



**APPENDIX C**  
**Public Consultation**


**Urban Master Environmental Servicing Plan – Update Study  
Public Information Centre  
SIGN-IN SHEET**

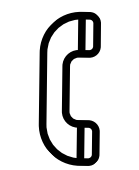
July 20, 2023 from 5:00 pm to 7:00 pm

Municipal Office First Floor - Committee Room 2

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# Public Information Centre

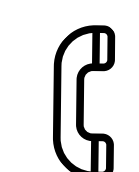
## July 20, 2023

### Urban Master Environmental Servicing Plan – Update Study (Water & Wastewater Systems)

#### Welcome!

1. Please sign in at the Front Desk
2. Feel free to review the boards and participate in the exercises.
3. Complete a comment sheet.
4. Staff are available to answer questions.

 330 Rodinea Road, Unit 3  
Vaughan, Ontario, Canada L6A 4P5

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# URBAN ENVIRONMENTAL SERVICING PLAN UPDATE (WATER AND WASTEWATER)

## Study Objective

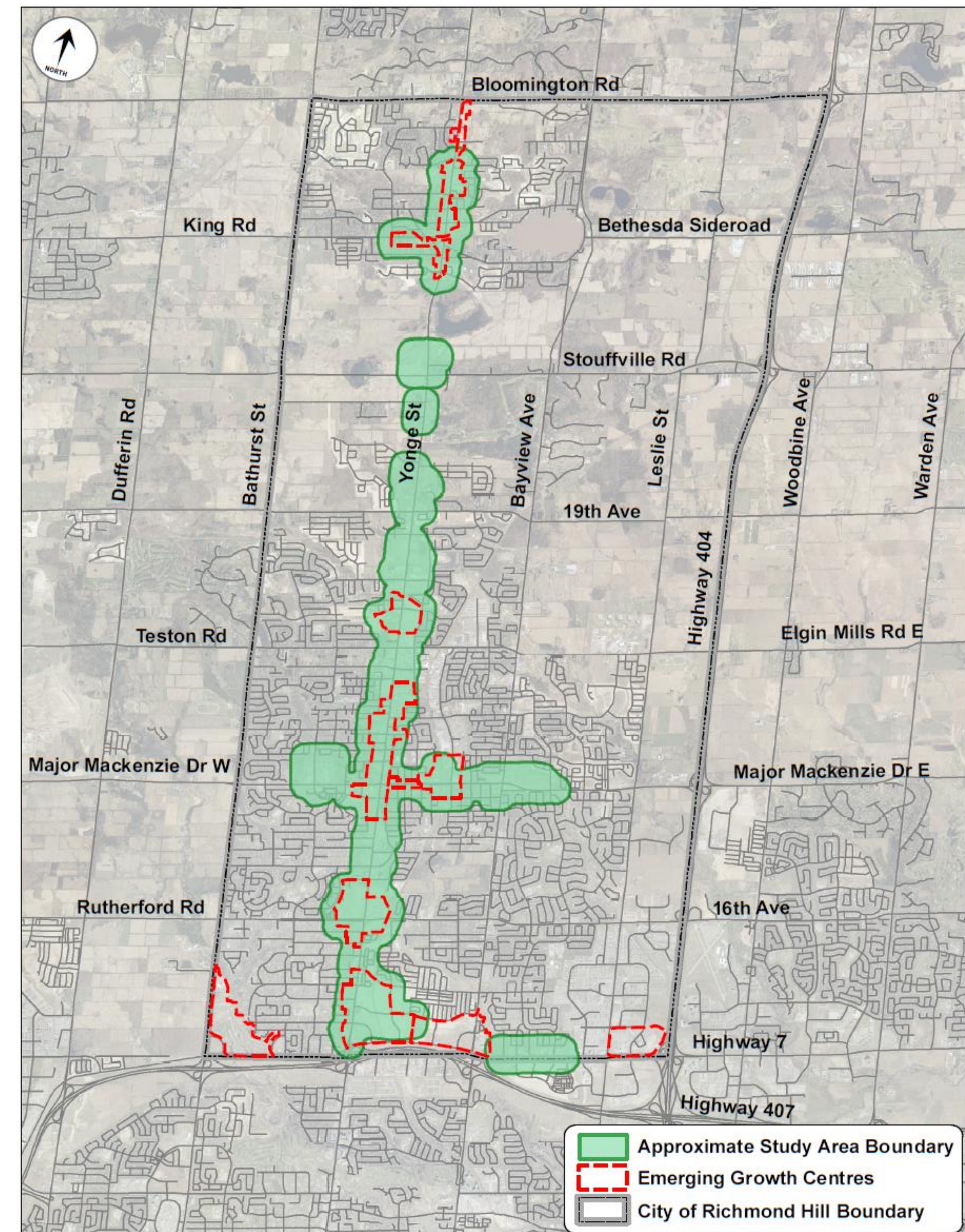
Update the 2014 Urban Master Environmental Servicing Plan (UMESP) to complement the City's Official Plan and to verify and update the proposed municipal water and wastewater infrastructure improvements required to support the planned growth and intensification within the City's Official Plan.

## Problem Statement

The City of Richmond Hill's settlement area is nearly built out, most of the future growth and development in the City will occur through intensification. Directing new growth to the centres and corridors as set out in the Plan represents a city-building approach to developing a complete community.

The hierarchy of centres and corridors is intended to achieve the City's intensification target and accommodate growth based on a comprehensive land use planning framework to direct and manage population and employment growth to Ultimate build-out conditions, beyond 2041.

As a result of this growth, the City has undertaken the UMESP update study to identify a series of water and wastewater projects necessary to support intensification in accordance with the urban structure framework and policies defined by the City's Official Plan.



# PROJECT INTRODUCTION

## Objectives

- Evaluate the City's existing water and wastewater systems.
- Identify water and wastewater system deficiencies driven by future growth.
- Establish evaluation criteria.
- Confirm recommendations from the 2014 UMESP study should these solutions still be valid.
- Identify other new retrofit opportunities and required infrastructure to support growth forecasts.
- Prepare an infrastructure implementation phasing plan.

Complete a comprehensive review of background information on land use, population, sanitary sewer and water systems, and operation/maintenance records.

Analyze historical hydrant pressure and sanitary flow monitoring data.

Develop computer models to assess the performance of the City's water and wastewater system.

Identify hydraulic deficiencies and capacity constraints within the water and wastewater systems.

Develop alternative servicing solutions to support future growth.

Evaluate alternative solutions, and recommend a preferred servicing solution.

Prepare an infrastructure implementation phasing plan.

# Study Area

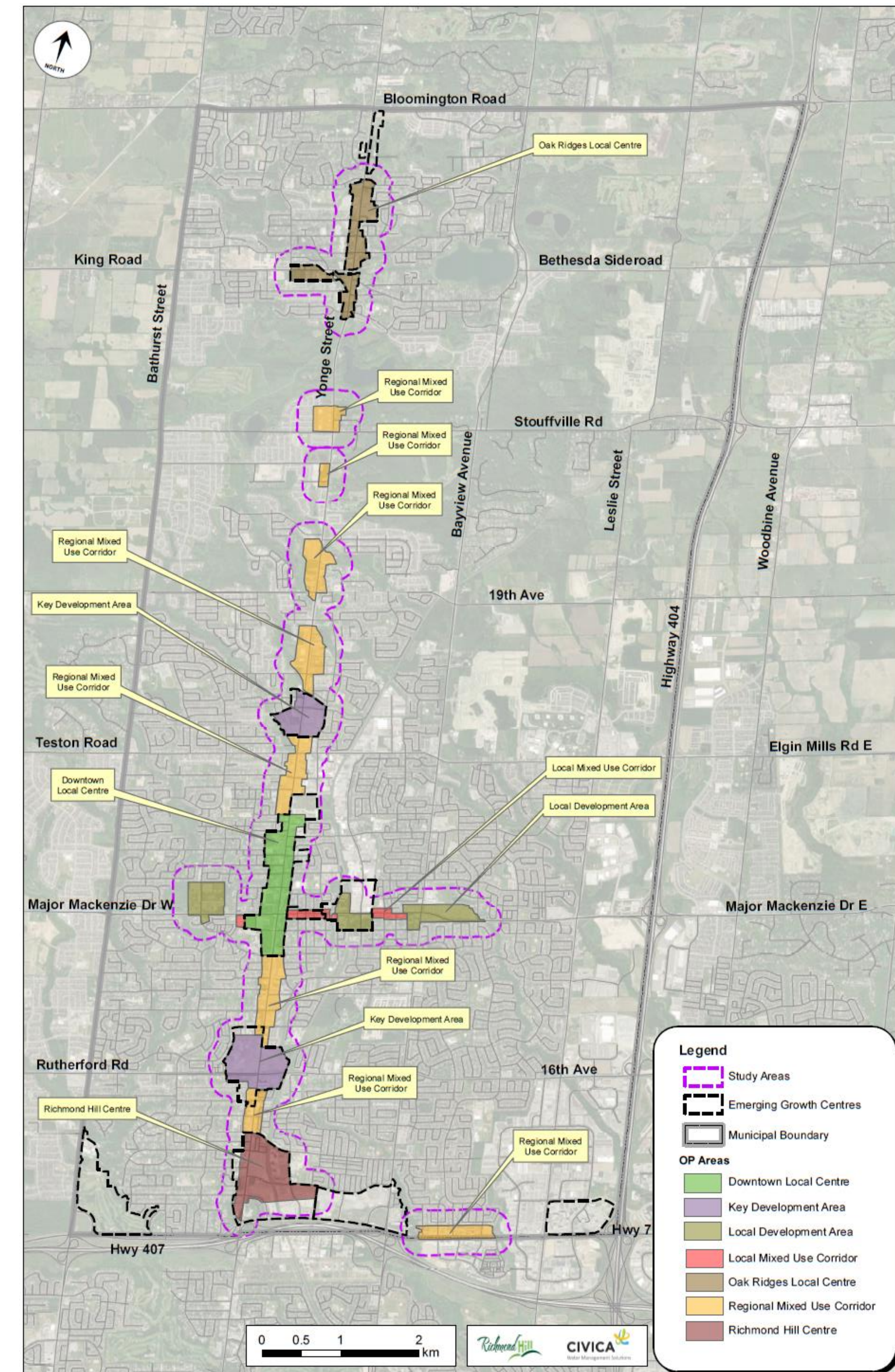
The study area includes the network of centres and corridors which include the secondary plan areas for local centres, key development areas, and the Richmond Hill Centre urban growth centre, as well as the other remaining intensification areas identified within the Richmond Hill Official Plan (OP).

