

A background graphic featuring a network of interconnected nodes and lines. The nodes are represented by circles of varying sizes, and the lines are thin, creating a web-like structure. The background is dark gray, and the text is white and purple.

MOVING WATER FORWARD

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara Region

Catherine Street and Lakeshore Road Sewage Pumping Stations Environmental Assessment

Public Information Centre

September 8th, 2021

Welcome to: Virtual Public Information Centre

The objectives for today's Public Information Centre are:



Present the study area and objectives



Present the problem and opportunity statement along with the short list of alternatives



Provide a clear and transparent process for the evaluation of alternatives



Receive feedback on the evaluation process and recommended alternative

**MOVING
WATER
FORWARD**

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara Region Eastside Sewage Pumping Station Forcemain Class Environmental Assessment – Public Information Centre

Thank you for taking the time to fill out this comment form. Please place it in the box provided or email it to the address below. **Your input is important.** Comments will become a public record with the exception of personal information.

1. Do you think any criteria or important indicators were missed? If so, please indicate which ones:

2. What do you think about the evaluating criteria? Do you think any criteria are more or less important than the others?

	More Important than the other categories	Same importance as the other categories	Less important than the other categories
Environmental Impacts			
Social and Cultural Impacts			
Constructability Impacts			
Financial Viability			
Operational Benefits			

Please explain your rationale:

3. Do you agree with the identified advantages and disadvantages for the short-listed alternatives?
☐ Yes
☐ No

If no, please indicate below:

Remember to fill out a comment form!

