

To: Thomas Deming, City of Belleville
Jarrod Gliddon, City of Belleville
Kirsty Kilbourne, Kirsty Kilbourne Consulting

CC: Stephen Ashton, City of Belleville
Nathan Jianopoulos, City of Belleville
Andrew Chan, City of Belleville

From: Amna Khan; Amy Greenberg; and Rory Baksh

Date: September 10, 2025

Subject: West Belleville Secondary Plan – Four Storey Study

Our File: 21-2538

1.0 Purpose of this Memo

This memorandum (memo) presents a land use modelling study undertaken to support the City of Belleville's Housing Accelerator Fund (HAF) commitment to explore permissions for a minimum of four-storeys of residential development as-of-right. The study, completed by Dillon Consulting in collaboration with City staff, analyzes this permission and includes recommended policies to support and implement this initiative within the West Belleville Secondary Plan.

2.0 Part 1: Modelling of Options

2.1 Introduction and Purpose

Part 1 of this memo presents the findings of a land use scenario modelling exercise for the West Belleville Secondary Plan (WBSP) area.

The analysis was initiated to address two key items:

- A four-storey building analysis for specific lands within the WBSP, prompted as a Housing Accelerator Fund (HAF) initiative; and,
- A review of the land use configuration proposed by the developer of "Potter's Creek" to understand its implications on the secondary plan.

The primary objective of this work is to model and assess different development scenarios to determine potential residential unit counts and distribution. This assessment will identify whether the planned land uses result in a surplus or deficit of units relative to growth targets, which will in turn inform future policy refinement for the WBSP and support upcoming public consultation.

To achieve the project objective, Dillon utilized its CityEngine platform, an ESRI-based software, to develop and analyze three-dimensional spatial models of three development scenarios. This approach allows for a quantitative and visual comparison of land use options. The following four models were created:

1. **The "Baseline" Model:** This model reflects the land use concept originally developed by Dillon for the WBSP, establishing a benchmark for unit yields and density targets.
2. **The "Four-Storey Full Built-out" Alternative Model:** This model illustrates the development of specific lands assuming a four-storey build-out, allowing for a statistical analysis of this form through the CityEngine dashboard feature. The extent of lands designated for this form was determined based on available servicing allocation.
3. **The "Potter's Creek" Model:** This model was developed based on the land use configuration provided by the developer, taking into account the residential densities proposed for the Potter's Creek area. The Potter's Creek area is bounded by Moira Street West to the north, Avonlough Road to the west, and Marshall Road and the Potter's Creek floodplain to the east.
4. **The "Refined Four-Storey" Model (Sensitivity Test):** Following the review of the initial three scenarios with City staff, the "Potter's Creek" model was selected for further refinement. This sensitivity test adjusts the model's parameters to align with a more targeted and achievable development outcome, representing a preferred path forward.

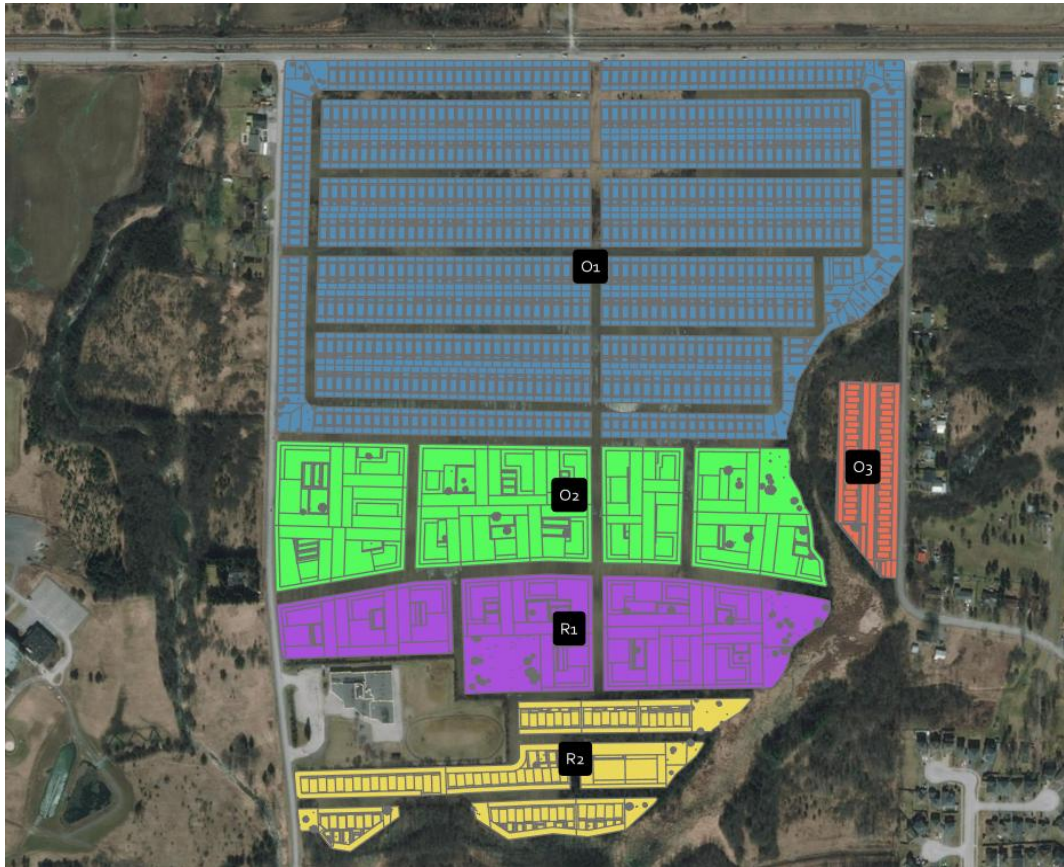
The findings from these models form the basis of the analysis presented in the subsequent sections of this report. Part 1 of this memo will conclude by summarizing the key statistical outputs and providing precedent images for four-storey housing forms to help visualize the built form.