## OP Intensification Areas:

- Downtown Local Centre
- Key Development Area
- Local Development Area
- Local Mixed-Use Corridor
- Oak Ridges Local Centre
- Regional Mixed-Use Corridor
- Richmond Hill Centre

## Emerging Growth Centres (EGC):

- Oak Ridges
- Village
- Newkirk GO
- MZO at Major Mackenzie Drive East and Highway 404
- Bathurst & Highway 7
- Bayview & Highway 7
- East Beaver Creek & Highway 7



# Projected Growth

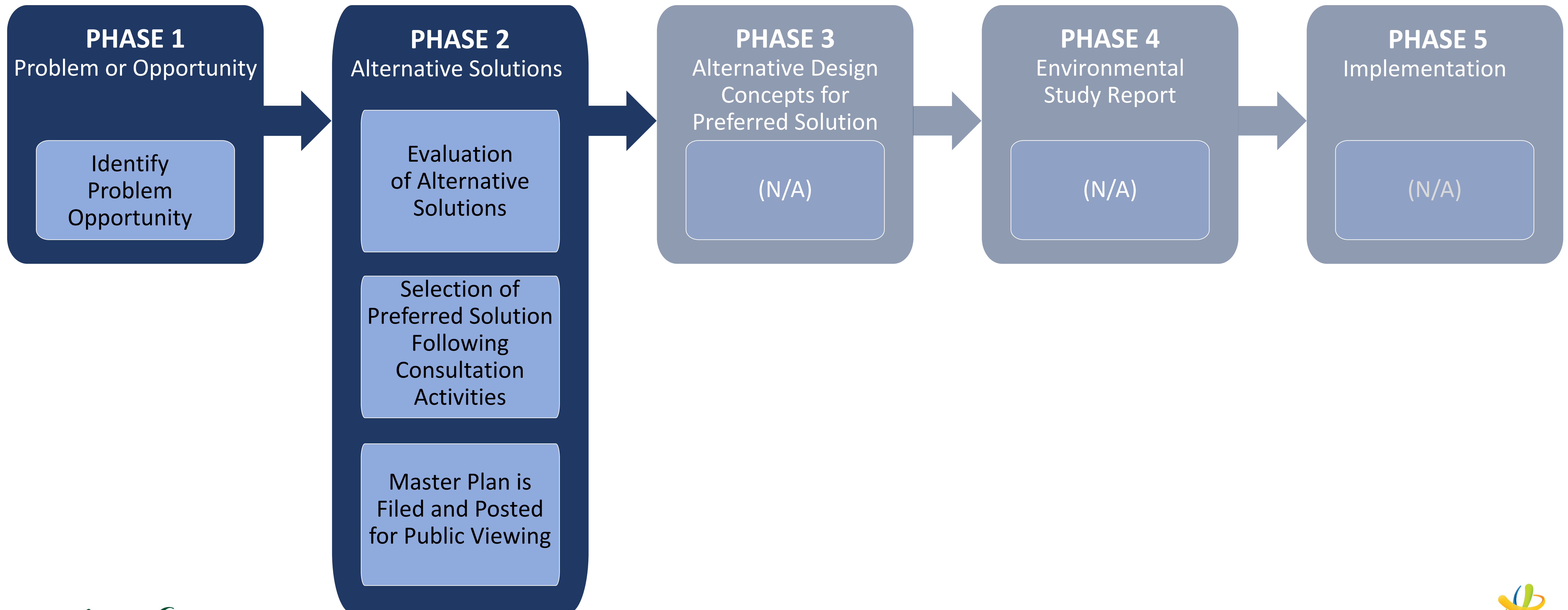
After almost three decades of rapid urbanization, the City is nearly built out to its urban boundary. Consequently, future growth and development will largely be accommodated in more compact, pedestrian-oriented, mixed-use forms of development.

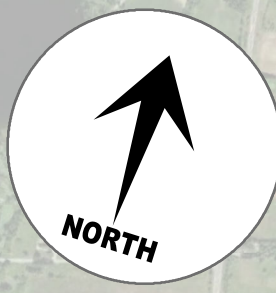
Updates to the UMESP are required to accommodate the City’s projected growth, and to ensure that sufficient servicing can be provided to the Ultimate Build-out scenario.

Projected Growth		
2016 - 2041	2041 – 2051	2051 – Ultimate Build-out
181,241	28,088	169,627

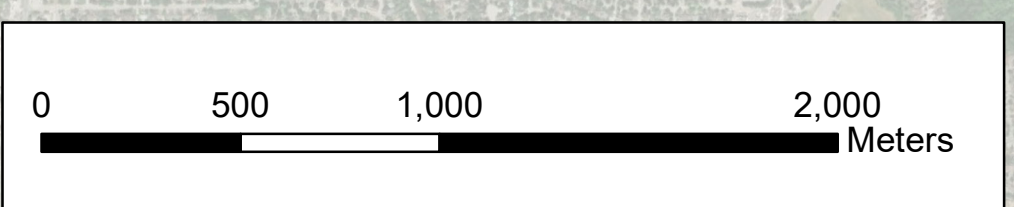
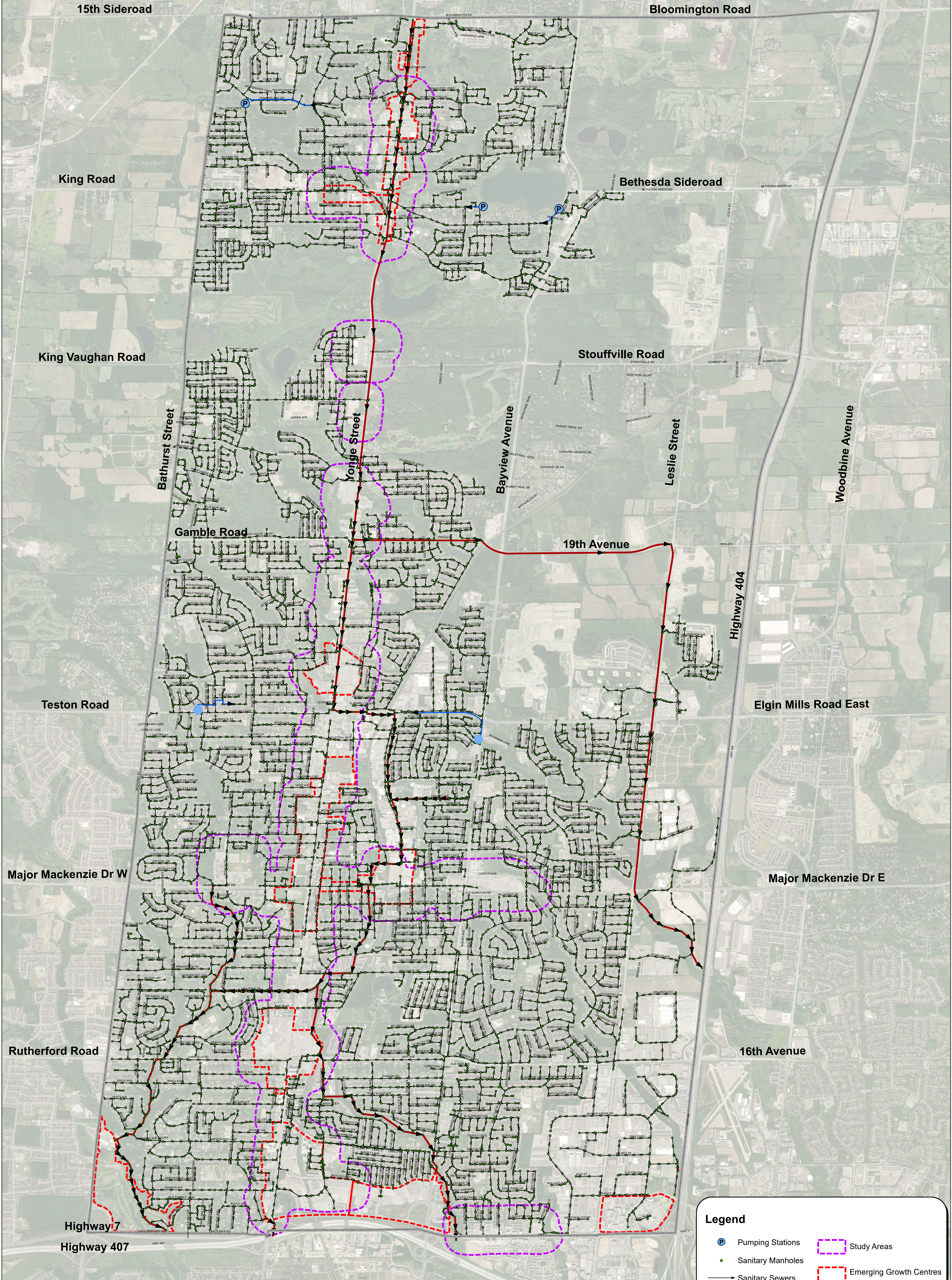
# MASTER CLASS EA PROCESS

Master Plans are conducted under the framework of the Municipal Engineers Association's (MEA) Class EA process. They are long-range plans that identify infrastructure requirements for existing and future land use within a larger study area, through the application of environmental assessment principals. This Master Plan follows Approach #2, which requires the preparation of a Master Plan document at the conclusion of Phases 1 and 2 of the MEA Class EA process.