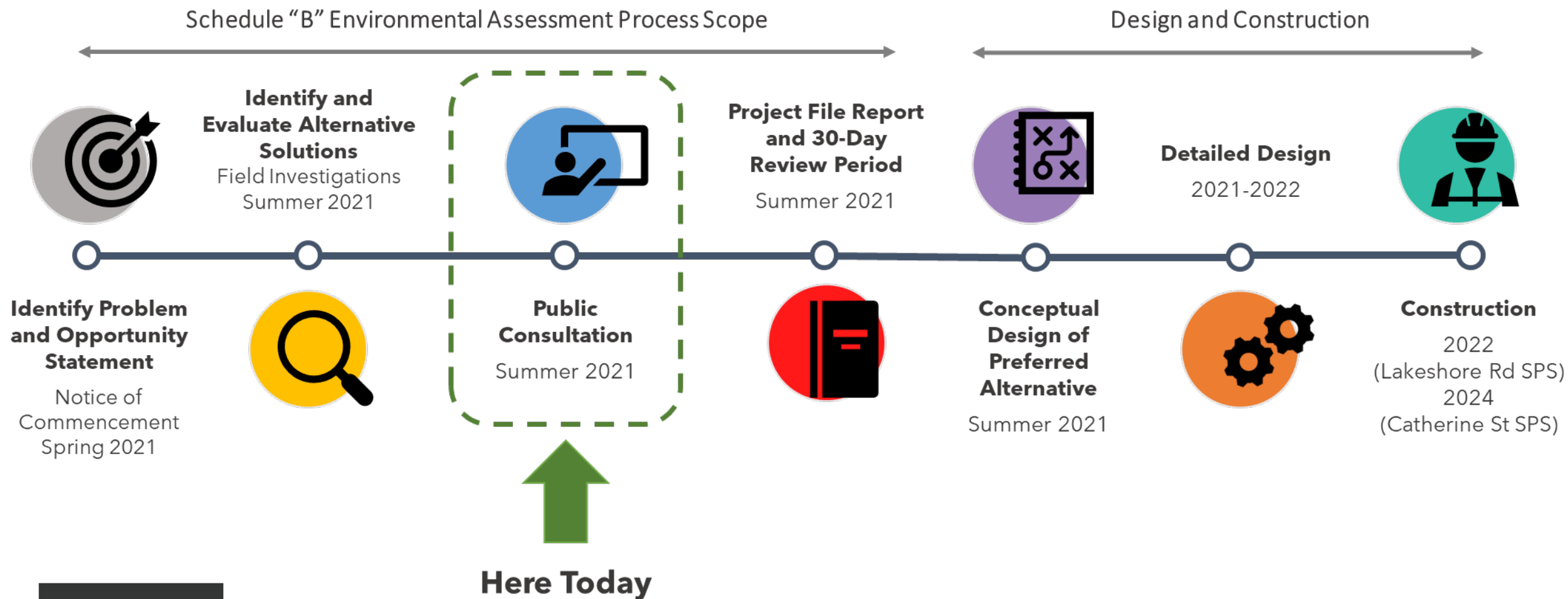
Submitting Questions & Comments

[Lakeshore Road Sewage Pumping Station Environmental Assessment - Niagara Region, Ontario](#)

[Catherine Street Sewage Pumping Station Environmental Assessment - Niagara Region, Ontario](#)

Deadline: September 22, 2021

Class “B” Environmental Assessment Process



Study Purpose and Objectives



Problem Opportunity/Statement

“Identify and develop a preferred solution to meet future capacity requirements to the year 2041 at the Lakeshore Road and Catherine Street Sewage Pumping Stations (SPS), while minimizing impacts to the natural, socio-cultural and technical environments.”



Our mandate will be to ensure the following goals are achieved:

1. Satisfy Schedule B Class Environmental Assessment Process
2. Provide infrastructure capacity and flexibility to meet future capacity demands identified in the Region’s 2041 Master Servicing Plan (MSP)
3. Decrease the potential for future service disruptions; and
4. Minimize environmental impacts including natural and socio-economic

Study Area and Background Details – Catherine Street Sewage Pumping Station

- Catherine Street Sewage Pumping Station is located at 8 Catherine Street, Fort Erie
- The existing station was commissioned in 1981 and has since undergone equipment replacements with various maintenance activities, including a new 300 mm forcemain replacement
- Investigations at the site indicate aging infrastructure and poor condition warranting the need for station upgrades
- The Region's 2017 Water and Wastewater Master Servicing Plan indicated increased capacity demands due to the operational, capacity and wet weather constraints



Study Area and Background Details – Lakeshore Road Sewage Pumping Station

- Lakeshore Road Sewage Pumping Station is located at 14A Lakeshore Road, Fort Erie
- The station was commissioned in 1985 and has since undergone minor equipment replacements and various maintenance activities
- The station conveys its flows to Catherine Street Sewage Pumping Station through a 200 mm forcemain and then both stations' flows are conveyed to the Anger Avenue Wastewater Treatment Plant
- Investigations at the site indicate aging infrastructure resulting in high maintenance costs and the Region's 2017 Water and Wastewater Master Servicing Plan indicated increasing capacity demands



Preliminary Screening Criteria

Screening Criteria #1: Effectiveness & Reliability



Can the alternative effectively and reliably meet 2041 capacity requirements?

Screening Criteria #2: Compatibility with Existing System



Is the alternative compatible with the existing wastewater system such that it will not require major changes if implemented?

Screening Criteria #3: Implementation Challenges



Can the alternative be implemented without facing major constraints or time delays, including regulatory land availability, environmental or social constraints?



Alternatives must pass all 3 criteria to proceed to short list

Evaluation Categories & Criteria for Short Listed Alternatives



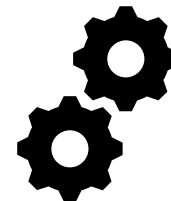
- Terrestrial System
- Aquatic System
- Groundwater, Water Quality and Quantity

ENVIRONMENTAL (25%)



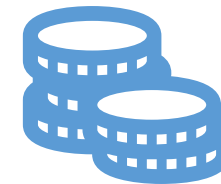
- Odour
- Visual and Aesthetics Appeal
- Disruption During Construction
- Property Acquisition and Easements
- Existing and Future Land Compatibility
- Archaeological/Built Cultural Heritage

