

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: March 23, 2020

Subject: Tender Award, Contract # T20-105C, Cold In-Place Recycling with Expanded Asphalt Material (CIREAM)

Recommendations

It is recommended that:

1. The 2020 Cold In-Place Recycling with Expanded Asphalt Material (CIREAM) Program be approved.
2. The tender in the amount of \$1,760,187.19 including HST for Cold In-Place Recycling with Expanded Asphalt Material be awarded to Huron Construction Company, a division of Brenna Paving and Construction Ltd..
3. The Mayor and Clerk be authorized to sign the necessary agreement.

Background

During 2019, Engineering and Transportation staff reviewed multiple road sections based on Pavement Condition Index (PCI) and International Roughness index collected by Fugro Roadware in 2016 and 2017. This data was used for the purpose of identifying candidates for a multi-year Cold In-Place Recycling (CIP) Program including the road sections identified for this year.

To confirm that the roads identified by Engineering staff were appropriate candidates, further geotechnical investigations were required. In the spring of 2017 (Talbot Trail) and the winter of 2019 (Charing Cross Road), Golder's Associates Ltd. were commissioned to complete the investigations and provide a technical report for each of these road sections. The investigations consisted of a visual inspection as well as core sampling the existing asphalt pavement to determine the pavement and subbase structure.

The road sections identified in this year's CIREAM contract (Charing Cross Road and Talbot Trail) were recognized as appropriate candidates for the CIREAM process.

Cold In-Place Recycling with Expanded Asphalt Material (CIREAM) is a process in which the existing hot mix asphalt is reclaimed, sized, treated with the desired binder, relayed and compacted in one stage. Once the CIREAM process has been completed, an asphalt overlay is placed on the mat. The asphalt overlay for Talbot Trail will be placed under the 2020 Hot Mix contract.

There are a number of benefits of CIREAM over other rehabilitation methods. The process can rehabilitate pavement exhibiting age, thermal, fatigue and reduce reflective cracking. It also has been found to be cost effective by recycling 100% of the existing road. There are also environmental benefits by eliminating the hauling of new materials and reusing the existing asphalt pavement. The CIREAM process provides a service life of 12 to 15 years versus the short term service life of only an asphalt overlay with reflective cracking returning through the overlay within the first few years.

Comments

The 2020 Cold In-Place Recycling with Expanded Asphalt Material (CIREAM) contract provides for the rehabilitation of Charing Cross Road from Indian Creek Road to Doyle Line (3.2 km) and Talbot Trail from the east limit of the Community of Cedar Springs to Lagoon Road (3.5 km). A location map for the 2020 Cold In-Place Recycling (Appendix A) has been attached to assist Council in identifying these locations.

Tenders were called and received by the Purchasing Officer on Thursday, February 20, 2020.

Two (2) contractors submitted tenders for the project and bidding was an open competitive process.

The results are as follows:

Bidder	Location	Bid (including HST)
Huron Construction Company	Chatham, ON	\$ 1,760,187.19
Coco Paving Inc.	Tecumseh, ON	\$ 1,913,390.35

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 Huron Construction Company, a division of Brenna Paving and Construction Ltd. who submitted the lowest acceptable 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

Project fees associated with this contract will be funded as summarized in the following table:

Financial Implications
Cold In-Place Recycling with Expanded Asphalt Material (CIREAM)
Project Costs

Recommended Tender (Including HST)	\$ 1,760,187.19
Engineering & Material Testing w/HST	\$ 60,000.00
Less HST Rebate 11.24%	-\$ 181,052.25
Total Current Project Costs	\$ 1,639,134.94
Project Funding – 2020 Lifecycle Road Budget	\$ 1,639,134.94

The low tender bid submitted by Huron Construction Company was 10% below the budget estimate.

