



The Regional Municipality of Durham

Works Committee Revised Agenda

Wednesday, June 4, 2025, 9:30 a.m.

Regional Council Chambers

Regional Headquarters Building

605 Rossland Road East, Whitby

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

Note: This meeting will be held in a hybrid meeting format with electronic and in-person participation. Committee meetings may be [viewed via live streaming](#).

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3. Adoption of Minutes	
3.1 Works Committee meeting - May 7, 2025	4
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5. Presentations	
*5.1 Michael Harris, Manager of Water and Wastewater Infrastructure Design Re: Tender Award, Additional Engineering Services and Additional Financing required for Regional Municipality of Durham Contract D2024- 52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington (2025-W-23) [Item 8.2 e.)]	11
5.2 Ramesh Jagannathan, Commissioner of Works Re: Proposed Bowmanville Avenue (Regional Road 57) Expansion, Baseline Road (Highway 401 Ramps) to King Street, in the Municipality of Clarington	
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There are no delegations	
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	Approval to Award a Sole Source Agreement to SNF Canada for the Purchase of Anionic Powder Polymer for Enhanced Total Phosphorus Removal at the Duffin Creek Water Pollution Control Plant, in the City of Pickering	
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	f. Report #2025-W-24	68
	Sole Source Procurement of Varec Biogas 244 Series Waste Gas Burner and Ignition System at Port Darlington Water Pollution Control Plant (WPCP) in the Municipality of Clarington	

9. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

10. Confidential Matters

10.1 Reports

- a. Report #2025-W-18
Confidential Report of the Commissioner of Works –
Proposed or Pending Acquisition of Land for Regional
Corporation Purposes as it relates to Property in the
Community of Courtice, Municipality of Clarington

Under Separate Cover

11. Other Business

12. Date of Next Meeting

Wednesday, September 3, 2025 at 9:30 AM

13. Adjournment

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The Regional Municipality of Durham

MINUTES

WORKS COMMITTEE

Wednesday, May 7, 2025

A regular meeting of the Works Committee was held on Wednesday, May 7, 2025 in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:30 AM. Electronic participation was offered for this meeting.

1. Roll Call

Present: Councillor Barton, Chair
Councillor Marimpietri, Vice-Chair
Councillor Cook*
Councillor Foster
Regional Chair Henry
Councillor Lee*
Councillor Mulcahy
Councillor Nicholson
***denotes Councillors participating electronically**

Absent: None

Also
Present: Councillor Wotten*
***denotes visiting Councillors participating electronically**

Staff
Present: N. Andres, Manager, Water and Wastewater Infrastructure Planning
E. Baxter-Trahair*, Chief Administrative Officer
S. Ciani, Committee Clerk, Corporate Services – Legislative Services
S. Dessureault, Committee Clerk, Corporate Services – Legislative Services
C. Dunkley*, Director of Corporate Infrastructure and Strategic Business Services, Works Department
D. Dunn, Director, Transportation & Field Services
A. Evans, Director of Waste Management Services
L. Fleury, Deputy Clerk, Corporate Services – Legislative Services
M. Hubble, Director of Environmental Services
J. Hunt, Regional Solicitor/Director of Legal Services, Corporate Services – Legal Services
R. Inacio, Systems Support Specialist, Corporate Services – IT
R. Jagannathan, Commissioner of Works
L. Saha*, Manager, Waste Services
N. Taylor*, Commissioner of Finance
D. Waechter, Director, Capital Projects Delivery

*** denotes staff participating electronically**

2. Declarations of Pecuniary Interest

There were no declarations of pecuniary interest.

3. Adoption of Minutes

Moved by Councillor Marimpietri, Seconded by Councillor Foster,
(36) That the minutes of the regular Works Committee meeting held on
Wednesday, April 2, 2025, be adopted.

CARRIED

At this time, R. Jagannathan, acknowledged two members of the Works Department who recently lost their son, and advised that the flags located outside Regional headquarters have been put at half mast to remember him and all of the individuals who struggle with their mental health.

4. Statutory Public Meetings

There were no statutory public meetings.

5. Presentations

There were no presentations heard.

6. Delegations

There were no delegations heard.

7. Waste

7.1 Correspondence

There were no communication items considered.

7.2 Reports

**A) Energy from Waste-Waste Management Advisory Committee 2025 – 2026
Workplan ([2025-WR-3](#))**

Report #2025-WR-3 from R. Jagannathan, Commissioner of Works, was received.

Staff responded to a question from the Committee regarding the Emerald Energy From Waste Facility located in the Regional Municipality of Peel and advised that staff would bring forward information when available to the Committee regarding the technology that is currently being utilized there and how it compares to what is

being utilized at the Durham York Energy Centre (DYEC), to ensure that the Region is using the best available technology.

Moved by Councillor Foster, Seconded by Councillor Nicholson,
(37) That we recommend to Council:

- A) That the Energy from Waste-Waste Management Advisory Committee's 2025 – 2026 Workplan, as outlined in Attachment #1 to Report #2025-WR-3 of the Commissioner of Works, be approved; and
- B) That a copy of Report #2025-WR-3 be forwarded to the Municipality of Clarington for information.

CARRIED

8. Works

8.1 Correspondence

- A) Certificate of Proclamation, dated March 1, 2025, re: National Public Works Week (May 18 – 24)

R. Jagannathan announced that on May 24, 2025, from 10:00 AM – 2:00 PM an open house would be held at the Durham York Energy Centre (DYEC), and the Duffin Creek Water Pollution Control Plant (WPCP). He also advised that there would be an opportunity to try the training simulator at the Duffin Creek WPCP during the open house.

Moved by Councillor Nicholson, Seconded by Councillor Foster,
(38) That the Certificate of Proclamation, dated March 1, 2025, regarding National Public Works Week (May 18 – 24) be received for information.

CARRIED

8.2 Reports

- A) Sole Source Procurement of Uninterruptible Power Supply Equipment for Traffic Control Signals throughout the Regional Municipality of Durham ([2025-W-13](#))

Report #2025-W-13 from R. Jagannathan, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Mulcahy,
(39) That we recommend to Council:

- A) That staff be authorized to award a sole source contract to Tacel Limited for the provision of Uninterruptible Power Supply (UPS) equipment for traffic control signals throughout the Regional Municipality of Durham, with terms not to exceed five years;

- B) That financing for the sole source agreement for UPS equipment be provided from the approved 2025 Roads and Infrastructure Capital Budget and future years Business Plans and Budgets. The annual estimated cost is \$580,000, with the total cost not to exceed \$2,900,000*; and
- C) That the Commissioner of Finance be authorized to execute the necessary sole source agreement.
(*) before applicable taxes

CARRIED

- B) Sole Source Procurement of Engineering Services for Stevenson Road North Sanitary Sewer and Watermain Project in the City of Oshawa ([2025-W-14](#))

Report #2025-W-14 from R. Jagannathan, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Mulcahy,

(40) That we recommend to Council:

- A) That staff be authorized to award a sole source contract to Gannett Fleming Canada ULC for engineering services for the detailed design of a 450-millimetre (mm) diameter trunk sanitary sewer and 300 mm diameter watermain on Stevenson Road North from Taunton Road West to Conlin Road West in Oshawa, for \$310,390*, to be financed from the approved project budget; and
- B) That the Commissioner of Finance be authorized to execute the necessary documents related to the sole source agreement.
(*) before applicable taxes

CARRIED

- C) Lease Renewal with 2381502 Ontario Inc., o/a "Midtown Centre" for Space Located at 200 John Street, Unit E8 in the City of Oshawa, for Use by the Health Department ([2025-W-15](#))

Report #2025-W-15 from R. Jagannathan, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Mulcahy,

(41) That we recommend to Council:

- A) That the Lease Agreement with 2381502 Ontario Inc., o/a "Midtown Centre" (the "Landlord") for the Dental Clinic located at 200 John Street, Unit E8, in the City of Oshawa, containing approximately 8,974 square feet be renewed with the following terms and conditions:
 - i) The renewal term is for a period of five (5) years commencing July 1, 2025, and ending on June 30, 2030;

- ii) The annual rent for years 1 and 2 of the lease term will be \$134,610*, payable in monthly instalments of \$11,217.50*, based on a rate of \$15* per square foot per annum. The annual rent for years 3 to 5 will be \$143,584* payable in monthly instalments of \$11,965.33*, based on a rate of \$16* per square foot per annum;
 - iii) Additional rent is estimated at \$53,126.08 per annum based on a rate of \$7.73* per square foot, payable in equal monthly instalments of \$4,427.17. This covers the operating costs for the premises, including, common area maintenance, utilities, janitorial services, and realty taxes. The amount per square foot for additional rent will be adjusted annually based on actual costs;
 - iv) The Region will have the option to terminate the Lease after the first two years of the renewal term, with the Region providing the Landlord with nine months written notice;
 - v) The Landlord remains responsible for repairs and maintenance of the building and other common areas; and
- B) That the Regional Chair and Clerk be authorized to execute all documents associated with the Lease Renewal.
(* exclusive of applicable taxes)

CARRIED

- D) Lease Renewal with PTC Ownership LP for Space Located at 1355 Kingston Road, Unit 14A in the City of Pickering, for Use by the Health Department
[\(2025-W-16\)](#)
-

Report #2025-W-16 from R. Jagannathan, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Mulcahy,
(42) That we recommend to Council:

- A) That the Lease Agreement with PTC Ownership LP (the "Landlord") for premises located at 1355 Kingston Road, Unit 14A, in the City of Pickering, containing approximately 3,584 square feet, be renewed with the following terms and conditions:
- i) The renewal term is for a period of five (5) years commencing July 1, 2025, and ending on June 30, 2030;
 - ii) The gross rent for the term will be as follows:

Year	Term	Rate PSF*	Monthly Rent*	Annual Rent*
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Year 1	July 1, 2025 – June 30, 2026	\$28	\$8,362.67	\$100,352
Year 2	July 1, 2026 – June 30, 2027	\$29	\$8,661.33	\$103,936
Year 3	July 1, 2027 – June 30, 2028	\$30	\$8,960.00	\$107,520
Year 4	July 1, 2028 – June 30, 2029	\$31	\$9,258.67	\$111,104
Year 5	July 1, 2029 – June 30, 2030	\$32	\$9,557.33	\$114,688

- iii) The Landlord will be responsible for all charges, impositions, and outlays relating to the Premises and the Building including, but not limited to, repairs, maintenance, and replacement of mechanical, electrical, and plumbing services, all utilities, realty taxes, and building and grounds maintenance; and

- B) That the Regional Chair and Clerk be authorized to execute all documents associated with the Lease Renewal.

(*) exclusive of applicable taxes

CARRIED

- E) Sole Source Procurement of Engineering Consulting Services for the Corbett Creek WPCP – Digestion Remediation and Upgrade Works Project in the Town of Whitby ([2025-W-17](#))
-

Report #2025-W-17 from R. Jagannathan, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor Mulcahy,

(43) That we recommend to Council:

- A) That Regional staff be authorized to award a sole source contract to AECOM Canada ULC (AECOM) for engineering consulting services for the design and construction administration of upgrades to the aeration and phosphorus removal systems at the Corbett Creek Water Pollution Control Plant (WPCP) for the amount of \$1,827,176*, to be financed from the approved project budget; and

- B) That the Commissioner of Finance be authorized to execute the necessary sole source agreement.

(*) before applicable taxes

9. Advisory Committee Resolutions

There were no advisory committee resolutions to be considered.

10. Confidential Matters

There were no confidential matters to be considered.

11. Other Business

There was no other business to be considered.

12. Date of Next Meeting

The next regularly scheduled Works Committee meeting will be held on Wednesday, June 4, 2025 at 9:30 AM in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby.

13. Adjournment

Moved by Councillor Marimpietri, Seconded by Councillor Nicholson,
(44) That the meeting be adjourned.

