



The Corporation of the Town of LaSalle

To: Mayor and Members of Council

Prepared by: Jonathan Osborne, Director of Public Works

Department: Public Works

Date of Report: October 24, 2024

Report Number: PW-37-2024

Subject: Local Road Infrastructure Enhancement Cost Analysis

Recommendation

That the report of the Director of Public Works dated October 24th, 2024, (PW-37-2024) regarding Local Road Infrastructure Enhancement Cost Analysis be received;

And that, Council direct administration to review the road network enhancements and funding opportunities in greater detail through our asset management program and provide an updated report at a future Council meeting.

Report

Administration has prepared this report to provide Council a high-level review of the potential cost implications of enhancing our existing local roads with a semi-rural cross section, to a higher level of service from what currently exists. These enhancements typically include curb and gutter, storm sewer, sidewalk on both sides of the road, and additional street lighting.

Existing Conditions

Currently the Town has approximately 277 km of roadway, with 144 km having a more modern cross section with curb and gutter and storm sewers. The construction of the modern cross section was completed at time of development and ultimately the homebuyers bore the cost of this enhanced level of construction. In contrast, the remaining 113 km of roadway having a more historic cross section, which may include a storm sewer, or open ditches or ditch infills, and no curb and gutter, resulting in a lower cost to the homebuyer at the time of development. Within the urban boundary, there are 92 km of local roads with curb, and 42 km of local roads without curbs.

Many of these areas were developed in a time prior to consistent roads standards, storm sewer design standards, and storm water management guidelines being in place.

There are various areas in Town that would have this “semi-urban cross section”. For example, two prominent areas that have these characteristics are:

“Old LaSalle” which is located between Front Road and Malden, and Reaume south to Sacred Heart. In this area there is typically a sidewalk on one side of the road, street lighting, a combination of open ditches, storm sewers or ditch infills, and mature street trees. There is not storm water management facility with these roads, however as part of the Front Road Storm Sewer project, an adequate outlet will exist on Front Road for the majority of this area should proper storm sewers be installed. The sanitary sewers are in good condition. The watermains are functioning quite well considering their age, but will ultimately require replacement.

“Oliver Farms” which is located between Howard, Heritage Estates, and Sixth Concession. In this area there are no sidewalks, no curbs, there is storm sewer. Also, there is an adequate storm Outlet at the west side of this development where the trail leads into Heritage Park. The sanitary sewers are in good condition. The watermains are at the end of their useful life, and require replacement. Historically there have been numerous watermain breaks in this area, however those numbers have been improving upon completion of the watermain looping that occurred as part of the Parkway construction.

The Town also has a preliminary design for reconstruction of this area completed. The Town has applied for multiple grants over the past number of years to complete this work. Unfortunately, the Town has been unsuccessful in receiving grants for this work to date.

Upgrades to Current Design Standards

In order to upgrade these streets to our typical curb and gutter design standards, a complete reconstruction of the road would be required, including the following items:

- Watermain (replacement)
- Existing sidewalk (replacement)
- Asphalt (replacement)
- Street lights (replacement)
- Installation of new storm sewers (replacement or enhancement)
- Excavation of the roadway and proper stone base (enhancement)
- Widening of the road base to allow for proper road width and sub drainage (enhancement)
- New curb and Gutters (enhancement)
- Additional sidewalk (enhancement)

Attached are examples of representative cross sections of older roadways.

The benefits of the enhancements are:

- The roadway has more structural integrity, and will provide a longer service life

- There curb and gutter provides a more defined roadway that controls parking and assists with snow removal
- There are additional active transportation facilities in the way of another sidewalk
- Better curb appeal and safer roads for the home on the street and surrounding neighbourhood
- Storm drainage is at higher design level, and contained within the sewers at the 1:5 yr design storm
- Less water on/near the road and base, reducing freeze/thaw issues
- Mill and Paves become less effective as they occur on the same roadway multiple times

The approximate cost for the replacement items (asphalt, watermain, one sidewalk) without enhancements is \$3000/m, for a total of \$126,000,000 on the 42 km of local roads within the boundary. This amount is mostly funded through our asset management plan.

The approximate cost for the enhancement items (road base, curb and gutter, additional sidewalk, storm sewers) is an additional \$3500/m, for a total of \$147,000,000 on the 42 km of local roads. This is not contained within the asset management plan and would require a mechanism to raise these funds.

The overall enhanced replacement cost is approximately \$273,000,000.

Funding

The Town's 2024 Asset Management plan has identified that LaSalle funds core infrastructure replacements (including roads related items, watermains, sewers, and pump stations) at an 81% level. However overall, the Town is funding of all assets is at a level of 65%. While this is above many municipal comparators it is important to note that the funding level represents replacing assets at current standards rather than enhanced standards. Administration has and will continue to apply for infrastructure related application-based grants released by upper levels of government to assist in addressing the overall asset management funding gap, including an enhanced level of roadway infrastructure.

Another opportunity is to utilize the Local Improvement process. With Local Improvement projects, the property owners pay for the enhancements on a per-front-foot basis. These projects have to meet a certain threshold of property owner buy in. If initiated by the property owners, 67% must be in favor, and 50% of the property values be represented. If the Town were to initiate a project via Council by-law, 50% of the property owners would have to be against it, and the project would not move forward. In LaSalle, the Local Improvement process has not historically been used.

For arterial and collector roads, providing these enhancements has a benefit beyond the properties fronting those streets. As those projects come forward, they will be designed with the necessary enhancements on a case by case basis.

Other Considerations

When considering replacement work versus enhancement work, there are other factors to consider. The Town of LaSalle prides itself on having high quality infrastructure and a high level of service for that infrastructure. The roadways that exist with the historic cross section are struggling to meet that standard.

The Town requires development to build to our high design standards. The Town is often faced with the question from the development community on why they are required to build this infrastructure, and the Town does not implement the same standards when roadwork occurs.

When replacement of the watermain eventually occurs, the road is largely excavated and damaged as part of that process. While doing that work, it is the ideal time to take the next step and build the enhanced infrastructure.

Consultations

Finance Department

Financial Implications

None at this time.

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Director of Public Works

Town of LaSalle



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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 - Not Applicable
5. Sustaining strong public services and infrastructure - Yes

Communications

NA

Report Approval Details

Document Title:	Local Road Infrastructure Enhancement Cost Analysis.docx
Attachments:	- cross sections.pdf - Town Map__curb.pdf
Final Approval Date:	Oct 29, 2024

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



Deputy Chief Administrative Officer

Peter Marra



Chief Administrative Officer

Joe Milicia