Prepared by:

Reviewed by:

Paul Tippin, A.Sc.T.
Engineering Technologist,
Engineering and Transportation

Mark McFadden, P.Eng.
Manager, Infrastructure Services
Engineering and Transportation

Reviewed by:

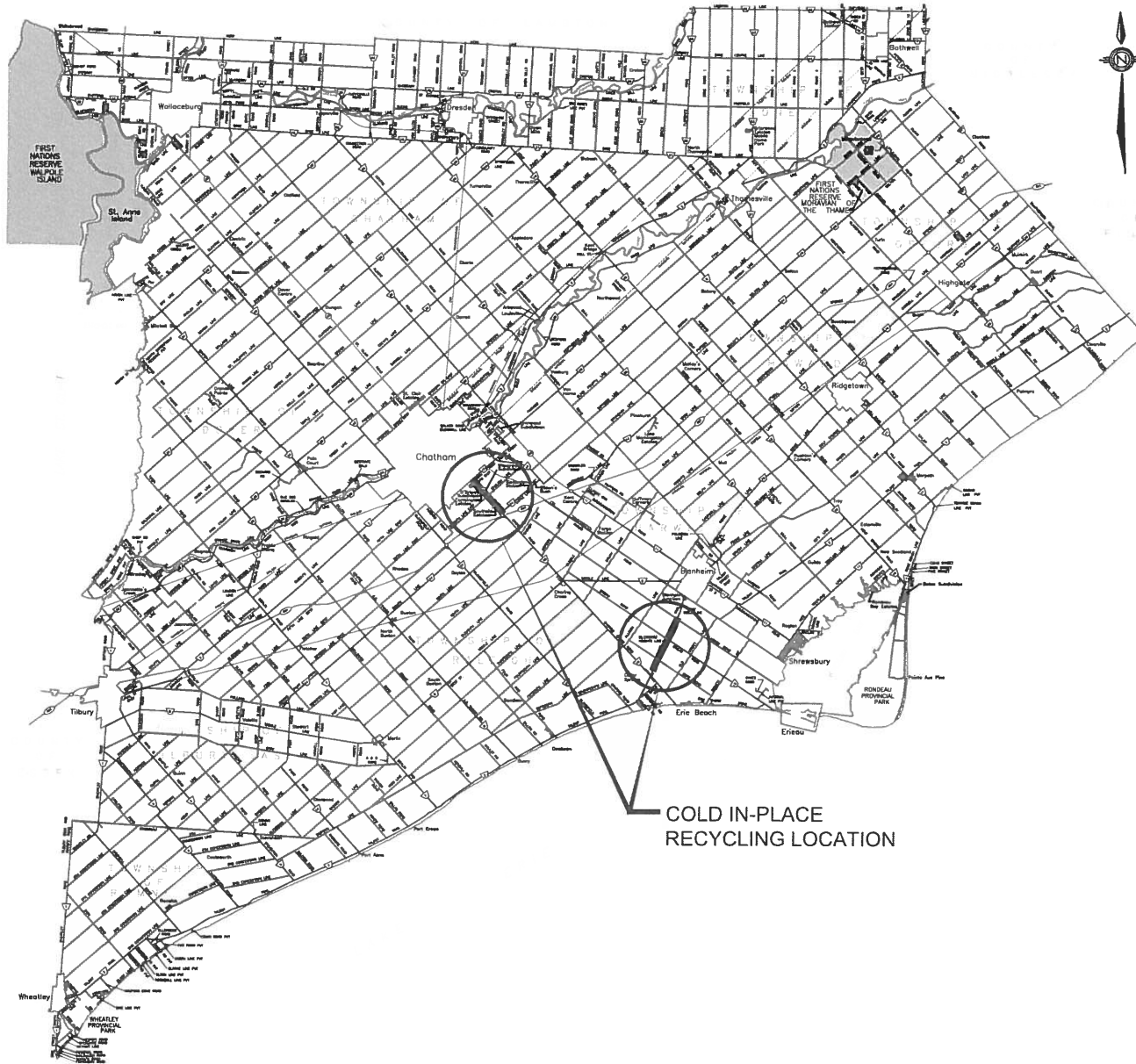
Thomas Kelly, P.Eng., MBA
General Manager
Infrastructure and Engineering Services

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

Jennifer Scherle
Purchasing Officer

Attachments: Appendix A – Location Plan

(RTC:\Infrastructure & Engineering\I&ES\2020\4215 – Tender Award Contract T20-105C (Cold In-Place Recycling with Expanded Asphalt Material))



2020 COLD IN-PLACE RECYCLING

- 1.) Charing Cross Road - Indian Creek Road to Doyle Line (3.2 km)
- 2.) Talbot Trail - East Limit of Cedar Springs to Lagoon Road (3.5 km)



CONTRACT NO. T20-105C
COLD IN-PLACE RECYCLING WITH EXPANDED
ASPHALT MATERIAL (CIREAM)

SHEET NO.
1 OF 1

Appendix A