

Overview of the Fifth Street Bridge

The Fifth Street Bridge is an important piece of infrastructure serving the Comox Valley.

Completed in 1960, the 72 metre single span Pratt Truss bridge crosses the Courtenay River. It has two vehicle lanes and 1.5 metre sidewalks on both sides.

DAILY TRIPS



Vehicles:
20,000 / day



Pedestrians:
650 / day



Cyclists:
500 / day



HISTORY OF THE CROSSING

The Fifth Street Bridge crossing has evolved significantly as the community has grown.

The first bridge was a wooden bridge installed in 1874, followed by the first steel bridge in 1923.

The current bridge is the third bridge at the crossing and with on-going investment is expected to last another 20 years before additional rehabilitation is required.

Maintenance and assessment are done routinely and the last significant investment was completed in 2012.

COMMUNITY UTILITIES

Several important utilities run underneath the bridge:

1. *City of Courtenay water main*
2. *Comox Valley Regional District water main*
3. *Fortis Gas line*
4. *Telus tele-communications*



Description of Fifth Street Rehabilitation Project

The City of Courtenay is developing plans for rehabilitating the Fifth Street Bridge and improving cycling and pedestrian accessibility across the Courtenay River.



THE SCOPE FOR FIFTH STREET REHABILITATION PROJECT INCLUDES:

- *Bridge deck replacement*
- *Structural repairs to the steel*
- *New handrails*
- *Removal of lead paint and rust*
- *Recoating steel to prevent corrosion*
- *New 3.0 metre multi-use pathways on both sides*

DETAILED PLANNING IS UNDERWAY AND WILL ADDRESS:

- *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*

Connecting Courtenay: Transportation Master Plan

Courtenay residents have expressed a desire to shift travel choices towards more sustainable modes, such as walking and cycling.

The **Connecting Courtenay: Transportation Master Plan** identifies that widening the pathways on both the north and south side of the Fifth Street Bridge would have significant connectivity and safety impacts across the Courtenay River for all active modes of transportation.

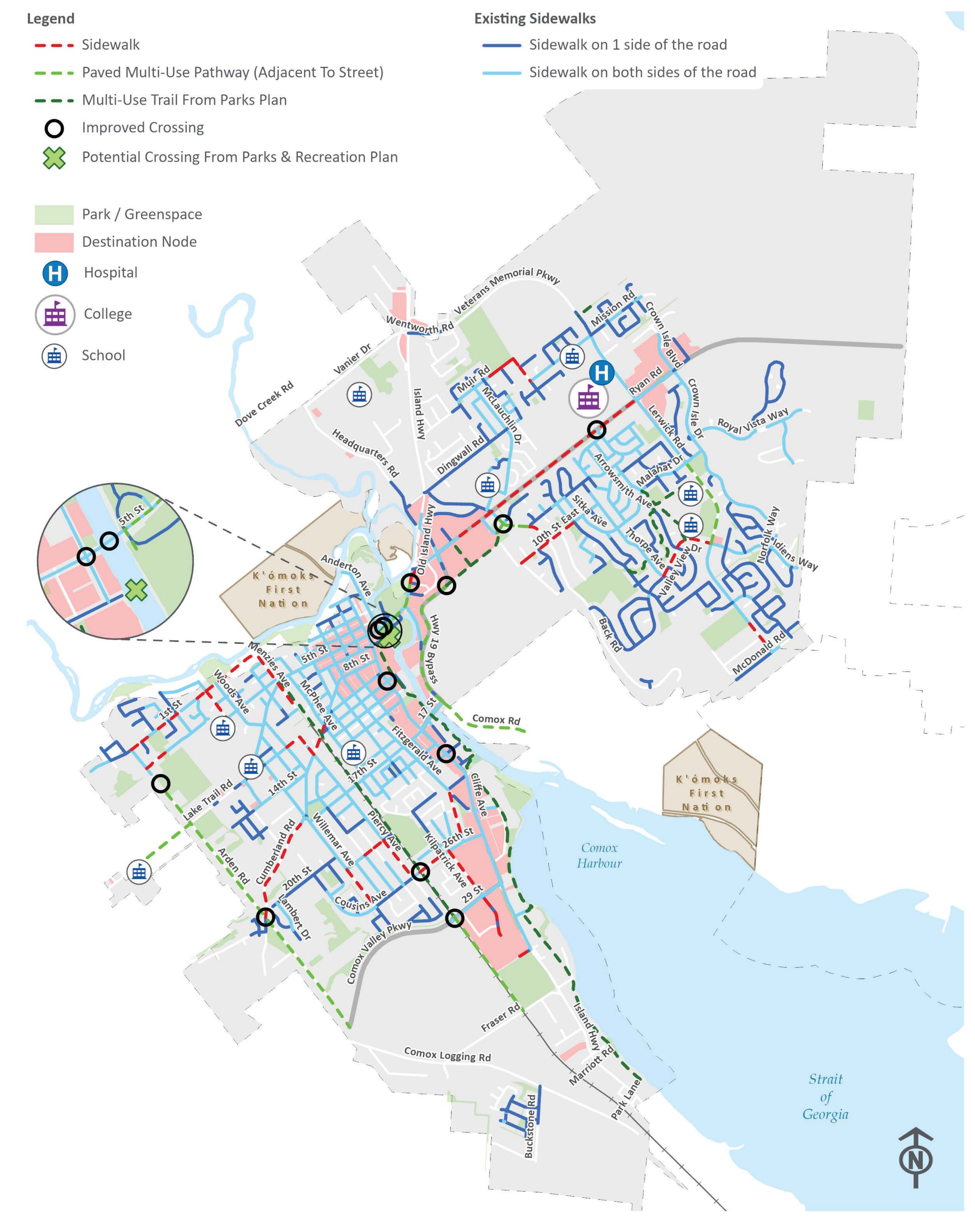
New three metre wide multi-use pathways are proposed to improve safety, accessibility and user experience for those who walk, bike, use strollers, and have mobility aids.

