

Water, Wastewater and Stormwater Master Plans and Strategic Transportation Network Review

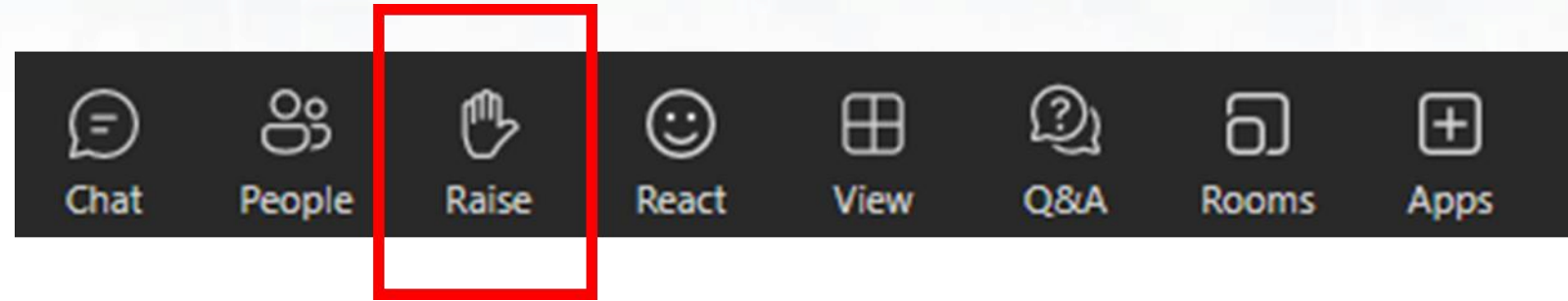
Virtual Public Information Centre (PIC) #1

May 9, 2023 (5:30 – 8:00 PM)



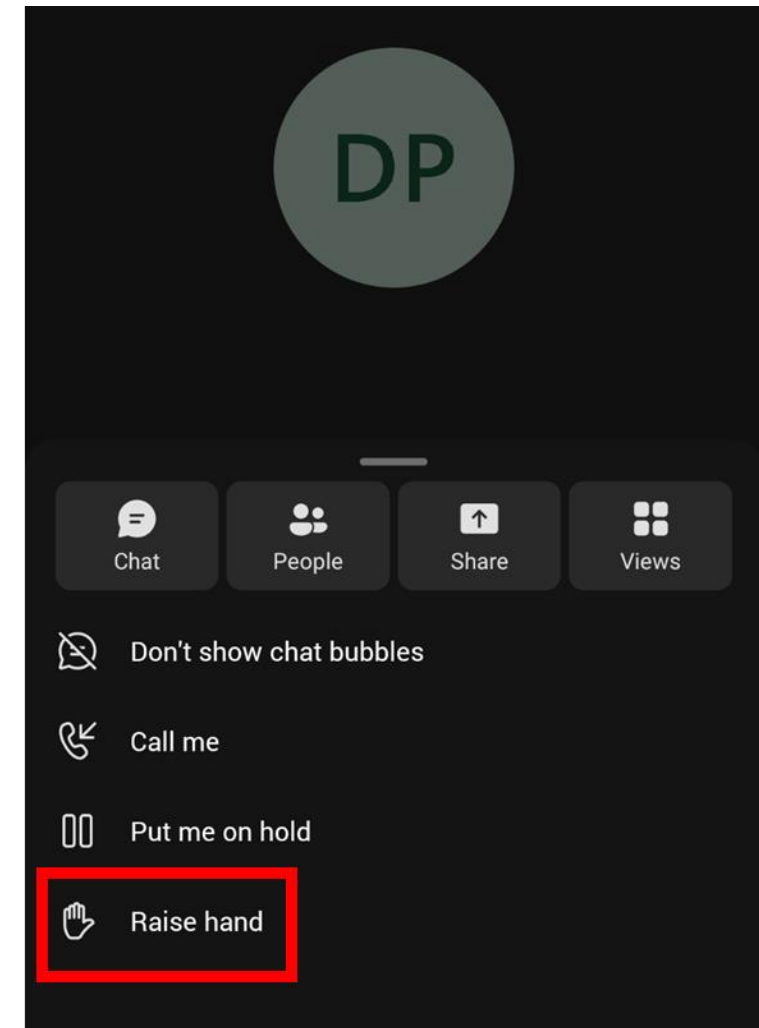
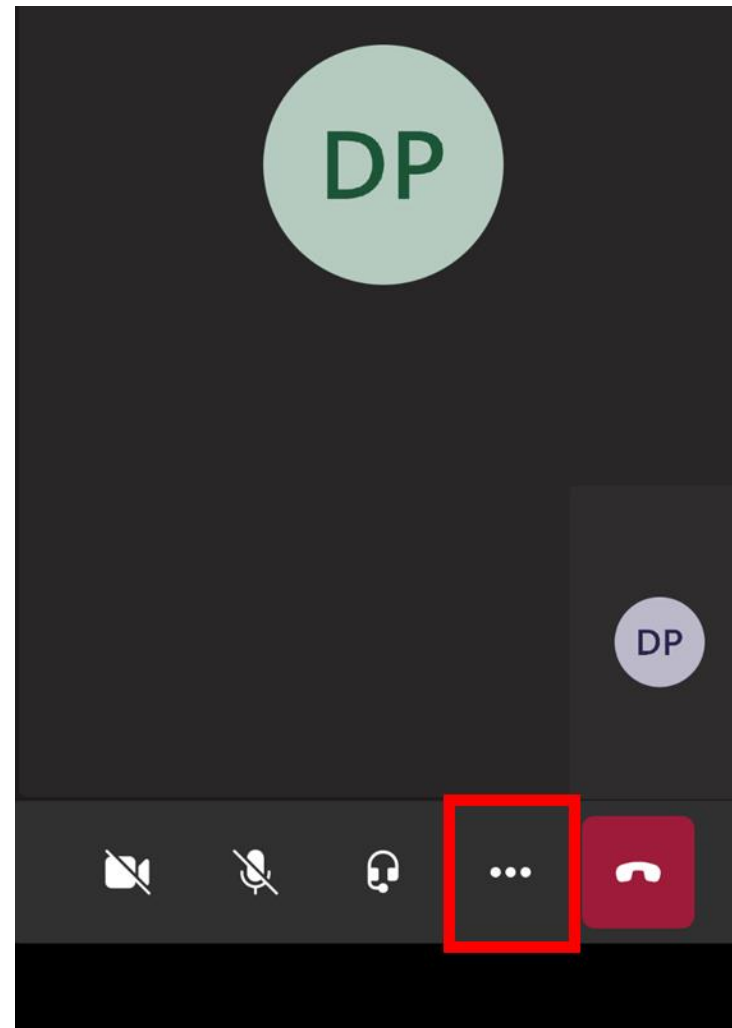
How to Ask a Question

Internet Browser/Ms. Teams Application on computer: Click the hand icon.



Smartphones: Click the three dots at the bottom. Select 'Raise Hand' from the pop up.

The presentation will be **recorded** and **posted** on the project pages



- **Welcome and Land Acknowledgement (5-10 minutes)**
- **Hamilton is Growing – Planning Context (5-10 minutes)**
- **Water, Wastewater & Stormwater Master Plans (25-30 minutes)**
- **Strategic Transportation Network Review (25-30 minutes)**
- **How to Provide Feedback?**
- **Live Question and Answer (70 - 80 minutes)**

The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation.

Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.