2.3 Development Scenarios

2.3.1 Scenario 1, Baseline Model (Developed by Dillon for the WBSP)



Figure 1: Scenario 1, Baseline Model



Units by Sub-Area

Scenario 1: Baseline Model

CityEngine Exported

Grand Total Summary

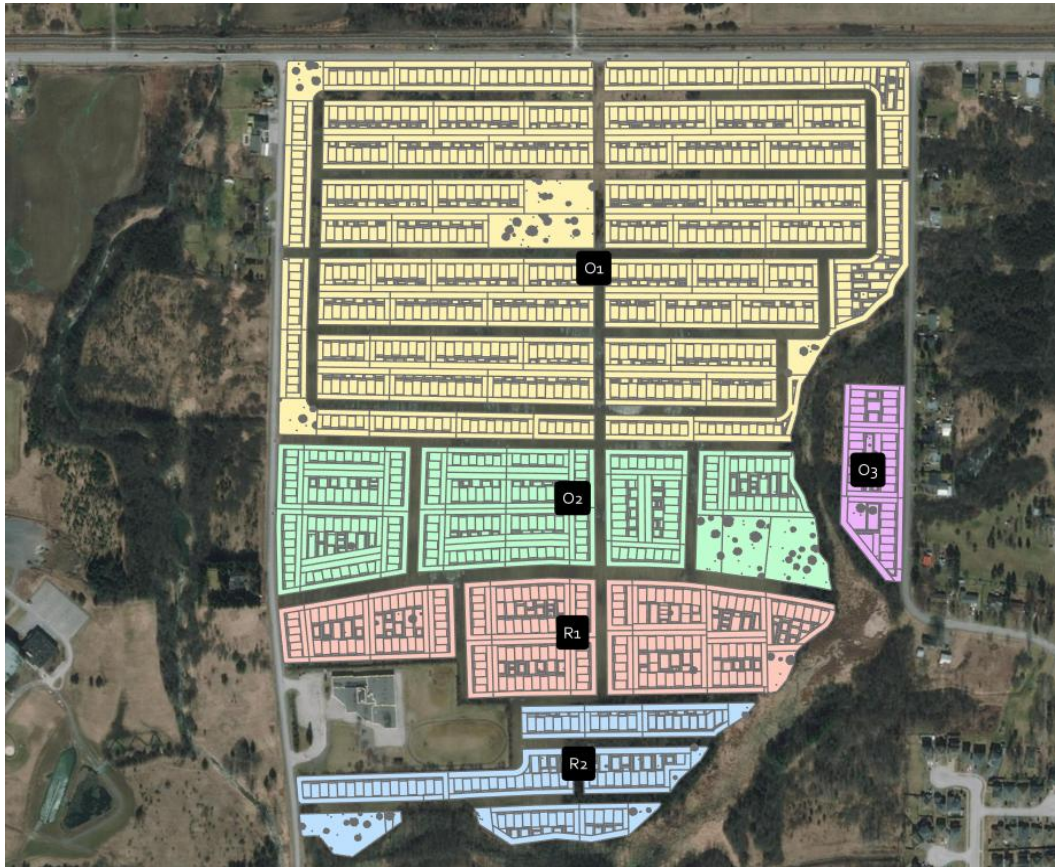
Sub Area	Single-Detached Units	Townhouse Units	Stacked Townhouse Units	Apartment Units	Non-Residential Gross Floor Area	Total Units	Total Non-Residential GFA
R2	0	0	213	93	0	306	0
O2	0	0	0	730	24,164	730	24,164
R1	0	0	0	529	17,507	529	17,507
O1	564	0	0	0	0	564	0
O3	0	50	0	0	0	50	0
Grand Total	564	50	213	1,353	41,670	2,180	41,670