CARRIED

The meeting adjourned at 9:37 AM

Respectfully submitted,

D. Barton, Chair

S. Ciani, Committee Clerk



Bowmanville Water Supply and Distribution System Upgrades, Expansion and Improvements

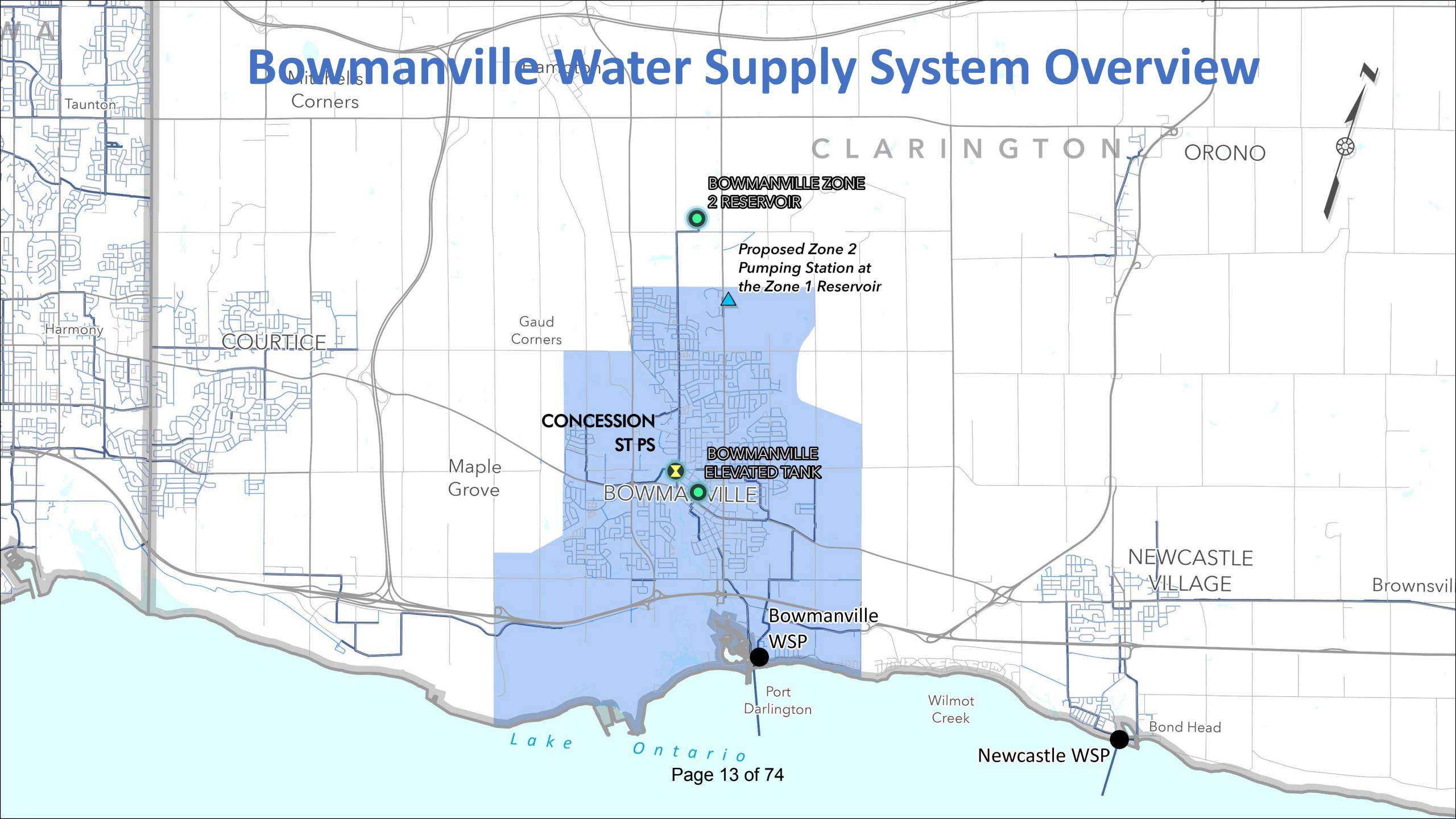
Works Committee Meeting – June 4, 2025

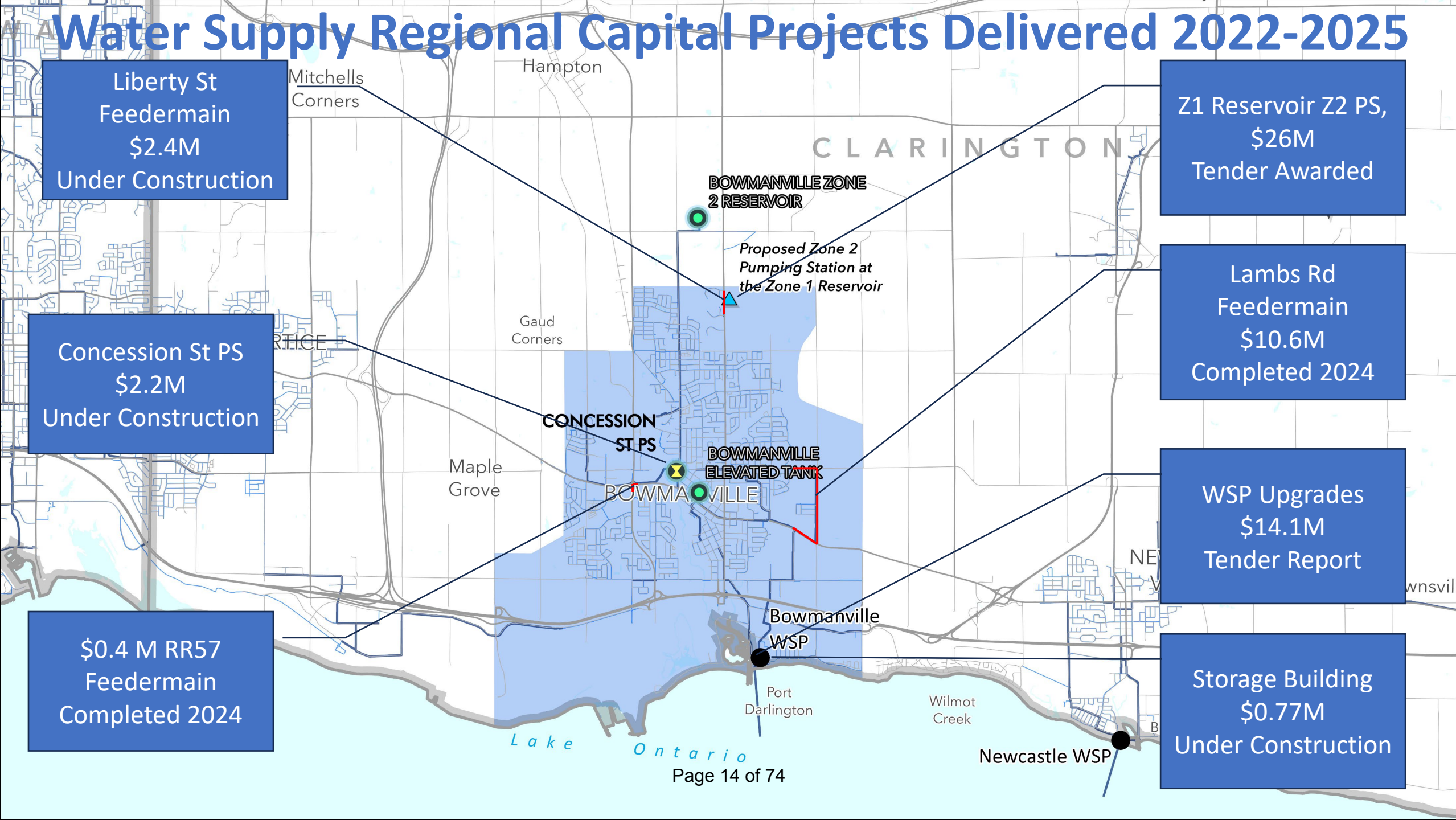
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Goals of Today's Presentation

- To provide an overview of past, current and future water supply system capital projects in Bowmanville
- To provide a summary of Bowmanville Water Supply Plant upgrades and improvements (subject of Report# 2025-W-23)

Bowmanville Water Supply System Overview





Future Water Supply Regional Capital Projects

Zone 2 Reservoir Expansion, Standby Power and Zone 2 Feedermain

Liberty & Conc 3 Feedermain Tender in 2025

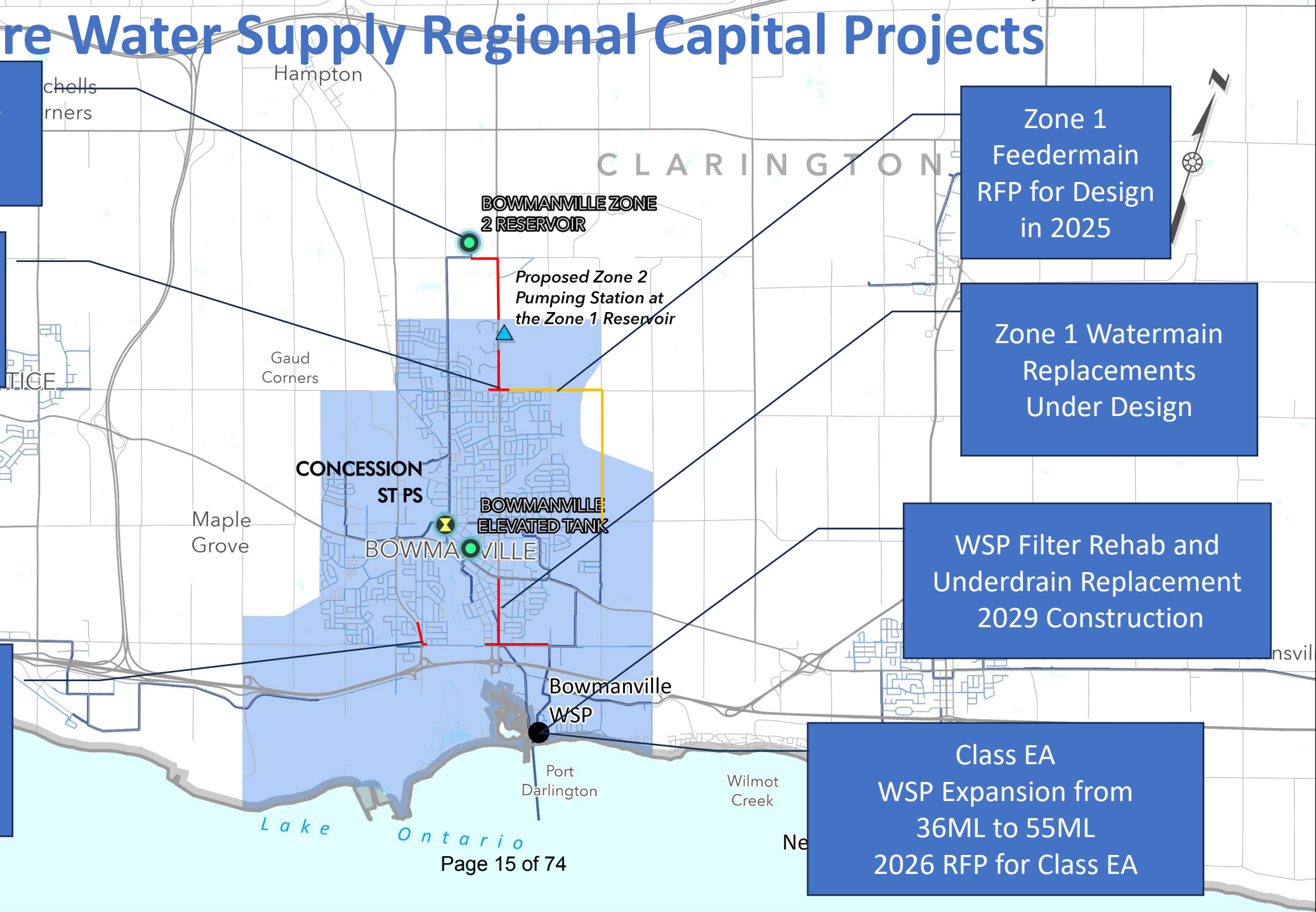
Bowmanville Ave Feedermain Tender in 2025

