

Monthly Status Report

Reporting Period

February 2023

SIP-TIC-PCO-RPT-00014 R0

1. Introduction

1.1 Project Overview

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

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

- Upgrade the interchange to be consistent with modern design standards.
- Reduce vehicle queues for northbound off-ramp traffic and transit to Steveston.
- Improve mobility for east-west traffic on Steveston Highway.
- Improve transit operations at the interchange.
- Provide new 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 structure(s) of five lanes that accommodates two eastbound lanes and three westbound lanes (including a left turn lane) and new pedestrian and cyclist 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 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 BC Transportation Financing Authority. The estimated cost of the Project including planning, construction, and financing during construction is \$87.5 million.






The Project will be 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 structure(s) of five lanes that accommodates two eastbound lanes and three westbound lanes (including a left turn lane) and new 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 approved schedule of interchange open in 2025.		<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 February 2023 was \$1.5 million. Total Project spending to date is \$19.0 million; the Project is forecasted to be delivered within budget.
	Safety	Ensure that Project work is preformed safely, in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> Occupational Health and Safety (OH&S) requirements for the Project are defined within the Project Management Plan and the Design-Build Agreement (DBA). Lost Time Injury Frequency Rate (LTIFR) for the Project is 0. The average Injury Rate for Bridge, Overpass, or Viaduct Construction or Repair from 2021 is 1.2 per WorkSafeBC.
	Quality	Implement an effective Quality Management System.		<ul style="list-style-type: none"> The Design Builder's Project's quality policies, procedures, roles, responsibilities, and authorities are documented in the Construction Quality Management Plan and compliance to the Plan will be monitored through ongoing audits of the Project work. Provided comments on the Design-Builder's updated Construction Quality Management Plan, updated Quality Systems Procedures, and Quality Audit Program. Ongoing review of Inspection and Test Plans, including correlated check-sheets.

		Objectives	Project Status	Comments
	Environmental	Ensure Project work is performed in an environmentally responsible manner.	●	<ul style="list-style-type: none"> Permits and authorizations are in place for the Project as listed in Section 3: Project Documents and Achievements to Date. Additional regulatory authorizations will be obtained by the Design-Builder as required. The Design-Builder created access roads for the northeast-quadrant Project site with recycled-concrete aggregate material (RCAM). RCAM can cause higher than normal pH levels in site runoff water, which can be harmful to aquatic species. The Design-Builder is working to develop and implement permanent solutions to mitigate elevated pH levels.
	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"> Final Design is under development by the Design-Builder. The Technical Team participates in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder. The Design-Builder is currently exploring various options for a permanent laydown area for the Project. Tree clearing, earthworks, and utility relocations continue on site.
	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 employment targets are included in the DBA with incentive payments for exceeding the targets. The Design-Builder's Community Benefits Plan is in place.
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"> The Project Team continues to consult and engage with the Identified Indigenous Groups (IIGs) on design, permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.
	Third Parties	Continue to build and maintain positive relationships and reach agreement on Project requirements with City of Richmond and owners of interfacing infrastructure.	●	<ul style="list-style-type: none"> A Municipal Agreement (MA) with the City of Richmond has been fully executed. The Project Team and Design-Builder continue to meet on a weekly basis with City of Richmond staff regarding the Project. Utility relocation designs are complete, and construction is ongoing.

		Objectives	Project Status	Comments
				<ul style="list-style-type: none"> The Project Team and Design-Builder continue to meet with TransLink and the Coast Mountain Bus Company bi-weekly.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> The Project Team is providing information to community organizations, businesses, and residents that are in close proximity to the Project. The Project Team prepared presentations for two stakeholder groups. The Project Team and Design-Builder prepared and distributed a notice related to a BC Hydro relocation.

Status	Description
●	Managing critical issues and negotiating resolution – action required immediately.
●	Managing some issues and negotiating resolution – action required in the near term.
●	Stay the course – no action required.