Unit count excludes existing buildings: 2 single detached and 1 school

Figure 2: Scenario 1, Baseline Model Units by Sub-Area



Figure 3: Scenario 2, Four-Storey Full Build-out Alternative Model



Units by Sub-Area

Scenario 2: Four-Storey Full Build-out Alternative Model

CityEngine Exported

Grand Total Summary

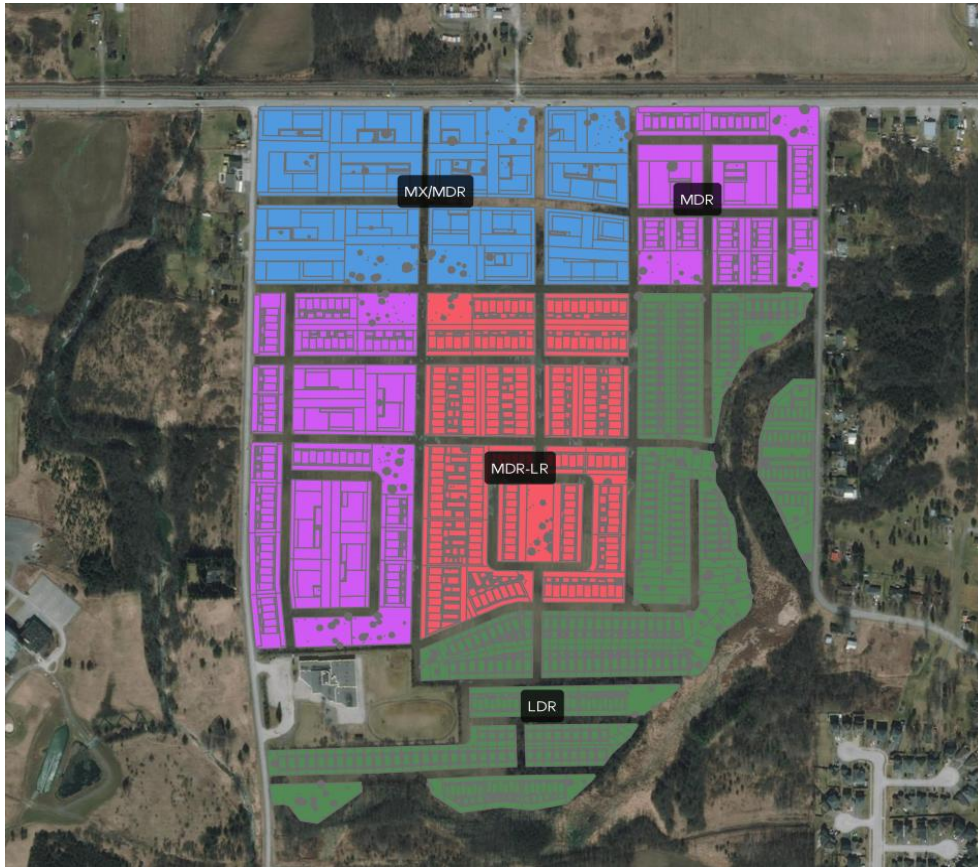
Sub Area	Four-Storey Units	Total Units
R2	284	284
O2	748	748
R1	604	604
o1	2,136	2,136
O3	120	120
Grand Total	3,892	3,892

Unit count excludes existing buildings: 2 single detached and 1 school

Figure 4: Scenario 2, Four-Storey Full Build-out Alternative Model, Units by Sub-Area



