



# **Monthly Status Report**

**Reporting Period: October 2024** 

### 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 Dashboard

		Objectives	Project Status	Comments
	Scope	Project delivered within approved scope.	•	<ul> <li>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.</li> <li>The Project is within the approved scope.</li> </ul>
	Schedule	Project delivered within the approved schedule.	•	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> <li>Project spending for the month of October 2024 was \$0.2 million.</li> <li>Total Project spending to date is \$42.3 million.</li> <li>The Project is forecasted to be delivered within the approved budget.</li> </ul>
	Safety	Ensure that Project work is performed safely, in compliance with all applicable safety regulations, and in accordance with government policy.	•	<ul> <li>Monitored the implementation of the Design-Builder's health and safety program and performed spot audits and joint site inspections with the Design-Builder.</li> <li>Reviewed safety documentation within methodology statements.</li> <li>There has been zero (0) lost time injuries on the Project to date.</li> <li>Lost Time Injury Frequency Rate (LTIFR) for the Project is zero (0), which is less than the WorkSafeBC 2023 rate of 1.7 for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair).</li> <li>*Injury rate data reflects Large Employer 100+ Person Years employer size.</li> </ul>
Project Delivery	Quality	Implement an effective Quality Management System	•	<ul> <li>Continued review of quality documentation, including turnover packages, inspection and test plans, various quality plans, methodology statements, and correlated check-sheets.</li> <li>Continued monitoring of the Design-Builder's Quality Management System, including Quality Records, Test Reports, Audit Reports, Nonconformity Reports/Log, and Opportunity for Improvement Log.</li> </ul>

				<ul> <li>Continued conducting site surveillance and quality audits of the Design-Builder's field construction activities.</li> </ul>
	Environmental	Ensure Project work is performed in an environmentally responsible manner.	•	<ul> <li>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.</li> </ul>
	Design and Construction	Development of a reference concept, technical requirements/specifications, and related technical studies for the Project and manage activities onsite.	•	<ul> <li>The Project design has been finalized by the Design-Builder.</li> <li>Continued Technical Working Group meetings to discuss design-related topics.</li> <li>Continued weekly Construction Working Group meetings between the Province and the Design-Builder.</li> </ul>
	Community Benefits	Successfully implement the Special Project Needs Agreement (SPNA).	•	<ul> <li>The Design-Builder and its sub-contractors are required to carry out the Project in accordance with the SPNA.</li> <li>Apprenticeship, trainee, and equity targets are included in the Design-Build Agreement (DBA), with incentive payments for exceeding the targets.</li> <li>The Design-Builder's Community Benefits Plan is in place and quarterly reporting is provided.</li> </ul>
Partners/Stakeholders	First Nations	Continue to build and maintain positive collaborative working relationships with First Nations.	•	<ul> <li>Continued consultation and engagement with First Nations on permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.</li> <li>The Design-Builder reports that targets for Indigenous contracting opportunities have been met.</li> </ul>
	Third Parties	Continue to build and maintain positive relationships and collaborate on Project requirements with the City of Richmond (the City) and owners of interfacing infrastructure.	•	<ul> <li>Continued bi-weekly meetings with the City of Richmond on Project activities.</li> <li>Continued bi-weekly meetings with TransLink and the Coast Mountain Bus Company.</li> </ul>
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	•	<ul> <li>Continued to provide information to community organizations, businesses, and residents that are in close proximity to the Project.</li> </ul>

Status	Description
	Managing critical issues, negotiating resolution; action required immediately
	Managing some issues, negotiating resolution; action required in the near term
	Managing day to day operations