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> Project Management Plan (October 2021) <u>Executed Design-Build Agreement (April 2022)</u>
	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)

		<ul style="list-style-type: none"> Water Sustainability Act (WSA) – Order for Change Approval of Section 11 Permit (November 2021)
	Design and Construction	<ul style="list-style-type: none"> Reference concept design developed (August 2021)
	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.
	Third Parties	<ul style="list-style-type: none"> BC Hydro Protocol Agreement (December 2018)
	Public and Stakeholder Engagement	<ul style="list-style-type: none"> Presentations to various stakeholders (2021 – ongoing)

4. February Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none">• Establish Occupational Health and Safety (OH&S) Project delivery standards and set achievable key performance indicators.• Manage Project 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.• Identify specific health and safety roles and responsibilities and to ensure continued compliance.• 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">• Total number of recorded incidents and accidents documented on the health and safety log for the month was 0.• Lost Time Injury Frequency Rate (LTIFR) for the Project remains at 0, which is below the WorkSafeBC average of 1.2 for <u>Bridge, Overpass, or Viaduct Construction or Repair</u>.• Continue to build processes for physical site monitoring, to oversee compliance with the DBA and legislative requirements.• Established enhanced safety inspections with the Design-Builder's Safety Team for both day and night activities.
Three-Month Lookahead:	<ul style="list-style-type: none">• Develop a robust tracking system for daily key performance indicators.• Develop an audit schedule.

4.2 Quality

Scope:	<ul style="list-style-type: none">• Review and monitor the Design-Builder's Quality Management System documentation, including plans.• Monitor the Design-Builder's 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 and Non-Conformity Reports. • Monitor the Design-Builder’s Opportunity for Improvement Log. • Monitor the Design-Builder’s quality management activities. • Monitor development, implementation, maintenance, and insurance of effective operation of the Province Project Quality Management System.
Monthly Highlights:	<ul style="list-style-type: none"> • Reviewed the Design-Builder’s updated quality submittals including the Construction Quality Management Plan, Quality System Procedures, and Audit Program. • Reviewed the Design-Builder’s quality documentation (Inspection and Testing Plans and checklists) for upcoming work. • Revised the Quality Management System Audit Program to reflect the Design-Builder’s current Quality Management System status.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Ongoing review of the Design-Builder’s updated quality documentation (i.e., Inspection and Testing Plans and checklists) for upcoming work. • Revise and implement the Province’s Quality Management System Audit Program. • Monitor the Design-Builder’s site activities, including inspections and testing. • Conduct Quality Management System and Site Surveillance audits of the Project work. • 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 Opportunity for Improvement Log.

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 assessment and public engagement processes. • Manage outstanding environmental permits and associated environmental studies, monitoring, and compliance processes.
Monthly Highlights:	<ul style="list-style-type: none"> • Monitored Design-Builder discussions with private property owners and City of Richmond regarding potential site office and laydown locations, including permitting requirements.

	<ul style="list-style-type: none"> • Reviewed Design-Builder’s monthly and weekly Environmental reports. • Continued discussions with IIGs on planting and seed selections. • Monitored erosion and sediment control measures planning and implementation at northeast and southeast quadrants. • Assisted the Design-Builder in continued discussions with the IIGs regarding tree salvage. • Design-Builder created access roads for the northeast quadrant Project site with recycled-concrete aggregate material (RCAM), which can cause water to have higher-than-normal pH levels. Elevated pH can be harmful to aquatic species. • The Project Team took immediate action to mitigate impacts to the nearby downstream drainage pond by blocking off the culvert to contain affected water. The Project Team continued to work with the Design-Builder to develop and implement permanent solutions to mitigate the issue. • The Province reported the RCAM issue to Environment and Climate Change Canada, BC Ministry of Environment, the City of Richmond and First Nations.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Finalize the Archaeological workplan. • Review City of Richmond permitting requirements. • Ensure the drainage design has been reviewed for potential permit amendment requirements. • Review the Design-Builder’s Environmental Work Plans. • Review the Design-Builder’s RCAM Monitoring and Mitigation Plan • Conduct additional water quality compliance monitoring throughout the Project site

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 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, as needed.
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. • Participated in coordination meetings with the Design-Builder and the utility owners to discuss utility relocation construction logistics: <ul style="list-style-type: none"> ○ BC Hydro Overhead Distribution Line – relocation ongoing ○ Bell Fibre Optic Line – design completed, relocation ongoing ○ Shaw Fibre Optic Line – design completed, relocation ongoing ○ City of Richmond Fibre Optic Line – relocation ongoing

