



November 26, 2018

Honourable Brian Mason  
Minister of Transportation, Government House Leader  
Office of the Minister - Transportation  
320 Legislature Building  
10800 - 97 Avenue  
Edmonton, AB TSK2B6

Dear Minister Mason:

**SUBJECT: LIGHT WEIGHT CONCRETE GIRDERS**

Thank you for your recent participation in the Ministerial Forum at the RMA convention in Edmonton.

During the Ministerial Forum, I once again raised the issue of the light weight concrete girders which we had discussed with you during your meeting with us in Dixonville this past spring. You indicated at the convention that your department would be willing to discuss the matter and possible solutions with affected municipalities.

As you are aware, the County of Northern Lights has 5 affected bridges and is second only to Alberta Transportation who has 9. Two of our bridges received a 2 rating in 2017 due to the deteriorating girders. When our Council met with you in early 2018, we asked whether the department would be taking legal action against the supplier of the light weight concrete as the potential costs of repairing these bridges will be substantial in some cases. You indicated at that time that the department would not, for various reasons, be taking legal action. AT sets the standards for Local Road bridges in the province and compliance by municipalities is not voluntary. Setting the Standards comes with the responsibility of being a leader when problems develop.

Currently, there has been no proposed solution to this light weight aggregate problem that developed and went undetected for many years. This needs to be viewed like a product recall where the public's safety is in danger. This is not like the other bridge issues in the province where good infrastructure has served its useful life and we are trying to find the means to fund the replacements. This issue is about the preservation of the public confidence. There have been many news stories from around the world this year, where the public's trust has been shaken because they believed that the governments are protecting them from poor bridge construction practices, which can put their lives at risk. This specific issue needs a plan and dedicated funding, to replace all the girders in the province that have this problem. It would be proactive and would put the province ahead of the problem. If this problem is not addressed in 2019, there will likely be bridge closures due to the issue, and the public will then start paying attention to the depth and breadth of this problem. If municipal and provincial governments wait until then, any plan will truly be reactionary and too late.

Minister Mason  
November 26, 2018  
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It continues to be our belief that AT set the specifications and the change in aggregate quality was incorrectly accepted or missed by the department and therefore they should be taking the required legal action, and if not, provide funding to assist with the required replacements of these concrete girders.

On behalf of the County of Northern Lights, we hereby request that your department provide funding to the municipalities affected, in order that we can undertake the complete required repairs to these bridges, without affecting the other bridge maintenance requirements which all municipalities are faced with annually. Thank you in advance for your consideration of this request.

Yours truly,

Terry Ungarian  
Reeve

Cc: Council

Affected Municipalities:

- Cardston County (District 1) 1 bridge
- Cypress County (District 1) 3 bridges
- MD of Foothills (District 1) 2 bridges
- Rocky View County (District 2) 1 bridge
- Mountain View County (District 2) 3 bridges
- MD of Lesser Slave River (District 3) 1 bridge
- Strathcona County (District 5) 1 bridge
- Sturgeon County (District 3) 1 bridge
- County of Grande Prairie (District 4) 3 bridges
- MD of Greenview (District 4) 1 bridge
- Mackenzie County (District 4) 1 bridge
- Saddle Hills County (District 4) 1 bridge

Tom Burton, District 4, RMA  
Al Kemmere, President, RMA  
Debbie Jabbour, MLA- Peace River  
Marg McCuaig-Boyd, MLA- Dunvegan - Central Peace - Notley



Transportation

**Deputy Minister**  
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4999 - 98 Avenue  
Edmonton, Alberta T6B 2X3  
Canada  
Telephone 780-427-6912  
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[www.transportation.alberta.ca](http://www.transportation.alberta.ca)

December 3, 2018

Mr. Gerald Rhodes  
Executive Director  
Rural Municipalities of Alberta  
2510 Sparrow Drive  
Nisku, Alberta T9E SNS



Dear Mr. Rhodes:

Thank you for your November 13, 2018 letter regarding the SC girder deterioration.

In May 2017, Alberta Transportation issued BIM Advisory Bulletin #6, which summarized the findings of the engineering assessment and provided a recommended management plan for these deteriorated SC girder bridges. The engineering assessment revealed the deterioration was due to the use of substandard aggregates in the concrete mixes used during fabrication of the girders. The department has explored possible reasons for why this might have occurred but has not proceeded with any legal action to determine the responsible parties.

Alberta Transportation briefly discussed the possibility of cost-sharing with one of the precast suppliers, but the discussions did not result in a positive outcome. It is a challenging situation since the contractual relationship between the department (or municipality) is typically with the general contractor, and not the project sub-contractors.