Zone 1 Feedermain RFP for Design in 2025

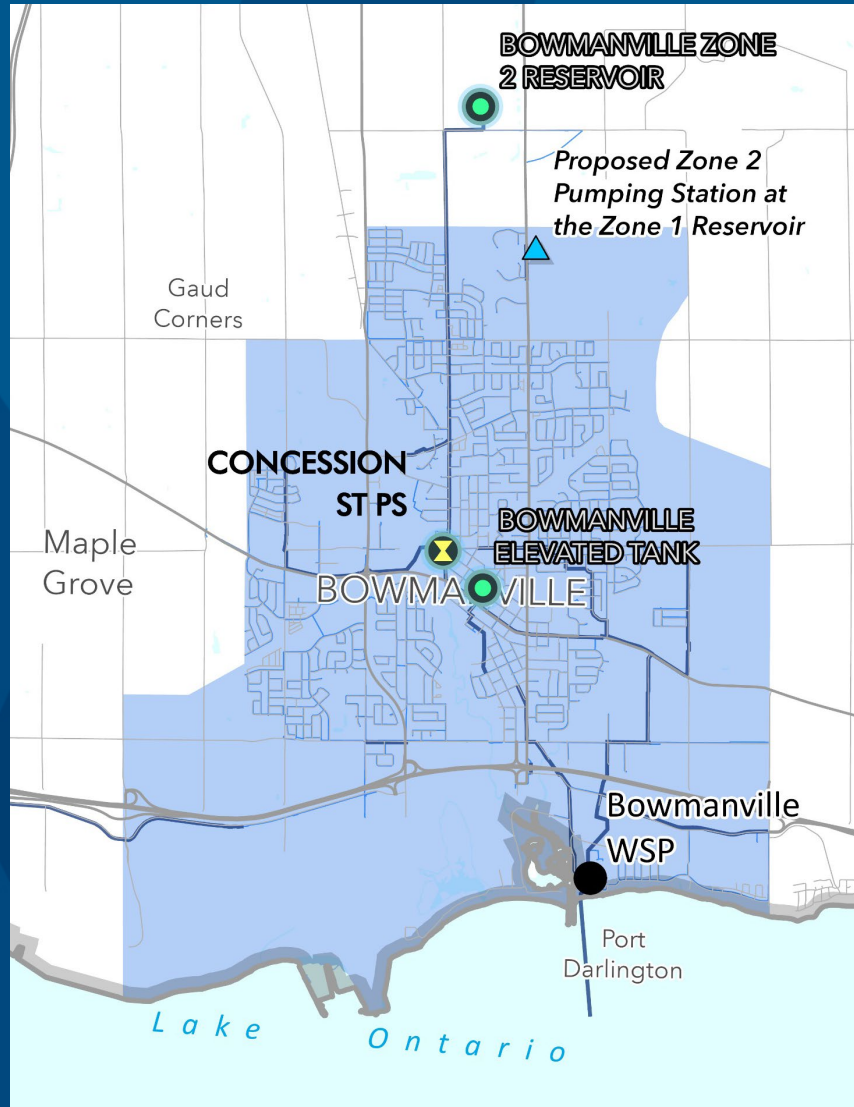
Zone 1 Watermain Replacements Under Design

WSP Filter Rehab and Underdrain Replacement 2029 Construction

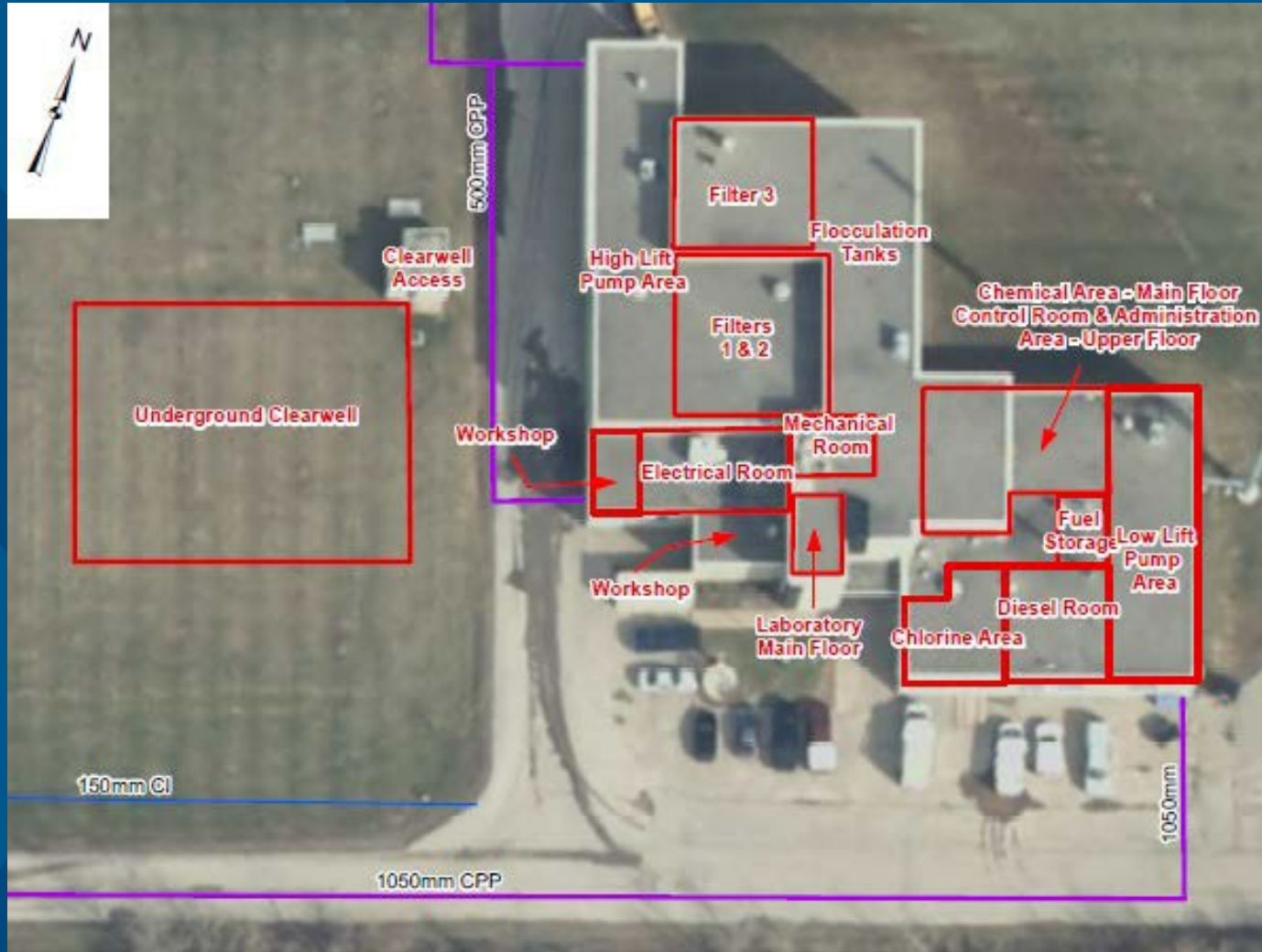
Class EA WSP Expansion from 36ML to 55ML 2026 RFP for Class EA



Project Site: Bowmanville WSP



Bowmanville Water Supply Plant – Existing Conditions



- ~36MLD rated capacity for treated water production, operates at ~75% capacity
- Conventional filtration plant
- Last major expansion was 1991-1993
- Disinfection is through chlorination
- Chlorine consumption is high in cold weather months
- TSSA compliance variance expires in March 2027 for fuel storage
- Filter 3 requires repair and rehabilitation in the near future



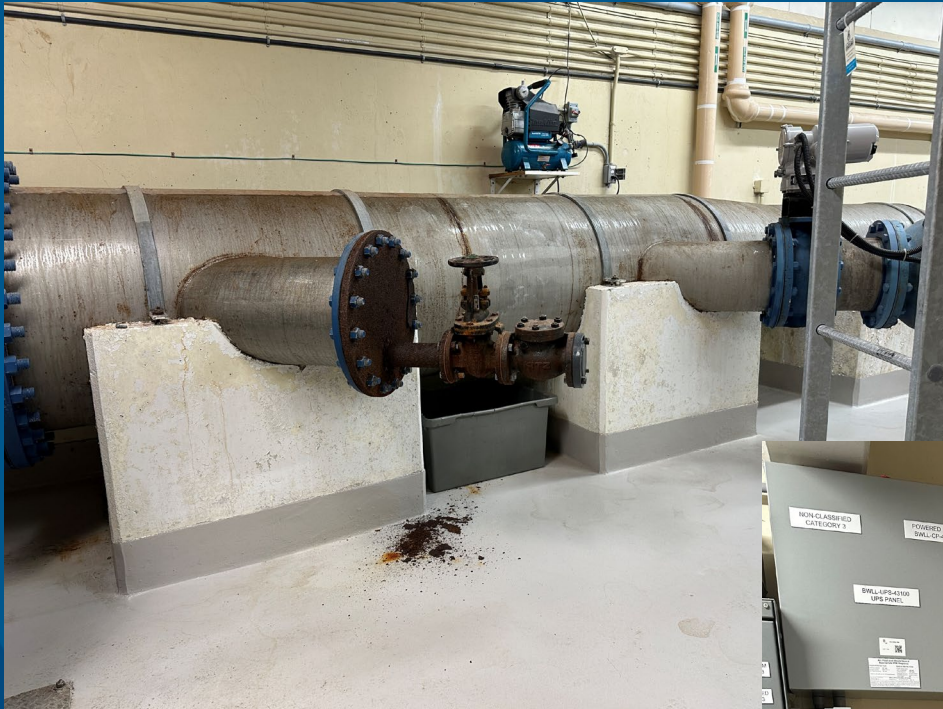
Contract D2024-52 - Bowmanville Water Supply Plant Disinfection and Electrical Upgrades

Key Objectives of Contract:

- Supplement disinfection with ultraviolet (UV) system for primary water disinfection, reduce chlorine use to enable plant to improve operational efficiency and meet increased frequency of periods of high demand, reduce pitting of metallic piping
- Replace and relocate electrical switchboard and control panels, designed with future improvements and expansion in mind
- Replace indoor diesel back-up power system by relocating the system outdoors and expanding its power generating capacity for new UV system , designed with future improvements and expansion in mind













Project Consulting Assignment History

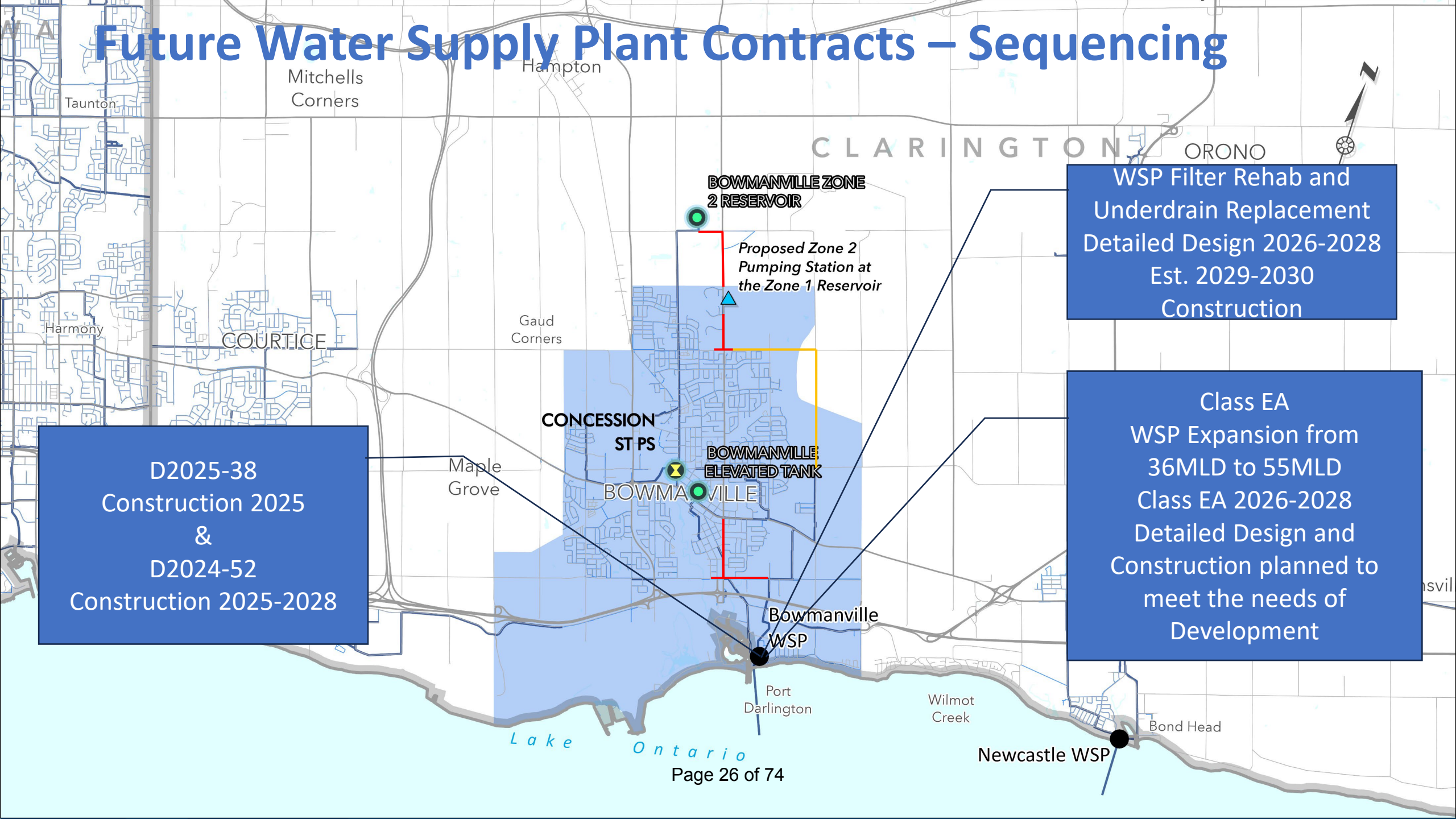
- RFP-1110-2020 for preliminary and detailed design tendered for UV upgrades and asset inventory / condition assessment
 - Awarded to RV Anderson Associates
 - RFP assumed 2022 construction for 14 months duration of UV upgrades
- Asset inventory / condition assessment concluded that additional electrical infrastructure needed replacement due to age, condition as well for compliance
 - New scope for detailed design increased project complexity and therefore schedule and duration
- Storage is required for aged infrastructure replacement parts, and due to reduction of storage within the Plant due to proposed works
 - A new storage building has been added to the site under a separate Contract
- Project complexity, need for additional SCADA system design, supply chain and market conditions have prolonged construction schedule