Figure 5: Scenario 3, Potter's Creek Model



Units by Sub-Area

Scenario 3: Potter's Creek Model

CityEngine Exported

Grand Total Summary

Sub Area	Single-Detached Units	Townhouse Units	Stacked Townhouse Units	Apartment Units	Non-Residential Gross Floor Area	Total Units	Total Non-Residential GFA
MDR-LR	0	0	603	0	0	603	0
LDR	176	74	0	0	0	250	0
MDR	0	0	372	431	0	803	0
MX/MDR	0	0	0	795	26,317	795	26,317
Grand Total	176	74	975	1,227	26,317	2,452	26,317

Unit count excludes existing buildings: 2 single detached and 1 school

Figure 6: Scenario 3, Potter's Creek Model, Units by Sub-Area



Figure 7: Scenario 4, Refined Four-Storey Model (Sensitivity Test)



Units by Sub-Area

Scenario 4: Refined Four-Storey Model (Sensitivity Test)

CityEngine Exported

Grand Total Summary

Sub Area	Single-Detached Units	Townhouse Units	Stacked Townhouse Units	Apartment Units	Non-Residential Gross Floor Area	Total Units	Total Non-Residential GFA
PC-1	0	0	0	106	3,498	106	3,498
PC-10	0	0	261	0	0	261	0
PC-11	0	0	195	0	0	195	0
PC-12	28	197	0	0	0	225	0
PC-2	0	0	0	121	0	121	0
PC-3	0	0	0	269	0	269	0
PC-4	0	0	0	154	0	154	0
PC-5	0	0	417	0	0	417	0
PC-6	0	0	333	0	0	333	0
PC-7	9	59	0	0	0	68	0
PC-8	0	34	0	0	0	34	0
PC-9	0	0	0	143	0	143	0
Grand Total	37	290	1,206	792	3,498	2,325	3,498

Unit count excludes existing buildings: 2 single detached and 1 school

Figure 8: Scenario 4, Refined Four-Storey Model (Sensitivity Test), Units by Sub-Area

Precedent Imagery for Four-Storey Developments

To foster an understanding of four-storey built forms and architectural expression, the following section provides five precedent studies of these housing forms from across Ontario.

The precedents showcase a range of built forms to serve as tangible examples to inform the development of enabling policies and to facilitate a productive discussion with City staff, stakeholders, and the public regarding four-storey as-of-right permissions as part of the City's HAF initiatives.

2.4.1

Elevate at Logan - 485 Logan Ave, Toronto, ON M4M 2P5 (Kaleido Developments)



Figure 9: Elevate at Logan, 4-storey stacked townhouse condominium render.¹

¹ Source: <https://condos.ca/toronto/elevate-at-logan-485-logan-ave>.



Figure 10: Elevate at Logan, 4-storey stacked townhouse condominium Google Street View image.²

Total residential units: 41.