Specifically, the pathways will provide:

- *an off-street cycling route allowing cyclists to travel separate from vehicles*
- *a wider pathway that provides a safe and comfortable walking experience*
- *new connections between Lewis Park, Simms Millennium Park, and downtown Courtenay*

Options for improving connectivity will be informed by both public input and technical design standards, including the recently released B.C. Active Transportation Design Guide, with consideration for land availability, grades, road geometry, and costs.

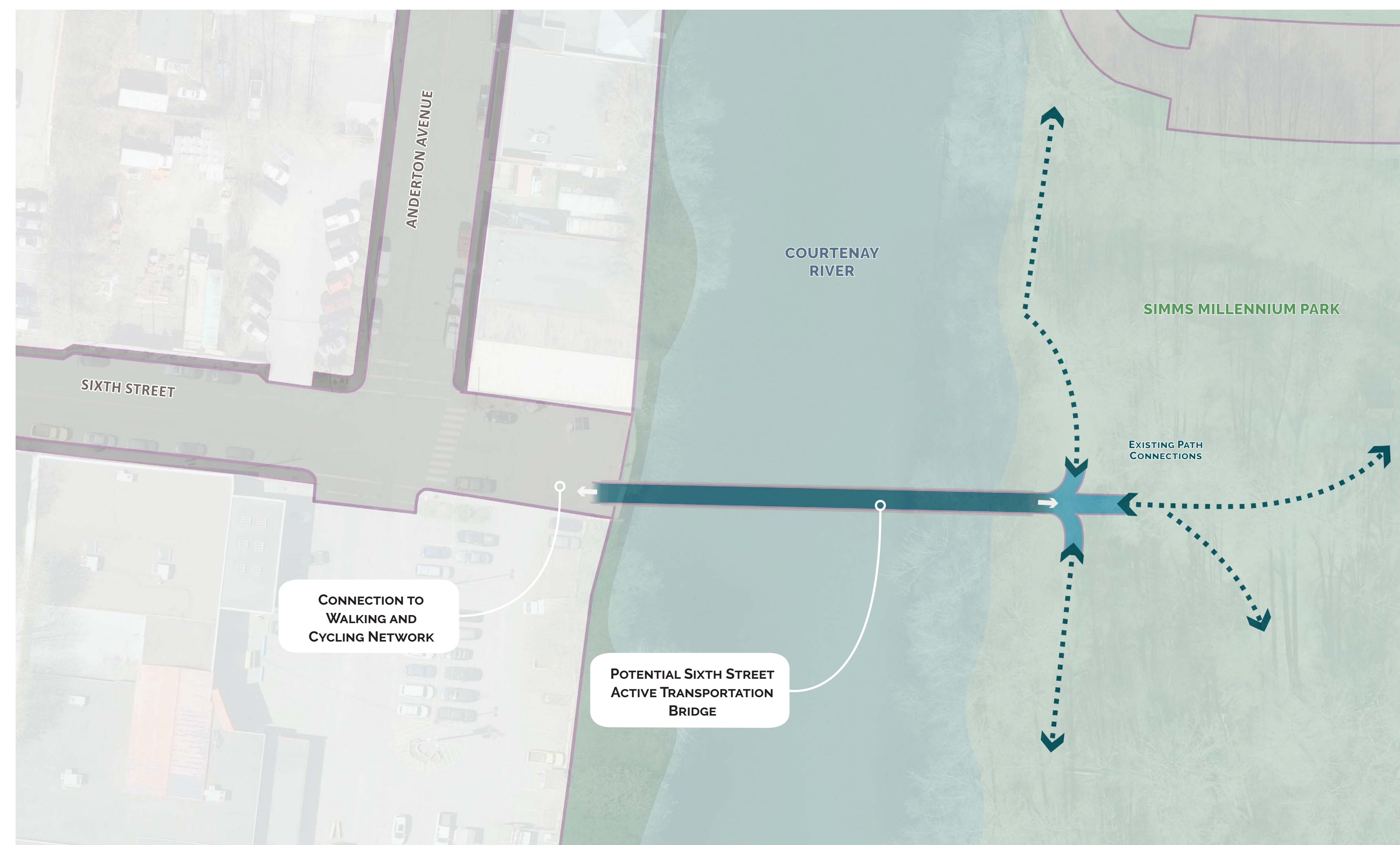
Recommended Pedestrian Network Plan



Sixth Street Multi-Use Bridge

Improving connectivity for people who walk and cycle across the Courtenay River is a priority as we plan for the future.

In parallel to the planning for rehabilitation of the Fifth Street Bridge, Courtenay Council has directed staff to investigate construction of a permanent Sixth Street bike and pedestrian bridge.



Timed with additional information related to the Fifth Street Bridge, staff will report back to Council in early 2020 with further detail about Sixth Street bridge options.

Where We Are in the Process

*A multi-phased
planning process is
underway.
Public engagement
will occur throughout
the process.*

WE ARE HERE

1

PHASE 1: FEASIBILITY AND FUNDING

- *Confirm project goals and use of the bridge today*

2

PHASE 2: ENGINEERING ASSESSMENT AND OPTIONS DEVELOPMENT

- *Review high level concepts*

3

PHASE 3: PROJECT REFINEMENT

- *Council approval*

4

PHASE 4: PUBLIC ENGAGEMENT AND PROJECT PLANNING

- *Public engagement taking place from November - December*
- *Detailed design and traffic management plan to be informed by technical analysis and public input*

5

PHASE 5: FINALIZE SCOPE

- *Borrowing Bylaw will be prepared outlining purpose and amount of borrowing*

6

PHASE 6: DETAILED DESIGN

- *The detailed design will continue to evolve through 2019 and 2020*

7

PHASE 7: CONSTRUCTION

- *Construction is expected to begin in early 2021*
- *Exact details and schedule are yet to be determined*

8

PHASE 8: PROJECT COMPLETION

- *Grant funding requires the project to be completed by March 2022*

How Will the Project Be Funded?

The Fifth Street Rehabilitation Project may be funded in a variety of ways, including grants, reserves, and borrowing.