	<ul style="list-style-type: none"> • Reviewed the Design-Builder’s design submittals including: <ul style="list-style-type: none"> ○ Final Design Package 1 Issued for Construction (i.e., Preload and Ground Improvements, Early Works), ○ Final Design Package 2 updates (Electrical Early Works), and ○ Final Design Package 3 (Civil). • Reviewed the Design-Builder’s updated construction Work Method Statements and associated Traffic Control Plans for: <ul style="list-style-type: none"> ○ Site access, excavation, and trenching, ○ BC Hydro pole relocation support, ○ Placement of fills, and ○ Electrical relocates. • Monitored the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> ○ Temporary access construction, ○ Material haulage within site, ○ Installation of new BC Hydro distribution line, poles, and transformer, ○ City of Richmond watermain shutoff at east and west intersection, ○ Completed remaining tree clearing, and ○ Third party utility relocations and installation (including directional drilling and trenching).
Three-Month Lookahead:	<ul style="list-style-type: none"> • Review the Design-Builder’s submittals including the Intelligent Traffic System Implementation Plan, and the Final Design packages. • Install cameras for the Project Team’s monitoring of the Project site. • Monitor the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> ○ Completion of utility relocations (BC Hydro Distribution Line, Bell Fibre, Shaw Fibre, and City of Richmond Fibre), ○ Temporary retaining wall construction, ○ Fill placement and ditch construction, ○ Installation of stone columns and ground improvements, ○ Roadworks near Richmond Country Farms, and ○ Pile driving for bridge foundation.

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 monitoring.
Monthly Highlights:	<ul style="list-style-type: none"> • Continued engagement on environmental plans and permitting.

	<ul style="list-style-type: none"> • Cultural Recognition Plan updated to reflect expected timelines, opportunities, and responsibilities. • Ongoing discussions with IIGs to support Project activities, including cultural awareness and recognition, mentorship opportunities for Indigenous youth, site visits, and construction and archaeological monitoring opportunities. • Ongoing initial and follow-up meetings between the Design-Builder and the IIGs.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue engagement, Indigenous construction monitoring opportunities and building monitoring capacity, to inform agreements with interested IIGs. • Coordinate additional site visits with interested IIGs. • Ongoing meetings between TI Corp and IIGs to develop a scope for Indigenous Cultural Awareness and Recognition opportunities to inform implementation of the Indigenous Cultural Awareness and Recognition Plan. • Continue engagement on environmental plans and permitting. • 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 future 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"> ○ Ongoing weekly meetings between the Project Team, the Design-Builder, and City staff. ○ Completed engagement and coordination with the City and the Design-Builder regarding the watermain design, City watermain shutoff, decommissioning, and reinstallation plan. ○ Continued engagement and coordination with the City and the Design-Builder regarding the fibre optic relocation works, including impacts to affected municipal buildings. ○ Completed engagement with the City and the Design-Builder regarding the upcoming tree removals. • TransLink and Coast Mountain Bus Company (CMBC): <ul style="list-style-type: none"> ○ Ongoing bi-weekly meetings between the Project Team, the Design-Builder, TransLink, and CMBC. ○ Continued engagement with TransLink and CMBC regarding upcoming traffic impacts related to transit infrastructure and pedestrian access.

