



The Regional Municipality of Durham

Works Committee Agenda

Council Chambers
Regional Headquarters Building
605 Rossland Road East, Whitby

Wednesday, February 5, 2020

9:30 AM

1. Declarations of Interest

2. Adoption of Minutes

A) Works Committee meeting – January 8, 2020

Pages 4 - 13

3. Statutory Public Meetings

There are no statutory public meetings

4. Delegations

There are no delegations

5. Presentations

5.1 Ramesh Jagannathan, Director, Transportation and Field Services, re:
Works Department – 2020 Business Plans and Budgets (2020-W-15)
[Item 7.2 H)]

6. Waste

6.1 Correspondence

6.2 Reports

There are no Waste Reports to consider

7. Works

7.1 Correspondence

7.2 Reports

- A) Award of Request for Proposal #1132-2019 for Feedermain Condition Assessment on Pickering Beach Road from Lake Driveway East to Bayly Street East, in the Town of Ajax (2020-W-8) 14 - 17
- B) Award of Request for Proposal #1007-2019 for Engineering Services for Capacity Re-rating and Upgrades at the Newcastle Water Pollution Control Plant, in the Municipality of Clarington (2020-W-9) 18 - 21
- C) Detailed Design Engineering and Construction Administration for the Digester Mixing and Motor Control Centre Upgrades Project at the York-Durham Duffin Creek Water Pollution Control Plant, in the City of Pickering (2020-W-10) 22 - 24
- D) Sole Source Engineering Assignment for the York Durham Duffin Creek Water Pollution Control Plant in the City of Pickering – Supervisory Control and Data Acquisition Hardware Refurbishment for Blower Buildings 1 and 2 (2020-W-11) 25 - 29
- E) Road Rationalization: Transfer of Roads Between the Regional Municipality of Durham and the Town of Whitby (2020-W-12) 30 - 38
- F) Agreement with the Ministry of Transportation Ontario (MTO) for Road Rehabilitation on Taunton Road (Regional Road 4) at Highway 35/115 and Ganaraska Road (Regional Road 9) at Highway 35/115 in the Municipality of Clarington (2020-W-13) 39 - 42
- G) Expropriation of Land Required for Construction of a Multi-Use Path on Victoria Street East (Regional Road 22), in the Town of Whitby (2020-W-14) 43 - 46
- H) 2020 Works Department Business Plans and Budgets (2020-W-15) 47 - 57

[Link to Works Department – 2020 Business Plans and Budgets – General Tax](#)

[Link to Works Department – 2020 Business Plans and Budgets – Solid Waste Management](#)

8. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

9. Confidential Matters

There are no confidential matters to be considered

10. Other Business

11. Date of Next Meeting

Wednesday, March 4, 2020 at 9:30 AM

12. Adjournment

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The Regional Municipality of Durham

MINUTES

WORKS COMMITTEE

Wednesday, January 8, 2020

A regular meeting of the Works Committee was held on Wednesday, January 8, 2020 in the Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:30 AM

Present: Councillor Mitchell, Chair
Councillor Marimpietri, Vice-Chair
Councillor Barton
Councillor Crawford
Councillor John Neal
Councillor Smith
Regional Chair Henry

Also

Present: Councillor Dies
Councillor Foster

Absent: Councillor McLean

Staff

Present: J. Demanuele, Director of Business Services
J. Hunt, Director of Legal Services, Corporate Services – Legal Services
M. Januszkiewicz, Director of Waste Management
G. LeRiche, Director of Business Services, Durham Regional Police Services
J. Paquette, Manager (Works), Corporate Communications
J. Presta, Director of Environmental Services
R. Jagannathan, Director of Transportation and Field Services
R. Inacio, Systems Support Specialist, Corporate Services – IT
S. Penak, Committee Clerk, Corporate Services – Legislative Services
D. Simpson, Facilities Manager, Durham Regional Police Services
S. Siopis, Commissioner of Works

1. **Declarations of Interest**

There were no declarations of interest.

2. Adoption of Minutes

Moved by Councillor Marimpietri, Seconded by Councillor Barton,
(1) That the minutes of the following meetings be adopted:

- Regular Works Committee meeting held on December 4, 2019; and
- Closed Works Committee meeting held on December 4, 2019.

CARRIED

3. Statutory Public Meetings

There were no statutory public meetings.

4. Delegations

There were no delegations to be heard.

5. Presentations

5.1 Perry Sisson, Director, Engineering and Field Operations, Central Lake Ontario Conservation Authority, re: Lake Ontario Water Levels

Perry Sisson, Director, Engineering and Field Operations, Central Lake Ontario Conservation Authority (CLOCA), appeared before Committee to present on Lake Ontario water levels and Plan 2014.

Highlights from his presentation included:

- Summary
- Lake Ontario Watershed
- Lake Ontario and the St. Lawrence River
- Water Level Regulation
- Plan 58 and Plan 58DD
- Plan 2014
- Plan 2014 – Conditions and Rules
- Extreme Water Levels: 2017 and 2019
- Lake Erie
- 2017 and 2019 Extreme Water Levels
- Influence of WL Regulation on 100-yr Static Lake Level
- Future Conditions
- Conclusions

P. Sisson emphasized the importance of collecting as much data as possible as to understand the extent of the damages that occurred during the 2017 and 2019 extreme weather conditions.

P. Sisson noted that the International Joint Commission (IJC), a consultant Zuzek Inc., and the Provincial Flood Advisor, have not attributed the higher water levels to Plan 2014.

At the request of Councillor John Neal, a copy of the letter to The Right Honourable Justin Trudeau with respect to the motion regarding Lake Ontario Water Levels, as adopted by Regional Council at its meeting held on June 26, 2019, was distributed to the Committee.

Councillor John Neal questioned whether staff have received any updates from the Provincial Flood Task Force. S. Siopis advised that she would follow-up and get back to him directly. In response to a question, Councillor Foster advised that the Province has appointed an individual to take the lead on their initiative and he will provide S. Siopis with that information.

P. Sisson responded to questions from the Committee regarding ways for residents to mitigate the damages caused by extreme weather conditions; benefits to the regeneration of wetlands; stormwater management programs; what the Region of Durham can do to help with Lake Ontario Water Levels and what can come from the 2020 Flooding Forecast; outcomes of shoreline mapping; whether municipalities should be looking to the Federal government for relief; and whether CLOCA's coastal flood line regulation will change as new information is received.

6. Waste

6.1 Correspondence

- A) Correspondence dated December 18, 2019 from the Association of Municipalities of Ontario (AMO), re: Call for Action to Pass a Resolution about Transition of the Blue Box to Full Producer Responsibility
-

Staff responded to questions regarding the timelines for implementing full producer responsibility and advised that a report will be forthcoming with more details.

Moved by Regional Chair Henry, Seconded by Councillor Smith,

- (2) That the correspondence dated December 18, 2019 from the Association of Municipalities of Ontario (AMO), re: Call for action to pass a resolution about transition of the blue box to full producer responsibility, be referred to staff for a report.

CARRIED

6.2 Reports

There were no Waste Reports to consider.

7. Works

7.1 Correspondence

There were no items of communication to be considered.

7.2 Reports

- A) Award of Request for Proposal #1105-2019 for Engineering Services for the Detailed Design of the Rehabilitation of Lake Ridge Road (Regional Road 23) from 100 metres north of Myrtle Road/9th Concession Road (Regional Road 5) to 800 metres south of Chalk Lake Road, in the City of Pickering, Town of Whitby and the Townships of Uxbridge and Scugog (2020-W-1)

Report #2020-W-1 from S. Siopis, Commissioner of Works, was received.

Staff responded to questions regarding why the south limit of the rehabilitation project is not being done in-house, like the north limit of the rehabilitation project; and whether there will be passing lanes put in on sections of Lakeridge Road which runs north/south, as a result of the rehabilitation work.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,
(3) That we recommend to Council:

- A) That Request for Proposal #1105-2019 be awarded to The Municipal Infrastructure Group Limited (TMIG Ltd.) to provide engineering services for the detailed design of the rehabilitation of Lake Ridge Road (Regional Road 23) from 100 metres north of Myrtle Road/9th Concession (Regional Road 5) to 800 metres south of Chalk Lake Road, in the City of Pickering, Town of Whitby and the Townships of Uxbridge and Scugog, with a total upset limit not to exceed \$250,688* to be funded from the approved project budget of \$650,000; and

- B) That the Commissioner of Finance be authorized to execute the professional services agreement.

(*) including disbursements and before applicable taxes

CARRIED

- B) Approval for Sole Source Procurement for the Supply of Equipment and Materials to be Specified within Proposed Regional Municipality of Durham Contract D2019-009 for the Construction of the Newcastle Water Supply Plant and Port of Newcastle Sanitary Sewage Pumping Station, in the Municipality of Clarington (2020-W-2)

Report #2020-W-2 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,
(4) That we recommend to Council:

- A) That approval be granted to specify Trojan Technologies as the sole manufacturer and supplier of Ultra-Violet Disinfection equipment and materials for the construction of the disinfection system at the Newcastle Water Supply Plant, within the proposed Regional Municipality of Durham Contract D2019-009 (estimated value of \$200,000*); and
- B) That approval be granted to specify Hydroxyl Environmental Inc. as the sole manufacturer and supplier of the odour Control equipment and materials for the construction of the odour control system at the Port of Newcastle Sanitary Sewage Pumping Station, within the proposed Regional Municipality of Durham Contract D2019-009 (estimated value of \$200,000*).
(*) including disbursements and before applicable taxes

CARRIED

- C) Award of Request for Proposal #657-2019 for an Authorized Dealer for Design, Supply and Installation of Teknion Leverage Workstation Systems Furniture and Teknion Demountable Wall Systems and Related Workstation Peripheral Equipment for all Regional Municipality of Durham Facilities excluding Durham Regional Police Services Locations (2020-W-3)
-

Report #2020-W-3 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,
(5) That we recommend to Council:

- A) That Request for Proposal #657-2019 be awarded to Holmes & Brakel Limited to provide design support services and the supply, delivery, installation, and follow up warranty support of Teknion Leverage Workstation Systems furniture, Teknion Demountable Wall Systems and related workstation peripheral equipment for all Regional Municipality of Durham facilities excluding Durham Regional Police Services locations on an “as required” basis effective until June 30, 2023, with an option to extend for one year;
- B) That financing for design support services and the supply, delivery and installation of Teknion Leverage Workstation Systems furniture, Teknion Demountable Wall Systems and related workstation peripheral equipment be provided through the individual project budgets for construction, renovation, reconfiguration and optimization of Regional facilities; and
- C) That the Commissioner of Finance be authorized to execute the professional services agreement.

