



# DUNNVILLE MASTER SERVICING PLAN UPDATE

Public Information Centre

## **Welcome** to this Public Information Centre for the **Dunnville Master Servicing Plan (MSP) Update.**

We want to hear from you.

Please fill out the comment sheet provided at today's Public Information Centre and leave it in one of the boxes provided.

Additional information is available on the project website at [www.haldimandcounty.ca](http://www.haldimandcounty.ca)

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## Problem / Opportunity Statement

The purpose of this Master Servicing Plan Update is to evaluate Dunnville's long-term infrastructure needs to match the growth in Dunnville over the near-term (10 year) and long-term (25 year) future. Four servicing components will be evaluated through this Master Servicing Plan Update:

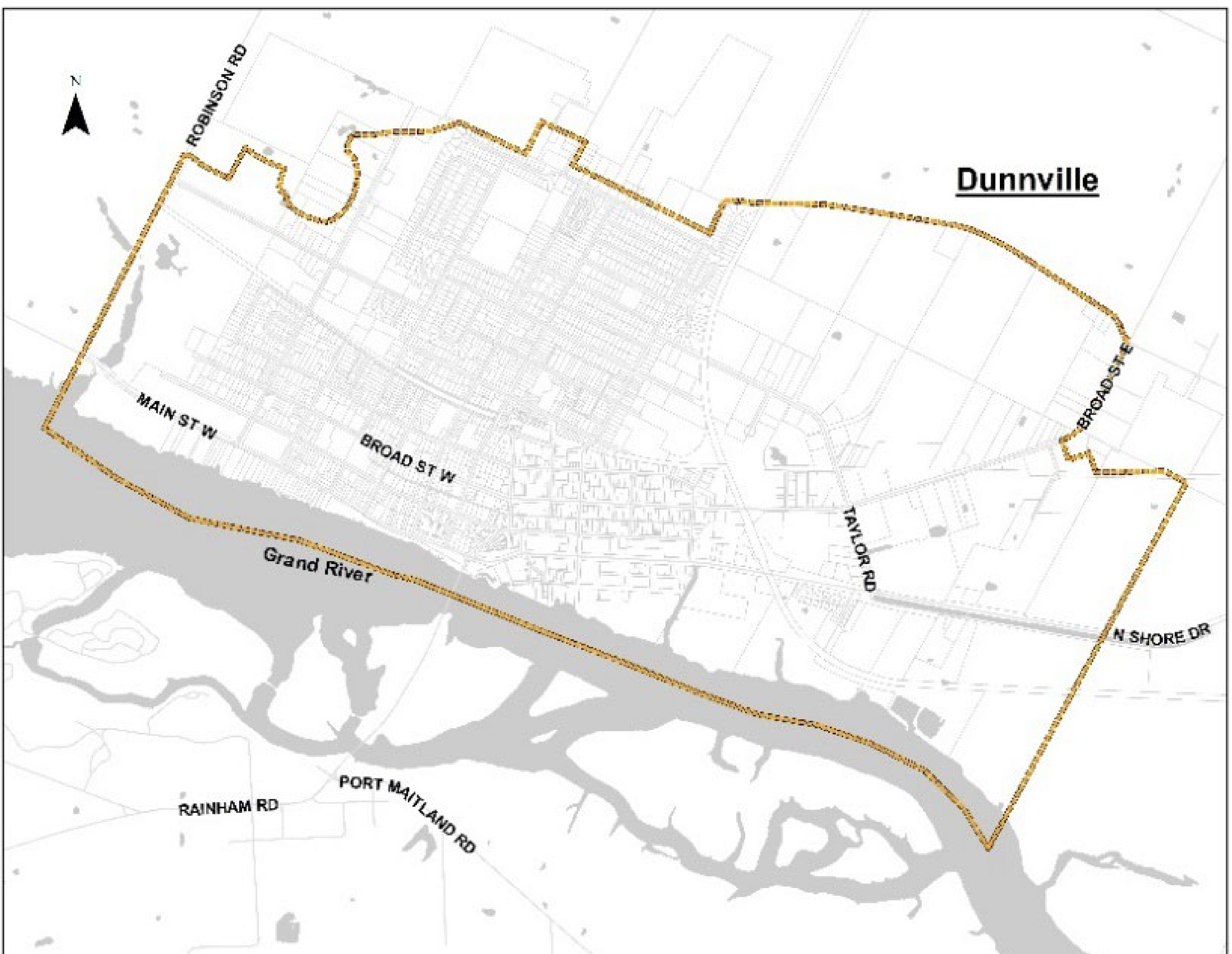
**WATER**

**WASTEWATER**

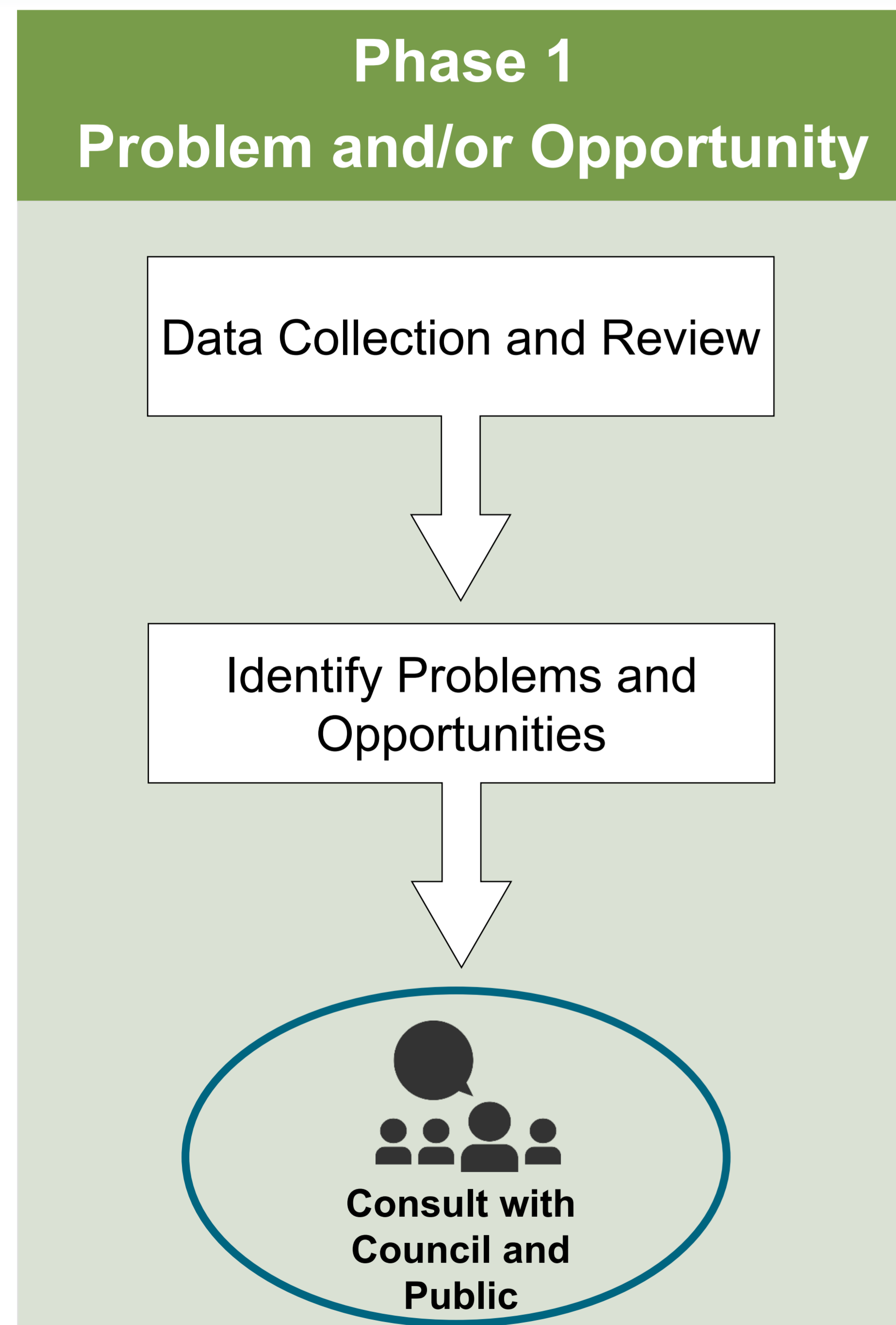