2.4.2 The Way Urban Towns - 2277 South Millway, Mississauga, ON L5L 2M5 (Sorbara Group)

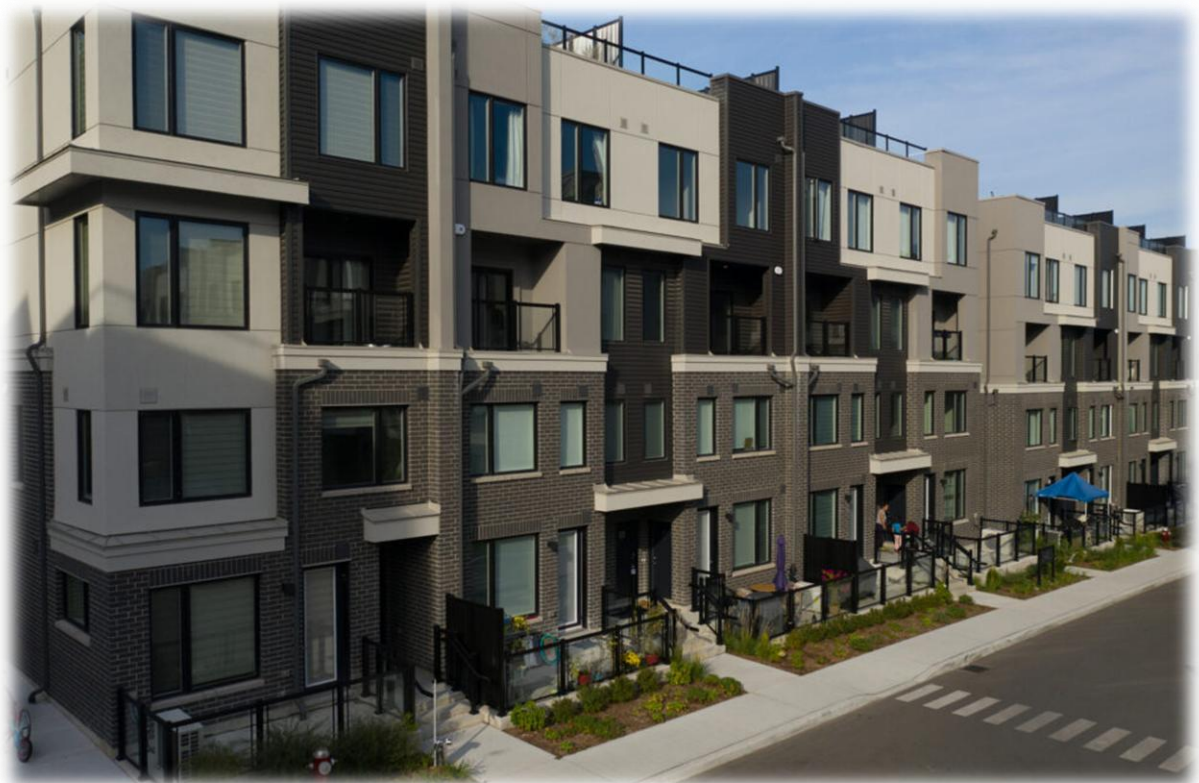


Figure 11: The Way Urban Towns, 4-storey stacked condominium render.³

² Source: Google Street View.

³ Source: <https://sorbara.com/communities/the-way-urban-towns/>



Figure 12: The Way Urban Towns, 4-storey stacked condominium Google Street View image.⁴

Total residential units: 144.

2.4.3

Victoria Commons - 104 Bartley Drive, North York, ON M4A 1C5 (Losani Homes)



Figure 13: Victoria Commons, 4-storey stacked back-to-back townhouse condominiums render. ⁵

⁴ Source: <https://rentals.ca/mississauga/3476-widdicombe-way-2>

⁵ Source: <https://www.jerrywen.com/aprg/newproject/projectdetail.aspx?sid=100482&pid=13759&Bartley-Towns>



Figure 14: Victoria Commons, 4-storey stacked back-to-back townhouse condominiums green space render.⁶



Figure 15: Victoria Commons, 4-storey stacked back-to-back townhouse condominium Google Street View image.⁷

Total residential units: 267.

⁶ Source: <https://www.jerrywen.com/aprg/newproject/projectdetail.aspx?sid=100482&pid=13759&Bartley-Towns>

⁷ Source: Google Street View.



Figure 16: Streetsville Centre, 4-storey townhouse condominiums render.⁸



Figure 17: Streetsville Centre, 4-storey townhouse condominiums Google Street View image.⁹

Total residential units: 194.

⁸ Source: <https://strata.ca/mississauga/80-thomas-st-streetsville-centre-condos>

⁹ Source: Google Street View.



Figure 18: Creekside 4-storey mid-rise apartment building.



Figure 19: Creekside, 4-storey mid-rise apartment building Google Street View image.¹⁰

Total residential units: 169.¹¹

¹⁰ Source: Google Street View.

¹¹ Source: <https://patrygroup.com/projects/847-development/>

Part 2: Draft Policies for Four-Storey As-of-Right Development

Part 2 of this memo provides a recommended draft policy framework to implement the four-storey as-of-right permissions and related development standards discussed in the preceding analysis.

The following policies are written for direct insertion into the West Belleville Secondary Plan and are numbered to align with their proposed location within that plan. It should be noted that these policies and attached maps represent draft policies/mapping at a specific point in the West Belleville Secondary Plan's conceptualization and may be further refined over time.