# 3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul> <li>GMC Business Case (April 2021)</li> <li>Cost Report (April 2021)</li> <li>GMC Relationship Review Process Description (April 2021)</li> <li>Request for Qualifications Issued (June 2021) and Closed (August 2021)</li> <li>Request for Proposals Issued (September 2021)</li> <li>Executed Design-Build Agreement (April 2022)</li> </ul>	
	Environmental	<ul> <li>Agricultural Land Commission (ALC) Approval (October 2021)</li> <li>Fisheries and Oceans Canada (DFO) – Letter of Advice (October 2021)</li> <li>Heritage Conservation Act (HCA) – Inspection Permit (November 2021)</li> <li>Water Sustainability Act (WSA) – Order for Change Approval of Section 11 Permit (November 2023)</li> <li>Water Sustainability Act (WSA) – Short-Term Use of Water (October 2022)</li> <li>City of Richmond Watercourse Crossing Permit (September 2023)</li> <li>City of Richmond Non-Stormwater Discharge Permit (August 2024)</li> </ul>	
	Design and Construction	<ul> <li>Reference Concept Design developed (August 2021)</li> <li>Construction began (July 2022)</li> <li>Final design completed (June 2023)</li> </ul>	
	Community Benefits	<ul> <li>Special Project Needs Agreement (SPNA) (June 2021)</li> </ul>	
Partners / Stakeholders	First Nations	<ul> <li>Ongoing engagement and consultation</li> <li>Design-Builder confirmed that Indigenous contracting requirements have been met</li> </ul>	
	Third Parties	<ul> <li>BC Hydro Protocol Agreement (December 2018)</li> <li>City of Richmond Municipal Agreement (August 2022)</li> </ul>	
Partn	Public and Stakeholder Engagement	<ul> <li>Presentations to various stakeholders (2021 – ongoing)</li> </ul>	

# 4. Monthly Highlights and Three Month Lookahead

## 4.1. Safety

Scope:	<ul> <li>Manage Project Occupational Health and Safety (OH&amp;S) activities using a collaborative and proactive management approach with all principal stakeholders.</li> <li>Monitor relevant OH&amp;S performance metrics by setting measurable targets and objectives in the form of key performance leading and lagging indicators.</li> <li>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.</li> <li>Outline relevant health and safety management processes and activities to ensure the health and safety of the workforce and the public is always safeguarded.</li> </ul>
Monthly Highlights:	<ul> <li>The total number of incidents and accidents documented on the health and safety log for the month was zero (0).</li> <li>The Lost Time Injury Frequency Rate (LTIFR) for the Project is zero (0), which is less than the WorkSafeBC 2023 rate of 1.7* for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair).</li> <li>*Injury rate data reflects Large Employer 100+ Person Years employer size.</li> <li>Continued site safety monitoring of Project activities.</li> <li>Reviewed documents and statistics submitted by the Design-Builder.</li> </ul>
Three Month Lookahead:	<ul> <li>Review Design-Builder's submitted documentation and monthly statistics.</li> <li>Continue to inspect and monitor construction activities of the Design-Builder.</li> <li>Continue spot audits of relevant Design-Builder activities.</li> </ul>

## 4.2. Quality

Scope:	<ul> <li>Monitor the Design-Builder's Project Quality Management System performance.</li> <li>Monitor the Design-Builder's on-site and off-site construction activities, including inspections and testing.</li> <li>Monitor the Design-Builder's internal and external audits, including audit reports.</li> <li>Conduct Quality Management System and site surveillance audits.</li> <li>Monitor the Design-Builder's Non-Conformity tracking system, Non-Conformity Reports, including Correction, Corrective Actions, and Opportunity for Improvement Log.</li> <li>Review the Design-Builder's quality documentation, including inspection and test plans, correlated check-sheets, other quality plans, and work method statements.</li> <li>Lead internal quality meeting and attend quality-related Project team and Design-Builder meetings.</li> <li>Monitor the Design-Builder's quality control and quality assurance activities.</li> </ul>
Monthly Highlights:	<ul> <li>Review Design-Builder's turnover documentation.</li> <li>Reviewed the Design-Builder's quality documentation, including inspection and testing plans, various quality plans, materials documentation, third-party reports, and correlated quality items in work method statements for upcoming work.</li> <li>Continued quality monitoring of the Mechanically Stabilized Earth (MSE) wall construction.</li> <li>Continued quality monitoring of the construction of the Phase 1 overpass, including east and west abutments, pier diaphragms, overpass deck, and reinforcing steel installation.</li> </ul>

- Monitored all Design-Builder's site activities, including inspections and testing.
- The Design-Builder issued two (2) new Non-Conformity Reports (NCRs) this month related to construction. To date, there have been a total of 34 NCRs reported by the Design-Builder (five (5) open and 29 closed). The Province issued zero (0) NCRs this month. To date, there have been five (5) NCRs issued by the Province (zero (0) open and five (5) closed).

