

**The Corporation of the Town of Deep River**  
**REPORT**  
**2022-PW-009**

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**Council Meeting Date: June 22, 2022**  
**Council Meeting Time: 6:00 PM**  
**Council Meeting Place: Electronic Meeting**

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**Subject: Road and Sidewalk Summary and Short-Term Plan**  
**Author: Dave McCarthy, Infrastructure & Contract Manager**

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**RECOMMENDATION(S):**

**BE IT RESOLVED THAT** report number 2022-PW-009 “**Road and Sidewalk Summary and Short-Term Plan**” be received, and

**THAT** the proposed 2022 Short-Term Road and Sidewalk Plan be adopted as a guiding document to be utilized until the long-term plan contained in our Asset Management Plan and Capital Plan for the overall management of our road infrastructure is fully developed and adopted.

**BACKGROUND:**

During the May 25, 2022 Council meeting the following resolution was passed;

***“BE IT RESOLVED THAT the correspondence from Linda Hanson, a resident of Deep River, regarding Town of Deep River infrastructure, be received, and***

***THAT staff be directed to provide a summary update to Council of the status of roads and sidewalks and a plan forward.”***

The following is a summary of the infrastructure work completed on the road and sidewalk networks from 2019-2021. The total investment for this important infrastructure over this time frame is estimated at \$1.8 million. It is important to note that many infrastructure investments were made in water, waste water, parks, facilities and fleet in this time frame but are not considered as part of this report.

<b>Year</b>	<b>Project Title</b>	<b>Project Description</b>
2019	Mainstreet Grant Funding	Rehabilitation of downtown core sidewalks (280m <sup>2</sup> ) and curbs (90m)
	Thomas St and Avon Rd	Rehabilitation of Thomas St and Avon: 420m
	Chadwick Drive	Rehabilitation of Chadwick Drive: 100m
2020	Parkdale Ave	Rehabilitation of Parkdale Ave: 715m <sup>2</sup>
	Brockhouse Way Design	Design work for the reconstruction of Brockhouse Way
	Asphalt Repaving	Road Patching: 894.94m <sup>2</sup>
	Preventative Maintenance	Crack sealing: 4,025m
2021	Streetlogix	Road and Sidewalk Condition Ratings and Index
	Thomas Street	HWY 17 to Avon Road - Mill and Pave
	Lower Thomas and Kennedy Place	Rehabilitation of Thomas St and Kennedy Place: 550m
	Asphalt Repaving	Road Patching: 980m <sup>2</sup>
	Preventative Maintenance	Crack sealing: 4,255m

The Town of Deep River contains approximately 36 kilometers of road, which includes two County roads (Ridge Road and Deep River Road) and 6 kilometers of sidewalk. Each year the Town allocates funding to both the capital and operating budgets to complete various methods, described below, of preservation, maintenance, rehabilitation and reconstruction projects. The operating budget contains projects that are related to preservation, maintenance and minor rehabilitation whereas the capital budget contains major rehabilitation and reconstruction.

### Preservation & Maintenance:

- Crack Seal: process of filling cracks in asphalt with hot rubberized crack sealer to repair the cracks and prolong the life of the asphalt pavement

### Minor Rehabilitation:

- Slurry Seal: coating roads with a thin layer of asphalt, water and aggregate to improve longevity and fill minor damage
- Chip Seal: spraying a coat of hot liquid asphalt mixed with 30 per cent water to the existing surface of a prepared base and then a chip spreader is used to distribute washed chip aggregate
- Patching: pot hole repair (cold and hot mix) and road segment repair/repaving
- Mill and Pave: remove the old asphalt, heat it, recycle with additives, then re-lay in one layer

### Major Rehabilitation:

- Full Depth Reclamation: pulverizing the surface layers of the pavement and a portion of underlying granular up to 300mm in depth

### Reconstruction:

- Rebuild entire pavement structure and base

The proposed Short-Term Road and Sidewalk Plan (Attachment 1) highlights potential infrastructure projects for 2022-2023. The determined sections of roads and sidewalks are based on the condition assessment that was completed in 2021 with appropriate identified treatment options as well as alignment with other necessary linear infrastructure projects. The selection of road and sidewalk projects is not simply fixing the worst segments first but also focusing on maintaining good segments through preservation, maintenance and minor rehabilitation methods and coordinating linear infrastructure replacement in a cost-effective manner.

The condition assessment utilizes a Pavement Condition Index (PCI) and a Sidewalk Condition Index (SCI), which are a numerical rating of the pavement and sidewalk condition based on the type and severity of distresses observed on the surface. The PCI or SCI value of the pavement and sidewalk condition is represented by a numerical index between 0 and 100, where 0 is the worst possible condition and 100 is the best possible condition. The Town's average PCI (excluding County roads) is 61 and the average SCI is 56.

Staff are currently working on developing and implementing an updated Asset Management Plan (AMP), to be completed for the July 1, 2022 provincial deadline. The AMP will utilize the condition assessments from Streetlogix along with a new system, Decision Optimization Technology (DOT), through Infrastructure Solutions, to develop a

long-term infrastructure plan. The DOT system “is next-generation asset investment planning (AIP) software designed to help maximize the impact of tax dollars and plot a course for the sustainable growth of communities with confidence. It gives a clear understanding of infrastructure assets and their performance, allowing you to make better investment decisions.”

### **RATIONALE:**

Municipal roads and sidewalks best practices address two priorities:

- Front-end planning and decision making to identify and manage infrastructure
- A preventive approach to slow the deterioration of existing infrastructure

Sound decision making and preventive maintenance are essential to managing municipal road and sidewalk infrastructure cost effectively. The proposed Short-Term Road and Sidewalk Plan will act as a guiding document to make the best possible decisions regarding future road and sidewalk infrastructure projects. The future development and implementation of the Town’s Asset Management Plan and DOT system will allow staff to produce a long-term infrastructure plan. However, for the Short-Term Road and Sidewalk Plan the 2021 condition assessment completed by Streetlogix and I&I investigation completed by CIMA+ reinforce the decisions within the plan.

### **OTHER ALTERNATIVES CONSIDERED:**

No other alternatives were considered.

### **FINANCIAL CONSIDERATIONS:**

All financial considerations will be presented to Council through the operating and capital budgetary process and future reports to Council to award infrastructure projects.

The proposed Short-Term Road and Sidewalk Plan recommends continuing to allocate funds to both the operating and capital budget to allow for the different methods of surface treatments

- Operating budget funded through the Ontario Community Infrastructure Fund (OCIF) for preservation, routine maintenance and minor rehabilitation of infrastructure
- Capital budget funded through Gas Tax fund and other sources of funding for the major rehabilitation and reconstruction of infrastructure

### **ACCESSIBILITY IMPLICATIONS OF ANY DEVELOPMENT/POLICY:**

None.

**STRATEGIC AREAS OF FOCUS:**

This project aligns with the strategic area of focus of *Quality, Reliable & Sustainable Infrastructure* by providing a Short-Term Road and Sidewalk Plan.

**CONSULTATIONS:**

Jp2g Consultants Inc  
GOA Paving

**ATTACHMENTS:**

Attachment 1 – 2022 Short-Term Road and Sidewalk Plan