

Municipality of Lakeshore – Report to Council

Operations

Public Works



To: Mayor & Members of Council
From: Jeff Wilson, Division Leader – Public Works
Date: March 12, 2024
Subject: 2024 Roads Rehabilitation Program based on Approved Budget

Recommendation

Approve the recommended 2024 Roads Rehabilitation Program as identified in the report based on the approved budget amount of \$6,745,200.00, as presented at the April 9, 2024 Council meeting.

Background

In advance of the 2024 budget, Administration took a report to Council on December 12, 2023 related to the proposed 2024 Reconstruction, Rehabilitation and Gravel Road Conversion Program.

The report outlined the recommendation of road rehabilitation for 2024 and the following resolution was passed:

356-12-2023

Continue to support the completion of an updated Roads Needs Study to be undertaken in 2024;

Approve the budget of \$1,900,000 for the Asphalt Road Rehabilitation (asphalt life cycling) in 2024 to complete the rehabilitation of asphalt roadways; and

Approve the budget of \$845,200 for the placement of maintenance lifts and life cycling of current surface treated roadways that require rehabilitation in 2024, foregoing the gravel road conversion plan in 2024.

Based on the above, Administration recommended the following in the 2024 Draft Budget:

- \$1,900,000.00 for asphalt resurfacing program;

- \$845,200.00 for rehabilitation (surface treated roadways); and
- \$0 for gravel conversion in 2024.

The total proposed 2024 budget for roads rehabilitation was \$2,745,200.00.

During the February 15, 2024 budget deliberations, Council directed an additional \$4,000,000.00 be added to the existing proposed 2024 Roads Rehabilitation Program (\$2,745,200), bringing the total 2024 rehabilitation budget to \$6,745,200.00. It was requested that a report be brought back to Council to present the updated 2024 Roads Rehabilitation Program based on the approved budget.

The \$6,745,000.00 budget included asphalt resurfacing, surface treatment rehabilitation and additional surface treatment lifts. No gravel conversion projects are planned in 2024 based on the recommendation from the December 12, 2023 report.

The Municipality has been completing, on average per year, approximately 2.4 km of asphalt resurfacing since 2020, and approximately 8 km of surface treatment rehabilitation since 2020.

Based on the increase in funds directed at road rehabilitation, the 2024 roads program could amount to length of roads rehabilitated in the last 4 years to be completed in 1 year, provided the successful contractor could accommodate the volume tendered.

Comments

Administration has taken the approach to balance the 2024 roads rehabilitation cost between asphalt and surface treatment by distributing the overall project budget at approximately 60% asphalt resurfacing and 40% surface treatment rehabilitation.

Pending tender results, the roads sections listed in this report represents approximately 23% to the overall paved Municipal Road system resulting in an overall average pavement condition index improvement nearing 69 or just over, a goal outlined in 2019 when the last road scan was completed. These figures will be updated in the Roads Needs Study currently being undertaken and a subsequent report will be brought to Council when completed.

Administration has reviewed industry standards, best practices and has utilized several strategies to determine what roads sections will be rehabilitated in 2024. This criterion is outlined below:

1. Field assessments

- Field assessments carried the most weight in the rationalization process for the rehabilitation list provided in this report.

2. Pavement condition index from 2018

- It should be noted that the pavement condition index is considered outdated and should be updated every 3 years. This was taken into account during determination of the roadways chosen.

3. Review of the existing 5-year plan

- Some consideration was given to road sections that are included in the 5-year lifecycle plan (beyond 2024) however, most of these roadways were not included in the proposed 2024 roads rehabilitation since these roadways are not due to be completed this year and it was determined upon review that the life cycle was accurate (i.e. those roadways that should still be on track to be done in 2027).
- Some roadways within the 5-year plan have seen more significant deterioration and were moved into the 2024 plan.
- It is anticipated that the 5-year funding for road rehabilitation will continue based on recommendations in the December 12, 2023 Council Meeting until such time as the updated Road Needs Study is adopted by Council (targeted to be completed by Q1 of 2025).