D2024-52 as a Prerequisite to Future Capital Work

- D2024-52 scope will take an estimated 3 years for equipment supply, installation and commissioning
- Future filter rehabilitation and underdrain replacement asset management work needs D2024-52 scope to be completed first, condition of Filter 3 underdrains prevents plant from operating at full capacity now
- D2024-52 and future filter contracts need to be completed before WSP Plant expansion can proceed to tendering and construction
- WSP Plant expansion Class EA is planned to be started in 2026. Detailed design and construction timing planned to meet the needs of development
- Due to projected population growth, there is expected to be a continued increase in the frequency of periods of high-water demand
- Projects need to be delivered and executed in strategically sequenced order
- D2024-52 and future filter contracts need to be planned and completed to maintain infrastructure in a good state of repair as per Standard of Care, Section 19 of Safe Drinking Water Act

Future Water Supply Plant Contracts – Sequencing



Questions?



Michael Harris, P.Eng.
Manager, Water and Wastewater Infrastructure Design
Capital Projects Delivery
michael.harris@durham.ca

Dan Waechter, P.Eng.
Director, Capital Projects Delivery Branch
Dan.waechter@durham.ca

[durham.ca](https://www.durham.ca)

[**@RegionofDurham**](#)



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The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-WR-4
Date: June 4, 2025

Subject:

Extension of Cart-based Waste Collection Pilot in the Town of Ajax and the Township of Scugog and Expansion Options

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to continue cart-based collection of garbage permanently in the following two pilot project collection areas as described below, at a one-time cost not to exceed \$25,000, exclusive of taxes, to be funded from the approved 2025 Solid Waste Management Business Plans and Budget:
- i) the pilot in the Township of Scugog to continue until the current solid waste collection contract (C003008) ends on March 31, 2028. After this date, a new contract utilizing fully automated waste collection equipment will commence; and
 - ii) the pilot in the Town of Ajax to continue until the current solid waste collection contract (C003326) ends on June 30, 2030. Following this, a new solid waste collection contract utilizing fully automated waste collection equipment will commence;

-
- B) That 2026 pre-budget approval be granted and staff be authorized to negotiate amendments to Contracts C003008 and C003326 to expand the cart-based collection of garbage and organics to include Tuesday, Wednesday and Thursday collection routes effective January 1, 2026, to optimize the use of the cart-based collection vehicle used in the current pilot area at an estimated one-time cost of \$504,000 for the purchase of the carts and incremental annual operating costs not to exceed \$30,000;
- C) That financing in the amount of \$534,000 be approved as follows:
- i) \$504,000 for the purchase of the carts from the Solid Waste Management Reserve Fund;
 - ii) \$30,000 for operating costs from the 2026 property tax levy.
- D) That staff be directed to continue investigating and report back on the financial and logistical implications of expanding cart-based waste collection operation to the remaining households in the Town of Ajax and the City of Pickering in the fall of 2025; and,
- E) That all changes necessary to enact changes related to Recommendations A) and B) be made subject to the satisfaction of the Commissioner of Works and the Commissioner of Finance.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to provide an update to Regional Council on the feasibility and costs to extend the Automated Cart Pilot Program in the Town of Ajax and Township of Scugog pilot locations, and the estimated costs to expand automated cart collection beyond these pilot locations.

2. Background

- 2.1 At the March 5, 2025, meeting, Works Committee received Report [#2025-WR-2](#) that provided an update on the Region's Automated Cart Pilot (Pilot) and recommended that the Region adopt an automated cart collection system for garbage and organics when new collection contracts are tendered.

- 2.2 Collection services for the Municipality of Clarington and Townships of Scugog, Uxbridge and Brock (C003008) will be procured in 2025 for an April 1, 2028, start date, with the City of Pickering and Town of Ajax collection contract (C003326) following with a July 1, 2030, start date.
- 2.3 Two-year lead time is required for waste collection contracts to allow the successful contractor time to purchase new collection vehicles.
- 2.4 Based on the success of the Pilot, Works Committee added a recommendation to the report directing staff to "investigate and report back on the feasibility and costs of continuing the current pilot program in the Town of Ajax and the Township of Scugog locations, as well as inquiring what the costs would be to expand the pilot program to the rest of the Region's waste collection areas within the existing contractual framework(s)."
- 2.5 Regional Council approved the amended report at its meeting of March 26, 2025.

3. Previous Reports and Decisions

- 3.1 Report [#2025-WR-2](#) titled "Update on the Automated Cart-Based Garbage Collection Pilot Project and Future Waste Collection Contract Delivery" provided an update on the Automated Cart Pilot and made recommendations to transition to automated cart collection for garbage and organics when new collection contracts were tendered.
- 3.2 Report [#2024-WR-4](#) titled "Proposed Automated Cart-Based Garbage Collection Pilot Project" authorized staff to undertake and Automated Cart Collection Pilot to assess the health and safety and operational impacts of residential automated cart collection. The pilot commenced in July 2024.

4. Pilot Extension and Expansion Options

- 4.1 After approval of the report at Regional Council, staff approached the current contractor to request costing to continue the Pilot to the end of 2025.
- 4.2 The current pilot project includes borrowing a fully automated waste collection vehicle from another municipality on Fridays where the truck is brought to Durham Region early on Friday mornings to complete the pilot project collections, then it returns to its normal municipality midday to complete its work on Friday afternoons. This arrangement satisfied the need for the pilot on a temporary basis, but it is not sustainable in the long term.

- 4.3 The interim solution to satisfy Council's request to continue cart-based waste collection until new waste collection contracts employing fully automated waste collection are implemented, is to retrofit cart tipping equipment onto existing waste collection vehicle and to proceed with semi-automated waste collection. Semi-automated waste collection differs from fully automated in that it requires the driver to exit the vehicle and manually position a cart onto a tipping device and then activate the tipping device which tips the cart to empty its contents into the collection vehicle. In fully automated waste collection, this operation is done from inside the cab by the driver manipulating a joystick which actuates a robotic arm to pick up and empty the cart. Semi-automated waste collection is slower than manual waste collection and this impacts on the operating cost of the operation.
- 4.4 The three available options to continue and expand the Pilot are outlined below;
- a. **Option One** – Continue current pilot project on a permanent basis
 - The current practice of borrowing a fully automated waste collection vehicle on Fridays from another municipality is not sustainable. Therefore, the contractor will retrofit one existing rear-loading collection truck with two tote tippers to allow for the continuation of the current pilot project on a permanent basis.
 - Option One involves the cost of equipment and labor to retrofit a vehicle currently in use for the Region collection contract to allow the continuation of the Pilot on the two collection routes for semi-automated collection of garbage only.
 - There is an additional cost to provide organics carts for semi-automated collection in the Pilot area. Under Option One only the waste would be collected using the semi-automated carts. Organics would be collected via the existing program.
 - b. **Option Two** - Retrofit the vehicle from Option One and use it on all collection days (Tuesday – Friday) to expand the semi-automated cart collection beyond the Pilot area;

- Maximizes the use of the tipping equipment on the retrofitted collection vehicle, enabling the additional testing of collection conditions in different areas. This includes potentially harder to service areas, depending on routing and collection scheduling.
 - Homes in the expansion area would require carts for garbage that would be provided by the Region. As a result, these homes will not need carts during the larger system rollout.
 - To incorporate semi-automated collection for organics, additional organics carts compatible with semi-automated collection would be required for every household on the Pilot and expansion routes.
 - One retrofitted vehicle allows for the expansion of the Pilot in one Tuesday, Wednesday, Thursday and Friday collection route, but does not allow all homes the Region services to receive semi-automated collection.
- c. **Option Three** – The conversion of the entire existing Ajax and Pickering collection contract (Contract C003326) to semi-automated collection. The logistical and operating cost implications for this option are still under investigation and staff will report back on operational and financial impacts in the fall of 2025.

5. Financial Implications

5.1 Table 1 outlines the cost implications for options One and Two.

Table 1: Pilot Extension and Expansion Cost Estimates

Option	2025 Cost	Capital Cost Estimate	Annual Operating Cost Estimate
Option One – Continue Pilot unchanged on Fridays	\$25,000	N/A	N/A
Option Two – Expand Pilot to	N/A	\$280,000 for garbage carts	Up to \$30,000

Option	2025 Cost	Capital Cost Estimate	Annual Operating Cost Estimate
three additional collection days and include organics to maximize use of truck with tippers (semi-automated)		\$224,000 for organics carts	
Option Three – Conversion of Ajax/Pickering contract to semi-automated collection	N/A	To be reported to Council once determined	To be reported to Council once determined

- 5.2 To continue semi-automated cart collection in the original Pilot areas, the cost to retrofit a vehicle with automated tippers is estimated at \$25,000 and can be accommodated within the approved 2025 Solid Waste Management Service budget.
- 5.3 Advancing rollout to additional pilot areas (Option #2) effective January 1, 2026 requires funds to purchase bins and address impacts to operational efficiencies. The estimated costs are approximately \$504,000 for carts and annual increased collection operating costs not to exceed \$30,000. Pre-budget approval for these incremental costs would be required and are proposed to be funded as follows:
- \$504,000 for the purchase of the carts from the Solid Waste Management Reserve Fund
 - \$30,000 for operating costs from the 2026 property tax levy
- 5.4 Although the recommendation has an incremental financial impact, there is significant value to the corporation to continuing to collect information from the pilot areas in terms of compositional data and to develop communication materials for future roll outs. Additionally, any carts purchased during pilot program expansion will reduce the number required during full program implementation.

- 5.5 Expanding the entire existing Ajax and Pickering collection contract (Contract C003326) to semi-automated collection the Pilot beyond three additional days of collection routes (option #3) may incur additional operating costs, which have not been determined at the writing of this report and would be subject to separate approval.
- 5.6 The benefits of increased time efficiency for collection, reduced health and safety incidences for drivers and reduced identified labour costs associated with fully automated waste collection will not be realized until the current collection contracts are rebid and the fully automated collection fleet for collections is delivered.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:

Connected and Vibrant Communities

- C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.

Environmental Sustainability and Climate Action

- E4. Lead the transition to sustainable living through waste management, diversion, and the circular economy.