CARRIED

D) Amendment and Extension of Lease for Premises with 552595 Ontario Limited at 1775 Reach Street, in the Township of Scugog for the Regional Municipality of Durham Paramedic Services (2020-W-4)

Report #2020-W-4 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,

(6) That we recommend to Council:

- A) That the amendment and extension of lease for 241.54 square metres (2,600 square feet) of office space, being located at 1775 Reach Street, in the Township of Scugog be approved with the following terms and conditions:
- i) The term is for a period of three years commencing January 1, 2020, ending December 31, 2022, with an option to purchase at fair market value;
 - ii) The annual rental rate for the three-year period of the lease is \$28,600* based on a rate of \$118.40* per square metre (\$11.00 per square foot);
 - iii) The Regional Municipality of Durham is responsible for all operating costs for the leased premises, including janitorial services, repairs and maintenance for the premises and grounds and property taxes;
 - iv) The Landlord is responsible for repairs and maintenance for the structure of the building and for replacement of the asphalt parking lot, when necessary; and
- B) That the Regional Chair and Clerk be authorized to execute all documents associated with the amendment and extension of lease agreement.
(* before applicable taxes in all instances

CARRIED

E) Termination of Industrial Raw Water Agreement with WEGU Manufacturing Inc. in the Town of Whitby (2020-W-5)

Report #2020-W-5 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,

(7) That we recommend to Council:

- A) That the Industrial Raw Water Agreement with WEGU Manufacturing Inc. be terminated; and

- B) That the Regional Chair and Clerk be authorized to execute the necessary amendment.

CARRIED

- F) Detailed Design, Construction Administration, Project Planning, and Monitoring Assignments for the Replacement of Incineration Reactors 1 and 2 at the Duffin Creek Water Pollution Control Plant, in the City of Pickering (2020-W-6)

Report #2020-W-6 from S. Siopis, Commissioner of Works, was received.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,
(8) That we recommend to Council:

- A) That the selection of the engineering consortium of "Team Duffin Creek" (Jacobs Canada Incorporated is identified as the prime consultant) by the Regional Municipalities of York and Durham be confirmed to carry out detailed design and construction administration services for the replacement of Reactors 1 and 2 at the Duffin Creek Water Pollution Control Plant at an upset limit of \$19,972,071*, with the Regional Municipality of Durham's share of the cost identified as \$5,232,683*, to be funded from the approved project budget; and
- B) That the selection of Revay and Associates Limited by the Regional Municipalities of York and Durham be confirmed to carry out project planning and monitoring services for the above project at an upset limit of \$1,000,000*, with the Regional Municipality of Durham's share of the cost identified as \$262,000*, to be funded from the approved project budget.
(*) including disbursements and before applicable taxes

CARRIED

- G) Acquisition of Property Recommended for the Construction of Phase 2 of the Durham Regional Police Service Complex, in the Municipality of Clarington (2020-W-7)

Report #2020-W-7 from S. Siopis, Commissioner of Works, was received.

In response to a question, staff advised that discussions have taken place with respect to cooperative sites (paramedic/fire/police), but because of the complexity of the four buildings on this site, there would not be room for multiple emergency services.

S. Siopis advised that the acquisition of land at 2188 Bloor Street East, in the Municipality of Clarington, would allow for surface parking as opposed to multi-level parking and would allow a buffer between the residents and the complex on the north and west side. She also advised that the extra land would eliminate the need for a retaining wall and would accommodate a large amount of fill, reducing the need to haul fill material into and off site.

In response to a question from Councillor Crawford, J. Demanuele advised that she would follow-up on the total cost of the project and get back to her directly, as well as forward her the business case.

Moved by Councillor Marimpietri, Seconded by Councillor Crawford,
(9) That we recommend to Council:

A) That the purchase agreement for additional lands for the Durham Regional Police Service Complex in the Municipality of Clarington be approved:

James Robert Maguire,	2188 Bloor Street East	\$650,000
Stanley Matthew Maguire,	Clarington, ON	
John Arthur Maguire,	Part Lot 20, Conc. 2, Darlington.	
Estate of Lesley Maguire	Parts 7, 8, 9 10R3579, Municipality of Clarington.	

B) That financing for the acquisition be provided from the current approved project budget; and

C) That the Regional Chair and Clerk be authorized to execute all documents associated with the agreement.

CARRIED

8. **Advisory Committee Resolutions**

There were no advisory committee resolutions to be considered.

9. **Confidential Matters**

There were no confidential matters to be considered.

10. **Other Business**

10.1 Notification to Local Municipalities, re: Fill Locations

Detailed discussion ensued regarding whether there is a Regional policy that dictates how local municipalities are notified of the locations where fill from Regional road reconstruction projects will be disposed of.

Staff advised that notifying local municipalities is a long-standing practice on projects where there is fill being generated, and that the location information is included in the contract document that requires the contractor to be responsible for approaching landowners.

S. Siopis advised that staff could prepare a memorandum for Committee with respect to discussions that have taken place with the local municipalities and conservation authorities regarding fill locations for Regional construction projects,

and potential next steps. The Committee suggested that the haul route be required in the contract document.

Moved by Councillor John Neal, Seconded by Councillor Marimpietri,
(10) That the Region of Durham develop a Regional fill policy with input from the local municipalities and Central Lake Ontario Conservation Authority (CLOCA).

REFERRED BACK TO STAFF LATER IN THE MEETING
(See Following Motions)

Moved by Councillor Smith, Seconded by Councillor John Neal,
(11) That main motion (10) of Councillor John Neal and Councillor Marimpietri be amended by adding the word 'disposal' after the word 'fill' and before the word 'policy'.

REFERRED BACK TO STAFF LATER IN THE MEETING
(See Following Motion)

Moved by Regional Chair Henry, Seconded by Councillor Barton,
(12) That the main motion (10) of Councillor John Neal and Councillor Marimpietri, and the amending motion (11) of Councillor Smith and Councillor John Neal, be referred back to staff to be incorporated into a memorandum to the Committee.

MOTION CARRIED ON THE FOLLOWING RECORDED VOTE:

<u>Yes</u>	<u>No</u>
Councillor Barton	None
Councillor Crawford	
Regional Chair Henry	
Councillor Marimpietri	
Councillor John Neal	
Councillor Smith	
Chair Mitchell	

Absent: Councillor McLean

Conflict: None

10.2 Snow Fences Along the Provincial Highways

Councillor Smith inquired as to why there were no snow fences in certain areas of the North where there had been previously. He asked whether Durham Region has any input as to where Ministry of Transportation (MTO) snow fences are placed, and if there was anything that could be done to re-establish the snow fences in those areas.

S. Siopis advised that they were not aware changes had been made to the snow fence locations. She also advised that staff will be meeting with the Ministry of Transportation shortly and will inquire changes may have been made and report back to him directly.

10.3 Concerns at the Taunton Road and Thornton Road Intersection

A concern was raised regarding numerous safety concerns at the intersection of Taunton Road and Thornton Road, where there have been a couple fatalities, and numerous accidents. Councillor Marimpietri suggested that the Region of Durham and the City of Oshawa staff to discuss possible solutions on improvements at this intersection.

10.4 Display Screen at the Durham York Energy Centre (DYEC)

Councillor Foster questioned what the operating costs were for the display screen located outside of the Durham York Energy Centre (DYEC) building, and whether there are members of the public coming to view the data being displayed. M. Januskiewicz advised that members of the public do view the information being provided in the display and that part of the cost is incurred through the contract with COVANTA but will follow-up regarding the total cost and get back to him directly.

11. Date of Next Meeting

The next regularly scheduled Works Committee meeting will be held on Wednesday, February 5, 2020 at 9:30 AM in the Lower Level Boardroom (LL-C), Regional Headquarters Building, 605 Rossland Road East, Whitby.

12. Adjournment

Moved by Councillor John Neal, Seconded by Regional Chair Henry,
(13) That the meeting be adjourned.

CARRIED

The meeting adjourned at 11:01 AM

Respectfully submitted,

D. Mitchell, Chair

S. Penak, Committee Clerk

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: #2020-W-8
Date: February 5, 2020

Subject:

Award of Request for Proposal #1132-2019 for Feedermain Condition Assessment on Pickering Beach Road from Lake Driveway East to Bayly Street East, in the Town of Ajax

Recommendation:

That the Works Committee recommends:

- A) That Request for Proposal #1132-2019 be awarded to Pure Technologies Ltd. to provide a condition assessment for the feedermain on Pickering Beach Road from Lake Driveway East to Bayly Street East, in the Town of Ajax, at a total upset limit not to exceed \$282,050*; and
 - B) That the Commissioner of Finance be authorized to execute the professional services agreement.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to provide details and seek authorization to award Request for Proposal (RFP) #1132-2019 to Pure Technologies Ltd. to provide a condition assessment for the feedermain on Pickering Beach Road, from Lake Driveway East to Bayly Street East, in the Town of Ajax (Ajax). Dollar amounts followed by an asterisk (*) include disbursements and are before applicable taxes.