# Existing Wastewater System

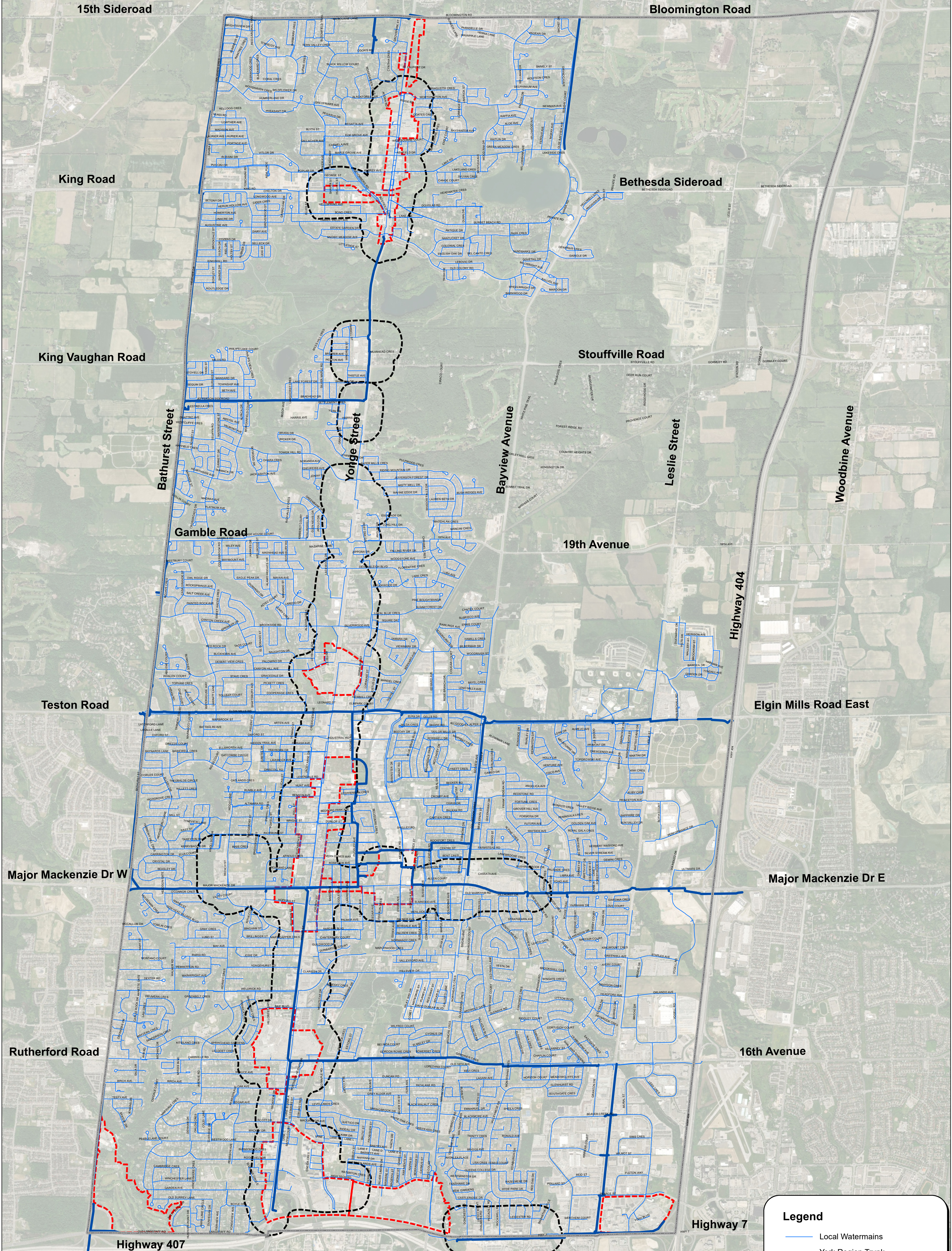


**Legend**






- Pumping Stations
- Sanitary Manholes
- Sanitary Sewers
- Forcemains
- York Region Sanitary Trunk Sewers
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

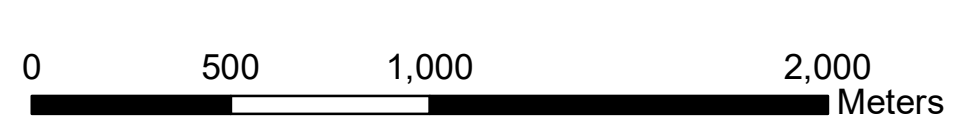


# Existing Water System



### Legend

-  Local Watermains
-  York Region Trunk Watermains
-  Study Areas
-  Emerging Growth Centres
-  Municipal Boundary



# Evaluation of Alternative Solutions

Alternative	Description	Results of Evaluation
<b>1. Do Nothing</b>	<p>A do nothing scenario would allow buildout of the urban structure in accordance with the Official Plan, without making improvements to the sanitary collection system.</p>	<p>This approach would result in a substandard level of service through some parts of the City, with the potential for sanitary sewer surcharging as build-out occurs. This could then trigger basement flooding, and possibly even surface flooding. This alternative does not satisfy the objectives associated with the problem statement for this project.</p>
<b>2. Limit Community Growth</b>	<p>This alternative would require updating the Official Plan in order to limit the extent of intensification to only what could be accommodated within the existing sanitary sewers. In order to accommodate the provincially-mandated growth, the City would have to designate additional areas within the City for intensification, where sufficient reserve sanitary servicing capacity exists.</p>	<p>This alternative solution would ultimately negate some of the planning processes that have been undertaken to date, and therefore be unsatisfactory with respect to the objectives associated with the problem statement for this project.</p>
<b>3. Implement Water Conservation Procedures</b>	<p>This alternative solution would effectively increase the population that could be serviced through the existing collection system by decreasing the average per-capita flow rates across the City.</p>	<p>While many municipalities have successfully reduced the overall flow generation rate through implementing education and incentive-based water conservation procedures, the success of these programs is not guaranteed.</p>
<b>4. Enhance / Expand the Existing Infrastructure</b>	<p>This alternative would have the City plan for strategic enhancements to and/or expansion of the existing collection system in order to accommodate the planned populations at the prescribed level of service in accordance with the City's design criteria.</p>	<p>The future condition model was used to identify the extent of system upgrades needed to compensate for any observed shortfalls.</p>

# Evaluation of Alternative Solutions

Three criteria were applied to screen the long-list of alternatives:

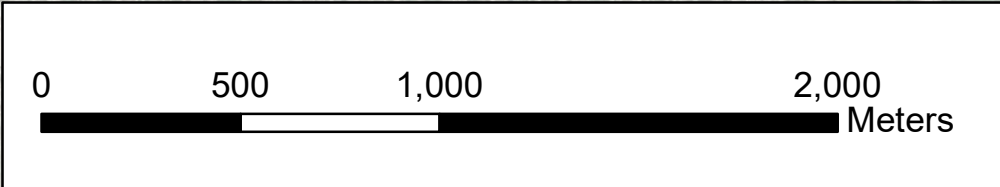
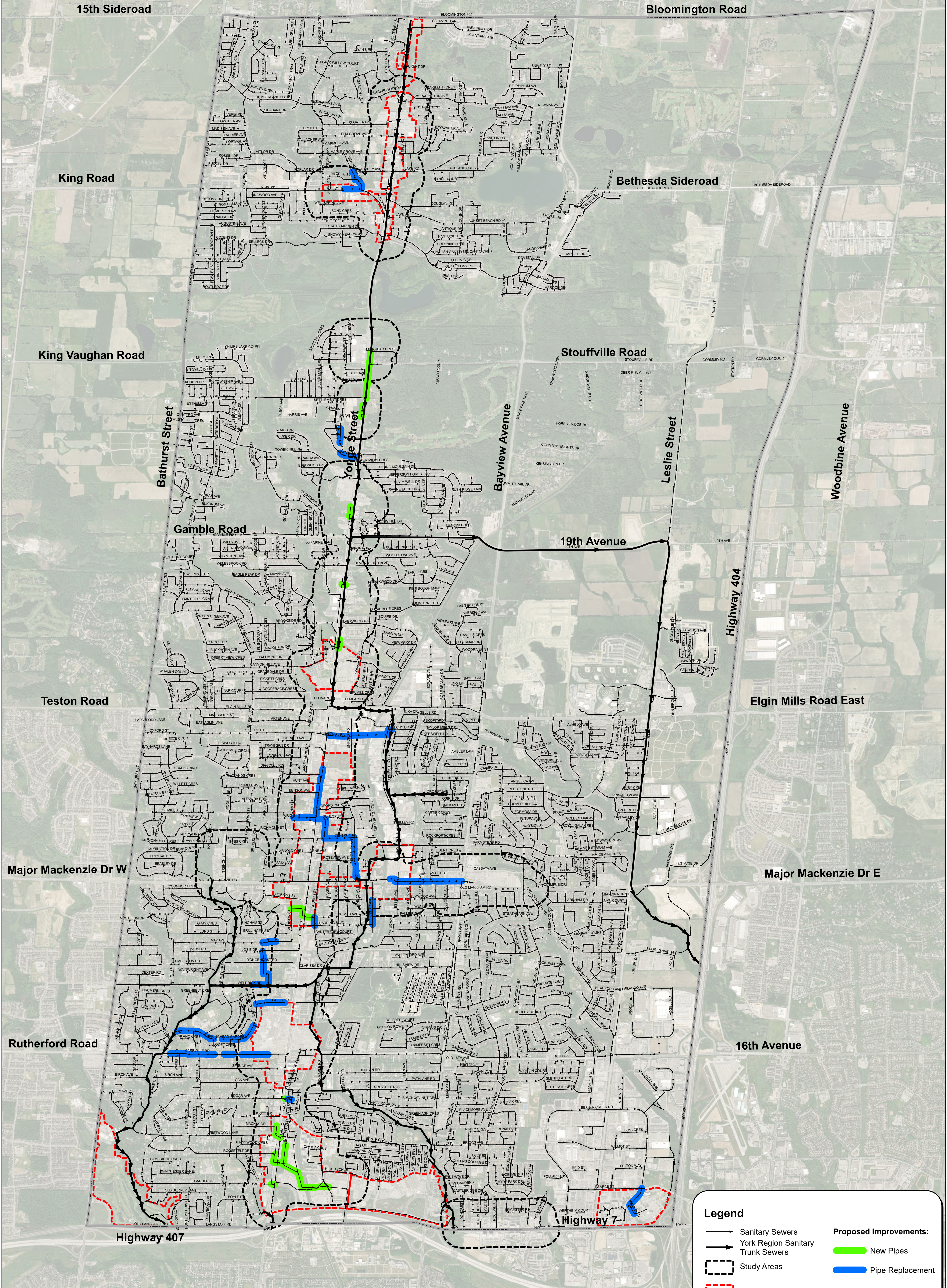
1. **Flexibility and Redundancy** – Flexibility and redundancy refers to alternatives that provide a foundation for future infrastructure development to service growth.
2. **Compatibility with the current policies and regulations** – An alternative that complies with Provincial and City policy related to growth and development is preferred.
3. **Addresses the problem statement** – A pass is given to an alternative that provides a solution to any of the constraints identified in the problem statement.

The screening process concluded that enhance/expand the existing infrastructure is the preferred alternative to address the problem statement

Alternative	Flexibility and Redundancy	Policy and Regulation Compatibility	Addresses the Problem Statement
Do Nothing	✘	✘	✘
Limit Community Growth	✘	✘	✘
Implement Water Conservation Procedures	✓	✓	✘
Enhance / Expand the Existing Infrastructure	✓	✓	✓



# Preferred Wastewater Solutions



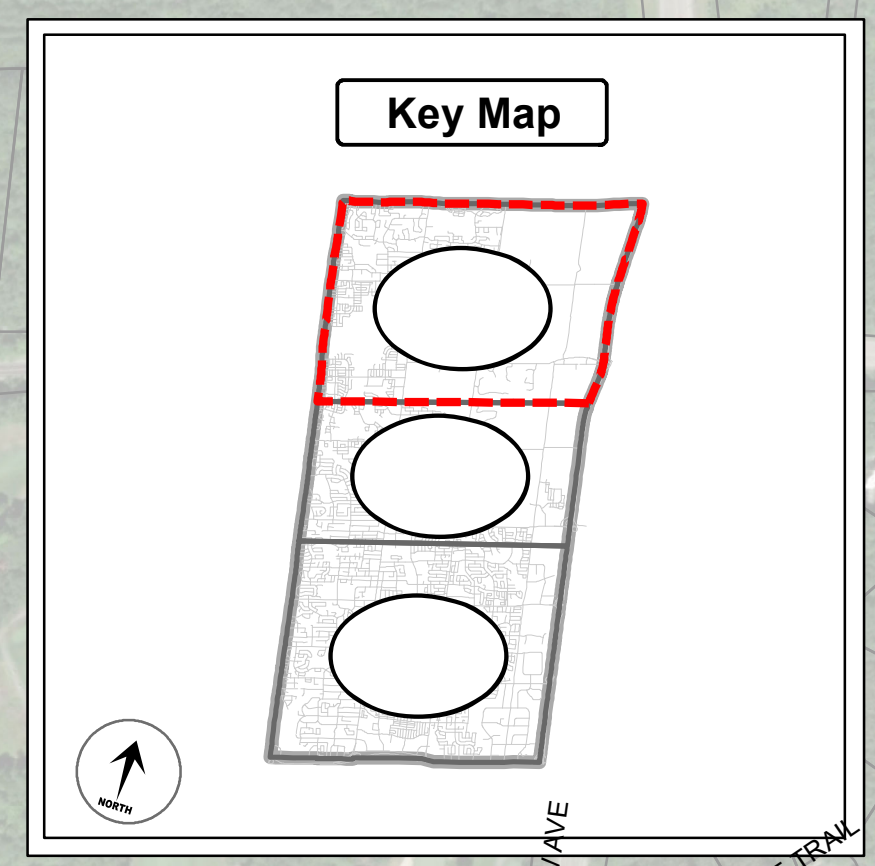
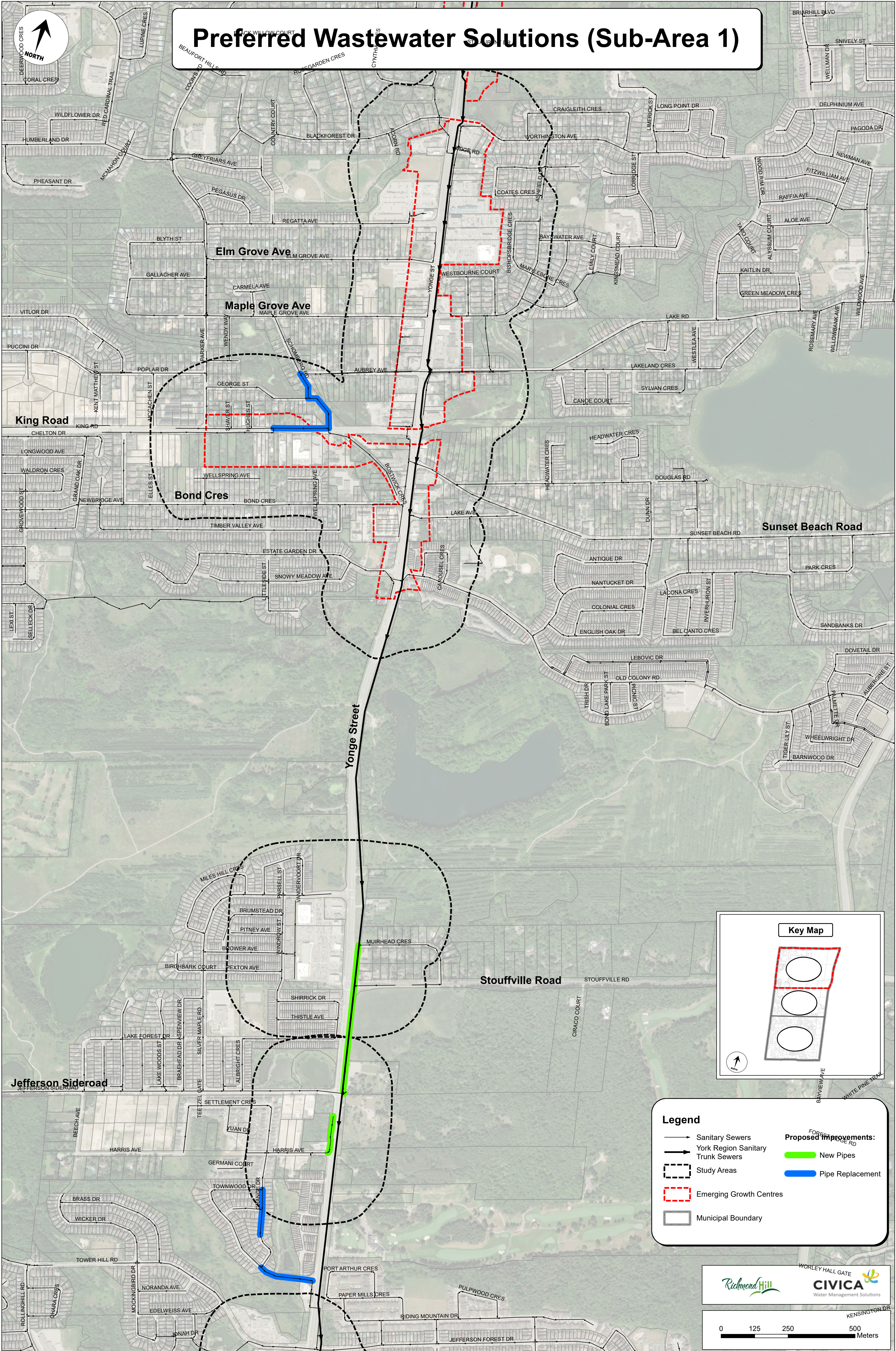
**Legend**