Strong Relationships

- S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

- 6.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:

- Processes: Continuously improving processes to ensure we are responsive to community needs.
- Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

7. Conclusion

- 7.1 There are three options available to the Regional Municipality of Durham to accommodate Regional Council's request for an extension and expansion of the Automated Cart Waste Collection Pilot.
- 7.2 Staff recommends proceeding with the first option at this time and to report back on the logistical and financial implications of the remaining options in the fall of 2025.
- 7.3 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 7.4 For additional information, contact: Andrew Evans, Director Waste Management Services, at 905-668-4113 extension 4102.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-19
Date: June 4, 2025

Subject:

Approval of Unbudgeted Capital Work and Related Financing to Undertake the Detailed Design and Construction, and Sole Source Award to Stantec Inc. for Engineering Design Services for a 600 mm Zone 3 Feedermain on Columbus Road, in the Town of Whitby

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That unbudgeted capital work in the amount of \$9,200,000* for the detailed design and construction of the 600 mm Zone 3 feedermain on Columbus Road from Cedarbrook Trail to Country Lane, in the Town of Whitby, be approved;
- B) That financing for the unbudgeted capital work for the detailed design and construction of the Zone 3 feedermain on Columbus Road, in the Town of Whitby, be provided from the following water supply development charge reserve funds:

Residential	\$8,519,200
Commercial	266,800
Industrial	349,600
Institutional	<u>64,400</u>
Total	<u>\$9,200,000</u>

- C) That staff be authorized to negotiate and enter into a sole source agreement with Stantec Inc. to provide detailed design services for the feedermain design, for an amount not to exceed \$300,000 included in the estimated project cost; and
 - D) That the Commissioner of Finance or designate be authorized to execute the necessary documents related to the sole source agreement.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain Regional Municipality of Durham (Region) Council approval for funding for unbudgeted capital work for detailed design and construction of the 600 mm Zone 3 feedermain on Columbus Road, in the Town of Whitby.
- 1.2 All dollar amounts contained in this report are before applicable taxes.

2. Background

- 2.1 The widening of Columbus Road across Brooklin from a two-lane rural road to a four lane urbanized road has been identified as an important project required to service the Brooklin expansion areas, which were incorporated into the Region's Official Plan through the Regional Official Plan Amendment (ROPA) 128 in 2013.
- 2.2 Columbus Road is a Town of Whitby (Whitby) owned road. The first phase of this widening has been identified by Whitby as the 1.7km section from Cedarbrook Trail to Country Lane. Refer to Attachment #1 for a location map of the approximate project limits.
- 2.3 The Ministry of Infrastructure recently awarded the Town of Whitby a \$20 million grant under the Housing-Enabling Core Servicing (HECS) funding stream, for the design and construction of the widening and urbanization of Columbus Road in this area.
- 2.4 The HECS grant is contingent upon construction of the project being completed by no later than March 31, 2028. To meet the HECS prescribed deadline, construction tenders must be completed by Quarter 4, 2025. These dates are earlier than the Region's previously planned timeline for the Zone 3 feedermain.

- 2.5 The Development Charge Background Study includes a 600- millimeter (mm) diameter Zone 3 feedermain though the entire length of the Town of Whitby project. The Region had initially planned to construct this feedermain in conjunction with the road works, with funding approval projected in the 2026 Water Supply Capital Forecast as part of the 2026 Business Plans and Budget. However, to align with Whitby's HECS funding timelines, these funds are required one year earlier. The Zone 3 feedermain will facilitate the construction of up to 10,000 new residential units in the Town of Whitby.
- 2.6 In addition to the Development Charge feedermain project, the construction will also include local sanitary sewers and watermain. These local works will be funded by developers through normal servicing agreement arrangements. Council has granted staff delegated authority to enter into these servicing agreements.
- 2.7 Stantec Inc. has been providing all the design services for the Town of Whitby's road works as well as the local sanitary sewer and watermain works that are being funded by the benefitting developers. Stantec Inc. was awarded the original design contract for Columbus Road through the Town's standard public procurement process.

3. Previous Reports and Decisions

- 3.1 There are no previous reports or decisions.

4. Unbudgeted Capital Feedermain and Sole Source Justification

- 4.1 Whenever possible, staff work to align Regional infrastructure construction with area municipal road construction projects. This coordination minimizes public disruption and offers a significant cost savings to the Region.
- 4.2 This Zone 3 feedermain project has always been planned to coincide with the Whitby's road reconstruction project, which was previously forecasted for 2026.
- 4.3 The Town of Whitby has successfully secured a \$20 million HESC grant, however, the terms of this grant require an accelerated project schedule with tendering in 2025. Regional approval for the design and construction of the Zone 3 feedermain on Columbus Road in the Town of Whitby and associated financing is required in advance of the Region's 2026 Water Supply Capital Budget to be included with the Town of Whitby's tendering of this project.

- 4.4 Whitby's road project design is approaching 90 per cent completion and is being prepared by Stantec Inc. Stantec Inc. is best positioned to add the feedermain design to the road design drawings with minimal effort. The Region has previously worked with Stantec Inc. on feedermain designs.

5. Financial Implications

- 5.1 The financing for the unbudgeted capital work for the detailed design and construction of the Zone 3 feedermain on Columbus Road, in the Town of Whitby, can be provided from the following water supply development charge reserve funds:

Residential	\$8,519,200
Commercial	266,800
Industrial	349,600
Institutional	<u>64,400</u>
Total	<u>\$9,200,000</u>

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:
- a. Connected and Vibrant Communities
 - C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.
 - C4. Improve road safety, including the expansion and connection of active transportation networks to enhance the range of safe mobility options.
 - b. Strong Relationships
 - S3. Collaborate across local area municipalities, with agencies, non-profits, and community partners to deliver co-ordinated and efficient services.
 - S4. Advocate to the federal and provincial government and agencies to advance regional priorities.

6.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:

- a. Processes: Continuously improving processes to ensure we are responsive to community needs.

7. Conclusion

7.1 Staff recommends the approval of the award of the sole source agreement to Stantec for Engineering Services and for the unbudgeted capital works to complete the detailed design and construction of the Zone 3 feedermain on Columbus Road west, in the Town of Whitby.

7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.

7.3 For additional information, contact: Paul Gillespie, Manager of Development Approvals, at 905-668-4113 extension 3443.

8. Attachments

Attachment #1: Location plan

Respectfully submitted,

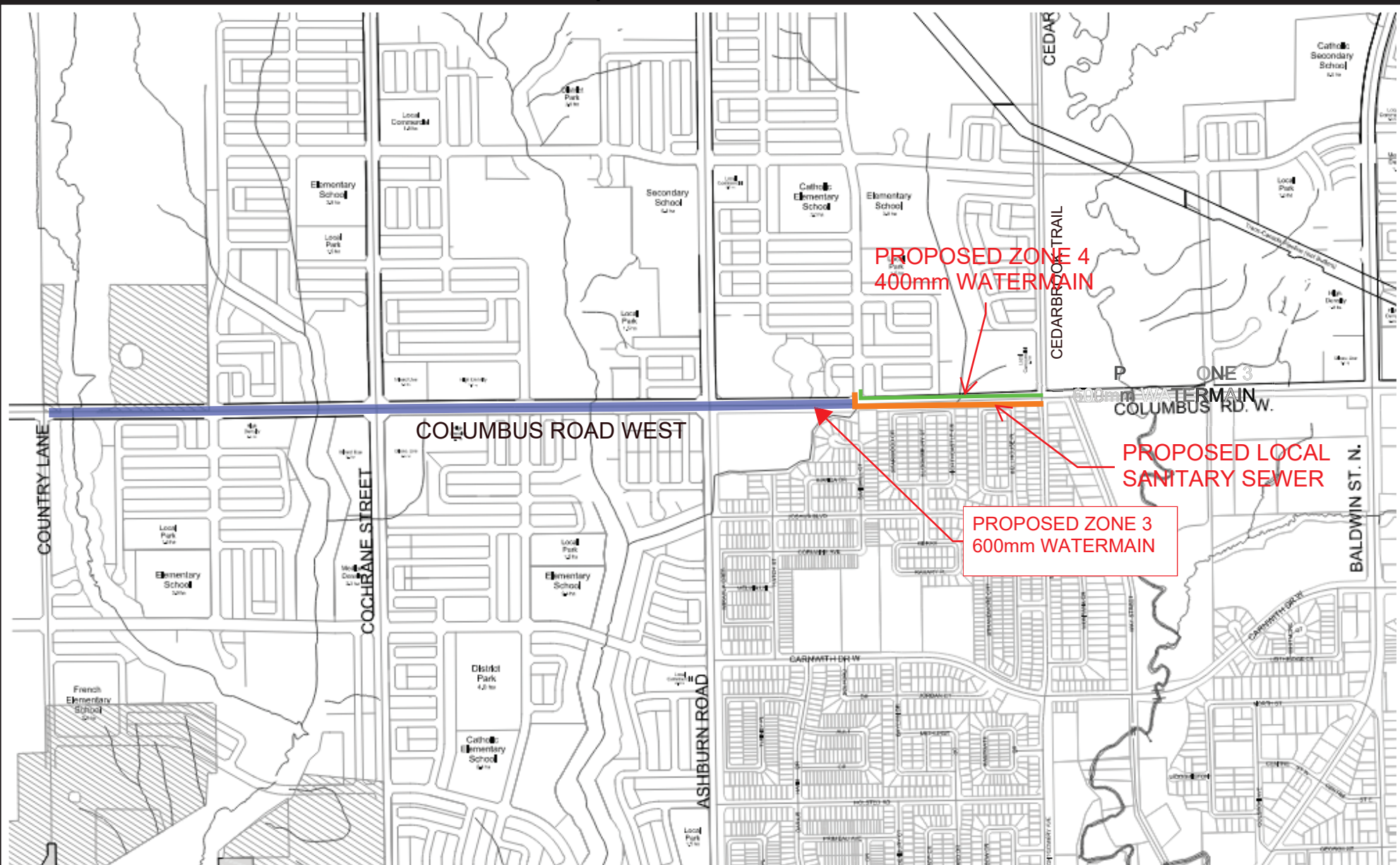
Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



Attachment #1

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-20
Date: June 4, 2025

Subject:

Approval to Award a Sole Source Agreement to SNF Canada for the Purchase of Anionic Powder Polymer for Enhanced Total Phosphorus Removal at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to negotiate and award the sole source purchase of anionic powder polymer from SNF Canada for the purpose of enhanced total phosphorous removal at the Duffin Creek Water Pollution Control Plant, with terms not to exceed three years;
- B) That financing for the sole source purchase be provided from the approved 2025 Sanitary Sewerage Operations Budget for the Duffin Creek Water Pollution Control Plant and future years Business Plans and Budgets. The estimated three-year total cost is \$750,000* or \$250,000* annually; and
- C) That the Commissioner of Finance be authorized to execute the necessary sole source agreement for supply of anionic powder polymer.

Report:**1. Purpose**

- 1.1 The purpose of this report is to seek Regional Municipality of Durham (Region) Council approval to award a sole source agreement for the supply of anionic powder polymer to SNF Canada for enhanced total phosphorous removal at the Duffin Creek Water Pollution Control Plant (WPCP).
- 1.2 Dollar amount followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 One of the recommendations in an Environmental Study Report issued in 2013 as part of the Duffin Creek WPCP Outfall Class Environmental Assessment (Class EA) was to optimize the existing secondary treatment processes to enhance phosphorous removal. This resulted in the subsequent development from 2016-2019 of a Phosphorous Reduction Action Plan (PRAP) for the Duffin Creek WPCP, which identified the addition of anionic powder polymer to the treatment process as a supplementary chemical to improve phosphorus removal.
- 2.2 The PRAP study included field trials, for which the engineering consultant (Formerly CH2M Hill Canada; now Jacobs Canada) selected SNF Canada to supply the anionic powder polymer.
- 2.3 The results and recommendations of the PRAP study were reviewed by the Ministry of the Environment, Conservation and Parks (MECP); as well as by the Duffin Creek WPCP Advisory Committee, which was comprised of stakeholders from the local conservation authority, local environmental interest groups, and local area municipalities in York and Durham Regions.
- 2.4 Following the positive results of the PRAP study, capital upgrades were implemented at the Duffin Creek WPCP from 2020 through 2024 to enable the addition of anionic powder polymer to the treatment process. SNF Canada continued to be the supplier of anionic powder polymer during the capital upgrades.
- 2.5 Field trials to evaluate potential alternative suppliers of anionic powder polymer were not feasible during the PRAP capital upgrades since a significant amount of coordination is required between the contractor and plant operations to maintain

compliance during a construction project, and the introduction of field trials would have increased the risk of experiencing non-compliance events.

- 2.6 In 2024, an additional capital project was initiated that involves significant rehabilitation of the existing secondary treatment processes at the Duffin Creek WPCP, and this construction is expected to continue until 2027. An evaluation of alternative anionic powder polymers will not be possible during these capital upgrades due to the increased risk of experiencing non-compliance events.
- 2.7 To mitigate the risk to regulatory compliance requirements and to the treatment process conditions, it is recommended that SNF Canada continue to supply anionic powder polymer to the Duffin Creek WPCP until the end of 2027 when the current capital upgrades are expected to be complete. Field trials to evaluate the compatibility of potential alternative anionic powder polymers can be undertaken by prospective vendors following completion of these capital upgrades, and then a tender developed and issued for the supply of anionic powder polymer to the Duffin Creek WPCP.

3. Previous Reports and Decisions

- 3.1 In August 2024 a sole source purchase request was approved for the supply of anionic powder polymer from SNF Canada to the Duffin Creek WPCP.

4. Rationale for Sole Source

- 4.1 An absence of anionic polymer powder from the treatment process during wet weather or high flow events at the Duffin Creek WPCP could result in process disruptions, increased costs and risk of non-compliance.
- 4.2 SNF Canada has successfully supplied anionic polymer powder to the Duffin Creek WPCP for approximately 10 years, and they are currently the only vendor who can ensure that their anionic powder polymer is compatible with the treatment process conditions at the Duffin Creek WPCP. Once the ongoing capital construction projects at the WPCP are completed in 2027, prospective vendors will be able to evaluate the compatibility of alternative anionic powder polymers by undertaking field trials.
- 4.3 The current vendor, SNF Canada, was originally selected by the engineering consultant for the PRAP study. The results and recommendations of the PRAP study were reviewed by the MECP and by the Duffin Creek WPCP Advisory Committee.

5. Financial Implications

- 5.1 The Region's Purchasing Bylaw #16-2020 permits the acquisition of goods and services through sole source negotiations under specific circumstances outlined in Appendix "C" of the by-law. Section 1.1 of Appendix "C" permits negotiations for goods or services that can be supplied only by a particular supplier where no reasonable alternative or substitution of goods or services exist to ensure compatibility with existing goods or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative. The by-law also requires approval by the appropriate standing committee and Council for the award of sole source contracts that exceed \$100,000 in value.
- 5.2 The sole source agreement will be funded from the 2025 approved Sanitary Sewerage Operations Budget and future years Business Plans and Budget at an estimated annual cost of \$250,000 from 2025 to 2027. The total estimated cost over the three-year period is \$750,000, with costs to be shared proportionally between the Regional Municipalities of Durham and York based on utilization as follows:

Durham Region Share (17.2%) User Rate	\$129,000
York Region Share (82.8%)	<u>\$621,000</u>
Total Upset Limit	<u>\$750,000</u>

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Prepare for and respond to severe weather impacts.
 - b. Respect the natural environment, including greenspaces, waterways, and agricultural lands.
 - c. Collaborate for a seamless service experience.

7. Conclusion

- 7.1 It is recommended the Regional Municipality of Durham enter into a sole source agreement with SNF Canada Limited for the supply and delivery of anionic powder polymer to the Duffin Creek WPCP for a three-year term at an estimated contract value of \$750,000.
- 7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendations.
- 7.3 For additional information, contact Rich Tindall, Manager, Water and Wastewater Treatment, at 905-668-4113 extension 3547 or Mike Hubble, Director Environmental Services, at 905-668-7711 extension 3460.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-21
Date: June 4, 2025

Subject:

Approval for Additional Financing for the Carruthers Creek Sanitary Sewage Pumping Station Odour Control System Upgrades Project, in the Town of Ajax

Recommendations:

That Works Committee recommends to Regional Council:

- A) That additional financing in the amount of \$2,000,000 for Odour Control Upgrades at the Carruthers Creek Sanitary Sewage Pumping Station (SSPS) located in the Town of Ajax, be approved; and
- B) That financing for the project be provided as follows:

Previously Approved Financing

2025 Sanitary Sewerage Capital Budget

Carruthers Sanitary Sewage Pumping Station - Odour Control System
Upgrades, Project ID: D2523

User Revenue	<u>\$1,000,000</u>
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Total Previously Approved Financing	<u>\$1,000,000</u>
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Additional Financing

2025 Sanitary Sewerage Capital Budget, Item #193:

Michael Blvd. Sanitary Sewerage Pumping Station - replacement of the Motor Control Centre (MCC) and pump, Whitby (Project ID: D1832)	
User Revenue	<u>\$1,800,000</u>
2025 Sanitary Sewerage Capital Budget, Item #185: Carruthers Sanitary Sewage Pumping Station - Standby Power Upgrades (Project ID: D2522)	
User Revenue	<u>\$200,000</u>
Total Additional Financing	<u>\$2,000,000</u>
Total Revised Project Financing	<u>\$3,000,000</u>

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain approval for additional financing for capital work for the Odour Control Upgrades at Carruthers Creek Sanitary Sewage Pumping Station (SSPS) in the Town of Ajax.

2. Background

- 2.1 The Regional Municipality of Durham is undertaking upgrades at the Carruthers Creek SSPS in the Town of Ajax.
- 2.2 CIMA Canada Inc. (CIMA) was retained by the Region to provide engineering services for detailed design of the upgrades.
- 2.3 During construction, it was discovered that the fan used to ventilate the wet well space for entry was not operating correctly. This fan was subsequently repaired.
- 2.4 Following repair of the fan, the Region began receiving odour complaints from residents. Odour complaints started August 14, 2024, and are ongoing.
- 2.5 A petition signed by fifteen (15) residents relating to the odour issues was also submitted to the Region on September 26, 2024.
- 2.6 The Region met with residents and committed to investigate and address the odours complaints.

- 2.7 Meetings with Ministry of Environment, Conservation and Parks (MECP) were also held on October 3, 2024, and November 15, 2024.
- 2.8 Odour monitoring and sampling was performed in October 2024. Results from the odour investigation confirmed the presence of hydrogen sulfide and odours at the perimeter of the facility.
- 2.9 Following sampling of the odours, CIMA prepared a technical memorandum to provide a review of the odour issue against available technology, and recommended a preferred solution, which identified activated carbon as the preferred technology to be implemented.
- 2.10 CIMA has recommended a construction budget of \$3,000,000, including contingency for the Odour Control Upgrade project.
- 2.11 The recommended odour control system equipment and installation will be competitively procured.
- 2.12 The Region has committed to MECP and residents that the odour control system will be implemented as soon as possible.

3. Financial Implications

- 3.1 Section 17.1 of Durham Region's Budget Management Policy states that the approval of the applicable Standing Committee and Regional Council for the reallocation of capital funding exceeding \$250,000.
- 3.2 Financing for Odour Control Upgrades at the Carruthers Creek Sanitary Sewage Pumping Station in the Town of Ajax in the amount of \$3,000,000 will be provided from the following sources:

Previously Approved Financing

2025 Sanitary Sewerage Capital Budget

Carruthers Sanitary Sewage Pumping Station - Odour Control System
Upgrades, Project ID# D2523

User Revenue	<u>\$1,000,000</u>
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Total Previously Approved Financing	<u>\$1,000,000</u>
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Additional Financing

2025 Sanitary Sewerage Budget Item #193: Michael Blvd. Sanitary Sewerage Pumping Station

- replacement of the Motor Control Centre (MCC) and pump, Whitby (Project ID: D1832)

User Revenue \$1,800,000

2025 Sanitary Sewerage Budget Item #185: Carruthers Sanitary Sewage Pumping Station

- Standby Power Upgrades (Project ID: D2522)

User Revenue \$200,000

Total Additional Financing \$2,000,000

Total Revised Project Financing **\$3,000,000**

- 3.3 Funding is available from these two deferred projects. Funding for the deferred projects will be included in the 2026 Business Plans and Budget.

4. Relationship to Strategic Plan

- 4.1 This report aligns with/addresses the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:

a. Connected and Vibrant Communities

- C7. Create accessible, lively, and culturally welcoming public spaces, including opportunities to access nature.

b. Environmental Sustainability and Climate Action

- E4. Lead the transition to sustainable living through waste management, diversion, and the circular economy.
- E5. Respect the natural environment, including greenspaces, waterways, and agricultural lands.

c. Strong Relationships

- S1. Enhance inclusive opportunities for community engagement and meaningful collaboration.
- S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

- 4.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:
- a. Processes: Continuously improving processes to ensure we are responsive to community needs.
 - b. Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

5. Conclusion

- 5.1 Staff recommends that Additional Financing of \$2,000,000 for implementation of Odour Control Upgrades at the Carruthers Creek Sanitary Sewage Pumping Station (SSPS), located in the Town of Ajax, be approved.
- 5.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 5.3 For additional information, contact Mike Hubble, Director Environmental Services, at 905-668-4113 extension 3460 or Sorin Manta, Manager, Engineering Support, at 905-668-4113 extension 3840.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-22
Date: June 4, 2025

Subject:

Sole Source Procurement of Engineering and Field Services, and Filter Media and Stainless Steel Underdrain Equipment System, for the Oshawa Water Supply Plant, located in the City of Oshawa

Recommendations:

That Works Committee recommends to Regional Council:

- A) That staff be authorized to award a sole source contract to Anthratch Western Inc. (AWI) for the provision of engineering and field services for the supply of a Design Package and equipment for the new granular filter media and a custom engineered stainless steel underdrain system for Filters 1-4 in plant 2 at the Oshawa Water Supply Plant (WSP), located in the City of Oshawa, in the amount of \$2,900,000*, to be financed from within the approved project budget; and
 - B) That the Commissioner of Finance be authorized to execute the applicable agreements.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to seek Regional Municipality of Durham (Region) Council approval to award a sole source contract with Anthratch Western Inc.

(AWI) for engineering and field services for the design and supply of new granular filter media and a custom engineered stainless steel underdrain system for Filters 1-4 in plant 2 at the Oshawa WSP, in the City of Oshawa.

- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 In April 2023, the Commissioner of Works declared an emergency at the Oshawa Water Supply Plant (WSP) for the replacement and refurbishment of Filters 5 and 6 in Plant 2.
- 2.2 Works Committee Report #2023-W-22, approved by Regional Council on June 28, 2023, authorized financing of \$5,000,000 for unbudgeted capital work related to the Emergency project at the Oshawa WSP.
- 2.3 In July 2023, AWI was awarded a sole source contract to design, supply and install the stainless steel underdrains and specialized granular filter media for Filters 5 and 6 in plant 2. The works are estimated to cost approximately \$3,000,000* (Report #2024-W-16). This equipment is currently being installed under the Phase 1 works contract D2024-43 and will be commissioned by July 2026.
- 2.4 Filters 1 through 4 also require the underdrains to be replaced due to aging and operational challenges, to improve both the reliability of plant production and the water quality performance. The Provincial Government established the Housing Enabling Water System Fund (HEWSF) in the 2023 Fall Economic Statement and has committed funding over three years to support the repair, rehabilitation, and expansion of core water infrastructure to protect communities and enable new housing development.
- 2.5 On March 21, 2024, the Region was awarded funding for the completion of additional projects at the Oshawa WSP including Upgrades to Filters 1-4 in plant 2 and associated works which includes the supply of new media and underdrains proposed for sole sourcing in this report.

3. Justification for the Sole Source

- 3.1 Anthratech Western Inc. (AWI), headquartered in Calgary, has specialized in drinking water filtration technology and filter media design since 1977. They have a proven track record of installations of filter upgrades, retrofits and new

systems across Canada, the US and select international markets including Durham Region and other municipalities across the GTA and Southern Ontario. The Region has previously contracted AWI for the supply of new media and stainless steel underdrains for the rehabilitation of Filters 5 and 6 in plant 2 at the Oshawa WSP.

- 3.2 Since AWI products are already installed in connected Filters 5 and 6 at the Oshawa WSP, the Region proposes to award a sole source contract to AWI for the design, supply and installation of the new custom engineered stainless steel underdrains and specialized granular filter media for the remaining four filters. This will ensure consistent equipment installed across the entire facility.
- 3.3 AWI's Phoenix Underdrain System is a low-profile, gravel-less system which maximizes the volume of granular media for solids capture during filtration and the volume available for bed expansion to improve backwashing effectiveness. The media sizing and design needs to consider the quality of the water to be filtered (solids to be captured in the filter) as well as the system hydraulics (amount of pressure available to push water through the filter). The underdrain system is then custom designed so that only water and air is passing through the slots in the underdrain laterals with minimal resistance which reduces the pressure available to push water through the filter overall. These slots are precision machined so that the granular media is retained inside the filter box and does not travel downstream where it could damage other equipment such as pumps or valves transferring water to the distribution system. AWI has a long history of successful installations based on high quality design development and manufacturing processes based on a holistic understanding of granular media filtration design and operation.

4. Financial Implications

- 4.1 Section 7.2 of the Region's Purchasing By-law 16-2020 permits the sole sourcing of goods or services under specific circumstances, including where a change of supplier is not recommended due to compatibility/continuity concerns and cost impacts. The by-law requires Regional Council approval for any negotiated purchases of \$100,000 and greater in value.
- 4.2 The Region will be reviewing the HEWSF program to ensure that the reimbursement of funding applicable to this project is maximized.

- 4.3 Financing for the purchase of consulting services and equipment estimated at \$2,900,000* will be provided from within the following approved project budget:

Water Supply System Capital Budget

Oshawa Water Supply Plant Rehabilitation and Replacement - Phase 2:
Rehabilitation of the filters 1 to 4 and associated works for rehabilitation and
installation of second blower (Project ID: D2424)

Asset Management Reserve Fund \$1,000,000

Rate Stabilization Reserve Fund \$3,550,000

User Revenue \$200,000

Housing Enabling Water System Fund Grant \$7,560,812

Total Financing \$12,310,812

5. Relationship to Strategic Plan

- 5.1 This report aligns with/addresses the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:

a. Connected and Vibrant Communities

- C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.

b. Strong Relationships

- S3. Collaborate across local area municipalities, with agencies, non-profits, and community partners to deliver coordinated and efficient services.
- S4. Advocate to the federal and provincial government and agencies to advance regional priorities.
- S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

- 5.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:

- a. People: Making the Region of Durham a great place to work, attracting, and retaining talent.
- b. Processes: Continuously improving processes to ensure we are responsive to community needs.
- c. Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

6. Conclusion

- 6.1 It is recommended that Regional Municipality of Durham Council authorize a sole source contract with Anthratch Western Inc. for engineering and field services for the design and supply of new granular filter media and a custom engineered stainless steel underdrain system for Filters 1 to 4 in plant 2 at the Oshawa Water Supply Plant.
- 6.2 This report has been reviewed by the Legal Services Division – CAO Office and the Finance Department, and the Commissioner of Finance concurs with the financial recommendations.
- 6.3 For additional information, contact Mike Hubble, Director Environmental Services, at 905-668-4113 extension 3460 or Sorin Manta, Manager, Engineering Support, at 905-668-4113 extension 3840.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-23
Date: June 4 2025

Subject:

Tender Award, Additional Engineering Services and Additional Financing required for Regional Municipality of Durham Contract D2024-52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That the lowest compliant bid of BGL Contractors Corp, in the amount of \$14,145,000*, be awarded for Regional Municipality of Durham Contract #D2024-52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington;
- B) That contract amendment with R.V. Anderson Associates Ltd. (RVA) be authorized for consulting costs associated with additional engineering and contract administration services for the Bowmanville Water Supply Plant Upgrades project in the amount of \$970,112.57*, over the approved upset limit of \$1,750,656.41* for a revised upset limit not to exceed \$2,720,768.98*; and
- C) That the previously approved project budget of \$12,650,000 for Regional Municipality of Durham Project ID: D1814 / D1927 be increased by \$6,800,000 to a revised total project budget of \$19,450,000; and
- D) That the additional financing of \$6,800,000 be provided from the following sources:

Previously Approved Financing

Water Supply Capital Budget

Bowmanville Water Supply Plant - standby power and upgrading the uninterrupted power supply (UPS), Project ID: D1814

User Revenue \$9,350,000

Bowmanville Water Supply Plant - Disinfection upgrades, Project ID: D1927

User Revenue \$3,300,000

Total Previously Approved Financing \$12,650,000

Additional Financing

Item #175: Whitby Water Supply Plant - Plant 1 Upgrades and Rehabilitation Works Proposed works to include but not limit to building envelope improvements, filter treatment process upgrades, rehabilitation works for electrical, mechanical and process systems (Project ID: D2419)

Water Stabilization Reserve Fund \$6,800,000

Total Additional Financing \$6,800,000

Total Revised Project Financing **\$19,450,000**

Report:**1. Purpose**

1.1 The purpose of this report is to obtain approval from Regional Council for additional financing, contract amendment for additional engineering consulting services, and to award Regional Municipality of Durham (Durham) Contract D2024-52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington.

1.2 All dollar amounts contained in this report are before applicable taxes.

2. Project Background

2.1 The Bowmanville Water Supply Plant (WSP) is a 36,368 m³/d capacity conventional treatment facility which services the community of Bowmanville in the Municipality of Clarington.

2.2 The upgrade works required to be completed at the Bowmanville WSP include addition of an ultraviolet (UV) system for primary water disinfection, the

modification to the chlorine application points, the replacement of the main electrical switchboard, low lift and high lift MCCs and PLCs, replacing the existing back-up diesel generator system, and repurposing the existing diesel generator/fuel tank room into a new electrical room.

- 2.3 The plant currently faces operational challenges meeting disinfection requirements with chlorine. During the cold weather months, low Lake Ontario water temperatures make chlorine disinfection less efficient. Furthermore, due to the limited water storage volume in the reservoir at the plant, the existing primary disinfection process is vulnerable during periods of high-water demand due to a watermain break or fire event. The UV disinfection treatment system is being added at the plant to reduce the reliance on chlorine for disinfection and to increase the volume of water within the existing reservoir that can be counted on to be sent out to the distribution system during periods of high demand.
- 2.4 Additionally, there are other major operational and maintenance issues at the plant, summarized as follows:

- a) The amount of chlorine required to be applied to treat water is high, which results in accelerated aging of equipment within the plant.
- b) The plant's electrical system is aging and becoming obsolete, making it difficult to service because equipment vendors are no longer manufacturing parts required for maintenance and repairs.
- c) The existing diesel generator has limited capacity to service the existing plant, and the additional load required for the UV system requires that the diesel generator to be larger in electrical capacity.
- d) The fuel storage for the existing diesel generator is indoors. The proposed relocation of the fuel storage addresses compliance related improvements that would otherwise be required at the plant for the existing configuration.
- e) The plant has very limited space to store equipment. This condition is exasperated when there is construction work occurring at the plant. The plant infrastructure is aging and aside from the current Contract #D2024-52, future construction contracts are required at the plant for asset management and operational improvements. A Class Environmental Assessment is planned for 2026 for the eventual plant expansion.

2.5 Regional Contract #D2025-36 has been awarded for a new prefabricated storage building on the plant property that will be utilized by Operators to store surplus equipment and supplies. This Regional Contract is funded from the same project account.

2.6 Updates to major system components incorporated into this project will make the water supply system more resilient, mitigate compliance related risks during the winter months and extend the overall life of the plant.

2.7 Contract #D2024-52 is one of several projects required to secure the existing WSP capacity, maintain the WSP in a state of good repair, optimize water storage at the WSP and position the WSP to ultimately increase capacity to a projected 55,000 m³/d. These projects are collectively significant to address both prudent asset management and urban growth demands for the serviced area in the Community of Bowmanville. It is paramount that these projects are implemented in a strategically sequenced and timely manner to enable the Bowmanville water distribution system to continue to serve existing and future customers. These projects include but are not limited to the following:

Bowmanville WSP

- A. Bowmanville WSP Filter Rehabilitation and Underdrain Replacement anticipated to be undertaken in 2029 after Contract #D2024-52 is completed. This is an important asset management project that requires all work within #D2024-52 to be completed first. This scope of #D2024-52 also needs to be completed before the WSP can undergo the construction of any future expansion work.
- B. Staff plan to hire a Consultant to initiate a Municipal Class Environmental Assessment (MCEA) in 2026 for the expansion of the Bowmanville WSP to increase capacity to 55,000 m³/d, which is required to support future development within Bowmanville. It is estimated that the MCEA will take two years to complete, and that detailed design will take three years to complete, after which construction of the expansion could be started.

Other Bowmanville Water Distribution Facilities

- C. Concession Street Zone 2 Pumping Station Upgrades, Contract #D2022-46, is currently under construction and scheduled to be commissioned by the end of 2025.
- D. Liberty Street Zone 1 Reservoir and Zone 2 Pumping Station, Contract #D2024-25, currently being awarded to a Contractor and target schedule is for commissioning by the end of 2027.
- E. Decommissioning of the existing elevated storage tank in downtown Bowmanville, is anticipated to be undertaken in 2028 after the Zone 1 Reservoir and all phases of the new Zone 1 Feedermain are put into service. (estimated 2028)
- F. Staff plan to hire a Consultant and to initiate a MCEA for the Bowmanville Zone 2 Reservoir Expansion from 9ML to 18ML in 2026. It is estimated that the MCEA will take 2 years to complete, and that detailed design will take 3 years to complete, after which construction of the expansion could be started. This work will be planned to be delivered to meet the needs of development.

Conveyance Improvements

- G. Bowmanville Zone 1 Feedermain Phase 1, Contract #D2023-33 (Lambs Road, Concession Street and Highway 2), construction was substantially

completed in Fall 2024.

- H. Bowmanville Zone 1 Feedermain Phase 2 Contract #D2024-62 (Liberty St from Pamela to Sydel Courts), is currently under construction and is scheduled to be completed by the end of 2025.
- I. Bowmanville Zone 1 Feedermain Phase 3 (part of Contract #D2025-29) (Liberty St from Pamela Court to Concession Road 3 150m east of Liberty St), is currently targeting a Fall 2025 construction start and is estimated to be completed by the end of 2026. This work is being implemented in concert with a major Regional Road reconstruction project.
- J. Bowmanville Zone 1 Feedermain Phase 4, Contract # to be determined, (Concession Road 3 150m east of Liberty St to Concession St E and Lambs Road intersection), is currently targeting a late 2026 construction start and is estimated to be completed by the end of 2027. This feedermain needs to be constructed for the Liberty St Zone 1 reservoir to be put into functional service and for the existing elevated tank to be decommissioned.
- K. Bowmanville Zone 2 Feedermain from Liberty St Zone 2 pumping station to the Zone 2 reservoir, Contract # to be determined and construction requires the Liberty Street Zone 1 Reservoir and Zone 2 Pumping Station to be in service. This work will be planned to be delivered to meet the needs of development potentially in 2029.

3. Tender Information Contract #D2024-52

- 3.1 Tenders for Regional Contract #D2024-52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington closed on Feb 18, 2025. The following four compliant bids were received:

Bidder	Total Tender Amount (excluding applicable taxes)
BGL Contractors Corp	\$14,145,000
Baseline Constructors Inc.	\$14,383,000
ASCO Construction (Toronto) Ltd.	\$14,435,914
Peak Construction Group Ltd.	\$15,601,900

- 3.2 The total approved budget for the project is \$12,650,000. The lowest compliant bid amount for the project plus consulting engineering and contract administration services, Regional internal costs, and contingencies total \$19,450,000. Therefore, the project will require additional financing of \$6,800,000. The difference between the tendered and budgeted amounts is due to the continued market volatility and uncertainty caused by supply chain issues, the volume of water and wastewater capital works projects being tendered by Municipalities across the province, cost increases for labour and equipment and increase in unit costs for materials such as diesel engine generators, electrical systems, stainless-steel pipe and fittings, and ultraviolet disinfection equipment.
- 3.3 It is recommended that the lowest compliant bidder, BGL Contractors Corp, be awarded Regional Contract #D2024-52.

