

NO: R167

COUNCIL DATE: September 13, 2021

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **September 9, 2021**

FROM: **General Manager, Engineering**

FILE: **5405-30**

SUBJECT: **Provincial Railway Safety Regulation Amendment**

RECOMMENDATION

The Engineering Department recommends that Council receive this report for information.

INTENT

The intent of this report is to provide an overview of recent legislative changes impacting railway crossing safety standards and the anticipated financial impacts.

BACKGROUND

The Canadian rail system includes both Federal and Provincial railways. Railways that cross Provincial boundaries are governed by Federal legislation, while railways that operate strictly within the boundaries of the Province are governed by Provincial legislation.

There are five railway companies that operate on railways in Surrey. Railway companies that operate on Federally regulated railway tracks within Surrey are:

- Burlington Northern Santa Fe Railway (“BNSF”);
- Canadian National Railway Company (“CN”); and
- Canadian Pacific Railway (“CPR”).

Railway companies that operate on Provincially regulated railway tracks within Surrey are:

- British Columbia Railway Company (“BC Rail”); and
- Southern Railway of British Columbia (“SRY”).

Level grade crossings are areas where railway tracks intersect with roads or walkways. Within Surrey, there are 47 railway grade crossings of public roadways. 14 of the grade crossings are Federally regulated and 33 of the grade crossings are Provincially regulated. The locations of the public grade crossings are shown in the attached Appendix “I”.

On December 17, 2014, the Minister of Transport (Canada) established new Grade Crossing Regulations under the Railway Safety Act (Canada) to improve the safety of interactions between trains and road users at Federally regulated grade crossings. The Grade Crossing Regulations were accompanied by Grade Crossing Standards that provide additional design and engineering details to ensure and control consistency in the application of rail safety across Canada.

The Grade Crossing Regulations stipulate that the safety requirements must be met seven years after the day that the regulations came into force. The City is on schedule to complete the safety requirements before the November 28, 2021 deadline.

On September 22, 2020, the Minister of Transportation and Infrastructure (British Columbia) amended the Railway Safety Adopted Provisions Regulation (British Columbia) to harmonize the technical regulations, rules, and standards of the Provincial legislation with the Federal legislation. The Provincial legislation covers grade crossings in British Columbia.

The new Provincial regulations impact existing level grade crossings that may need to undergo upgrades, including improving sightlines or introducing greater safety measures, such as warning bells, flashing lights, and gates. All new crossings must be designed and built to these new standards. Any required upgrades must be completed by January 1, 2028.

DISCUSSION

The City engaged engineering consultants to undertake railway safety assessments in 2014, 2016, and 2020 to recommend necessary improvements at grade crossings to comply with Federal technical standards. Safety assessments were also conducted at Provincially regulated grade crossings in anticipation of Provincial legislation changes. Staff have used the recommendations from these assessments to apply federal technical design standards to transportation projects impacting provincially regulated grade crossings in recent years to mitigate future impacts to the City.

Meeting the legislated grade crossing safety standards is a shared responsibility between the road authority and railway company, with site specific crossing agreements established for each crossing.

In general, road authorities are responsible for:

- Designing, building, and maintaining a road approach outside of the railway;
- Installing and maintaining traffic control devices; and
- Maintaining sightlines, including removing any trees or brush, along the road.

In general, railway companies are responsible for:

- Railway signing;
- Installing and maintaining railway warning devices;
- Installing and maintaining the crossing surface; and
- Maintaining sightlines, including removing any trees or brush, in proximity to the railway.

Road authorities and railway companies may enter into an agreement assigning responsibilities and allocating costs for the initial capital installation and maintenance of grade crossings. While the City has maintenance agreements in place for most of the grade crossings in Surrey, some

agreements are not explicitly clear as to which party is responsible for upgrades and changes to the level of grade crossing protection required by changes in regulations.

As part of the safety upgrades, staff will work with the railway agencies to include whistle cessation, where achievable.

Financial Impact

The conclusions of the City's railway safety assessment reports indicate that work is required at 23 Provincially regulated grade crossings to comply with the amended provincial legislation. The estimated total value of the work is approximately \$6 million, with an estimated \$3 million to be funded by the City.

The value of the work has been estimated assuming agreement with the BC Rail and SRY on the scope of work technical details, stable construction costs, and successful negotiations for sharing costs equally where upgrading the railway warning system is required.

Discussions with BC Rail on outstanding requirements and areas of financial responsibility for their five crossings are complete. Staff have initiated communication with SRY staff regarding the required actions and next steps for their 18 crossings. SRY is conducting their own systemwide compliance review and has committed to sharing those results with the City in Fall 2021. Further discussions will resume with SRY at the completion of their compliance review.

Funding

Transport Canada has funding available under the Railway Safety Act (Canada) for eligible costs related to improving crossings. The Rail Safety Improvement Program ("RSIP") provides funding in the form of grants and contributions based on merit. RSIP applications are accepted annually in August for funding in the next Federal fiscal year starting April 1.

In 2021, Transport Canada approved five railway projects agreeing to contribute 80% of the costs to a maximum of \$1,017,268.72. Two of the projects support safety improvements at Provincial grade crossings in Surrey.

Staff will continue to apply for RSIP funding annually to offset the financial impact to the City.

Funding is available for the City's \$3 million portion in the Transportation Capital budget identified in the City's Engineering 10-Year Servicing Plan.