SOCIAL & CULTURAL (25%)



- Long-term Flexibility
- Ease of Operation
- Redundancy
- Existing Infrastructure Compatibility
- Geotechnical and Hydrogeology
- Climate Change Adaptability
- Permits and Approvals

TECHNICAL (25%)



- Capital Costs
- Lifecycle Costs

ECONOMIC (25%)

Option A – Upgrade Lakeshore Rd SPS and Catherine St SPS at existing locations and property footprints



ENVIRONMENTAL

- ✓ Minimal environmental impacts to aquatic system and groundwater
- ✗ Moderate potential impacts to terrestrial habitats

SOCIAL & CULTURAL

- ✓ Minimal archaeological and natural heritage impacts
- ✓ Compatible with existing land use as no property acquisitions will be required
- ✗ Impacts to adjacent landowners during construction

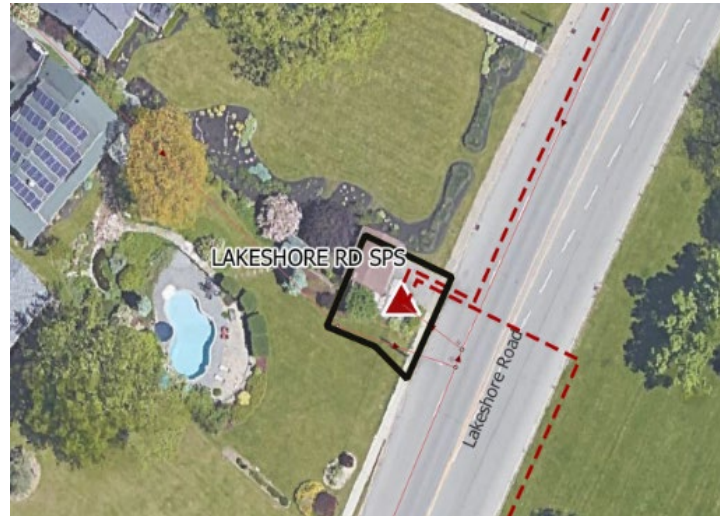
TECHNICAL

- ✓ No significant geotechnical challenges
- ✓ No challenges to obtaining permits and approvals
- ✓ Compatible with existing infrastructure
- ✗ Potential maintenance issues due to site constraints; limited size and storage space
- ✗ Restricted climate change adaptability

ECONOMIC

- ✓ Lowest capital costs
- ✓ Lowest lifecycle costs

Option B – Upgrade both stations, Lakeshore Rd SPS at the existing site and move Catherine St SPS to the adjacent lot to the east



ENVIRONMENTAL

- ✓ Minimal impacts to surrounding aquatic systems and groundwater due to short sewer length
- ✗ Moderate impacts to terrestrial habitats

SOCIAL & CULTURAL

- ✓ Compatible with existing land use as property acquisition will not be required
- ✗ Potential impacts to archaeological and natural heritage sites
- ✗ Impacts to adjacent landowners during construction

