

Monthly Status Report

Reporting Period

October 2023

SIP-TIC-PCO-RPT-00020 R0

1. Introduction

1.1 Project Overview

The Steveston Interchange Project (the Project) is a component of the Highway 99 Tunnel Program and is being delivered in advance of the new immersed tube tunnel project.

The Project will address many of the safety, congestion, and mobility challenges at the interchange for all modes of travel by:

- Upgrading the interchange to be consistent with modern design standards.
- Reducing vehicle queues for northbound off-ramp traffic and transit to Steveston.
- Improving mobility for east-west traffic on Steveston Highway.
- Improving transit operations at the interchange.
- Providing new separated cycling and pedestrian connections along Steveston Highway across Highway 99.

The Project will replace the existing two-lane overpass structure at Steveston Highway and Highway 99 with a new five-lane structure that accommodates two eastbound lanes and three westbound lanes (including a left turn lane). The Project will also include new pedestrian and cycling infrastructure, as well as improved connections to and from the overpass.

The replacement overpass is designed to integrate with the new eight-lane immersed tube tunnel replacing the existing George Massey Tunnel along Highway 99.

Additional information and updates about the Steveston Interchange Project can be found on the Highway 99 Tunnel Program website: <https://www.highway99tunnel.ca/project-overview>.

1.2 Project Delivery

Transportation Investment Corporation, a Provincial Crown Corporation, is delivering and overseeing the Project on behalf of the Ministry of Transportation and Infrastructure and the B.C. Transportation Financing Authority. The estimated cost of the Project including planning, construction, and financing during construction is \$87.5 million.






The Project is being delivered through a Design-Build (DB) contract model and is currently in the implementation phase. Flatiron Constructors Canada Limited, comprised of Flatiron Constructors Canada Limited and Urban Systems Ltd., was selected as the Design-Builder on April 12, 2022. Construction on the Project began in 2022 and is expected to be completed in fall 2025.

1.3 Project Goals

- Support sustainability of Fraser River communities.
- Facilitate increased share of sustainable modes of transportation.
- Enhance regional goods movement and commerce.
- Support a healthy environment.

2. Project Update

2.1 Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Project delivered within approved scope.		<ul style="list-style-type: none"> The Project will replace the existing two-lane overpass structure at Steveston Highway and Highway 99 with a new five-lane structure that accommodates two eastbound lanes and three westbound lanes (including a left turn lane) and new separated pedestrian and cyclist infrastructure, as well as improved connections to and from the overpass. The Project is within the approved scope.
	Schedule	Project delivered within the approved schedule.		<ul style="list-style-type: none"> The Project is on schedule for the new interchange to be operational in fall 2025.
	Budget	Project delivered within approved budget of \$87.5 million.		<ul style="list-style-type: none"> Project spending for the month of September 2023 was \$0.8 million. Total Project spending to date is \$28.6 million. The Project is forecasted to be delivered within the approved budget.
	Safety	Ensure that Project work is performed safely, in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> Audited the implementation of the Project's health and safety program and performed joint site inspections. There have been zero lost time injuries on the Project to date. Lost Time Injury Frequency Rate (LTIFR) for the Project is zero, which is less than the WorkSafeBC 2022 rate of 1.7* for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair). <p><i>* Injury rate data reflects Large Employer 100+ Person Years employer size.</i></p>
	Quality	Implement an effective Quality Management System.		<ul style="list-style-type: none"> Continued reviewing quality documentation, including Inspection and Test Plans and correlated check-sheets. Continued monitoring of the Design-Builder's Quality Records, Nonconformity Reports/Log, and Opportunity for Improvement Log. Continued performing surveillance and quality audits to the Design-Builder's Quality Management System and field construction activities. Continued inspecting fabricators and suppliers.

