



The Regional Municipality of Durham

Works Committee Agenda

Lower Level Boardroom (LL-C)
Regional Headquarters Building
605 Rossland Road East, Whitby

Wednesday, September 7, 2022

9:30 AM

Note: This meeting will be held in a hybrid meeting format with electronic and in-person participation. It is encouraged that members of the public [view the Committee meeting](#) via live streaming, instead of attending the meeting in-person. If in-person attendance is required, arrangements must be made by emailing clerks@durham.ca prior to the meeting date.

1. Roll Call

2. Declarations of Interest

3. Adoption of Minutes

A) Works Committee meeting – June 8, 2022

Pages 4 - 16

4. Statutory Public Meetings

There are no statutory public meetings

5. Delegations

There are no delegations

6. Presentations

6.1 Andrew Evans, Manager of Waste Services, and Angela Porteous, Supervisor of Waste Operations, re: Waste Management Education Programs in Durham Region Schools

7. Waste

7.1 Correspondence

7.2 Reports

- A) Update on the Proposed Clear Bag Pilot in the Municipality of Clarington (2022-WR-4) 17 - 49

8. Works

8.1 Correspondence

8.2 Reports

- A) Sole Source of Ultraviolet Disinfection Units at the Newcastle Water Pollution Control Plant, in the Municipality of Clarington (2022-W-37) 50 - 53
- B) Sole Source Approval for the Supply of Replacement Primary Treatment Scum Collectors and Equipment Required to Refurbish Existing Travelling Bridges at the Duffin Creek Water Pollution Control Plant, in the City of Pickering (2022-W-38) 54 - 58
- C) Sole Source Engineering Services Agreement for the Detailed Design of Bloor Street East (Regional Road 22), from East of Harmony Road South (Regional Road 33) to Grandview Street South, in the City of Oshawa (2022-W-39) 59 - 64
- D) Update on Servicing Options for Property Owners on Bickle Drive and Roselawn Avenue, including the Sun Valley Heights Homebuilders Co-op, in the City of Oshawa (2022-W-40) 65 - 71
- E) Approval of Capital Works and Financing to be Incorporated into a Servicing Agreement with Universal City Developments Inc., Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of a Sanitary Sewer and the Extension of a Watermain, in the City of Pickering (2022-W-41) 72 - 78

9. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

10. Confidential Matters

There are no confidential matters to be considered

11. Other Business

12. Date of Next Meeting

Wednesday, December 7, 2022 at 9:30 AM

13. Adjournment

Notice regarding collection, use and disclosure of personal information:

Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.

The Regional Municipality of Durham

MINUTES

WORKS COMMITTEE

Wednesday, June 8, 2022

A regular meeting of the Works Committee was held on Wednesday, June 8, 2022 in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:32 AM. Electronic participation was offered for this meeting.

1. Roll Call

Present: Councillor Mitchell, Chair
Councillor Marimpietri, Vice-Chair
Councillor Barton*
Councillor Crawford*
Councillor McLean*
Councillor John Neal*
Councillor Smith
Regional Chair Henry*
***denotes Councillors participating electronically**

Also

Present: Councillor Collier* attended the meeting at 9:42 AM
Councillor Dies*
Councillor Foster* attended the meeting at 10:07 AM

Staff

Present: G. Anello, Director of Waste Management
E. Baxter-Trahair, Chief Administrative Officer
J. Demanuele, Acting Commissioner of Works
A. Harras, Director of Legislative Services & Regional Clerk
W. Holmes, General Manager, DRT
J. Hunt, Regional Solicitor/Director of Legal Services, Corporate Services –
Legal Services
R. Inacio, Systems Support Specialist, Corporate Services – IT
R. Jagannathan, Director of Transportation and Field Services
J. Presta, Director of Environmental Services
S. Siopis, Commissioner of Works
N. Taylor, Commissioner of Finance
R. Trewin, Senior Project Manager, Transportation Design
N. Prasad, Assistant Secretary to Council, Corporate Services – Legislative
Services
K. Smith, Committee Clerk, Corporate Services – Legislative Services

2. Declarations of Interest

There were no declarations on interest.

3. Adoption of Minutes

Moved by Councillor McLean, Seconded by Councillor Smith,
(51) That the minutes of the regular Works Committee meeting held on
Wednesday, May 4, 2022, be adopted.

CARRIED

4. Statutory Public Meetings

There were no statutory public meetings.

5. Delegations

There were no delegations to be heard.

6. Presentations

It was the consensus of the Committee to hear the presentation from Ron Trewin, Senior Project Manager, Transportation Design regarding Victoria Street Reconstruction and Widening Project [Item 6.2] at this time.

6.2 Presentation by Ron Trewin, Senior Project Manager, Transportation Design, re: Victoria Street Reconstruction and Widening Project

Ron Trewin, Senior Project Manager, Transportation Design, provided a PowerPoint Presentation with regards to the Victoria Street Reconstruction and Widening Project.

Highlights of the Presentation included:

- Victoria Street Reconstruction and Widening Project
- Celebrating Victoria Street Construction
- Victoria Street Reconstruction and Widening
- Great Lakes Waterfront Trail and Look Out
- Victoria Street a Major Arterial Road
- Technically Challenging
- Shisko Wetland
- Celebrating this Project and Working Together

R. Trewin advised that the Victoria Street Reconstruction and Widening Project happened over a 6 year period and has been awarded the 2022 Transportation Association of Canada (TAC) Achievement Award as well as the Ontario Public Works Association (OPWA) Project of the Year Award.

R. Trewin stated that the reconstruction and widening project through the Lynde Shores Wetland complex and Conservation Area is the most technically complex and environmentally challenging project that the Region of Durham has ever undertaken, and provided an overview of the following details and features: two new bridge structures; two wildlife crossings; a new multi-use path; larger excavated pond to improve mussel habitat; Shisko Wetland; and turtle nesting areas. He also stated that one of the key features of the project was the Great Lakes Waterfront Trail and Look Out. He advised that the project has been the most challenging road projects geotechnically as a result of Victoria Street being an important connecting corridor which included hydro, fibre optics and natural gas. He also advised that in order to mitigate for the loss of wetland habitat from the road widening, the Shisko Wetland was constructed.

Staff responded to questions with regards to the use of Light Weight Cellular Concrete; the total cost of the project; and whether the Region is monitoring the success of the wildlife protection features that were put in place.

Staff was requested to put some geotags along the area so that visitors would be able to click on it to understand the project and relate it back to the Report. Staff was also requested to look into the creation of a social media piece with a video of the project.

6.1 Presentation of the 2021 Ontario Public Works Association Project of the Year Award to the Regional Municipality of Durham – Victoria Street Reconstruction and Widening Project

Don Kudo, President, Ontario Public Works Chapter, attended the meeting to recognize Durham Region for the Ontario Public Works Association (OPWA) 2021 Project of the Year Award. He advised that on May 17th, during National Public Works Week, the annual awards event was held and 18 Project of the Year Awards were awarded. The 2021 Public Works Project of the Year Award - Environment (between \$10 and \$15 million dollar category) was awarded to Durham Region.

D. Mitchell, T. Marimpietri and T. Smith presented the award to S. Siopis, Commissioner of Works.

6.2 Presentation by Ron Trewin, Senior Project Manager, Transportation Design, re: Victoria Street Reconstruction and Widening Project

The presentation from Ron Trewin, Senior Project Manager, Transportation Design regarding Victoria Street Reconstruction and Widening Project [Item 6.2] was heard earlier in the meeting (see pages 2 and 3 of these minutes).

7. Waste

7.1 Correspondence

7.2 Reports

There were no Waste Reports to consider.

11. Other Business - Waste

Councillor Crawford requested an update from staff with regards to the delays being experienced with yard waste pick up and how the situation is being addressed. Staff was requested to provide a memo to Council providing further information regarding issues surrounding yard waste pick-up; the status of contract collectors; drop off options for the public; and, the Region's communication strategy.

8. Works

8.1 Correspondence

- A) Correspondence from the City of Oshawa regarding resolution passed by Oshawa City Council on May 24, 2022 with respect to New Community Safety Zone on Raglan Road on the West Side of Simcoe Street

Moved by Councillor John Neal, Seconded by Councillor McLean,
(52) That the correspondence from the City of Oshawa regarding the resolution passed by Oshawa City Council on May 24, 2022 with respect to New Community Safety Zone on Raglan Road on the West Side of Simcoe Street be referred to staff.

CARRIED

8.2 Reports

- A) Servicing Agreement with OPB Realty Inc. for the Relocation and Oversizing of a Sanitary Sewer and Watermains from an Easement on Private Property onto Glenanna Road and Pickering Parkway, in the City of Pickering (2022-W-28)

Report #2022-W-28 from J. Demanuele, Acting Commissioner of Works, was received.

Staff responded to questions about the capacity at the Durham York Facility; the location of the planned pumping station; clarification on the cost for the oversizing of the sanitary sewer; and, details surrounding the proposal for Liverpool Road and Highway 401 and whether there is enough capacity or would the pipes have to be upsized at that location.

Discussion ensued with regards to referring Report #2022-W-28 back to the September meeting to allow the City of Pickering Council time to meet on the matter.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
 (53) That we recommend to Council:

- A) That financing estimated at \$689,400 for the Regional Municipality of Durham’s share of the construction of sanitary sewers in the City of Pickering be approved;
- B) That the Regional Municipality of Durham be authorized to enter into a servicing agreement with OPB Realty Inc. for the relocation and upsizing of sanitary sewers and watermains in the City of Pickering, including a Regional Share amount estimated at \$689,400 for the oversizing of the sanitary sewer, for an estimated total project cost of \$3,984,480;
- C) That financing for the servicing agreement, including the Regional Share amount, be provided from the following sources:

OPB Realty Inc. Share – Sanitary Sewer and Watermain

OPB Realty Inc. Sanitary Sewers	\$1,603,500
OPB Realty Inc. Watermains	<u>\$1,691,580</u>
Total OPB Realty Inc.	<u>\$3,295,080</u>

Regional Share – Sanitary Sewer

2022 Sanitary Sewerage System Capital Budget

Item Number 343 Allowance for Regional Share for works in conjunction with non-residential development (Project ID: M2211):

Commercial Development Charges	\$ 18,400
Residential Development Charges	295,200
User Rates	<u>86,400</u>
	\$400,000

Item Number 344 Allowance for Regional Share for works in conjunction with residential development (Project ID: M2210):

Commercial Development Charges	\$ 13,312
Residential Development Charges	213,578
User Rates	<u>62,510</u>
	\$289,400

Total Regional Sanitary Sewerage Financing **\$689,400**

Total Project Costs – Sanitary Sewer and Watermain **\$3,984,480**

- D) That the Acting Commissioner of Works be authorized to execute the necessary documents related to the Servicing Agreement.
REFERRED (See Following Motion)

Moved by Councillor Smith, Seconded by Councillor Crawford,
(54) That Report #2022-W-28 from J. Demanuele, Acting Commissioner of Works, be referred to the Works Committee meeting scheduled for September 7, 2022.

CARRIED

- B) Petition for Construction of a Sanitary Sewer System on Meadow Street, in the City of Oshawa (2022-W-29)
-

Report #2022-W-29 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(55) That we recommend to Council:

That the construction of a sanitary sewer system on Meadow Street, from Avalon Street to Manor Drive, in the City of Oshawa, be considered in the proposed 2023 and 2025 Sanitary Sewerage System Business Plans and Budgets.

CARRIED

- C) Sole Source of Engineering Services for the Rectification of Deficiencies at Port Darlington Water Pollution Control Plant, in the Municipality of Clarington (Bowmanville) (2022-W-30)
-

Report #2022-W-30 from J. Demanuele, Acting Commissioner of Works, was received.