- Sanitary Sewers
- York Region Sanitary Trunk Sewers
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

**Proposed Improvements:**

- New Pipes
- Pipe Replacement

# Preferred Wastewater Solutions (Sub-Area 1)



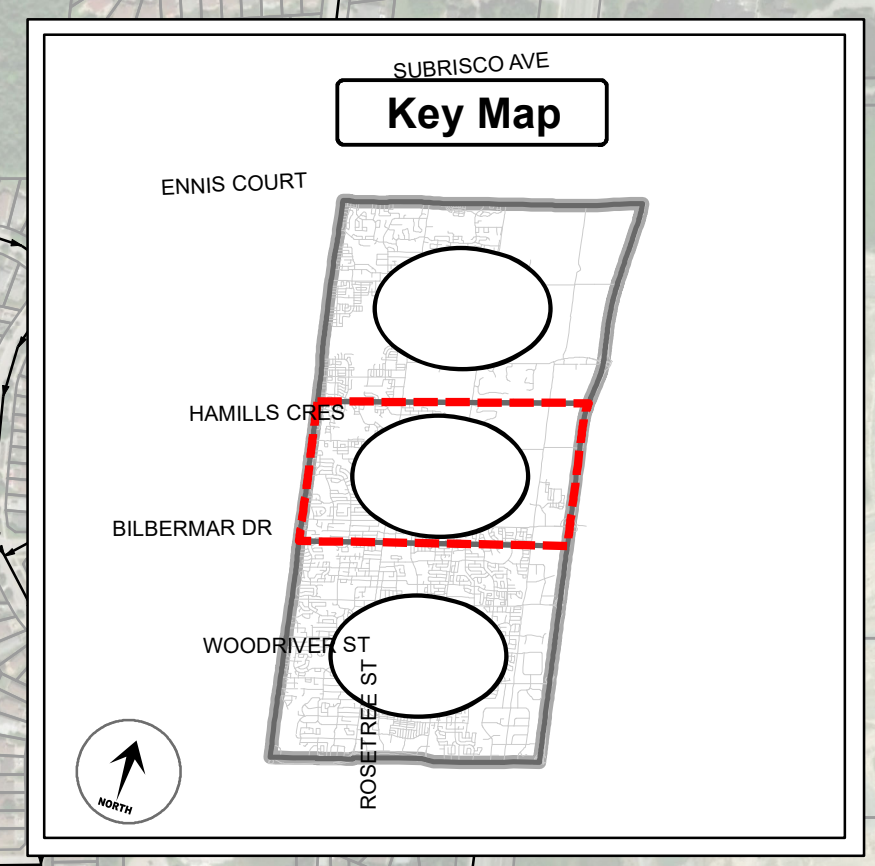
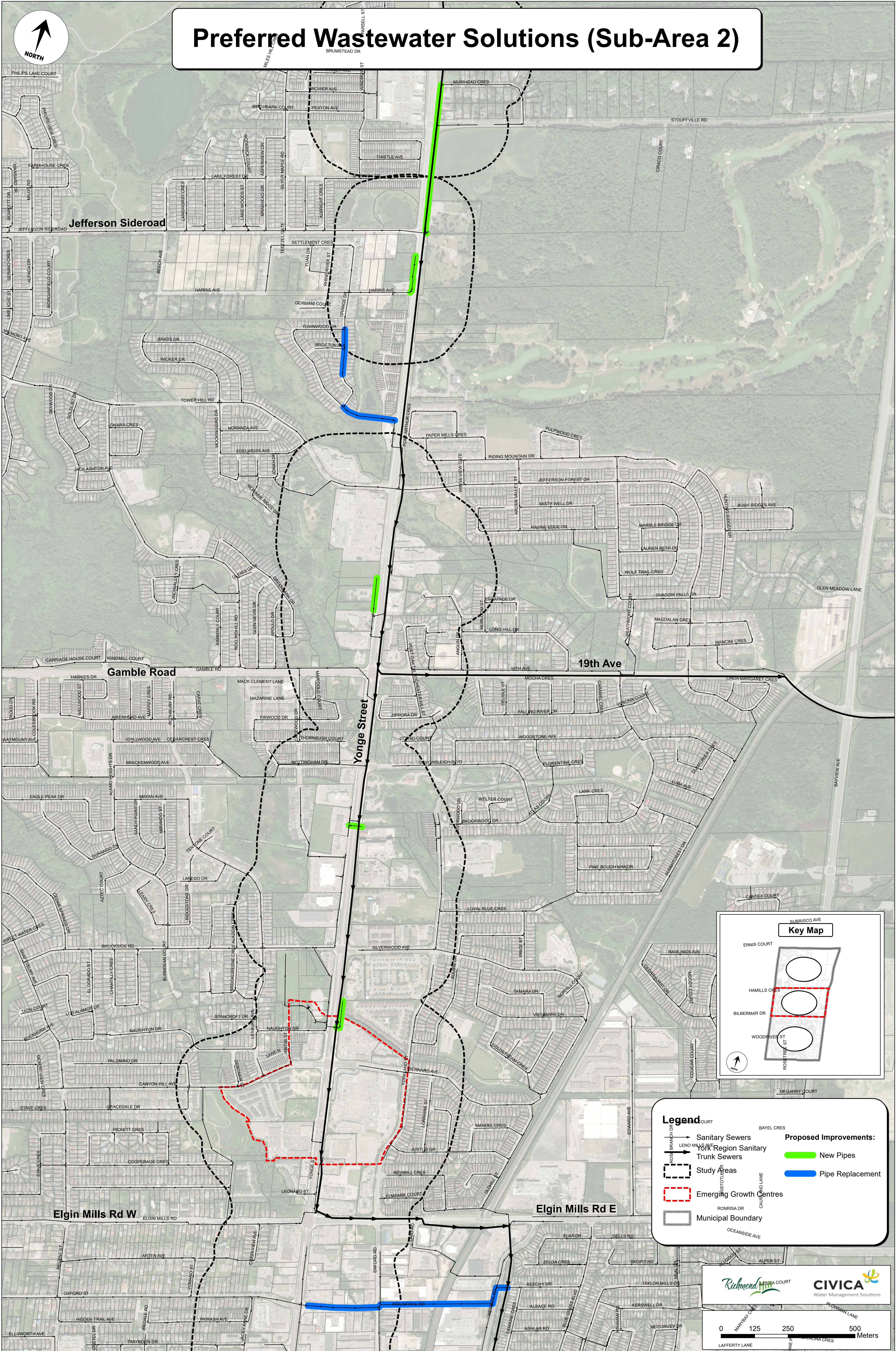
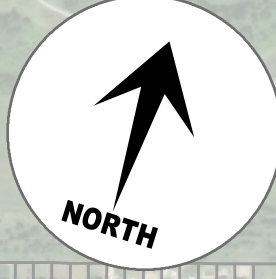
**Legend**

- Sanitary Sewers
- York Region Sanitary Trunk Sewers
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