Project Element	Rehabilitation + 3.0 metre wide Bike and Pedestrian Pathways
Outcome	<i>A rehabilitated crossing with extended service life that provides improved cycling and walking amenities, with full utilization of the grant.</i>
Bridge Recoating & Deck Renewal	<i>\$4.1 million</i>
Structural and Traffic	<i>\$2.2 million</i>
Cantilever Pathway	<i>\$2 million</i>
TOTAL	<i>\$8.3 million</i>
Fed / Prov Grant	<i>\$1.96 million</i>
Reserves	<i>\$0.94 million</i>
City Borrowing Amount	<i>\$5.4 million</i>

The City of Courtenay was successful in receiving \$1.96 million in funding from the New Building Canada Fund – Small Communities Fund. The agreement in place for the federal government’s contribution expires March 31, 2022.

Financial considerations will be updated as project details are refined. The city will likely need to borrow money.



What are the anticipated costs for an average taxpayer?

At current tax rates, borrowing \$5.4 million for bridge rehabilitation – including the new multi-use pathways – would be equivalent to an estimated 1.6% total tax increase.



RESIDENTIAL PROPERTY OWNERS:

The impact to an **average residential property** valued at \$435,600 (based on 2019 assessments and tax rates) is estimated to be approximately \$20 per year.



COMMERCIAL PROPERTY OWNERS:

The impact to an **average commercial property*** valued at \$819,332 (based on 2019 assessments and commercial multiplier of 3.35) is estimated to be approximately \$130 per year.

****Please note:** Commercial Class 6 encompasses a wide range of businesses and assessment valuations.*

The City anticipates using the Alternative Approval Process (AAP) for any necessary borrowing. The full impacts of borrowing would not be realized until 2022, the year after construction is complete.

What To Expect During Construction

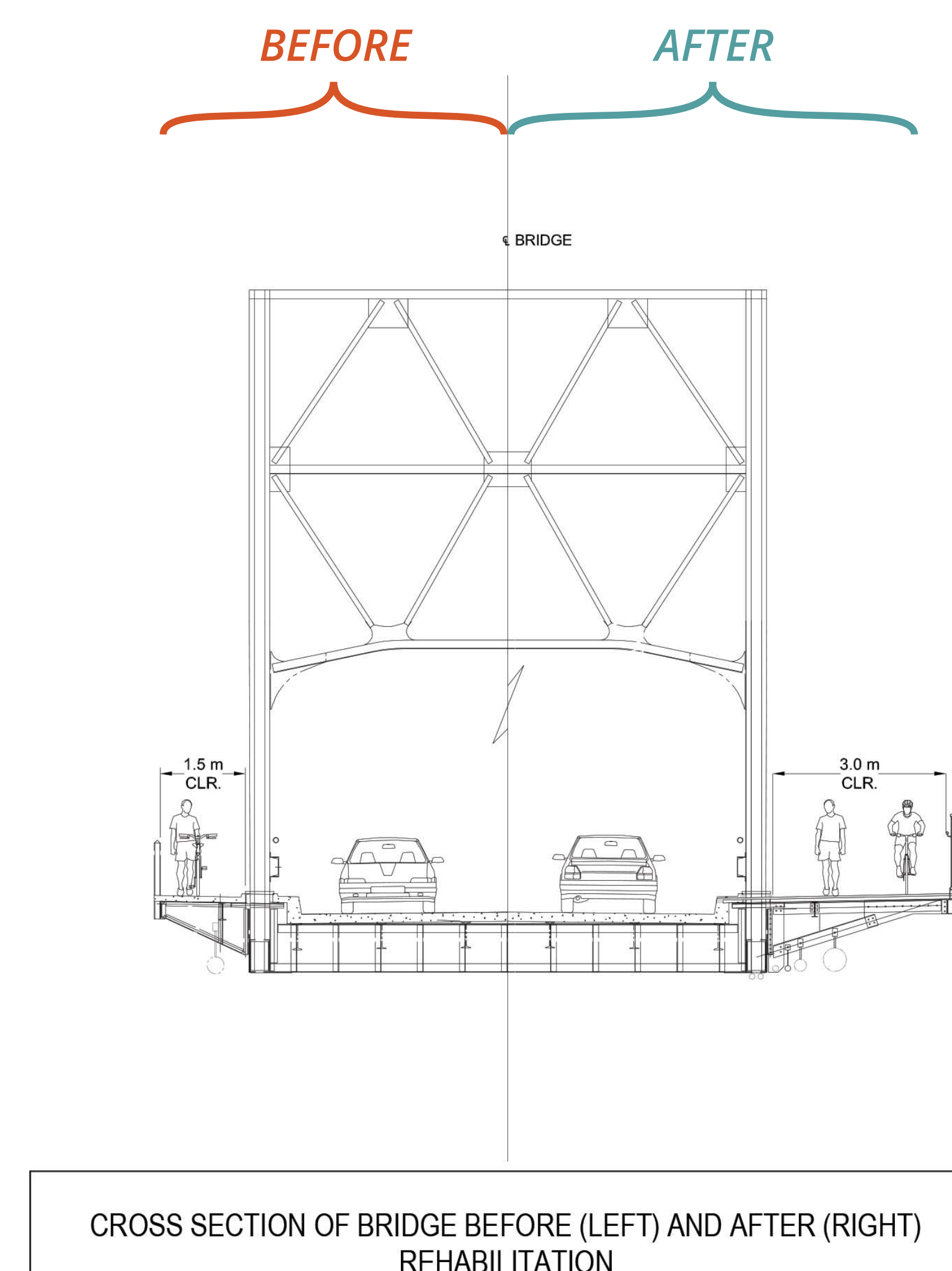
Major infrastructure investment often has impacts. The City of Courtenay is committed to minimizing impacts where possible. It's important the community is aware of what construction may include.



