






Subject: **Policy 13-2 Grader Gravel Services**
 Meeting Date: Tuesday, November 19, 2024
 Prepared By: Mike Conkin, Project Construction Supervisor
 Presented By: Mike Conkin, Project Construction Supervisor

STRATEGIC PLAN ALIGNMENT: (Check all that apply)

	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
High Quality Infrastructure		Economic Resilience		Quality of Life		Effective Leadership		Level of Service	

RELEVANT LEGISLATION:

Provincial (cite)- N/A
Council Bylaw/Policy (cite)- Policy 13-2 Grader Gravel Service

BACKGROUND/PROPOSAL:

Kneehill County policies are presented for review every four years (at a minimum). This review by Council ensures the policies will remain current and allows for any modifications to be made based on changing legislative requirements.

This review is pertaining to Policy 13-2 Grader/Gravel Services. This policy was presented to the Committee of the Whole at the June 20th, 2023 meeting and Council September 26, 2023. While the Committee did recommend that Council approve the proposed changes, further revisions have been included for Council's consideration based on the discussions.

Administration has reviewed and updated Policy 13-2 to incorporate the recommended changes and has included additional revisions deemed necessary following the review.

DISCUSSION/OPTIONS/BENEFITS/DISADVANTAGES/OTHER CONSIDERATIONS:

The attached policy is presented with the recommended revisions. The revisions presented include key points such as:

- Removal of the ability for ratepayers to request County services such as snow plowing and grading to occur on privately owned lands. While this service has been available for many years, the potential liability for these activities is considered too high to continue the practice. Additionally, the clearing or grading of private lands detracts from core public road maintenance activities. Many municipalities in the province that had once offered this service have also abandoned it for similar reasoning. The intent would be to initiate this change in the spring of 2025 to allow residents to adapt to the changes.
- References to both summer and winter maintenance activities for paved and chip-seal roads were added.
- The revisions include changes to the minimum grader rotation requirements, now set at 2-6 rotations per year, based on need and at the discretion of the Road supervisor. However, the supervisor may increase the number of rotations beyond six if the road's condition warrants it.



Road grading activities have always been focused on providing the appropriate level of maintenance, considering factors such as weather conditions, road quality, and traffic intensity. The previous 'minimum rotation' standard often resulted in some roads being over-graded, which could negatively impact road conditions, while others required more attention than assumed under the policy. The updated minimum requirement allows supervisors to better align the program with actual conditions and strategically deploy graders where they are most needed.

- An added reference to the winging of ditches method that the County currently implements. This method of creating snow storage in the ditches is an industry approved practice that municipalities across the country utilize.
- Dirt Trail Maintenance has been combined into this Policy. Within this, dirt trails are bladed a minimum of twice a year with additional maintenance to be completed at the road supervisor's discretion.

Change in service level – Road Graveling Program

- A reduction in total kilometers re-graveled per year from 640km (400miles) – 485km (300 miles).
- The average cost of the County's gravel program over the past four years is \$2,168,950, with an average of 134,650 tonnes applied. With the proposed changes to the County's gravel program, the cost would be approximately \$1,626,713, with about 100,988 tonnes applied. While the goal is to target the re-graveling of 300 miles annually, this figure would not serve as a strict limit. Should circumstances require, an increase in road graveling for a given year would be considered.
- This change in service level is being proposed due to the introduction of a new blading technique with graders. The County's innovative method of blading gravel roads, coupled with the use of carbide blades, enhances the quality of the roads while reducing the frequency of re-graveling. This technique efficiently pulls up existing gravel from the road's crust, redistributing it evenly across the surface, thereby maintaining better road conditions without the constant need for adding new gravel.
- To ensure that this change in service level will not detrimentally affect County roads or cause risks to the safety of road users, Administration proposes to implement a targeted monitoring program. This program will include the selection of 20 to 25 specific sites, approximately 100 meters in length, distributed across the County. These sites will be carefully chosen based on road conditions, traffic levels, and geographical diversity to ensure comprehensive coverage. By closely monitoring these areas, early signs of road deterioration will be detected and responded to proactively before any significant damage occurs. Quarterly updates from these monitoring sites will be captured through measurements, detailed photographs and videos providing visual evidence of road conditions over time.

This data-driven approach will help identify trends and areas of concern, allowing for timely interventions. With these frequent updates, we can ensure that any necessary maintenance or gravel application is scheduled before roads deteriorate to a point where safety could be compromised. This proactive strategy aligns with the County's commitment to maintaining road safety while operating within the revised service levels. By adopting this monitoring program, administration is confident that reducing the overall graveling program from 400 to 300 miles annually will not have a measurable impact on road quality. The data gathered from these key sites will inform decisions on whether additional graveling is needed in specific areas, ensuring that road safety is upheld and that resources are allocated efficiently.

FINANCIAL & STAFFING IMPLICATIONS:

The financial implications of this policy change will include reduced revenue generated from private snow clearing and grading services, which equates to approximately \$5,000 annually. This will be somewhat offset by reduced resource time (salary, fuel, equipment) needed to perform these duties.



The proposed reduction in total kilometers graveled would reduce operating expenses by approximately \$500,000 per year.

ATTACHMENTS:

Policy 13-2 (redline version with proposed changes)

Policy 13-2 (final blackline version)

Adjacent Municipality comparison chart

13-36 Maintenance of Dirt Trail Road Allowances (redline version)

RECOMMENDATION:

1. That the Committee of the Whole recommend to Council to approve the recommended changes to Policy 13-2 Grader and Gravel Services and further direct Administration to develop an appropriate communications package informing ratepayers of the revisions to the policy.
2. That the Committee of the Whole recommend to Council to approve the repeal of policy 13-36 Maintenance of Dirt Trail Road Allowances

APPROVAL(S):

Mike Haugen, Chief Administrative Officer

Approved-

