late modern era. Commercial, institutional, and a small number of former industrial buildings are interspersed throughout the residential areas. The former industrial core of Beasley is currently dominated by parking lots.

Social and cultural focal points in Downtown Beasley include Gore Park, a commercial hub, public park, and gathering place; Beasley Park, the Community Centre, and the Dr. J. Edgar Davey School; International Village, a section of King Street East that features independent retail, restaurants, and local entertainment; King William Street, a focal point for the arts, theatre, dining; and James Street North, the setting for Art Crawl and other cultural activities. With the exception of Gore Park, which has long served as the symbolic heart of Hamilton and its downtown, each of these areas has emerged as a hub in recent years and is supporting the regeneration of the downtown core and its community.

Historical Overview

Beasley is one of the four original neighbourhoods of Hamilton. Its origins can be traced to the town's incorporation in 1833 and the establishment of the first ward boundaries. The neighbourhood was named after Richard Beasley, an early settler, who established a trading post in the late 18th century in the region. As with other historic downtown neighbourhoods, the land within its boundaries was employed for agricultural purposes before the town was settled. This changed in 1816, when the area bounded by Main, James, Wilson, and Mary streets was included within the town plan prepared by George Hamilton.

King Street began as an aboriginal route, which resulted in the irregular configuration unconforming to the town's first grid plan. Responding to its unusual configuration, George Hamilton donated a triangular piece of land along King Street East, between Mary and James streets. The triangular-shaped 'Gore' was the result, which eventually became Gore Park and one of the finest pieces of urban design in Hamilton. Landscaping was initiated by the City of Hamilton

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in the 1860s and the area was established as a public park between the 1870s and 1880s. Since that time, Gore Park has been subject to several significant changes, but has remained the symbolic heart of the city and its downtown since the late 19th century.

Hamilton's first businesses were established in Beasley by the second decade of the 19th century, around the area that became the Gore, on King Street East. By the mid-19th century, low-rise commercial buildings lined King and James, as well as other neighbouring streets. Beasley's role as the commercial core of Downtown Hamilton has continued since that time, in particular along King and James streets. It has, however, experienced a dramatic decline since suburbanization and the redevelopment of significant portions of Central, including the construction of Jackson Square.

In addition to being the focal point of early commerce in Hamilton, the city's first industries also began in Beasley and were concentrated in this neighbourhood, and in Central, for many decades. Small-scale industries began to appear as early as 1819, with the opening of a wagon and plough factory on King Street East. The early industries were small-scale, family-run operations, and included textile manufacturers, carriage and wagon works, breweries, distilleries, tanneries, lumber mills and small foundries, among other things, which served the growing city. The arrival of the Great Western Railway in 1853 spurred further industrial activity in the city and was a driver of development in the northern sections of downtown core, including Beasley, which were situated in relatively close proximity to the railway.

As was typical of manufacturing districts of the Victorian period, housing for workers was constructed, cheek-by-jowl, next to the industries and commercial establishments where the workers were employed. This gave rise to the role of Beasley as a self-sufficient, mixed-use neighbourhood and an arrival point for new immigrants, something that continues to the present.

Although the first half of the 20th century saw some new commercial and institutional development in Beasley, for example, the 12-storey Royal Connaught Hotel of 1916, various department stores and the Dominion Public Building of 1936, it marked the beginning of Beasley's decline. A new era of modern industrial development had begun, based around Hamilton Harbour. Residential and commercial

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development also began to decentralize, as transportation routes and the public transit system improved. Beasley was further affected by the re-development of portions of Central during the second half of the 20th century, as well as the construction of Jackson Square.

In spite of its decline over the course of the 20th century, Beasley has remained an important inner-city, mixed-use neighbourhood. Although much of its former industrial land has been converted to surface parking, its residential and commercial roles continue, and a burgeoning arts, entertainment, and cultural scene is growing within its boundaries. Many important municipal social services are situated within Beasley and at the edge of the downtown core a skateboard park, school, and community centre have been established on former industrial land to serve its residents.

Historical Themes

Beasley was home to Hamilton's first commercial core:

- The city's first businesses were established around the site of the triangular park known as 'the Gore', which was formed by the two sides of King Street between Mary and James Streets. The first grocery store opened in 1814, and Hamilton's first brick commercial building was built on the Gore in 1829. By the mid-19th century, low-rise commercial buildings lined both sides.
- Commercial zones developed during the 19th century along John, James, and King Streets. Although the growth of suburbs and malls in the 1950s, as well as the construction of Jackson Square, had a devastating impact on businesses in Beasley, King and James have continued to function as commercial main streets and are characterized by their rich collection of historic buildings, some of which pre-date Confederation.

Hamilton's first industrial district was situated in Beasley:

- Proximity to rail and water transportation enabled Beasley to become an industrial hub during the 19th and 20th centuries. The Great Western Railway came to Hamilton in 1853, its lines forming the northern boundary of Beasley (outside the downtown core).

- Industrial development began with the establishment of a wagon and plough factory on King Street East and the Hamilton Tin Factory on Catharine Street. In 1835, Canada's first threshing machine manufacturer began operations on James Street North.
- Industries flourished and grew in the heart of Beasley, along King William, Rebecca, Gore, Wilson, John, Catharine, Mary, and Ferguson streets, among others. These industries included several large foundries, such as the Gurney Tilden Stove Foundry; the Hamilton Distillery Company; and the M. Brennan and Sons Lumber Yard.
- Heavy industry (such as foundries) began to leave downtown Hamilton around the mid-20th century, relocating to Hamilton Harbour. Lighter industries (textile, hosiery, printing, etc.) eventually left the area as well, but were slower to do so.