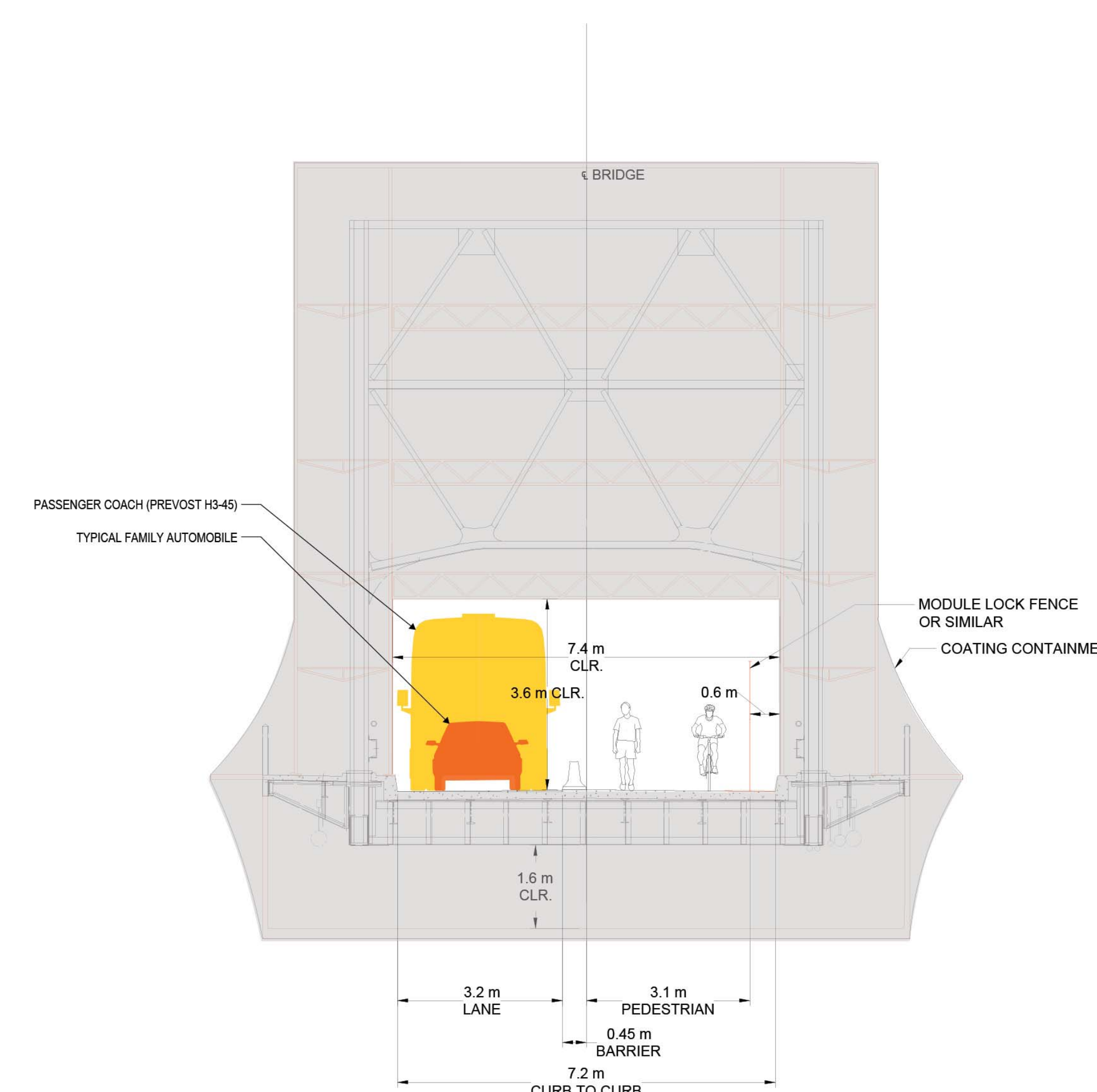
TRAFFIC:

To complete the repairs safely, the bridge will need to be wrapped in scaffolding and plastic. The vertical and horizontal clearance on the bridge will be reduced.

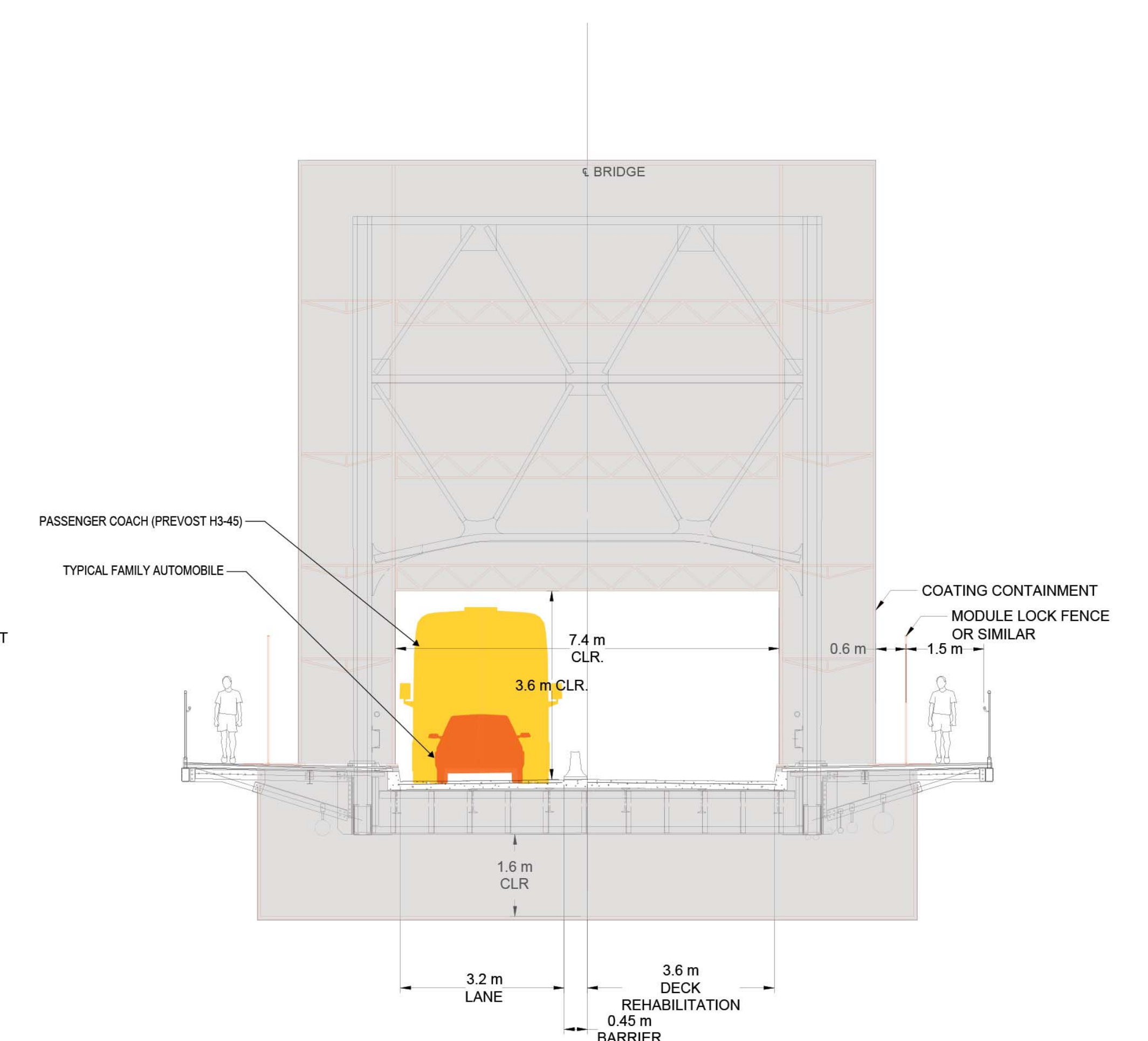
Vehicular traffic will likely be reduced to single lane alternating across the bridge for a portion of construction. Duration for this is yet to be determined and will depend on the construction plan.



