
Subject: Approval of Public Works Single Source Purchase Order Requests and Purchase Change Order Requests Exceeding \$100,000

Report to: Public Works Committee

Report date: Tuesday, June 15, 2021

Recommendations

1. That the Single Source Purchase Order Requests identified in Appendix 1 of Report PW 27-2021 **BE APPROVED**.

Key Facts

- At the Special Council meeting on July 30, 2020, Regional Council instructed staff that, “If any single source [Public Works] procurement [over \$5000] is deemed essential there must be approval first received by the Public Works Committee.”
- On August 18, 2020, the CAO provided Confidential Memorandum CONF-C 6-2020 providing key information in response to the July 30, 2020 staff direction. The memo identified that pursuant to a formal competitive procurement process, a change to the resulting contract (via the Change PO process) is required for any additional goods and/or services, which were not part of that formal process (consider Single Source additions). This includes most (if not all) instances where the “work” is underway when a Change PO request initiates.
- At the Council meeting on September 17, 2020, Regional Council approved an increase in the limit to \$100,000 above which approval must first be received by the Public Works Committee.

Financial Considerations

The included Single Source requests have approved funding in place from either Capital or Operating budgets in the respective divisions in Public Works.

Analysis

Niagara Region’s Procurement By-law 02-2016 as amended February 28, 2019 provides controls and methods that ensure, among other things, that the procurement

processes undertaken to procure Goods and/or Services achieves, “best value for the Corporation”.

Pursuant to the formal procurement process, which culminates in contract award, there are occasions, when new information identified after award, requires further consideration of how these unforeseen additional requirements will impact the final project deliverable.

When this happens, staff consider the following alternative approaches to addressing the scope change:

1. Is the original project objective still achievable or should it be abandoned?
2. Can the project proceed as originally planned and this new information be deferred to a later time without reducing the integrity of the design, construction, etc.?
3. Is the current work at a point where it can be terminated, and a new competitive procurement for the additional scope items be initiated without excessive costs or negative impacts to the community from the delays?
4. Does the addition of this new work to the current assignment still achieve best value if Staff can validate that it represents fair value?

Staff note, that where a construction project is underway, the Ontario Occupational Health and Safety Act dictates that, “When an owner undertakes a project by contracting with more than one employer (contractor), the owner is undertaking the project and is the constructor.” As a result, if Niagara Region were to initiate additional work on a project site at the same time by two contractors, Niagara Region would assume significant additional liability risk for the safety of all workers on the site. Ideally, the work of first contractor must be completed prior second contractor commencing.

Alternatives Reviewed

Staff have considered the following alternatives for each of the change order requests appended as Appendix 1:

- Closing out the current work. Abandoning the previous approach and re-considering strategy;
- Proceeding as originally planned and addressing the new information/change in scope at a later time through a competitive process; and,

- Terminating the current contract where possible and conducting a competitive procurement process to complete the work with the additional scope items added.

Staff conclude that none of the aforementioned options achieves the desired best value outcome without significant risk to the Region in terms of cost, delay and unavailability of critical infrastructure. Staff have assessed the financial impact of these additionally scoped items, deemed them fair and reasonable hence, the recommendation contained herein is presented for approval as it offers the best value for the Corporation given in the specific circumstances.

Relationship to Council Strategic Priorities

- Responsible Growth and Infrastructure Planning

Other Pertinent Reports

- CONF-C 6-2020, July 30, 2020 Closed Session - Update from Special Council Meeting
- PW 42-2020, September 8, 2020 - Approval of Various Single Source Public Works New Purchase Orders and Purchase Order Change Request
- PW 45-2020, October 13, 2020 - Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 47-2020, November 10, 2020 Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 3-2021, January 12, 2021 Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 7-2021, February 16, 2021 Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 13-2021, March 9, 2021 Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 17-2021, April 13, 2021 Approval of Public Works Single Source Purchase Requests Over \$100,000
- PW 25, 2021, May 11, 2021 Approval of Public Works Single Source Purchase Requests Over \$100,000

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Appendices

Appendix 1 Single Source Purchase Order Requests

Purchase Order Change Requests to Existing Contracts

1. Project Name: 2021 Water and Wastewater Master Servicing Plan Update

Request: Ilija Stetic, Project Manager

Consultant: GM BluePlan Engineering

Purchase Order Number: 85330

Increase original contract amount of \$891,100 (excl. HST) by \$265,480 for a new total of \$1,156,580.