4. Rehabilitation vs reconstruction funding constraints

- Consideration was given to roadways that are at the end of their life cycle and should be reconstructed, however based on the capital road reconstruction plan being under funded, some of these roadways are being recommended for road rehabilitation in lieu. The roadways considered did not include curbs, did not have drainage issues requiring improvements, had sufficient grading and/or infrastructure replacement is not noted to be required in the recent plans.
- Although the estimated extended life of the asphalt roadway may be less than typical, consideration was given to the fact that these roadways will not be funded in time before critical issues arise if some form of rehabilitation does not occur.
- It should be noted that the roads have reached the end of their useful lives, deteriorated past the point that preservation activities will help, but generally have proposed construction phases in future years of the Capital Plan. The work being completed is holding the road over until the project can realistically be funded for reconstruction.

5. Resident concerns

- Consideration was given to road sections that receive reoccurring resident complaints.

Based on the comments from Council regarding full urbanized reconstruction and the forecasted funding model, Administration has added roads sections that would normally wait until full reconstruction.

It should be noted that these roads sections have been selected based on not requiring additional work to be undertaken (i.e. no drainage issues, no watermain replacements, no curbs, adequate crossfall, etc.).

Schedule of Roads

2024 Proposed Asphalt Resurfacing Program

Asphalt Resurfacing - 2024 Approved 5-year plan			
Road Section	From	To	Length
Dupuis Street	Notre Dame Street	St Charles Street	101
Dupuis Street	Broadway Street	Notre Dame Street	169
Railway Avenue	First Street	Dupuis Street	405
Earl Street	Pierre Ave	Caruhel Drive	82
Pierre Avenue	County Road 22	Earl Street	196
James Street	Main Street	Ainslie Avenue	255
Abbott Avenue	County Road 46	the North End	270
Asphalt Resurfacing – 2024 Additional Road Sections			
Road Section	From	To	Length (m),
Rochester Townline Rd	County Rd 42	Lakeshore Road 305	1467
Rochester Townline Rd	Lakeshore Road 305	Settler Road	1395
Rochester Townline Rd	Settler Road	North Side of 401	1180
Eleventh Street	Notre Dame	St Perter	303
Little Base Line Road	County Road 22	Manning Road	1985
Albert Lane	Old Tecumseh Road	East End	477
St Louis Street	St Paul Street	390 St Louis	268
St Paul Street	St Peter Street	St Charles Street	197
St Lawrence Street	St Peter Street	St Charles Street	197
St John Street	St Peter Street	St Charles Street	197
St William Street	Main Street	Abbott Ave	134
Corbett Drive	Seymour Crescent	McMurren Drive	215
King Louis Street	I C Roy Drive	King John St	285
Elmwood Ave	Beachwood Drive	Willowwood Drive	361
Decarlo Drive	Orchard Park	End	81
Stowe Street	County Road 27	End	57
Total Length (km)		10.3	
Total 2024 Asphalt Resurfacing Estimated Budget		\$4,200,000.00	

To maximize spend, the following will be included as provisional items for determination at the time of tender award:

Asphalt Resurfacing – 2024 Provisional Items			
Maplewood Drive	Willowwood Drive	County Road 21	376
Crest River Avenue	Tisdelle Drive	End	647