Beasley has served as an arrival city for new immigrants since the late 19th century:

- Since the expansion of industry in the late 19th century, Beasley has been an entry point for new immigrants. The majority of first wave of immigrants was from the United Kingdom. After 1910, significant waves of immigrants came from southern and eastern Europe. Today, Beasley's residents come from over 40 countries.

Beasley has always functioned as a self-sufficient neighbourhood:

- Since the 19th century, Beasley has functioned as a self-sufficient neighbourhood, comprising a mix of residential and commercial development, as well as social services and cultural facilities.
- Historically, many cultural and civic institutions were located in Beasley: The Federal Building (1886), which served as a municipal post office and temporary city hall; the municipal Court House, and the Grand Opera House (1880), which seated 1200 people and hosted celebrities of international renown, were all located in Beasley, among many others.
- With the development of the new city hall and civic precinct in the Central neighbourhood in the 1950s, 60s and 70s, a number of institutions left Beasley. It is currently home to a number of essential social service organizations and institutions, including the Good Shepherds, Goodwill/Amity, the Immigrant Womens' Centre, and the Downtown Mosque.

Attributes

The following attributes characterize the urban form of Beasley:

- The grid street pattern, which dates from the 19th century, with King and James serving as main streets.
- The check-by-jowl pattern of commercial, residential, and industrial development, which was established in the second half of the 19th century, when smaller-scale industries proliferated across Beasley and Central.
- Highly cohesive streetscapes of James and King Streets, composed of 19th- and 20th-century commercial buildings; the tremendous variety of building types and styles that make up their streetwalls, ranging from very plain and modest structures, to very fine examples of 19th and early 20th century commercial architecture, reflecting the aspirations of the 'Ambitious City' (as is typical of main street development, most buildings have been significantly adapted over time to meet the needs of their occupants).
- Gore Park and the surrounding King Street East streetscape as a social, commercial, and symbolic focal point of the neighbourhood and the downtown core.
- Fragmented pockets of low-rise residential development, generally dating from the mid-19th to the early 20th centuries. These pockets of houses, which are found at the northern and northeastern sections of the neighbourhood, sometimes abut mid-rise commercial, institutional, and a small number of former industrial buildings.
- The modest character of much of Beasley's housing stock, which includes detached, semi-detached and row houses, much of which is of brick construction or faced with brick. (A small number of late 20th century mid- and high-rise apartment buildings were constructed in Beasley, but are not its dominant residential form.)
- Small lots with shallow setbacks of its historic residential development.

- Social and cultural hubs across downtown Beasley, such as Beasley Park, Beasley Community Centre, and the Dr. J. Edgar Davey School (civic and social core of the residential neighbourhood); King William Street (restaurants and arts scene); International Village (restaurants and independent businesses); and James Street North (independent businesses and arts scene).
- Surface parking lots scattered throughout the residential areas, dominating the core of Beasley on the sites of former industrial facilities. The former industrial sections of Beasley, in particular the blocks between King William and Wilson Streets, are dominated by large surface parking lots. Very little remains of Hamilton's first industrial landscape, with a few exceptions (such as the former Knitting Mill and the Good Shepherds Centre).
- Fast-moving, one-way arterials running in an east-west direction. Together with the parking lots, they create a sense of discontinuity within the neighbourhood.

What we heard from citizens about Beasley:

- Very diverse and eclectic, multi-cultural, adaptable, community-focused, with lots of 'social capital'.
- Strong sense of identity.
- Although modest, it is seen as having 'good bones' – the older houses are well built.
- Cannon St. appears to be a natural divide in Beasley; citizens identified the high-rise towers above Cannon as a separate area. A resident from outside the study area (to the north) noted that 'north Beasley' is often mistakenly excluded from what is popularly understood as Beasley.
- Used to be the industrial core of Hamilton – the Gundry Foundry was an important industry that exported products internationally, but the site of the facility is now a parking lot. The original housing stock was constructed to accommodate industrial labourers.
- One-way arterials are an issue in the neighbourhood. Wilson Street, a four-lane arterial, is seen as dividing the neighbourhood in half.

- Citizens identified several places in Beasley that attract younger people: cafes along James St. N., Dr. Disc (rooftop concerts), Sonic Unyon (bar and music venue), Beasley Park (skate park).
- The school and community centre that abut Beasley Park function together as an important community hub that brings together diverse communities (for example, Somali, Ethiopian, Vietnamese, etc.) in Beasley, including residents in the high-rise towers north of Cannon. The skate park is also located in this enclave.
- The Beasley Neighbourhood Association has a very diverse and active membership – young and old, and across ethnicities. However, people are from similar socio-economic backgrounds.
- The neighbourhood has an abundance of social services: Good Shepherd, Immigrant Womens' Centre, etc. It is home to a large number of community service organizations.
- Beasley plays a very important role as an entry point into the city – from start-up businesses and artists along James St. N., to new immigrants. There is a wave of retirees moving back into the Downtown core and Torontonians who wish to take advantage of better real estate prices.
- To the north of Wilson, Beasley is primarily a residential neighbourhood, whereas to the south it is more commercial.
- The neighbourhood serves as an arrival point for new immigrants, an incubator for small businesses, and an enclave for artists, musicians, and theatres. Cultural diversity and the entry point role are two aspects of Beasley that are highly valued.
- Citizens identified the following site as neighbourhood landmarks: Lister Block, Right House, Treble Hall, Hydro Station, Fire Hall, The Studio (artists' studios), Chepies (car rental), the hostel, the bingo hall, Gore Park, King William streetscape, Beasley Park, skate park, school and community centre, the Mosque, Dr. Disc, Sonic Unyon, the Old Knitting Mill.

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