2. Background

- 2.1 There are 2,489 kilometres of watermains in the Regional Municipality of Durham (Region). The largest transmission mains or feeder mains are concrete pressure pipe with an average age of 28 years. Although these mains have operated with minimal incidents since installation, a prudent asset management plan strives to minimize risk.
- 2.2 The feeder main on Pickering Beach Road is 1,500 millimetres (mm) in diameter and is a pre-stressed concrete cylinder pipe (PCCP). This feeder main is recommended for assessment as it ranks as one of the highest scores for consequence of failure. It also experienced a leak in 2017 and was shut down for several weeks for repair. The length of the inspection project is approximately three kilometres.
- 2.3 The pipe will be internally inspected using electromagnetic equipment including a mounted camera. The results of the inspection will provide a video showing the condition of the inside of the pipe, locations of any potential leaks as well as the number of broken pre-stressing wires, if any. The pressure in the pipe will also be monitored for 30 days. A structural analysis will then be completed using all of the collected data to provide recommendations on any required repairs and future inspections.

3. Request for Proposal #1132-2019

- 3.1 RFP #1132-2019, to provide a condition assessment for the feeder main on Pickering Beach Road from Lake Driveway East to Bayly Street East, in Ajax, was issued and advertised publicly on November 28, 2019, through the Region's website.
- 3.2 The RFP closed on December 17, 2019. One proposal was received from Pure Technologies.
- 3.3 The proposal was deemed compliant and evaluated by an evaluation team comprised of staff from the Works Department. The Region's Purchasing Section of the Finance Department oversaw the evaluation process.

3.4 The proposal was reviewed and evaluated in accordance with the evaluation criteria outlined in the RFP, which consisted of the following elements:

- Company Structure and Resources (15%)
- Project Team Background, Qualifications and Experience (40%)
- Project Management, Approach, Innovation & Methodology (30%)
- Pricing (15%)
- References (Pass/Fail)

3.5 Based on an overall technical and financial evaluation of the proposal by the evaluation team, it is recommended that Pure Technologies Ltd. be awarded the professional services assignment.

4. Financial Implications

4.1 Section 9.4.1 of the Region's Purchasing By-Law 68-2000 (Amended) requires where the project or annual value of a consulting or professional service assignment is expected to be more than \$60,000, the approval of Regional Council is required for the award of the assignment when proposals are obtained.

4.2 The engineering services assignment, in an amount not to exceed \$282,050*, can be funded from within the following approved project budget:

Condition Assessments Linear (Project D1420)	\$360,000
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5. Conclusion

5.1 It is recommended that Request for Proposal #1132-2019, to provide a condition assessment for the feedermain on Pickering Beach Road from Lake Driveway East to Bayly Street East, in the Town of Ajax, be awarded to Pure Technologies Ltd. for a total upset limit of \$282,050*.

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

5.3 For additional information, please contact Wendy Houlberg, Project Manager, Engineering Planning and Studies, at 905-668-7711, ext. 3444.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine 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: #2020-W-9
Date: February 5, 2020

Subject:

Award of Request for Proposal #1007-2019 for Engineering Services for Capacity Re-rating and Upgrades at the Newcastle Water Pollution Control Plant, in the Municipality of Clarington

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That Request for Proposal #1007-2019 be awarded to R.V. Anderson Associates Limited (RVA) to provide engineering services for capacity re-rating and upgrades at the Newcastle Water Pollution Control Plant, in the Municipality of Clarington, with a total upset limit not to exceed \$2,103,378* funded from the approved project allowance of \$4,914,000 and;
 - B) That the Commissioner of Finance be authorized to execute the Agreement for Consulting/Professional Services and any required amendments to the Agreement.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to provide details and seek authorization to award Request for Proposal (RFP) #1007-2019 to R.V. Anderson Associates Limited (RVA) to provide engineering services for capacity re-rating and upgrades at the Newcastle Water Pollution Control Plant (WPCP), in the Municipality of Clarington (Clarington). Dollar amounts followed by an asterisk (*) include disbursements and are before applicable taxes.

2. Background

- 2.1 The Newcastle WPCP is located at 1000 Toronto Street in Newcastle. The plant was commissioned in 1996.
- 2.2 Future developments in the Newcastle community, particularly the Foster Creek Neighbourhood, North Village Neighbourhood, and completion of Kaitlin Waterfront Development require additional wastewater treatment capacity at the Newcastle WPCP.
- 2.3 In 2014, XCG Consultants Ltd (XCG) completed a feasibility study to re-rate the plant and to identify required upgrades that are necessary to support an increased plant capacity.
- 2.4 The feasibility study confirmed that the plant can be re-rated from 4,086 m³/d to 7,200 m³/d through capital upgrades and operational modifications prior to a major plant expansion.
- 2.5 The scope of work for the plant upgrades project was identified by Regional staff and the RFP was prepared. The project requires engineering services to conduct an environmental assessment addendum, preliminary design, detailed design and contract administration.

3. Request for Proposal #1007-2019

- 3.1 RFP #1007-2019 to provide engineering services for capacity re-rating and upgrades at the Newcastle Water Pollution Control Plant, in Clarington was issued and advertised publicly on August 21, 2019, through the Regional Municipality of Durham's (Region) website.
- 3.2 The RFP closed on October 3, 2019. Proposals were received from the following four (4) respondents:
 - Associated Engineering (Ontario) Limited
 - CH2M Hill Canada Limited
 - J. L. Richards & Associates Limited
 - R. V. Anderson Associates Limited
- 3.3 The proposals were evaluated by an evaluation team comprised of staff from the Works Department. The Region's Purchasing Section of the Finance Department oversaw the evaluation process.

3.4 All four (4) proposals were deemed compliant and were reviewed and evaluated in accordance with the evaluation criteria outlined in the RFP, which consisted of the following elements:

- Background and experience of the company relevant to engineering services for sewage treatment plant projects (20%);
- Qualifications and experience of the proposed key staff assigned to provide engineering services for the Newcastle WPCP project (40%);
- Technical approach and methodology for providing engineering services for the Newcastle WPCP project (25%);
- Pricing (15%); and
- References (Pass / Fail).

3.5 Based on an overall technical and financial evaluation of the proposals by the evaluation committee and based on the satisfactory performance on past similar projects for the Region, it is recommended that the highest scoring proponent, R.V. Anderson Associates Limited, be awarded the engineering services agreement.

4. Financial Implications

4.1 Section 9.4.1 of the Region's Purchasing By-Law 68-2000 (Amended) requires where the project or annual value of a consulting or professional service assignment is expected to be more than \$60,000, the approval of Regional Council is required for the award of the assignment when proposals are obtained.

4.2 The engineering services assignment, in an amount not to exceed \$2,103,378*, can be funded from within the approved capital project allowance of \$4,914,000. (Project D1117).

5. Conclusion

5.1 It is recommended that Request for Proposal #1007-2019 for Engineering Services for capacity re-rating and upgrades at the Newcastle Water Pollution Control Plant, in Clarington, be awarded to R.V. Anderson Associates Limited for a total upset limit of \$2,103,378*.

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

5.3 For additional information, please contact Marek Krynski, Project Manager, Environmental Services Design, at 905-668-7711, ext. 3471.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer



The Regional Municipality of Durham Report

To: The Works Committee
From: Commissioner of Works
Report: #2020-W-10
Date: February 5, 2020

Subject:

Detailed Design Engineering and Construction Administration for the Digester Mixing and Motor Control Centre Upgrades Project at the York-Durham Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That the selection of Jacobs Canada Incorporated by the Regional Municipalities of York and Durham be confirmed to carry out the detailed design and construction administration services for the Digester Mixing and Motor Control Centre upgrades project at the Duffin Creek Water Pollution Control Plant at an upset limit of \$ 2,845,340 with the Regional Municipality of Durham's share of the cost identified as \$745,479 which is to be funded from the approved project budget.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain approval of the Regional Municipality of Durham's (Durham) share for professional engineering services from Jacobs Canada Incorporated (Jacobs) to undertake detailed design and construction administration services for the digester mixing and motor control centre (MCC) upgrades project at the Duffin Creek Water Pollution Control Plant (WPCP), in the City of Pickering.

2. Background

- 2.1 The required digester and MCC upgrades include mixing process, electrical infrastructure, building envelope and miscellaneous work as identified through the asset management planning process and condition assessment.
- 2.2 Works Committee Report #2016-W-78 authorized the award of conceptual design activities to Team Duffin Creek (CH2M Hill Canada Ltd).
- 2.3 Conceptual design activities were completed by Team Duffin Creek at the end of the third quarter of 2017.
- 2.4 The Regional Municipality of York (York) issued Request for Proposal (RFP) #P-19-46 for the project on behalf of York and Durham on August 27, 2019. Four submissions were received for the proposal with one submission rejected due to the inclusion of financial information in the technical proposal which violated the submission requirements. The remaining three submissions were evaluated by project team members from both York and Durham (Regions), with Jacobs' submission being recommended to carry out the assignment. Dollar amounts followed by an asterisk (*) include disbursements and are before applicable taxes.
- 2.5 York Council authorized the recommendation of Jacobs at their Council meeting of November 21, 2019.

3. Financial Implications

- 3.1 The project will be cost shared based on the 15-year average utilization by both Regions for the detailed design and construction administration work as follows:

Region	Cost Splits	Upset Limit*
Durham	26.2%	\$745,479
York	73.8%	\$2,099,861
Total	100.0%	\$2,845,340

3.2 Durham's share for the detailed design and construction administration engineering services can be accommodated within the funds approved in the 2020 Sanitary Sewerage Capital Budget, Item #96 Project # Y1502 totalling \$8,000,000.