		Objectives	Project Status	Comments
	Environmental	Ensure Project work is performed in an environmentally responsible manner.	●	<ul style="list-style-type: none"> The necessary permits and authorizations are in place for the Project as listed in Section 3: Project Documents and Achievements to Date. Any additional regulatory authorizations will be obtained as required.
	Design and Construction	Development of a reference concept, technical requirements/specifications, and related technical studies for the Project and manage activities on-site.	●	<ul style="list-style-type: none"> The Project design has been finalized by the Design-Builder. Technical Working Group meetings took place to discuss design related topics. Construction Working Group meetings between the Province and the Design-Builder continue to take place weekly. Temporary retaining wall construction at the east and west abutments is ongoing. The settlement period for several areas of new road alignment is ongoing.
	Community Benefits	Successfully implement the Special Project Needs Agreement (SPNA).	●	<ul style="list-style-type: none"> The Design-Builder and its sub-contractors are required to carry out the Project in accordance with the SPNA. Apprenticeship, trainee, and equity targets are included in the Design-Build Agreement (DBA) with incentive payments for exceeding the targets. The Design-Builder's Community Benefits Plan is in place and quarterly reporting is provided.
Partners/Stakeholders	Indigenous Groups	Continue to build and maintain positive collaborative working relationships with the Identified Indigenous Groups (IIGs).	●	<ul style="list-style-type: none"> Continued to consult and engage with Identified Indigenous Groups (IIGs) and the Project team on permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring. The Design-Builder has met targets for Indigenous contracting opportunities.
	Third Parties	Continue to build and maintain positive relationships and collaborate on Project requirements with the City of Richmond and owners of interfacing infrastructure.	●	<ul style="list-style-type: none"> Continued bi-weekly meetings with the City of Richmond on Project activities. Continued bi-weekly meetings with TransLink and the Coast Mountain Bus Company. Completed Phase 2 Utility relocation work.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> Continued to provide information to community organizations, businesses, and residents that are in close proximity to the Project. Shared Project information at pop-up events in communities related to the Highway 99 Tunnel Program.

		Objectives	Project Status	Comments
				<ul style="list-style-type: none"> Completed in-person visits to nearby stakeholders to provide a Project update and notification related to the Highway 99 loop ramp closure/detour.

Status	Description
●	Managing critical issues and negotiating resolution – action required immediately.
●	Managing some issues and negotiating resolution – action required in the near term.
●	Manage day to day operations.

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> <u>GMC Business Case (April 2021)</u> <u>Cost Report (April 2021)</u> <u>GMC Relationship Review Process Description (April 2021)</u> <u>Request for Qualifications Issued (June 2021) and Closed (August 2021)</u> <u>Request for Proposals Issued (September 2021)</u> Executed Design-Build Agreement (April 2022)
	Environmental	<ul style="list-style-type: none"> Agricultural Land Commission (ALC) Approval (October 2021) Fisheries and Oceans Canada (DFO) – Letter of Advice (October 2021) Heritage Conservation Act (HCA) – Inspection Permit (November 2021) Water Sustainability Act (WSA) – Order for Change Approval of Section 11 Permit (November 2021) Water Sustainability Act (WSA) – Short-Term Use of Water (October 2022) City of Richmond Watercourse Crossing Permit received (September 2023)
	Design and Construction	<ul style="list-style-type: none"> Reference concept design developed (August 2021) Construction began (July 2022) Final design completed (June 2023)
	Community Benefits	<ul style="list-style-type: none"> Special Project Needs Agreement (SPNA) (June 2021)

Partners/Stakeholders	Indigenous Groups	<ul style="list-style-type: none"> Ongoing engagement and consultation. Indigenous contracting targets met (September 2023)
	Third Parties	<ul style="list-style-type: none"> BC Hydro Protocol Agreement (December 2018) City of Richmond Municipal Agreement (August 2022)
	Public and Stakeholder Engagement	<ul style="list-style-type: none"> Presentations to various stakeholders (2021 – ongoing)

4. Monthly Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none"> Manage Project Occupational Health and Safety (OH&S) activities using a collaborative and proactive management approach with all principal stakeholders. Monitor relevant OH&S performance metrics by setting measurable targets and objectives in the form of key performance leading and lagging indicators. Ensure the Project complies with relevant Federal and Provincial Acts and Regulations and Municipal Codes and By-laws, as well as applicable best industry practice guidelines. Outline relevant health and safety management processes and activities to ensure health and safety of workforce and public is always safeguarded.
Monthly Highlights:	<ul style="list-style-type: none"> The total number of incidents and accidents documented on the health and safety log for the month was zero. The Lost Time Injury Frequency Rate (LTIFR) for the Project is zero, which is less than the WorkSafeBC 2022 rate of 1.7* for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair). * Injury rate data reflects Large Employer 100+ Person Years employer size. Continued site monitoring, and reviewed documents and statistics submitted by the Design-Builder. Reviewed the Design-Builder’s Job Hazard Analysis for pier piling construction.
Three-Month Lookahead:	<ul style="list-style-type: none"> Continue to inspect and monitor construction activities with the Project’s contractor. Begin spot audits of relevant Design-Builder activities.