The department has no current plans to pursue legal action on this matter. However, Alberta Transportation's technical staff are available to provide technical support to any municipality should they wish to pursue this further. An affected municipality may choose to pursue legal action against the general contractor with whom they entered into a contract for construction of an affected bridge. That contractor may then engage in legal action with other parties who they consider having been involved in the issue. Please note that the cause of the issue was identified in January 2017, and we have been advised that any legal action would be required to start within two years of that time.

Sincerely,

Barry Day  
Deputy Minister



ALBERTA  
TRANSPORTATION

*Office of the Minister  
Government House Leader  
MLA, Edmonton - Highland - Norwood*

Info  
RECEIVED

DEC 27 2018

COUNTY OF  
NORTHERN LIGHTS

December 11, 2018

AR 74763

Mr. Terry Ungarian, Reeve  
County of Northern Lights  
#600, 7 Avenue NW  
P.O. Box 10  
Manning, AB TOH 2M0

Dear Reeve Ungarian:

Thank you for your November 26, 2018 letter regarding lightweight concrete girders. I appreciate the time you took to write.

I recognize that this issue has unexpectedly added to the infrastructure needs for many municipalities. I agree that public trust in our infrastructure is critical, and that we as managers of that infrastructure must be diligent in ensuring public safety through actions such as inspections, repairs, replacements, and restricted use as necessary.

Barry Day, Deputy Minister, recently responded to Mr. Gerald Rhodes, Executive Director of the Rural Municipalities of Alberta on this issue. In this letter, Mr. Day noted that Alberta Transportation has no current plans to pursue legal action on this matter. However, he also noted that an affected municipality may choose to pursue legal action against the general contractor with whom it entered into a contract, and that Alberta Transportation's staff are available to provide technical support to any municipality that chooses to do so. We understand there are time limitations on initiating any such legal action.

Please note that Alberta Transportation would not have been a party to any such contracts for bridges managed by municipalities, and the standard girder design as specified by the department at that time was not the cause of the problem that has arisen. It is also our understanding that not all affected bridges require girder replacement.

Sincerely,



Brian Mason  
Minister

cc: Gerald Rhodes, Executive Director  
Rural Municipalities of Alberta

County of Northern Lights  
PO Box 10, #600, 7<sup>th</sup> Avenue NW  
Manning, Alberta  
TOH 2MO

**Delivered via  
e-mail**

Attention: Leonard Van Oort, Capital and Operational Projects

**LOW RATING ADVISORY**

<b>Bridge File:</b> (including Structure #)	74350-02	<b>Highway:</b> (incl. Control Section)	Local Road	<b>Legal Location:</b>	NW 27-90-22-W5M
<b>Stream/Over:</b>	Rousseau Creek	<b>Town:</b>	North Star		
<b>Rating:</b>	2	<b>Element:</b>	Bridge Rail Posts, Girders (4), Superstructure General Rating		
<b>Reason for Low Rating:</b>	Concrete section loss extends through plinth to bridge rail post at SP1G1, SP2G1 and SP3G1. More than 50 mm of concrete section loss with exposed rebar, stirrups and strands at SP1G1, SP2G1, SP3G1, and SP1G9.				
<b>Recommendations:</b> (see Note)	Replace all exterior girders, apply silane sealer to deck and ACP overlay. Reduce inspection cycle to annually until girders replaced.				
<b>Other Comments:</b> (if any)	Consider cleaning off deck and re-inspecting top of interior girders before proceeding with exterior girder replacement. Repairs recommended as per BIM Advisory #6.				

**Note:** These recommendations are provided as part of the initial notification and may be revised once the BIM is submitted for review. Information on the submitted BIM should be consulted when available.

If more information is required, please call.

Sincerely,  
MPA Engineering Ltd.  
per:



Megan Bartman, EIT

cc: David Morrison, AT

*Sunny Valley*

Friday, December 21, 2018

Honourable Minister Brian Mason  
Minister of Transportation  
320 Legislature Building,  
10800- 97 Avenue,  
Edmonton, Alberta T5K 2R6

**RE: Light Weight Concrete Girders**

Dear Minister Mason,

We are in support of the County of Northern Lights request for the Ministry of Transportation to undertake and finance the required repairs to bridges built with light weight concrete girders.

Our support is a result of the County's experience with these girders. The attached photo demonstrates the existing erosion of the girder's aggregate and will require costly repairs. (Attachment A). This bridge is set to be replaced in 2075; however, with the current rate of degradation of the light weight- concrete girder it will have to be replaced earlier.

Roads safety is a high priority for the County and its residents. That is why we have worked in concert with Alberta Transportation over the year to ensure safe access to the County's and province's roads networks.

