TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Jacques Dubé, Chief Administrative Officer

DATE: January 4, 2019

SUBJECT: Budget Increase and Increase to Contract, Tender 18-228 Street and Watermain Renewal – Sinclair Street

ORIGIN
This report originates from a need to increase Tender 18-228 Street and Watermain Renewal – Sinclair Street beyond 20% of its original award.

LEGISLATIVE AUTHORITY
Under the HRM Charter, Section 79(1) provides that the Council may expend money required by the Municipality for
(a) streets, culverts, retaining walls, sidewalks, curbs and gutters;

Appendix B of 2016-005-ADM, the Procurement Administrative Order, provides that contract amendments that exceed the greater of 20% of the original award amount or $20,000, must be approved by Council for funds to be issued.

RECOMMENDATION
It is recommended that Halifax Regional Council:

1. Approve a budget increase of $173,688 (Net HST included) to Project Account No. CR000009 Street Recapitalization funded through cost sharing with Halifax Water as outlined in the Financial Implications of this report.

2. Authorize an increase to Tender 18-228 Street and Watermain Renewal – Sinclair Street to Sackville Trenching Limited (Purchase Order 2070794445), in the amount of $203,756 (net HST included), with funding from Project Account No. CR000009 Street Recapitalization, as outlined in the Financial Implications section of this report.
BACKGROUND

On June 15, 2018, Tender 18-228 Street and Watermain Renewal – Sinclair Street was awarded to Sackville Trenching Limited by the Chief Administrative Officer in the amount of $1,384,869 (net HST included) including a 10% contingency in the amount of $138,487 (net HST included). The report also included a budget increase in the amount of $727,468 (net HST included) funded through cost sharing with Halifax Water.

DISCUSSION

During the construction phase, this project incurred (16) change orders as detailed below:

<table>
<thead>
<tr>
<th>Change Order#</th>
<th>Description of Work</th>
<th>Owner</th>
<th>Value Net HST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Four Lateral Connections</td>
<td>HW</td>
<td>$28,833</td>
</tr>
<tr>
<td>2</td>
<td>Lateral Connection and Spot Repair, Civic 20</td>
<td>HW</td>
<td>$11,686</td>
</tr>
<tr>
<td>3</td>
<td>300mm of Type 1 Gravel over street area</td>
<td>HRM</td>
<td>$109,501</td>
</tr>
<tr>
<td>4</td>
<td>200mm and 100mm Storm Pipe</td>
<td>HW</td>
<td>$20,473</td>
</tr>
<tr>
<td>5</td>
<td>250mm DR18 Catch Basin Lead Pipe</td>
<td>HW</td>
<td>$12,500</td>
</tr>
<tr>
<td>6</td>
<td>Full Depth Removal</td>
<td>HW</td>
<td>$3,905</td>
</tr>
<tr>
<td>7</td>
<td>Storm Pipe and Manholes</td>
<td>HW</td>
<td>$33,826</td>
</tr>
<tr>
<td>8</td>
<td>Sewer Spot Repair and Grout Fill Abandoned Sewer</td>
<td>HW</td>
<td>$18,435</td>
</tr>
<tr>
<td>9</td>
<td>Repair Manhole</td>
<td>HW</td>
<td>$2,295</td>
</tr>
<tr>
<td>10</td>
<td>Parking Lot Work</td>
<td>HRM</td>
<td>$3,316</td>
</tr>
<tr>
<td>11</td>
<td>Lorde Street Asphalt</td>
<td>HW</td>
<td>$9,745</td>
</tr>
<tr>
<td>12</td>
<td>Miscellaneous Roadway Work</td>
<td>HRM</td>
<td>$7,467</td>
</tr>
<tr>
<td>13</td>
<td>Road Hardware</td>
<td>HRM</td>
<td>$6,163</td>
</tr>
<tr>
<td>14</td>
<td>Fencing Preparation</td>
<td>HRM</td>
<td>$5,557</td>
</tr>
<tr>
<td>15</td>
<td>Echelon Paving</td>
<td>HRM/HW Shared</td>
<td>$13,944</td>
</tr>
<tr>
<td>16</td>
<td>Retaining Wall Fencing</td>
<td>HRM</td>
<td>$14,537</td>
</tr>
<tr>
<td></td>
<td>HRM Total</td>
<td></td>
<td>$153,513</td>
</tr>
<tr>
<td></td>
<td>HW Total</td>
<td></td>
<td>$148,670</td>
</tr>
<tr>
<td></td>
<td>TOTAL CHANGE ORDERS</td>
<td></td>
<td>$302,183</td>
</tr>
</tbody>
</table>