**STORMWATER**

**TRANSPORTATION**

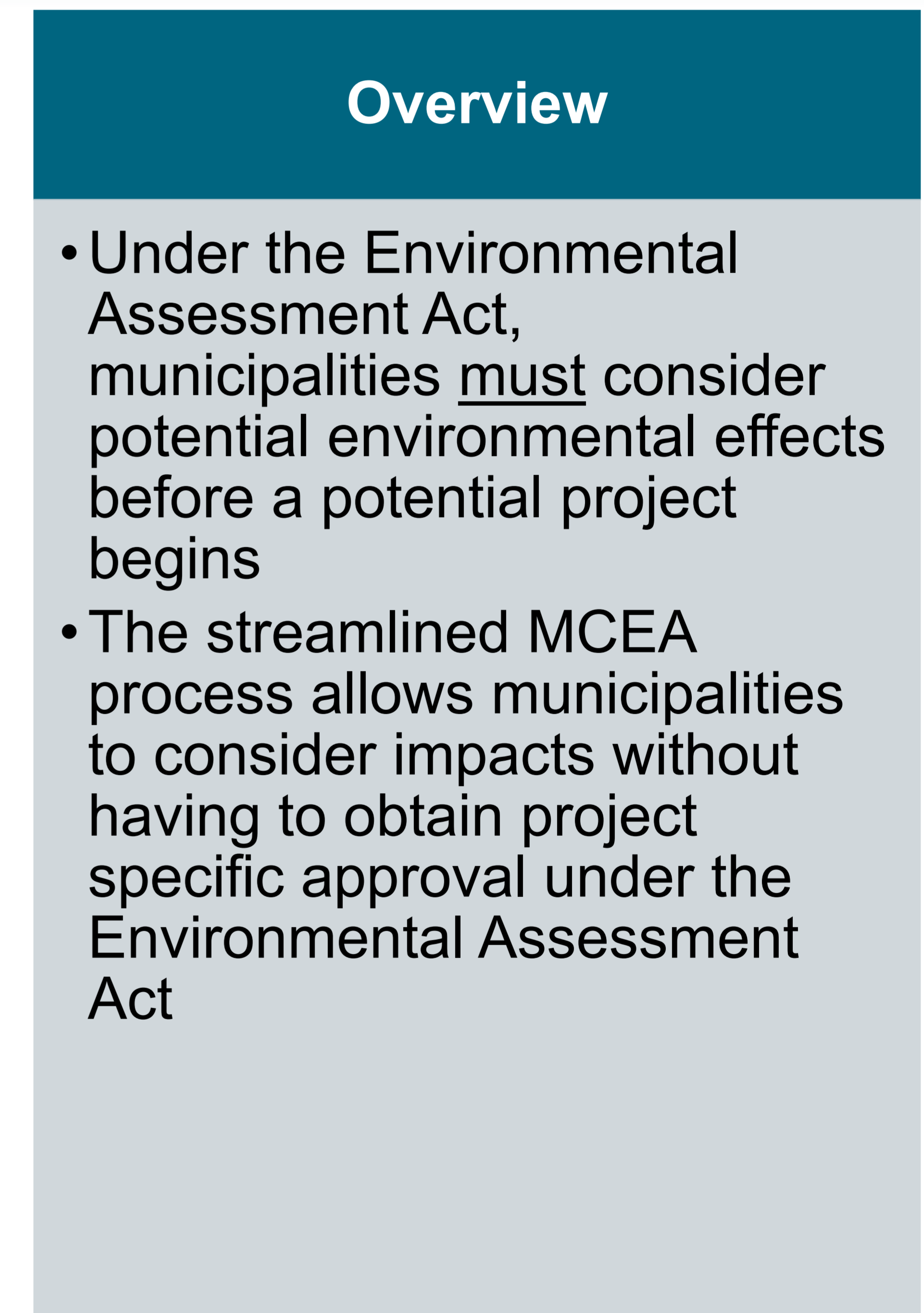
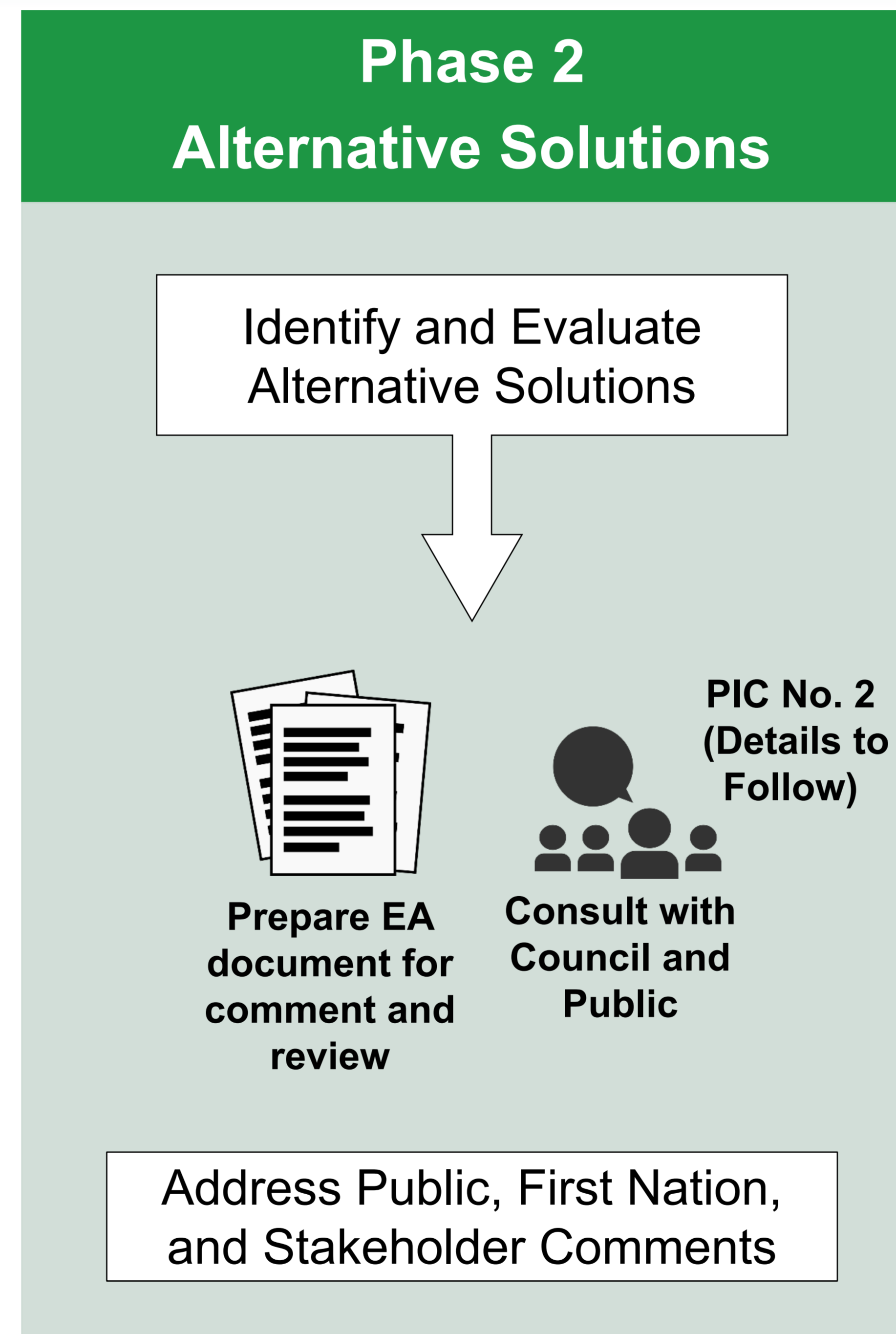
Through consultation with participating stakeholders and rightsholders, the Municipal Class Environmental Assessment (MCEA) framework will enable the consideration of options and identify preferred infrastructure solutions that are environmentally, socially, and financially responsible and sustainable.