Rationale for Increase

The Region has been approached by:

1. **Town of Lincoln** about the local Water System Modeling Assessment identified in their Operational Budget. This work includes hydraulic modeling, which is also a major portion of the Regional Master Servicing Plan Update this year. This collaborative effort by two levels of government to work together on a shared infrastructure project represents an opportunity to gain operational efficiencies coupled with a greater likelihood of reducing the overall tax burden on Regional taxpayers. The technical reasons are as follows:
 - An update to the Region's trunk water model is included in the baseline scope. Inclusion of the local distribution system into development of an all-pipe model as part of the master plan assignment provides efficiency relative to independent/future updates.
 - Development of a single all-pipe model for the Regional Master Servicing Plan Update will ensure consistent accuracy and more precise reporting of system capacity and performance of both distribution systems.
 - Including the local system into the Regional model will reduce the likelihood of future inconsistencies and/or conflicting recommendations if different companies were working on the modeling assignment in the future.
 - GMBP has the capacity to complete these works without negatively impacting the Master Servicing Plan Schedule.
2. **City of St. Catharines** about their Stormwater Drainage Master Plan and Sanitary Sewer Master Plan as identified in their City Council Report EFES-066-2021. Part of their work includes hydraulic modeling, which is also a part of the Regional Master Servicing Plan Update this year. This collaborative effort by two levels of government to work together on a shared infrastructure project represents an opportunity to gain operational efficiencies coupled with a greater

likelihood of reducing the overall tax burden on Regional taxpayers. The technical reasons are as follows:

- An update to the Region's trunk wastewater model is included in the baseline scope. Completion of the all-pipe model as part of the master plan assignment provides efficiency relative to independent/future updates.
- Development of a single all-pipe model for the Master Servicing Plan update will ensure consistent accuracy and reporting of system capacity and performance in both the Region and the City's Master Plan, reducing the likelihood of future inconsistencies and/or conflict of recommendations.
- GMBP has the capacity to complete these works without negatively impacting the Master Servicing Plan Schedule.

Alternatives Reviewed

(i) Do nothing

- Both Regional models would be less accurate in assessing Regional trunks and local capacities for the water system in Lincoln and the wastewater system in St. Catharines. Even though this arose after the Regional project scope was developed and the consultant hired for the job, this alternative would be inefficient and not representative of the One Team approach.

(ii) Proceed with competitive RFP process:

- Similar to the "Do Nothing" alternative the Master Servicing Plan schedule would be negatively impacted and an input to the DC Study would not be provided as accurately as would be per the staff recommendation.

Funding Source

Original PO **\$891,100**

Change PO **\$265,480** (no HST)

Total changed unit price **\$1,156,580**.

Total Budget: **\$1,156,580** (\$86,780 funded through a Cost Sharing Agreement with the Town of Lincoln and \$178,700 funded through a Cost Sharing Agreement with the City of St. Catharines)

Expenditures including commitments: \$891,100

Budget Remaining: \$265,480

There is sufficient budget in the project budget to assign this change PO.

Purchase Order Requests for Approval

2. Request: Sole source purchase of Zinc5 Battery Backup Systems (BBS)

Supplier: Econolite Canada

Single source purchase of traffic signal cabinet battery backup systems required for twenty (20) signalized intersections at a total cost of \$219,867.60 (exclusive of HST).

Rationale for Purchase

This request is for the approval for a sole source purchase of vehicle traffic signal cabinet battery backup systems as an interim measure, while Staff continue to further assess the market for the purposes of developing a suitable procurement strategy. This request will fulfill the immediate need while this investigative process is finalized.