Staff responded to questions with regards to the ramifications resulting in issues with a contractor.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(56) That we recommend to Council:

- A) That a sole source contract with CIMA+ for the provision of engineering services for the Port Darlington Water Pollution Control Plant Rectification of Deficiencies project in the amount of \$347,282* be approved, with financing provided from within the 2022 Sanitary Sewage System Business Plans and Budgets (Project ID: D2216); and

- B) That the Commissioner of Finance be authorized to execute the professional services agreement and associated amendments.
(*before applicable taxes)

CARRIED

- D) Sole Source Amendment to an Existing Contract for Additional Engineering Services for the Detailed Design of a Watermain on Liberty Street (Reg Rd 14) and Concession Road 3, in the Municipality of Clarington (2022-W-31)

Report #2022-W-31 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(57) That we recommend to Council:

- A) That a sole source amendment to the existing contract with Robinson Consultants Inc. be authorized for costs associated with additional engineering services for the Liberty Street (Regional Road 14) project, from Longworth Avenue to Concession Road 3 roundabout and rehabilitation, in the amount of \$275,190*, not included in the approved contract upset limit of \$617,554*, resulting in a revised upset limit not to exceed \$892,744*; and
- B) That the Commissioner of Finance be authorized to execute the amendment to the existing engineering services agreement.
(*before applicable taxes)

CARRIED

- E) Approval to Award a Sole Source Agreement for Annual Preventative Maintenance on the Hydroxyl Generator Units installed at Various Locations throughout the Regional Wastewater Systems (2022-W-32)

Report #2022-W-32 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(58) That we recommend to Council:

- A) That staff be authorized to negotiate and award a sole source agreement with Purified Air Solutions at an upset limit of \$75,000* per annum for a term of four years, to provide annual preventative maintenance of the hydroxyl generator units installed at various locations throughout the Regional wastewater systems, to be financed through the annual Sanitary Sewerage Business Plans and Budget; and

- B) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source agreement.
(*before applicable taxes)

CARRIED

- F) Subdivision Agreement with 2103386 Ontario Inc., Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of a Sanitary Sewer in the Municipality of Clarington (2022-W-33)

Report #2022-W-33 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(59) That we recommend to Council:

- A) That the Regional Municipality of Durham be authorized to enter into a subdivision agreement with 2103386 Ontario Inc. for the construction of a 750 millimetre sanitary sewer, including cost sharing in accordance with the Regional Municipality of Durham’s Regional Share Policy, located at the northwest quadrant of Regional Highway 2 and Ruddell Road in Newcastle, in the Municipality of Clarington, at an estimated total project cost of \$6,335,200; and
- B) That financing for the subdivision agreement be provided from the following sources:

Developer’s Cost – Sanitary Sewers and Watermain

2103386 Ontario Inc. Sanitary Sewer Funding	\$2,133,420
2103386 Ontario Inc. Watermain Funding	<u>\$2,340,980</u>

Total Developer Costs – Sanitary Sewers and Watermain \$4,474,400

Regional Costs - Sanitary Sewers

Previously Approved - Sanitary Sewerage System Funding

Wilmot Creek Sanitary Sewer Ruddell Road to King Avenue, Newcastle
(Project ID: D2007)

Residential Development Charges	\$1,062,720
Commercial Development Charges	\$66,240
User Revenues	<u>\$311,040</u>
Total Previously Approved Funding	\$1,440,000

2022 Sanitary Sewerage System Funding

Item 344 - Allowance for Regional Share for Works in Conjunction with Residential Subdivision Development (Project ID: M2210)

Residential Development Charges	\$310,550
Commercial Development Charges	\$19,358
User Revenues	<u>\$90,892</u>
Total Additional Financing	\$420,800
Total Regional Costs – Sanitary Sewers	<u>\$1,860,800</u>
Total Project Costs – Sanitary Sewers and Watermain	<u>\$6,335,200</u>

CARRIED

- G) Approval of Unbudgeted Capital Work and Related Financing to Undertake the Geotechnical Investigations, Subsurface Utility Investigations and Detailed Design for the Watermain Replacement on Belton Court, in the Town of Whitby, and Watermain Replacement on Mary Street, in the City of Oshawa (2022-W-34)

Report #2022-W-34 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(60) That we recommend to Council:

- A) That unbudgeted capital work in the amount of \$90,000* for the geotechnical investigations, subsurface utility investigations and detailed design for the watermain replacement on Belton Court, in the Town of Whitby be approved;
- B) That financing for the unbudgeted capital work for the watermain replacement on Belton Court, in the Town of Whitby, be provided as follows:

2022 Water Supply Capital Budget

Item 3: Allowance for unknown requirements in conjunction with area municipality road programs in various locations (Project ID: M2203)

User Revenue	\$90,000
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- C) That unbudgeted capital work in the amount of \$65,000* for subsurface utility investigations and detailed design for the watermain replacement on Mary Street from Rossland Road East to 150m north of Robert Street, in the City of Oshawa, be approved; and
- D) That financing for the unbudgeted capital work for the watermain replacement on Mary Street from Rossland Road East to 150m north of Robert Street, in the City of Oshawa, be provided as follows:

2022 Water Supply Capital Budget

Item 102: Replacement of watermain on R.R.56 (Farewell St.) from Canadian National Railway to Bloor St., Oshawa (Project ID: O1701)

Asset Management Reserve Fund	\$65,000
CARRIED	

- H) Approval of Capital Works and Financing to be Incorporated into a Servicing Agreement with Garrard Limited Partnership GP Inc., Garrard Limited Partnership, Garrard Coinvest Limited Partnership GP Inc. and Garrard Coinvest Limited Partnership, Including Cost Sharing in Accordance with the Region Share Policy, for the construction of a 600 millimetre Watermain, in the Town of Whitby (2022-W-35)
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Report #2022-W-35 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri,
(61) That we recommend to Council:

- A) That unbudgeted capital works and financing estimated at \$1,500,000 for the Region share of the construction of a 600 millimetre watermain, in the Town of Whitby, be approved;
- B) That the Regional Municipality of Durham be authorized to enter into a Servicing Agreement with a Region Share payment to Garrard Limited Partnership GP Inc., Garrard Limited Partnership, Garrard Coinvest Limited Partnership GP Inc. and Garrard Coinvest Limited Partnership estimated at \$1,500,000 for the construction of a 600 millimetre watermain, in the Town of Whitby; and
- C) That financing for the servicing agreement be provided by reallocation of funding from the following sources:

Regional Costs – Watermain

2022 Water Supply System Capital Budget

Item 155: Zone 3 feedermain on Anderson St. and Watford St. from Clair Ave. to Carnwith Dr., Whitby Region's share (Project ID: D2203)

Residential Development Charges	\$1,314,000
Commercial Development Charges	\$33,000
User Rate	<u>\$153,000</u>
Total Regional Costs	\$1,500,000
Total Project Financing	<u>\$1,500,000</u>

I) Sole Source Procurement of Additional Engineering Services for Construction Inspection for Complex Capital Construction Projects (2022-W-36)

Report #2022-W-36 from J. Demanuele, Acting Commissioner of Works, was received.

Moved by Councillor McLean, Seconded by Councillor Marimpietri, (62) That we recommend to Council:

- A) That staff be authorized to obtain sole source proposals and amend existing contracts with engineering consultants providing detailed design services for the provision of engineering and inspection services required during the construction of capital works containing complex construction techniques; and
- B) That the Commissioner of Finance be authorized to execute amendments to existing engineering services agreements.

CARRIED

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

11.1 Update on Reconstruction of Regional Road 13, between Highway 12 and Lakeridge Road, Township of Brock

With regards to the reconstruction of Regional Road 13 (between Highway 12 and Lakeridge), Councillor Smith advised that a portion was supposed to be done in 2019 which seems to have stalled and requested an update.

11.2 Safety Issues regarding School Buses on Regional Road 23 (Lakeridge Road)

Councillor Smith advised of concerns regarding close encounters with gravel trucks and school buses on Regional Road 23 (Lakeridge Road) and asked whether any action has been taken and whether staff has explored the use of signs.

11.3 Update on Bridge Rehabilitation on Regional Road 23 in Beaverton

Councillor Smith inquired about the timeline regarding the rehabilitation of the bridge on Regional Road 23 in Beaverton, and whether it is scheduled for this year.

11.4 Maintenance of Trees on Regional Road in Downtown Areas

Councillor Smith inquired whether the maintenance of trees that are dying or have died on regional roads that go through downtown areas is a regional or lower tier responsibility.

11.5 Update on Sewage Capacity for Sunderland and Cannington

Councillor Smith stated that, with regards to the sewage capacity for Sunderland and Cannington, right now there is no capacity and no plans to rectify that for several years. He inquired what the reasons are with regards to people being turned down regarding building single family homes.

11.6 Use of Abandoned Buildings

Councillor Smith stated that the Bon Air Nursing Home in Cannington is supposed to be expanded and he inquired about the possibility of utilizing abandoned buildings or locations rather than expanding current locations.

11.7 Update on Vision Zero

Councillor Crawford provided the following Vision Zero update:

- additional Leading Pedestrian Interval locations have been implemented at Brock and Dundas, Stevenson and the Oshawa Centre access, Harwood and Hunt, Harwood and Kings Crescent, Glenanna and the Esplanade, and Simcoe at Reach
- new cycling cross rides and bicycle signals have also been implemented across Taunton Road, as well as other locations in the Region
- an update to the community safety zone policy will be provided in the Council Information Package within the next couple of months

- the first fatality of the year on a regional road occurred on May 19th where a 16-year-old boy was struck and killed while riding his bicycle at the intersection of Simcoe and Wentworth in Oshawa

12. Date of Next Meeting

The next regularly scheduled Works Committee meeting will be held on Wednesday, September 7, 2022 at 9:30 AM in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby.

13. Adjournment

Moved by Regional Chair Henry, Seconded by Councillor Barton, (63) That the meeting be adjourned.

CARRIED

The meeting adjourned at 11:05 AM

Respectfully submitted,

D. Mitchell, Chair

N. Prasad, Assistant Secretary to Council

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: #2022-WR-4
Date: September 7, 2022

Subject:

Update on the Proposed Clear Garbage Bag Pilot in the Municipality of Clarington

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That the implementation of a clear garbage bag pilot program in the Municipality of Clarington be approved with the following implementation parameters:
 - i) That the clear garbage bag pilot be implemented for a period of six months;
 - ii) That the clear garbage bag pilot commence in the third quarter of 2023 and include a four-week transition period before participation in the program becomes mandatory;
 - iii) That the clear garbage bag pilot project be implemented in a manner that reflects how the clear garbage bag program would be implemented on a permanent basis, meaning that where any visible Blue Box material, food, household hazardous waste or any other material for which a diversion program is available is detected in the garbage bag during the mandatory phase, that the bag will not be collected and will be left at the curb;
 - iv) That the clear garbage bag pilot project be conducted with the following performance measures with a comparison of the data pre- and post-pilot:

1. Garbage generation rates;
 2. Quantity of Blue Box, Green Bin and/or household hazardous material found in the garbage bag;
 3. Collection contractor injury rate;
 4. Collection route impacts (collection time, etc.);
 5. Impacts at Waste Management Facilities; and
 6. Incidence of illegal dumping complaints.
- B) That external resources to support the implementation of the clear garbage bag pilot project be retained to provide the following:
- i) An initial communication strategy and support in the planning and operating phases of the clear garbage bag pilot, including the distribution of educational material to residents in the Municipality of Clarington and discussions with retail outlets and/or clear bag suppliers related to the supply of clear garbage bags to pilot project residents; and
 - ii) Waste audits to establish the baseline for the performance measures and to measure performance in the Municipality of Clarington and other Regional Municipality of Durham municipalities during the pilot.
- C) That the pilot program costs, including anticipated additional collection contractor costs, waste audits to establish the baseline and ongoing evaluation of the effectiveness of the clear garbage bag pilot program, and continued educational and promotional efforts to support the pilot, currently estimated at \$530,000 exclusive of taxes, be included in the proposed 2023 Business Plans and Budget for Waste Management Services and subject to the approval of the new Council; and
- D) That additional details regarding the Regional Municipality of Durham's waste management education programs in partnership with local school boards and details regarding the City of Orillia's clear garbage bag requirement be received for information.
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Report:**1. Purpose**

- 1.1 This report provides an outline and timing of a proposed pilot project to study the impact of using clear garbage bags on waste diversion and driver safety in the Municipality of Clarington (Clarington).
- 1.2 In addition, this report also provides an update on the education program delivered by Waste Management Services staff in the Regional Municipality of Durham (Region) school boards and on the implementation of a clear garbage bag requirement in the City of Orillia.

2. Background

- 2.1 At its meeting on January 26, 2022, Regional Council passed a motion directing staff to implement a pilot program for the use of clear garbage bags for one year in Clarington and to report on the details of “how the clear bag program will be done, when, what the cost is, etcetera” at the April 2022 Regional Council meeting.
- 2.2 Report #2022-WR-3 “Proposed Pilot of Mandatory Clear Garbage Bag Use in the Municipality of Clarington” (Attachment #1) was presented at the April 6, 2022, Works Committee meeting included the following information:
 - a. The previous clear garbage bag pilot conducted in the City of Pickering and the Municipality of Clarington in 2009 resulted in an approximately three per cent increase in diversion and a 14 per cent increase in the Green Bin participation rate. However, based on the extensive promotion and education program provided to residents participating in the pilot, the impact of clear garbage bags could not be distinguished from the impact of the additional resident education and awareness.
 - b. Results from other municipalities with clear garbage bag programs vary, with diversion rate increases that are temporary or inconclusive.
 - c. Conducting another clear garbage bag pilot will require significant effort, cost and staff time, including consultant support to conduct the required waste audits and impact analysis.

