



## REPORT N° INF2019-013

<b>Date</b>	25/03/2019
<b>Submitted by</b>	Julian Lenhart
<b>Subject</b>	Gagné Road Reconstruction
<b>File N°</b>	

1) **NATURE/GOAL :**

The nature of this report is to provide Council with options to consider for Gagné Road and to obtain Council's direction to repair Gagné Road.

2) **DIRECTIVE/PREVIOUS POLICY :**

At its February 20th Committee of the Whole meeting, Council received a petition to pave Gagné Road. Further to discussions, Mayor Desjardins mandated the administration to prepare a report regarding the possible options for repairs to Gagné Road including estimated costs.

3) **DEPARTMENT'S RECOMMENDATION :**

**THAT** Report INF2019-013 be received as information.

**QUE** le rapport INF2019-013 soit reçu à titre d'information.

4) **BACKGROUND :**

Gagné Road is situated in Hammond and spans north/south from Du Golf Road to Lacroix Road. Gagné Road has a total length of 3.0km where roughly, 1.5km is currently asphalted and the remaining 1.5km is gravel. See key plan of Gagné Road in attachment 1. The asphalted section is situated within the Community Policy (urban) limits of Hammond and is in a very good to good condition. The gravel portion is situated outside of the Community Policy (urban) limits of Hammond and this section of the road is in a poor to very poor condition.

The poor condition of this area is mainly due to a poor road structure, where significant peat and topsoil is present in the structure in the saturated levels of the road structure. To help address the saturation issues, in 2016, the Department retained the services of STP Excavation and Construction Inc. to re-profile and construct ditches along Gagné road. During this project, poor soil conditions were observed resulting in many issues with slope stability and structure and integrity.

Gagné road has approximately 100 houses and 2 active sand pits that have access on this road. This results in a combination of traffic compositions where both residential low weight vehicles and heavy weight commercial vehicles travel this road. On average, this road has

traffic volumes of less than 500 AADT (annual average daily traffic) as per a traffic survey dated July 2016. At the time of the survey, the majority of the traffic observed was local traffic, traffic generated from the houses on Gagné Road and traffic generated from the sand pit operations. The Department does not foresee additional development along Gagné Road and therefore, does not expect an increase in traffic volumes.

5) **DISCUSSION :**

Following Council's directive, the Department evaluated different options and their associated costs to repair Gagné Road. The Department measured the merits of maintaining Gagné Road in its current condition versus reconstructing it. This was evaluated with Council's approved asset management principals and criteria. Prioritization of road improvement program are measured in terms of consequence (risk) and likelihood of failure. Refer to the consequence Table in Attachment 2 for the complete evaluation of Gagné Road.

**Consequence:** the following seven criteria are used to evaluate the risk of maintaining the road in its current condition.

- Operational Impacts
- Environment
- Safety
- Travel Time
- Affected Population
- Service Delivery – Comfort
- Financial

**Likelihood of Failure:** the likelihood of failure is evaluated on a scale of Improbable to almost certain of failure if Gagné Road is maintained in its current condition.

- Improbable
- Possible
- Likely
- Almost Certain

Based on these criteria, Gagné Road scored 10.6 points out of a possible 64 points, where a road that scores 0 points is less recommended and 64 points is the most recommended. A minimum score of 30 points is required to recommend significant improvements to the road way that is evaluated. Gagné Road does not meet the minimum score. This means that current operations or a slight increase in operations are warranted for this road at this time. Council can consider to increase the frequency of road grading and localised berm removal to help drain the surface of the road.

The Department considered the cost of repairs for two possible surface options; asphalt or surface treatment. Due to the condition of the road structure, only a full reconstruction from the subgrade to the surface is recommended. Anything less than a full reconstruction will not address the structural issues of the road and will not have a long-term impact on the road condition. A complete full cost breakdown is presented in Attachment 3.

**Option 1 Road reconstruction with Asphalt surface**

\$2.6 million including engineering design, tender and contract administration.

**Option 2 Road reconstruction with Surface Treatment**

\$2.3 million including engineering design, tender and contract administration.

Option 2 is not recommended because surface treatment is not appropriate for heavy vehicles, as this type of traffic will drastically reduce its life expectancy.

6) **CONSULTATION:**

N/A

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

Gagné Road reconstruction was not considered during the 2019 budget deliberations. The reconstruction cost for Gagné Road would need to be debt financed with an estimated interest rate of 3.5% as per the last confirmed rates with Infrastructure Ontario. The estimated cost for reconstruction and asphalt surface is \$2,600,000 with an annual debt repayment of \$182,938.80 including interest, where as, the estimated cost for reconstruction and surface treatment is \$2,300,000 with an annual debt repayment of \$161,830.48 including interest. The tax increase impact ranges between 0.83% and 0.94% to cover the debt cost.

9) **LEGAL IMPLICATIONS :**

N/A

10) **RISK MANAGEMENT :**

N/A

11) **STRATEGIC IMPLICATIONS :**

This project is not aligned with the City's strategic initiatives and does not meet Council's approved asset management principals and criteria.

12) **SUPPORTING DOCUMENTS:**

Attachement 1 – Key plan Gagné Road

Attachement 2 – Consequence Table

Attachement 3 – Cost Estimate Full Reconstruction Option 1 and 2