Current Project Stage (We Are Here)

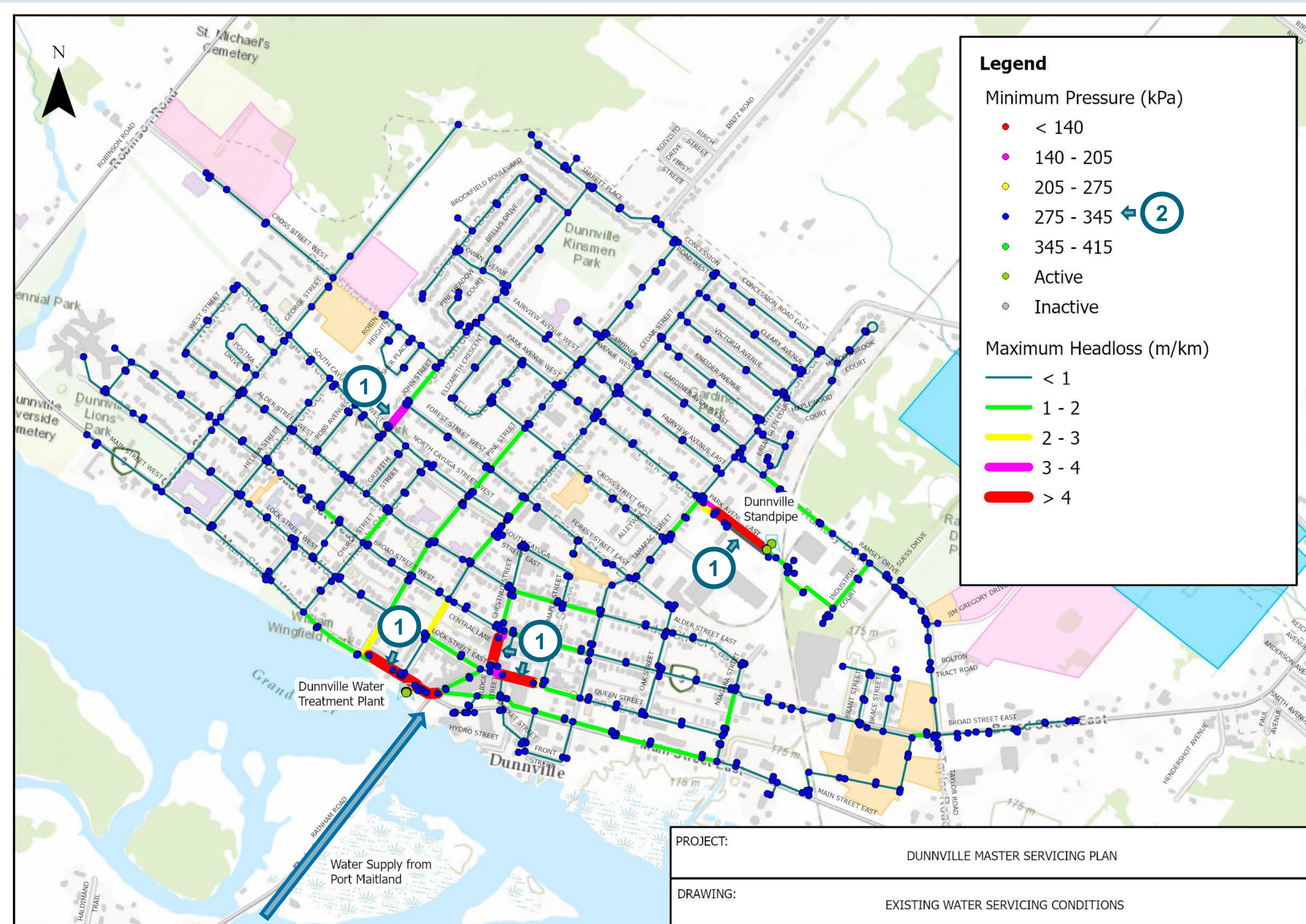




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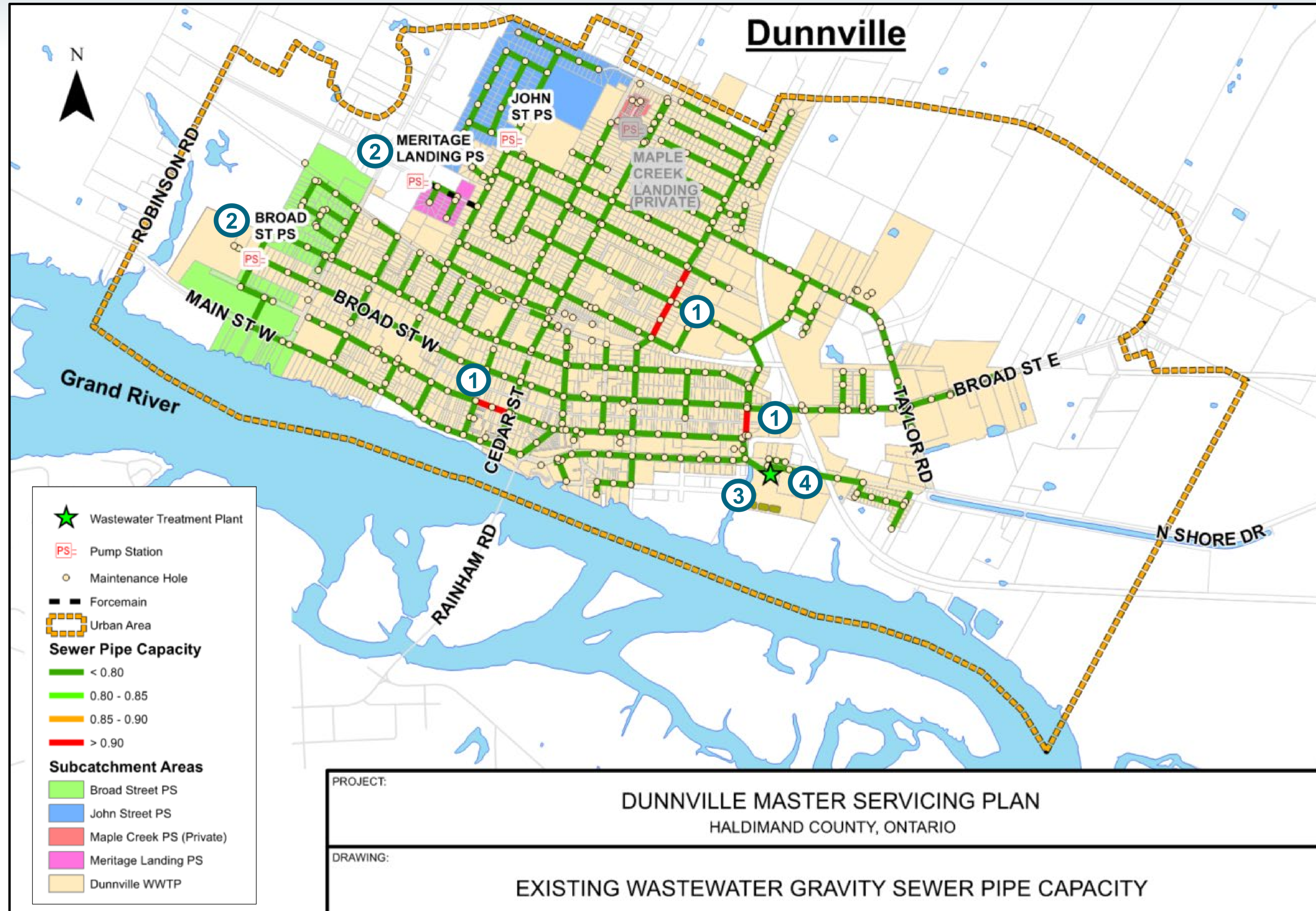
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### Existing Water Servicing Conditions



- 1 **Watermains** – Areas of high headlosses with existing water demands include the following:
  - John St
  - Park Ave E
  - Locke St
  - Main St
  - Cedar St
- 2 **Water Pressure** – Pressures in the water system are within an acceptable operating range of 275 kPa to 345 kPa.