4.2 Quality

Scope:	<ul style="list-style-type: none"> Monitor the Design-Builder’s Project Quality Management System performance. Monitor the Design-Builder’s site activities, and off-site activities, including inspections and testing. Monitor the Design-Builder’s internal and external audits, including audit reports. Conduct Quality Management System and Site Surveillance Audits of the Project work.
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	<ul style="list-style-type: none"> • Monitor the Design-Builder’s Non-Conformity tracking system, Non-Conformity Reports, and Opportunity for Improvement Log. • Review the Design-Builder’s quality documentation, including Inspection and Test Plans and correlated check-sheets. • Monitor the Design-Builder’s Quality Control and Quality Assurance activities.
Monthly Highlights:	<ul style="list-style-type: none"> • Reviewed the Design-Builder's quality documentation including Inspection and Testing Plans, material documentation, third-party reports, their correlated Work Method Statements for upcoming work, audit reports, and quality traffic management plans. • Conducted weekly visits to inspect progression of precast girder fabrication. • Monitored the Design-Builder’s site activities, including field inspections and testing.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue to review the Design-Builder’s updated quality documentation (i.e., inspection and testing plans and checklists) for upcoming work. • Monitor and conduct surveillance of the Design-Builder’s site activities, including inspections and testing. • Conduct Site Surveillance Audits of the Project work based on the Design-Builder’s schedule. • Conduct Quality Management System Audits on the Design-Builder. • Monitor the Design-Builder’s internal and external audits, including audit reports. • Monitor the Design-Builder’s non-conformity tracking system. • Identify and implement continuous improvement initiatives. • Monitor the Design-Builder’s opportunities for improvement log. • Review the Design Builder’s monthly reports.

4.3 Environmental

Scope:	<ul style="list-style-type: none"> • Manage follow-up and compliance actions required under relevant environmental regulations and permits. • Liaise with regulators and stakeholders on matters related to the Project commitments made through the environmental and public engagement processes. • Manage outstanding environmental permits and associated environmental studies, monitoring, and compliance processes
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Monthly Highlights:	<ul style="list-style-type: none"> • Continued to follow up on the Water Sustainability Act (WSA) Section 11 change approval amendment to accommodate final drainage and related designs. • Finalized a spot monitoring report for the southeast quadrant. • Reviewed the Design-Builder’s monthly and weekly environmental reports. • Reviewed a site planting plan that included seed mix selections. • Received the City of Richmond Watercourse Crossing permit. • Reviewed surface water quality monitoring data from the Design-Builder and the Independent Environmental Monitor. • Continued to monitor and review the effectiveness of the recycled concrete aggregate material mitigation.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue to monitor and support archaeological spot-monitoring events. • Continue to follow up on WSA Section 11 change approval amendment application. • Review the Design-Builder’s environmental work plans. • Continue to monitor and review the effectiveness of the recycled concrete aggregate material mitigation, and work with Design-Builder to arrange for removal.

4.4 Design and Construction

Scope:	<ul style="list-style-type: none"> • Provide technical advice to the Project Team on a broad range of Project issues, and inputs into the Design-Build Agreement (DBA). • Oversee compliance with the design and construction requirements of the DBA, including undertaking reviews and audits, on-site monitoring, and other engagement with the Design-Builder.
Monthly Highlights:	<ul style="list-style-type: none"> • Participated in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder to progress design and construction items. • Reviewed the Design-Builder’s updated design submittals, including: <ul style="list-style-type: none"> ○ The temporary retaining wall design package. ○ Highway 99 (northbound loop ramp and bus lane closure) detour. ○ Preliminary bridge demolition traffic detour plan. • Reviewed the Design-Builder’s updated construction Work Method Statements and associated Traffic Control Plans, including: <ul style="list-style-type: none"> ○ Pier piling ○ Electrical works (permanent and temporary relocations) ○ Pavement • Monitored the Design-Builder’s on-site construction activities, including: <ul style="list-style-type: none"> ○ Temporary lock block surcharge wall construction and preload placement at northeast quadrant ○ Precast concrete girder fabrication (off-site fabrication facility) ○ Electrical relocations and earthwork for east intersection detour alignment ○ Drainage culvert installation ○ Preload removal at northbound offramp

