

David Foster Harbour Pathway - Heron Cove and Raymur Point Bridges



November 19,
2015



Purpose

- Seek approval to proceed with detailed design and costing for two multi-modal bridges at Heron Cove and Raymur Point



Scope of Work 2015-2018

- Construction of two multi-modal bridges at Heron Cove and Raymur Point
- Development of two special places at Heron Cove and Ship Point
- Pathway improvements around the Johnson Street Bridge, including Reeson Park
- The installation of permanent wayfinding along the pathway



Background - Bridges

- Morrison Hershfield was retained to provide detailed designs and construction drawings for the bridges as well as the surrounding landscape
- Funding for the project is as follows:

Source	Amount
City of Victoria	\$3,100, 000
Trans Canada Trail Foundation	\$1,402,000
Bike BC	\$440,000
Vancity	\$100,000
David Foster Foundation	\$50,000
TOTAL	\$5,090,000



Options – Bridge Types

Three bridge structure options:

- steel pony truss
- steel plate girder
- steel-tied arch



Bridge Types (Option 1) – Steel Pony Truss

- Consists of two steel trusses on either side of the pathway deck



Bridge Types (Option 2) – Steel Plate Girder

- Consists of three steel or concrete girders supporting the pathway deck above



Bridge Types (Option 3) – Steel Tied-Arch

- Consists of a steel arch projecting approximately five metres above the pathway deck, with vertical hangers supporting the weight of the deck



Analysis

- The Steel Plate Girder is problematic due to partial submergence during high tide
- The Steel-Tied Arch option is a viable option as the bridge structural support system (steel arches) are above, rather than below the deck. However, this option was not favoured during initial stakeholder input

Recommendation: Steel Pony Truss



Bridge Lengths – Raymur Point

- Two alignment options:
 - 49 metres
 - 39 metres
- Split pathway along Raymur Point poses challenges for the 39 metre bridge length



Analysis – Raymur Point

- A shorter bridge at Raymur Point would require extensive pathway improvements and is more costly

Recommendation: 49 metre bridge at Raymur Point



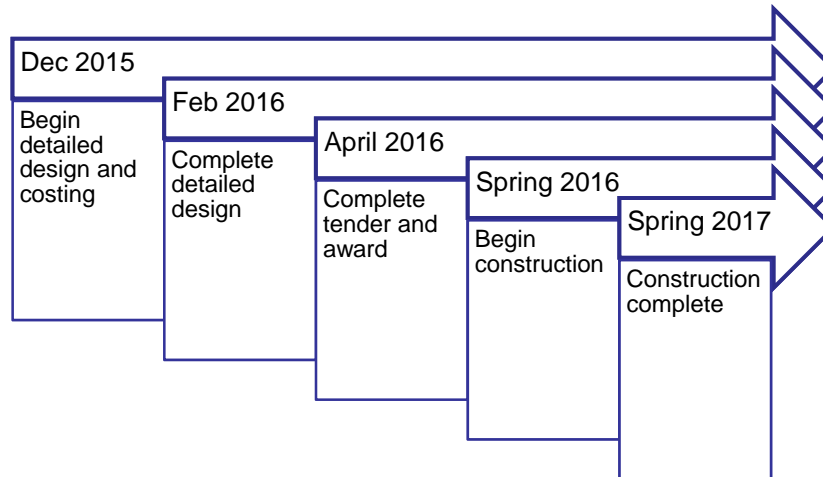
Bridge Length – Heron Cove

- Heron Cove does not have the same site constraints as Raymur Point. The shorter bridge provides the most direct approach for pedestrians and cyclists

Recommendation: 39 metre bridge at Heron Cove



Timeline



Communications

- Continued work with property owners for approvals and consents
- Further discussions with neighbourhood association and residents on placemaking opportunities including bridge colour, integration of art and signage
- On-going project updates to the larger public on bridge design, connectivity and construction timelines



Recommendation

- That Council direct staff to proceed with detailed design and costing for two steel pony truss multi-modal bridges at Heron Cove and Raymur Point, at 39 metre and 49 metre lengths respectively