4. Contract Amendment for RFP-1110-2020

- 4.1 The Bowmanville WSP Disinfection Upgrades project was originally scoped within Request for Proposal #1110-2020 issued for competitive bidding by the Regional Municipality of Durham (Region) in 2020. RVA was previously awarded the detailed design assignment for the work through the execution of a Consulting Services Agreement. The Terms of Reference (ToR) for RFP-1110-2020 and subsequent contract amendments were based on a total estimated construction duration of 14 months, with construction set to begin in 2022.
- 4.2 In 2024, RVA was directed by the Region to prepare a separate Contract package for the design and tendering of a prefabricated storage building on the plant site. The scope of work for the prefabricated storage building did not include contract administration and inspection services for the separate Contract.
- 4.3 The Region issued the tender documents for contract D2024-52 on December 23, 2024, and the tender was closed on February 19, 2025.
- 4.4 The current industry lead delivery times for specialized electrical power supply equipment required as part of the upgrades is up to two years after a purchase order is issued to an equipment vendor. This has had a major impact on the project schedule which is now extended to approximately 33 months from award with an estimated completion date of 2028.
- 4.5 Complexities in the design of the SCADA communications system has resulted in the need for additional design reviews and workshops which were required to

ensure a seamless integration with the existing plant processes and systems and will be required through the construction phase of the project.

- 4.6 As a result of the extension in the project schedule and the complexities involved with the design, an amendment to RFP-1110-2020 is required to allow the Region to continue to utilize the consultant's design and contract administration services for the project.
- 4.7 Retaining the services of RVA would ensure continuity of the capital project. Without this amendment the Region would need to coordinate multiple consultants resulting in additional time and resources, which would cause operational challenges as well as challenges during commissioning the work.
- 4.8 It is recommended that a contract amendment with RVA be approved for additional engineering and contract administration services outside of the original scope of work for the replacement of the existing electrical systems including standby power and associated instrumentation and control system upgrades in the amount of \$970,112.57*, over and above the approved upset limit of \$1,750,656.41* resulting in a revised upset limit not to exceed \$2,720,768.98*.

5. Financial Implications

- 5.1 Section 15.3 of Durham Region's Budget Management Policy states that the approval of the applicable Standing Committee and Regional Council for additional project financing requirements exceeding \$250,000 prior to the award of the applicable contract is required.
- 5.2 Section 17.1 of Durham Region's Budget Management Policy states that the approval of the applicable Standing Committee and Regional Council for additional project expenditures exceeding \$250,000 beyond project funding prior to the approval of the additional commitments.
- 5.3 Financing for the award of Regional Contract D2024-52 for the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington (Bowmanville) will be provided from the following sources:

Previously Approved Financing

Water Supply Capital Budget

Bowmanville Water Supply Plant - standby power and upgrading the

uninterrupted power supply (UPS), Project ID:D1814
 User Revenue \$9,350,000

Bowmanville Water Supply Plant - Disinfection upgrades, Project ID:D1927

User Revenue \$3,300,000

Total Previously Approved Financing \$12,650,000

Additional Financing

Item #175: Whitby Water Supply Plant - Plant 1 Upgrades and Rehabilitation Works Proposed works to include but not limit to building envelope improvements, filter treatment process upgrades, rehabilitation works for electrical, mechanical and process systems (Project ID:D2419)

Water Stabilization Reserve Fund \$6,800,000

Total Additional Financing \$6,800,000

Total Revised Project Financing \$19,450,000

- 5.4 The Whitby Water Supply Plant 1 Upgrades and Rehabilitation Works project (project ID:D2419) is being advanced while staff and consultants continue working on the deliverables for the project. The deliverables for that project are currently scheduled to be ready for tender issue in January 2026. Financing to offset the reallocated funding will be requested as part of the 2026 Business Plans and Budget process.

6. Previous Reports

- 6.1 On February 24, 2021, Regional Council approved [Report #2021-W-8](#) 'Project Update and Sole Source of Additional Engineering Services for Upgrades at the Bowmanville WSP, in the Municipality of Clarington'.

7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:

a) Connected and Vibrant Communities:

- C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.

b) Environmental Sustainability and Climate Action:

- E3. Prepare for and respond to severe weather impacts.

c) Strong Relationships:

- S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

7.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:

- Processes: Continuously improving processes to ensure we are responsive to community needs.
- Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

8. Conclusion

8.1 It is recommended that:

- a) Regional Council grant approval to award the Regional Municipality of Durham Contract #D2024-52 to the lowest compliant bidder, BGL Contractors Corp, the Bowmanville Water Supply Plant Disinfection and Electrical Upgrades in the Municipality of Clarington (Bowmanville).
- b) A contract amendment with RVA be approved for additional engineering and contract administration services outside of the original scope of work resulting in a revised upset limit not to exceed \$2,720,768.98*.
- c) Additional financing of \$6,800,000 be approved.

8.2 This contract is one of several projects required to secure the existing Bowmanville WSP capacity, maintain the WSP in a state of good repair, increase water storage capacity and ultimately increase the existing plant capacity to support future development. It is paramount that these projects are implemented in a strategically sequenced and timely manner. Any delays to any of these projects could impact the ability of the Bowmanville water distribution system to continue to serve existing and future residents and businesses.

- 8.3 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 8.4 For additional information, please contact Michael Harris, P.Eng., Manager, Water and Wastewater Infrastructure Design Division at 905-668-4113, extension 3458 or Dan Waechter, P. Eng., Director, Capital Projects Delivery at 905-668-4113, extension 3550.

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2025-W-24
Date: June 4, 2025

Subject:

Sole Source Procurement of Varec Biogas 244 Series Waste Gas Burner and Ignition System at Port Darlington Water Pollution Control Plant (WPCP) in the Municipality of Clarington

Recommendation:

That the Works Committee recommends to Regional Council that Regional staff be authorized to sole source the Varec Biogas 244 Series Waste Gas Burner through specifications in the contract tender documents for Plant 1 and Waste Gas Burner Upgrades at the Port Darlington Water Pollution Control Plant.

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain Regional Municipality of Durham (Region) Council approval for the sole sourcing of a Varec Biogas 244 Series Waste Gas Burner (WGB) unit through specifications in the contract tender documents for Plant 1 and WGB upgrades at the Port Darlington Water Pollution Control Plant (WPCP) in Bowmanville.

2. Background

- 2.1 The Water and Wastewater Infrastructure Design (WWID) Division of the Works Department's Capital Projects Delivery Branch is managing the capital project for the Plant 1 and WGB upgrades project at Port Darlington WPCP.

- 2.2 Surplus biogas generated by the digestion complex at the Port Darlington WPCP is burned off on-site by an existing waste gas burner. This practice is common to most of the Region's WPCPs.
- 2.3 The existing WGB at the Port Darlington WPCP was installed in 1981 under Contract D79-45 and it operates 24 hours per day, 7 days a week.
- 2.4 A condition assessment completed in 2019 identified that the existing WGB was corroded and was at the end of its service life. The recommendation was provided for it to be planned for replacement.
- 2.5 Furthermore, the open-flame design of the current WGB has led to public concerns and multiple false emergency calls to the Municipality of Clarington's Fire Department, further supporting the need for a replacement with a concealed flame unit.
- 2.6 The Region has planned and budgeted for a project to tender and construct a new enclosed WGB at the Plant. The Contract will involve replacing the existing WGB with a single-duty enclosed flare-type WGB, including all associated electrical and SCADA connections. The digester gas pipe running from the digestion complex to the WGB will also be replaced as part of this project.
- 2.7 The detailed design for the Contract is currently at the 60 per cent complete stage and tender documents are scheduled to be finalized in time for a Fall 2025 tender.
- 2.8 The WGB enclosure building needs to be designed to accommodate the specific make and model of a WGB product to finalize complete tender documents.
- 2.9 The Region's Design Consultant has evaluated multiple WGB products and has recommended for the Region to pre-select, and therefore effectively sole source, a Varec Biogas 244 Series WGB.
- 2.10 Refer to Attachment #1 for a picture of a typical Varec WGB installation.
- 2.11 There are several manufacturers that provide enclosed-flare WGBs capable of combusting digester gas. The following manufacturers were evaluated for this project:
- Varec Biogas
 - John Zink Hamworthy Combustion Technology

- Shand & Jurs, represented by Vector Process Equipment in Ontario
- Tornado Combustion Technologies

3. Previous Reports and Decisions

3.1 There have not been any previous reports and decisions applicable to this work.

4. Justification for the Sole Source

4.1 The Varec Biogas 244 Series WGB is recommended to be pre-selected for the Port Darlington WPCP site for the following reasons:

- a. Varec's WGB is not a temperature-controlled flare, which means it does not require operation at elevated temperatures for a specified retention time to ensure complete combustion. This is advantageous for the climatic conditions in the Region where temperatures can vary greatly during the course of a day. Therefore, the unit does not need to be enclosed in a temperature-controlled building, resulting in a simpler structural design for the enclosure and energy efficiencies, therefore both short- and long-term cost savings are achieved. The Region's Design Consultant has been unable to source an alternative WGB products that has this operating characteristic.
- b. Varec's design allows the unit to operate at a lower temperature while maintaining a high combustion efficiency. This eliminates the need for a refractory lining in the combustion chamber. Other manufacturers' designs require elevated temperatures for the burner to operate, therefore there is a need for refractory linings in the combustion chamber, which in turn, increases both health and safety risks for Operators for the inspection, maintenance and repair of these refractory linings. The Region's Design Consultant has been unable to source an alternative WGB product that has this operating characteristic.
- c. The venturi nozzle design used in the Varec WGB draws in air and mixes it with the gas before the fuel reaches the burner. The naturally aspirated air also cools the main chamber, further negating the need for a refractory lining, which can become a cumbersome maintenance item due to wear over time from thermal degradation, as noted above. The Region's Design Consultant has been unable to source alternative WGB products that have this operating characteristic.

- d. Other WGB manufacturers rely on motor-driven blowers and adjustable louvres to regulate airflow to the units within the buildings that they are contained in, adding to both operational and maintenance complexity of the building. The Varec WGB does not require these elements. The Region's Design Consultant has been unable to source an alternative WGB products that has this operating characteristic.
- 4.2 The Consultant for the project has evaluated different procurement options, including pre-selection and pre-purchase of the unit. It has been determined that there are no significant schedule benefits to pre-purchasing the WGB in advance of the general contract.
- 4.3 As such, it is recommended that the preferred procurement option for the WGB would be to sole source the unit through the tendered contract specifications. This method will facilitate the integration of the unit into the final design, allow for an expedited review of shop drawings during construction and therefore equipment manufacturing can begin promptly after shop drawing approval, thus expediting the construction schedule.
- 4.4 Process mechanical, electrical, civil, and structural drawings and specifications will be developed using Varec's preliminary submittal package, ensuring that design requirements specific to Varec are integrated into the final Contract drawings and specifications.
- 4.5 Varec is based in California and does not have a Canadian manufacturing location. However, Westech Industrial, the distributor representing Varec for technical and sales support, is located in London, Ontario.

5. Financial Implications

- 5.1 Section 7.2 of the Region's Purchasing By-Law #16-2020 permits the acquisition of goods and services through sole source negotiations under specific circumstances outlined in Appendix 'C'. Section 1.1 of Appendix 'C' permits negotiations for goods or services to be supplied only by a particular supplier if no reasonable alternative or substitute goods exist due to the absence of competition for technical reasons.
- 5.2 The Region's Purchasing By-law also requires Regional Council approval for any negotiated purchases of \$100,000 and greater in value.

- 5.3 The Vendor, Westech Industrial, has provided a quotation in March 2025 for a Varec Biogas 244 Series WGB unit at approximately \$800,000 (CAD).
- 5.4 The Varec Biogas 244 Series WGB unit will be specified as the required WGB product in the Contract specifications at the time of tendering the Construction Contract.

6. Relationship to Strategic Plan

- 6.1 This report aligns with the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:
- a. Connected and Vibrant Communities
 - C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.
 - b. Environmental Sustainability and Climate Action
 - E1. Reduce corporate greenhouse gas emissions to meet established targets.
 - c. Strong Relationships
 - S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.
- 6.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:
- a. Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

7. Conclusion

- 7.1 It is recommended that Staff be authorized to sole source the Varec Biogas 244 Series Waste Gas Burner (WGB) through the contract tender documents for Plant 1 and WGB upgrades at the Port Darlington Water Pollution Control Plant (WPCP).
- 7.2 This Report has been reviewed by the Finance Department, and the Commissioner of Finance concurs with the financial recommendations.

7.3 For additional information, contact: Michael Harris, Manager, Water and Wastewater Infrastructure Design Division, at 905-668-4113 extension 3458.

8. Attachments

Attachment #1: Representative Varec Biogas Waste Gas Burner Installation

Respectfully Submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer



Attachment 1 – Representative Varec Biogas Waste Gas Burner Installation

(Source www.varec-biogas.com/244w-waste-gas-burner-ignition-system)