



TRANSPORTATION SERVICES

TO:	Council	
DATE:	May 25, 2021	DIVISION: 7
FILE:	4050-100	APPLICATION: N/A
SUBJECT:	Range Road 14 Update	

EXECUTIVE SUMMARY:

The intent of this report is to provide Council with a general briefing of work to date in regards to RR14 from HWY#567 north to the County limit as well as future maintenance initiatives.

ADMINISTRATION RECOMMENDATION:

Administration recommends approval in accordance with Option #1.

BACKGROUND:

In 2015 under the guidance of the Research and Development Program, work commenced on RR14 from TWP274 north to TWP280, a section of gravel road previously treated with oil as dust abatement. Test sections of approximately 1000 feet each were treated utilizing a variety of aggregate and chloride specifications in order to validate a 2007 Transportation Research Board Low Volume Road - Dust Abatement research record. These records have undergone peer review and then accepted for public record. The construction of the test sections, testing and reporting of results was provided by a third party engineering firm and results were presented to Council in 2018. Monitoring of the results continued with adopted best practices presented to Council in 2019.

In 2017, building upon the success of the test sections, Transportation Services performed surface treatment to RR14 south from TWP274 to HWY567 as well as from TWP280 north to TWP282. Monitoring of the project in collaboration with an intensive agricultural operation located adjacent to the test sections has provided valuable feedback regarding excessive crown, potholes and shoulder failures. Utilizing this feedback and the adopted best practices has resulted in this section of RR14 remaining in an acceptable dust free condition and has been requested to remain as such by the collaborative partner.

Simultaneously in 2017, Capital Projects performed a substantial reshape and gravelling of RR14 from TWP282 north to the County limit. Upon completion of the gravel placement, it was determined that a surface treatment would provide a dust free benefit and work commenced in October 2017. Unfortunately, weather conditions deteriorated with daytime temperatures averaging +5C with freezing overnight. The following spring it was determined that the desired results had not been achieved due to the utilization of a standard gravel specification versus the modified specification used in the test sections as well as the chloride being applied outside manufacturer specifications. In spring 2018, chloride was reintroduced with less than satisfactory results, primarily due to the lacking gravel specification. It should be noted that this work was completed prior to the Research and Development test results and subsequent best practices outlined above.

Administration Resources

Steven Hulsman, Transportation Services



RR14 from TWP282 north to the County boundary is now scheduled for surface remixing as per adopted best practices. An application of modified specification gravel is required to align with the adopted best practices and the work should result in RR14 from HWY567 north to the County boundary being in an acceptable condition as a dust free gravel road.

BUDGET IMPLICATIONS:

The work outlined within this report is part of the Research and Development program within the approved 2021 Operating Budget.

STRATEGIC OBJECTIVES:

Providing consistent dust mitigation measures aligns with Council's Strategic Objectives:

"Create a Culture of Customer Service"

- Continuous improvement of gravel roads by providing a dust free environment to residents and the travelling public.

"Enhance Transparency and Communication"

- Develop a relationship and trust with residents and customers regarding effective dust control on gravel roads

OPTIONS:

Option #1: THAT the Range Road 14 Update report be received as information.

Option #2: THAT alternative direction be provided.

Respectfully submitted,

Concurrence,

"Byron Riemann"

"Kent Robinson"

Executive Director
Operations

Acting Chief Administrative Officer

SH/bg

ATTACHMENTS:

ATTACHMENT 'A': Range Road 14 Update Presentation