CROSS SECTION OF BRIDGE BEFORE (LEFT) AND AFTER (RIGHT) REHABILITATION



SAMPLE CONCEPT BRIDGE CROSS-SECTION DURING REHABILITATION WITH PEDESTRIANS, CYCLISTS AND SINGLE LANE ALTERNATING VEHICLE TRAFFIC ACCOMMODATED ON DECK



SAMPLE BRIDGE CROSS-SECTION DURING REHABILITATION WITH PEDESTRIANS AND CYCLISTS ACCOMMODATED ON NEW WIDENED WALKWAYS

NOTE: the images above are concept sketches only.

Continued on next board >

What Else To Expect During Construction

Major infrastructure investment often has impacts. The City of Courtenay is committed to minimizing impacts where possible. It's important the community is aware of what construction may include.



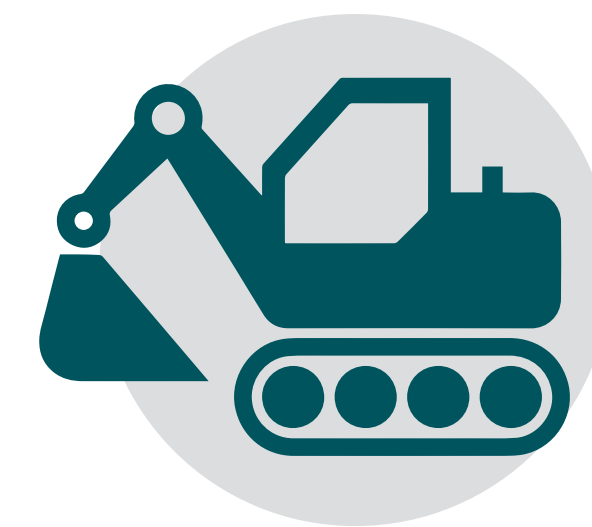
NOISE:

In order to remove the lead paint and re-coat the steel structure, high pressure compressors are used. The compressors can produce a great deal of noise. The City will explore the application of noise barriers to reduce the impact.



LIGHT:

Should work be completed during evening hours, construction lighting may be used.



LAY-DOWN AREA:

The contractor will require a large area beside the bridge for storage of equipment, supplies, vehicles and construction trailer.



COST:

Final cost estimates will continue to be refined through the design phase. It is anticipated that some form of borrowing will be needed. If so, a borrowing bylaw will be required.

