





# Anne Street & Front Street Sewage Pumping Station Upgrades

Schedule 'B' Municipal Class Environmental

Assessment

Public Information Centre April 29, 2025







## **Background Information**

The City of Kawartha Lakes (City) has initiated a planning process to evaluate the Alternatives for increasing the capacity of the wastewater transmission system to accommodate future population growth and commercial development within areas north of the Bobcaygeon river.

The evaluation process is being carried out as a Schedule 'B' project under the terms of the Municipal Class Environmental Assessment (Class EA) process, which is approved under the Ontario Environmental Assessment Act.





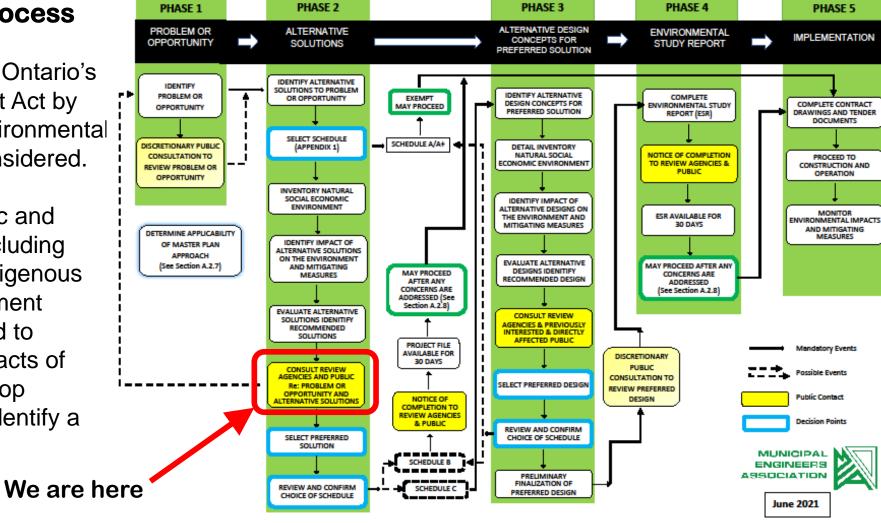


#### MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

#### **Municipal Class EA Process**

Meets the requirements of Ontario's Environmental Assessment Act by ensuring that potential environmental impacts of projects are considered.

Consultation with the public and interested stakeholders including members of the public, Indigenous Communities, and government review agencies is required to identify environmental impacts of alternative solutions, develop mitigating measures and identify a preferred solution.









## **Opportunity Statement**

The Anne Street sewage pumping station (SPS) and the Front Street SPS require additional capacity to meet the anticipated future sanitary sewage flows.

The forcemains (FM) that convey sewage to the wastewater treatment plant (WWTP) also require additional capacity.

The existing SPS and FM are aging and have deficiencies that need to be addressed.

#### **Alternatives**

#### **Sanitary Pumping Station (SPS):**

- Do Nothing
- Rehabilitate and upgrade existing SPS for additional flows
- Maintain Existing SPS and Construct a new SPS for additional flows
- Construct a single new SPS that meets all future flow requirements

#### Forcemain (FM):

- Do Nothing
- Rehabilitate existing FM and construct an additional "twin" FM
- Construct new "twin" FMs
- Construct a single larger FM





#### **Anne St. SPS and Forcemain**

The Anne St SPS is located at 47 Anne St.

Existing SPS has a rated capacity of 60 litres/sec (I/s). The existing maximum daily inflows often exceed 90 I/s. Existing pumping equipment is old and in poor condition.

Future Flow Capacity of more than 310 l/s is required to accommodate all planned residential and commercial development.

Existing 300mm diameter forcemain is inadequate to handle the future flows.

Existing emergency power generator is inadequate for future demands and has other deficiencies.

The SPS does not have an emergency overflow system.



Feasibility study area



# Concept Dash



## **Anne St. SPS and Forcemain**



SPS Wet Well Chamber, Control Panels and Emergency Power Generator Building



300mm diameter Forcemain on East St. Bridge to WWTP







### Front St. SPS and Forcemain

The Front St SPS is located at 200 Front St. West.