10.7.3 Four-Storey As-of-Right Overlay

- a) Notwithstanding any other policy in this Plan, buildings with a minimum height of four (4) storeys shall be permitted as-of-right on those lands designated with the 4-Storey As-of-Right Overlay shown on Schedule B-1 (Land Use Plan – Urban Serviced Area – West Belleville Secondary Plan).
- b) Any residential buildings permitted by the underlying designation may take the form of stacked townhouses and low-rise apartment buildings with a minimum of four (4) storeys in height.
- c) For any residential development permitted by Section 10.7.3 b), the City shall permit the build notwithstanding any angular plane policies in Section 3.10.2 h) of the Official Plan.
- d) Any mixed-use buildings permitted by the underlying designation may consist of at-grade commercial uses with residential on upper floors.
- e) To foster cohesion in built form, an aesthetically pleasing streetscape, and streets that are conducive to multi-modal transportation, buildings with the 4 Storey As-of-Right Overlay shall:
 - i. Be oriented with their front façade and primary entrance facing the extension of Bridge Street, Avonlough Road, Moira Street West, or Marshall Road, as the case may be; and,
 - ii. Have parking oriented to the rear or side as appropriate.

10.7.4 Housing Yields and Front-Ending

10.7.4.1 Minimum Build-Out

- a) The approach to achieving the minimum build-out target for the Secondary Plan area is the implementation of minimum housing yields. All development applications for lands within the defined sub-areas shown on **Appendix 'E' – Density Target Areas** shall be expected to demonstrate how the proposal meets the specified minimum housing yield. For the purposes of the West Belleville Secondary Plan, housing yield shall be calculated as the total of all residential dwelling

units proposed for development in a subdivision or site plan application, including the primary units and any accessory residential unit(s) being constructed simultaneously with any primary unit.

- b) Any proposed reduction in housing yield below the targets identified in Appendix E (West Belleville Secondary Plan – Density Target Areas) may be subject to the policies of Section 10.9 (Implementation) of this Secondary Plan, which may require a financial impact study and the transfer of housing yield to other lands within the Secondary Plan area.
- c) The implementing Zoning By-law shall contain the appropriate development standards to ensure the minimum height and density targets of this Plan are achieved.

