Municipality of Chatham-Kent
Infrastructure and Engineering Services
Engineering and Transportation Division

To: Mayor and Members of Council
From: Mark McFadden, P.Eng.
Manager, Infrastructure Services
Date: June 6, 2019
Subject: Single Source Tender Award, Contract # T19-102A, Fibre Reinforced Surface Treatment

Recommendations
It is recommended that:

1. The Fibre Reinforced Surface Treatment contract be approved.

2. The tender in the amount of $441,071.77 including HST for the Fibre Reinforced Surface Treatment be awarded to Norjohn Contracting and Paving Limited

3. The Mayor and Clerk be authorized to sign the necessary agreement.

Background
During early spring, Engineering and Transportation staff derived a list of road sections based on Pavement Condition Index (PCI) and International Roughness Index (IRI) collected by Fugro Roadware in 2016 and 2017 and through consultation with Public Works. This data was used for the purpose of identifying ideal candidates for innovative Surface Treatment trial sections.

Innovation
In an effort to support innovative technologies and procedures for surface treated roads, the Engineering and Transportation division invited Norjohn Contracting and Paving Limited in to meet with staff to discuss Fibre Reinforced Surface Treatment and the potential for additional trial sections to be completed within the Municipality. Multiple road sections were reviewed and the proposed sections were chosen as ideal candidates.

Fibre Reinforced Surface Treatment combines a special polymer modified asphalt emulsion with chopped fiberglass strands and a special aggregate. This combination is proven to make the mixture highly resilient to reflective and alligator cracking as it bridges and holds the mix together.
Comments

The 2019 Fibre Reinforced Surface Treatment Contract consists of single applications for approximately 3560m of roadway. Maps and tables outlining the road sections to be completed are shown in Appendix A and B (see attached).

Areas for improvement were identified, reviewed and prioritized by Engineering and Transportation Division and through consultation with the Public Works Division. Road segment selections are based on condition ratings and road usage.

Fiber reinforced surface treatment was used in trial applications back in 2013 and 2014 throughout Chatham-Kent. Recent visual inspections of these sections clearly indicated that the fibre reinforced surface treatment sections are holding up better than its regular counterpart. Engineering will closely monitor the performance and lifecycle of the existing and new trial road sections in order to obtain results specific to Chatham-Kent. This will assist with consideration for use of fibre reinforced chip seal on future contracts.

Furthermore, Engineering staff contacted surrounding municipalities that have been using this technology. It was noted that these Municipalities seem to be increasing their use of fiber reinforced surface treatment in lieu of regular, non-reinforced chip seal.

Any known conflicts with future bridge, water main, storm sewer or other utility work were identified in the draft stages of the 2019 fibre reinforced surface treatment contract and the list was adjusted accordingly.

The engineering, contract administration and inspection on this project are being carried out by the Engineering and Transportation Division.

Tenders were called and received by the Purchasing Officer on Thursday, June 6, 2019.

One contractor submitted tenders for the project and bidding was an open competitive process.

The results are as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Location</th>
<th>Bid Amount (including HST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norjohn Contracting and Paving Limited</td>
<td>Niagara Falls, ON</td>
<td>$441,071.77</td>
</tr>
</tbody>
</table>

Engineering and Transportation Division has reviewed the tenders and found them to be complete in all respects.

It is the recommendation herein that the contract be awarded to who submitted the lowest tender bid.
**Areas of Strategic Focus and Critical Success Factors**

The recommendations in this report support the following areas of strategic focus:

☐ Economic Prosperity:
Chatham-Kent is an innovative and thriving community with a diversified economy

☐ A Healthy and Safe Community: Chatham-Kent is a healthy and safe community with sustainable population growth

☐ People and Culture:
Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community

☐ Environmental Sustainability:
Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

☐ Financial Sustainability:
The Corporation of the Municipality of Chatham-Kent is financially sustainable

☐ Open, Transparent and Effective Governance:
The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership

☐ Has the potential to support all areas of strategic focus & critical success factors

☒ Neutral issues (does not support negatively or positively)

**Consultation**

The Tenders were opened by the Purchasing Officer and reviewed by the Engineering and Transportation Division, Infrastructure and Engineering Services.

**Financial Implications**

This project is being funded through the 2019 Lifecycle Roads Budget.
The lowest tender bid, submitted by Norjohn Contracting and Paving Limited was within the budget estimate.

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) Project Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Recommended Tender (Including HST)</td>
<td>$ 441,071.77</td>
</tr>
<tr>
<td>Engineering &amp; Administration (Including HST)</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>Less HST Rebate (11.24%)</td>
<td>- $ 43,872.98</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>$ 422,198.79</td>
</tr>
<tr>
<td><strong>B) Project Funding</strong></td>
<td></td>
</tr>
<tr>
<td>Lifecycle Roads</td>
<td></td>
</tr>
<tr>
<td><strong>Total Project Funding</strong></td>
<td>$ 422,198.79</td>
</tr>
</tbody>
</table>

The lowest tender bid, submitted by Norjohn Contracting and Paving Limited was within the budget estimate.

Prepared by:                                      Reviewed by:

Curtis Lanoue, EIT                                Mark McFadden, P.Eng.
Engineering Technologist I,                       Manager, Infrastructure Services
Infrastructure and Engineering Services           Infrastructure and Engineering Services

Reviewed by:

Chris Thibert, P.Eng.
Director, Engineering and Transportation
Infrastructure and Engineering Services

Thomas Kelly, P.Eng., MBA
General Manager
Infrastructure and Engineering Services

Consulted and confirmed the content of the consultation section of the report by:

Jennifer Scherle
Purchasing Officer
Financial Services

Attachments: Appendix A: T19-102A Fibre Reinforced Surface Treatment – List
            Appendix B: T19-102A Fibre Reinforced Surface Treatment – Locations

(RTC:\Infrastructure & Engineering\I&ES\2019\4131 – Tender Award Contract T19-102A (Fibre Reinforced Surface Treatment)
<table>
<thead>
<tr>
<th>Municipal Area</th>
<th>Street/Road</th>
<th>Location Description</th>
<th>Lifts (ea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twp. of Harwich</td>
<td>Harwich Road</td>
<td>Highway 401 to Pinehurst Line</td>
<td>1</td>
</tr>
<tr>
<td>Twp. of Chatham</td>
<td>Lindsay Road</td>
<td>320m North of Eberts Line to 740m North of Eberts Line</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lindsay Road</td>
<td>460m North of Darrell Line to Eberts Line</td>
<td>1</td>
</tr>
<tr>
<td>Wallaceburg</td>
<td>Roy Street</td>
<td>Murray Street to East Limits</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mckee Road</td>
<td>Forhan Street to Nelson Street</td>
<td>1</td>
</tr>
</tbody>
</table>
2019 Fibre Reinforced Surface Treatment

RURAL

1. Harwich Road - Highway 401 to Pinehurst Line
2. Lindsay Road - 320m North of Eberts Line to 740m North of Eberts Line
3. Lindsay Road - 460m North of Darrell Line to Eberts Line

PLEASE NOTE:
ROADS ARE PRIORITIZED AS WORK PROCEEDS AND MAY BE SUBJECT TO CHANGE DUE TO UNFORESEEN TECHNICAL CIRCUMSTANCES.
WALLACEBURG

4. Roy Street - Murray Street to East Limits
5. McKee Road - Forhan Street to Nelson Street

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ROADS ARE PRIORITIZED AS WORK PROCEEDS AND MAY BE SUBJECT TO CHANGE DUE TO UNFORESEEN TECHNICAL CIRCUMSTANCES.