# Three Month Lookahead:

- Continue to review of the Design-Builder's quality documentation (i.e., inspection and testing plans and checklists) for upcoming work.
- Continue to review of quality turnover packages.
- Monitor and conduct surveillance of the Design-Builder's site activities.
- Conduct site surveillance audits of the Project work based on the Design-Builder's construction schedule.
- Conduct audits of the Design-Builder's Quality Management System.
- Monitor the Design-Builder's schedule of internal and external audits, including audit reports.
- Participate in the Design-Builder's audits as an observer.
- Monitor the Design-Builder's Non-Conformity Report tracking system, Non-Conformity Reports, and Opportunities for Improvement Log.
- Identify and implement continuous improvement initiatives.
- Review the Design-Builder's monthly reports.

#### 4.3. Environmental

#### Scope: - 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. - Reviewed the Design-Builder's monthly and weekly environmental reports. Monthly Highlights: Reviewed the surface water quality monitoring data from the Design-Builder and the Independent Environmental Monitor. Submitted the Water Sustainability Act Section 11 Amendment application for works in the southwest quadrant. **Three Month** Continue to monitor and support archaeological spot-monitoring events. Lookahead: - Review the Design-Builder's annual Construction Environmental Management Plan update. Continue to monitor and review the effectiveness of the recycled concrete aggregate material mitigation. Continue to monitor and provide input to Design-Builder on rain and water management.

## 4.4. Design and Construction

#### Scope:

- 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:

- Participated in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder to progress design and construction items.
- Continued weekly meetings with the Design-Builder to discuss the Overpass Demolition Plan.
- Reviewed the Design-Builder's updated design submittals, including:
  - Concrete Curing Compound
  - o Electrical Stage 5A 6E detour staging drawings
- Reviewed the Design-Builder's updated construction Work Method Statements and associated Traffic Control Plans, including:
  - o Traffic Control Plans west intersection works on Steveston Highway
  - o Traffic Staging Stage 5A 6E detour staging drawings
  - o Highway 99 lane closures
- Monitored the Design-Builder's on-site construction activities, including:
  - o Stone column installation in the northwest quadrant
  - o Formwork and rebar installation on the Phase 1 overpass deck
  - o Formwork and rebar installation for the Phase 1 east and west abutment diaphragm
  - Median removal and drainage installation in the west intersection on Steveston Highway
  - City of Richmond watermain tie-ins
  - MSE precast panel and vegetative wall installation
  - o Preload placement in the southwest quadrant
  - o Surcharge removal in the southeast quadrant
  - o Completed the installation of lock blocks and preload in the southwest quadrant
  - Preload placement alongside Steveston Highway eastbound fronting Richmond Country Farms
  - Coping installation for MSE wall on the northbound off-ramp
  - o Settlement and vibration monitoring and surveying
  - Anchor testing for soil nail walls

# Three Month Lookahead:

- Monitor the Design-Builder's on-site construction activities, including:
  - o Concrete pour for the Phase 1 overpass deck
  - Phase 1 overpass approach roadworks
  - o Placement of embankment in the northwest quadrant
  - o Placement of the overpass end fills
  - $\circ\quad$  Continuation of drainage installation at Highway 99 southbound bus lane
  - Abandonment of the decommissioned watermain
  - o Pavement and electrical works in the west intersection on Steveston Highway
  - o Formwork, reinforcement, and concrete pour for the approach slabs
  - Traffic switch to the Phase 1 overpass
- Removal of the existing overpass.

