



## **The Corporation of the Town of LaSalle**

**To:** Mayor and Members of Council

**Prepared by:** Michael Cappucci, Manager of Engineering

**Department:** Public Works

**Date of Report:** September 12, 2024

**Report Number:** PW-33-2024

**Subject:** Matchett Intersections Improvement Options

### **Recommendation**

That the report of the Manager of Engineering, dated September 19, 2024 (PW-33-2024) regarding Matchett Intersections Improvement Options be received;

And that, RC Spencer and Associates finalizes the detailed design of the Matchett/Sprucewood intersection to include signals and protected left turn lanes on Matchett Road;

And that, RC Spencer and Associates finalizes the detailed design of the Matchett/Morton intersection to include turning lanes on Matchett Road;

And that, Administration brings forward the temporary intersection improvements with sidewalks for Council consideration as part of the 2025 Proposed Capital Budget.

### **Report**

#### **Background**

In 2023, Council had requested Administration provide a report on the history and function of the Sprucewood and Matchett intersection. The report outlined that the intersection does function, however at a lower level of service in the afternoon peak times. The report also highlighted the fact that there is an agreement in place for the future potential development site on the northwest corner, to construct a full roundabout at the developers expense at the time they develop. However, the timing of that development is not known at this time.

Council directed administration to obtain a traffic engineer to review the Sprucewood and Morton intersections along Matchett, complete a preliminary design, and identify the associated property and cost requirements. RC Spencer and Associates was retained, has analyzed the intersections and produced a preliminary design.

## **Existing Intersections**

Currently Sprucewood is controlled by a four-way stop and flashing red lights, and currently operates at a Level of Service (LOS) D during peak times, indicating some delays. Road users experienced a spike in traffic volumes in the month of September due to construction work that had taken place on Ojibway Parkway.

The Morton intersection has stop signs on Morton only, and Matchett has thru lanes. The Morton intersection experiences no major delays, however due to the collision history of the intersection, upgrades should be considered.

Administration has been collaborating with RC Spencer to develop a functional design for the intersections as determined below.

### **Sprucewood**

Administration approached this task with the intention of designing the intersection to facilitate signals but also minimize the number of additional infrastructure improvements needed to save costs. The result is a signalized intersection with protected left turn lanes on Matchett only, that will improve the level of service of the intersection and adds some pedestrian connectivity.

To accommodate the signal design, there are some sections of ditch infilling required and bank stabilizing. These were done as little as possible to avoid any environmental areas and keep the work within the existing roadway. Most of the civil work will be widening the road, re-paving, underground infrastructure and installing the signals.

### **Morton**

The Morton intersection was reviewed, and due to the high collision history of this intersection the Ontario Traffic Manual warrants an all-way-stop control.

An alternative approach that Administration would recommend, is to add turning lanes on Matchett, and re-evaluate the intersection after the improvements are made on Sprucewood. With the installation of signals at Sprucewood and geometric changes at Morton, it is likely that it will produce the necessary gaps in traffic to more easily allow cars to turn off of Morton onto Matchett. With this, Administration would continue to monitor the function of the intersection over the next couple of years and report back.

### **Sidewalk Connectivity**

Administration would like to point out that due to the temporary nature of this signal design and limited space, pedestrian connectivity can be partially accommodated, but not fully implemented. Typically, a more wholesome approach is taken as part of a

signalization project. However AODA standards and being met on the pedestrian facilities contemplated.

The design illustrates the potential of a sidewalk on the south and east corner of the intersection that would connect the existing sidewalk on Matchett to the sidewalk on Sprucewood. However, to accommodate this, a small piece of property (approximately a 4m x 4m daylight corner) would be required and a full ditch enclosure is needed. If Council approved the pedestrian connection and sidewalk construction, Administration would begin property requirement discussions with the property owner.

Lastly, this design at this stage does not contemplate the sidewalk extension beyond the intersection work. However, extending the sidewalk on Sprucewood to connect to the existing sidewalk and trail connection at the LaSalle Street ROW would be recommended to be completed if the intersection works do proceed (approximately 500m east). This can be incorporated into the detailed design.

### **Estimated Costs**

The cost to complete the signal installation, lane additions at the Sprucewood intersection would be approximately \$900,000.00.

The cost to add turning lanes on Matchett at Morton would be approximately \$250,000.

The cost to complete the sidewalk extension on Matchette would be approximately \$100,000.00

The cost to complete the sidewalk extension on Sprucewood would be approximately \$200,000.00.

The total costs of all of the work listed would be approximately \$1,450,000.00

An important item to note is that this work would be temporary, as it is the intention of the Town to have the full roundabout installed by the developer at the time of that development. If the development occurs in the short term, some of the signal infrastructure could be re-utilized by the Town on other projects.

### **Closing**

Administration would recommend to continue to have RC Spencer work on the detailed design work as part of their original assignment. Given that a tender package would not be ready until winter of 2025, it would be appropriate to identify this project in the 2025 proposed budget. If approved in the 2025 proposed budget, Administration would be in a position to tender and award a contract in spring of 2025.

## Consultations

RC Spencer and Associates

City of Windsor

Finance Department

## Financial Implications

The estimated cost of the signal and road work is \$1,150,000. If approved in the 2025 budget, the project would be recommended to be funded from the Roads Reserve.

The estimated cost of the sidewalk work is \$300,000. If approved in the 2025 budget, the project would be recommended to be funded from the Pedestrian Safety reserve.

With the addition of this signal, an additional operating cost will also be included in the 2025 proposed budget to account for signal maintenance costs.

## Prepared By:

A handwritten signature in black ink, appearing to read 'M. Cappucci', with a long horizontal flourish extending to the right.

Michael Cappucci P.Eng

## Link to Strategic Goals

1. Enhancing organizational excellence - Not Applicable
2. Strengthen the community's engagement with the Town - Not Applicable
3. Grow and diversify the local economy - Not Applicable
4. Build on our high-quality of life - Yes
5. Sustaining strong public services and infrastructure - Yes

## Communications

N/A

**Report Approval Details**

Document Title:	Matchett Intersections Improvement Options.docx
Attachments:	
Final Approval Date:	Oct 8, 2024

This report and all of its attachments were approved and signed as outlined below:



Jonathan Osborne  
Director, Public Works

Jonathan Osborne



Deputy Chief Administrative Officer

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Chief Administrative Officer

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