SUSTAINABILITY CONSIDERATIONS

The safety upgrades of railway crossings in Surrey support the City's Sustainability Charter 2.0. In particular, railway crossing safety upgrades relate to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, and Public Safety. Specifically, railway safety upgrades support the following Desired Outcome ("DO") and Strategic Direction ("SD"):

- Neighbourhoods and Urban Design DO8: The built environment enhances quality of life, happiness and well-being; and
- Transportation Safety SD8: Ensure all public infrastructure is built and maintained to ensure community safety and well-being for all ages and abilities.

CONCLUSION

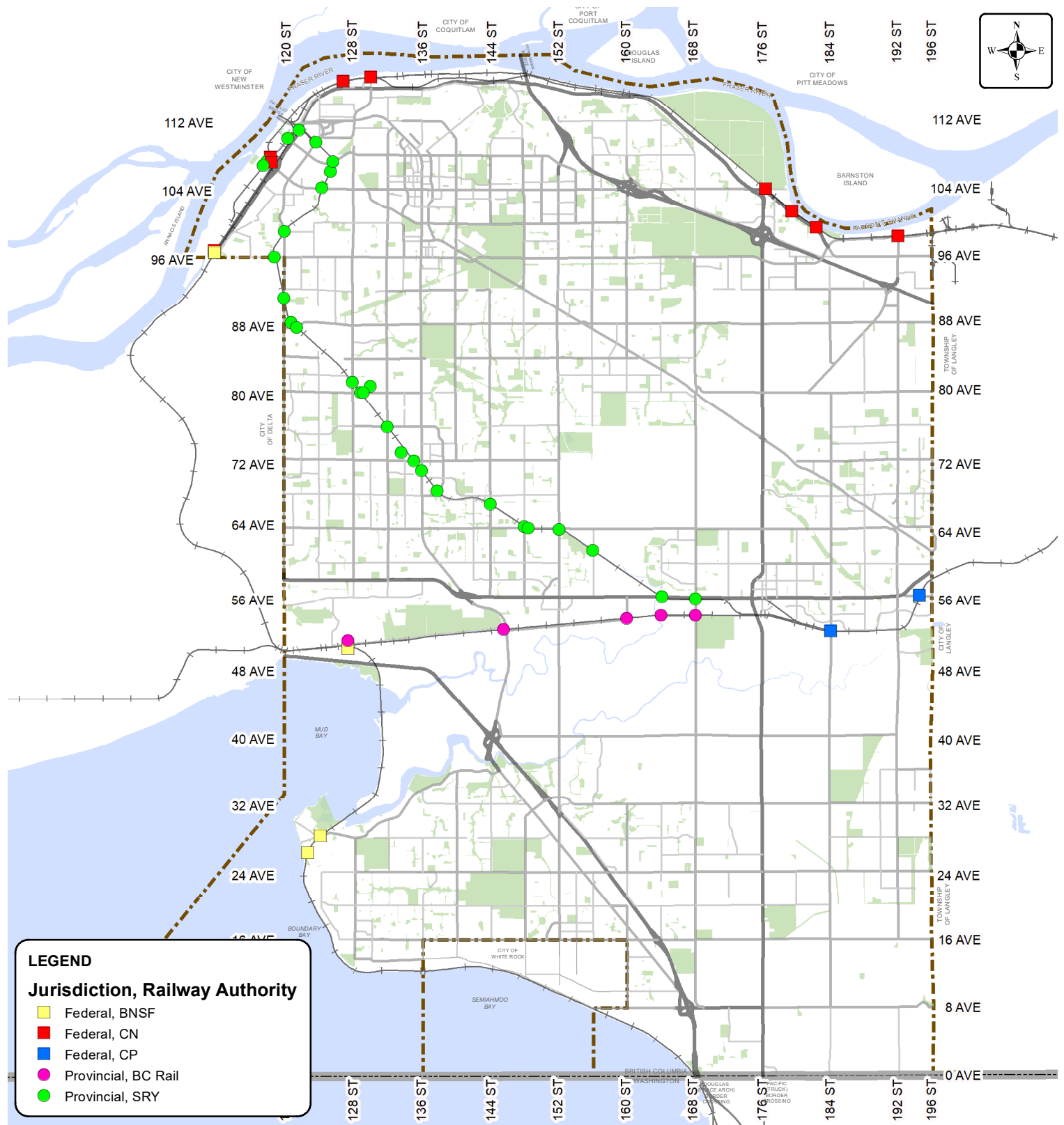
British Columbia's regulatory framework for railways has changed to adopt the same regulations and standards for level grade crossings as Federally regulated railways. As a result, safety upgrades are required at some crossings to comply with this new legislation by January 1, 2028. Staff will pursue cost sharing with railway companies and Transport Canada's RSIP to mitigate the financial impact to the City.

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RV/GDC/cc/jhs

Appendix "I" – Map of Locations of Public Grade Crossings

https://surreybc.sharepoint.com/sites/ENG.Administration/WP_Docs/2021/Admin/CR/Final_CRs/Sept_13/Provincial_Railway_Safety_Regulation_Amendment.docx



LEGEND

Jurisdiction, Railway Authority

- Federal, BNSF
- Federal, CN
- Federal, CP
- Provincial, BC Rail
- Provincial, SRY

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Scale: 1:125,000 0 1,000 M



Active Public Railway Crossings

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.