**Proposed Improvements:**

- New Pipes
- Pipe Replacement

# Preferred Wastewater Solutions (Sub-Area 2)



**Legend**

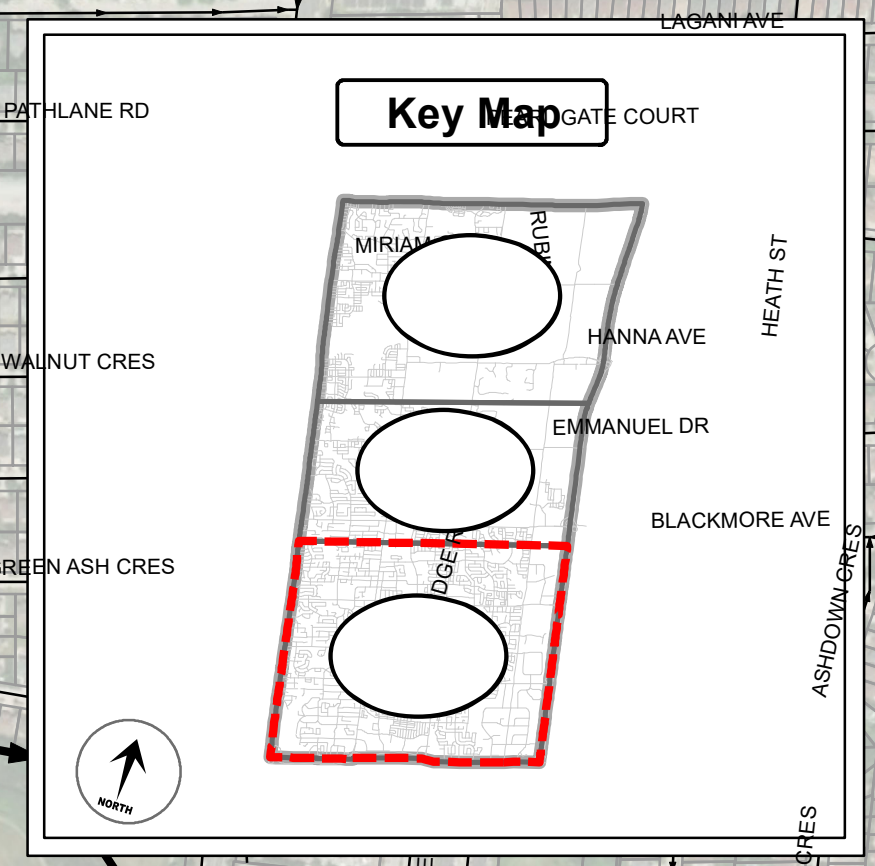
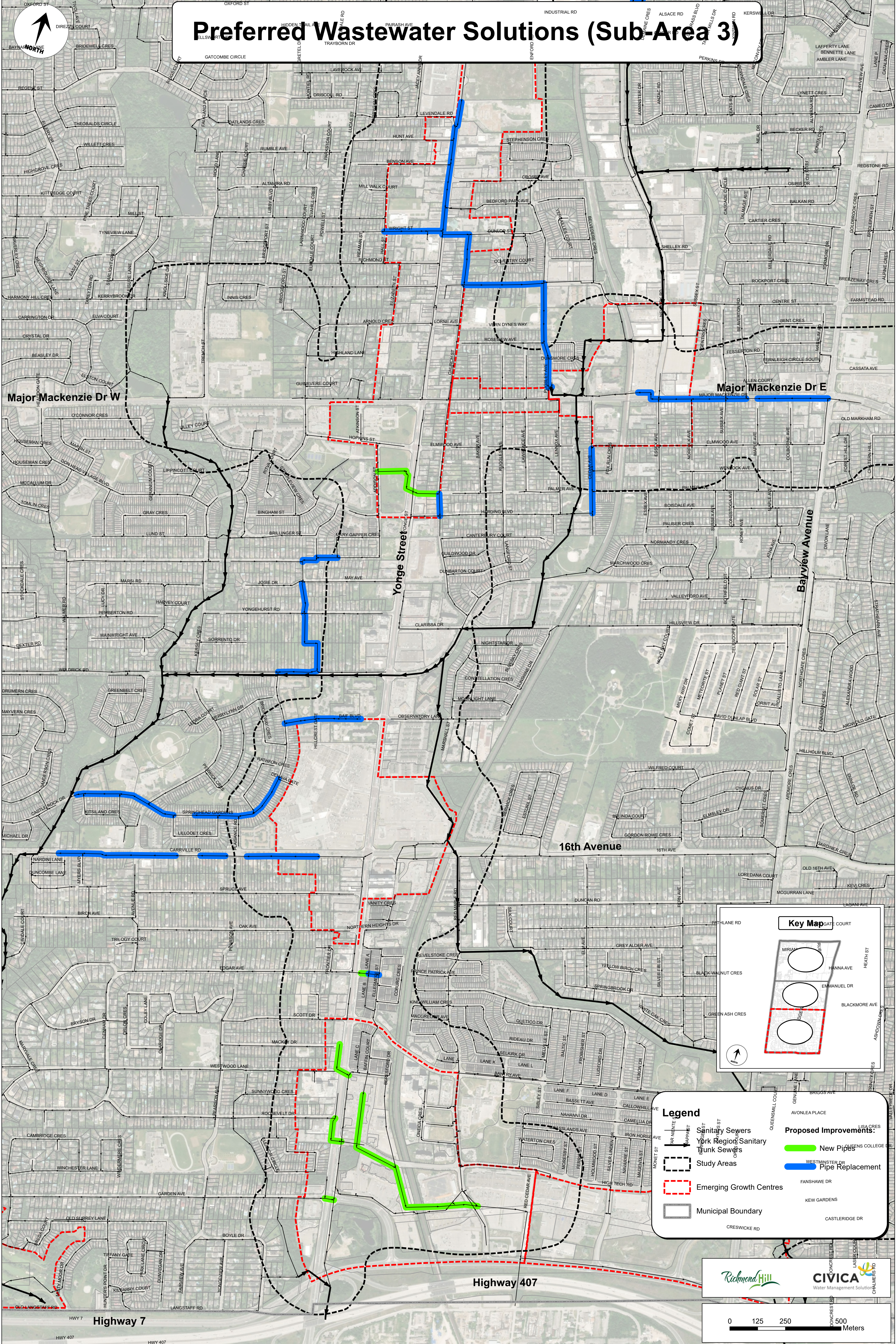
- Sanitary Sewers
- York Region Sanitary Trunk Sewers
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

**Proposed Improvements:**

- New Pipes
- Pipe Replacement

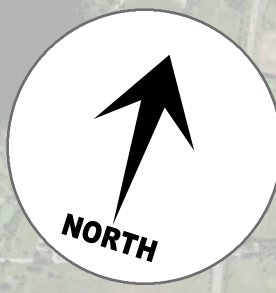
0 125 250 500 Meters

# Preferred Wastewater Solutions (Sub-Area 3)

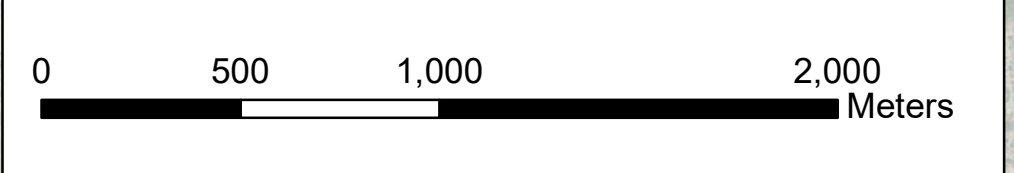
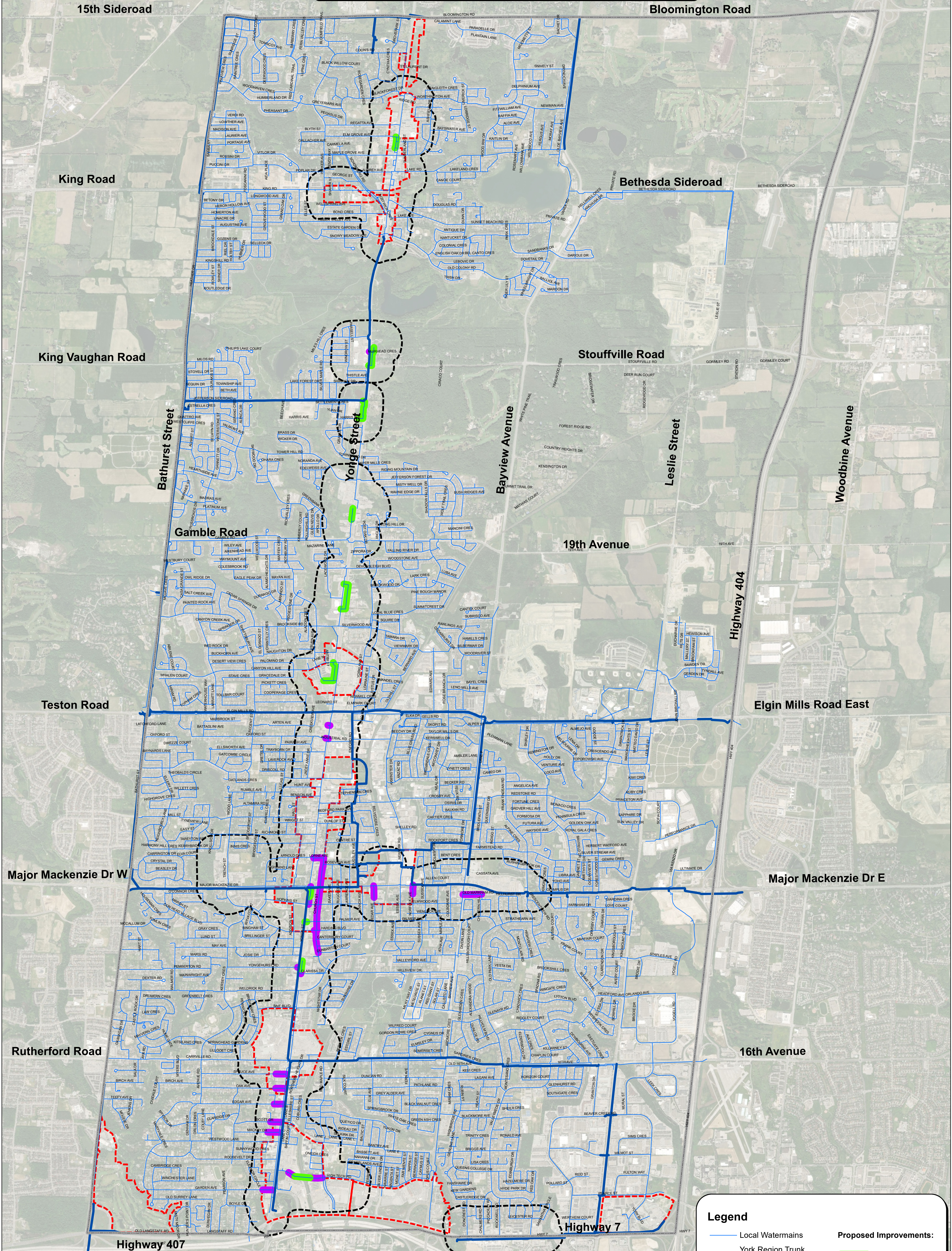


- Legend**
- Sanitary Sewers
  - York Region Sanitary Sewers
  - Trunk Sewers
  - Study Areas
  - Emerging Growth Centres
  - Municipal Boundary
  - Proposed Improvements:
    - New Pipes
    - Westminster Pipe Replacement