4. Conclusion

4.1 It is recommended that the Regional Municipality of Durham concur with the award of the detailed design and construction administration engineering services of the digester mixing and motor control centre upgrades to Jacobs Canada Incorporated at an upset limit of \$2,845,340* with the Regional Municipality of Durham's share of the cost identified as \$745,479*.

4.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendation.

4.3 For additional information, please contact Brad Dobson, Project Manager, Plant Operations, at 905-668-7711 ext. 4297.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
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: #2020-W-11
Date: February 5, 2020

Subject:

Sole Source Engineering Assignment for the York Durham Duffin Creek Water Pollution Control Plant in the City of Pickering – Supervisory Control and Data Acquisition Hardware Refurbishment for Blower Buildings 1 and 2

Recommendations:

That the Works Committee recommends to Regional Council:

- A) That Eramosa Engineering Ltd. be retained to provide pre-design, detailed design and construction administration services for the York Durham Duffin Creek Water Pollution Control Plant Stage 1 and 2 Blower Building Control Control System Hardware Replacement at an upset limit not to exceed \$160,000*;
- B) That the gross cost of this assignment will be funded from the approved 2020 Sanitary Sewage System Budget, cost shared with the Regional Municipality of York as follows:

Durham Region Share (20%) User Rate	\$32,000
York Region Share (80%)	<u>\$128,000</u>
Total Upset Limit	<u>\$160,000</u>

- C) That the Commissioner of Finance be authorized to execute the necessary engineering services agreement.
-

Report:**1. Purpose**

- 1.1 The purpose of this report is to obtain approval to sole source an assignment to Eramosa Engineering Limited for engineering and construction administration services for control system replacements for Blower Buildings 1 and 2 at the Duffin Creek Water Pollution Control Plant (WPCP). Dollar amounts followed by an asterisk (*) are including disbursements and before applicable taxes.

2. Background

- 2.1 In 2006, Terms of Reference for engineering services for the replacement of the legacy proprietary control system fibre optic backbone were prepared by staff. This infrastructure work included:
- a. The replacement of the proprietary control system provided with the original facility in 1980. This work required extensive planning and interaction with Plant Operations to maintain facility operation during construction and commissioning;
 - b. The installation of a new modern, fibre optic backbone extending into all facility buildings. This project allowed the replacement of the existing control system and the integration of the stand-alone fire alarm monitoring system; and
 - c. In addition to the infrastructure work, Eramosa in conjunction with staff recommended and prepared hardware standards with regards to Programmable Logic Controllers and associated hardware for future control system additions. These standards have been maintained in use at the facility for the last 15 years with the Region having preferred pricing (via a standard agreement) with the hardware vendor.
- 2.2 Eramosa was the recommended proponent for this scope of work. In 2013, Eramosa successfully transitioned the legacy Stage 1 and 2 Incineration Complex Wonderware platform to the new, standard IFIX platform adopted above. This work was extremely detailed and required close co-ordination with the Operations staff to ensure reactor operations remained consistent. The work was performed successfully.

2.3 The synopsis above is provided to demonstrate that Eramosa has been instrumental in modernizing the Duffin Creek Water Pollution Control Plant Control System infrastructure for over 17 years.

3. Blower Buildings 1 and 2 Control System – End of Life

3.1 Blower Buildings 1 and 2 were constructed in 2002 during the L1 Liquid Capacity Upgrade Project where the existing mechanical aeration system was replaced with centrifugal blowers and a diffused air system.

3.2 The existing systems have been in service for over 18 years. The original supplier of the local control panel no longer manufactures the product. The networking hardware including GE Versamax remote I/O hardware is no longer actively supported. The facility has consumed its original supply of hardware spare parts over the years. Additional spare components can no longer be securely supplied.

3.3 The required upgrades identified above, were further verified through the asset management planning process and condition assessment activities.

3.4 Eramosa Engineering completed the conceptual design for a replacement strategy in December of 2019, utilizing the facility control system hardware and control programming that were established in 2005 and have been used in capital project activities throughout the recent Stage 3 Expansion and Stage 1 and 2 Retrofit projects conducted over the last 15 years.

3.5 Detailed design, if initiated in March of 2020, will be completed by year end with construction initiated and completed by the end of 2021.

3.6 It is imperative that the above schedule be maintained to ensure that the unit process treatment performance can be reliably controlled and operated. A failure of the control hardware essentially reduces the system to localized, operator control and monitoring with reduced capability to reduce energy and optimize performance.

3.7 Duffin Creek WPCP Operations staff have further plans to optimize the control system software programming with the assistance of the original vendor and Eramosa. This future work will increase the ability to reduce power consumption through control system programming updates that reflect the operating conditions of today. This proposed work cannot be implemented until the control system hardware has been updated to current generation equipment. Approvals for this

work will be sought separately upon completion of this phase of the project.

4. Financial Implications

- 4.1 The Region's Purchasing By-Law 68-2000 (Amended), Section 9.1.1 requires that staff submit a report to Regional Council to obtain approval to acquire the services of a particular company or individual where the value of the assignment is expected to be more than \$60,000.
- 4.2 The estimated value of the engineering services agreement, inclusive of construction administration services, is estimated to be \$160,000*.
- 4.3 The gross cost of this assignment will be funded from the approved 2020 Sanitary Sewage System Budget, Program # Y2003, Duffin Creek Water Pollution Control Plant Item # 103 which is cost shared with the Regional Municipality of York as follows:

Durham Region Share (20%)	\$32,000
York Region Share (80%)	<u>\$128,000</u>
Total Upset Limit	<u>\$160,000</u>

5. Conclusion

- 5.1 It is recommended that Eramosa Engineering Inc. be retained to conduct the engineering and construction administration services for the Supervisory Control and Data Acquisition Hardware Refurbishment for Blower Buildings 1 and 2 at the York Durham Duffin Creek Water Pollution Control Plant with an upset limit not to exceed \$160,000*.
- 5.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendation.

5.3 For additional information, please contact Brad Dobson, Project Manager, Plant Operations, at 905-668-7711 ext. 4297.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
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: #2020-W-12
Date: February 5, 2020

Subject:

Road Rationalization: Transfer of Roads Between the Regional Municipality of Durham and the Town of Whitby

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That the Town of Whitby Report # PW-29-19 (Attachment #1) approved by Whitby Council on October 28, 2019, be received for information;
- B) That in keeping with the intent of the Road Rationalization Plan to realign responsibility for the road network between the Regional Municipality of Durham and the Local Area Municipalities, By-law #22-2018 be amended to give effect to the transfers described below and that Regional staff be authorized to take all steps necessary to give effect thereto:
 - Cochrane Street from Dundas Street to Rossland Road (including the CP Rail structure), and Henry Street from Victoria Street to Dundas Street, from the Regional Municipality of Durham to the Town of Whitby, effective May 1, 2020;
 - Rossland Road from Des Newman Boulevard to Cochrane Street, from the Town of Whitby to the Regional Municipality of Durham, effective May 1, 2020;
- C) That the responsibility for the operation and maintenance of Rossland Road from Lake Ridge Road to Des Newman Boulevard, the segment that is under Ministry of Transportation Ontario's ownership, be transferred from the Town of Whitby to the Regional Municipality of Durham, effective May 1, 2020;

- D) That the Town's commitment to complete the final lift of asphalt on the recently reconstructed segment of Rossland Road, roughly in the 2020/21 timeframe (i.e. after the proposed transfer date), be acknowledged;
 - E) That the Region's commitment to replace the CP Rail structure on Cochrane Street, roughly in the 2021/22 timeframe (i.e. after the proposed transfer date), be acknowledged;
 - F) That Regional staff advance further discussions with applicable Local Area Municipalities to realize full road rationalization within the Regional Municipality of Durham; and
 - G) That a copy of this report be forwarded to the Town of Whitby.
-

Report:

1. Background

- 1.1 The Regional Municipality of Durham (Region) and Town of Whitby (Whitby) staff have engaged in discussions over several years related to a Roads Network Rationalization Plan that included realigning responsibility of the road network between the Region and the Local Area Municipalities (LAMs).
- 1.2 In March 2018, Information Report #2018-INFO-31 was issued to update Regional Council on the findings to date of the Region-wide Road Network Rationalization Study. On the basis of sound transportation planning criteria outlined below, the report identified candidate road segments for jurisdictional transfer in the short-term and highlighted segments proposed for future consideration:
 - a. Connection with the provincial and/or inter-regional network
 - b. Volume of inter-municipal and regional traffic on the road
 - c. Volume of traffic relative to adjacent roads
 - d. Level of access control
 - e. Role in supporting regional goods movement/aggregate hauling
 - f. Role in supporting major transit route and/or planned rapid transit route
 - g. Role in supporting region-wide economic and growth objectives
 - h. Effects on corridor planning or planning of downtowns or mature urban areas
 - i. Potential environmental and community impact due to change in road function
- 1.3 The #2018-INFO-31 report acknowledged that transfer opportunities in each LAM have unique considerations that will require further discussion.

- 1.4 In September 2018, Information Report #2018-INFO-138 (Attachment #2) was issued to update Regional Council on further meetings/exchanges with LAM staff and to document a summary of staff level views and consensus elements on the proposed short-term transfers. The report noted that upon receipt of comments from the participating LAM's, specific to their candidate roads identified for transfer in the short-term, Regional staff would report back on a recommended implementation plan and timeline for the transfers.
- 1.5 On October 28, 2019, Whitby Council through staff report PW 29-19 (Attachment #1) resolved that the Town formalize an agreement with the Region of Durham for the transfer of the following road segments effective May 1, 2020:
- Rossland Road between Lake Ridge Road and Cochrane Street.
 - Cochrane Street between Dundas Street and Rossland Road, excluding the limits of the CP Rail bridge (structure).
 - Henry Street between Victoria Street and Dundas Street.
- 1.6 Whitby Council's resolution also authorized staff to continue discussions with respect to road rationalization/transfer of additional road segments.