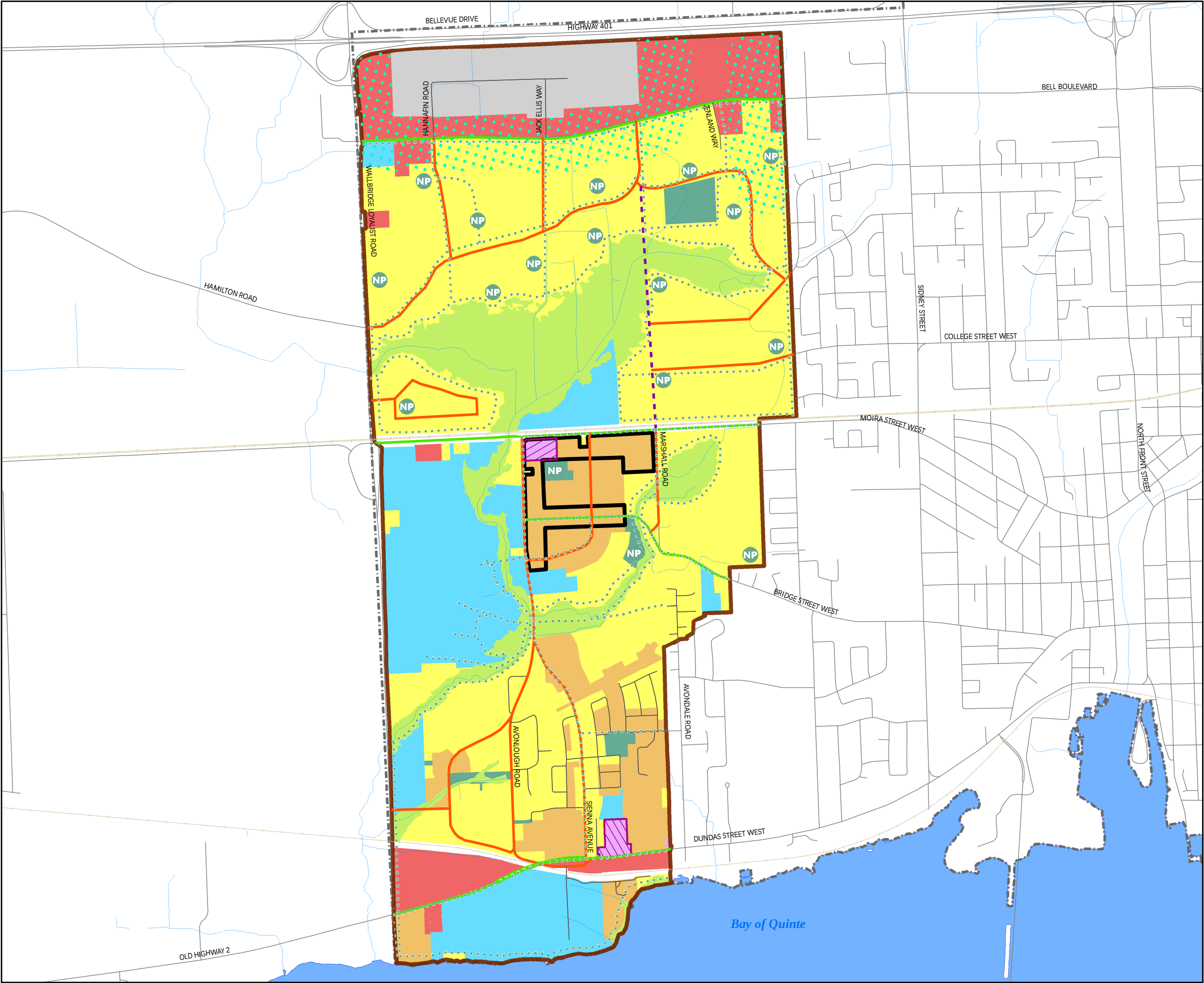
10.7.4.2

Front-Ending Agreements

- a) The City may, at its discretion, enter into front-ending agreements with landowners or developers to provide for the financing and construction of municipal infrastructure and community facilities required to service development within the Secondary Plan area. Such agreements shall be in accordance with the provisions of the *Planning Act* and are intended to facilitate the orderly progression of development and assist the City in recovering its investment in major infrastructure required to support the housing yields identified in Appendix E (West Belleville Secondary Plan – Density Target Areas).

Attachments

Draft Revisions to Schedule B-1 (Land Use Plan) and Appendix E (Density Target Areas)



This is Map 7 of
Schedule 1 to By-law
2025-xx and must be
read together with
the text.

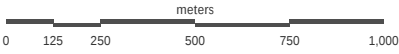
DRAFT, 2025-09-09

CITY OF BELLEVILLE
OFFICIAL PLAN

Schedule B-1
Land Use Plan - Urban Serviced Area -
West Belleville Secondary Plan



- Legend
- West Belleville Secondary Plan Area
 - Municipal Boundary
 - Railways
 - Watercourses
 - Bay of Quinte
 - Transportation Network
 - Arterial Road
 - Collector Road
 - Local Road
 - Protected Corridor for Future Road Alignment (see Section 10.6 of the Official Plan)
 - Trails
 - Land Use Designations
 - Commercial
 - Community Facility
 - Employment
 - Employment Transition Overlay (see section 10.4.3.1 of the Official Plan)
 - Environmental Protection
 - Low Density Residential
 - Medium Density Residential
 - Mixed Use
 - Open Space
 - New Park, See Section 10.4.2
 - Mixed Use Sub Area 1 Overlay
 - Mixed Use Sub Area 2 Overlay
 - 4-Storey As-of Right Overlay (see section 10.7.3.1 of the Official Plan)



SCALE 1:20,000

MAP DRAWING INFORMATION:
ESRI Basemaps, City of Belleville, MNRF (2019), Canvec (2018), Quinte Conservation