- 3 **Water Storage** - The Dunnvillle Standpipe has sufficient storage under existing demands.
- 4 **Water Supply** – The rated capacity of the Dunnvillle Water Treatment Plant is sufficient to meet existing demands.
- 5 **Water Treatment** – The disinfection capability of the facility to treat the emergency Grand River intake is considered marginal.





1 Capacity constraints under existing conditions have been identified for gravity sewers in the following areas:

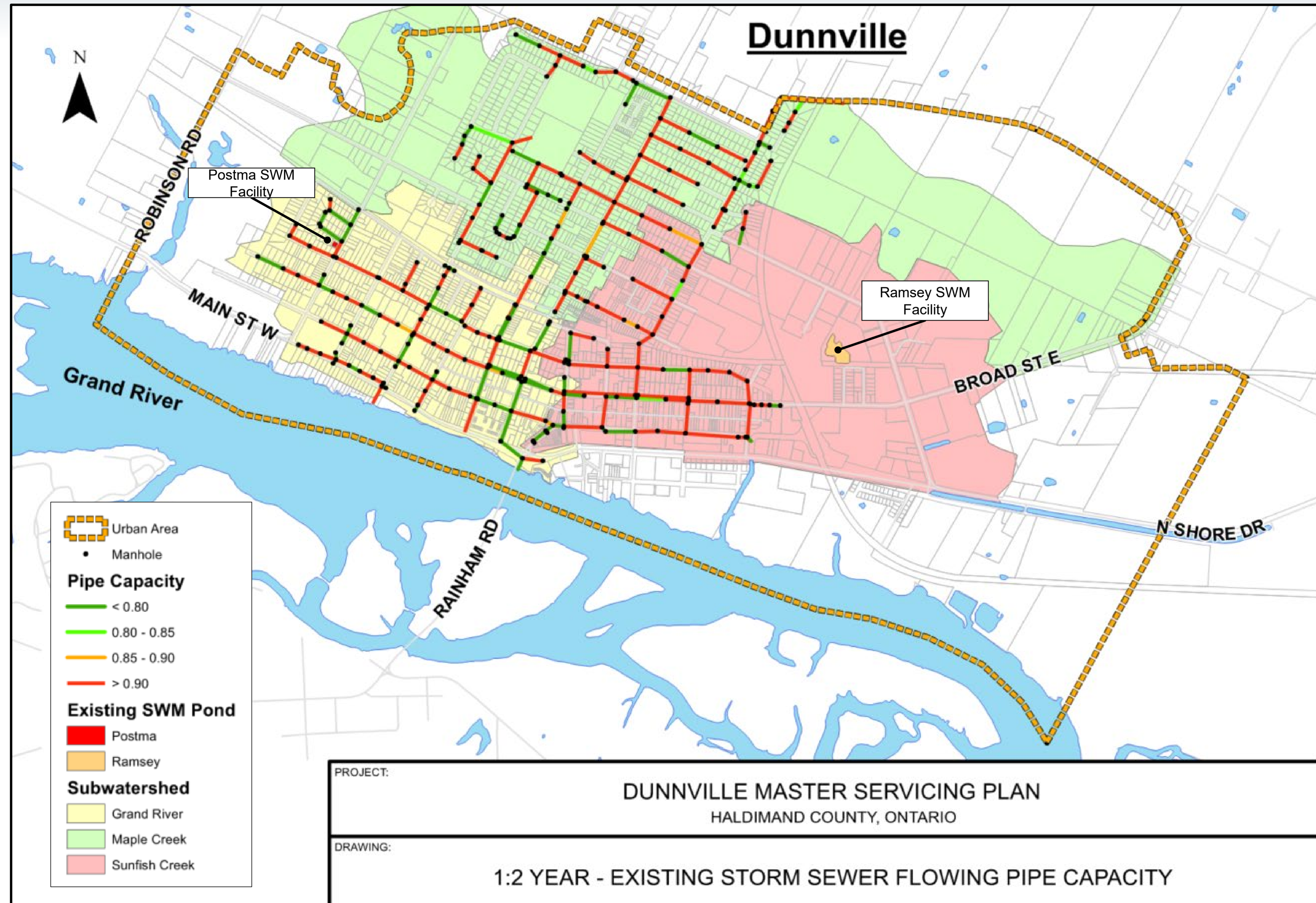
- Near the WPCP (Niagara St.)
- Tamarac St.
- Downtown (Lock Street West, Pine Street)