Traffic Mitigation

Access for all modes of traffic, including foot, bikes, buses and vehicles will be maintained during construction.

To minimize further impacts, a variety of options for managing traffic during construction are being considered:

1. Construction Traffic Control

Establish single lane alternating traffic control practices to maximize available capacity.

2. Bridge Closures

Ensure any required full bridge closures are scheduled to occur during periods when travel demand is lowest to minimize impact.

3. Intersection Traffic Control

Optimize nearby intersection signal timings to reflect altered traffic conditions and minimize delay.

4. Traffic Detour Route(s)

Identify detour routes that minimize negative impacts elsewhere in the network and offer comfort/certainty to motorists seeking alternatives to the Fifth Street Bridge.

5. Time-of-day Travel

Promote / encourage off-peak travel to reduce congestion during peak periods.

6. Alternative Travel Modes

Shift from single vehicle travel to walking, cycling, or carpooling.



Thank You!

*Your input will help guide
future Council decisions,
and how the City will
communicate with you
during construction.*



Please share your
thoughts in the print or
online survey available until
Friday, December 6, 2019.

The input collected will be presented to
Council and shared with the public in early 2020.

Learn more and sign-up to receive project updates at:
www.courtenay.ca/fifthstreetbridge



Mitigating Construction Impacts

Have
Your Say!

Rehabilitating and upgrading a bridge, while remaining open to traffic, requires a number of considerations. The safety of both work crews and the public will always be the top priority.

Of the following other considerations, please select the three (3) that are most important to you:

Minimizing noise	
Reducing congestion	
Supporting downtown businesses	
Maintaining access for all modes of transportation during construction	
Minimizing costs	
Value for investment	
Duration of construction	
Aesthetics around bridge during construction	
Protecting the surrounding environment	
Improving pedestrian and cycling amenities	

Travel Behaviour

Have
Your Say!

The construction required to safely rehabilitate the Fifth Street Bridge will cause traffic disruptions in adjacent areas for several months.

In terms of your own travel behaviour, during construction are you most likely to:

Shift from driving to walking	
Shift from driving to riding a bike	
Take an alternate route	
Move your travel time to outside peak periods	
Plan for additional travel time	
Car pool	
Take the bus	
Not change anything	
Other _____	

Colour of the Bridge

Have
Your Say!

The Fifth Street Rehabilitation project includes removing all of the existing lead paint and recoating the bridge to protect the steel from corrosion. There is an opportunity to change the colour of the bridge.



Do you feel the Fifth Street Bridge should be a recoated in a different colour?

Yes	
No	
Neutral / No Preference	

Please provide any additional comments:

Communications During Construction

Have
Your Say!

We recognize that regular and proactive communications during construction are important to mitigating impacts to the public.

What is the best way to keep you informed?
(Select the 3 that are most effective for you)

Local radio	
Local newspaper	
Twitter	
Facebook	
Email updates	
Open houses	
City of Courtenay website	
Construction signage	
Project newsletter email	
Council reports	
Other _____	

Improving Connectivity

Have
Your Say!

To improve connectivity for people who walk, cycle, or use mobility aids approaching and exiting the Fifth Street Bridge, a number of improvements are being considered. Please share your thoughts about the proposed improvements:

1) How important is improving the connections to and from the Fifth Street Bridge for people who walk, cycle and use strollers, or mobility aids?

1 (low)	2	3	4	5 (high)

2) Which destinations are most important to connect to from the Fifth Street Bridge when walking, cycling or using mobility aids? *(Select the 3 most important to you)*

Lewis Park	
Lewis Park Recreation Centre	
Anderton Road	
Cliffe Avenue	
Simms Parks	
Existing on-street bike lanes	
Existing sidewalks	
Other.....	

2) If priority needed to be placed on advancing connections on either side of the bridge, which would you prioritize highest?

West (Downtown)	East (Lewis Park)



About the Rehabilitation Project

*Have
Your Say!*

*What do you like most
about the Fifth Street
Rehabilitation Project?*



About the Rehabilitation Project

*Have
Your Say!*

*Do you have any
concerns about Fifth Street
Rehabilitation Project?*