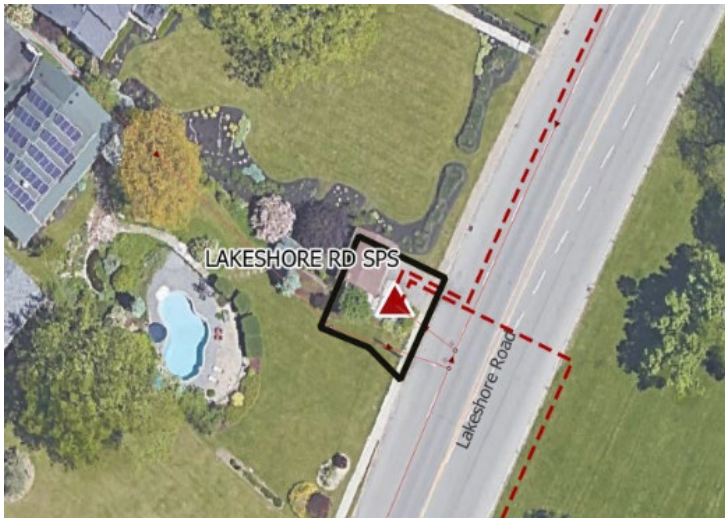
TECHNICAL

- ✓ Minimal geotechnical challenges
- ✓ Ability to meet future flow requirements
- ✓ No challenges to obtaining permits and approvals
- ✓ Compatible with existing infrastructure
- ✗ High potential for maintenance issues due to site restrictions and moderate sewage storage space
- ✗ Restricted climate change adaptability

ECONOMIC

- ✓ Low capital costs
- ✓ Low lifecycle costs

Option C – Lakeshore Rd SPS remove control building and construct a new wet well, valve chamber and forcemain. Construct new Catherine St SPS at adjacent lot to the east



ENVIRONMENTAL

- ✓ Minimal environmental impacts to aquatic system and groundwater
- ✗ Moderate potential impacts to terrestrial habitats or systems

SOCIAL & CULTURAL

- ✓ Compatible with existing land use as no property acquisitions will be required
- ✓ Improved aesthetics from removing the control building
- ✗ Impacts to adjacent landowners during construction
- ✗ Potential impacts to archeological and natural heritage sites

TECHNICAL

- ✓ Minimal geotechnical challenges
- ✓ Ability to meet future flows
- ✓ No challenges to obtaining permits and approvals
- ✓ Compatible with existing infrastructure
- ✗ Moderate potential for maintenance issues as Lakeshore will be constrained with moderate sewage storage space
- ✗ Restricted climate change adaptability

ECONOMIC

- ✓ Low capital costs
- ✓ Low lifecycle costs

Option D – Decommission Lakeshore Rd SPS and gravity sewer along Lakeshore Road/Niagara Boulevard. Relocate Catherine St SPS to Forsythe Street. Extend sewer from existing Catherine St SPS to new SPS at Forsythe Street



ENVIRONMENTAL

- ✗ Moderate to severe impacts to aquatic system and groundwater due to sewer length
- ✗ Severe potential for impacts to terrestrial habitats

SOCIAL & CULTURAL

- ✓ Addresses odour and aesthetics issues
- ✗ Impacts to adjacent landowners during construction
- ✗ Requires purchasing of land
- ✗ Moderate to severe impacts to archeological and natural heritage sites

TECHNICAL

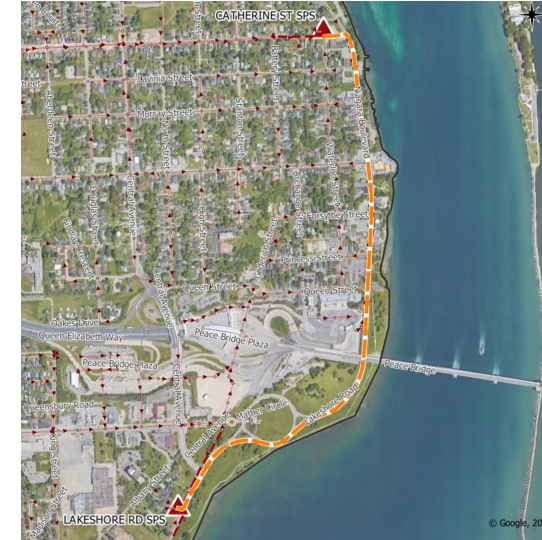
- ✓ Moderate ability to meet future flows
- ✓ Low potential for maintenance issues
- ✓ Ability to provide redundancy and adaptability to climate change impacts
- ✗ Potential challenges to obtaining permits and approvals
- ✗ Moderate to severe geotechnical and hydrology impacts
- ✗ Not compatible with existing infrastructure