This purchase is for the materials needed for installation of traffic signal cabinet battery backup systems at twenty (20) signalized intersections falling under both Regional and local area municipality jurisdiction. This product has proven to meet all Regional operational and performance standards consistently at other locations for years without issue.

The Region has standardized to install battery backup systems (BBS) in all new traffic signal installations and/or rebuilds. Product availability has resulted in delays since the

last purchase. These systems are intended to be installed at signalized intersections that have newly constructed or rebuilt.

ZincFive has the patent on sealed Nickel-Zinc (NiZn) batteries which are physically safer, has a wider operating temperature range, and a longer life than traditional batteries. The ZincFive batteries are also intelligent and can self-monitor performance and are hot-swappable. The ZincFive systems have a central system management platform which can continuously monitor equipment health and report faults. The result is a system which requires little preventative maintenance.

Since 2014, the Region has invested over \$700,000.00 in ZincFive systems at seventy plus (70+) signalized intersections throughout the Niagara Region. The product is a proven performer.

Alternatives Reviewed

- (i) Do nothing – Inefficient operation and increased safety issues of a signalized intersection during a brown out, black out, and utility power issues with increase driver delays and frustration, resulting in potential safety issues as the intersection goes out completely.
- (ii) Procurement strategy under review – currently, there are only two (2) known suppliers of the Zinc5 Battery Backup Systems that meet operational criteria as mentioned above. Staff received quotes and are proceeding with the lowest one which is before PWC today for approval. Risk of procuring products of unproven performance may cause safety and/or operational concerns at affected signalized intersections which is why staff under the larger procurement strategy, are reviewing what other manufacturers may exist with a comparable product which could then be piloted and added to the vendors list if compatible.

Recommendation by Transportation Services

Proceed with single source purchase of traffic signal cabinet battery backup systems detection equipment.

3. Request: Sole source purchase of Polara Accessible Pedestrian Signal (APS) button systems

Supplier: Tacel Ltd.

Sole source purchase of Polara Accessible Pedestrian Signal (APS) button systems required for twenty (20) signalized intersections at a total cost of \$184,000.00 (exclusive of HST).

Rationale for Purchase

This request is for the approval for a sole source purchase of Polara Accessible Pedestrian Signal (APS) buttons as an interim measure, while Staff continue to further assess the market for the purposes of developing a suitable Procurement Strategy. This interim request will fulfill the immediate need while this investigative process is finalized.

This purchase is for the materials needed for the installation of Polara Accessible Pedestrian Signal (APS) button systems at twenty (20) signalized intersections falling under both Regional and local area municipality jurisdiction. This product has proven to meet all Regional operational and performance standards consistently at other locations for years without issue.

In accordance with the Accessibility for Ontarians with Disabilities Act, 2005 (AODA), the Region is installing Accessible Pedestrian Signal (APS) button systems at all new traffic signal installations and/or rebuilds.

Polara owns the patent for a 2-wire Accessible Pedestrian Signal (APS) system which allows for installation in existing signal infrastructure with minimal cost and resources. Competitive products use a 3-5 wire system which would require new cabling to be installed throughout the signal plant.

Since 2006, the Region has invested over \$1.6 million in Polara Accessible Pedestrian Systems at one hundred and seventy-one plus (171+) signalized intersections. When accommodating citizens with visual/auditory challenges, it is important to ensure equipment has a consistent look, sound, and feel. Staff have standardized their installation methods, which has allowed for optimization when installing, maintaining and troubleshooting this product. The product is a proven performer and has evolved to provide non-contact actuation where citizens can activate the buttons by simply waving their hand in front of it.

Alternatives Reviewed

- (i) Do nothing – Not a recommended option. AODA regulation mandate that APS buttons be installed at all new signal installations and/or signal rebuilds.
- (ii) Procurement strategy is under review:
 - Staff are reviewing products that use a 3-5 wire system and will evaluate their compatibility with the Region's current wiring scheme. The risk of procuring products of inconsistent appearance, operation, and unproven performance may cause safety and operational concerns at affected signalized intersections.

Recommendation by Transportation Services

Proceed with sole source purchase of Polara Accessible Pedestrian Signal (APS) button systems at this time.