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- d. Clear garbage bags are not an effective diversion tool in multi-residential buildings where garbage from all residents is comingled in common collection bins and cannot be traced to a specific unit for compliance with diversion programs.
 - e. The results of the pilot will be one of several considerations in the staff's recommendation to Council on whether or not to expand the program permanently throughout Durham Region. Implementing a clear bag program in one municipality alone will produce a negligible impact on the Region's overall diversion rate.
- 2.3 The Works Committee referred Report #2022-WR-3 back to staff until the September 7, 2022, Works Committee meeting.
- 2.4 Modifications to the original recommendations adjust the timing of the budget request and pilot to accommodate the referral of Report #2022-WR-3 to the September 2022 Works Committee meeting which delays the start of planning for the pilot.
- 3. Revised Timing for Clear Garbage Bag Pilot**
- 3.1 The proposed operation parameters for the clear garbage bag pilot are provided in Report #2022-WR-3 (Attachment #1). The timing of the pilot has been adjusted as outlined below to reflect the referral of the report to the September 2022 Works Committee meeting and to allow for the approval of the 2023 Waste Management Business Plans and Budget.
- 3.2 Preparatory work scheduling for the clear garbage bag pilot in Clarington was initially proposed to begin in the fall 2022 with waste audits to establish baseline quantities of Blue Box, Green Bin and household hazardous waste in the garbage bags of the proposed pilot area and a control area of non-pilot homes. Communications with retailers regarding the upcoming pilot and the need for increased retail stock of clear garbage bags were also anticipated to take place in the fall 2022. The schedule for preparatory work has been adjusted to commence in 2023 after approval of the 2023 Business Plans and Budgets.
- 3.3 The estimated total cost for the clear garbage bag pilot of \$530,000 (excluding applicable taxes) will be included in the proposed 2023 Waste Management Business Plans and Budget. Work on the clear garbage bag pilot is anticipated to proceed as follows:

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- a. First and second quarter of 2023 - Planning for waste audits (baseline and operating) and communications support will be undertaken;
 - b. Second quarter of 2023 - Conduct the baseline waste audit in the pilot area and in non-pilot communities that will act as the control;
 - c. Second quarter of 2023 - Communicate with retailers and residents regarding the clear garbage bag pilot and timing;
 - d. Third quarter of 2023 - Launch clear garbage bag pilot and conduct waste audits to measure the impact of the clear garbage bag requirements;
 - e. Fourth quarter of 2023 - Conduct additional waste audits to measure the impact of clear garbage bag requirements; and
 - f. First quarter of 2024 - Compile pilot data and report to Regional Council on results of clear garbage bag pilot.
- 3.4 If retailers in Clarington and the surrounding area are unable to stock an adequate supply of clear garbage bags to support the timing of the pilot, the Region may need to provide clear garbage bags to every household in the pilot area. The additional cost of supplying clear garbage bags is unknown at this time and will be included in the proposed 2023 budget submission, if necessary.
- 3.5 The objectives and measurements for the clear garbage bag pilot as originally outlined in Report #2022-WR-3 remain unchanged.
- 4. Additional Details and Clarification of the Proposed Clear Garbage Bag Pilot**
- 4.1 The baseline waste audits and follow-up audits will be conducted on select collection routes in Clarington that are in the pilot area and on select routes in non-pilot municipalities (i.e., City of Pickering and Township of Scugog). The same routes will be audited before and during the pilot to establish the baseline and measure changes in resident behaviour after the implementation of a clear garbage bag requirement.
- 4.2 There will be a phase-in period at the start of the pilot to allow residents to adjust to the new requirements similar to what has been done with previous waste collection program changes. During this time, additional education will be

provided to non-compliant households to encourage proper participation in the program.

- 4.3 Measurement of any increased use by Clarington residents of the Region's Waste Management Facilities for garbage disposal during the pilot will be necessary. The approach for obtaining this measurement is being investigated but will be designed to minimize the impact on residents use and access to the Waste Management Facility.

Zero Tolerance

- 4.4 The communities listed in the [Continuous Improvement Fund Clear Garbage Bag Program Implementation Toolkit](#) (CIF Toolkit) were reviewed to confirm the approach to prohibited materials in the clear garbage bag. All of the communities indicate that recyclables and household hazardous wastes are not permitted in the clear garbage bag. Food waste is also prohibited in communities that have an organics diversion program. Any bags containing materials which are prohibited may not be collected.
- 4.5 None of the CIF Toolkit communities indicate a permissible level of contamination below which the clear garbage bag will still be collected for disposal. Every participating community indicated that garbage in opaque bags will be left at the curb. A zero-tolerance approach is not unique to the Region's pilot and, in most communities, any leeway for contamination provided to residents is not publicized.
- 4.6 The City of Orillia published a Frequently Asked Questions page for the recent launch of the clear bag mandate. This page indicates that soiled recycling, such as soiled tin foil, will be accepted in the clear garbage bags if it is less than 10 per cent of the garbage and the resident has also placed recycling containers out for collection.
- 4.7 The Region employs a zero-tolerance approach to all curbside waste placed for collection. For example, grass clippings placed in garbage or leaf and yard waste bags are not collected. Also, if residents use non-compostable plastic bags for Green Bin material, the Green Bin is not collected.

5. Waste Management Education Program in Durham School Boards

- 5.1 For several years Regional staff have provided presentations in Durham Region schools, designed to engage young students in a fun and interactive manner on

- the importance of proper waste management practices and the impact their choices have on the environment. Engaging students also serves as a means for those students to advocate for proper waste practices in their own homes and workplaces.
- 5.2 These presentations were initially geared toward elementary schools and focused on proper sorting of paper and packaging for inclusion in the Blue Box. As the program evolved, the focus shifted to include older students in secondary and post-secondary schools and covered more complex waste management topics.
 - 5.3 Currently, waste management education is offered in all four English speaking school boards in Durham Region. The development of French language education modules is a priority for the 2022-2023 school year.
 - 5.4 Waste management education has evolved to focus on complementing the Ontario Ministry of Education curriculum. With limited staff resources to provide in-person programming, video and online modules were developed for teachers to access and present independent of Regional staff. This shift pre-dated the pandemic but was beneficial with the shift to online school and virtual learning during the COVID-19 pandemic.
 - 5.5 At the elementary school level, teachers can request virtual presentations that can be provided as pre-recorded videos or in real-time to allow more interaction with students. These have been available for the 2020-2021 and 2021-2022 school years and cover topics such as the 5Rs (Rethink, Reduce, Reuse, Recycle and Recover) and food waste. For the 2022-2023 school year, more detailed education modules are being developed on the 5Rs, composting, household hazardous waste and careers in waste management.
 - 5.6 For secondary students, a virtual education program was launched in September 2021 to provide education modules on several waste management topics. These include Landfills and Perpetual Care, Integrated Waste Management, Energy from Waste and Careers in Waste Management. Education modules include background on the topic, lesson plans to help deliver course material in the classroom, videos and resources, and interactive activities.
 - 5.7 The education modules for elementary and secondary students will be available on an updated School Programs webpage at durham.ca/waste in fall 2022.

- 5.8 In addition to the classroom resources outlined above, staff are developing a video library to support the general promotion and education program and diversify the resources provided to teachers and students. Completed videos are posted on the [Region's YouTube Channel](#) and include topics such as Durham's Integrated Waste Management System; How to properly participate in the Green Bin program – “the Basics”; Benefits of Recycling; Safe with Your Waste Topics on medical sharps, batteries and others; Careers in Waste Management Series such as Waste Disposal Clerk, Landfill Management, and Waste Management Policy Planner; and Food Waste Reduction.
- 5.9 In 2021, the Waste Management education program reached over 4,000 Kindergarten to Grade 8 students in the Region's school boards and the virtual education program for high school was launched. Private schools are also included in the Region's education program.
- 6. Update on Orillia Clear Garbage Bag Requirement**
- 6.1 Table 1 below outlines key aspects of waste management programs in the Region, City of Orillia and Town of Markham. The comparison is provided to highlight commonalities and differences between the Region and two nearby municipalities requiring clear garbage bags.
- 6.2 The 2020 diversion rates as calculated by the Resource Productivity and Recovery Authority (RPRA) for all three communities are between 60 and 65.8 per cent. The York Region diversion rate is used as a proxy for the Town of Markham to ensure a common calculation method for diversion. A key factor in York Region's higher diversion rate is that diapers and pet waste are accepted in their Green Bin program. The Region estimates up to 10 per cent increased diversion is possible if contaminated organics, such as diapers and pet waste, are accepted in the Green Bin.
- 6.3 Both the Region and the City of Orillia impose a garbage bag limit for curbside collection. However, the City of Orillia allows only 20 free bags annually, while the Region allows 104 free bags annually with four bags permitted each collection period. The City of Orillia residents must purchase bag tags for each bag in excess of the 20 bag limit. The Town of Markham does not impose a garbage bag limit.
- 6.4 In addition to garbage, the Town of Markham instructs residents to place overflow Green Bin and Blue Box material in clear plastic bags for collection.

- 6.5 The Town of Markham does not operate a Waste Management Facility for residents to drop off items for disposal that are not collected at the curb. Residents are directed to a private waste transfer station where tonnages are not included in the Town of Markham or York Region waste generation numbers.

Table 1 Waste Management Programs Comparison

	Region of Durham	City of Orillia	Town of Markham
Population	696,992	31,166	338,503
Area, Kilometres²	2,537	28.61	210.9
2020 RPRA Diversion Rate	62.8%	60.0%	65.8% (York Region)
Curbside Garbage Collection	Four bag limit with collection every other week at no charge	20 free bags per year with collection every other week; residents purchase additional bag tags for more than 20 bags per year	No garbage bag limit with collection every other week
Curbside Blue Box	Dual stream collected weekly	Dual stream collected weekly; includes Styrofoam packaging and trays in clear bags and plastic shopping bags	Single stream collected weekly in large boxes (not totes); cardboard bundled separately; excess recycling can be placed in clear bags

	Region of Durham	City of Orillia	Town of Markham
Curbside Green Bin	Weekly; limited to food waste and other 'clean' organics such as hair and tissues	Weekly; limited to food waste and other 'clean' organics such as hair and tissues	Weekly; includes diapers and pet waste and allows plastic bags; Overflow organics collected in clear bags
Curbside Bulky Items	Curbside collection by appointment	No curbside collection	Curbside collection of carpet and bulky items with garbage; appliances and metal items collected by appointment; fees may apply
Grass Clippings	Prohibited for disposal in any Region program	Collected as yard waste but must be tagged with garbage bag tag (i.e.: collected for a fee)	Prohibited for disposal in garbage or yard waste
Garbage Disposal Method	Durham York Energy Centre	City-owned landfill	Managed by York Region at various locations including Durham York Energy Centre and private EFW, and landfill
Garbage Bag Tag availability and cost	Sold as packs of 5 for \$12.50	Sold as packs of 5 for \$10.00	Not Applicable

	Region of Durham	City of Orillia	Town of Markham
Waste Management Facility	Three resident drop-off locations for \$5 minimum; sliding scale up to \$125/tonne for waste; \$250/tonne for fill material	One resident drop-off location for \$20 minimum; \$185/tonne for waste; \$370/tonne for construction and demolition waste	Residents directed to privately owned transfer station for garbage disposal where fees apply
Stated Goal of Clear Garbage Bag	Proposed pilot to measure impact on diversion	To divert additional Blue Box and Green Bin material and extend the life of the City landfill	To reduce risk of injury to collection workers and generate clean waste for EFW
Contamination/Privacy Policy	Proposed: Opaque bags not collected; Zero visible contamination; one privacy bag	Opaque bags not collected; up to 10% visible contamination allowed if recycling containers are out; two privacy bags	Opaque bags not collected; no publicized allowable contamination amount but collector discretion allowed; four privacy bags per clear bag

- 6.6 The City of Orillia implemented a clear garbage bag requirement on February 7, 2022. A Council Information Report comparing waste tonnage for the first five weeks of the clear bag requirement to the same time the previous year was released on April 1, 2022.
- 6.7 The 46 per cent decrease in garbage tonnage year over year is attributed primarily to an increase in organics diversion which increased by 21 per cent. The impact of additional waste generation in 2021 due to COVID 19 stay-at-home orders is not discussed.
- 6.8 Based on the experience of other municipalities as detailed in the Attachment to Report #2022-WR-3, garbage generation generally decreases, and diversion

increases in the first months to one year after the implementation of a clear garbage bag requirement. However, diversion numbers generally return to pre-clear bag levels after the first year.

7. Financial Implications

- 7.1 The clear garbage bag pilot project cost is estimated to be \$530,000 (exclusive of taxes), as shown in the following table:

Table 2 Clear Garbage Bag Pilot Cost Estimate

Clear Garbage Bag Pilot Task	Estimated Cost (exclusive of taxes)
Consultant to conduct waste audits and develop communications strategy	\$300,000
Promotion and Education Campaign	\$105,000
Contractor Collection Costs	\$125,000
Total Project Costs	\$530,000

- 7.2 Financing for the pilot project will be included in the proposed 2023 Business Plans and Budget for Waste Management Services and subject to the approval of the new Council.

8. Relationship to Strategic Plan

- 8.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Environmental Sustainability:

Goal 1.2: Increase waste diversion and resource recovery.

9. Conclusion

- 9.1 The proposed timing of planning activities for the clear garbage bag pilot must be revised to reflect the referral of the initial report to the September Works Committee. The total cost estimate is unchanged and will be planned for in the proposed 2023 Waste Management Services Business Plans and Budget.
- 9.2 Extensive and expanding waste education program in partnership with all four English school boards operating in Durham Region is supported. The French language programming to allow partnership with the two French language school boards is currently being developed for future implementation.
- 9.3 Clear garbage bag programs, like other waste management services, vary by municipality in the scope and purpose of the requirement. The proposed pilot for Clarington is designed to reflect Durham Region's integrated waste management system, collection options and contracts.
- 9.4 For additional information, contact: Gioseph Anello, Director, Waste Management Services, at 905-668-7711, extension 3445.

10. Attachments

Attachment #1: Report #2022-WR-3: "Proposed Pilot of Mandatory Clear Garbage Bag Use in the Municipality of Clarington"

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
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: Acting Commissioner of Works
Report: #2022-WR-3
Date: April 6, 2022

Subject:

Proposed Pilot of Mandatory Clear Garbage Bag Use in the Municipality of Clarington

Recommendations:

That the Works Committee recommends to Regional Council:

A) That the implementation of a clear garbage bag pilot program in the Municipality of Clarington be approved with the following implementation parameters:

- i) That the clear garbage bag pilot project be implemented for a period of six months;
- ii) That the six month clear garbage bag pilot project commence in the second quarter of 2023 include a four week transition period until participation in the program becomes mandatory;
- iii) That the six month clear garbage bag pilot project commence after the four week transition period, implemented in a manner that reflects how the clear garbage bag program would be implemented on a permanent basis, meaning that where any visible Blue Box material, food or household hazardous waste is detected in the garbage bag during the mandatory phase, the bag will not be collected and will be left at the curb;
- iv) That the six month clear garbage bag pilot project be conducted with the following performance measures to determine the effectiveness of the program as compared to a 2022 baseline, and to other Regional Municipality of Durham municipalities that are not part of the pilot:

1. Garbage generation rates compared to baseline data;
 2. Quantity of Blue Box, Green Bin and/or household hazardous material found in the garbage bag compared to baseline data;
 3. Collection contractor injury rate;
 4. Collection route impacts (collection time, etc.); and
 5. Incidence of illegal dumping complaints.
- B) That external resources (consulting or other) to support the implementation of the clear garbage bag pilot project be retained in 2022 at a cost not to exceed \$125,000* to provide:
- i) An initial communication strategy and support in the planning and operating phases of the clear garbage bag pilot, including the distribution of educational material to residents in the Municipality of Clarington and retail outlets related to the supply of clear garbage bags; and
 - ii) Waste audits to establish the 2022 baseline for the performance measures and measure performance in the Municipality of Clarington and other Regional Municipality of Durham municipalities.
- C) That financing for the incremental cost of the clear garbage bag pilot project background work required in 2022 at an estimated cost of \$125,000* be provided at the discretion of the Commissioner of Finance; and
- D) That the remaining pilot program costs currently estimated at \$405,000* reflecting anticipated additional collection contractor costs, ongoing waste audits to evaluate the results of the clear garbage bag pilot program and continued educational and promotional efforts to support the pilot be included as part of the proposed 2023 Business Plans and Budgets for Waste Management Services and subject to the approval of the new Council.
-

Report:

1. Purpose

- 1.1 At the Regional Municipality of Durham (Region) Council meeting of January 26, 2022, a motion to implement a pilot program for the use of clear garbage bags for one year in the Municipality of Clarington (Clarington) was referred to staff for a report to detail “how the clear bag program will be done, when, what the cost is, etcetera” to be brought to the April 2022 Council meeting. This report is now being provided as requested and provides Regional Council with information on the learnings from the Region’s clear garbage bag pilot conducted in 2009 and learnings from the use of clear garbage bags in other municipalities.
- 1.2 The report also provides a summary of the common issues related to the implementation of a clear garbage bag program; implications of a clear garbage bag requirement for all of Durham Region; and outlines the purpose, proposed parameters and costs for conducting a six-month pilot program mandating clear garbage bag use Clarington.
- 1.3 Dollar amounts followed by an asterisk (*) exclude applicable taxes.

2. Previous Reports and Decisions

- 2.1 Report #2008-WR-20 titled “Clear Plastic Bags for the Collection of Garbage” requested Regional Council approval for a three-month clear garbage bag pilot program for the Clarington and City of Pickering (Pickering) to be conducted in 2009.
- 2.2 Report #2009-WR-12 titled “Results of Clear Bags Pilot Study in the Municipality of Clarington and City of Pickering” provided Regional Council with an overview of the efforts undertaken by staff to conduct a clear garbage bag pilot and the results of the pilot program. Details of the results of the pilot are provided in Attachment #1.
- 2.3 Report #2014-WR-10 titled “Update Report on Clear Plastic Bags for the Curbside Collection of Garbage” provided a review of the results of the 2009 pilot conducted by the Region and details on clear garbage bag programs and results in other municipalities.
- 2.4 Report #2017-COW-114 titled “Clear Bag Update Report” provided an update on clear bag usage for curbside garbage collection.
- 2.5 Report #2017-COW-172 titled “City of Markham Clear Garbage Bag Experience” outlines the implementation of the clear garbage bag program in the City of Markham and the objectives and results of the program.

3. Clear Garbage Bag Programs in other Municipalities

- 3.1 The Continuous Improvement Fund (CIF) developed a [Clear Garbage Bag Program Implementation Toolkit \(CIF Toolkit\)](#) for municipalities considering a clear garbage bag requirement. The toolkit includes case study information from nine Ontario municipalities. Programs implemented in other municipalities are summarized in Attachment #1.
- 3.2 As highlighted in the CIF Toolkit, many of the clear bag programs in Ontario are not found in larger municipalities that are providing multiple curbside collection options for residents. Over half of the case studies in the CIF Toolkit operate depot or 100 per cent pay-as-you-throw programs. For depot programs, residents must deliver all waste materials to a municipal-run transfer station where an attendant inspects the waste for compliance prior to accepting it for disposal. This allows for easy enforcement of a clear garbage bag program and maintains some additional privacy compared to clear bags left for pick-up in a resident's neighbourhood.
- 3.3 When reviewing provincial diversion rates in municipalities that have implemented curbside clear garbage bag programs, typically there is an increase in diversion immediately after the implementation. However, the diversion rate generally stagnates or returns to pre-clear garbage bag levels. Details of municipal clear garbage bag programs in Ontario and Halifax with corresponding diversion rates are provided in Attachment #1.
- 3.4 The Region conducted a clear garbage bag pilot in 2009. The Region's pilot resulted in a three per cent increase in Blue Box diversion and a 14 per cent increase in Green Bin participation. However, based on the extensive promotion and education of the clear garbage bag program (\$35 per household), the results of the pilot could not be attributed solely to the clear garbage bag requirement. Observations and results of the 2009 pilot are provided in Attachment #1.
- 3.5 As reported in Works Committee Report #2008-WR-20, common concerns with clear garbage bag mandates include privacy, clear bag availability, enforcement of the mandate, impacts to operating costs and increased illegal dumping. The proposed clear garbage bag pilot is a modified approach from the 2009 pilot to address these concerns and build on the lessons learned. Details of these concerns and common methods to address them are provided in Attachment #1.

4. Clear Garbage Bag Pilot for Clarington in 2023

- 4.1 As noted, at its meeting of January 26, 2022, Regional Council directed staff to report on the parameters and costs for a full year clear garbage bag pilot in Clarington. The clear garbage bag pilot will evaluate changes in resident diversion behaviour by measuring the quantity of Blue Box, Green Bin or hazardous materials in clear garbage bags, to measure the impact on collector injury rates and to measure the impact on incidences of illegal dumping compared to status quo. The results of the pilot project will inform decisions on expansion or

discontinuation of the clear garbage bag program as part of the Region's waste collection operations.

- 4.2 Staff recommends undertaking a six-month pilot that allows for a longer planning period starting in 2022 to communicate the upcoming pilot to residents and retailers. A six-month pilot would start mid-to-late spring 2023 and continue to mid-to-late fall 2023. The pilot will be conducted on selected routes within Clarington with a focus on urban routes. The specific routes have not been selected.
- 4.3 Work for a pilot project should commence immediately and will include pre-requisite tasks such as completing the baseline audit for Clarington and developing promotion and education material. The approach for the clear garbage bag pilot will be informed by the CIF [Clear Garbage Bag Program Implementation Toolkit](#).
- 4.4 Audits will be completed to assess the change in diversion rates and participation rates for the both the Blue Box and Green Bin in a sample of homes in Clarington. Homes located in the City of Pickering (Pickering) and the Township of Scugog (Scugog) will act as control samples. Collector injury rates and illegal dumping complaints will also be tracked in all three municipalities.
- 4.5 Communication with retailers and residents is necessary in advance of the launch of the pilot. A minimum of six months notice is recommended to allow residents to use up existing supplies of traditional garbage bags and allow retailers time to stock adequate quantities of clear garbage bags. Staff will commence promotion and education for the pilot in Fall 2022.

5. Proposed 2023 Pilot Program Parameters

- 5.1 To reflect an operational clear garbage bag program more accurately, staff recommend that following a short voluntary transition period, the use of clear garbage bags becomes mandatory with non-compliant bags left at the curb on collection days. The mandatory phase would start four weeks after the pilot launch.
- 5.2 During the pilot timeframe, residents will be limited to one opaque privacy bag within each clear garbage bag. Garbage bags with more than one privacy bag will be tagged and left at the curb during the mandatory phase of the pilot.
- 5.3 Staff recommend that clear garbage bags be visually inspected for the presence of recyclable materials that should be placed in the Blue Box and food and kitchen waste that should be in the Green Bin. Bags containing any visible divertible material will be rejected at the curb. Inspections will also include hazardous materials such as batteries, paint and oil. Any quantity of hazardous materials will result in the bag being rejected at the curb.

- 5.4 Waste collection contractors can be injured by sharp objects (e.g., broken glass, needles) improperly disposed of in opaque garbage bags and by lifting overweight garbage bags. Clear garbage bags should make these hazards more visible and easier to avoid. Bags containing protruding, sharp or heavy items will also be rejected at the curb. Contractor injury rates will also be tracked to measure the impact of clear garbage bags compared to status quo.
- 5.5 Zero tolerance is recommended for non-garbage materials to reduce the ambiguity for the collection worker who must evaluate if a clear bag is compliant in a few seconds at each stop. Zero tolerance is a more straightforward threshold than estimating if a bag contains 10 or 20 per cent non-garbage material.
- 5.6 To support the enforcement of the clear garbage bag mandate at the curb and to better reflect a functioning clear garbage bag program, staff recommend the collection contractor receive compensation for the additional time spent at each stop inspecting the clear bag. This cost will be based on the routes selected for the pilot and the number of stops. Staff will negotiate with the contractor to determine the compensation rate. Based on the estimated additional time required for each stop and annualized cost estimates, compensation during the pilot program will not exceed \$125,000*.

Pilot Project Promotion and Education

- 5.7 The 2009 clear garbage bag pilot included approximately \$35 per household for promotion and education. This significant promotion and education effort made it impossible to separate the impact of clear garbage bags from the impact of extensive resident education on diversion options. For the 2023 pilot, a more sustainable and representative promotion and education approach will be used.
- 5.8 Staff recommend a promotion and education effort that includes a print and social media advertising campaign, Waste App notifications and a printed notice and explanation of the pilot program delivered to each household. The promotion and education effort will focus on the new requirement for residents to place all garbage in a clear plastic bag during the pilot and remind residents of the existing diversion programs available to them.
- 5.9 Unlike the 2009 pilot, staff do not recommend providing residents with clear garbage bags to use for the duration of the pilot due to the quantity required for the pilot duration and the logistics and cost of providing such a quantity of bags.
- 5.10 This approach will reduce costs significantly from the \$35 per household spent in 2009 and reflect a promotion and education approach that is more consistent with the implementation of changes to other programs such as the introduction of a larger Blue Box or the inclusion of additional plastics in the Blue Box program.
- 5.11 Contracted waste collection staff will require training on the implementation of the clear garbage bag pilot and the parameters for rejecting bags at the curb.

Waste Audits to Establish Baseline

- 5.12 To measure the impact of a mandatory clear garbage bag pilot program on waste set outs and generation rates, audits are required. A baseline audit will be conducted in 2022 to establish the current quantity of Blue Box material, Green Bin organics, household hazardous waste and other improperly disposed materials in Clarington residential curbside garbage.
- 5.13 In addition to auditing garbage set outs in the Clarington, audits will also be conducted in Pickering and Scugog. Routes in these local municipalities will act as a control group to measure any external impacts on set outs and waste diversion behaviour. External impacts could include economic changes, pandemic response, weather events, etc.
- 5.14 Staff recommend three audits be completed during the pilot in 2023, to measure the impact of the clear garbage bag program on residents' garbage generation and waste diversion. Staff recommend a third-party consultant be retained to complete the waste audits and report results as outlined below.
- 5.15 Data on collection contractor injury and reports of illegal dumping will be retained for 2022 and 2023 to measure any changes from status quo in both performance indicators that could be attributed to the clear garbage bag pilot.
- 5.16 It should be noted that previous waste audits (2018 Composition Study) have indicated that residential garbage contains approximately 19 per cent non-recyclable plastics. This plastic is primarily film plastic which will make quick visual inspection of clear garbage bags at the curb difficult.
- 5.17 The Region is currently participating in a garbage audit in partnership with the Continuous Improvement Fund (CIF). This audit is jointly funded by CIF and Stewardship Ontario and is focused on Blue Box materials in the garbage prior to the blue box transition to producer responsibility. Although this audit is for a different purpose, staff will investigate opportunity to expand this audit's parameters to include organics and household hazardous waste, such that the CIF audit could be used as the Clarington baseline audit. Staff expect that there will be a cost to the Region for an audit expansion. It is unknown at this time if this additional cost will be greater than that of a dedicated baseline audit.

Consultant Support

- 5.18 The 2009 clear garbage bag pilot was supported by a consultant that conducted surveys, completed waste audits and collected pilot program data. Staff recommend a similar level of consultant support for the proposed. pilot.
- 5.19 The consultant scope of work, with an estimated cost of \$300,000*, will include:
 - a. Contact with retailers in Clarington and large retail outlets in adjacent municipalities beginning in 2022. Retailers will be advised of the upcoming

clear garbage bag pilot and requested to increase their stock of clear bags that could be used for garbage.

- b. Delivery of promotional and education material to every residence in the pilot area in Clarington.
- c. Conduct training sessions with the collection contractor including refresher or follow-up training as necessary during the pilot.
- d. Complete waste audits as outlined above and report data and trends.

5.20 Waste management staff in cooperation with the Corporate Communications Office will develop promotional and education material for residents and contractors. Waste management staff will also coordinate print and social media advertising campaigns, curbside signage and Waste app notifications. Resident education for the pilot is anticipated to begin in the Fall of 2022.

5.21 Waste management staff will also provide support to the collections contractor in administering the clear garbage bag requirements.

5.22 The purpose of conducting a pilot of any new waste management approach is to evaluate it for implementation Region wide. Should the clear garbage bag pilot in Clarington be deemed successful, staff would recommend that Regional Council establish a permanent Region-wide clear garbage bag program, along with the costs and timeframes to implement this program change.

6. Region-Wide Implications of Clear Garbage Bag Program

6.1 The Region has expended significant effort and cost to establish consistent waste management diversion and disposal requirements throughout the Region, including the City of Oshawa (Oshawa) and Town of Whitby (Whitby) which provide most waste collection services for their residents directly.

6.2 All residences receiving curbside collection are subject to a four-garbage bag limit every other week, provided with weekly collection service for Blue Box and Green Bin source-separated wastes and seasonal leaf and yard waste collection.

6.3 Special collections for additional recyclable items such as scrap metal, electronics, porcelain and batteries are also available. There are some variations among local municipalities for additional services for bulky garbage items with Whitby and Oshawa establishing their own requirements for these materials. This expansion of curbside services has resulted in a significant diversion rate increase from 30 per cent in 2000 to 63 per cent currently.

6.4 A standardized Region-wide waste management program is the best way to reduce resident confusion and ensure simple, consistent messaging for program compliance. As Oshawa and Whitby provide garbage collection in their municipalities, both would also need to agree to implement clear plastic garbage bag programs to maintain a Region-wide and consistent program.

- 6.5 The Region's Waste Management By-law #2011-42 will also require amendment to reflect a mandatory clear garbage bag program. Both Oshawa and Whitby will need to adopt and enforce a similar lower-tier by-law within their municipality. The Region's waste management by-law enforcement staff do not currently, and would not in the future, enforce a Whitby or Oshawa waste management by-law.
- 6.6 The 2018 residential waste audit determined curbside garbage bags contained less than one per cent household hazardous waste, indicating the existing diversion programs for household hazardous wastes work well.
- 6.7 The 2018 audit also measured Blue Box materials at less than four per cent of the garbage collected at the curb, indicating there is little room for improvement with a clear garbage bag program.

7. Multi-Residential Building Impacts

- 7.1 Most multi-residential buildings use a waste chute system and large waste bins to manage residents' waste. This allows residents to dispose of garbage anonymously and eliminates any inspection and enforcement possibilities. Clear garbage bags are not effective to address multi-residential waste management issues because the nature of waste collection systems in multi-residential buildings makes it impossible to address individual resident compliance with waste diversion programs.
- 7.2 Many multi-residential buildings also use compaction systems to compress garbage to manage space constraints. This further negates any opportunity for inspection of garbage bags prior to collection.
- 7.3 A clear garbage bag program cannot address the provincial policy direction to divert food and organic waste from disposal in multi-residential homes. Provincial policy requires 50 per cent food and organic waste diversion in multi-residential buildings by 2025.

8. Implications for the Mixed Waste Pre-sort and Anaerobic Digestion Project

- 8.1 Clear garbage bag programs in other municipalities have resulted in small and short-term increases in diversion. For the municipal programs described in Attachment #1, reported diversion data has remained relatively constant or has decreased.
- 8.2 A clear garbage bag program is not an effective enforcement mechanism for multi-residential buildings where garbage disposal remains anonymous. Therefore, it is anticipated that such a program would have no effect on multi-residential tonnage required for processing at the Region's proposed Mixed Waste Pre-sort and Anaerobic Digestion (AD) facility.
- 8.3 The Mixed Waste Pre-Sort portion of the facility is designed to remove recyclable materials and organic material from the garbage bag. This facility will target all

garbage collected by the Region, not just single-family garbage, and will remove recyclable materials consistently, regardless of residents' fatigue with an enforcement program. The 2018 garbage composition audit indicated that up to 49 per cent of garbage is composed of organic material including material from the multi-residential sector.

- 8.4 The AD portion of the facility will be capable of handling a more contaminated source-separated organics stream. AD will allow residents to divert materials such as diapers, pet waste and sanitary waste to the Green Bin Program. Staff will prepare a promotion campaign to 're-launch' the Green Bin and educate all Durham Region residents about new waste diversion options with the launch of the AD facility. This promotion program is expected to result in increased participation and use of the Green Bin Program to increase diversion in single-family homes. It is expected that a greater than 14 per cent increase in Green Bin participation can be achieved with a re-launched Green Bin Program. As shown above, this cannot be accomplished with a clear garbage bag program alone.
- 8.5 The proposed Mixed Waste Pre-sort and AD facility will allow the Region to meet its diversion obligations for multi-residential buildings under the provincial Food and Organic Waste Policy Statement. As detailed below, clear garbage bags will not address any diversion requirements in the multi-residential sector.
- 8.6 The recently approved Long-term Waste Management Plan (2022 – 2040) includes diversion targets to increase Green Bin organics diversion up to 10 per cent by 2026 with the commissioning of a Mixed Waste Pre-Sort and AD facility. As seen from diversion rates in other municipalities, this diversion cannot be accomplished with a clear garbage bag program alone.

9. Financial Impacts

- 9.1 A clear garbage bag pilot in Clarington was not included in the 2022 Business Plans and Budgets for Waste Management Services. As outlined above, staff recommend work on the 2023 pilot commence in 2022 to ensure residents, retailers and the Region's collection contractor are aware and prepared for the launch of the pilot in 2023.

Table 1: Clear Garbage Bag Pilot Cost Estimate

Clear Garbage Bag Pilot Task	Estimated Cost*
Consultant to conduct waste audits and develop communications strategy	\$300,000
Promotion and Education Campaign	\$105,000
Contractor Collection Costs	\$125,000

Clear Garbage Bag Pilot Task	Estimated Cost*
Total Project Costs	\$530,000

9.2 The clear garbage bag pilot project cost is estimated to be \$530,000* as outlined in Table 1, with up to \$125,000* expected to be spent in 2022 for the initial promotion and education and the baseline audits. Financing for the 2022 costs is not included in the approved 2022 Business Plans and Budgets for Waste Management Services and will be provide at the discretion of the Commissioner of Finance.

9.3 The balance of \$405,000* will be included in the proposed 2023 Business Plans and Budget for Waste Management Services and subject to the approval of the new Council.

10. Relationship to Strategic Plan

10.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

a. Environmental Sustainability:

Goal 1.2: Increase waste diversion and resource recovery.

11. Conclusion

11.1 The previous clear garbage bag pilot conducted in Pickering and Clarington in 2009 resulted in approximately three per cent increase in diversion and a 14 per cent increase in the Green Bin participation rate. However, based on the extensive promotion and education program provided to residents participating in the pilot, the impact of additional resident education and awareness could not be distinguished from the impact of clear garbage bags.

11.2 Results from other municipalities with clear garbage bag programs are varied, with diversion rate increases that are temporary or inconsistent.

11.3 Conducting a clear garbage bag pilot will require significant effort and support from staff including consultant support. Staff recommend shortening the duration of the pilot to allow for additional planning efforts which must commence in 2022. Further activities will be subject to 2023 budget approval by the new Council.

11.4 A successful pilot will be one input into a decision to expand this program throughout Durham Region. Implementing a clear bag program in one municipality will produce a minor impact to diversion rates.

11.5 This report has been reviewed by the Finance Department.

11.6 For additional information, contact Gioseph Anello, Director, Waste Management Services, at 905-668-7711, extension 3445.

12. Attachments

Attachment #1: Summary of Clear Garbage Bag Program Experiences

Respectfully submitted,

Original signed by:

Jenni Demanuele, CPA, CMA
Acting Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

Attachment 1: Summary of Clear Garbage Bag Program Experiences

Continuous Improvement Fund Clear Bag Implementation Toolkit

In 2015 the Continuous Improvement Fund (CIF) published a [Clear Bag Implementation Toolkit](#) (CIF Toolkit) that included case studies from nine Ontario municipalities that implemented or attempted to implement clear garbage bag requirements. Details of the programs included in the CIF Toolkit are summarized below.

Four of the nine municipalities studied do not provide curbside collection. Residents must bring all waste to a municipal depot or transfer station where an attendant inspects the clear garbage bag before accepting it. These municipalities also require some form of proof of residency prior to accepting waste materials.

Two of the nine municipalities provide curbside collection of garbage provided it is in a clear bag and every bag must have a municipal tag. Residents must purchase a tag for every garbage bag placed at the curb – with no free bag allowance.

Two municipalities implemented traditional clear garbage bag mandates with residents receiving curbside collection of garbage, Blue Box and Green Bin materials on a prescribed schedule. All garbage must be placed in clear bags.

Finally, one municipality received Council direction to implement a clear garbage bag program and began promotion of the program. When staff returned to Council for final approval of the clear garbage bag requirement, Council decided not to proceed. Several Councillors were newly elected in the municipal election that occurred during the initial promotion of the clear garbage bag proposal and did not support the program.

Many of the successful clear bag programs in Ontario are not found in larger municipalities providing multiple curbside collection options for residents. Over half of the case studies in the CIF Toolkit are depot or 100 per cent pay-as-you-throw programs in addition to mandating clear garbage bags. In depot programs, residents must deliver all waste materials to a municipal-run transfer station where an attendant inspects waste for compliance prior to accepting it for disposal. This allows for easy enforcement of a clear bags program and privacy to be maintained.

Experience of other Municipalities

Municipalities operating curbside programs typically see an increase in diversion in the year immediately following the implementation of a clear garbage bag requirement. However, within a short time, the diversion rate stagnates or returns to pre-clear garbage bag levels.

Attachment #1: Summary of Clear Garbage Bag Program Experience

City of Markham, Ontario

The City of Markham in York Region implemented a clear garbage bag program and removed its three-garbage bag limit in April 2013. The stated objectives of the clear garbage bag program in Markham are to encourage diversion and address worker health and safety concerns due to improper disposal of hazardous materials. Markham is one of the municipal case studies in the CIF Toolkit.

City of Markham staff stress the importance of a political champion and strong Council support when implementing a clear garbage bag mandate. To address resident concerns about privacy, an unlimited number of opaque privacy bags are permitted within the clear garbage bag.

The clear garbage bag program was not implemented in multi-residential buildings in Markham and all garbage bags are collected unless there are visible hazardous materials or electronics in a clear bag. Garbage bags are not left behind for blue box or organic material unless it is obviously full of these divertible items.

Based on information available in the 2020 York Region Waste Diversion Report, in the past five years Markham had consistently higher green bin diversion and lower residual waste generation per capita than the other two southern cities in York Region. Blue Box diversion data was not reported separately for lower tier municipalities in York Region.

York Region has reported a ten per cent increase in its diversion rate since Markham launched the clear garbage bag program, in 2013. The Regional Municipality of Durham (Durham Region) experienced a nine per cent increase in its diversion rate over the same time.

City of Guelph, Ontario

The City of Guelph launched a clear garbage bag program in 2003. Guelph has since transitioned to a three-cart system for waste collection and residents use a grey cart for garbage. However, garbage must be placed loose in the cart or bagged in a clear bag.

The purpose of the clear garbage bag program in Guelph was to boost recycling and increase organics diversion.

A 2016 waste audit for the City of Guelph indicated that 38 per cent of waste generated in single family homes could still be diverted from the gray cart to the blue or green cart for recycling or composting respectively despite the implementation of a clear bags program. The City of Guelph had a 58.7 per cent Resource Productivity and Recovery

Attachment #1: Summary of Clear Garbage Bag Program Experience

Authority (RPRA) verified diversion rate in 2016 and a 49.9 per cent diversion rate in 2020. Durham Region's verified diversion rate in 2020 was 62.8 per cent

City of Kawartha Lakes, Ontario

The City of Kawartha Lakes launched a clear garbage bag program on January 1, 2017. Residents must place all garbage in clear bags with a limit of two bags every week. One small, opaque privacy bag may be placed in each clear garbage bag.

Garbage bags are left at the curb if they are not clear, if they contain more than 10 per cent recyclable material, if they contain hazardous materials, if they contain needles or other sharp objects, or if the garbage is in a 95-gallon cart. Collection drivers are tasked with determining if a resident's waste set out meets City of Kawartha Lakes requirements for clear garbage bags and divertible material content.

The City of Kawartha Lakes does not have a Green Bin program for source separated organics but does provide curbside leaf and yard waste collection.

The City of Kawartha Lakes' RPRA verified diversion rate increased from 39.1 percent in 2016 to 43.1 percent in 2017 after the introduction of clear garbage bags, but it has since dropped to 34.8 per cent in 2020, which is lower than the pre-clear garbage bag diversion rate in 2016.

City of Orillia, Ontario

The City of Orillia launched a clear garbage bag program on February 7, 2022. The goal of the program is to increase diversion to prolong the life of their landfill. Currently 36 per cent of waste placed in the garbage bag in Orillia could be diverted for Blue Box recycling or Green Bin composting. In 2020, the City of Orillia had a 60 per cent diversion rate.

The clear garbage bag program in Orillia will allow up to two privacy bags and up to 10 per cent of the contents of the clear garbage bag may be divertible material. This allowance is intended to account for soiled recyclables that should not be placed in the Blue Box and pet waste which can be wrapped in newspaper prior to putting in the garbage. Collection drivers are tasked with determining if a resident's waste set out meets City of Orillia requirements for clear garbage bags and divertible material content.

Before the launch of clear garbage bag program, Orillia staff contacted local stores to inform them of the change to clear bags and request that they stock clear garbage

Attachment #1: Summary of Clear Garbage Bag Program Experience

bags. The City of Orillia website includes a list of the seven stores stocking clear garbage bags and their location.

There is currently an online petition started by an Orillia resident asking City of Orillia Council to reconsider the clear garbage bag program. As of February 1, 2022, there were over 1,200 signatures on the petition. Resident concerns listed in the petition include lack of availability of kitchen size clear garbage bags; lack of recycled plastic content in clear bags as compared to some black/green bag manufacturers offering recycled content; and the use of 'garbage police' and shame tactics to enforce the clear garbage bag policy and diversion as inspections at the curb will result in bags not being collected.

City of Halifax, Nova Scotia

On August 1, 2015, the City of Halifax, Nova Scotia, began a clear garbage bag program. Halifax experienced a 31 per cent drop in waste generation and a 20 per cent increase in Blue Box collection in the initial months of the clear garbage bag program. With no other changes to the waste management program, clear garbage bags are considered the reasons for the changes.

Halifax has a different approach than many municipalities and allows one full size, opaque, privacy bag each collection period. Residences are allowed up to six bags every other week and only five must be clear.

Transparent blue bags are used for Halifax's two stream recycling program and carts are provided for source separated organic waste. For additional privacy all clear bags can be placed in a garbage can.

2009 Durham Region Pilot

In 2008, Durham Region Council approved a three-month pilot program to require residents to place garbage in clear bags for collection at the curb. The pilot was conducted on two collection routes for a total of approximately 1,500 households. One route in the Municipality of Clarington and one route in the City of Pickering were chosen for the pilot.

The clear garbage bag pilot had two objectives: to assess the effect of clear garbage bags on the diversion rate and to assess the effect of clear garbage bags on the participation levels in the recycling and compost program.

Attachment #1: Summary of Clear Garbage Bag Program Experience

The pilot was divided into three phases: voluntary participation with no interaction with residents beyond the initial pilot launch package, voluntary participation with encouragement with educational material provided to non-participating homes and mandatory participation with enforcement including tagging and leaving non-compliant garbage bags at the curb with no additional outreach from waste management staff.

The clear garbage bag pilot study concluded that a clear garbage bag program had the potential to increase Durham Region's overall diversion rate up to three per cent compared to 2008 data. It also concluded that clear bags had no impact on Blue Box participation, but participation in the Green Bin program for food waste increased by 14 per cent. Surveys conducted after the pilot indicate 53 per cent of residents supported a clear garbage bag requirement.

The final 2009 clear bag pilot report notes that inspection of the clear garbage bag at the curb by the contractor was hampered by the quantity of film plastic in the bag. Visual inspection of the clear garbage bags alone was not a good indicator of unacceptable materials in the bag. As a result, most non-compliant clear bags continued to be collected. Waste audits conducted during the mandatory phase of the pilot indicated that clear garbage bags continued to contain 31 per cent divertible material. This is a decrease from the baseline of 43 per cent in the garbage before clear bags but was still a significant amount.

An extensive promotion and education (P&E) campaign was conducted immediately before and during the clear garbage bag pilot. Staff conducted several door-to-door information sessions, a Public Information Centre was held in each local municipality and there was a multi-media advertising campaign that included radio and newspaper advertisements and roadside signage on the selected pilot collection routes. The cost of promotion, training for collections staff and resident education was estimated to be \$35 per household over the three-month pilot.

Due to the extensive P&E campaign conducted for the pilot, the effects of clear garbage bags on the overall diversion and participation rates could not be distinguished from the effects of the extensive promotion and education for the pilot.

Attachment #1: Summary of Clear Garbage Bag Program Experience

Common Clear Garbage Bag Concerns

Privacy

Residents' concerns around clear bags for garbage relate predominantly to privacy issues. Some municipalities allow residents to put one or more opaque grocery bags inside their larger clear plastic bag to address this issue.

In the 2009 clear garbage bag pilot, Durham Region allowed residents to use one opaque privacy bag inside each clear garbage bag. Clarington residents were still allowed three garbage bags each week.

Additional measures may be necessary for residents generating home medical waste and incontinence products as the volume of these items may exceed what an opaque carry-out privacy bag can hold. However, permitting large opaque garbage bags for large volumes of excessive waste on an application basis can result in other resident privacy concerns if one home is allowed opaque garbage bags while neighbours are not.

Enforcement

Enforcement is essential for the long-term success of a clear garbage bag program and can come from several levels of government. Typically, clear garbage bag programs are enforced by municipal bylaws and collection contracts.

While collection workers' roles already require them to leave behind non-acceptable materials, current policy includes clearly defined weight limits and clear descriptions of non-acceptable waste such as grass clippings. The clear bag garbage programs described in this report introduce ambiguity to the collection worker's role by allowing up to ten per cent divertible materials in clear bags. Without conducting a waste audit at every stop with divertible materials in clear bags, the collection worker has no way to assert that a clear bag has more or less than ten per cent in a clear bag. This ambiguity either puts the collection worker in direct dispute with non-compliant residents, which the worker is not trained to resolve, or it leads the collection worker to simply collect the bag to avoid the dispute. This challenge is a likely contributor to the long-term flat lining or decline in diversion rates experienced in the municipal case studies outlined in this report.

Attachment #1: Summary of Clear Garbage Bag Program Experience

Impact on Operating Costs

Inspection of each garbage bag prior to collection will require additional time to complete each collection route. Tagging rejected bags prior to leaving them at the curb will also require additional collector time as will the dispute resolution process to address resident complaints of non-collected garbage. Additional contract costs are anticipated for the additional collection time required for the clear bag enforcement efforts by the collection contractor. A five second delay in garbage collection at each house in Clarington is the equivalent of over \$125,000 in additional time annually.

The increased number of rejected garbage bags left at the curb is also expected to lead to more resident complaints and questions resulting in an increased demand for call centre and by-law compliance resources. Residents also always have the option to elevate complaints to elected municipal officials.

Illegal Dumping

Illegal dumping is an ongoing problem in many municipalities. There is a risk with a clear garbage bag program that, as requirements are enforced and non-compliant bags are left at the curb, there will be an increase in illegal dumping. Dumping is already a concern in rural areas.

Durham Region waste management by-law enforcement officers follow up on dumping incidents and complaints. By-law officers collect dumped garbage, sort through it for identifying information and then follow up with the offending resident. This follow up may result in the resident being charged for illegal dumping. Implementation of clear garbage bag requirements could increase the time by-law enforcement officers spend on illegal dumping.

Durham Region waste management by-law enforcement officers follow up on dumping incidents on regional roads and when called to a residence. Dumping on municipal roads is the responsibility of by-law enforcement of each local municipality.

Clear Bag Availability

Since clear garbage bags are not widely used by residents on a voluntary basis, availability of clear garbage bags at retailers may be an issue.

After staff outreach by calling local stores, only seven retail outlets are currently listed on the City of Orillia's webpage as selling clear garbage bags. Retail outlets in Clarington and retailers in neighbourhoods bordering the Municipality of Clarington

Attachment #1: Summary of Clear Garbage Bag Program Experience

would need to stock clear garbage bags to ensure there is adequate supply. Staff have not conducted research on the availability of clear garbage bags in various sizes to meet resident needs.

Education

Education is key to the success of a clear garbage bag program. Retailers and residents require adequate notice of the implementation of a clear garbage bag program so existing supplies of opaque garbage bags can be used up and retailers can stock sufficient supply of clear garbage bags. At least three months notice should be provided to the public before the start of the pilot program.

For the 2009 clear garbage bag pilot, Durham Region spent an estimated \$35 per household on resident and contractor education for a three-month pilot. Extensive resident education was provided to give residents information on the purpose of the pilot and to encourage participation. Contractor education was necessary to ensure collection workers knew what to inspect in each clear garbage bag and when to tag and leave bags at the curb for non-compliance.

\$35 per household for promotion and education for one three-month waste management program is not practical or financially sustainable. This cost is equivalent to \$140 per household per year, or \$30M annually if such a promotion and education program was implemented Durham Region-wide. A more balanced education approach is required for a longer-term clear garbage bag pilot.

Single Use Plastics Implications

Canada is currently consulting on a regulation to ban certain single use plastics including store provided carry out bags. This regulation is expected to be finalized in 2022 with implementation starting in 2023.

Many clear garbage bag programs allow the use of smaller privacy bags within the clear outer bag. These are frequently the opaque carry-out bags provided at many retail outlets and which many residents also use as in-home garbage receptacles. A clear garbage bag program, coupled with the impending ban on single use plastic carry out bags, could have the unintended consequence of increasing the demand for single use plastics by requiring residents to purchase additional single use small garbage bags to use as privacy bags.

End

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: #2022-W-37
Date: September 7, 2022

Subject:

Sole Source of Ultraviolet Disinfection Units at the Newcastle Water Pollution Control Plant, in the Municipality of Clarington

Recommendations:

That Works Committee recommends to Regional Council:

- A) That staff be authorized to enter into a sole source agreement with Trojan Technologies for the provision of ultraviolet disinfection units at the Newcastle Water Pollution Control Plant for the Rerating and Upgrades Project (D1117) in the amount of \$422,000*; to be financed within the approved project from the Sanitary Sewage System Capital Budget; and
 - B) That the Commissioner of Finance or designate be authorized to execute the required agreements.
-

Report:

1. Purpose

1.1 The purpose of this report is to obtain authorization to negotiate a sole source contract with Trojan Technologies (Trojan) to supply ultraviolet (UV) disinfection units for the Rerating and Upgrades Project at Newcastle Water Pollution Control Plant (WPCP), in the Municipality of Clarington.

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

2. Background

- 2.1 The preliminary design of the Newcastle WPCP is nearing completion. A preliminary product list has been prepared that identifies over 250 materials/equipment required for the construction of the facility. This report has been prepared to obtain the approval for one selected process equipment, the UV treatment system, to address specific safety, operational and maintenance needs related to the facility.
- 2.2 The UV treatment system at the Newcastle WPCP will be used to disinfect the effluent water prior to discharge into Lake Ontario. The UV disinfection technology involves the use of a UV light source to emit UV radiation to inactivate pathogens, such as bacteria and viruses.

3. Justification for the Sole Source Procurement of Ultraviolet Units

- 3.1 As part of the preliminary design, four UV disinfection units supplied by Trojan, Aquaray, DeNora, and Wedeco were assessed to replace the existing chlorination system.
- 3.2 All of the above-noted vendors can provide UV treatment systems with automatic mechanical cleaning – a mechanical wiper that moves along the UV lamps. However, UV lamps installed in secondary effluent are more prone to deposits and fouling that cannot be removed with the mechanical wiper alone.
- 3.3 Trojan manufactures the only UV treatment system that provides both automatic mechanical and chemical cleaning systems for treating secondary effluent. Trojan's cleaning system is comprised of a wiping mechanism, with the additional release of a chemical cleaning solution to remove deposits and fouling. The dual automatic cleaning system provides cleaning at a set frequency to reduce fouling and improve the efficiency of the UV units. In addition, the automated cleaning system reduces maintenance effort and provides health and safety benefits by eliminating chemical handling. UV disinfection units with only the automatic mechanical cleaning as provided by the other three vendors would require manual chemical cleaning of the UV lamp sleeves to remove fouling and scaling, at a minimum of every four weeks.
- 3.4 Trojan's UV units fit within the existing footprint and hydraulic process at the Newcastle WPCP. The UV units supplied by Aquaray and DeNora, requires a

larger channel footprint due to the dimension of the units, and would require a larger building footprint to accommodate the larger channel.

- 3.5 Trojan UV units are currently in operation at other Regional WPCPs including the Uxbridge WPCP. Sole sourcing of Trojan UV units for the Newcastle WPCP would provide operational familiarity, the potential to use spare parts within facilities, fewer operational and maintenance requirements and lower capital costs based on footprint.

4. Financial Implications

- 4.1 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. The By-law also requires Regional Council approval for any negotiated purchases of \$100,000 and greater in value.
- 4.2 Supply of the UV disinfection units will be included within Regional Contract D2023-19 for the construction of the Newcastle WPCP.
- 4.3 Financing for the purchase of the UV disinfection units, estimated at \$422,000* will be provided from within the approved project budget for the construction of the Newcastle WPCP (Project ID: D1117).

5. Relationship to Strategic Plan

- 5.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Environmental Sustainability Goal 1.3: Protect, preserve and restore the natural environment, including green spaces, waterways, parks, trails and farmlands.
 - b. Service Excellence Goal 5.1: Optimize resources and partnerships to deliver exceptional quality services and value.
 - c. Service Excellence Goal 5.4: Drive organizational success through innovation, a skilled workforce and modernized services.

6. Conclusion

- 6.1 It is recommended that authorization be approved for the sole source agreement with Trojan Technologies for the provision of ultraviolet disinfection units as part of the Newcastle Water Pollution Control Plant Rerating and Upgrades Project (D1117).
- 6.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 6.3 For additional information, contact Mike Hubble, Manager, Environmental Services Design, at 905-668-7711 extension 3460.

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
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: #2022-W-38
Date: September 7, 2022

Subject:

Sole Source Approval for the Supply of Replacement Primary Treatment Scum Collectors and Equipment Required to Refurbish Existing Travelling Bridges at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to negotiate and award a sole source agreement with OVIVO Water Technologies at an upset limit of \$12,500,000* for the supply of replacement primary treatment scum collectors and equipment to refurbish the existing travelling bridges;
- B) That financing be provided from within the approved project budget in accordance with the approved cost sharing with the Region of York as follows:

	Cost Split (%)	Cost Allocation*
Durham Region	20	\$2,500,000
York Region	80	\$10,000,000
Total	100	\$12,500,000

-
- C) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source agreement.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain Regional Municipality of Durham (Region) Council approval to negotiate and execute a sole source agreement with OVIVO Water Technologies (OVIVO) to supply replacement scum collectors and equipment required to refurbish the existing travelling bridges at the Duffin Creek Water Pollution Control Plant (WPCP), in the City of Pickering (Pickering).
- 1.2 A pre-purchase contract for the supply of the above equipment will be issued to ensure timely fabrication and delivery for installation by a general contractor under the future Duffin Creek WPCP Liquid Remediation Project scheduled to start in 2023. Approved vendor shop drawings, including installation details are required to be included in the general installation contract specifications.
- 1.3 To maintain plant treatment capacity, installation of equipment will be phased. Delivery of the first shipment of equipment will be required within four months of the general installation contract start date, with subsequent deliveries scheduled in approximate four-month intervals.
- 1.4 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 A total of eight travelling bridge and scum collectors were originally commissioned under the Stage 1 and 2 construction contracts in 1980 and 1992. The original vendor was Dorr-Oliver and Long, who is no longer in commercial operation.
- 2.2 In 2006, tenders were issued for the pre-purchase of six additional travelling bridge and scum collectors as a component of the Stage 3 Liquids Expansion Project. The lowest compliant bidder was Eimco Water Technologies (now OVIVO). No other bidders were able to demonstrate compliance with the specifications. The equipment was installed and has been in service for approximately 15 years.
- 2.3 In 2009, travelling bridges #5 and #8 from the original Stage 1 construction failed unexpectedly. Continued temporary repairs were not feasible, and as such, the units were replaced with equipment supplied by OVIVO.

- 2.4 In 2013, as a component of the Stage 1 and 2 Rehabilitation Project, the remaining original six travelling bridges were replaced. The procurement of the travelling bridge and scum collectors was sole sourced to OVIVO based on the previous tender results of the Stage 3 Liquids Expansion Project, and to facilitate ongoing optimization of maintenance efforts by Plant Operations staff.
- 2.5 Duffin Creek WPCP's Plant Operations staff have maintained the existing travelling bridges and scum collectors over the years with technical assistance and parts supply from OVIVO, who supply patented parts on an as needed basis.

3. Previous Reports and Decisions

- 3.1 Joint Finance and Administration Committee Report #2009-J-55 sought and obtained approval for the negotiation and emergency supply of Travelling Bridges #5 and #8, at an approved cost of \$3,000,000*.
- 3.2 Works Committee Report #2010-W-39 sought and obtained approval for additional funding to include the replacement of scum collectors as part of the Travelling Bridges emergency replacement at an approved cost of \$525,000*.
- 3.3 Approval under delegated authority was granted during the 2018 summer recess period for the negotiation of agreements in excess of \$125,000* for vendors to supply major equipment installed under the Stage 3 Expansion and Stages 1 and 2 Rehabilitation Programs.

4. Rationale for Sole Source Approval

- 4.1 The original supply of the Stage 3 travelling bridges over 15 years ago included Relay Logic Control panels. The newest generation of travelling bridges supplied under the Stage 1 and 2 Rehabilitation Project included Programmable Logic Control (PLC) based panels which have provided a greater degree of operational diagnostic information. This digital control has enabled staff to refine the operation, and to enhance programming features which was not possible under the old relay logic and provided a higher degree of operational time.
- 4.2 To integrate the replacement scum collectors into the PLC panel functionality, equipment must be purchased from the same manufacturer, OVIVO.
- 4.3 The pre-purchase contract is a necessary component of the timely project delivery for the Duffin Creek WPCP Liquids Remediation Project. With the pre-purchase contract in place, final detailed design drawings for the installation contract can be developed with enhanced details and specifications. Shop

drawing information is required by the end of the first quarter of 2023 to ensure project installation drawings and specifications are issued in the third quarter of 2023. This will permit an installation contract start date within 2024.

- 4.4 The pre-purchase contract for the supply of replacement scum collectors and the supply of equipment required to refurbish the existing travelling bridges will reduce the overall length of the installation contract by one to one and a half years which is critical for the subsequent construction programs planned for the Duffin Creek WPCP.
- 4.5 Schedule adherence is a necessity as follow-up liquid side projects are planned in subsequent years that will require the primary tanks to be returned to operation.

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" 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 substitute goods or services exist to ensure compatibility with existing good 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 Financing for the pre-purchase contract for the supply of replacement scum collectors and the supply of equipment required to refurbish the existing travelling bridges, estimated at \$12,500,000* will be funded from the approved 2022 Sanitary Sewerage Capital Budget, Project Number Y2001.
- 5.3 Costs will be shared with the Region of York in accordance with cost splits approved as follows:

	Cost Split (%)	Cost Allocation*
Durham Region	20	\$2,500,000
York Region	80	\$10,000,000
Total	100	\$12,500,000

- 5.4 The Region's share of the pre-purchase equipment supply is not to exceed \$2,500,000* of the total authorized amount of \$12,500,000*.

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. Service Excellence Goal #5.1: Optimize resources and partnerships to deliver exceptional quality services and value; and
 - b. Service Excellence Goal #5.2: Collaborate for a seamless service experience.

7. Conclusion

- 7.1 It is recommended that authorization be approved for the sole source negotiation with OVIVO Water Technologies for the supply of replacement scum collectors and the equipment required to refurbish existing travelling bridges at the Duffin Creek Water Pollution Control Plant.
- 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: Rich Tindall, Manager, Plant Operations, 905-668-7711 ext. 3547.

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
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: #2022-W-39
Date: September 7, 2022

Subject:

Sole Source Engineering Services Agreement for the Detailed Design of Bloor Street East (Regional Road 22), from east of Harmony Road South (Regional Road 33) to Grandview Street South, in the City of Oshawa

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That staff be authorized to negotiate a sole source engineering services agreement with AECOM Canada Limited to undertake the detailed design of Bloor Street East (Regional Road 22) from east of Harmony Road South (Regional Road 33) to Grandview Street South, in the City of Oshawa, at an amount not to exceed \$1,737,140*; to be financed through the approved project budget; and
 - B) That the Commissioner of Finance 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 authorization to negotiate a sole source engineering services agreement with AECOM Canada Limited (AECOM) to undertake the detailed design of Bloor Street East (Regional Road 22), from

east of Harmony Road South (Regional Road 33) to Grandview Street South, in the City of Oshawa (Oshawa).

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

2. Background

- 2.1 In June 2022, the Region, with AECOM as the consultant, completed the Municipal Class Environmental Assessment (MCEA) for the realignment and widening of Bloor Street from east of Harmony Road to Grandview Street including grade separation at the Canadian Pacific Railway (CPR). The realignment and widening of Bloor Street will address operational deficiencies, road safety, and increasing traffic volumes within the project limits while supporting accessibility and active transportation goals by adding a multi-use path on the north side and a sidewalk on the south side of realigned Bloor Street. The Bloor Street MCEA document is available at durham.ca/BloorEA.
- 2.2 The 2022 Regional Road Capital Program identifies detailed design funding for the realignment and widening of Bloor Street in 2022 with construction funding forecasted in 2024.
- 2.3 The Region's Bloor Street realignment and widening project also supports the following Provincial projects, which are forecasted for construction in the next five years:
- a. The Ontario Ministry of Transportation's (MTO) reconfiguration of the Highway 401/Harmony Road/Bloor Street interchange. The interchange reconfiguration was approved as part of the MTO Environmental Assessment (EA) completed by AECOM in 2015 for improvements to Highway 401 from Brock Road to Courtice Road. The interchange reconfiguration from the MTO EA included a partial realignment and widening of Bloor Street from Harmony Road to 600 metres (m) east of Harmony Road. The realignment and widening of Bloor Street have been extended easterly to Grandview Street by the Region's MCEA.
 - b. The Metrolinx GO Transit Oshawa to Bowmanville Rail Service Expansion. The GO Expansion includes additional rail lines within the CPR corridor which will impact the existing rail crossing at Bloor Street, approximately 200 m west of Grandview Street. The GO Expansion EA was completed by AECOM on behalf of Metrolinx in January 2011. The GO Expansion EA also

identifies a potential future GO Station Site south of Bloor Street and west of the CPR corridor.

- 2.4 The Region's Bloor Street project overlaps at the west limit with the MTO Highway 401/Harmony Road/Bloor Street interchange project. Constant coordination will be required to complete the detailed design simultaneously for the MTO interchange and Region Bloor Street projects as they are dependent on one another. AECOM was recently awarded the detailed design by MTO for the Highway 401/Harmony Road/Bloor Street interchange reconfiguration. Currently, the construction for the MTO interchange and Region Bloor Street project is also planned to take place concurrently, with the Region's Bloor Street construction completion scheduled ahead of the completion of the MTO interchange, such that the MTO interchange can integrate into the realigned and widened Bloor Street.
- 2.5 It is necessary that the detailed design for the Bloor Street realignment and widening be initiated to allow for the better construction alignment with the GO Transit Oshawa to Bowmanville Rail Service Expansion. Due to the planned increase of train volumes with the addition of GO service in the CPR corridor, it is desirable to construct the grade separation on Bloor Street prior to GO service commencing to Bowmanville to reduce vehicle and train conflicts at the existing Bloor Street and CPR level crossing. Constructing the grade separation on Bloor Street prior to GO service commencing to Bowmanville will also avoid a construction closure on Bloor Street at the CPR corridor that would be required to upgrade the existing level crossing if the grade separation is not constructed in advance.

3. Sole Source Justification

- 3.1 AECOM has recently completed three major EAs in this area:
- i. the MTO Highway 401 EA which included Highway 401/Harmony Road/Bloor Street;
 - ii. the Metrolinx Oshawa to Bowmanville GO Expansion EA; and
 - iii. the Region's Bloor Street realignment and widening MCEA.

Through this previous work, AECOM has completed many studies and has an intimate knowledge of the project area which will eliminate time and cost spent by another firm familiarizing themselves with the project.

- 3.2 The work completed to date will allow for a seamless transition into the detailed design.
- 3.3 In 2021, AECOM was awarded the detailed design by MTO for the Highway 401/Harmony Road/Bloor Street interchange reconfiguration through a competitive bid process. Given the interdependencies between the detailed design and subsequent construction of the MTO's interchange project and the Region's Bloor Street project, utilizing the same consultant will improve coordination between the projects leading to reduced timelines and decreased potential for inconsistencies and rework between the projects.
- 3.4 With the MTO interchange and Metrolinx GO Bowmanville Expansion detailed designs advancing, the Region needs to progress quickly with the Bloor Street realignment and widening detailed design to ensure design alignment between the three projects and ensure that Region interests are protected. Expediting the detailed design is critical to ensure the subsequent construction of the three projects can take place following the logical construction staging and sequencing that has been coordinated between the MTO, Metrolinx and the Region. Direct assignment to AECOM will expedite completion of the Region's detailed design work and allow for construction to take place as planned with MTO and Metrolinx.
- 3.5 AECOM has built relationships with key stakeholders through the previous and ongoing EA and preliminary/detailed design work completed in this area including MTO, Metrolinx, CPR, the Region, Oshawa and various other agencies. These relationships can be leveraged to accelerate detailed design timelines and improve coordination between the multiple stakeholders and agencies, leading to faster approvals and greater certainty the construction timing can align with the MTO and Metrolinx projects.

4. Proposed Engineering Services

- 4.1 The estimated engineering fee of \$1,737,140* includes the following services:
- a. Project Management;
 - b. Coordination with MTO, Metrolinx, CPR, City of Oshawa and other key stakeholders;
 - c. Subsurface utility investigations, mapping and coordination for relocations;

- d. Road design (including traffic safety);
- e. Bridge design (two bridges, retaining walls);
- f. Review and adjustments to existing sanitary sewers and watermains;
- g. Hydrology, drainage, and stormwater management investigations, reporting and design;
- h. Geotechnical and geo-environmental investigations, reporting and design;
- i. EA compliance, permit applications and approvals;
- j. Environmental studies to support permit applications;
- k. Support for required property acquisition;
- l. Streetlighting design;
- m. Traffic signal design;
- n. Landscaping and streetscaping design;
- o. Traffic and construction staging design;
- p. Contract specification preparation; and
- q. Additional services as required by the project.

5. Financial Implications

- 5.1 Section 8.4.2 of the Region's Purchasing By-law Number 16-2020 requires approval of Regional Council to award an assignment as a sole source where the project or annual value of a consulting or professional service assignment is expected to be \$100,000 or greater.
- 5.2 Financing for the procurement of the engineering services estimated at \$1,737,140* is to be provided from the approved project budget (Project ID: R2023).

6. Relationship to Strategic Plan

- 6.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Economic Prosperity Goal #3.3: Enhance communication and transportation networks to better connect people and move goods more effectively
 - b. Service Excellence Goal #5.1: Optimize resources and partnerships to deliver exceptional quality services and value.

7. Conclusion

- 7.1 It is recommended that authorization be approved for the sole source engineering services agreement with AECOM Canada Limited for the detailed design of Bloor Street from east of Harmony Road to Grandview Street, in the City of Oshawa, at an upset limit not to exceed \$1,737,140*.
- 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: Reid McGregor, Manager, Transportation Design, at 905-668-7711, extension 3502.