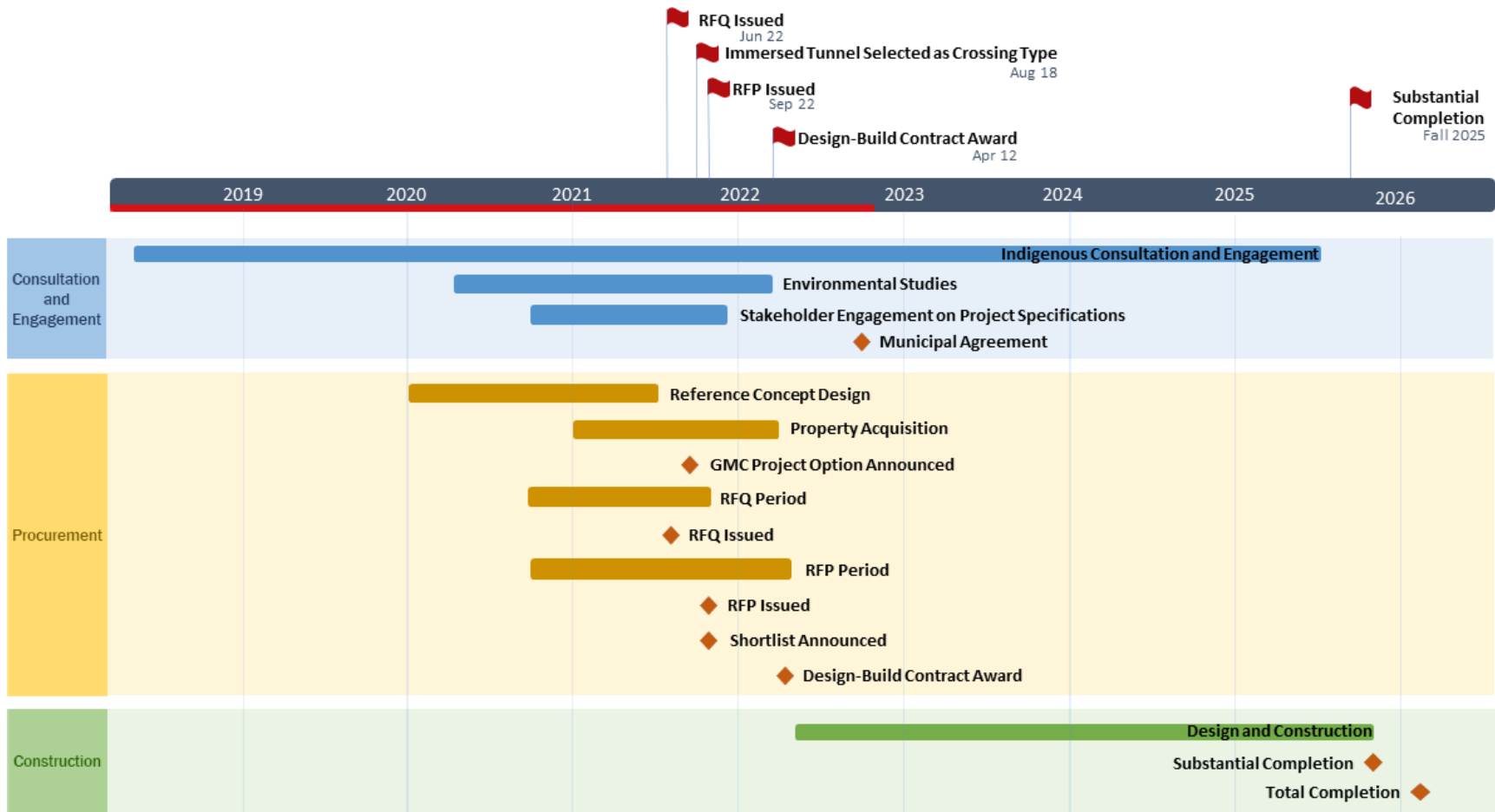
	<ul style="list-style-type: none"> • Utilities: <ul style="list-style-type: none"> ○ Coordinated regular meetings with impacted utility companies regarding utility relocation designs and construction logistics. ○ Refer to Section 4.4 Design and Construction for additional information.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue to facilitate reviews of the Design-Builder submittals and design packages by the City and TransLink. • Assist with coordinating the City’s fibre relocation, as needed, for construction activities in the vicinity. • Support the Design-Builder in obtaining Lane Closure Permits, Noise Variances, and Water Crossing Permits for upcoming work. • Monitor the utility relocation works on site.

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. • Delivered presentations to two distinct stakeholder groups as part of the Project Team's outreach efforts. • Circulated a construction notice informing the public about site preparation activities. • Circulated a construction notice for the relocation of BC Hydro utilities to relevant stakeholders. • Addressed two inquiries from members of the public regarding the Project.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Share public communications regarding the upcoming ground improvements.

