Fifth Street Bridge Rehabilitation Project Update

City Council Meeting January 27th, 2020







Presentation Objectives

1. Provide update on the Fifth Street Bridge Rehabilitation Project:

- a. Communications and Public Engagement Process
- b. Construction staging and scheduling
- c. Cycling and walking connectivity

2. Confirm final design – cantilevers or no cantilevers. This is critical to ensure completion of project within the grant window, by March 31, 2022.

3. Confirm whether to obtain loan authorization approval through Alternative Approval Process or Referendum



Where we are in the process



Fifth Street Bridge Rehabilitation Project Update 3 of 17

Project Scope

- Bridge deck replacement and cathodic protection systems,
- Structural repairs to the steel bridge structure,
- Removal of rust and existing lead-based coating
- Recoating of all steel to prevent corrosion
- New 3.0 metre wide multi-use pathways on both sides to be confirmed by Council



Public Engagement

- Broad communications and a public engagement strategy was approved in September to raise awareness and understand public concerns and ideas.
- The first phase of public engagement occurred Fall 2019

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER		
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.		
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.		



Public Engagement

- An open house, online survey, and in-person stakeholder meetings were used to seek input from the community
- 97 people attended the open house and 671 people completed the online survey











Detailed Planning Considerations

- Impacts to all modes of transportation, including emergency vehicles, transit, and active transportation.
- Environmental/Regulatory considerations including protection, mitigation and permitting
- Schedule, considering phasing, and construction season
- Key utility network components
- Utilities to be safe-guarded during construction





Construction Staging

Four staging options considered:

- 1. Full bridge and decking repairs and new multi-use pathways completed concurrently
- 2. Installation of multi-use pathways first, followed by bridge coating and decking repairs
- 3. Full bridge and decking repairs with no multi-use pathways
- 4. Installation of work split up between north and south sides of bridge



Construction Staging

Scenario	Advantages	Disadvantages	Estimated Capital Cost		
 Full bridge and decking repairs and addition of multi- use paths completed concurrently 	 Accommodates full project scope with shortest length of overall construction. Provides the most cost-effective scenario as the contractor would be free to dictate schedule. 	 Single lane alternating traffic (SLAT) during much of project timeframe. 	• \$8.3 Million		
2. Installation of multi-use pathways followed by bridge coating and decking repairs	 Accommodates the full scope of the project. Allows for two-way traffic during much of the bridge coating work. 	 Longer construction timeframe Would result in a cost premium to Scenario 1. 	• \$8.7 to 9.1 Million		
 Full bridge and decking repairs with no multi-use pathways 	Provides the shortest overall construction length and lowest capital cost.	 Would require SLAT traffic for the duration of project Does not include pathways. 	• \$6.3 Million		
4. Installation or work split up between north and south sides	 Accommodate 2-way traffic during large portions of the project. This advantage is most beneficial to a scenario where the pathways are not included. 	 Would expect a cost premium of approximately 20% for the additional efforts Would significantly increase the overall timing Dictation of the construction sequencing in this way may detract contractors 	 \$7.6 to \$10 Million (no Paths / including Paths) 		



Cycling and Pedestrian Connectivity

A concept has been developed identifying options for improving connections on the west and east side of the bridge.

- Multi-use pathways at each end of the bridge with appropriate transitions to nearby walking and cycling facilities.
- All connecting pathways are three metres wide, consistent with the proposed cantilever facility width and is sufficiently wide to accommodate both pedestrian and cyclist activities.
- Multi-use pavement markings are provided on all pathway segments. Appropriate regulatory, warning, and wayfinding signage should also be included



Cycling and Pedestrian Connectivity





Cycling and Pedestrian Connectivity





Budget and Funding

Project Element	1) Original Scope - Rehabilitation	1) Rehabilitation + Cantilever Upgrade			
Outcome	Rehabilitated crossing with 20-	A rehabilitated crossing with			
	year updated useful service life	extended service life that			
	with full utilization of the grant	provides improved cycling and			
	and cathodic protection and	walking amenities, with full			
	deck replacement.	utilization of the grant.			
Bridge Recoating & Deck	\$4.1 million	\$4.1 million			
Renewal	94.1 mmon	μ.τ ΠΠΠΟΠ			
Structural and Traffic	\$2.2 million	\$2.2 million			
Cantilever Pathway	n/a	\$2 million			
Total	\$6.3 million	\$8.3 million			
Fed/Provincial Grant	\$1.96 million	\$1.96 million			
Reserves	\$0.94 million	\$0.94 million			
City Borrowing Amount	\$3.4 million	\$5.4 million			



Borrowing Bylaw Process

Alternative Approval Process (AAP)

 Requires that 10% or more of the eligible electors must sign and submit response forms in opposition to the proposed loan authorization bylaw to the local government to obtain assent of the electors in order to proceed.
 Cost: \$1,200
 Timeline: Approximately 8 months

If 10% of the electors sign forms in opposition to the AAP, there are two choices; proceed to referendum within 80 days, or the loan authorization bylaw could be put on hold and alternatives considered.

Referendum

Requires asking electors to cast their vote in relation to the loan authorization bylaw. Assent of the electors is achieved if a majority of votes counted are in favour of proceeding with the bylaw. If elector assent is not granted the loan authorization bylaw could not be adopted and alternatives be considered.
 Cost: \$40,000
 Timeline: Approximately 10 months



Project Timeline

Once the project scope is given final approval, a loan authorization bylaw process must be commenced this spring to meet the construction schedule, and to meet the federal grant requirement that the bridge be completed by March 31, 2022.

City of Courtenay Eifth Street Bridge - Summary Schedule										
	2019	2020			2021				2022	
	Sep-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
Communications and Public Consultation										
Complete Design										
Borrowing Bylaw										
Contract Tender										
Construction										
Project Close-out										



Next steps

Upon Council direction, the next steps in the process include:

- 1. Confirm final design cantilevers or no cantilevers.
- 2. Commence Borrowing Bylaw Process and associated communications.
- 3. Advance detailed traffic management planning.
- 4. Proceed with detailed design.



Council Direction

Confirm Final Design of the Fifth Street Bridge Rehabilitation Project

Option 1:

That Council reaffirm its decision to include cantilevers in the final design of the Fifth Street Bridge Rehabilitation Project.

Option 2:

That Council direct staff not to include cantilevers in the final design of the Fifth Street Bridge Rehabilitation Project.

Confirm Approach to Borrowing Bylaw:

Option 1: Obtain elector approval through the Alternative Approval Process (*recommended*).

Option 2: Obtain elector approval through the Referendum Process.