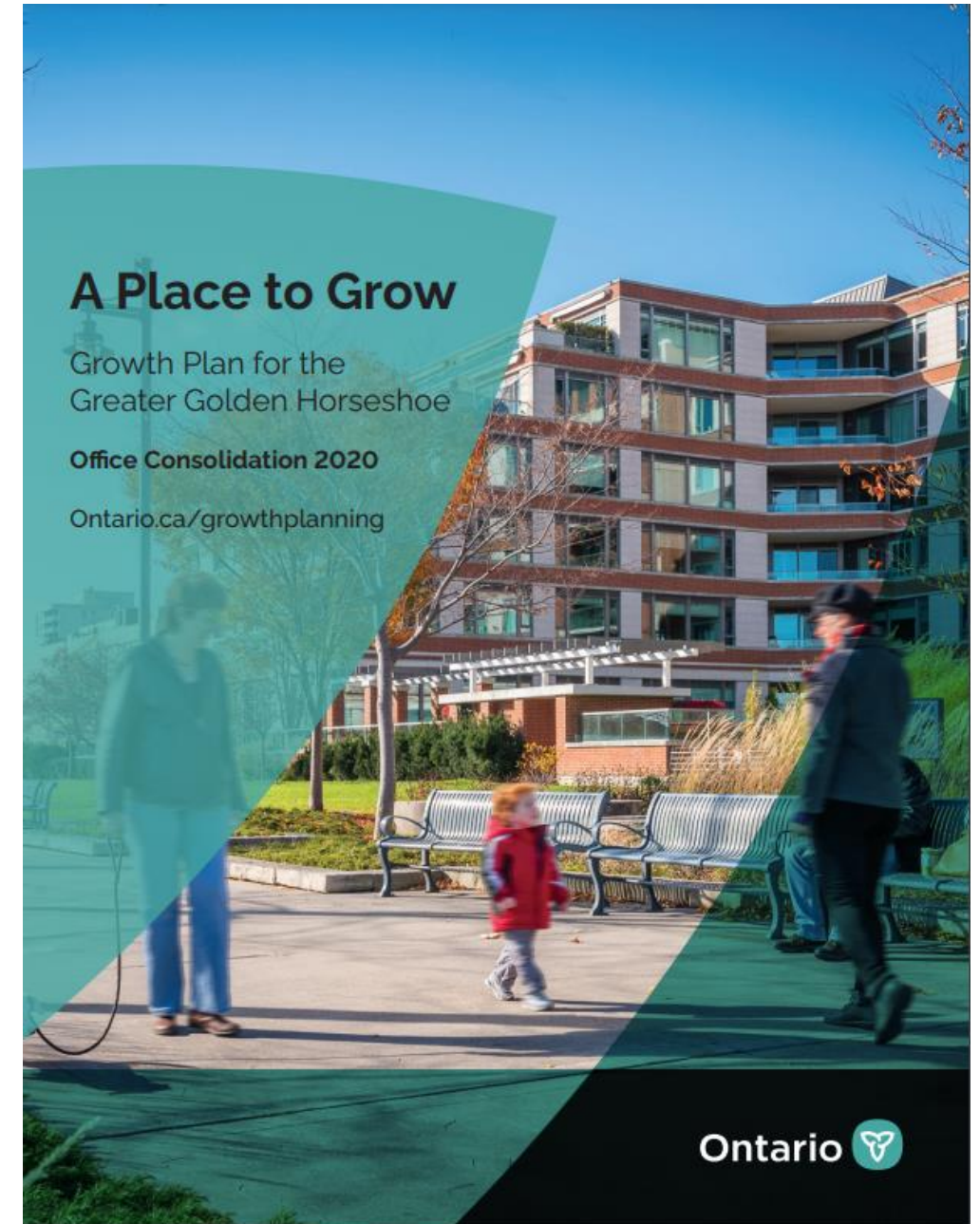
A Place to Grow - Growth Plan

A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Growth Plan) provides specific land use planning policies for the municipalities in the Greater Toronto and Hamilton Area. The Growth Plan provides the land use planning and implementation policies that guide development in the Plan area.



Growth Related Integrated Development Strategy

GRIDS is a big-picture planning process that evaluates the land use, infrastructure, economic development and financial implications of growth for the next 30 years. The City is planning for approximately **236,000** new residents and **122,000** new jobs in Hamilton to the year 2051, based on forecasts developed for the Growth Plan.





Intensification

Intensification is development and re-development of lands within the built-up area of the City at an intensity of use that is greater than currently exists. The minimum percentage of intensification for Hamilton is set at **50%** through the Growth Plan

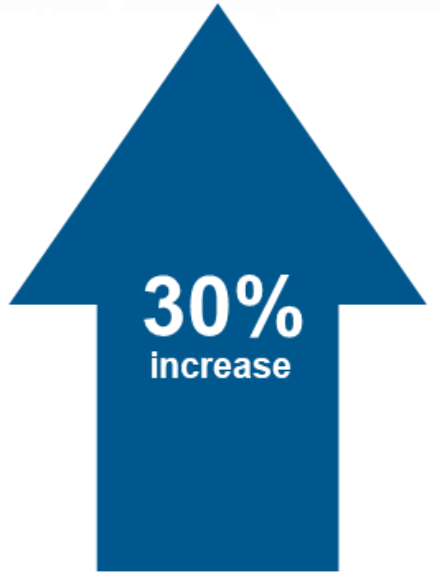
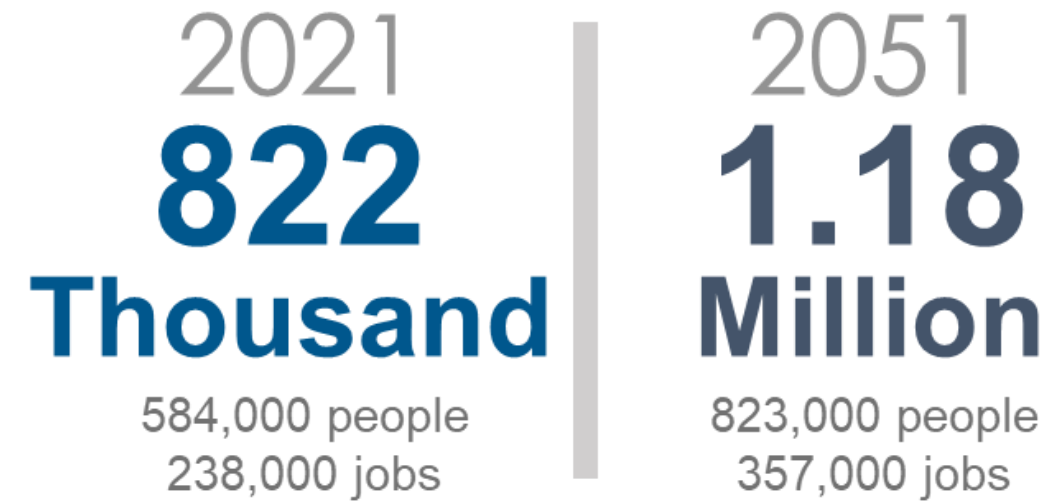


Greenfield Area Density

- Greenfield Area Density is the measure of how many people and jobs per hectare are planned in new areas for development. In areas without existing development approvals, the density shall be planned to **70 persons and jobs per hectare**. This anticipates that most new housing units will be built at a higher density.

The City of Hamilton is

GROWING!

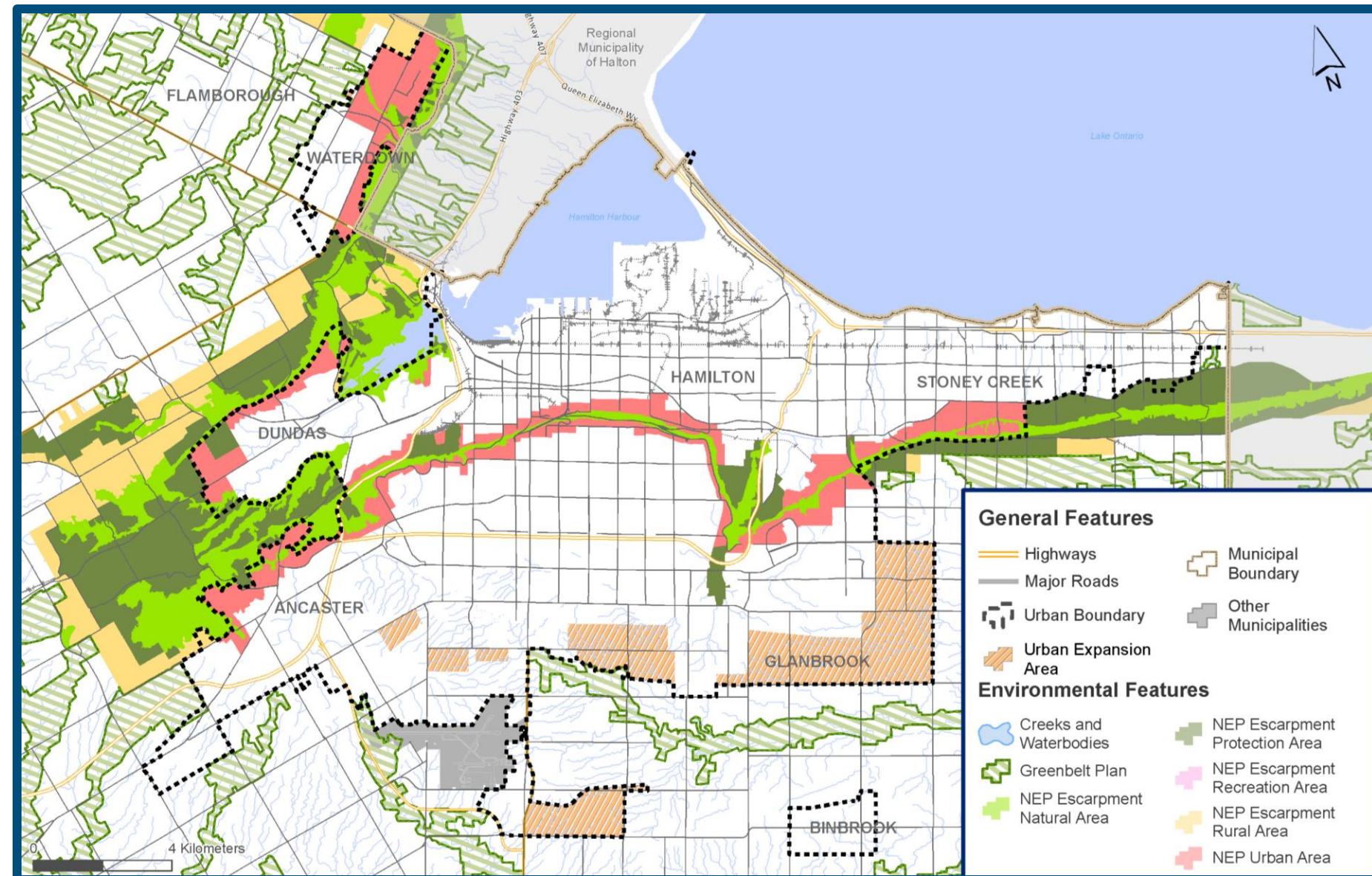


Growth to 2051

	Population	Employment
2021	584k	238k
2031	652k	271k
2041	733k	310k
2051	823k	357k