The largest change order associated with HRM’s scope was CO #3 as noted above ($109,501). During the predesign phase HRM staff engaged the services of a geotechnical firm to test the type and amount of existing road gravels. This information was used to assist HRM’s design team in determining the rehabilitation strategy; however, during construction it was determined the original test results did not reflect the field conditions. As a result, additional granulars were required.

In addition to the 16 change orders noted above, several quantities identified in the contract exceeded the tender amounts. Halifax Water had additional quantities of approximately $12,500 primarily resulting from additional water and sewer infrastructure, as well as asphalt reinstatement. Several HRM quantities were below the estimate while other items exceeded the estimate. The increases above the estimate included additional concrete curb and gutter, sidewalk and retaining wall quantities which totalled approximately $53,000.

Pursuant to HRM’s contract documents paving contracts allow for asphalt escalation/de-escalation based on the liquid asphalt price at the time of tender relative to the time of construction. The liquid asphalt price which is set by the Province increased between the tender date and construction for this project, and equated to an increase to contract of approximately $27,600 (net HST included). HRM’s contracts also provide for compaction and thickness price adjustment based on test results. The price adjustment for
compaction and thickness was approximately $2,300 (net HST included) and $14,000 (net HST included), respectively.

The table below provides a summary of all additional funds required for Tender 18-228:

<table>
<thead>
<tr>
<th>Increase Description</th>
<th>Approximate Value (Net HST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM C/O Total</td>
<td>$153,500</td>
</tr>
<tr>
<td>HW C/O Total</td>
<td>$148,700</td>
</tr>
<tr>
<td>HRM Additional Quantities</td>
<td>$52,900</td>
</tr>
<tr>
<td>HW Additional Quantities</td>
<td>$12,500</td>
</tr>
<tr>
<td>Asphalt Concrete Adjustments</td>
<td>$43,900</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$411,500</strong></td>
</tr>
</tbody>
</table>

Of the $411,486, the total amount of increases to Purchase Order 207094445 approved to date is $207,730 (net HST included), which represents a cumulative increase of 15% to the original contract value of $1,384,869. The remaining amount of $203,756 ($411,486-$207,730) is outstanding payment to the contractor and is reflected in Recommendation No. 2 noted above.

Staff is requesting an additional increase to Sackville Trenching Limited, PO # 2070794445, for changes to the contracted scope of work and additional quantities in the amount of $203,756 (net HST included). A summary of the changes is as follows:

- **PO Award (net HST included)**: $1,384,869
- **PO increases approved to date (15%)**: $207,730
- **Request for Increase (net HST included)**: $203,756
- **New Contract Value (net HST included)**: $1,796,355

This request for increase to PO No. 2070794445 represents a cumulative increase of 29.7% to the original contract of $1,384,869 (net HST included).

During construction of the project it was determined that additional work was required on infrastructure belonging to Halifax Water (outside of the change orders noted above). Final charges amount to $901,155 (net HST included), and Halifax Water has agreed to pay for all costs related to this additional work. This increased scope of work will result in an additional budget increase of $173,688 (net HST included) to Project Account No. CR000009 Street Recapitalization, and is outlined in Recommendation No. 1 above. This additional work is included in the increase to Purchase Order 2070794445.