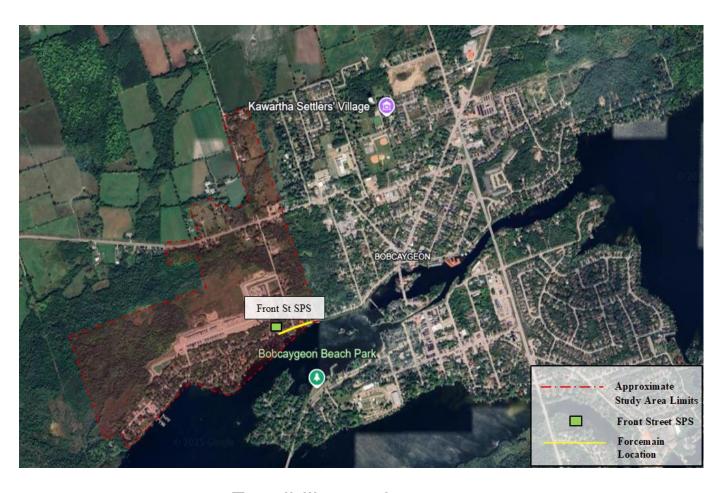
Existing SPS rated capacity is 15.4 litres/sec (l/s).

Future Flow Capacity of more than 70 l/s is required to accommodate all planned residential development in the sewer catchment.

Existing 150mm diameter forcemain is not adequate to handle the future flows.

The SPS does not have a back-up emergency power generator.

The SPS does not have an emergency overflow system.



Feasibility study area



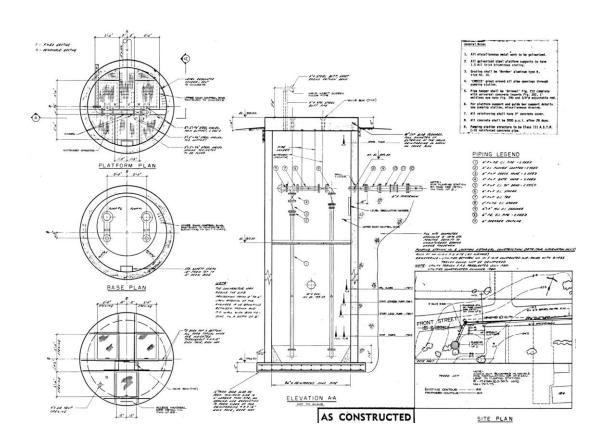




### Front St. SPS and Forcemain



Front St SPS Wet Well Chamber and Control Panels (above ground equipment)



Section View of Existing SPS (underground equipment installed 1982)



#### **Alternatives Evaluation Matrix**



Each of the alternatives is evaluated based on their potential impact on the environment (Financial, Natural Environment, Social and Cultural Environment; Technical and Compliance), with "Low Impact" as the most preferable result and "High Impact" as the least preferable result.

	Evaluation Criteria				
Rating Score	Financial Environmental Social & Cultural		Social & Cultural	Technical & Regulatory Compliance	
5 Most Preferred	Low Impact	Low Impact	Low Impact	High Technical Merit	
4 Moderately to Highly Preferred	Low to Moderate Impact	Low to Moderate Impact	Low to Moderate Impact	Moderate to High Technical Merit	
3 Moderately Preferred	Moderate Impact	Moderate Impact	Moderate Impact	Moderate Technical Merit	
2 Less Preferred	Moderate to High Impact	Moderate to High Impact	Moderate to High Impact	Low to Moderate Technical Merit	
1 Least Preferred	High Impact	High Impact	High Impact	Low Technical Merit	







## **Anne St. SPS – Alternative Evaluation**

Evaluation Criteria	Do Nothing	Rehabilitate and upgrade existing SPS for additional flows		Construct a single new SPS that meets all future flow requirements
<ul> <li>Financial</li> <li>Capital cost</li> <li>Annual Operation and Maintenance Costs</li> <li>Land Acquisition Costs</li> </ul>	4	4.33	3.67	4
<ul> <li>Technical</li> <li>Meets future Capacity Requirements</li> <li>Provides Robust Design</li> <li>Effects of Extraneous Flow (I&amp;I) on Design</li> <li>Meets Regulatory Requirements and Health &amp; Safety Requirements</li> </ul>	1.5	2.5	4	4.75
Natural Environment Impact on Terrestrial Wildlife and habitat Energy usage	2	3	3.33	3.67
<ul> <li>Social &amp; Cultural Environment</li> <li>Noise</li> <li>Odour</li> <li>Construction nuisances</li> <li>Archaeological resources &amp; cultural heritage preservation</li> </ul>	3	3.33	3	3.67
Overall Score	10.5	13.16	14	<b>16.09</b> <sub>10</sub>



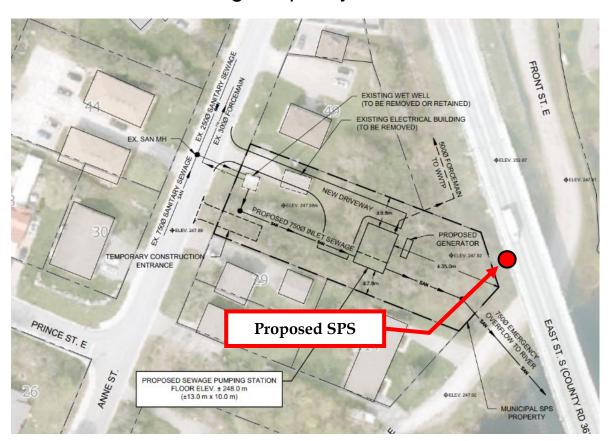




## Anne St. SPS – Recommended Alternative

#### Construct a single new SPS that meets all future flow requirements within the Existing Site

- Meets operational requirement of 310+ L/s rated capacity and improved reliability.
- Emergency Overflow limitations are addressed with a New Back-up Generator and Overflow to the River or additional on-site storage capacity.