ECONOMIC

- ✓ High capital costs
- ✓ High lifecycle costs

Option E – Decommission Lakeshore Rd SPS and gravity sewer along Lakeshore Road/Niagara Boulevard. Relocate Catherine St SPS to adjacent east lot

Decommission Lakeshore Sewage Pumping Station



ENVIRONMENTAL

- ✗ Moderate impacts to aquatic system and groundwater
- ✗ Moderate impacts to existing terrestrial habitats

SOCIAL & CULTURAL

- ✓ Addresses odour and aesthetics issues from removal of the control building
- ✗ Impacts to adjacent landowners during construction
- ✗ Requires purchasing of land
- ✗ Moderate to severe impacts to archeological and natural heritage sites

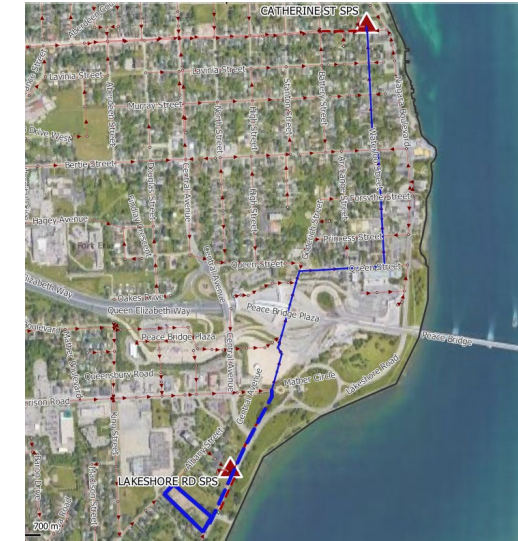
TECHNICAL

- ✓ Moderate ability to meet future flows
- ✓ Low potential for maintenance issues
- ✓ Ability to provide redundancy and adaptability to climate change impacts
- ✗ Potential challenges to obtaining permits and approvals
- ✗ Moderate to severe geotechnical and hydrology impacts
- ✗ Not compatible with existing infrastructure

ECONOMIC

- ✓ Moderate capital costs
- ✓ Moderate lifecycle costs

Option F – Relocate Lakeshore Rd SPS to south vacant property (West of Lakeshore Road) and relocate Catherine St SPS to adjacent lot to the east



ENVIRONMENTAL

- ✓ Minimal environmental impacts to aquatic system
- ✗ Moderate potential impacts to terrestrial habitat and groundwater

SOCIAL & CULTURAL

- ✓ Addresses odour issues
- ✗ Moderate impacts to adjacent landowners during construction
- ✗ Requires purchasing of land
- ✗ Severe impacts to archeological and natural heritage sites

TECHNICAL

- ✓ Ability to meet future flows demands
- ✓ Ability to meet future redundancy and adaptability to climate change impacts
- ✓ Compatible with the existing infrastructure
- ✗ Potential challenges include obtaining permits and approvals
- ✗ Moderate potential for maintenance issues
- ✗ Moderate geotechnical and hydrology impacts

ECONOMIC

- ✓ Moderate capital costs
- ✓ Moderate lifecycle costs

Option G - Relocate Lakeshore Rd SPS to south vacant property (east of Lakeshore Road). Relocate Catherine St SPS to adjacent east lot



ENVIRONMENTAL

- ✓ Minimal environmental impacts to aquatic system
- ✗ Moderate potential impacts to terrestrial habitat and groundwater

SOCIAL & CULTURAL

- ✓ Addresses odour issues
- ✗ Moderate impacts to adjacent landowners during construction
- ✗ Requires purchasing of land
- ✗ Severe impacts to archeological and natural heritage sites

TECHNICAL

- ✓ Ability to meet future flows demands
- ✓ Ability to meet future redundancy and adaptability to climate change impacts
- ✓ Compatible with the existing infrastructure
- ✗ Severe challenges include obtaining permits and approvals
- ✗ Moderate potential for maintenance issues
- ✗ Moderate geotechnical and hydrology impacts