	<ul style="list-style-type: none"> ○ Earthworks for new northbound loop onramp alignment ○ Reversible Lane Control System relocation electrical and civil works
Three-Month Lookahead:	<ul style="list-style-type: none"> ● Monitor the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> ○ Completion of Phase 2 temporary lock block walls. ○ Traffic detour for the northbound loop ramp and southbound bus lane closure. ○ Pier pile driving for bridge foundation. ○ Concrete pour of abutment and pier piles. ○ Drainage excavation for the new Steveston Highway on-ramp. ○ Placement of fill and preload materials along the new ramp alignments. ○ Traffic pattern changes and detour for Highway 99 northbound onramp.

4.5 Indigenous Groups

Scope:	<ul style="list-style-type: none"> ● Consultation and engagement with the Identified Indigenous Groups (IIGs) on the design, Project logistics, permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction and archaeological monitoring.
Monthly Highlights:	<ul style="list-style-type: none"> ● Continued engagement on environmental plans and permitting. ● Continued discussions with IIGs to support Project activities, including cultural awareness and recognition, site visits, and construction and archaeological monitoring opportunities. ● Continued meetings between the Design-Builder and the IIGs. ● Continued Project procurement discussions between the Design-Builder and the IIGs. ● The Contractor has met Indigenous contracting targets outlined in the Design-Build Agreement.
Three-Month Lookahead:	<ul style="list-style-type: none"> ● Coordinate additional site visits with interested IIGs. ● Conduct cultural recognition workshops and planning discussions with the IIGs, which will inform the implementation of the Indigenous Cultural Awareness and Recognition Plan. ● Continue engagement on environmental plans and permitting, landscaping, planting, and construction monitoring opportunities. ● Facilitate further discussions between the Design-Builder and IIGs, as needed. ● Discuss and develop job shadowing and mentorship opportunities for Indigenous youth.

4.6 Third Parties

Scope:	<ul style="list-style-type: none"> ● Project-specific Municipal Agreement (MA) with the City of Richmond (the City). ● Engagement with the City and TransLink on construction impacts, stakeholder concerns, and other inputs to the Project.
Monthly Highlights:	<ul style="list-style-type: none"> ● City of Richmond:

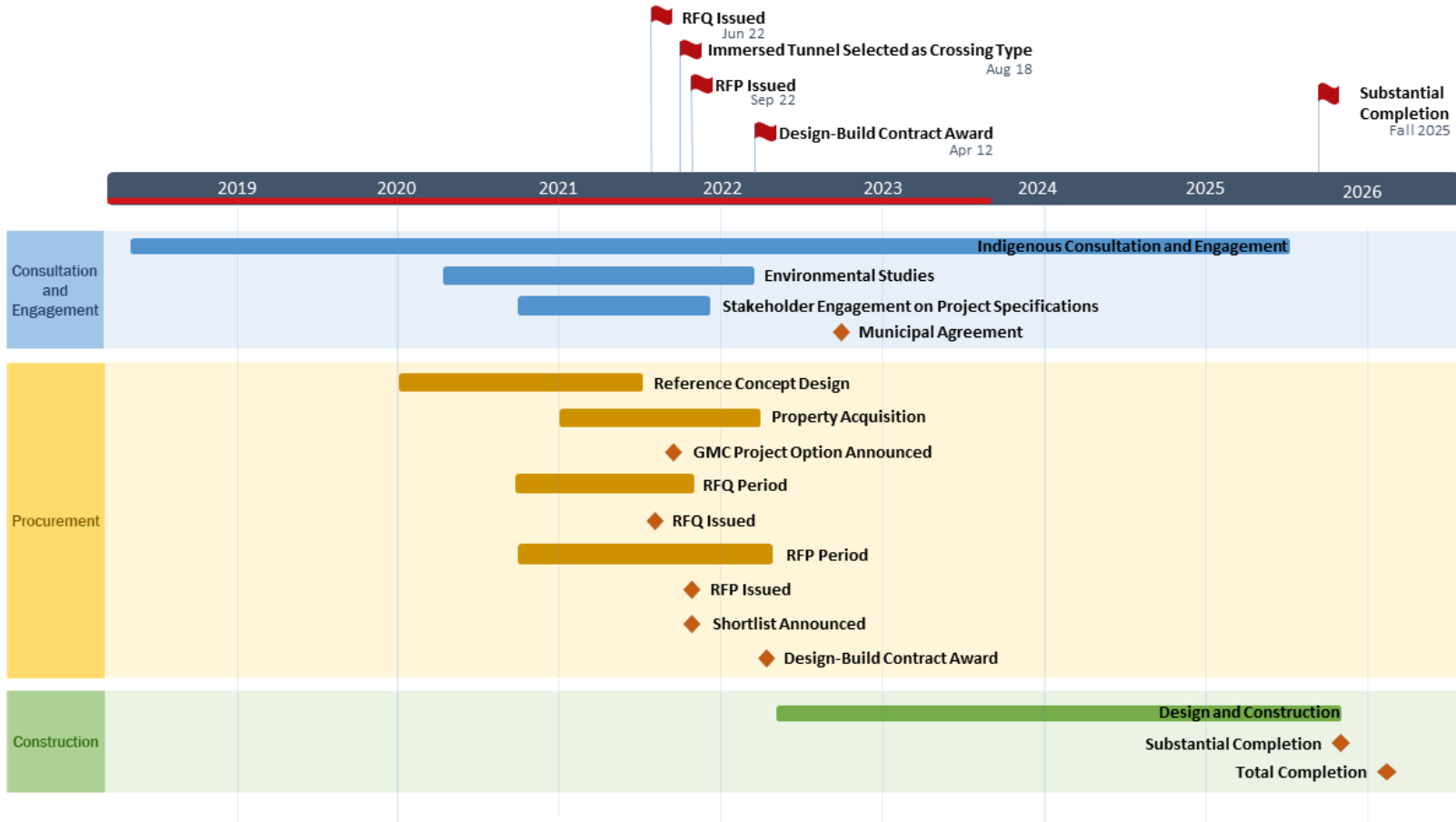
	<ul style="list-style-type: none"> ○ Continued bi-weekly meetings between the Project Team, the Design-Builder, and City of Richmond staff. ● TransLink and Coast Mountain Bus Company (CMBC): <ul style="list-style-type: none"> ○ Continued bi-weekly meetings between the Project Team, the Design-Builder, TransLink, and CMBC. ● Utilities: <ul style="list-style-type: none"> ○ Coordinated regular meetings with impacted utility companies regarding utility relocation designs and construction logistics. ○ Continued Phase 2 utility relocation for Telus and Shaw.
Three-Month Lookahead:	<ul style="list-style-type: none"> ● Complete reviews of the Design-Builder submittals and design packages by the City of Richmond and TransLink. ● Continue to support the Design-Builder in obtaining any relevant permits for upcoming work.

4.7 Public and Stakeholder Engagement

Scope:	<ul style="list-style-type: none"> ● Overseeing and managing ongoing communications and engagement with the public and stakeholders. ● Development and implementation of communication strategies. ● Creation of compelling content and messaging, and the cultivation of relationships with key stakeholders.
Monthly Highlights:	<ul style="list-style-type: none"> ● Conducted weekly meetings with the Design-Builder to assess potential public impacts and review proposed communication approaches. ● Completed in-person visits to nearby stakeholders to provide a Project update and notification related to the Highway 99 loop ramp closure/detour. ● Distributed a construction notification related to the Highway 99 loop ramp closure/detour.
Three-Month Lookahead:	<ul style="list-style-type: none"> ● Create renderings to be used for public communications. ● Prepare and distribute construction notices related to traffic impacts on Steveston Highway. ● Host a Traffic Advisory Committee meeting with stakeholders.

5. Schedule

The following schedule depicts deliverables, milestones and associated dates and timelines for the implementation phase of the Project, as well as anticipated construction timelines.



6. Project Photos



Figure 1 – Temporary Lock Block Wall At Northeast Quadrant



Figure 2 – East Intersection Detour Road Alignment Construction