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
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: #2022-W-40
Date: September 7, 2022

Subject:

Update on Servicing Options for Property Owners on Bickle Drive and Roselawn Avenue, including the Sun Valley Heights Homebuilders Co-op, in the City of Oshawa

Recommendation:

That the Works Committee recommends to Regional Council

- A) That this report be received for information; and
 - B) That a copy of this report be provided to the residents on Bickle Drive and Roselawn Avenue; Sun Valley Homebuilders Co-op; the City of Oshawa; and The Ministry of the Environment, Conservation and Parks York-Durham office.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to provide Works Committee and Regional Council with an update on servicing options for property owners on Bickle Drive and Roselawn Avenue, including the Sun Valley Heights Homebuilders Co-op (Sun Valley), in the City of Oshawa.

2. Background and Update

- 2.1 The Regional Municipality of Durham (Region) currently operates a private communal well on behalf of the Sun Valley Heights Homebuilders Co-op which

- services 17 properties. The remainder of property owners on Bickle Drive and Roselawn Avenue are on private wells and sewage disposal systems.
- 2.2 Sun Valley has brought forward concerns to the Region with regards to the cost and condition of their private communal well and distribution system, as well as a boil water advisory that has been issued due to the poor condition of the existing well casing.
- 2.3 With the planned road reconstruction and extension of municipal services on Thornton Road North from Conlin Road to the north of Bickle Drive, there is an opportunity to extend watermains and sanitary sewers to all property owners on Bickle Drive and Roselawn Avenue and decommission the Sun Valley communal well. All costs would be borne completely by property owners who benefit from the extension of municipal services. In addition, Sun Valley would be responsible for the cost to decommission the communal well.
- 2.4 The Region, with support from the City of Oshawa (Oshawa), conducted a Public Information Centre (PIC) in the lower-level Committee Room on April 21, 2022, at Regional Headquarters. The PIC was well attended with approximately 34 of 41 property owners in attendance.
- 2.5 Regional staff provided information to property owners including:
- a. A Sun Valley water quality monitoring update;
 - b. An update of the proposed Conlin Road works;
 - c. An update on the future Thornton Road North works;
 - d. A review of the Region's Well Interference Policy;
 - e. A review of servicing options and cost estimates;
 - f. A review of a take-home questionnaire; and
 - g. A question-and-answer period.
- 2.6 The estimated cost of \$93,220 per property owner to extend sanitary sewer and watermain services through the petition process was presented. This estimate is based on 2022 costs and is subject to change based on actual project tender costs, project timing, local construction activity and supply chain issues, etc.
- 2.7 The questionnaire was provided as an information gathering exercise to assist staff in preparing an assessment and supporting recommendations to Regional Council should the majority of property owners express their desire to extend

municipal services. Information that was requested from property owners included the age, use, location and health of existing private wells and sewage disposal system and if the property owner is interested in connecting to municipal services, and if so, when. In addition, if the petition passes, the information will inform the Region where to install service connections to minimize work on private property.

- 2.8 Property owners who attended the PIC were provided with a package that included the questionnaire and a copy of the presentation. Packages were also hand-delivered the following week to property owners who were not in attendance. Property owners were asked to return the completed questionnaires by May 31, 2022.

3. Results of Questionnaires

- 3.1 Twelve of 41 property owners within the study area returned questionnaires to the Region, of which five were from property owners connected to the Sun Valley water supply system. The overall results from the questionnaire are as follows:

Interest in Municipal Water	Timing	Interest in Municipal Sewer	Timing
Yes - 4	Immediately	Yes - 1	5 - 10 Years
Yes - 2	5 - 10 Years	Yes - 1	10 - 20 Years
No - 6	-	No - 10	-

- 3.2 Several property owners noted on the questionnaires that the immediate cost of extending municipal services was their biggest concern.
- 3.3 The option to extend municipal services to an existing urban area is through a petition completed by the Region in accordance with Ontario Regulation 586/06. A petition is successful if at least two-thirds of property owners who comprise a minimum of 50 per cent of the total land value are in favour of the petition. Based on the responses received from the property owners, it is likely that a formal petition would be unsuccessful.

4. Well Interference Concerns

- 4.1 There have been several well interference concerns brought forward by property owners who are currently on private services.

4.2 The Region investigated these concerns and has determined that in accordance with the Region's Well Interference Policy, the construction of Regional Services (i.e., watermain and sanitary sewer on Conlin Road and Thornton Road North) has not interfered with the private wells on Bickle Drive or Roselawn Avenue.

5. Alternative Option for the Extension of Municipal Services

5.1 An alternative option to extend municipal services to an existing developed area is through a local improvement charge. In accordance with *Section 326 of the Municipal Act*, Regional Council must pass a by-law to impose a special levy on property owners. Regional Council approval of a special levy would require the Region to plan and approve a budget for the detailed design and construction of the services.

5.2 While all costs continue to be borne by the property owners who benefit from the extension of municipal services, the Region would need to determine the most appropriate manner to be reimbursed for these costs, whether it is immediate by all or immediate by some property owners and other property owners within a set time frame.

5.3 An immediate connection by all Sun Valley property owners to the municipal services would allow the communal well to be decommissioned and the Region would no longer need to operate the private communal well on behalf of Sun Valley.

6. Alternative Operator

6.1 There are other licensed operators that are able to operate the private communal well on behalf of Sun Valley.

6.2 If Sun Valley property owners wish to assign another licensed operator a formal request by Sun Valley would need to be made to the Region and the Ministry of the Environment, Conservation and Parks.

6.3 Until municipal services are constructed or an alternative operator is secured, the Region will continue to maintain and operate the system with the Sun Valley Co-Op members continuing to be responsible for the operating and maintenance costs.

7. Future Thornton Road North Road Reconstruction Update

- 7.1 The Region and Oshawa have initiated the detailed design and preparation of the contract documents for the Thornton Road North Road Reconstruction which includes the extension of approximately 1.2 km of a watermain and sanitary sewer to north of Bickle Drive and Roselawn Avenue.
- 7.2 Oshawa is leading the reconstruction work and will be tendering the project. Detailed design is currently underway and construction is currently forecasted to commence as early as the summer of 2023.

8. Relationship to Strategic Plan

- 8.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic plan:
- a. Goal 5 – Service Excellence
 - Objective 5.1: Optimize resources and partnerships to deliver exceptional quality services and value.

9. Conclusion

- 9.1 It is recommended that this report be received for information.
- 9.2 This report has been reviewed by the Finance Department.
- 9.3 For additional information, contact: Mike Hubble, Manager of Environmental Services Design, at 905-668-7711, extension 3460.

10. Attachment

Attachment #1: Location Map – Sun Valley

Respectfully submitted,

Original signed by:

John Presta, P.Eng., MPA
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

Winchester Rd W

3

Attachment #1 to Report #2022-W-40



Thornton Rd N

Sun Valley Heights Homebuilders Co-op

Roselawn Ave

Bickle Dr

Britannia Ave W

Approximate Road Reconstruction Limits by City of Oshawa

Garrard Rd

Conlin Rd W



The Regional Municipality of Durham Works Department

This map has been produced from a variety of sources. The Region of Durham does not make any representations concerning the accuracy, likely results, or reliability of the use of the materials. The Region hereby disclaims all representations and warranties.

Map Date: August 15, 2022

Proposed Sanitary Sewer

Proposed Watermain

Road Reconstruction Limits



Location Map - Sun Valley

FIGURE 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: #2022-W-41
Date: September 7, 2022

Subject:

Approval of Capital Works and Financing to be Incorporated into a Servicing Agreement with Universal City Developments Inc., Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of a Sanitary Sewer and the Extension of a Watermain, in the City of Pickering

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That capital works and financing estimated at \$167,200 for the Region’s share of the Universal City Developments Inc. sanitary sewer and watermain project in the City of Pickering with a total cost of \$657,500 be approved;
- B) That the Regional Municipality of Durham be authorized to enter into a Servicing Agreement with a Region Share payment to Universal City Developments Inc. estimated at \$167,200 for the Region share of the oversizing of a sanitary sewer, and watermain on Celebration Drive, located north of Bayly Street (Regional Road 22) and west of Sandy Beach Road in the City of Pickering, at an estimated total project cost of \$657,500; and
- C) That financing for the sanitary capital works, estimated at \$345,000, be provided from the following sources:

Sanitary Sewer:

Developer’s Share – Sanitary Sewer

Universal City Developments Inc.	<u>\$277,500</u>
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Total Developer’s Sanitary Sewer Share	<u>\$277,500</u>
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Regional Costs – Sanitary Sewer

2022 Sanitary Sewerage System Capital Budget

Item 154: Allowance for Regional share for works in conjunction with residential subdivision development:

Residential Development Charges (Project ID: M2210)	\$49,815
Commercial Development Charges (Project ID: M2210)	3,105
User Rate (Project ID: M2210)	<u>14,580</u>
	<u>\$67,500</u>

Total Regional Share – Sanitary Sewer **\$67,500**

Total Sanitary Sewer **\$345,000**

Watermain:

Developer’s Share – Watermain

Universal City Developments Inc.	<u>\$212,800</u>
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Total Developer’s Watermain Share **\$212,800**

Regional Costs – Watermain

2022 Water Supply System Capital Budget

Item 249 Allowance for Regional share for works in conjunction with residential subdivision development:

Residential Development Charges (Project ID: M2210)	\$87,337
Commercial Development Charges (Project ID: M2210)	2,194
User Rate (Project ID: M2210)	<u>10,169</u>
	<u>\$99,700</u>

Total Regional Share – Watermain **\$99,700**

Total Watermain **\$312,500**

Total Developer’s Share **\$490,300**

Total Regional Share **\$167,200**

Total Project Financing **\$657,500**

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain approval of capital work and financing including cost sharing in accordance with the Regional Municipality of Durham's (Region) Share Policy, related to the construction of a proposed sanitary sewer and a watermain in the City of Pickering.

2. Background

- 2.1 Universal City Developments Inc. (UCD) is constructing multiple high-rise buildings over several phases (Attachment #1). To develop their lands, they require construction of the subject 375 millimetre (mm) diameter sanitary sewer from the existing trunk sewer located west of the site, across Celebration Drive, to Sandy Beach Road. The sanitary sewer will be oversized to accept drainage from the future redevelopment of lands located to the east of Sandy Beach Road. USD also require a 300 mm diameter watermain to be constructed across Celebration Drive. All proposed cost sharing will be in accordance with the Region's Share Policy.
- 2.2 The Region's Share Policy requires the developer to pay for the works required to service the subject development, with the Region responsible for the balance of the cost. In this case, UCD would be responsible to pay for the cost to construct a 250 mm diameter sanitary sewer, and the Region would be required to pay the cost of oversizing these pipes to a 375 mm diameter sanitary sewer. For both the sanitary sewer and the watermain the Region is responsible to pay 50 per cent of a 250 mm diameter sanitary sewer and a 300 mm watermain where the abutting lands are not owned by UCD. The length of this these abutting lands is approximately 79 m and is located at the northwest corner of Celebration Drive and Sandy Beach Road.
- 2.3 Regional staff do not have standing authority to approve cost sharing in Servicing Agreements. For this reason, Regional Council approval is required for the Region Share payment.
- 2.4 All other requirements of the Regional Servicing Agreement will be in place, including the posting of a letter of credit for 100 per cent of the cost of the works, Regional inspection requirements and the two-year infrastructure maintenance period.

3. Previous Reports and Decisions

3.1 There are no previous reports/decisions related to this report.

4. Financing

4.1 The financing of \$657,500 including the Developer’s share of \$490,300 and the Region’s share of \$167,200 for the oversizing and abutting costs can be provided as follows:

Sanitary Sewer:

Developer’s Share – Sanitary Sewer

Universal City Developments Inc.	<u>\$277,500</u>
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Total Developer’s Sanitary Sewer Share	<u>\$277,500</u>
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Regional Costs – Sanitary Sewer

2022 Sanitary Sewerage System Capital Budget

Item 154: Allowance for Regional share for works in conjunction with residential subdivision development:

Residential Development Charges (Project ID: M2210)	\$49,815
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Commercial Development Charges (Project ID: M2210)	3,105
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User Rate (Project ID: M2210)	<u>14,580</u>
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<u>\$67,500</u>

Total Regional Share – Sanitary Sewer	<u>\$67,500</u>
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Total Sanitary Sewer	<u>\$345,000</u>
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Watermain:

Developer’s Share – Watermain

Universal City Developments Inc.	<u>\$212,800</u>
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Total Developer’s Watermain Share	<u>\$212,800</u>
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Regional Costs – Watermain

2022 Water Supply System Capital Budget

Item 249 Allowance for Regional share for works in conjunction with residential subdivision development:

Residential Development Charges (Project ID: M2210)	\$87,337
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Commercial Development Charges (Project ID: M2210)	2,194
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User Rate (Project ID: M2210)	<u>10,169</u>
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	<u>\$99,700</u>
Total Regional Share – Watermain	<u>\$99,700</u>
Total Watermain	<u>\$312,500</u>
Total Developer’s Share	\$490,300
Total Regional Share	<u>\$167,200</u>
Total Project Financing	<u>\$657,500</u>

5. Relationship to Strategic Plan

- 5.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 5 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and fiscally sustainable services delivery.
 - Priority 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.

6. Conclusion

- 6.1 It is recommended that Regional Council grant approval for the Region to enter into a Servicing Agreement with Universal City Developments Inc. containing the foregoing provisions and that the capital works be approved as identified in the report.
- 6.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendation.
- 6.3 For additional information, contact: Paul Gillespie, Manager Development Approvals, at 905-668-7711, extension 3443.

7. Attachments

Attachment #1: Location Plan

Respectfully submitted,

Original signed by:

John Presta, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer