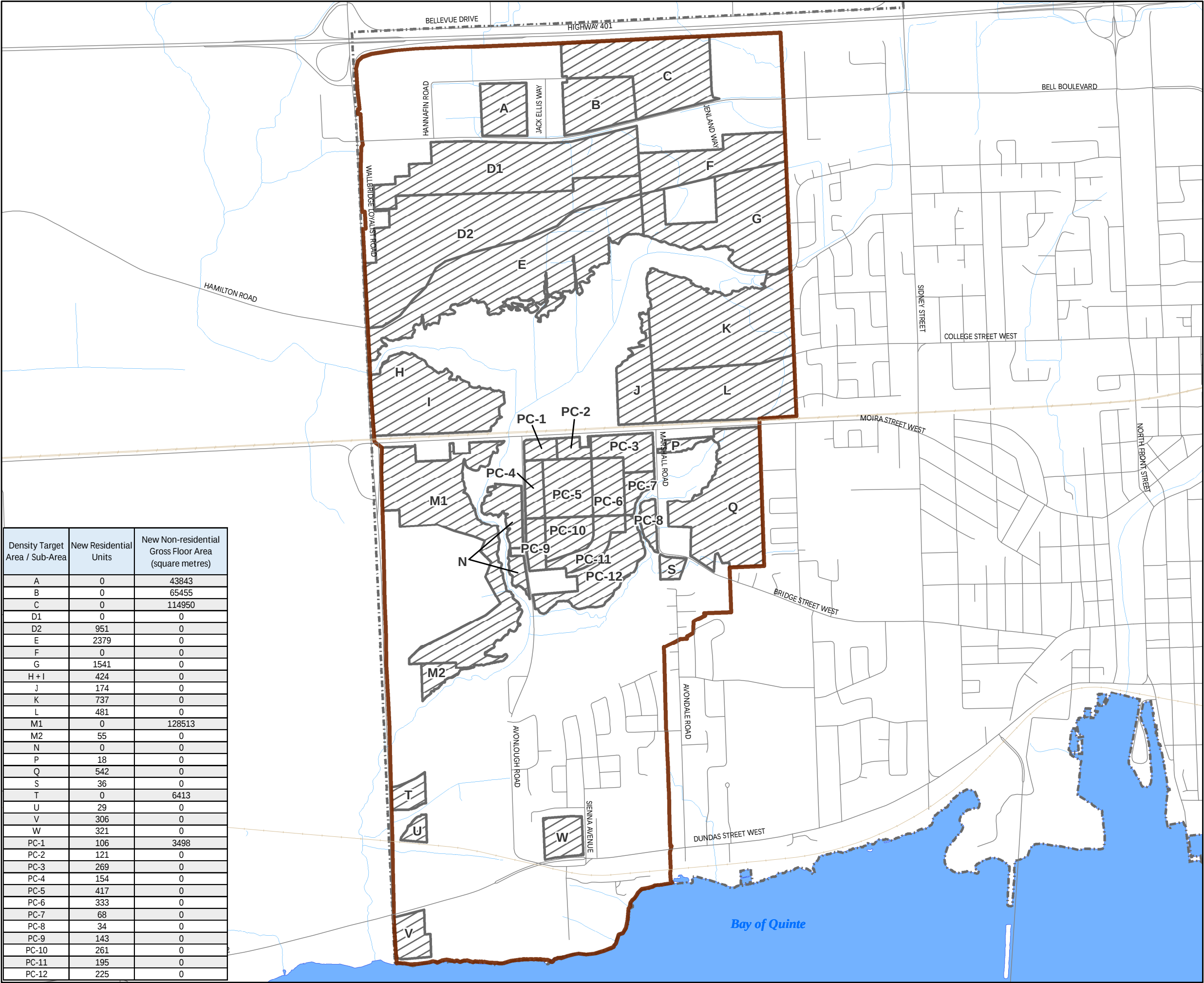
MAP PROJECTION: NAD 1983 UTM Zone 18N , ROTATED 15°

PROJECT: 212538

STATUS: DRAFT, FOR PUBLIC REVIEW

DATE: 2025-09-09





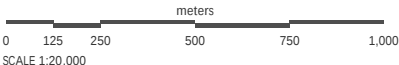
Density Target Area / Sub-Area	New Residential Units	New Non-residential Gross Floor Area (square metres)
A	0	43843
B	0	65455
C	0	114950
D1	0	0
D2	951	0
E	2379	0
F	0	0
G	1541	0
H + I	424	0
J	174	0
K	737	0
L	481	0
M1	0	128513
M2	55	0
N	0	0
P	18	0
Q	542	0
S	36	0
T	0	6413
U	29	0
V	306	0
W	321	0
PC-1	106	3498
PC-2	121	0
PC-3	269	0
PC-4	154	0
PC-5	417	0
PC-6	333	0
PC-7	68	0
PC-8	34	0
PC-9	143	0
PC-10	261	0
PC-11	195	0
PC-12	225	0

DRAFT, 2025-09-09

CITY OF BELLEVILLE
OFFICIAL PLAN

Appendix E
West Belleville Secondary Plan -
Density Target Areas

- Legend
- West Belleville Secondary Plan Area
 - Municipal Boundary
 - Density Target Area
 - Roads
 - Railways
 - Watercourses
 - Bay of Quinte



MAP DRAWING INFORMATION:
ESRI Basemaps, City of Belleville, MNRF (2019), Canvec (2018), Quinte Conservation

MAP PROJECTION: NAD 1983 UTM Zone 18N , ROTATED 15°

PROJECT: 212538

STATUS: DRAFT, FOR PUBLIC REVIEW

DATE: 2025-09-09