2 The Meritage Landing Sewage Pumping Station (SPS) and the Broad Street SPS are operating close to or beyond their capacity under existing conditions.

3 Inflow & Infiltration (I&) in Dunnville is high; work is underway to identify causes and potential remediation measures.

4 The Wastewater Treatment Plant has sufficient treatment capacity under existing conditions.





Under the 1:2-year storm event under existing conditions, 67% of the sewer system (~14 km of storm sewer) (shown in red) **has limited or no residual capacity in these pipe sections**. These sewer sections are located throughout Dunnville in all subwatersheds.

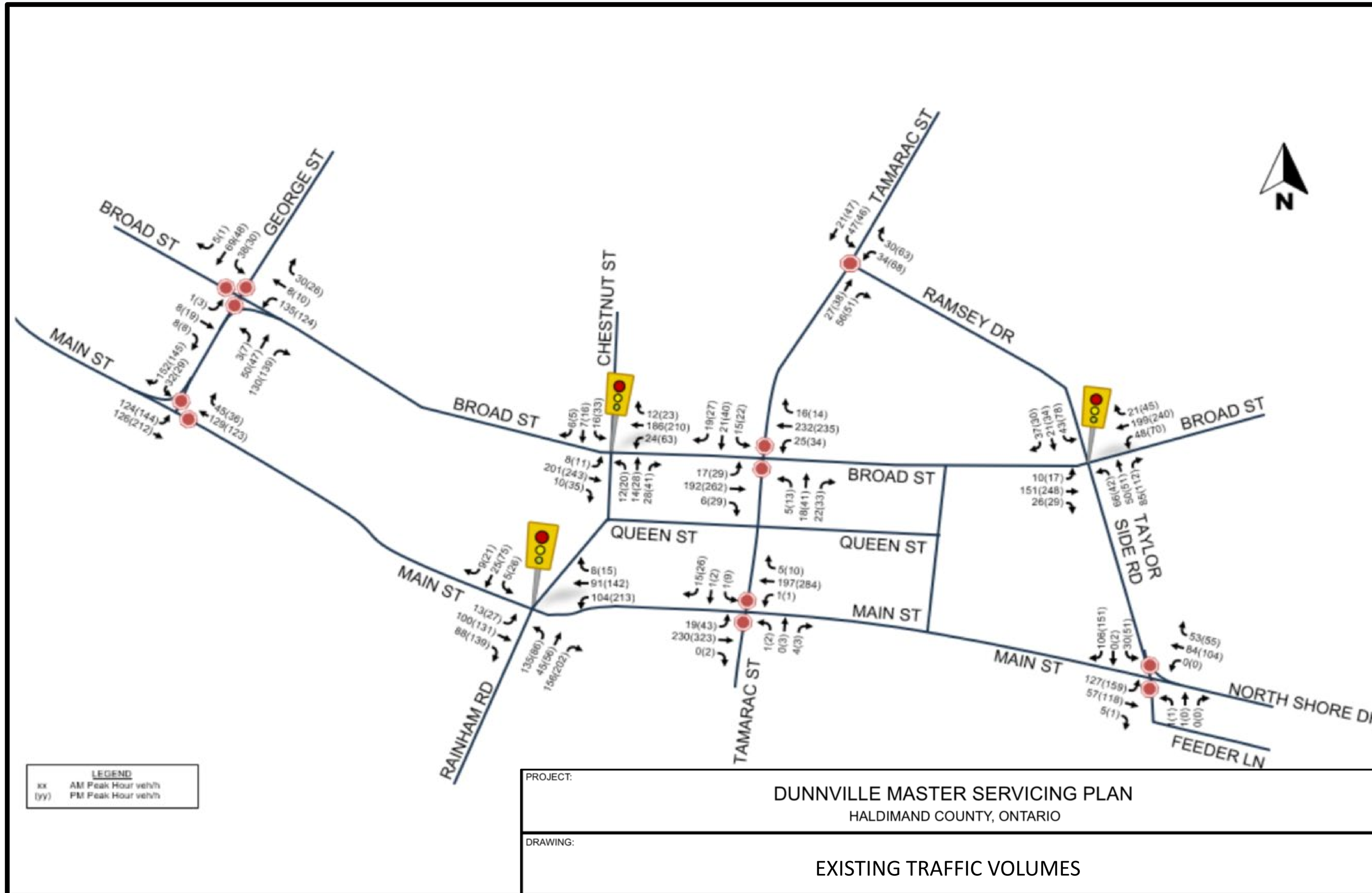
No operational concerns have been noted by County staff regarding the stormwater system.