2. Recommended Road Transfers

- 2.1 Further to the transfer candidates identified in Report #2018-INFO-138 (Attachment #2), recent discussions with Whitby staff, and consideration of Whitby Council's resolution of October 28, 2019, it is recommended that the first set of road candidates as detailed in Table 1 below be transferred effective May 1, 2020.

Table 1: Recommended Road Transfer Candidates (May 1, 2020)

Region Road #	Road Name	From	To	Length (km)	# of Lanes	Lane-km
43	Cochrane Street	Dundas Street	Rossland Road	2.1	2/3	6.2
45	Henry Street	Victoria Street	Dundas Street	2.1	2/3	5.8
Total Region to Local	-	-	-	4.2	-	12.0
Local to Region (Operation and Maintenance Responsibilities)	Rossland Road	Lake Ridge Road	Des Newman Blvd	0.8	4/5	3.5
Local to Region	Rossland Road	Des Newman Blvd	Cochrane Street	2.1	4/5	9.3
Total Local to Region	-	-	-	2.9		12.8

- 2.2 A location map identifying these recommended road transfers is included in Attachment #3.
- 2.3 With respect to the recommended transfer of the Rossland Road segments from Whitby to the Region, portions of the roadways were recently reconstructed by the Town. Final lift of asphalt is yet to be placed on these portions. As noted in Whitby's Report PW-29-19, it is expected the Town will complete this asphalt work after the recommended transfer date. The anticipated timing for the work is 2020/21.
- 2.4 With respect to the recommended transfer of Cochrane Street from the Region to the Town of Whitby, the road segment includes a CP Rail structure that is due for replacement in the short term. Design for the replacement is currently underway. As an approved Regional capital project, post transfer, the Region will undertake to complete this replacement. The anticipated timing for the replacement is 2021/22, subject to timely review and allocation of resources by CP Rail. Town staff will continue to be engaged as the design work advances.
- 2.5 Rossland Road from Lake Ridge Road to Des Newman Blvd is currently owned by the Province of Ontario due to Highway 412 construction and is expected to remain with the Province due to the planned future interchange at Highway 412. Due to the Province's requirements for the municipality to maintain the roadway that travels over the highway, maintenance responsibilities for this section of Rossland Road will be transferred from the Town of Whitby to the Region.

2.6 Other future proposed road transfer candidates include:

Table 2: Proposed Future Road Transfer Candidates

Reg. Rd. #	Road Name	From	To	CL Length (km)	# of lanes	Lane-km
22	Victoria Street (old alignment)	0.7 km West of Thickson Road	0.4 km West of Thickson Road	0.3	2/3	0.8
46	Brock Street	Water Street	Victoria Street	1.0	2	2.0
46	Brock Street	Victoria Street	South Limit of Highway #401	0.3	5	1.5
Former 23	Lake Ridge Road (North)	Almond Avenue	Cresser Avenue	0.3	2	0.6
Local to Region	Dundas Street	Fothergill Court	200 m west of Cochrane Street	1.1	4/5	5.1
Local to Region	Dundas Street	200 m east of Garden Street	Whitby/Oshawa Boundary	2.7	4/5	13.2

2.7 Town of Whitby Report PW-29-19 has identified Winchester Road from Baldwin Street to Thickson Road for assessment of potential transfer from the Region to the Town. The Town will soon be starting an Environmental Assessment (EA) study for the proposed Highway 7/12 Alternate Route. The Town is also engaged in EA studies for major roads in the new development areas of Brooklin and for a new east-west mid-block arterial south of Highway 407. Regional staff and other stakeholders (e.g. MTO) will actively participate in these EA studies to understand the impacts to the Regional road network and to advance further discussion on rationalization of Regional/Local/Ministry roads in the Brooklin area as appropriate.

3. Financial Implications

3.1 The primary objective of the recommended and proposed transfers is to establish the proper jurisdiction for these roads to maximize the overall efficiency of the road network in Durham. As the transfers are completed, it is expected that both the Region and the participating LAM will respectively integrate the capital, asset management, maintenance and operating cost obligations that accrue from these transfers into their business planning processes. This will include, but not be limited to, road and structural rehabilitations and expansions, traffic control device

installations and upgrades, active transportation upgrades and asset inspections, all taking guidance from respective established/approved policies and practices.

- 3.2 Whitby has historically performed winter maintenance on Cochrane Street and Henry Street on the Region's behalf and invoicing the Region on a time and material basis. After the May 1, 2020 transfer date, Whitby will continue the winter maintenance on these streets at its own cost. With the transfer of Rossland Road to the Region, the Region will assume and complete the winter maintenance on this road segment from Lake Ridge Road to Cochrane Street.
- 3.3 Based on 2018 benchmarking cost estimates for winter maintenance, road-side operating costs and paved road operating costs, there will be a slight increase in Regional costs.
- 3.4 At signalized intersections where all intersecting roads are LAM roads, the Region operates and maintains the traffic signal with the costs charged back to the LAM. With the recommended May 1, 2020 transfer candidates, there will be five traffic signals impacted (Attachment #3) for which operating and maintenance costs will be charged back to Whitby:
 - Cochrane Street at Dundas Street
 - Cochrane Street at Bonacord Avenue/Vernon Street
 - Henry Street at the GO Station entrance
 - Henry Street at Burns Street
 - Henry Street at Dundas Street
- 3.5 At signalized intersections between Regional road(s) and LAM road(s), the Region typically operates and maintains the traffic signals at its own cost. With the recommended May 1, 2020 transfer candidates, the funding for operation and maintenance of four traffic signals (Attachment #3) will become the Region's responsibility:
 - Rossland Road at Des Newman Boulevard
 - Rossland Road at McQuay Boulevard
 - Rossland Road at Coronation Road (currently under construction)
 - Rossland Road at Country Lane
- 3.6 On a go forward basis, the Region and the Town of Whitby will include the rationalized road segments in their respective business plans and budgets for any future road work.

4. Conclusion

- 4.1 It is recommended that Cochrane Street from Dundas Street to Rossland Road and Henry Street from Victoria Street to Dundas Street be transferred from the Regional Municipality of Durham to the Town of Whitby, and that Rossland Road from Lake Ridge Road to Cochrane Street be transferred from the Town of Whitby to the Regional Municipality of Durham, effective May 1, 2020.
- 4.2 As indicated in the recommendations to this report, to affect the road transfers as described, By-law Number 22-2018 will be amended.
- 4.3 Regional staff will continue discussions with applicable Local Area Municipalities regarding potential future road transfers to achieve road rationalization.
- 4.4 Upon receipt of comments from the participating Local Area Municipalities, specific to their candidates identified for transfer in the short-term, Regional staff will report back on a recommended implementation plan and timeline for the transfers.
- 4.5 The Regional Municipality of Durham's Finance and Legal Departments have reviewed this report.

5. Attachments

Attachment 1: [Town of Whitby Road Rationalization Report #PW 29-19 dated October 21, 2019](#)

Attachment 2: [Information Report #2018-INFO-138 dated September 28, 2018](#) –

Attachment 3: Location Map – Road Transfers

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
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: #2020-W-13
Date: February 5, 2020

Subject:

Agreement with the Ministry of Transportation Ontario (MTO) for Road Rehabilitation on Taunton Road (Regional Road 4) at Highway 35/115 and Ganaraska Road (Regional Road 9) at Highway 35/115 in the Municipality of Clarington

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That subject to approval of financing from the 2020 Business Plans and Budgets that a cost sharing agreement with the Ministry of Transportation Ontario (MTO) for road rehabilitation on Taunton Road (Regional Road 4) at Highway 35/115, and Ganaraska Road (Regional Road 9) at Highway 35/115, in the Municipality of Clarington be approved with an estimated total cost of \$209,160*; and
 - B) That the Regional Chair and Clerk be authorized to execute the above cost sharing agreement.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to seek authorization for the Regional Chair and Clerk to execute the cost sharing Agreement with the Ministry of Transportation Ontario (MTO) for road rehabilitation on Taunton Road (Regional Road 4) at Highway 35/115 and Ganaraska Road (Regional Road 9) at Highway 35/115 (Attachment #1), in the Municipality of Clarington (Clarington). Dollar amounts with an asterisk (*) are before applicable taxes.

2. Background

- 2.1 MTO is completing the detailed design and pavement and structural rehabilitation on Highway 35/115 from Main Street to Boundary Road in Clarington.
- 2.2 As part of their project, MTO provided recommendations with cost estimates where the Region could cost share to extend the pavement limits of the road rehabilitation on Taunton Road (Regional Road 4) and on Ganaraska Road (Regional Road 9) adjacent to the Highway 35/115 interchanges, where reasonable.
- 2.3 Regional Works staff reviewed the recommendations and cost estimates and recommend including this work in MTO's project to realize "economy of scale" benefits.
- 2.4 Construction of this project is anticipated to start in spring 2020.

3. Financial Implications

- 3.1 The total estimated cost to be paid by the Region is \$209,160*. This can be financed from the proposed 2020 Capital Road Program, Road Resurfacing/Rehabilitation Other Locations budget of \$4.21 million (R2099). The financing is subject to the approval of the 2020 Business Plans and Budgets by Regional Council scheduled to occur concurrently with this report.