Estimated Capital cost: \$4,960,000

**Proposed Construction: Starting 2026** 





## **Anne St. SPS – Recommended Alternative**







# **Anne St. Forcemain – Alternative Evaluation**

Evaluation Criteria	Do Nothing	Rehabilitate existing FM and construct an additional "twin" FM	Construct new "twin" FMs	Construct a single larger FM
<ul> <li>Financial</li> <li>Capital cost</li> <li>Annual Operation and Maintenance Costs</li> <li>Land Acquisition Costs</li> </ul>	4	4	3.67	4.67
<ul> <li>Technical</li> <li>Meets future Capacity Requirements</li> <li>Provides Robust Design</li> <li>Effects of Extraneous Flow (I&amp;I) on Design</li> <li>Meets Regulatory Requirements and Health &amp; Safety Requirements</li> </ul>	1.75	4.5	5	4.75
Natural Environment	3	4.33	4.67	5
<ul> <li>Social &amp; Cultural Environment</li> <li>Noise</li> <li>Odour</li> <li>Construction nuisances</li> <li>Archaeological resources &amp; cultural heritage preservation</li> </ul>	3.5	3.5	4	4.5
Overall Score	12.25	16.33	17.34	<b>18.92</b>





## Anne St. Forcemain – Recommended Solution St. Forcemain – Recommended Solution

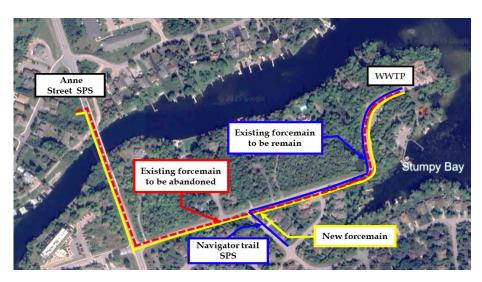
 Maintain the existing 300mm diameter force main east from Navigator Trail following rehabilitation to convey sewage from SPS #7

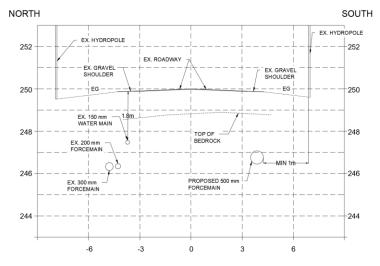
#### **Construct new single Force main**

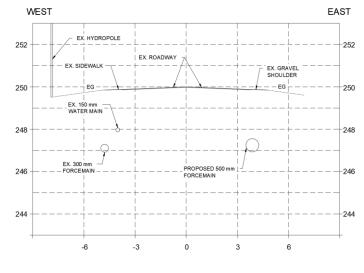
New, 500mm diameter single force main to replace the existing force main for sewage flows from Anne St SPS

Estimated Capital cost: \$1,520,000

**Proposed Construction: Starting 2026** 







NTS

CROSS-SECTION OF EAST STREET NORTH OF BOYD STREET







## Front St. SPS – Alternative Evaluation

Evaluation Criteria	Do Nothing	Rehabilitate and upgrade existing SPS for additional flows	Construct a single new SPS that meets all future flow requirements	
<ul> <li>Financial</li> <li>Capital cost</li> <li>Annual Operation and Maintenance Costs</li> <li>Land Acquisition Costs</li> </ul>	4	4.33	2.67	
<ul> <li>Technical</li> <li>Meets future Capacity Requirements</li> <li>Provides Robust Design</li> <li>Effects of Extraneous Flow (I&amp;I) on Design</li> <li>Meets Regulatory Requirements and Health &amp; Safety Requirements</li> </ul>	2.25	4	4.75	
Natural Environment  Impact on Terrestrial Wildlife and habitat  Energy usage	2.33	4	4.33	
Social & Cultural Environment      Noise     Odour     Construction nuisances     Archaeological resources & cultural heritage preservation	3	4	3.67	
Overall Score	11.58	16.33	<b>15.42</b>	