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## Existing Transportation Servicing Conditions



Under existing conditions, there are **no major transportation servicing issues or constraints**. All intersections are operating with acceptable volumes of traffic and have sufficient storage capacity during the morning and afternoon peak hours.



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## Future Development

Existing and Future Growth in Dunnville:

Existing (2024)

**5,421**  
Equivalent Units

Near-term Residential Growth

**306**  
Equivalent Units

Near-term Industrial, Commercial, or Institutional (ICI) Growth

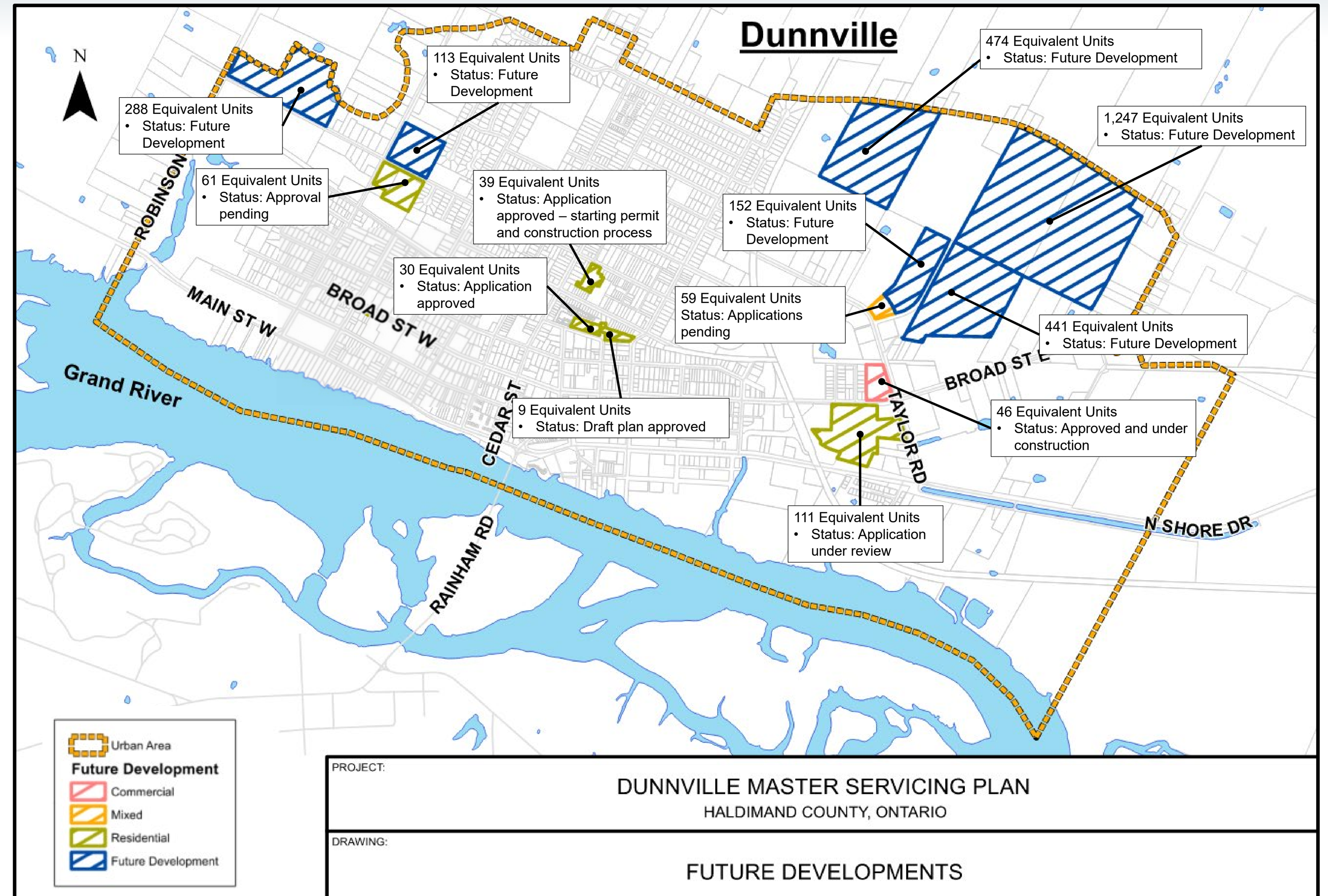
**49**  
Equivalent Units

Future Development Growth

**2,715**  
Equivalent Units

Total (Existing + Future)

