CM18-7

April 30, 2018

To: His Worship the Mayor
And Members of City Council

Re: Public Safety and Traffic Delay – Grade Rail Crossings on Ring Road between Winnipeg Street and McDonald Street

RECOMMENDATION

1) That $500,000 be allocated from the General Fund Reserve to fund the engagement of an engineering consultant and associated expenses to conduct a feasibility study to be provided to City Council in Q2 of 2019.

2) That a Request for Proposal to initiate the engagement of professional engineering services to conduct a feasibility study be approved.

3) That the Executive Director, City Planning & Development be authorized to negotiate, award and enter a contract, provided the fee for engineering services is equal or less than the project budget, including contingency of $500,000.

4) That the City Clerk be authorized to execute a contractual engagement through a Consulting Services Agreement after review and approval of the City Solicitor.

5) That City Administration be authorized to explore and secure grant funding if available.

CONCLUSION

A feasibility study to examine the costs and opportunities of removing the Canadian Pacific Railway (CPR) and Canadian National Railway (CNR) at-grade crossings will provide the necessary analysis to determine what the future direction is for the Ring Road corridor between Winnipeg Street and McDonald Street, in addition to understanding the potential impact on safety and the level of service in terms of delay times as a result of trains crossing. Exploration of the issues requires consideration of all possible solutions.

To undertake this work, City Administration is recommending that an upset limit of $500,000 be allocated from the General Fund Reserve to fund the engagement of an engineering consultant and associated administration expenses with undertaking the project. Administration expects the total costs to be less than $500,000; however, in order to expedite the procurement process and ultimately the study, Administration is suggesting an upset amount of $500,000 be allocated to this project. It is anticipated that the completion of this feasibility study could be provided to

City Council in Q2 of 2019. Opportunities may be available for City Administration to explore and secure grant funding if available for the feasibility study which would reduce the overall costs of the project.

BACKGROUND

At the City Council meeting on February 25, 2018, a Notice of Motion MN18-3 was introduced for consideration and discussed at the subsequent meeting of City Council on March 26, 2018. At that meeting, the motion was amended and approved as follows:

> *"The City of Regina Council directs Administration to bring back a report outlining the implications and costs of a feasibility study on potential solutions (e.g. over/underpass or rail relocation) to remove the Canadian Pacific (CP) and Canadian National (CN) at grade rail crossings on Ring Road located between McDonald Street and Winnipeg Street to the April 30, 2018 Council meeting".*

The two subject railways of the motion are the CPR Lanigan subdivision and the CNR Qu'Appelle subdivision. The CPR Lanigan subdivision connects Regina to Saskatoon and the CNR Qu'Appelle subdivision connects Regina to Melville. Both crossings at the Ring Road are at-grade, including the east on and off ramps to the Winnipeg Street grade separation over Ring Road.

In 1969, applications were made by the City to the Canadian Transport Commission (now Transport Canada) to construct Ring Road across the CPR Lanigan and CNR Qu'Appelle subdivisions. These applications were granted with all costs to be paid for by the City. An application in 1974 for the subsequent widening and the addition of ramps to Winnipeg Street was also granted with all costs to be paid for by the City.

In the 1980's, as part of the City's Relocation Initiative, the City applied to the Canadian Transport Commission for a decision to relocate the CNR Marshalling Yard, CNR Central Butte, CNR Craik, CNR Qu'Appelle and CPR Lanigan subdivisions to a corridor around the north side of the city. An affirmative decision was handed down in 1987; however, a combination of lack of sufficient funding and other factors resulted in the City withdrawing the pursuit of the relocations.

Subsequent discussions in the late 1980's and early 1990's to facilitate a compromise with both the CPR and CNR to relocate both subdivisions within the city limits to a joint operating corridor were unsuccessful at that time.

DISCUSSION

Transportation Master Plan

On May 29, 2017, City Council approved the Transportation Master Plan (TMP). The TMP is a long-term comprehensive and multi-modal transportation policy and planning document for all modes of transportation. The implementation horizon of the TMP is 25 years; however, it is also a living document subject to monitoring, review and update every five years. The Roadways

Network Map identifies future potential railway grade separation locations within the city, including the subject location of the motion, though specific projects are not identified for grade separations within the implementation horizon.

A Railway Study is identified in the TMP to be undertaken in approximately eight to sixteen years. The action to initiate a Railway Study contemplates several rail related items, including existing crossings and rail relocation. Undertaking a feasibility study for the two at-grade rail crossings at this time would advance a portion of a future citywide Railway Study.

Winnipeg Street Bridge Replacement and Realignment
The Winnipeg Street bridge is scheduled to be replaced and realigned in the near-future. Studies undertaken by City Administration have indicated that this bridge requires replacement and given its poor condition state, further rehabilitation efforts are not an option. Capital budget approval has been provided by City Council for the City portion of the project and funding for 1/3 of the project has been set aside for replacement and realignment of the Winnipeg Street bridge. The gross cost of the work is projected to be $28.8 million. The City made an application through the federal government's New Building Canada Fund (BCF) Provincial-Territorial Infrastructure Program (PTIC) where the provincial and federal governments would fund the remaining 2/3 of the project.

Through ongoing negotiations with the provincial and federal governments, the provincial government provided initial approval in principle and it is anticipated that once the federal government has completed its review and subsequent approval, the City will have access to the federal and provincial government's $19.2 million in funding to initiate the detailed design of the project in 2018.

The City will commence the Winnipeg Street Bridge project when funding is committed in advance of the feasibility study being completed due to the requirements of the grant funding. The results of the feasibility study will be taken into consideration for the final design of the Winnipeg Street Bridge and may result in changes to the design.

Ring Road Widening – Albert Street to McDonald Street
Identified in the TMP and proposed within the 2018 five-year General Fund Capital Plan is widening of Ring Road from Albert Street to McDonald Street. Widening of Ring Road within these limits will provide added capacity, particularly with respect to lanes for locations with on and off ramps and improve weaving movement safety. In 2019, $800,000 is identified for design of the widening project, which is tentatively identified in the 2018 five-year General Fund Capital Plan for construction in 2022.

The CPR and CNR at-grade crossings on Ring Road are between the project limits and as such, staging of this project to coincide with the outcomes of the feasibility study will be required.

Eastern Pressure Solution
Partially funded through capital carry forward and identified to begin within the 2018 five-year Utility Fund Capital Plan is the design and construction of an Eastern Pressure Solution. The project has been confirmed through the forthcoming Water Master Plan which will be brought

forward to City Council in the second half of 2018. The Water Master Plan will identify the long-term upgrades of the water system to maintain/improve level of service, reduce risk and vulnerabilities and accommodate growth. Engagement of an engineering consultant for preliminary design of the Eastern Pressure Solution is being sought in Q2 of 2018.

Within the road right-of-way (ROW) for Ring Road and across the CPR and CNR at-grade crossings is the 750 mm diameter water main, referred to as the City Loop. The City Loop is a large diameter water network comprised of pipes from 500 to 1,050 mm in diameter that encircles the city and connects to the distribution system at several locations. Identified in the draft Water Master Plan is the addition of a new 900 mm diameter supply main also in this location. As the existing 750 mm diameter water main, the identified 900 mm diameter supply line and other City and non-City underground infrastructure is within the Ring Road ROW, a grade separation in this location will necessitate the relocation or protection of a portion of the City Loop, the new supply line and other infrastructure. The feasibility study is not anticipated to have an impact on the overall timing of the delivery of the solution.

City Administration Impacts
The additional staffing required to oversee the consultant who conducts the feasibility study will be funded through the proposed project funding and should not jeopardize the work already in the Administration's work plans for 2018 and 2019.

Traffic and Train Volumes
Currently, 63,000 vehicles per day travel between Winnipeg Street and McDonald Street along Ring Road as per the 2015 – 2016 Annual Traffic Flow Map. As of 2013, the CPR Lanigan subdivision crossing was reported to have up to 10 trains per day. The CNR Qu'Appelle subdivision crossing was reported to have up to six trains per day. Recent train crossing data provided by CPR and CNR for this report indicated the overall number of crossings has decreased since 2013.

CPR indicated there is an average of four to eight trains per day and CNR indicated there is an average of two freight trains per day at these crossings respectively. According to both CPR and CNR, the number of trains can change at any time, depending on the needs of their customers. Both entities operate 24 hours per day, seven days a week and do not have a set schedule for the freight trains.

Collisions
At the CPR and CNR at-grade crossings, over the last 10 years (from 2009 to early 2018), there was eight separate collision cases, as reported by Saskatchewan Government Insurance. In some of these cases, there were multiple vehicle collisions. Severity ranged from property damage only to injuries. The determined causes included driver inattention, driver impairment and weather-related road conditions.

The above data outlines collisions at the CPR and CNR at-grade crossings locations specifically. A larger total number of collisions have occurred between Winnipeg Street and McDonald Street on Ring Road; however, the collision data is not separated between non-train related collisions and train related collisions at the time of the incident. Further analysis is required to determine

correlations between collision and train crossings, cause, severity, road conditions and other factors.

Opportunities
In anticipation of a potential rail relocation in the past, the City had the foresight to have constructed a third set of abutments for the addition of a railway across the subway south of Ross Avenue. In addition, the corridor between the Consumer's Cooperative Refinery and the City Landfill remains unencumbered. Preservation of land for future grade separations at various existing crossing locations have also been maintained along the corridor.

The City has grown substantially over the last 20 years and the interface between city traffic and the rail lines has increased, as such it is timely to re-engage in discussions with the rail lines on the opportunities that rail relocation offers. Although the study will examine the costs and benefits with an array of solutions, Administration anticipates that rail relocation will be the least impactful to future city projects along the Ring Road and may not require the same level of infrastructure investments which in the long term may have a cost benefit to the City. Since the notice of motion was put forward, CPR and CNR have reached out to the City noting their support to have discussions on this matter.

RECOMMENDATION IMPLICATIONS

Financial Implications
The primary driver to seek an alternative solution to the current Ring Road CPR and CNR at-grade crossings is to address both public safety and traffic delays, thus improving the overall level of service.

The source of funding to conduct the feasibility study and subsequently undertaking the design and construction of improvement is current contributions, notwithstanding the potential to seek funding through higher levels of government through existing or future grant programs. An approval to withdraw from the General Fund Reserve is required to fund a feasibility study and associated costs of up to $500,000. Should a design solution be identified to incorporate additional roadway capacity components to accommodate future growth, an incremental portion may be funded through Servicing Agreement Fees; however, either all or most funding by the City would be from current contributions.

The General Fund Reserve had a balance of $27.5 million at the end of 2017 but this balance is projected to decline to approximately $9 million at the end of 2018 due to funding commitments of $18.4 million for the purchase of the former Saskatchewan Transportation Company Bus Depot and Head Office which will serve as part of the expansion of the Regina Police Service Headquarters.

Transport Canada has a Rail Safety Improvement Program which provides grant and contribution funding to improve rail safety and reduce injuries and fatalities related to rail transportation which may be able to be accessed to support this study.

Environmental Implications
None with respect to this report; however, a feasibility study will need to explore and identify potential environmental implications and subsequent environmental impact studies may be required.

Policy and/or Strategic Implications
Within the City's TMP, the Roadways Network Map identifies future potential railway grade separation locations within the city, including the subject location of the motion. The action to initiate a Railway Study contemplates several rail related items, including existing crossings and rail relocation. As such, undertaking a feasibility study at this time will accelerate and advance a portion of work identified in the TMP.

Other Implications
None with respect to this report.

Accessibility Implications
None with respect to this report.

COMMUNICATIONS
Consultation and communication with affected stakeholders including, but not limited to CPR and CNR, will be required if a feasibility study is directed to be undertaken.

DELEGATED AUTHORITY

The recommendations contained in this report requires City Council approval.

Respectfully submitted,

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