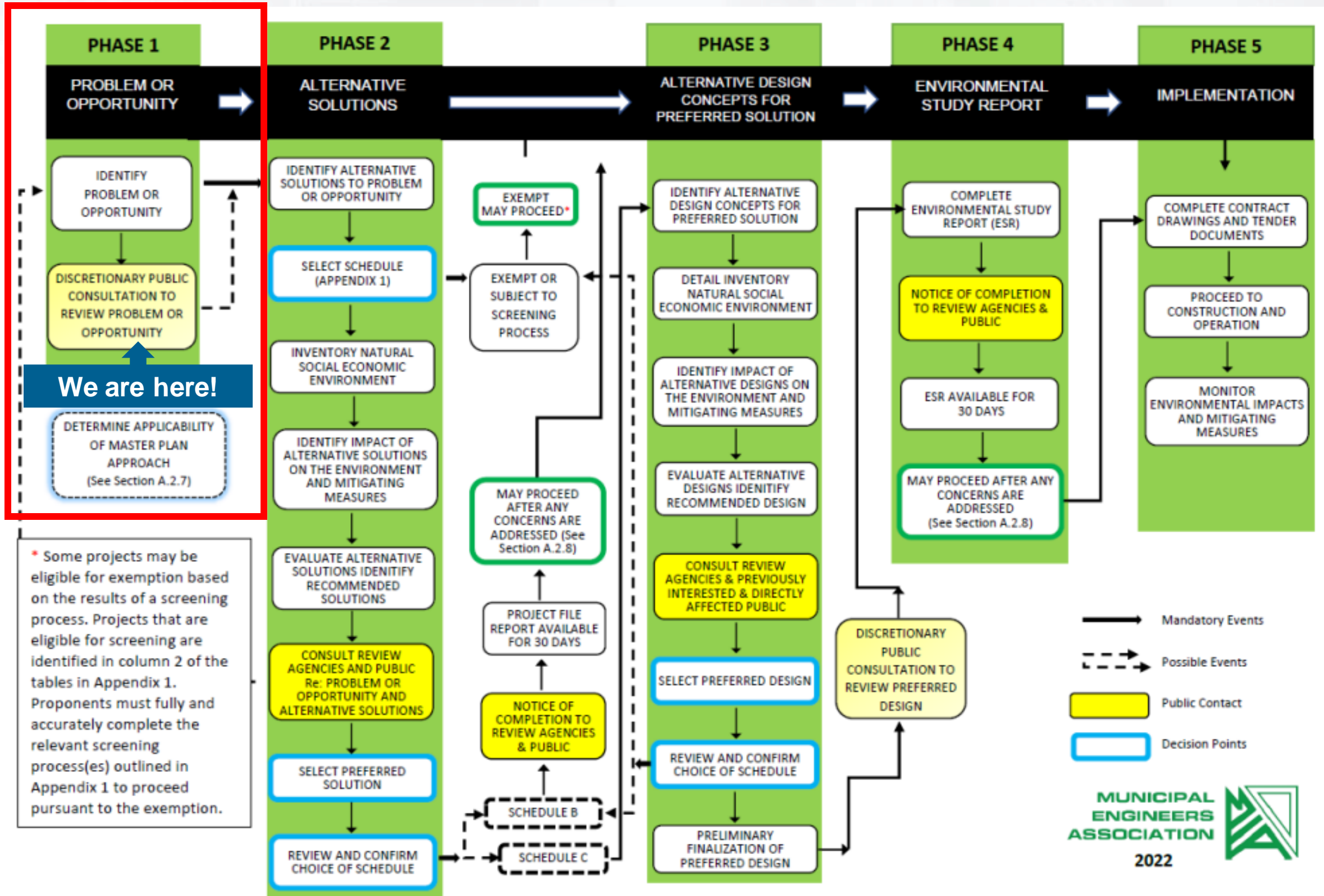
Provincial changes - Urban Expansion Areas

- Provincial approval of OPA 167 in November 2022 included expansion to the City's Urban Boundary
- Addition of 2,202 gross hectares of land to the City's Urban Boundary as "Urban Expansion Area"
- Secondary Planning must be completed before Urban Expansion Area lands can be developed
- Expansion Area lands are along Twenty Road West, Twenty Road East, Garner Road East, Elfrida area and White Church Road area



City of Hamilton Water, Wastewater and Stormwater Master Plans

Municipal Class EA Process and Consultation



* Some projects may be eligible for exemption based on the results of a screening process. Projects that are eligible for screening are identified in column 2 of the tables in Appendix 1. Proponents must fully and accurately complete the relevant screening process(es) outlined in Appendix 1 to proceed pursuant to the exemption.



Provincial Process

The projects are following the **Municipal Class Environmental Assessment** process, which is a decision-making process that all Ontario municipalities must follow for building new infrastructure.

Study Problem / Opportunity Statement (Water, Wastewater & Stormwater)

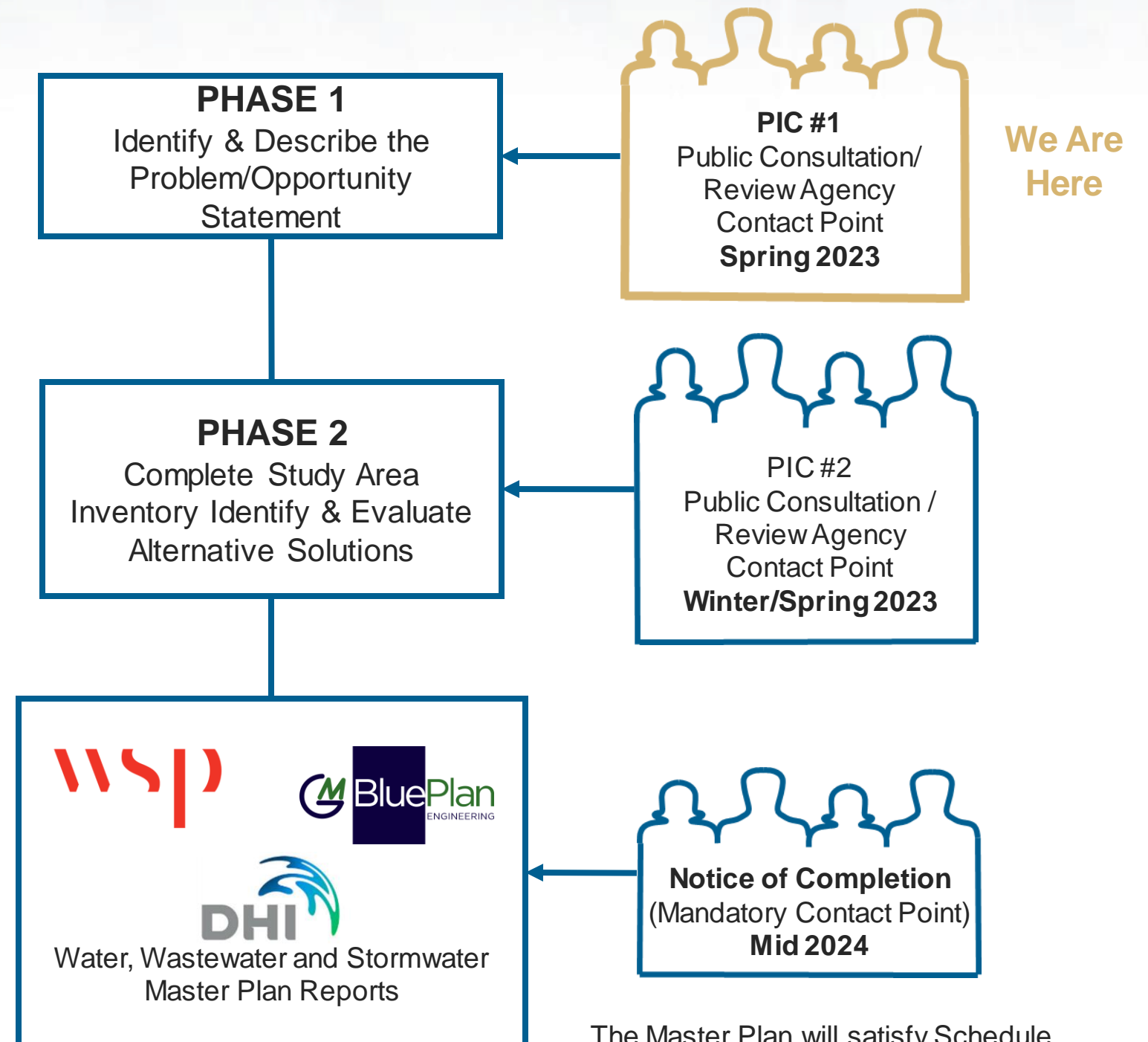
The problem or opportunity statement defines the principal starting point in the undertaking of the Class EA study and assists in defining the scope of the project. The problem or opportunity statement for the City of Hamilton Water, Wastewater and Stormwater Master Plans is defined as follows:

Supporting Growth

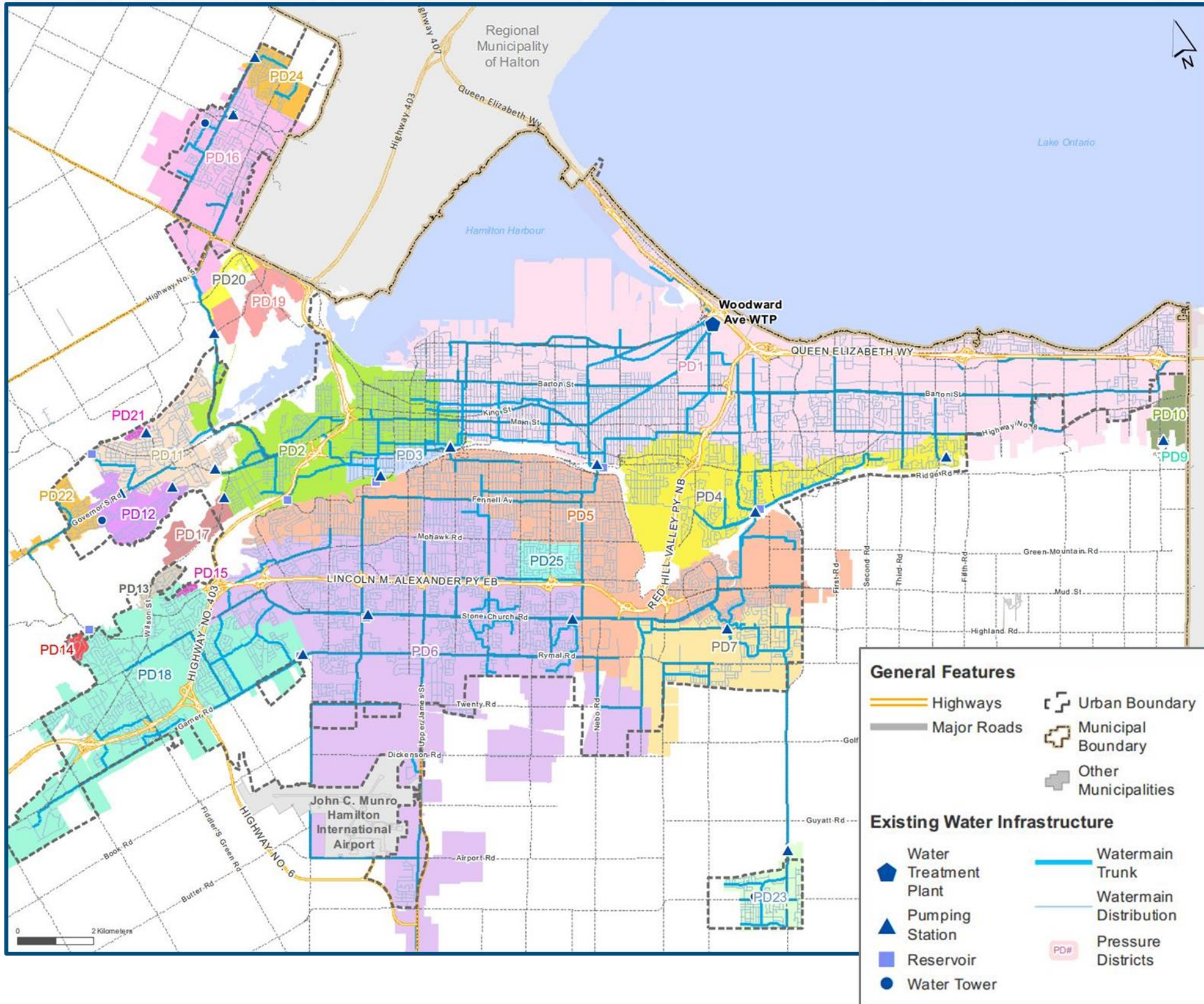
The Master Plans will determine how the City's water, wastewater, and stormwater infrastructure will support growth in a sustainable and financially responsible manner.

Developing a Long-Term Servicing Strategy

The Master Plans will develop a long-term servicing strategy and capital forecast to ensure level of service for existing residents and businesses, to support future growth in the community through 2051, and to consider potential impacts post-2051.



The Master Plan will satisfy Schedule A and A+ projects and provide the basis for future investigations of any identified Schedule B and C projects.



Treatment

- Water is drawn from Lake Ontario and is treated at the Woodward Ave Water Treatment Plant

Pumping & Transmission

- Treated potable water is pumped from the Treatment Plant through a network of large diameter feeder mains throughout the City
- The City is divided up into several areas called Pressure Districts, based on topography.
- Water is pumped by pumping stations located throughout the City which provide suitable pressure for use for each Pressure District

Storage

- Water is stored at a series of in-ground reservoirs and above ground elevated tanks, which provide storage for fire, emergency use and more efficient system operation

Existing Water System Opportunities and Constraints

Treatment

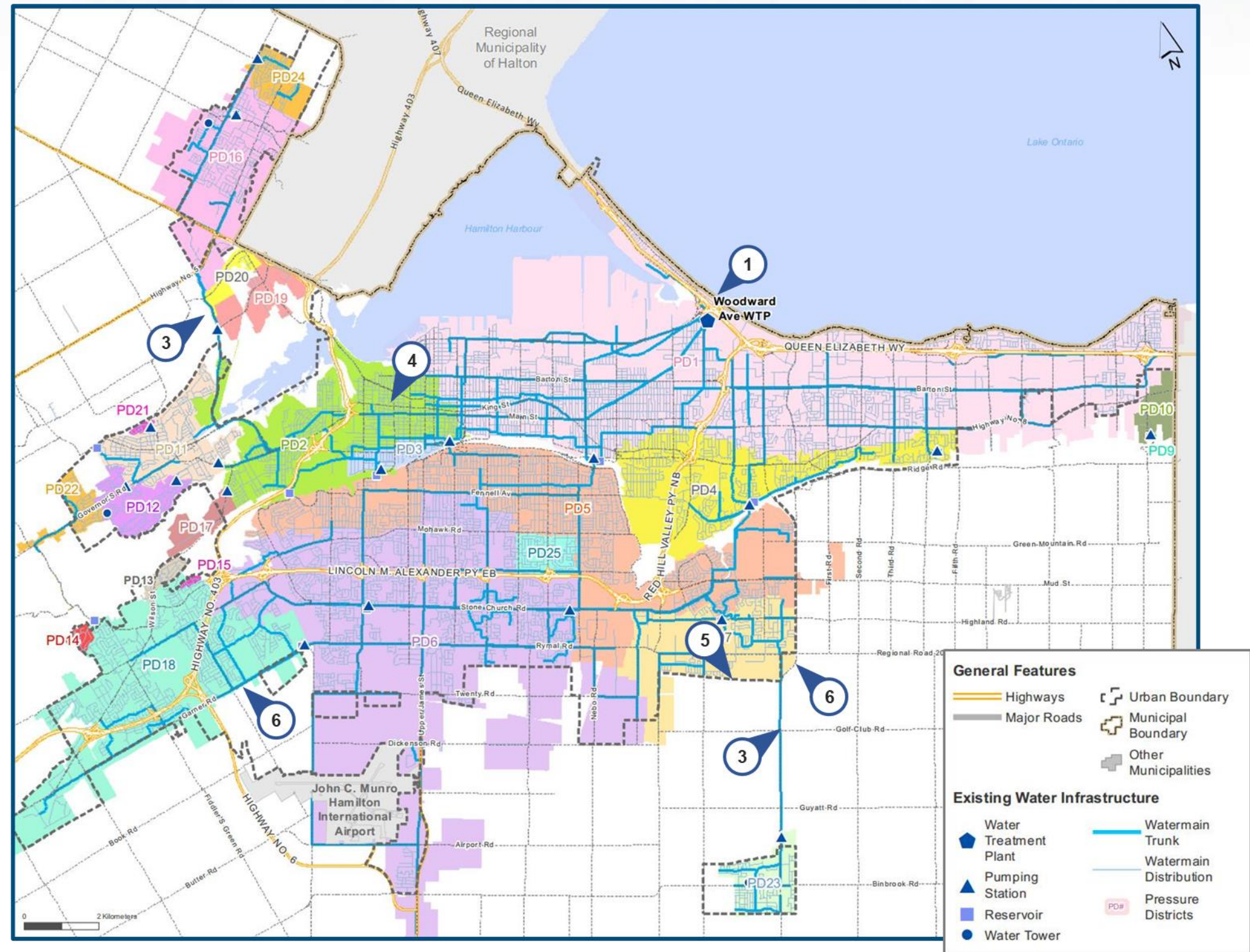
1. Woodward Ave Water Treatment Plant (WTP) provides treated water to City of Hamilton; WTP has had relatively recent upgrades to support growth.

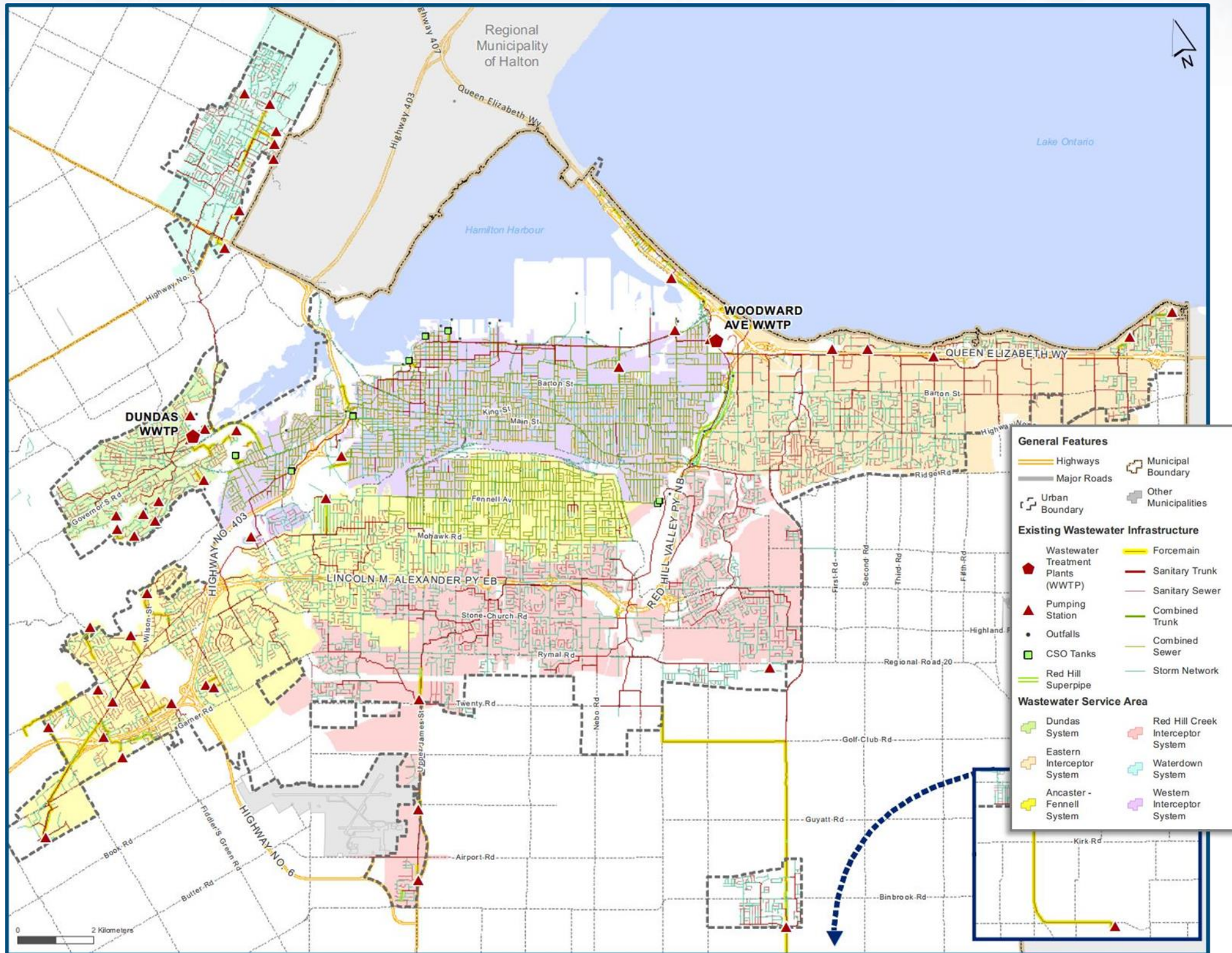
Pumping and Transmission

2. Recently constructed infrastructure within several Pressure Districts supports both Greenfield and Intensification growth. Further extensions of trunk watermains and new/upgraded Pumping Stations may be required for key growth areas
3. Single watermain feeds to growth areas may require twinning for capacity and security
4. Significant Intensification growth potential within downtown core; aging infrastructure must provide Level of Service (Pressure and Fire Flow) for existing and future re-development
5. Growth potential within PD7 may require new water facilities and system upgrades

Storage

6. Potential storage upgrades required within southern Pressure Districts





- The City of Hamilton is divided up into two major sewer servicing areas:
 - Combined** – located generally in the older areas of the City, where stormwater and wastewater from homes and businesses flow through a common “Combined” sewer
 - Separated** – located generally in the outer former municipalities, where wastewater and stormwater are conveyed by two different “Separated” sewers.

Treatment and Conveyance

- Sewers convey flow that ultimately outlets to one of two Wastewater Treatment Plants (WWTP); Dundas WWTP and Woodward WWTP where the wastewater is treated, then treated effluent is discharged to Desjardins Canal and Hamilton Harbour, respectively.

Sewage Pumping Stations

- Sewage Pumping Stations are located throughout the City to pump flow from areas that are not serviceable purely by gravity sewers

Combined Sewer Overflows (CSOs)

- Several Combined Sewer Overflow (CSO) tanks and outlets are located within the City to protect against sewer surcharging during severe wet weather events (<https://www.hamilton.ca/city-initiatives/our-harbour/combined-sewer-overflow-storage-strategy>)

Existing Wastewater System Opportunities and Constraints

Treatment

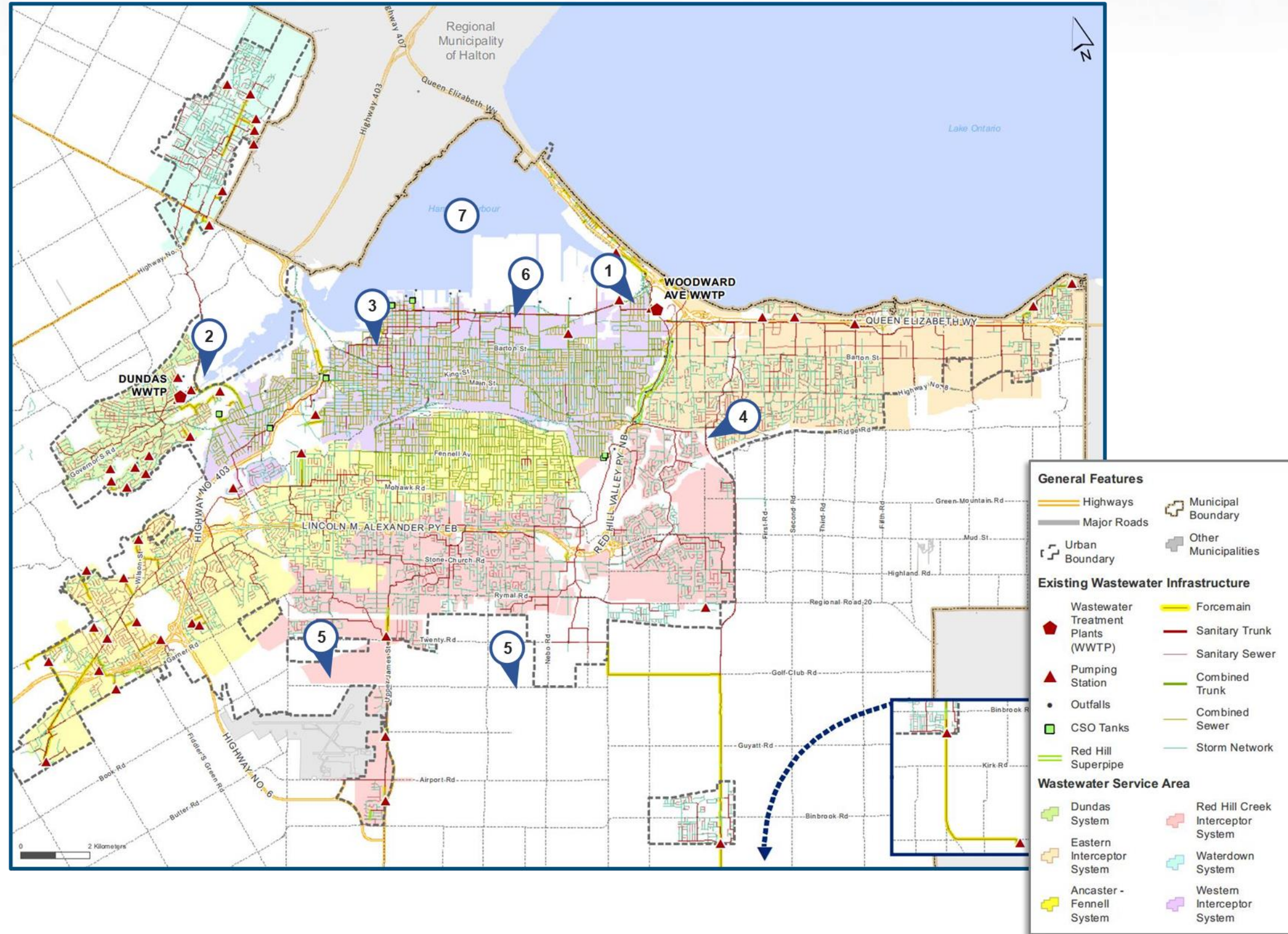
1. Woodward Ave WWTP expansion currently underway – EA completed and capacity upgrade designs imminent
2. Growth flow within Waterdown and Dundas flows to the Dundas WWTP; historical studies and recent recommendations for strategies at Plant including effluent quality improvements

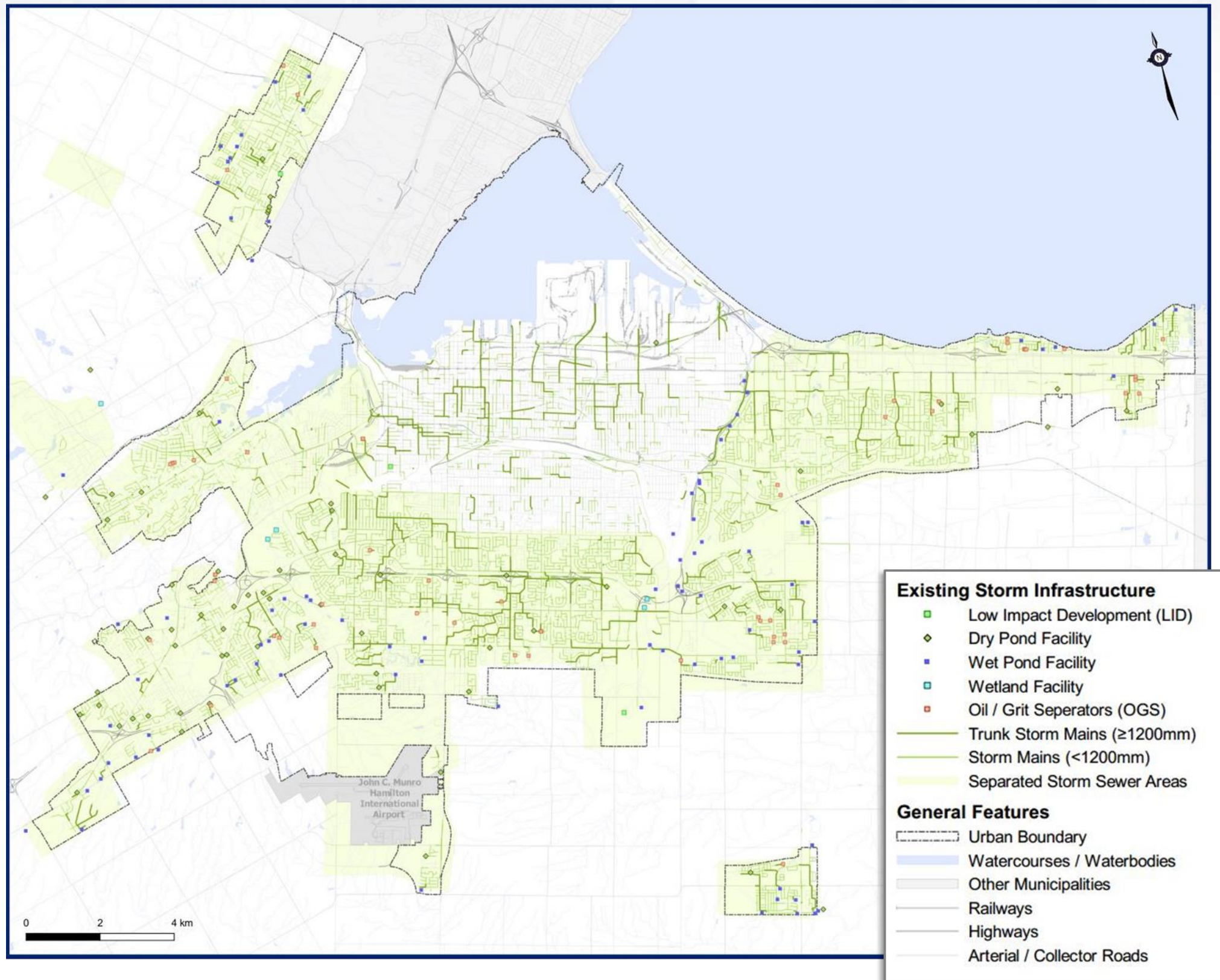
Conveyance

3. Significant Intensification growth potential within downtown core; combined sewers have capacity constraints during wet weather events
4. Centennial Trunk Sewer construction was completed to service growth on Hamilton Mountain. Downstream twinning of Battlefield Trunk Sewer will be reviewed in this Master Plan.
5. New Dickenson Trunk Sewer between Upper James St and Centennial Pkwy will service growth within the AEGD and Hamilton Mountain growth areas
6. Capacity constraints identified in Western Sanitary Interceptor (WSI)

Combined Sewer Overflows

7. Compliance with MECP's F-5-5 Requirements for Combined Sewer Overflows (CSO) is a continued constraint to be managed through MP recommendations as well as other concurrent studies





- In the **separated** sewer area, stormwater (surface runoff during rainfall/snowmelt events) is conveyed by two (2) systems:
 - **Minor System:** Systems designed to convey flows for frequent storms, typically the storm sewer network (City of Hamilton 1 in 5-year return period design event)
 - **Major System:** Overland flow (typically the roadway network) designed to convey flows in excess of storm sewer capacity
- **Minor System** conveys runoff either to:
 - Existing open watercourses (creeks) without any treatment
 - Stormwater Management Facilities (dry ponds and wet ponds typically) which provide peak flow control and stormwater quality treatment prior to discharge to open watercourses
- In older areas of the storm sewer network:
 - There are typically no stormwater management facilities or controls (quality or quantity)
 - **Major System** is reviewed to identify
 - Primary overland flow pathways
 - Capacity of system (ponding and potential flooding of roadways and other areas)

Existing Stormwater System Opportunities and Constraints

There are a number of different opportunities and constraints in the separated stormwater system throughout the City. A high-level overview of some of these are presented on the map. A further review will be completed as part of the Stormwater Master Plan.

Storm Sewer Capacity – Areas of Concern

- King/Cootes area of Dundas (Area 1)
- Meadowlands/Golf Links area (Area 3)
- Fessenden and Mountview Neighbourhoods (Area 5)
- Garth St trunk upstream of the Lincoln Alexander Parkway (Area 6)
- Hester/Hayden branch (Area 7)
- Upper James and Rymal (Area 9)
- Stoney Creek Area - Red Hill to Fruitland Rd, south of Barton (Area 10)

Stormwater Quality Control – Areas Lacking Treatment

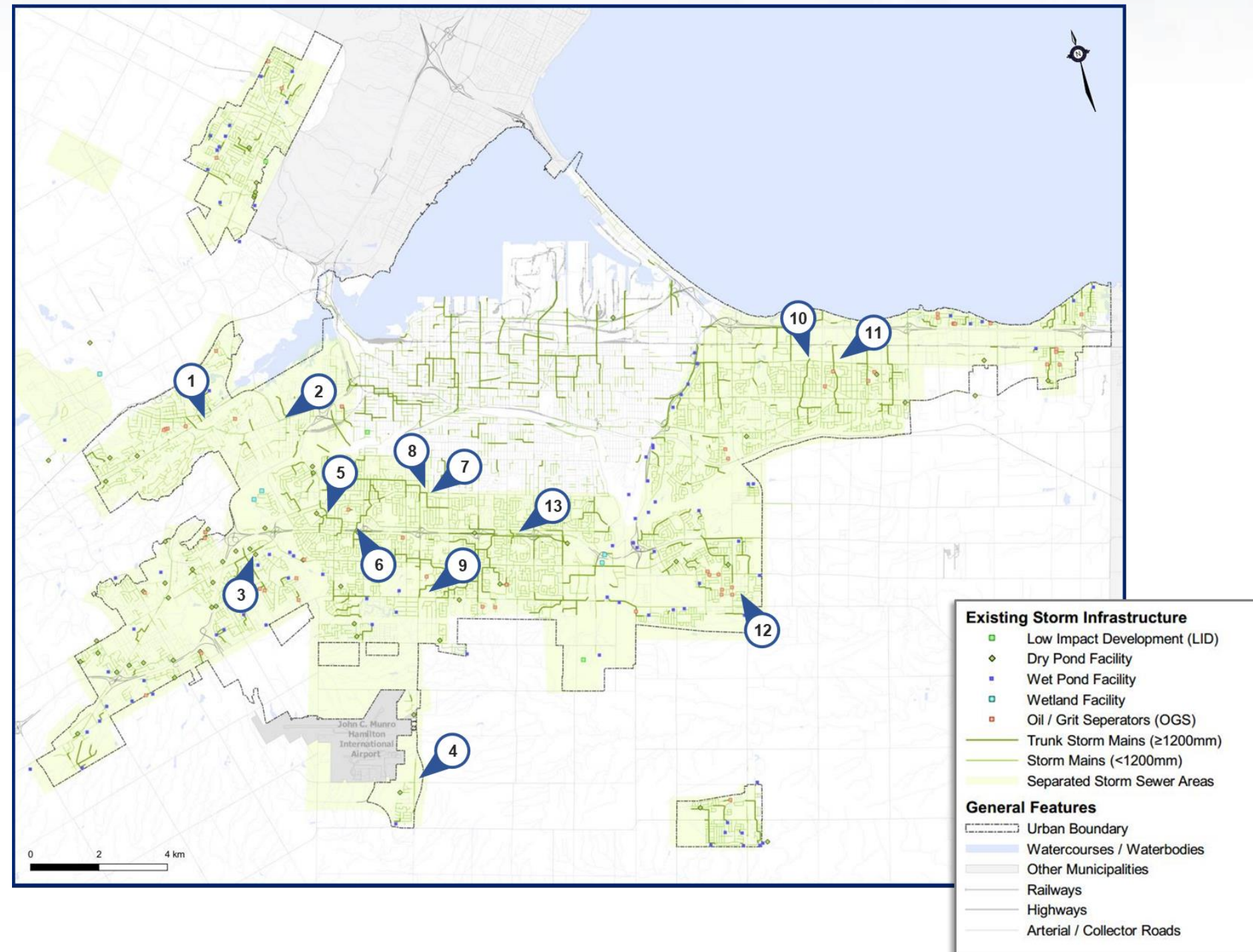
- Westdale area (Area 2)
- Along Upper James Street and the Chedoke Creek Watershed (Area 8)
- Lower Stoney Creek (Area 11)
- Several areas of Hamilton Mountain (Area 15)

Stormwater Quality Control – Pond Retrofit Opportunities

- Ancaster including Meadowlands (Areas 12 and 13)
- Glanbrook including Rymal and Foxmeadow and Centennial and Highland (Area 14)

Green Infrastructure (GI) and Low Impact Development (LID)

- Specific stormwater management (SWM) criteria for Airport Lands, including focus on LID measures (Area 4)
- Pending City policy directions and opportunities to further promote GI and LID



Project Commencement
Spring 2023



2023

Assess/Evaluate Alternative Servicing Solutions
Summer/Fall 2023



Develop Alternative Servicing Solutions
Spring/Summer 2023



Public Information Centre #2
Winter/Spring 2024



Final Master Plan Report
Summer 2024



2024

As we develop and assess different strategies, we want your input:

Today:

Input on the Master Plan Process and Study Considerations

Future Public Information Centre #2 :

Input on the evaluation and selection of the preliminary preferred alternatives

We want to hear from you! Please let us know your thoughts by:

- Email the Project Team**
- Signing up for project updates through Engage Hamilton: www.engage.hamilton.ca/wwsmasterplan**
- Completing the project response form**
- Attend Public Information Centre No. 2**

**Please provide your feedback by
May 23, 2023.**

Bhajan Sarker, P. Eng.

Project Manager
City of Hamilton
100 King St W, 9th Floor
Hamilton, ON L8P 1A2
Bhajan.Sarker@hamilton.ca
905-546-2424 ext. 5109

Mark Zamojc, P. Eng.

Project Manager
GM BluePlan Engineering Ltd
3300 Highway 7 W Suite 402
Vaughan, ON L4K 4M3
mark.zamojc@gmblueplan.ca
416-703-0667 ext. 7212

STRATEGIC TRANSPORTATION NETWORK REVIEW



- The City of Hamilton has initiated a **Strategic Transportation Network Review (STNR)** to update its planned future transportation network.
- The study will determine the **short and long-term transportation needs** to support servicing requirements to the year **2041** with consideration for 2041-2051. The STNR will:



Align with the 2018 Transportation Master Plan Vision and Desired Outcomes



Identify projects that update the road, transit, and active transportation networks (along with supporting infrastructure)



Include the anticipated timing and updated costs of each project

- The STNR will provide inputs to the **2024 Development Charges By-Law**

Supporting Growth

Given anticipated growth to 2051, there will be increased travel demand as more people move around the city to **live, work, play** and **connect**.

New Infrastructure

There is a need to provide resilient infrastructure to **sustainably accommodate this increased travel demand**, support economic development and foster healthy and safe communities.

What are Development Charges?



To support population and employment growth, the City needs to provide **new infrastructure**, such as new roads, sidewalks, multi-use paths, bike lanes, and more within the context of complete streets.



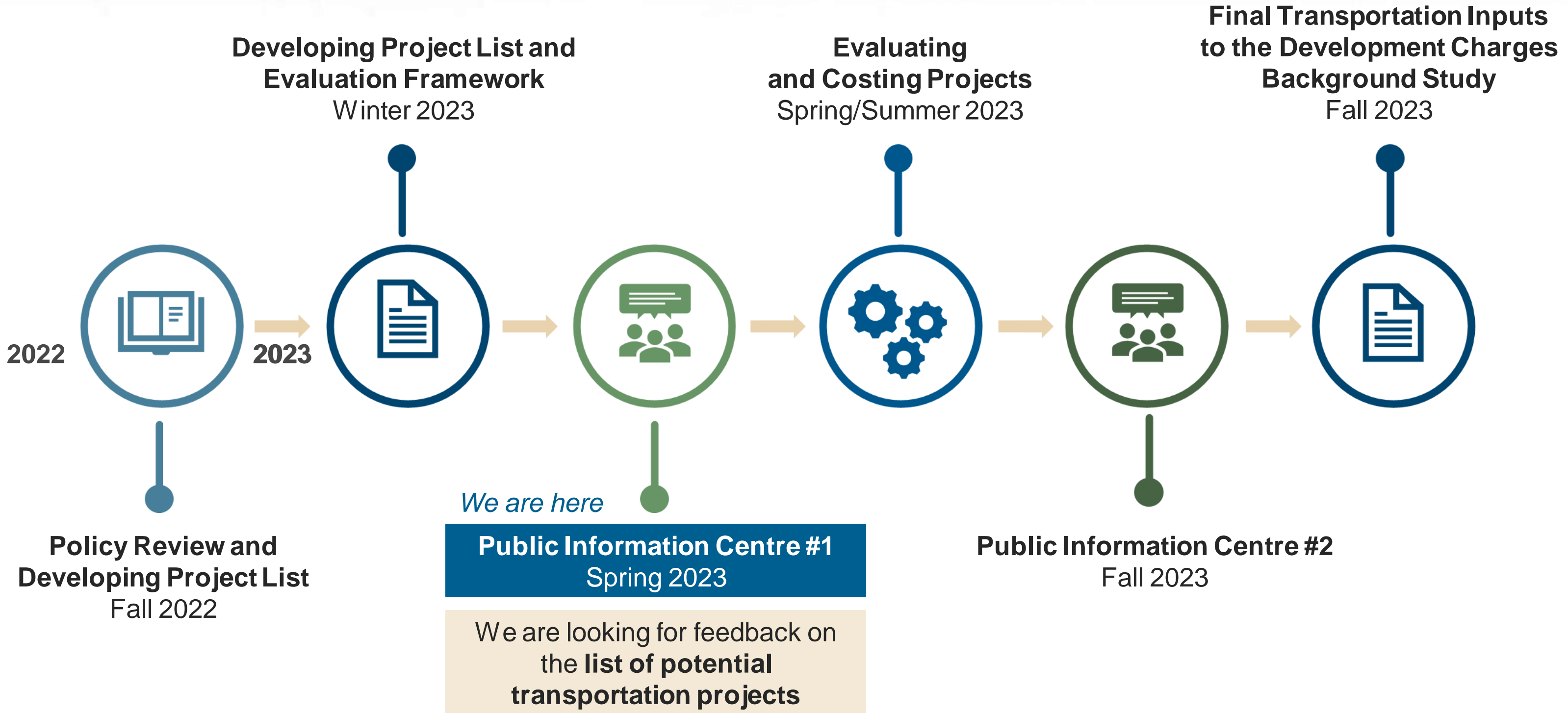
Development charges are fees that developers pay when a building permit is issued to help **pay for municipal services to new developments** including transportation infrastructure.



Without development charges, the **costs for additional infrastructure** would be at the expense of existing residents and businesses in the form of higher property taxes, rent and user fees.



Development charges **ease the financial burden on taxpayers** and support new services as a result of growth.



1

The 2018 Transportation Master Plan (TMP) outlines a **vision, desired outcomes**, and a **future transportation network** for the City of Hamilton. This includes an evaluation of alternative future transportation systems, which fulfills Phases 1 and 2 of the Environmental Assessment process.



2

The City has identified a **long list of potential future transportation projects** from multiple sources, including the 2018 TMP and GRIDS 2.



3

The 2018 TMP is still in effect today, and the Strategic Transportation Network Review (STNR) **follows the vision and desired outcomes of the 2018 TMP.**



4

The STNR will evaluate the long list of potential future transportation projects using **evaluation criteria based on the 2018 TMP.** Projects that pass the evaluation process will be costed and included in the 2024 Development Charges By-Law.

Existing Transportation Network

- Hamilton's existing transportation network includes **many different modes.**



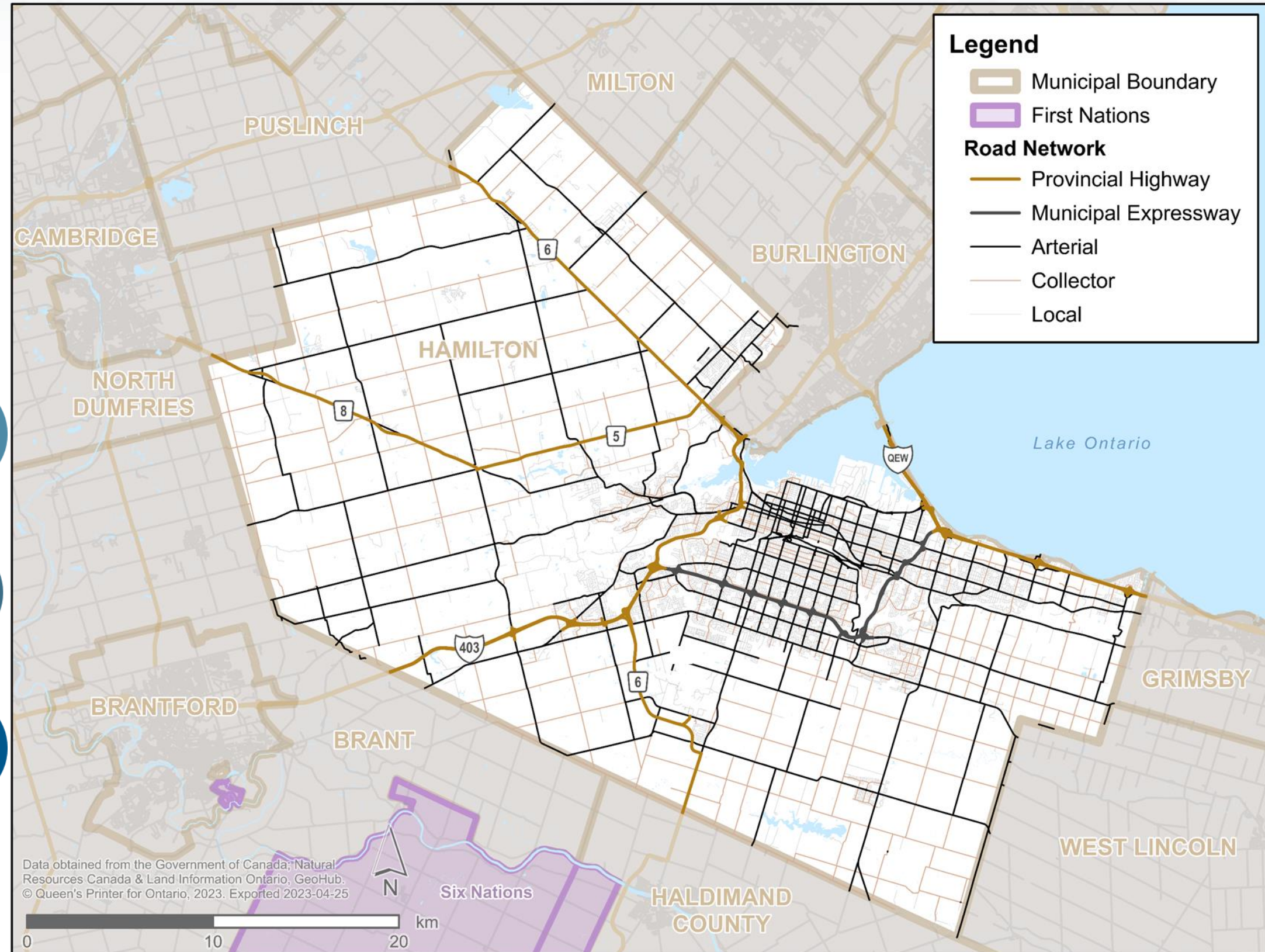
Roads



Active Transportation
(walking and cycling)



Transit



Potential Future Transportation Network

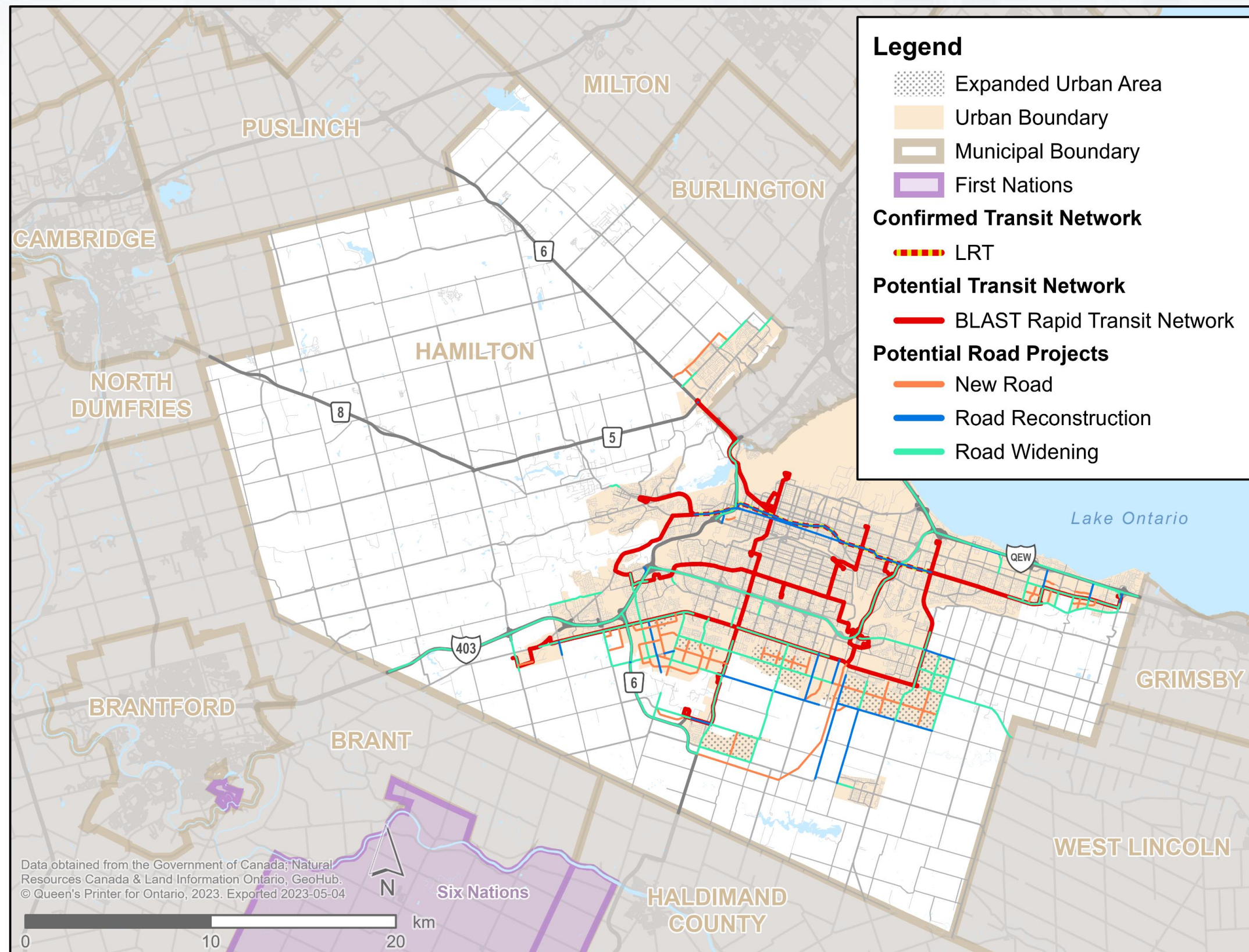
- The potential future transportation network draws on existing documents to identify a **long list of potential projects**

2019 Development Charges Background Study

2018 Transportation Master Plan

Secondary Plans

Infrastructure Needs Assessment to support future growth and urban boundary expansion







*Active Transportation projects can be viewed in the City of Hamilton Cycling Master Plan

- Projects that pass the evaluation process will form the **future transportation network**

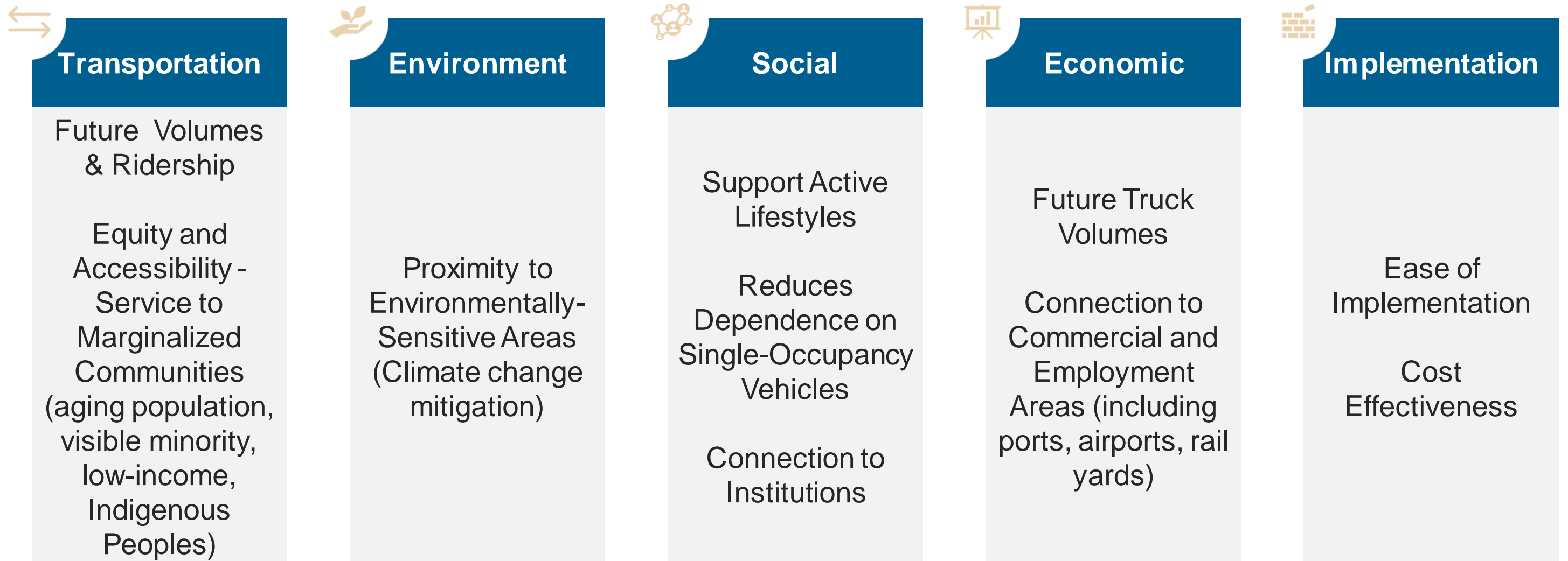
List of Potential Transportation Projects

- The **list of potential transportation projects** spans:

 Roads	 Transit	 Active Transportation	 Additional Programs
<p>Road improvements to service newly developed areas and promote sustainable travel along complete streets</p>	<p>Transit to serve new development and support growing transit ridership throughout the city</p>	<p>Pedestrian and cycling improvements to support active transportation throughout the City and connect to new growth areas</p>	<p>Transportation-related infrastructure that supports the overall transportation network (spanning roads, transit, and active transportation)</p>
<p><i>Examples</i></p> <ul style="list-style-type: none">Airport Road wideningArvin Avenue extension (new road)Main Street reconstructionNorth Waterdown Drive (new road)	<p><i>Examples</i></p> <ul style="list-style-type: none">Rapid transit routesTransit priority measuresNew buses and support vehiclesBus stop upgrades	<p><i>Examples</i></p> <ul style="list-style-type: none">New bike lanesNew sidewalksPedestrian crossovers and bridges	<p><i>Examples</i></p> <ul style="list-style-type: none">Intersection improvementsStreet lighting upgradesTraffic management programsGrade Separation

- To view the long list of potential transportation projects, please visit <https://engage.hamilton.ca/stnr>

- The 2018 Transportation Master Plan **evaluates alternative transportation solutions** using 5 evaluation criteria categories
- These **5 evaluation criteria categories** are used to evaluate the long list of potential projects in the Strategic Transportation Network Review



- 1** Evaluate the **list of projects** to determine which projects should be carried forward
- 2** Update **project costs** and determine the **timing** of each project
- 3** Present the **final list of projects** at Public Information Centre #2 (Fall 2023)
- 4** Provide the **transportation inputs** to the 2024 Development Charges By-Law



**Comments
Deadline
May 25, 2023**



Send your Comments via email to:

Omar Shams C.E.T.
Project Manager, City of Hamilton
Omar.shams@hamilton.ca

Scott Johnston,
P.Eng. Director, Arcadis IBI Group
hamiltonnetworkreview@ibigroup.com



Provide Feedback in the comment box on the project page

<https://engage.hamilton.ca/stnr>

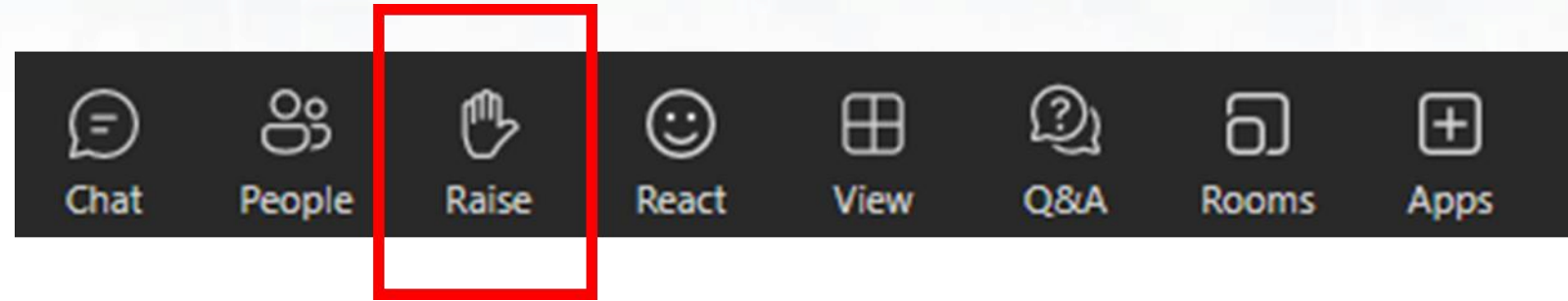


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