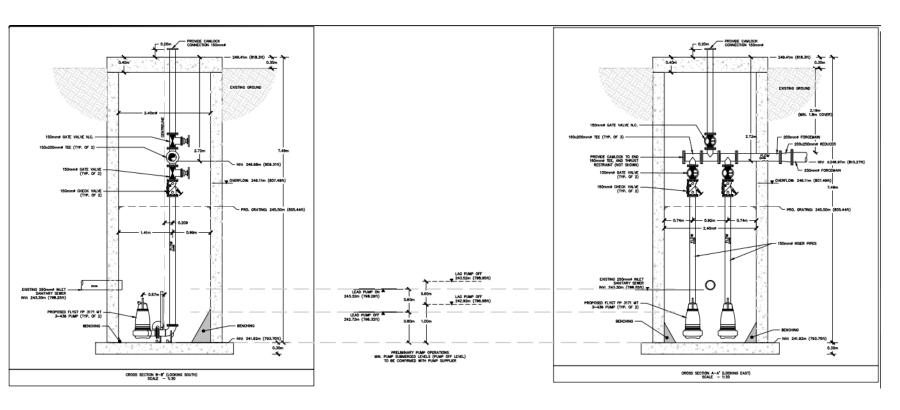




## Front St. SPS – Recommended Alternative

#### Rehabilitate and Upgrade Existing SPS

The Recommended Alternative focuses on improving the efficiency, capacity, and reliability of the existing Sewage Pumping Station (SPS) by upgrading pumps, piping and integrating modern technologies. Emergency Overflow limitations are addressed with a New Back-up Generator.



Estimated Capital cost: \$ 225,000

Proposed Construction: Starting 2026







## Front St. Forcemain – Alternative Evaluation

Evaluation Criteria	Do Nothing	Rehabilitate existing FM and construct an additional "twin" FM	Construct new "twin" FMs	Construct a single larger FM
<ul> <li>Financial</li> <li>Capital cost</li> <li>Annual Operation and Maintenance Costs</li> <li>Land Acquisition Costs</li> </ul>	4	4	3.67	4.33
<ul> <li>Technical</li> <li>Meets future Capacity Requirements</li> <li>Provides Robust Design</li> <li>Effects of Extraneous Flow (I&amp;I) on Design</li> <li>Meets Regulatory Requirements and Health &amp; Safety Requirements</li> </ul>	1.75	4.5	5	4.75
Natural Environment Impact on Terrestrial Wildlife and habitat Energy usage	3	4.33	4.33	4.67
<ul> <li>Social &amp; Cultural Environment</li> <li>Noise</li> <li>Odour</li> <li>Construction nuisances</li> <li>Archaeological resources &amp; cultural heritage preservation</li> </ul>	3.5	3.5	4	4.5
Overall Score	12.25	16.33	17	18.25



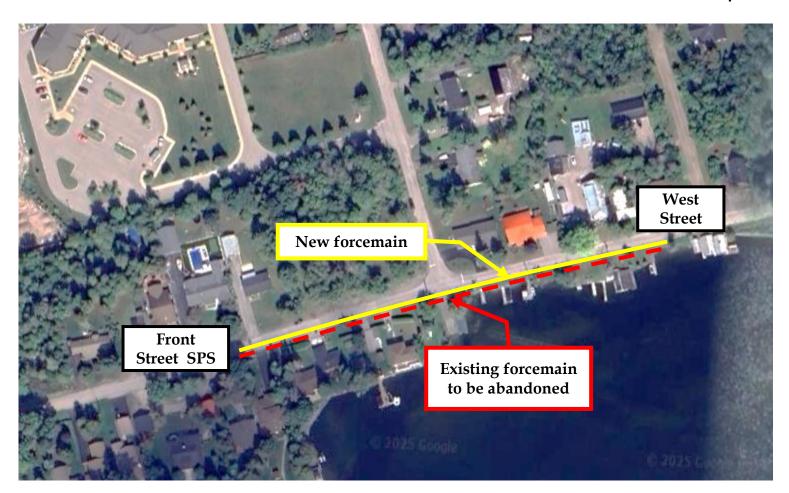




#### Front St. Forcemain – Recommended Solution

#### Construct new single Forcemain and abandon existing

The recommended Solution is a new 250mm diameter force main to replace the existing FM



Estimated Capital cost: \$ 130,000

Proposed Construction: Starting 2026





# **Next Steps**

Receive comments

Review comments, incorporate feedback from the PIC

Select the preferred alternative and finalize Project file report Issue notice of study completion and provide project file report for final 60-day public and Agency review and comment period Address and incorporate comments. If no Section 16 order is received from the MECP; proceed to design and construction





# Your Comments are Important

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We would appreciate receiving your comments by May 16, 2025