4. Conclusion

- 4.1 It is recommended that subject to the approval of the 2020 Business Plans and Budgets that the Regional Municipality of Durham enter into the cost sharing Agreement with the Ministry of Transportation Ontario (MTO) for road rehabilitation on Taunton Road (Regional Road 4) at Highway 35/115, and Ganaraska Road (Regional Road 9) at Highway 35/115, in the Municipality of Clarington.
- 4.2 This report has been reviewed by the Finance Department and Legal Services – Corporate Services.

4.3 For additional information, please contact Janet Mosher, Project Manager, Transportation Infrastructure, at 905-668-7711, extension 3336.

5. Attachments

Attachment #1: Map for Ministry of Transportation Road Rehabilitation on Taunton Road at Highway 35/115 and Ganaraska Road at Highway 35/115 in the Municipality of Clarington

Respectfully submitted,

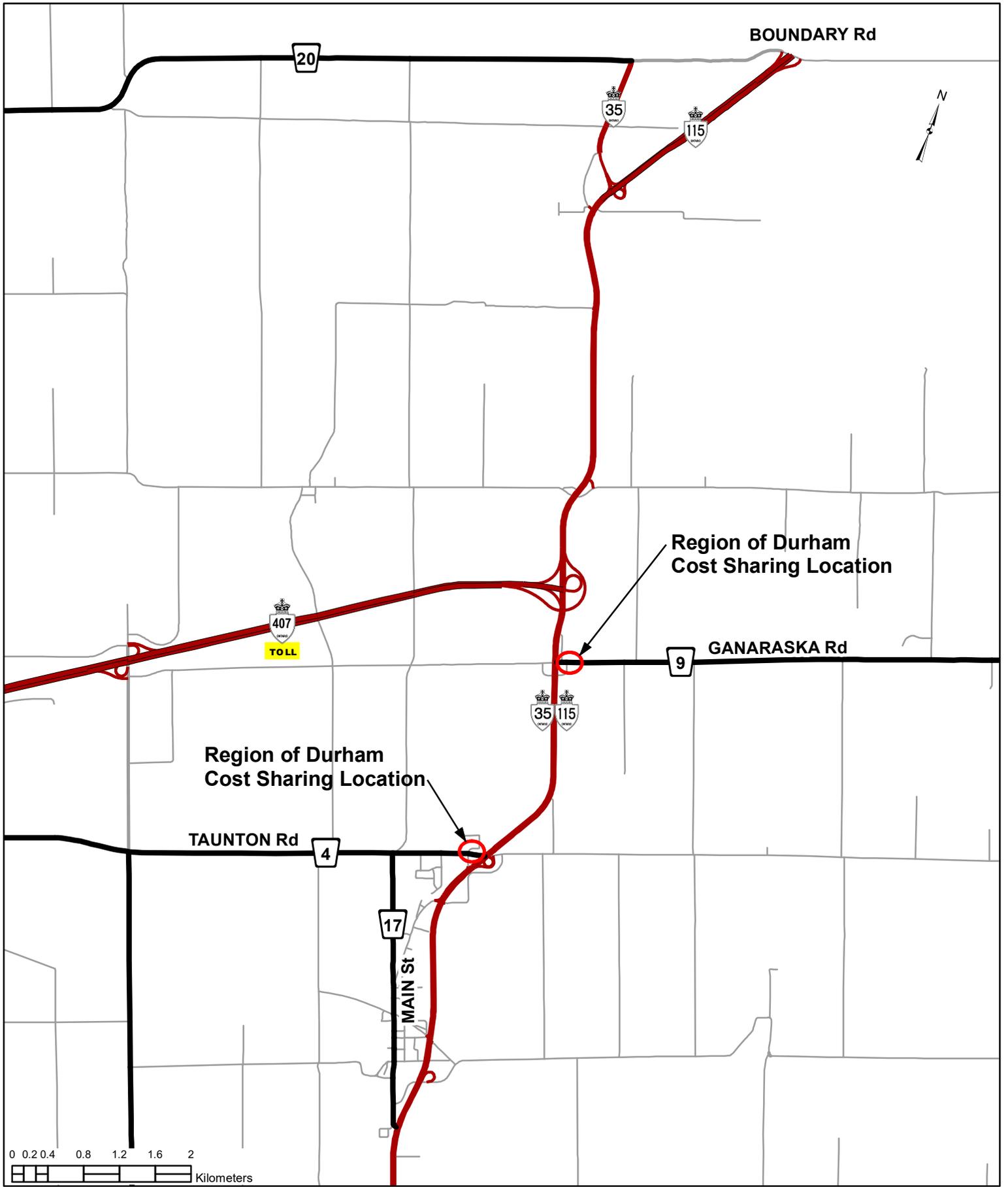
Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer



**MTO Road Rehabilitation on Taunton Road at
Highway 35/115 and Ganaraska Road at Highway 35/115
in the Municipality of Clarington**

This map has been produced from a variety of sources. The Region of Durham does not make any representation regarding the accuracy, completeness, or reliability of the data on this document. The Region's Planning, Design and Resource Information Systems Unit, Planning and Development Services Unit, 100 Victoria Park East, 2nd Floor, Clarington, Ontario L0R 2R0. © The Region of Durham, 2015. All rights reserved. This is not a plan of survey.

Highway 407 East Extension, Ministry of Transportation March 2015.

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The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2020-W-14
Date: February 5, 2020

Subject:

Expropriation of Land Required for Construction of a Multi-Use Path on Victoria Street East (Regional Road 22), in the Town of Whitby

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That authority be granted to Regional Municipality of Durham staff to initiate Expropriation proceedings, if necessary, where negotiations are unsuccessful with respect to the property requirements for 505 Victoria Street East (Regional Road 22) in the Town of Whitby as are depicted in Attachment #1 to this report, and for such other property requirements as may be determined and identified by Regional Municipality of Durham staff required for the project;
- B) That authority be granted to Regional Municipality of Durham staff to serve and publish Notices of Application for Approval to Expropriate the property requirement as described in Recommendation A) in this Report, and to forward to the Chief Inquiry Officer any requests for hearing that are received, to attend the hearings to present the Regional Municipality of Durham's position, and to report the Inquiry Officer's recommendations to Regional Council for its consideration; and
- C) That authority be granted to the Regional Clerk and Regional Chair to execute any notices and forms as may be statutorily mandated by the Expropriations Act R.S.O. 1990, c. E.26 to give effect to Recommendation B) in this report, including the Notices of Application of Approval to Expropriate.

Report:**1. Purpose**

- 1.1 This report seeks approval for Regional Municipality of Durham (Region) staff to commence Expropriation Proceedings, if necessary, where negotiations are unsuccessful, to advance cycling infrastructure on the Regional Cycling Network.

2. Background

- 2.1 Construction of a multi-use path (MUP) along Victoria Street East (Regional Road 22) between Brock Street (Regional Road 46) and South Blair Street is proposed, in partnership with the Town of Whitby and in accordance with the Regional Cycling Plan. The purpose of the MUP is to provide improved accessibility and a safer option for cyclists using this corridor. The completion of the MUP on Victoria Street East from Brock Street westerly in 2018 and the upcoming MUP construction from South Blair Street easterly with the Victoria Street East Re-alignment project will result in a gap. This segment of MUP was identified in the 2017 Transportation Master Plan as an Infill Project on the Short-Term Cycling Route, thereby making it a priority to provide a cohesive network over a shorter-term horizon. Through preliminary design, it was determined that land will be required from 505 Victoria Street East to provide the platform for the MUP construction. This MUP is currently included in the Region's Ontario Municipal Commuter Cycling Program project list and if access to this property can be obtained in sufficient time, the project will be constructed in 2020 to meet the program funding deadline.

3. Financial Implications

- 3.1 Financing for the property acquisition is included in the proposed 2020 Roads Capital project for Property Acquisition (Project M2028).

4. Conclusion

- 4.1 Regional Municipality of Durham staff will continue to negotiate with the property owner in an attempt to acquire the necessary property. Should these negotiations fail, this approval will permit staff to commence expropriation proceedings to allow this project to proceed to construction.

4.2 If Regional Municipality of Durham staff exercise the option of commencing expropriation pursuant to the authority being sought through this report, staff will report back further to Regional Council to seek authority for the next stage which will be to expropriate the property requirements and proceed to serve the next set of notices on affected property owners as would be statutorily mandated by the Expropriations Act R.S.O. 1990, c. E.26.

5. Attachments

Attachment #1: Location Map – 505 Victoria Street East (Regional Road 22),
Town of Whitby