0 125 250 500 600 Meters



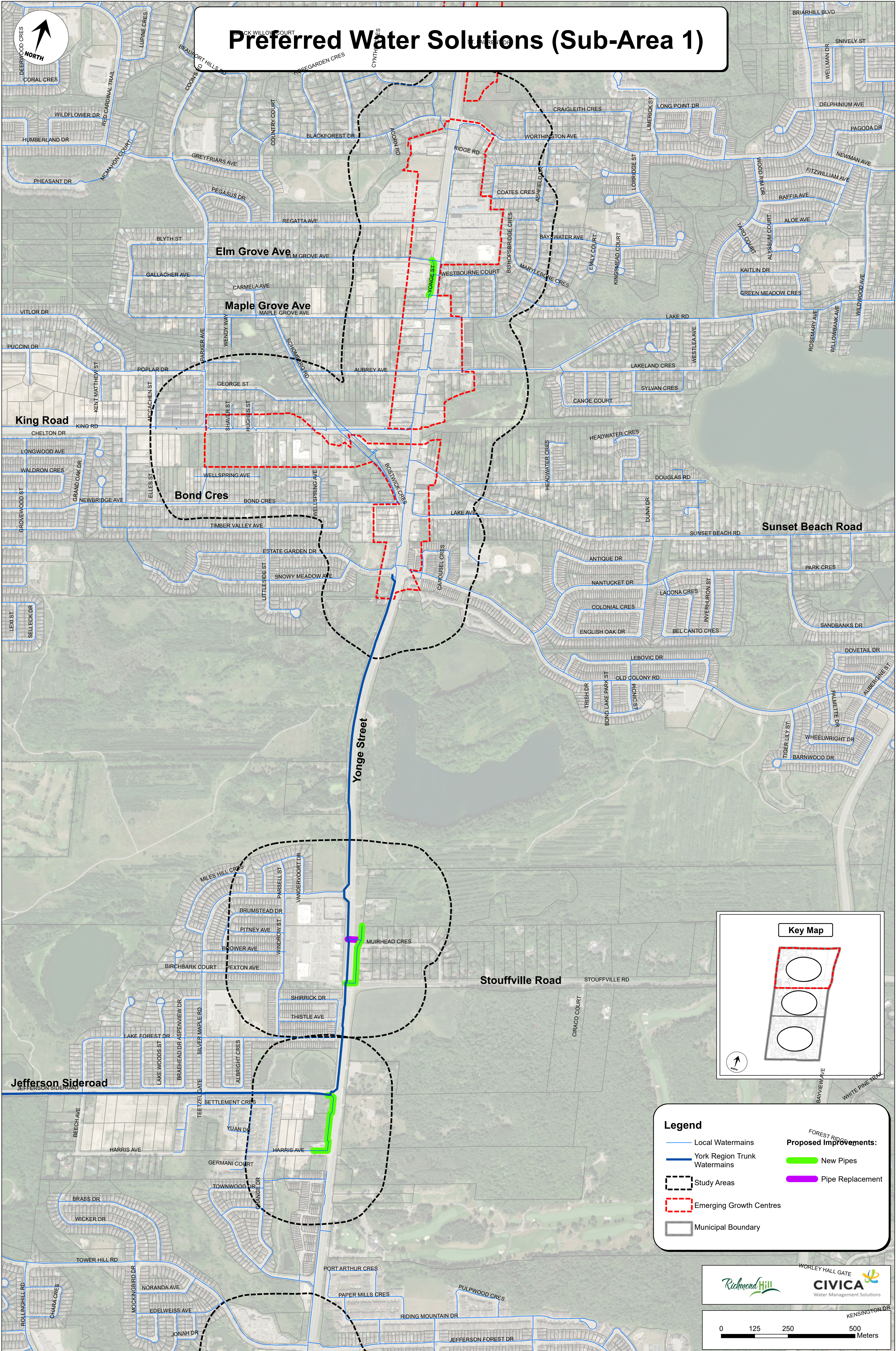
# Preferred Water Solutions



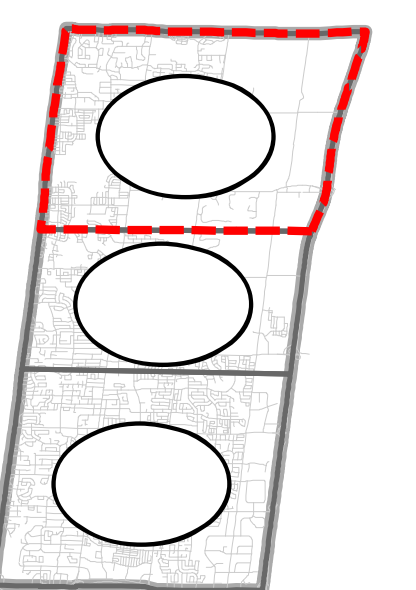
**Legend**

- Local Watermains
- York Region Trunk Watermains
- Study Areas
- Emerging Growth Centres
- Municipal Boundary
- Proposed Improvements:
  - New Pipes
  - Pipe Replacement

# Preferred Water Solutions (Sub-Area 1)

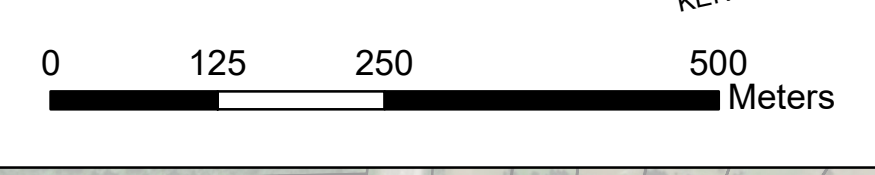


**Key Map**



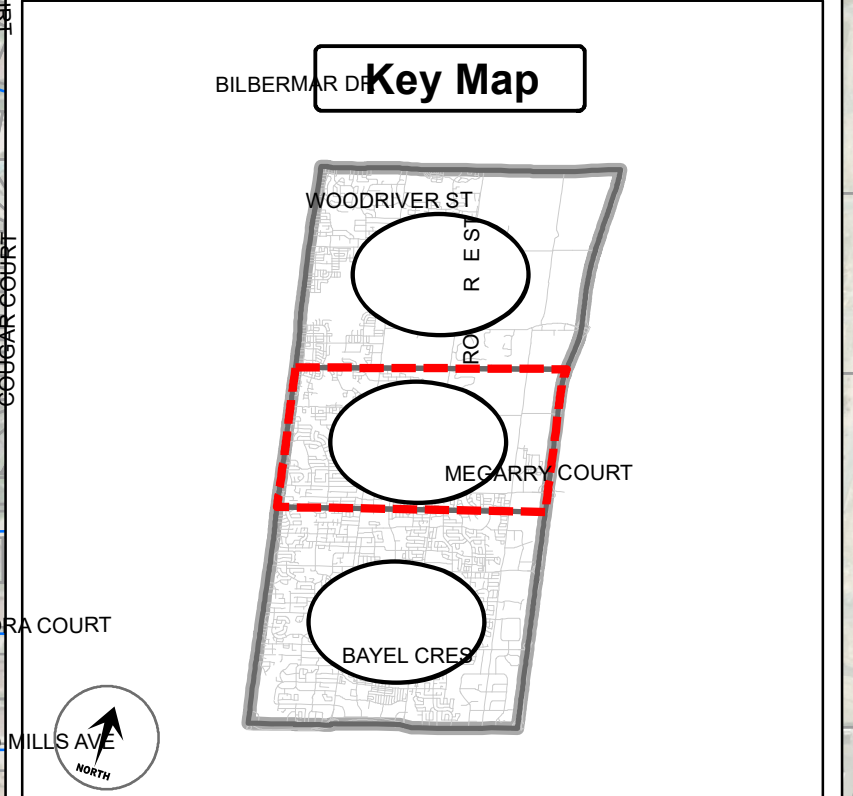
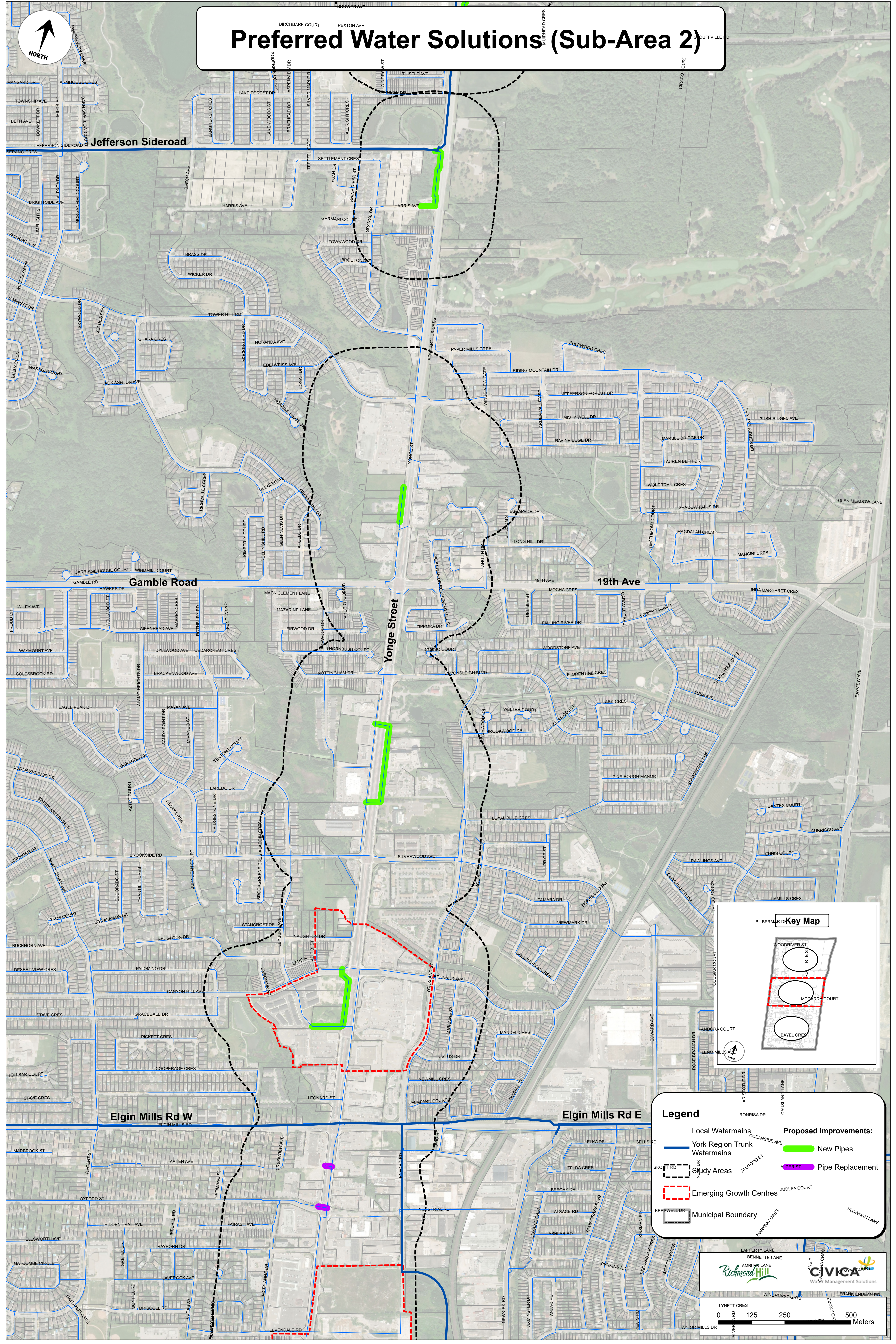
**Legend**