**8,491**  
Equivalent Units







### Impacts of Climate Change

- **Higher precipitation** from extreme weather
  - Increased **Inflow and Infiltration**, impacting sanitary system and treatment plant performance
  - **Higher flows and runoff**, impacting stormwater system performance
  - **Higher nutrient loading and algal blooms**, impacting drinking water treatment performance
  - **Flooding** of infrastructure
- **Water level fluctuations** in lakes and groundwater table impacting water supply
- **Evaporation** due to extreme heat
- **Energy usage** during extreme weather



### Mitigation and Adaptation

- Once proposed infrastructure alternatives are identified (Phase 2 of the MCEA), climate change mitigation and adaptation measures will be identified and assessed
- **Potential Mitigation and Adaptation Measures:**
  - Working with Conservation Authority, Provincial, and Federal **climate change adaptation initiatives**
  - **Renewable energy generation** and backup power
  - Building **resilient infrastructure**
  - Consideration of **future climate** conditions during the design of infrastructure



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### Cumulative Effects and Potential Impacts to Treaty Rights

Haldimand County is home to many Indigenous peoples, including the Six Nations of the Grand River and the Mississaugas of the Credit First Nation. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and Canada's commitment to implement these rights under the UNDRIP Act (UNDRIPA), was used as reference to determine the potential impacts of this Master Servicing Plan to the rights of Indigenous People within the project study area:

#### Rights Relating to Culture, Traditions, Customs, and Spirituality:

UNDRIP Act Article	Impact Considerations	Impact Mitigation
<ul style="list-style-type: none"> <li>Articles 11.1, 12.1, 15.1, 24.1, 25, 31.1</li> </ul>	<ul style="list-style-type: none"> <li>Several areas have <b>potential for archaeological and cultural heritage</b> significance.</li> <li>Natural <b>features of traditional significance</b> (e.g., hardwood trees, medicinal plants, animals) may also be present.</li> </ul>	<ul style="list-style-type: none"> <li>Once preferred project sites are known, a walk-through could be conducted with the affected First Nation community and knowledge learned could be incorporated into the project.</li> </ul>

#### Rights Relating to Decision Making and Participation in Projects:

UNDRIP Act Article	Impact Considerations	Impact Mitigation
<ul style="list-style-type: none"> <li>Articles 13.2, 18</li> </ul>	<ul style="list-style-type: none"> <li>First Nation peoples have the right to participate in decision-making for matters that affect their rights.</li> <li>There may be interested persons who are unable to understand information and unable to participate in the project.</li> </ul>	<ul style="list-style-type: none"> <li>The study will <b>meet the intention of meaningful consultation with First Nation communities</b>, ensuring all project information can be understood by First Nation peoples.</li> <li>First Nation peoples can <b>participate in the evaluation and decision-making</b> process by providing comments and concerns on proposed projects.</li> </ul>

#### Rights Relating to Development and Economic & Social Conditions:

UNDRIP Act Article	Impact Considerations	Impact Mitigation
<ul style="list-style-type: none"> <li>Articles 21.1, 21.2, 23</li> </ul>	<ul style="list-style-type: none"> <li>First Nation peoples living in Dunnville have the right to improvement of their municipal services without discrimination.</li> </ul>	<ul style="list-style-type: none"> <li>Areas of Dunnville requiring municipal service improvement will be identified <b>without discrimination against First Nation communities</b>.</li> <li>Appropriate provincial guidelines will be followed for preferred projects so members of First Nation communities will be <b>protected from municipal services in poor condition</b>.</li> </ul>

#### Rights Relating to the Environment and Conservation:

UNDRIP Act Article	Impact Considerations	Impact Mitigation
<ul style="list-style-type: none"> <li>Articles 29.1, 29.2</li> </ul>	<ul style="list-style-type: none"> <li>Development of municipal services will be proposed as part of this MSP update, which may have environmental impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Potential projects will undergo an evaluation process that <b>considers the protection and conservation of the environment</b>.</li> <li>Through consultation, particular <b>areas or conditions of concerns</b> held by First Nation communities can be <b>discussed and incorporated into the project</b>.</li> </ul>





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## Get Involved

### How Do I Get More Information?

- Complete the sign-in form to join the study mailing list
- Check the website ([www.haldimandcounty.ca](http://www.haldimandcounty.ca)) for study updates
- Plan to attend the next Public Information Centre, details to follow.
- If you have questions regarding the study, or have any accessibility requirements in order to participate in this project, please contact one of the individuals below at any time:

#### **Jane Wilson, P.Eng.**

Municipal Infrastructure and Planning Market Chief

Phone: 226-780-7487

Email: [jwilson@jlrichards.ca](mailto:jwilson@jlrichards.ca)

J.L. Richards & Associates Limited  
107-450 Speedvale Avenue West  
Guelph, ON N1H 7Y6

#### **Philip Wilson, C.E.T., PMP**

Manager – Water and Wastewater Engineering

Phone: 905-318-5932 ext. 6431

Email: [pwilson@haldimandcounty.on.ca](mailto:pwilson@haldimandcounty.on.ca)

#### **Jessica Davidson**

Project Manager – Water and Wastewater Capital Projects

Phone: 905-318-5932 ext. 6272

Email: [jdavidson@haldimandcounty.on.ca](mailto:jdavidson@haldimandcounty.on.ca)

Haldimand County  
Administration Building, 53 Thorburn Street South  
Cayuga, ON N0A 1E0