We look forward to working alongside the Ministry, and other affected municipal governments to solve this issue.

Sincerely,  
**ROCKY VIEW COUNTY**



**Greg Boehlke,**  
**Reeve**

cc: Northern Lights County Council  
Cameron Westhead, MLA, Banff-Cochrane  
Leela Aheer, MLA, Chestermere-Rocky View  
Nathan Cooper, MLA, Olds-Didsbury, Three Hills  
Angela Pitt, MLA, Airdrie  
Rocky View County Council  
Theresa Van Oort, CAO, County of Northern Lights  
Al Hoggan, CAO, Rocky View County



**RMA**  
RURAL MUNICIPALITIES  
of ALBERTA

January 4, 2019

Cardston County  
Cypress County  
MD of Foothills  
Rocky View County  
Mountain View County  
MD of Lesser Slave River  
County of Northern Lights

Strathcona County  
Sturgeon County  
County of Grande Prairie  
MD of Greenview  
Mackenzie County  
Saddle Hills County

Dear CAOs and councils,

**Re: Alberta Transportation action on premature girder deterioration**

As you are aware, your municipality is responsible for managing one or more SC girder bridge that experienced premature deterioration. Based on concerns expressed by the County of Northern Lights earlier in 2018 related to liability and costs associated with the impacted bridges, RMA sent a letter to the Deputy Minister of Transportation inquiring as to progress being made by Alberta Transportation in determining possible solution to the issue.

Please find attached the response from Alberta Transportation for your reference.

Please feel free to contact me with any questions or to discuss the issue further.

Sincerely,

Al Kemmere  
President

RESOURCEFUL. RESPONSIVE. RESILIENT.



2510 SpJrrow|D11v0  
Nisku, Alberta T9E 8N5

OFFICE 780 955 3639  
FAX 780 955 3615  
RMAAlberta.com

Municipalities:

- Cardston County (District 1) 1 bridge
- Cypress County (District 1) 3 bridges
- MD of Foothills (District 1) 2 bridges
- Rocky View County (District 2) 1 bridge
- Mountain View County (District 2) 3 bridges
- MD of Lesser Slave River (District 3) 1 bridge
- Strathcona County (District S) 1 bridge
- Sturgeon County (District 3) 1 bridge
- County of Grande Prairie (District 4) 3 bridges
- MD of Greenview (District 4) 1 bridge
- Mackenzie County (District 4) 1 bridge
- Saddle Hills County (District 4) 1 bridge





# Mountain View COUNTY

January 9, 2019

Honourable Brian Mason  
Minister of Transportation, Government House Leader  
Office of the Minister - Transportation  
320 Legislature Building 10800 - 97 Avenue  
Edmonton, AB T5K 286

Dear Minister Mason:

Re: Light Weight Concrete Girders

Thank you for attending the Ministerial Forum at the RMA convention in Edmonton, we sincerely appreciate your effort to ensure the question raised from the floor received a response. As part of your response to the question regarding defective Light Weight Concrete Girders you indicated that your department would be willing to discuss the matter and possible solutions with affected municipalities.

As you are now aware, Mountain View County has 3 affected bridges that were all constructed around 2004 and they are identified with the following Bridge File numbers:

- BF 867 (SE 13-29-28-W4) Rosebud Creek
- BF 6797 (NW 4-33-6-W5) Bearberry Creek
- BF 9588 (NW 18-29-3-W5) Dogpound Creek

Mountain View County has not heard of any updates from Alberta Transportation detailing what the next steps will be in addressing the many affected bridges across the province to ensure that public safety is preserved and that those responsible for the defective materials are held accountable. Mountain View County supports the position of the County of Northern Lights in that this issue needs to be viewed like a product recall where the public's safety is in danger. This is not like the other bridge issues in the province where good infrastructure has served its useful life and we are trying to find the means to fund the replacements.

It is the County's understanding that Alberta Transportation set the specifications and the change in aggregate quality was incorrectly accepted or missed by the department, and therefore, AT should be taking the required legal action, and if not, provide funding to assist with the required replacements of these concrete girders.

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The correction of defective bridges resulting from the use of the faulty Light Weight Concrete Girders needs a plan and dedicated funding external to the traditional Local Road Bridge Program under STIP. Mountain View County is asking Alberta Transportation to take proactive measures to address these bridges before restrictions and closures need to be considered to preserve public safety.

We look forward to having more dialogue on this subject and learning of your departments plan to correct the defective bridges.

Thank you in advance for your consideration of this request.

Sincerely,

Bruce Beattie Reeve

Cc: Russ Watts, Alberta Transportation, Regional Director