5. Schedule

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



6. Project Photos

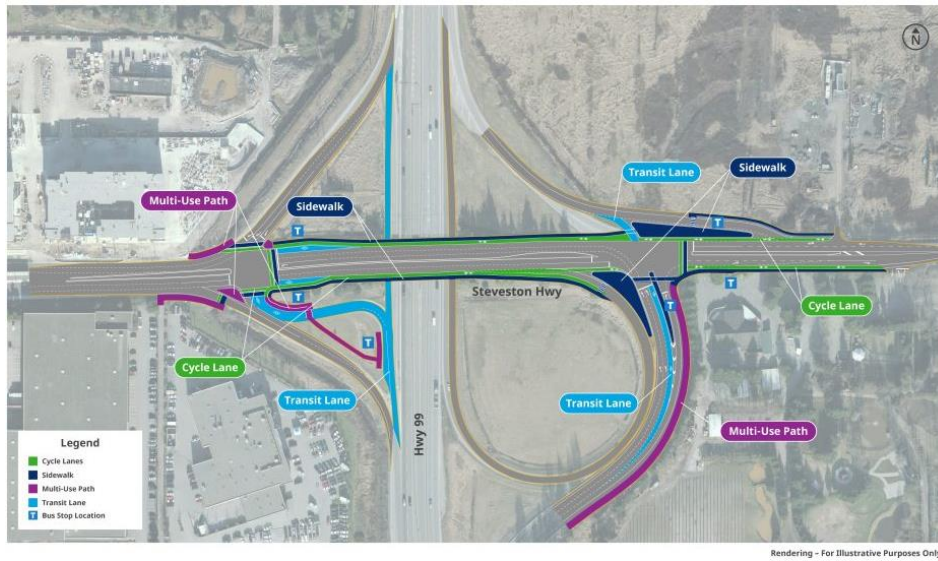


FIGURE 1 – DESIGN RENDERING

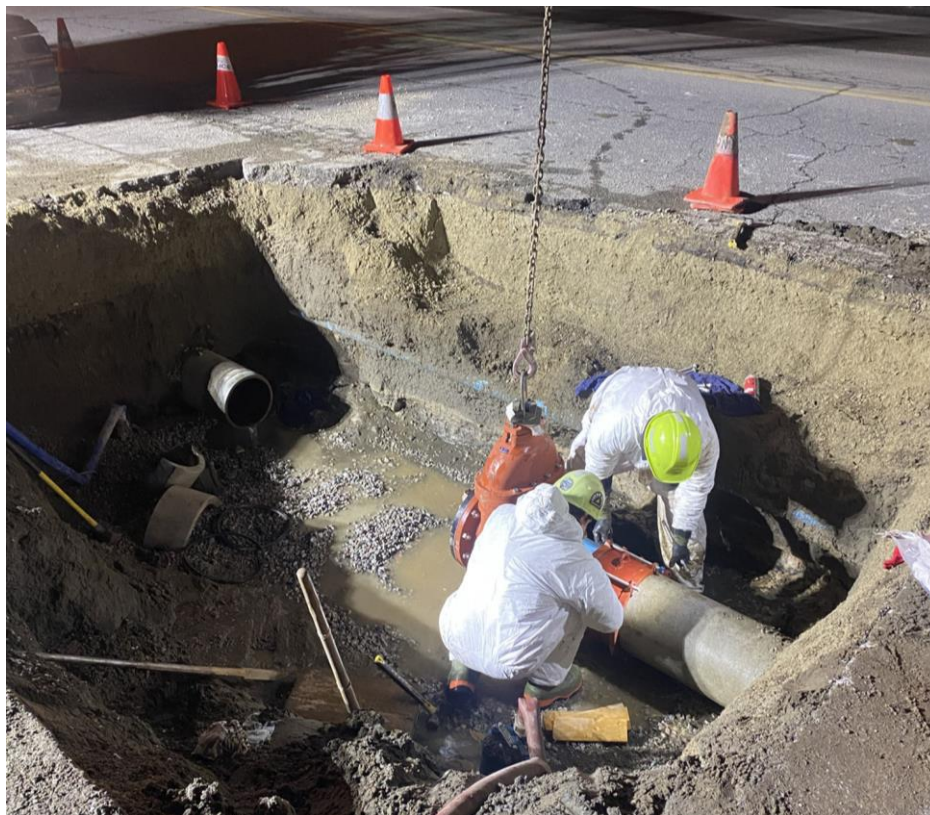


FIGURE 2 – UTILITY RELOCATIONS AT PROJECT SITE