2024 Proposed Lifecycle Surface Treatment Rehabilitation

Lifecycle Surface Treatment Rehabilitation - 2024 Approved 5-Year Plan			
Road Section	From	To	Length
Beaune Street	Tecumseh Road	South End	120
Sylvestre Crescent	County Road 31	East End	132
Queen Street	County Road 27	Church Street	115
Middle Road	Manning Road	County Road 46	427
Ross Beach Road	Strong Road	MN/683 Ross Beach	665
Lakeshore Road 205	South Middle Rd	North Talbot Rd	1618
Lakeshore Road 301	Gracey Sdrd	Couture Road	1564
West Belle River Rd	County Rd 42	Rogers Rd * 3rd lift	2604
Lifecycle Surface Treatment Rehabilitation - 2024 Additional Road Sections			
Road Section	From	To	Length
Lakeshore Road 203	South Middle Rd	County Road 46	1344
South Middle Road	Lakeshore Road 203	Lakeshore Road 205	1083
Pleasant Park Sdrd	County Road 46	North Rear Road	1354
King Street	Church Street	End	130
Church Street	King Street	South Middle Road	278
Hopgood Sdrd	North Talbot	County Road 34	1380
West Belle River Road	County Road 42	CP Tracks	1134
Total Length (km)			14.0
Total 2024 Lifecycle Surface Treatment Estimated Budget			\$1,500,000.00

To maximize spend, the following will be included as provisional items for determination at the time of tender award:

Provisional Items for Rehabilitation - 2024			
Road Section	From	To	Length
Surf Club Drive	Tecumseh Road	West End	1178
Comber Sdrd	Tecumseh Road	St Clair Road	994

Proposed Lifecycle Surface Treatment Additional Lifts:

Lifecycle Surface Treatment - 2024 Added Lifts			
Road Section	From	To	Length
Lakeshore Road 310	Gracey Sdrd	Richardson Sdrd	3670
Lakeshore Road 101	North Rear Road	County Road 42	5362
Wall Road	Country Road 25	Lakeshore Road 111	2774
Lakeshore Road 308	Gracey Sdrd	Kent Road 1	6117
Lakeshore Road 310	Rochester Townline	Highway 77	3628
Richardson Sdrd	Lakeshore Road 310	Lakeshore Road 311	1372
Lakeshore Road 311	Highway 77	Gracey Sdrd	3630
Lakeshore Road 311	Richardson Sdrd	Romney Townline	884
Romney Townline	Lakeshore Road 311	Kent Road 1	263
Morris Road	Richardson Sdrd	Tilbury Limit	2037
Total Length (km)			30.0
Total 2024 Lifecycle Surface Treatment Additional Lifts			\$1,040,000.00

No provisional lifts are being recommended for additional lifts.

The total roads being rehabilitated based on the 2024 budget will be 54.3 kms.

A summary on the spend and relative estimated total of rehabilitation per road type is provided below:

Rehabilitation Type	Total Length (km)	Estimated Cost	% of spend per type based on 2024 Budget	Estimated percentage of total roadways done per type
Asphalt Resurfacing Program	10.3	\$4,200,000.00	62%	6%
Lifecycle Surface Treatment Rehabilitation	14	\$1,500,000.00	22%	16%
Lifecycle Surface Treatment Additional Lifts	30	\$1,040,000.00	15%	
Total	54.3	\$6,740,000.00	100%	23%

Financial Impacts

There are no direct financial impacts as part of this report as the dollars were funded from the approved 2024 budget. Tender results will be brought to Council once the tender is closed and a report can be brought forward to recommend award.

Indirect financial impacts exist related to the long-term costs per rehabilitation type in the future based on the increase of spend in 2024. The roadway conditions will be reflected in the updated Roads Needs Study and an updated 5-year plan will be developed in advance of the 2025 budget.

Attachments

Attachment 1: Roads Map

Report Approval Details

Document Title:	2024 Roads Rehabilitation Project .docx
Attachments:	- 2024 Propose Asphalt Resurfacing Program (Map 1).pdf - 2024 Proposed Lifecycle Surface Treatment Rehab (Map 2).pdf - 2024 Proposed Lifecycle Surface Treatment Additional Lifts (Map 3).pdf
Final Approval Date:	Apr 4, 2024

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

Prepared by Jeff Wilson

Submitted by Krystal Kalbol

Approved by Justin Rousseau and Truper McBride