ECONOMIC

- ✓ Moderate capital costs
- ✓ Moderate lifecycle costs

Alternatives Evaluation

Alternative	Environmental Factors	Social and Cultural Factors	Technical Considerations	Economic Considerations	Summary Score
Option A – Upgrade Lakeshore Rd SPS and Catherine St SPS at existing locations and property footprints					
Option B – Upgrade both stations, Lakeshore Rd SPS at the existing site and move Catherine St SPS to the adjacent lot to the east					
Option C – Lakeshore Rd SPS remove control building and construct a new wet well, valve chamber and forcemain. Construct new Catherine St SPS at adjacent lot to the east					
Option D – Decommission Lakeshore SPS and gravity sewer along Lakeshore Road/Niagara Boulevard. Relocate Catherine SPS to Forsythe Street. Extend sewer from existing Catherine SPS to new SPS at Forsythe Street					
Option E – Decommission Lakeshore and gravity sewer along Lakeshore Road/Niagara Boulevard. Relocate Catherine SPS to adjacent east lot					
Option F – Relocate Lakeshore Rd SPS to south vacant property (West of Lakeshore Road) and relocate Catherine St SPS to adjacent lot to the east					
Option G - Relocate Lakeshore Rd SPS to south vacant property (east of Lakeshore Rod). Relocate Catherine St SPS to adjacent east lot					
Legend: Major Positive Minor Positive Neutral Minor Negative Major Negative					

Preliminary Preferred Alternative: Option C – Lakeshore Rd SPS remove control building and construct a new wet well, valve chamber and forcemain. Construct new Catherine St SPS at adjacent lot to the east



Removing the control building will improve Sewage Pumping Station aesthetics



Cost-effective alternative



Suits the existing infrastructure



Can accommodate future growth and servicing needs



Reduces disruption to existing infrastructure by utilizing owned Regional land



Next Steps



Incorporate any stakeholder feedback received from the Public Information Centre



Finalize the recommended alternative



Prepare the Project File Report and begin the Conceptual design



30-Day Review Period



Following 30-day review, provided no comments, Region plans to proceed to Design

Thank you for your interest!

Questions? Concerns? Comments?

Fill out a comment form and submit to Stephanie McGill or Amanda Beattie by September 22, 2021.

Your feedback is valuable and will inform the remainder of the decision-making process!

Niagara Region Eastside Sewage Pumping Station Force Main Replacement
Class Environmental Assessment – Public Consultation

Thank you for taking the time to fill out this comment form. Please place it in the box provided or email it to the address below. **Your input is important.** Comments will become part of the public record with the exception of personal information.

1. Do you think any criteria or important indicators were missed? If so, please indicate below:

2. What do you think about the evaluating criteria? Do you think any criteria are more or less important than the others?

	More Important than the other categories	Same importance as the other categories	Less important than the other categories
Environmental Impacts			
Social and Cultural Impacts			
Constructability Impacts			
Financial Viability			
Operational Benefits			

Please explain your rationale:

3. Do you agree with the identified advantages and disadvantages for the short-listed alternatives?
☐ Yes
☐ No

If no, please indicate below:

You can also contact the project team at:

Stephanie McGill

Project Manager
Water & Wastewater Services
Niagara Region

3501 Schmon Pkwy., PO. Box 1042
Thorold, ON L2V 4T7

Phone: 905.980.6000 x. 3176

Email:

stephanie.mcgill@niagararegion.ca

**Amanda Beattie P.Eng., P.Geo., CRL,
CMRP, PMP**

Project Manager
GM BluePlan Engineering Limited
1266 South Service Road, Unit C31
Stoney Creek, ON L8E 5R9

Phone: 905.932.4844

Email:

amanda.beattie@gmblueplan.ca