- Local Watermains
- York Region Trunk Watermains
- Study Areas
- Emerging Growth Centres
- Municipal Boundary
- Proposed Improvements:**
- New Pipes
- Pipe Replacement



# Preferred Water Solutions (Sub-Area 2)

NORTH



**Legend**

- Local Watermains
- York Region Trunk Watermains
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

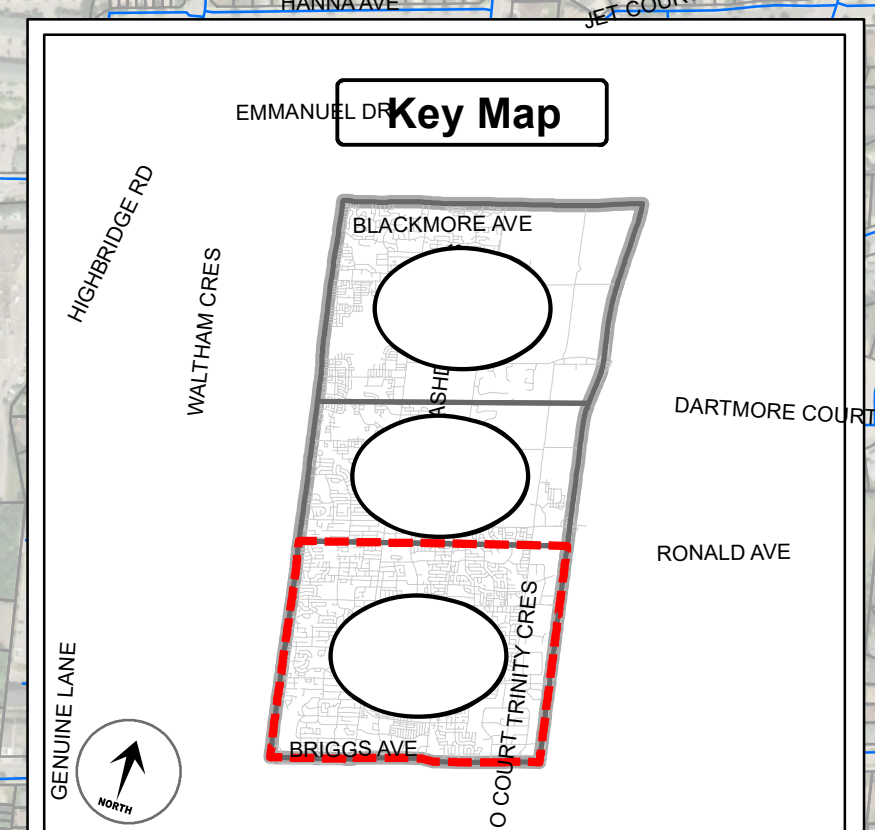
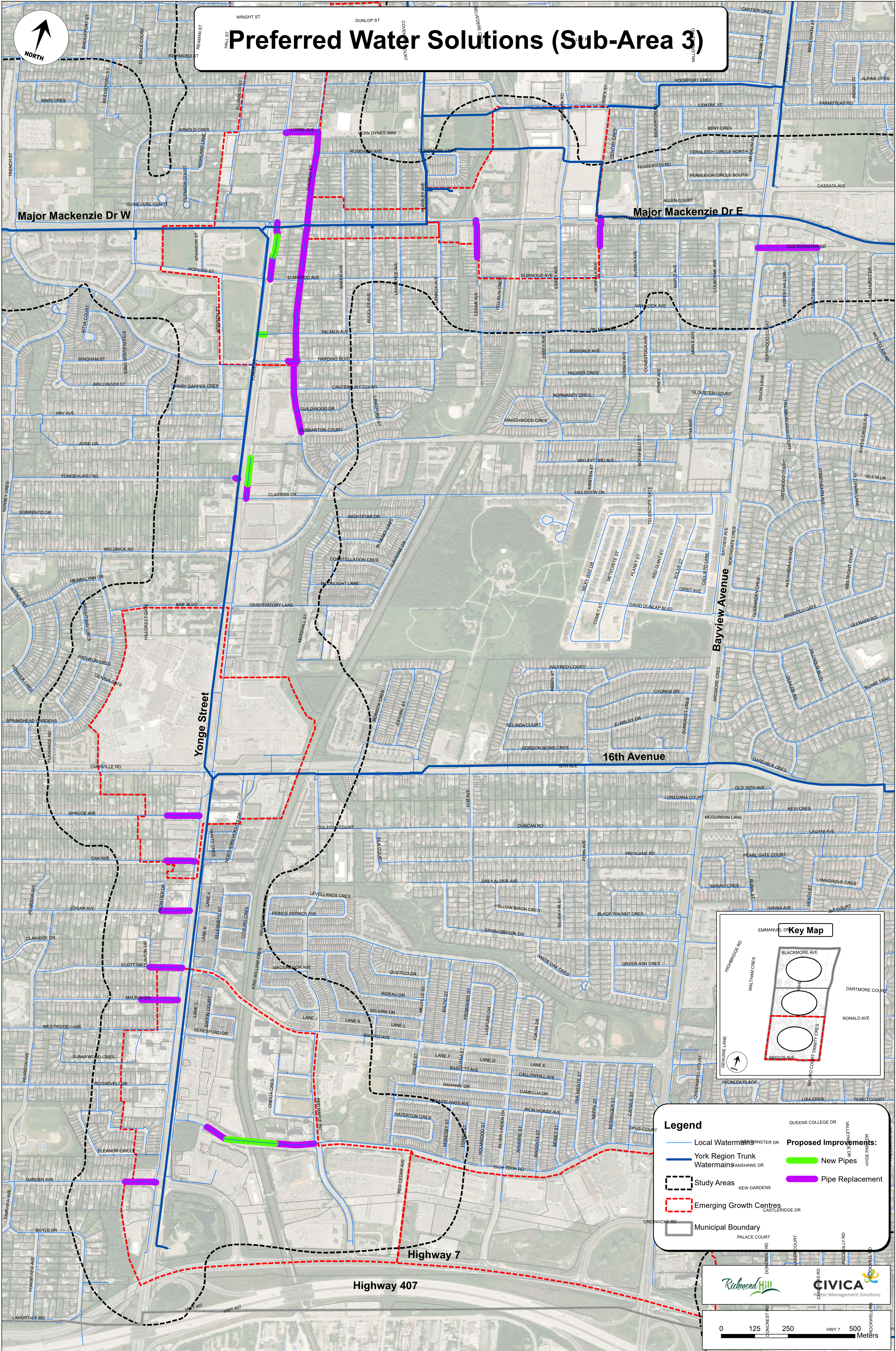
**Proposed Improvements:**

- New Pipes
- Pipe Replacement

0 125 250 500 Meters



# Preferred Water Solutions (Sub-Area 3)



**Legend**

- Local Watermains
- York Region Trunk Watermains
- Study Areas
- Emerging Growth Centres
- Municipal Boundary

**Proposed Improvements:**

- New Pipes
- Pipe Replacement

Richmond Hill  
CIVICA  
Water Management Solutions

0 125 250 500 Meters

Scale bar and logos for Richmond Hill and CIVICA Water Management Solutions.

# Next Steps

## Following the Public Information Centre, we will:

- Review and consider your comments in the assessment of the implementation of recommended projects, strategies and other solutions.
- Notify the public and review agencies of completion of the Class EA study.
- Finalize the UMESP Report and make the Final Report available to the public.

## Who's Listening?

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