**FINANCIAL IMPLICATIONS**

Increasing the approved Gross Capital Budget in the amount of $173,688 (net HST included) in Project Account CR000009 Street Recapitalization to reflect the additional funding secured, as outlined in the Discussion section of this report, will not change the Net Budget. The budget availability has been confirmed by Finance.

**Budget Summary:**

<table>
<thead>
<tr>
<th>Capital Account No. CR000009 Street Recapitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Unspent Budget</td>
</tr>
<tr>
<td><strong>Plus:</strong> Additional HW Cost Sharing</td>
</tr>
<tr>
<td><strong>Less:</strong> Increase Tender 18-228</td>
</tr>
<tr>
<td>Balance</td>
</tr>
</tbody>
</table>

The balance of funds will be used to implement the remaining Street Recapitalization projects approved by Council.
RISK CONSIDERATION

There are no significant risks associated with the recommendation in this report. The risks considered rate low. To reach this conclusion, consideration was given to financial, legal and compliance, and service delivery risks.

ENVIRONMENTAL IMPLICATIONS

There are no environmental implications.

ALTERNATIVES

Council could choose not to approve the recommendations in this report, but this is not recommended by staff as the work has been completed.

ATTACHMENTS

Attachment 1 - Final Approved Halifax Water Cost Sharing Quantities

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 490-4208.

Report Prepared by: Jeff MacEwen, P.Eng., Construction Supervisor, ROC at 902.717.4065

Report Approved by:

Original Signed

David Hubley, Manager, Project Planning & Design at 902.490.4845

Procurement Review:

Original Signed

Jane Pryor, Manager, Procurement at 902.490.4200

Report Approved by:

Original Signed by

Brad Anguish, Director, Transportation & Public Works at 902.490.4855
MEMORANDUM

DATE: May 22, 2018

TO: Jonathan MacDonal, P. Eng.
Project Engineer, Halifax Water

CC: Alan Ghothani, BSc Civil Eng., Engineering Technologist, Halifax Water
David Hubley, P. Eng., Manager, Project Planning and Design, HRM
Anne Sherwood, P. Eng., Senior Design Engineer, Project Planning and Design, HRM

FROM: Jennifer Jeans, P. Eng., Design Engineer, Project Planning and Design, HRM

SUBJECT: Cost Sharing Agreement: Tender No. 18-228, Street and Watermain Renewal – Sinclair Street

Tender No. 18-228, Street and Watermain Renewal – Sinclair Street was publicly advertised on May 1, 2018 and closed on May 17, 2018. Prior to tender award, a cost sharing agreement must be finalized between Halifax Regional Municipality (HRM) and Halifax Water (HW).

Please find enclosed a summary and break down of items associated with lateral replacement and related reinstatement work.

In the most recent discussion on this project HW has agreed to pay 100% of the cost associated with the lateral replacement and related work. HW also agreed to pay 50% of the reinstatement cost associated with the work (based on unit prices), and a 1.5% project overhead and contract administration cost based on the estimated HW cost share.

Based on the unit prices of the lowest bidder meeting specifications (Sackville Trenching Limited) and the above cost sharing, the estimated HW’s costs for Tender No. 18-228 can be summarized as follows:
SINCLAIR STREET AND LORNE AVENUE WATERMAIN RENEWAL

Sinclair St Watermain = 
HW share (50%) for reinstatement cost = 
Lorne Ave Watermain = 
Subtotal for HW cost share = $687,260.39 
Overhead and contract administration cost 1.5% of HW cost Share = $10,308.91 
Subtotal for HW Cost = $697,569.30 
Net HST (i.e., 4.286%) = $29,897.82
Total Estimated Cost for HW (including Net HST) = $727,467.12

Actual cost sharing for this project will be based on final quantities determined during construction. If these terms meet with your approval, please sign appropriate location below and return this document to my attention. If you have any questions or concerns, please call me at 902-490-1457.

Regards,

[Signatures]

Jennifer Jeans, P. Eng.
Design Engineer, HRM

Jonathan MacDonald, P. Eng.
Project Engineer, HW

[Signature]

May 22, 2018

Date