Respectfully submitted,

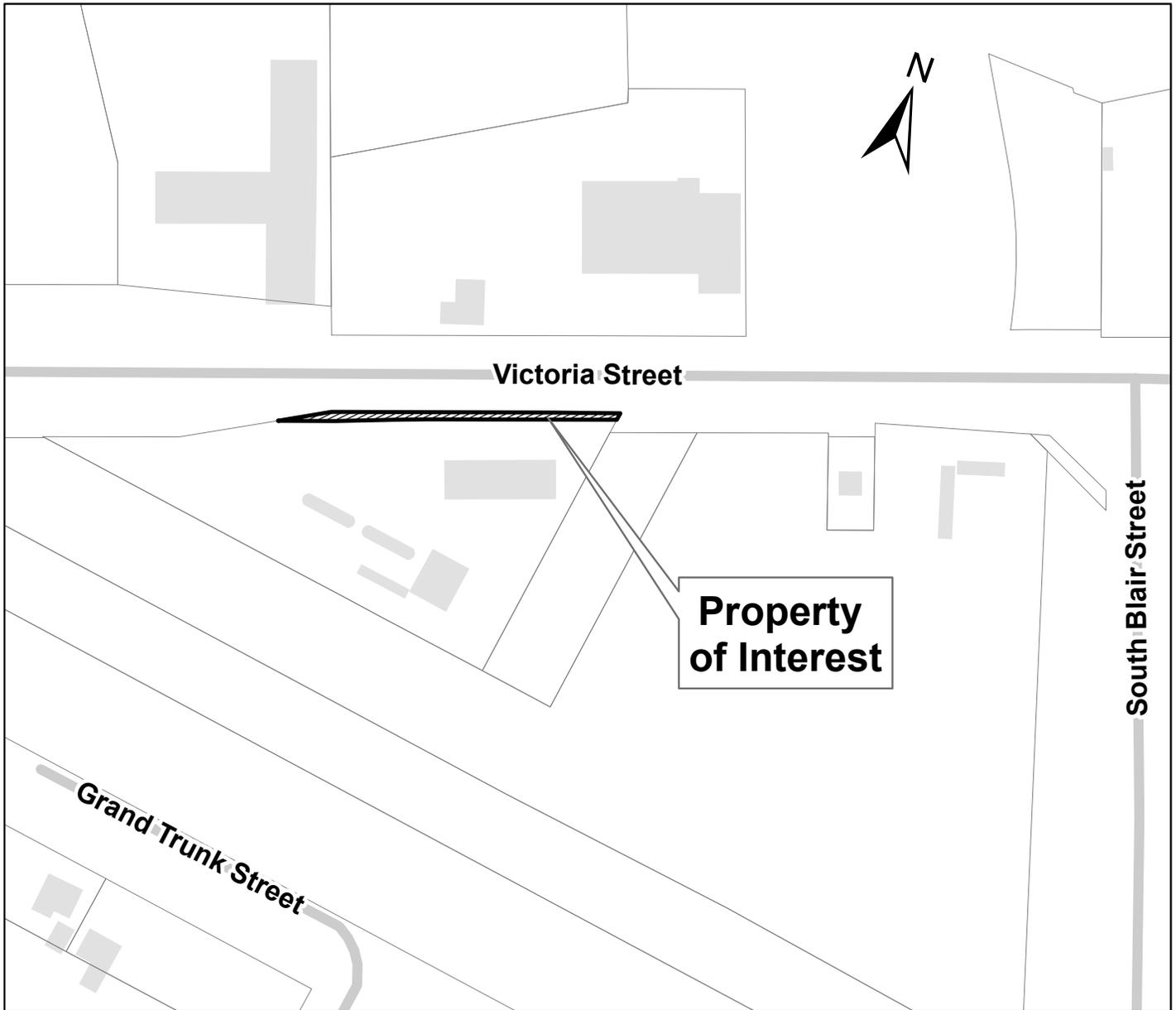
Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

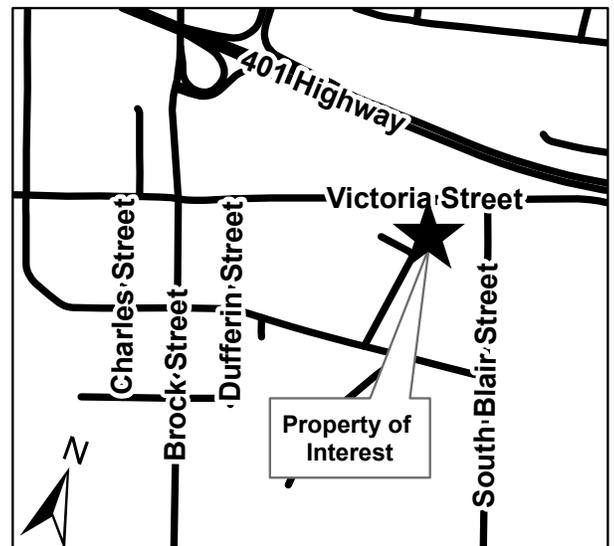
Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer



Attachment #1: - Location Map

**505 Victoria Street (Regional Road 22)
in the Town of Whitby**



Date: 1/23/2020

GIS Data: Produced by Durham Region, 2019.
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The Regional Municipality of Durham Report

To: Works Committee
From: Commissioner of Works
Report: #2020-W-15
Date: February 5, 2020

Subject:

2020 Works Department Business Plans and Budgets

Recommendation:

That the Works Committee recommends to the Finance and Administration Committee for subsequent recommendation to Regional Council that the 2020 Property Tax Supported Business Plans and Budgets for the Works Department's General Tax and Solid Waste Management operations be approved.

Report:

1. Purpose

1.1 The purpose of this report is to obtain Works Committee concurrence of the 2020 Business Plans and Budgets for the Works Department's General Tax (including roads, bridges and other general tax supported programs) and Solid Waste Management operations. The 2020 Works Department Business Plans and Budgets will be referred to the Finance and Administration Committee for consideration during deliberations of the 2020 Property Tax Supported Business Plans and Budgets.

2. Overview

2.1 The recommended 2020 Works Department Business Plans and Budgets meet the Regional Municipality of Durham (Region) Council-approved guideline for the 2020 Property Tax Supported Business Plans and Budgets.

2.2 The 2020 Works Department Business Plans and Budgets support the following key priorities:

- Respond to growth and affordability pressures and support the vulnerable sector;
- Innovate and modernize operations and administration;
- Accommodate ongoing legislative and regulatory changes; and
- Invest in infrastructure renewal.

2.3 The recommended 2020 Works Department Property Tax Supported Business Plans and Budgets include:

- a. Works General Tax: gross expenditures to deliver roads, bridges and other general tax programs totalling \$138.7 million, requiring \$46.1 million in property tax funding with the remaining expenditures funded by program fees, development charges, federal gas tax and reserves/reserve funds; and,
- b. Solid Waste Management: gross expenditures to deliver solid waste management operating and planning activities totalling \$239.2 million, requiring \$47.7 million in property tax funding with the remaining expenditures funded by program fees, provincial subsidies and reserves/reserve funds.

2.4 The recommended 2020 Works Department Business Plans and Budgets provide operating and capital funding for the following programs and services:

- a. Works General Tax
 - Maintenance Operations
 - i) Winter Control
 - ii) Roadside Maintenance
 - iii) Storm Sewers
 - Traffic Operations
 - i) Signals and Systems
 - ii) Signs, Markings and Roadside Protection
 - iii) Engineering and Central Control Systems

- Engineering and Staff Support
 - i) Construction Management Services
 - ii) Transportation Design
 - iii) Transportation Infrastructure
 - iv) Data System Management
 - v) Financial Services and Corporate Real Estate
- Facilities Management
- Regional Forest
- Depot Operations
- Fleet Operations
- Administration
- b. Solid Waste Management Operations:
 - Waste Management Facilities
 - Collections, Processing and Disposal
 - Administration
 - Facilities Management
 - Regional Corporate Costs
 - Waste Management Centre
 - Community Outreach
 - Environmental Studies

2.5 The 2020 Works Department Business Plans and Budgets also provide funding for a share of the operation and maintenance of Regional Headquarters.

3. 2019 Accomplishments

3.1 In 2019, the Works Department:

- a. Received Regional Council endorsement for Durham Vision Zero and advanced preparatory works for the implementation of various safety countermeasures including automated speed enforcement and red-light camera installations;

- b. Opened the new Clarington Municipal Hazardous and Special Waste Depot and relocated the Waste Call Centre operation to this renovated facility;
- c. Commenced the 101 Consumers and Regional Headquarters' Modernization and Optimization projects, awarding the design contract for Regional Headquarters, establishing principles for the use of space and the standardization of furniture to support the project;
- d. Installed six electronic vehicle chargers at Regional Headquarters;
- e. Reached an estimated 1.5 million people with the plastics display at Regional Headquarters during Waste Reduction Week and visited 88 classrooms comprised of 2,650 students as part of the school education program;
- f. Initiated activities for the development of a new Long-Term Solid Waste Master Plan to guide the Region through to 2040;
- g. Continued work including land acquisition and construction activities to support the ongoing implementation of BRT across Highway 2;
- h. Advanced the Regional Cycling Network (additional 1.6 kilometres of cycling lanes and multi-use paths);
- i. Exported approximately 96,700 megawatt-hours (MWh) of electricity to the grid and recovered over 4,200 tonnes of metals as a result of operations at the Durham York Energy Centre;
- j. Completed the rehabilitation of 16.4 kilometres of Regional roads with an estimated value of \$18.8 million, including installation of wider paved shoulders on rural roads to provide safer cycling environment;
- k. Relocated the Edna Thompson Childcare facility to its new location at Knox Christian School in the Municipality of Clarington, and commenced the detailed design for the new Region of Durham Paramedic Services Response Station in Seaton, and Phase 2 of the Durham Regional Police Service Clarington Complex;
- l. Acquired properties to support the advancement of Regional projects and negotiated leases for program delivery space throughout the Region, including the relocation of the Durham Regional Police Service Learning and Innovation Centre from space currently occupied at Durham College;
- m. Provided service to more than 295,000 customers at the Region's Waste Management facilities;

- n. Commenced the Depot Rationalization Study which will review the current and future needs of the Works Department's Maintenance Operations Depots to determine the optimal service locations and investment requirements;
- o. Initiated the process to amend the Durham York Energy Centre's permitted processing capacity under the Environmental Compliance Approval (ECA) from the current 140,000 tonnes per year to 160,000 tonnes per year using existing facility equipment;
- p. Upgraded the inbound and outbound weigh-scale cameras, intercoms and camera interface software at the Material Recovery Facility Scale House for improved truck processing, communication with drivers and overall safety;
- q. Hosted approximately 50 tours with over 560 guests at the Durham York Energy Centre, including delegations from across Canada and China;
- r. Continued improvements to the Oshawa Landfill site area, including expansion of the groundwater monitoring network (nine wells), slope revegetation for erosion control and creation of salmon habitat within the Oshawa Creek; and
- s. Completed the removal of 1,440 tonnes of waste materials from the Blackstock Landfill; overall approximately 4,800 tonnes of waste were removed from the site as part of this reclamation project.

