



**Date:** December 15, 2011  
**To:** Mayor & Council  
**From:** Mike Lai, Johnson Street Bridge Project Director  
**Department:** Engineering & Public Works  
**Regarding:** Rail on New Johnson Street Bridge

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This is in response to a request by Council on November 24, 2011 regarding a letter dated November 23, 2011 from Mr. Ross Crockford about adding rail into the design of the new Johnson Street Bridge.

### **Background**

The design work underway for this large and complex project is in accordance with previous decisions of Council to not borrow funding for rail [June 17 and August 12, 2010], but to protect a rail corridor as part of the project, and was also the basis of the referendum held in November 2010. Council was advised that a separate bridge would be needed to accommodate rail in future.

The direction to not include rail was reaffirmed with the approval of the Project Charter on February 4, 2011 and was the basis of the \$21 million federal Contribution Agreement signed on March 23, 2011.

The new bridge is being designed for active transportation [pedestrians and cyclists] with a multi-use trail, on-road bike lanes, and a pedestrian deck in addition to 3-lanes for motor vehicles. A different design would be required to accommodate rail on the bridge now or in the future.

### **Implications**

The project is at the 30% detailed design stage on the basis of the approved Project Charter. As a result, there are a number of serious implications as to why we would not recommend changes to the project at this stage:

1. This will be considered a major scope change which requires approval by Transport Canada relative to the existing federal Contribution Agreement. This would require additional work to prepare the appropriate design concepts and material for consideration and approval by Transport Canada. Additional work by the design team will be required and will add significant cost to the project that has not been budgeted. This will also add delay to the schedule, which affects the ability to complete the project within timelines.
2. To add rail in the project now will require the City to stop the project. This would involve major redesign of work completed to date for both the bridge and approaches. Adding rail would need to carefully consider how it integrates with the new bridge and where it terminates on the downtown side. Additional width must also be considered for rail. This will add design and capital cost to the project as well as delay to the project schedule.
3. Redesign work as well as preparing the necessary information for Transport Canada's reconsideration and approval under the Contribution Agreement would add at least 4 to 6 months to the schedule and will add cost to the project that has not been budgeted.
4. Furthermore, adding rail in the traffic lanes of the bridge is not recommended as it reduces capacity of the bridge lanes, which will result in increased traffic congestion, queuing at intersections in the downtown area [e.g., past Government Street and Yates Street], and creates safety issues with merging traffic. In addition, emergency responders have been concerned that lane reductions and more congestion will increase response times. This was previously considered and discussed with Council and was not pursued further for these reasons.

5. The possibility of LRT on the bridge was also considered in past and discussed with BC Transit. LRT requires reliability and schedule adherence to attract ridership and be successful. This is a moveable bridge over a federally regulated navigation channel, requiring the bridge to be lifted as requested by marine users at random times. This impacts the performance of LRT on the bridge which BC Transit staff advised they could not support.
6. The referendum held in November 2010 sought electorate approval to borrow funds for the current project [i.e., without rail]. Adding rail into the project would be considered a major change in scope, which may require electorate approval. A legal review would be required to confirm this if rail were to be added to the project. Holding another referendum will likely require about 3 to 4 months to complete, similar to the one held in 2010, which adds delay to the schedule as well as additional cost [about \$140,000 as in 2010] that has not been budgeted.
7. Delay in the project schedule will affect the coordination of construction with allowable windows to work in the harbour [fisheries work windows]. This delays completion of construction and would not allow the project to be completed within schedule, which also jeopardizes the federal funding.

### **Conclusion**

For the reasons outlined above, Administration does not recommend adding rail into the project. Adding rail would be considered a major scope change requiring not only additional budget for redesign work and capital cost, but significant time. This will add up to an additional year to timelines [report, design changes, Transport Canada approvals, referendum if required, Council approval, etc.]. The project will not be completed on time. This jeopardizes the \$21 million in federal funding associated with the approved Contribution Agreement.

Respectfully submitted,

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