#### 4.5. First Nations

Scope:	<ul> <li>Consultation and engagement with First Nations on the design, Project logistics, permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction and archaeological monitoring.</li> </ul>
Monthly Highlights:	<ul> <li>Continued discussions with First Nations to support Project activities.</li> <li>Continued to facilitate site visit opportunities for First Nations.</li> <li>Continued Project procurement discussions between the Design-Builder and First Nations.</li> </ul>

<ul> <li>Continued to develop Cultural Recognition Program, with input from key stakeholders and First Nations, to inform potential art opportunities.</li> </ul>
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# Three Month Lookahead:

- Coordinate additional site visits with interested First Nations.
- Continue engagement on environmental plans and permitting, landscaping, planting, and construction monitoring opportunities.
- Facilitate further discussions between the Design-Builder and First Nations, as needed.
- Continue to discuss job shadowing and mentorship opportunities for Indigenous youth.
- Continue engagement with First Nations to develop the Cultural Recognition Program, confirm art opportunities, and issue calls for art.

#### 4.6. Third Parties

## Scope: Project-specific Municipal Agreement (MA) with the City of Richmond. - Engagement with the City and TransLink on construction impacts, stakeholder concerns, and other inputs to the Project. Monthly - City of Richmond: Highlights: o Continued bi-weekly meetings between the Project Team, the Design-Builder, and City of Richmond staff. o Completed coordination between the Project Team, the Design-Builder, and City of Richmond staff related to installation of the new watermain. TransLink and Coast Mountain Bus Company (CMBC): $\circ \quad \hbox{Continued bi-weekly meetings between the Project Team, the Design-Builder, TransLink, and} \\$ Completed reviews of Design-Builder submittals and design packages by TransLink and CMBC Coordinated with TransLink and CMBC on changes to bus stops related to upcoming construction activities. **Three Month** - Complete coordination between the Project Team, the Design-Builder, and City of Richmond staff Lookahead: related to the formal handover of the watermain and other drainage infrastructure to the City of Richmond, as per the Municipal Agreement. Complete reviews of the Design-Builder submittals and design packages by the City of Richmond and - Continue to support the Design-Builder in obtaining any relevant permits for upcoming work. - Coordinate upcoming traffic impacts with the City of Richmond, TransLink, and other stakeholders. Hold meetings with targeted stakeholder groups to seek feedback on traffic management approaches related to upcoming construction activities.

## 4.7. Public and Stakeholder Engagement

# 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:

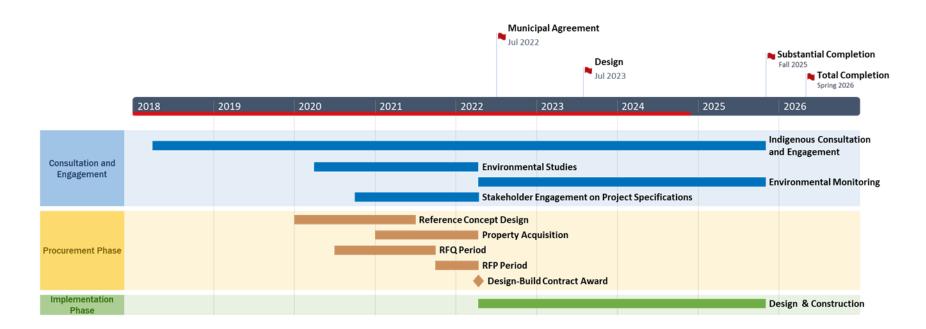
- Conducted weekly meetings with the Design-Builder to assess potential public impacts and review proposed communication approaches.
- Prepared construction notices, newsletters, and handouts related to traffic impacts on Steveston Highway and Highway 99.

# Three Month Lookahead:

- Prepare and distribute construction notices related to traffic impacts on Steveston Highway and Highway 99.
- Provide Project updates on construction activities to residents and stakeholders located near the Project site.
- Continue to respond to public inquiries related to construction activities and impacts.
- Host a quarterly Traffic Advisory Committee meeting to provide Project updates to local and regional stakeholders and seek feedback on traffic management approaches related to upcoming construction activities.

## 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: Impact hammer installing stone columns in the northwest quadrant.



Figure 2: Preparation for rebar placement on the Phase 1 overpass deck underway.



Figure 3: Preload placement in the southwest quadrant, with a temporary retaining wall in place.