

Submitted by: Steve Oliver, Director of Public Works

Report No: 2020-014

Council Meeting Date: January 15, 2020

Agenda Item: **4.(c)**

Subject: Gravel and Dust Suppressant Application Practice

File: C11 – Reports to Council

RECOMMENDATION:

For Council’s consideration

BACKGROUND & COMMENTS:

Historically the Township’s current practice for maintenance graveling application is that the Township road network is divided into north and south roads, with the whole network would have a gravel application every two years.

In 2019 Zorra Township acquired DM Wills to perform a Roads Needs Study on all the municipality’s road structures. It was identified and recommended in this document that the gravel road network should have gravel application once every three years. It is in staff’s opinion that the application of gravel once every three years would be sufficient only if dust suppressant application rates be increased on roads receiving fresh gravel applications.

The current dust suppressant application rates are a minimum and do not prevent gravel fines from escaping the surface resulting in stone loss from traffic and plowing operations. By decreasing the gravel applications, it would be imperative to apply the sufficient amount of dust suppressant to hold the gravel where it is placed on the roads.

Throughout the municipality there are sections of road that experience higher than normal traffic volumes and heavy loading and require more frequent gravel applications. This practice would continue, giving the roads in need more gravel and roads that experience less loading and traffic volumes less as per the Roads Needs Study recommendation.

This model will provide a more customized maintenance program utilizing Zorra’s resources to roads in need of higher service and an overall maintenance program.

This proposal would also increase the life expectancy of Zorra’s gravel resources and decrease cost for gravel crushing operations.

The cost of this practice is set out below based on 2018 and 2019 costs.

	Quantities	Gravel	Dust Suppressant	Total
North End - 2018 – 184 km	50,266 MT	\$308,169	\$255,637	\$563,806
South End - 2019 –160 km	54,985 MT	\$423,555	\$237,660	\$661,215

” Staff is proposing a change starting in 2020. The Township’s road network be divided into three sections and attached map outlines how it would be done.

	Quantities	Gravel	Dust Suppressant	Total
1 st Section -2020 135 km	33,600 MT	\$293,040	\$322,600	\$615,640
2 nd Section -2021 120 km	30,000 MT	\$266,400	\$316,620	\$583,020
3 rd Section – 2022 89 km	22,400 MT	\$210,160	\$296,600	\$506,760

FINANCIAL IMPLICATIONS

The propose change in graveling and dust suppressant applications and its financial implications have been factored into the 2020 1st draft budget.

LINK TO STRATEGIC PLAN

Regular updates from staff will keep Council and member of the public informed on Departmental activities and initiatives and supports the following goal and action in the Strategic Plan:

Goal: We are an *engaged* community that values all members and actively encourages involvement, engagement, openness and transparency.

Action: By being open and transparent

ATTACHMENTS

1. Graveling Township Road Map.

Submitted by:

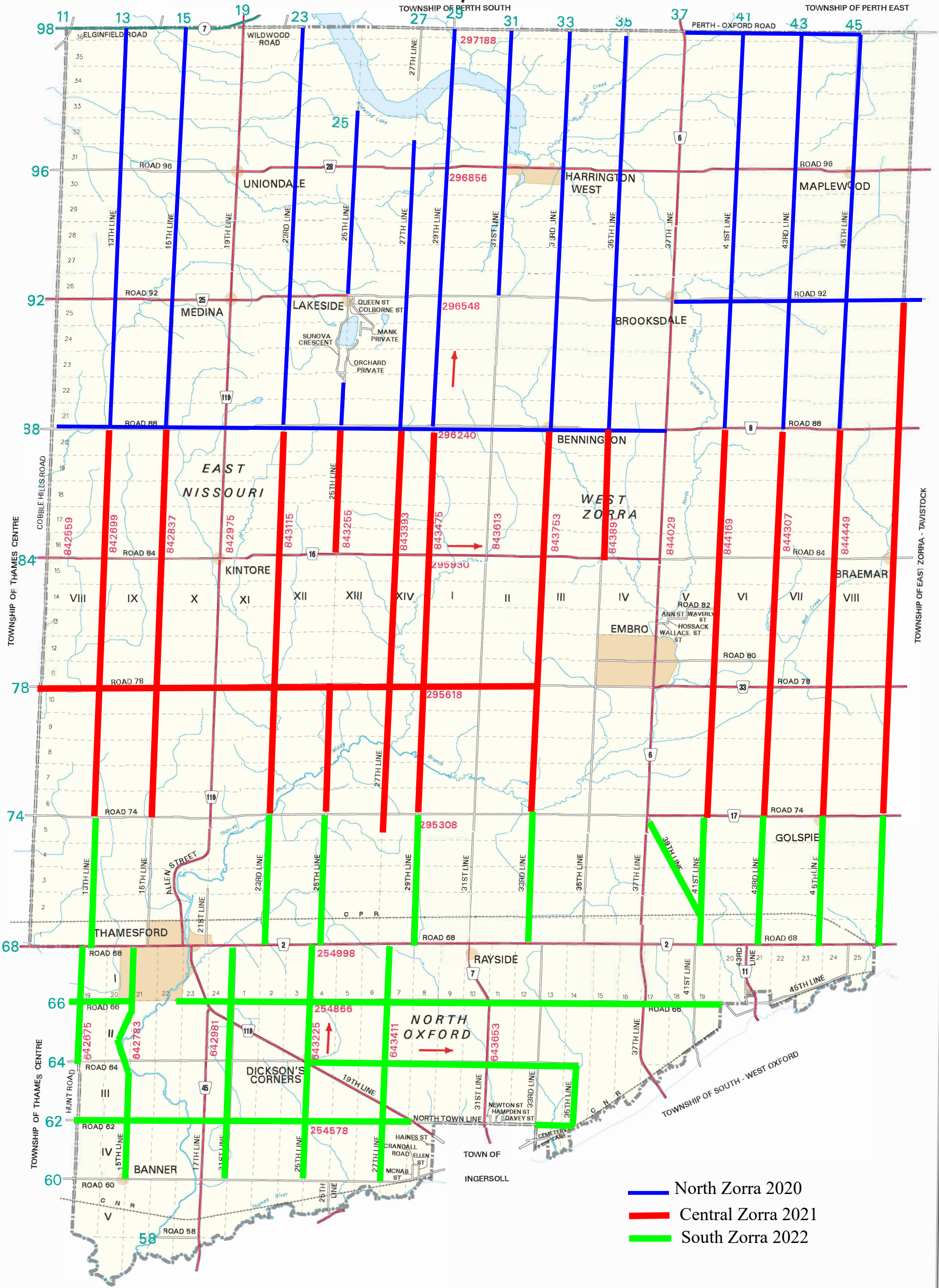
Steve Oliver

Steve Oliver
 Director of Public Works

Approved by:

Don MacLeod
 Chief Administrative Officer

Township of Zorra



- North Zorra 2020
- Central Zorra 2021
- South Zorra 2022