4. 2020 Priorities and Highlights

4.1 The Works Department 2020 Business Plans and Budgets propose significant investments for capital infrastructure, including:

- a. Capital roads and bridge rehabilitation projects totalling \$47.2 million;
- b. Growth related road infrastructure projects totalling \$29.8 million;
- c. Design and Request for Prequalification (RFPQ)/Request for Proposal (RFP) issuance for an anaerobic digestion facility complemented by mixed waste pre-sort to increase organics diversion totalling \$163.5 million;
- d. Additional heavy equipment to support Service Levels including the acquisition of two tandem dump trucks (\$0.3 million) to address prior infrastructure growth, vehicle maintenance hoist replacement (\$0.2 million) due to age and wear, and the addition of a heavy-duty excavator (\$0.1 million) to address maintenance needs in the field;

- e. Continued implementation of modernization and business continuity initiatives totalling \$0.6 million, including support costs and infrastructure upgrades of the Enterprise Maintenance Management System (EMMS) software roll out (\$0.3 million), and the installation of standby power at the Oshawa/Whitby and Sunderland Maintenance Operations Depots (\$0.3 million);
- f. Capital investments to achieve Durham Vision Zero's goals totalling \$1.5 million, with financing of \$1.2 million provided from the Vision Zero Initiatives Reserve Fund, for the implementation of countermeasures including line marking improvements in high priority areas (\$0.4 million), safety related studies for high collision areas (\$0.3 million), controlled pedestrian crossing devices (\$0.2 million), speed management devices (\$0.1 million), roadside protection measures (\$0.3 million), and the accelerated deployment of uninterruptable power supply units at high collision locations;
- g. Installation of two electronic vehicle charging stations at the Works Traffic Operations Depot (\$29k), with costs partially offset by the Zero Emission Vehicle Infrastructure Program Grant (\$10k); and,
- h. Preliminary design work for landfill reclamation at the Scott Landfill, in the Township of Uxbridge, totalling \$60k.

4.2 In addition to these capital priorities, the proposed 2020 Works Department Business Plans and Budgets include investments for key operational initiatives, such as:

- a. Implementation of Durham Vision Zero countermeasures, including \$0.7 million for the implementation of red-light camera technology and \$0.6 million for automated speed enforcement measures;
- b. Implementation of litter mitigation initiatives related to the Blue Box Program totalling \$1.0 million;
- c. Additional pressures on commodity revenues, including a shift from revenue to cost for paper processing with an estimated 2020 budget impact of approximately \$0.9 million. It is proposed that this impact be phased-in through a one-time draw from reserves funds of up to \$0.9 million;
- d. Phase-in of the remaining 2019 commodity price decrease of \$2.5 million which was managed through a one-time contribution from the Waste Management Reserve Fund of \$1.25 million in the 2019 budget;

- e. Increases in road maintenance costs in response to growth and historical service demands totalling \$1.6 million; and
- f. Incremental investment in solid waste promotional and educational efforts of \$0.2 million bringing the total 2020 budget to \$0.6 million. These efforts will include the introduction of new messaging across multiple platforms targeting improved waste diversion. Messaging will focus on managing food as a resource, debunking myths or misconceptions surrounding the Green Bin Program and tips to reduce common Green Bin issues such as fruit fly prevention and bag breakage.
- 4.3 A total of 12.399 new full-time equivalent employees (FTEs) are proposed in 2020. These positions represent new permanent resources to support the delivery of capital projects and operating activities. The cost of these positions is allocated at varying levels to capital projects or maintenance activities.
- Two (2) SWAT Labourers in Construction Management
(costs are shared between Water Supply, Sanitary Sewerage and General Tax) 0.716 FTE
 - Project Manager in Transportation Design 1.000 FTE
 - Works Technician 5 in Transportation Design 1.000 FTE
 - Senior Project Coordinator in Facilities Design, Construction and Asset Management (costs are shared with Water Supply, Sanitary Sewerage, General Tax and Solid Waste) 0.343 FTE
 - Vehicle and Equipment Trainer in Maintenance Operations
(costs are shared between Water Supply, Sanitary Sewerage and General Tax) 0.340 FTE
 - Manager, Policy and Transitioned Programs,
in Waste Administration 1.000 FTE
 - Positions proposed to support Vision Zero:
 - GIS Specialist 1.000 FTE
 - Two (2) Project Engineers 2.000 FTE
 - Works Technician 2 1.000 FTE
 - Positions proposed to support the implementation of

the Enterprise Maintenance Management System:

- | | |
|--------------------------------|-----------|
| ○ Works Technician 5 | 1.000 FTE |
| ○ Two (2) Technical Assistants | 2.000 FTE |
| ○ Works Technician 2 | 1.000 FTE |

5. 2020 Risks and Uncertainties

5.1 Areas of potential risks that could impact the operating and capital budgets of the Works Department include:

- a. Risks related to legislative changes, regulations, provincial reviews:
 - Completion of the streamlined Environmental Assessment (EA) and the subsequent Environmental Compliance Approval (ECA) amendment to increase the Durham York Energy Centre's annual permitted processing capacity from 140,000 tonnes per year to 160,000 tonnes per year is dependent on the Ministry of Environment, Conservation and Parks' availability to review, process and approve the application. The increased capacity will generate savings in 2020 in the form of bypass disposal cost avoidance and increased revenues from electricity and metal. With the timing of approval for the amendment uncertain, no provision for these savings are reflected in the 2020 Business Plans and Budgets. A report will be presented once the ECA is amended which will articulate the expected savings for 2020, reducing the reliance on reserve financing applied to bridge significant cost increases related to recycled paper processing costs currently reflected in the budget;
 - Transition to the Extended Producer Responsibility (EPR) regime, including the timing and content of regulations supporting the transition;
 - Compliance with the Province's Food and Organic Waste Policy Statement requirements for multi-residential buildings supported by the implementation of the Region's anaerobic digestion with mixed waste pre-sort initiative; and
 - Timing of required agreements related to Automated Speed Enforcement.

- b. Revenue/funding pressures (e.g. provincial/federal subsidies, investment, revenue, etc.)
- Uncertainty related to residential Development Charge collections;
 - Uncertainty surrounding the transition of provincial subsidy programs as per the Waste-Free Ontario Act, 2016 (Tires, Electronics, Municipal Hazardous Special Waste, and Blue Box);
 - Increased costs related to the processing of recycled paper in 2020 have created a significant operating budget pressure of \$992k. This pressure is being phased into the operating budget through draws from the Solid Waste Management Reserve Fund;
 - Impacts of the markets and unfavourable pricing present significant uncertainty to recycling commodity revenues; and,
 - Pending approval of Investing in Canada Infrastructure Program (ICIP) project applications which will influence the magnitude of the capital roads program.
- c. Operating Pressures (e.g. weather impacts, demand impacts, etc.)
- Growth across the Region, which includes development of several new communities in Seaton, West Whitby, North Oshawa, Bowmanville and Newcastle Village, will increase the demand for services to support residents and businesses as well as the operational and maintenance requirements for Regional infrastructure;
 - Ensuring sufficient staff resources to deliver a growing capital program and services for planned and growing communities is necessary to avoid impacts to the delivery schedules of projects or delays in response times for reactive maintenance activities;
 - Changing and unpredictable weather patterns impact treatment operations as well as preventative and reactive maintenance activities for Regional road infrastructure;
 - Inflation and commodity price fluctuations may place increased pressure on operating programs, particularly those delivered with contracted services; and,
 - Changes in local market demands for engineering and construction services can impact industry capacity for infrastructure projects.

6. Future Budget Pressures

6.1 Items proposed in the 2020 Works Department Business Plans and Budgets will result in impacts to the 2021 budget, including:

a. Annualized gross cost of new positions proposed in 2020, excluding recoveries from capital projects:

- Works – General Tax \$1,304,000
- Solid Waste Management \$198,500

6.2 Looking forward over the next four years, the following significant budget pressures include:

a. Growth Requirements:

- Increased demands for road maintenance, traffic maintenance and solid waste management programs in growth areas;
- Increased fleet and equipment requirements to service and maintain growing infrastructure;
- Operating costs related to the future mixed waste pre-sort and anaerobic digestion facility; and,
- Increased capital infrastructure including new and expanded facilities to accommodate and service growth and development.

b. Asset Management and Infrastructure Requirements:

- Refurbishment and expansion of existing Maintenance Operations Depots and Regional Waste Management Facilities;
- Replacement of fuel dispensing and tank monitoring systems; and,
- Capital road, traffic control and bridge expansion and rehabilitation needs.

c. Legislative and Regulatory Requirements:

- Ongoing environmental protection, compliance and rehabilitation requirements for closed landfills;
- Continued uncertainty regarding recyclable commodity price revenues; and,
- Ongoing implementation of Vision Zero countermeasures.

- 6.3 The recommended 2020 Works Department Business Plans and Budgets meet the Regional Council approved guideline for the 2020 Property Tax Supported Business Plans and Budgets and supports the Department's role in the provision of roads, bridges and other general tax supported programs, along with the delivery of solid waste management programs and services.
- 6.4 It is recommended that the Works Committee approve the 2020 Business Plans and Budgets for the Works Department and forward this report to the Finance and Administration Committee for consideration during the budget deliberations of the 2020 Property Tax Supported Business Plans and Budgets.
- 6.5 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendation.

7. Attachments

- 7.1 Detailed 2020 Business Plans and Budgets for the Works Department are available on-line through the links provided on the February 5, 2020 Works Committee agenda or in hard copy by contacting Jenni Demanuele, Director of Business Services, at 905-668-7711 extension 3456.

Respectfully submitted,

Original signed by:

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer