

# Highway 91/17 Upgrade Project

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MONTHLY STATUS REPORT

Month Ending October 31, 2021

# 1. PROJECT DASHBOARD

Project Delivery Objectives		Overall Project	DB Contractor	Owners/Other Works	Comments
<b>Safety</b>	Take every reasonable step to ensure that the work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Safety meetings and orientations ongoing.
<b>Budget</b>	Delivered within the approved budget.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	The Project has an approved capital budget of \$260 million and continues to track on budget.
<b>Schedule</b>	Delivered within the approved schedule.	<span style="color: green;">●</span>	<span style="color: yellow;">●</span>	<span style="color: grey;">●</span>	Most key Project activities are proceeding on schedule. Working to mitigate schedule impacts
<b>Scope</b>	Deliver the approved scope.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Delivery of the specified components is on track.
<b>Indigenous Groups</b>	Continue to build and maintain a positive collaborative working relationship	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Discussions and consultation with Indigenous groups ongoing.
<b>Environmental</b>	Ensure the work is performed in an environmentally responsible manner.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	The Project is being delivered in accordance with the obligations identified in the Construction Environment Management Plan.
<b>Community Benefits</b>	Incorporate the Community Benefits Objectives into the Project.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Community Benefits Objectives outlined in the Design-Build Agreement for implementation by the Design-Builder.
<b>Third Parties</b>	Continue to build and maintain positive relationships with Project Partners and other third parties.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Early and frequent engagement and advancing agreements with Project partners and other third parties.
<b>Stakeholder Engagement</b>	Continue to build and maintain positive relationships with the community, and other stakeholders.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Engagement with key Project partners is ongoing. Community and stakeholder engagement will continue.
<b>Quality</b>	Implement and Maintain an effective Quality Management System.	<span style="color: green;">●</span>	<span style="color: green;">●</span>	<span style="color: grey;">●</span>	Quality audits and reviews performed as required per the Quality Management Plan.

Status	Description
<span style="color: grey;">●</span>	Not currently applicable, as the Owner's Works are complete
<span style="color: red;">●</span>	Managing some issues, negotiating resolution; required immediately
<span style="color: yellow;">●</span>	Managing some issues, negotiating resolution; required in the near term
<span style="color: green;">●</span>	Good progress

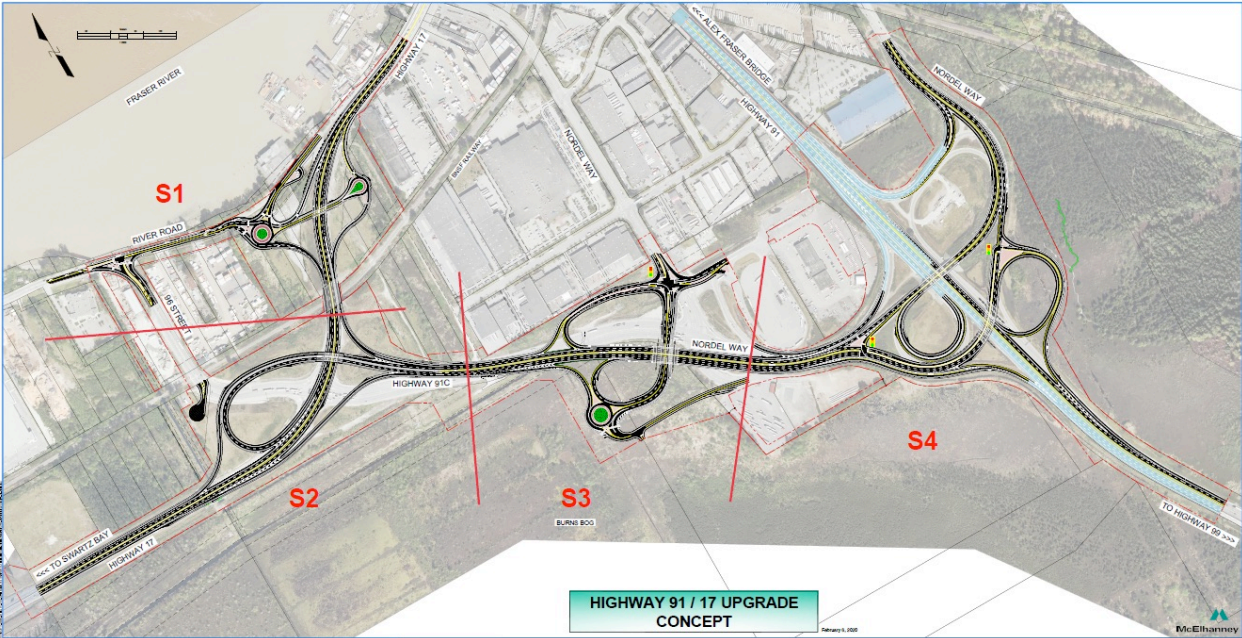
## 2. Introduction

### Project Overview

The Highway 91/17 & Deltaport Way Upgrade Project (the Program) is comprised of the Highway 91/17 Upgrade Project, as well as the 27B Avenue and Deltaport Way Improvements Project. The 27B Avenue and Deltaport Way improvements were completed in 2019 and are no longer be reported out on in the monthly reports.

The Highway 91/17 Upgrade Project (the Project) is a subcomponent project of the broader Program and includes a combination of improvements to the existing Highway 91, Highway 17, and Highway 91 Connector corridors to improve travel safety and efficiency. These upgrades will improve local and commercial travel time and reliability in the area, reduce conflicts between commercial vehicles and other traffic, and support community and economic development. The Highway 91/17 components also complement the recently completed 72nd Avenue Interchange Project and the Alex Fraser Bridge Project.

A Design-Build Agreement between the BC Ministry of Transportation and Infrastructure (the Ministry), the BC Transportation Financing Authority (BCTFA), and Pacific Gateway Constructors General Partnership (the Design-Builder) was signed on December 13, 2019. As such, the Project has entered the implementation phase and a comprehensive Monthly Status Report will be prepared to report on progress, budget status, and risk.



# October 2021 Highlights

Project highlights this month include:

<b>Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>Ongoing public and stakeholder notification to advise of Project activities including upcoming traffic and construction activities</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Environmental protection measures continue as part of active construction areas, no significant issues of concern</li> <li>Design-Builder providing environmental submissions</li> <li>Design-Builder initiated work on Habitat Offsetting sites</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>COVID-19 screenings and physical distancing being followed for staff and visitors</li> <li>Safety inspections ongoing</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>Ongoing development and review of Design-Builder detailed design</li> </ul>
<b>Construction</b>	<p>Segment 1 – River Road / Highway 17 Interchange</p> <ul style="list-style-type: none"> <li>Preparation for Hwy 17 Eastbound (EB) ramp opening in November, including River Road East roundabout gravelling</li> </ul> <p>Segment 2 – Highway 91C / Highway 17 Interchange</p> <ul style="list-style-type: none"> <li>Embankment fill commenced on north side of Hwy 17</li> <li>Hwy 17/Hwy 91C intersection temporary lights installation complete</li> </ul> <p>Segment 3 – Highway 91C / Weigh Scale Interchange</p> <ul style="list-style-type: none"> <li>Hwy 91C north sand embankment completed</li> </ul> <p>Segment 4 – Highway 91 / Nordel Way interchange</p> <ul style="list-style-type: none"> <li>Hwy 91 west side ramp gravelling and paving completed; opened to traffic</li> </ul>
<b>Traffic Management</b>	<ul style="list-style-type: none"> <li>Hwy 91 Southbound (SB) to Nordel Way EB offramp closures</li> <li>Hwy 17 Westbound (WB) and EB nighttime slow lane closure</li> <li>Hwy 91C WB nighttime slow lane closures</li> </ul>
<b>Quality</b>	<ul style="list-style-type: none"> <li>Ongoing implementation and review of quality system</li> </ul>

## 3. PROJECT DELIVERY

### Project Controls

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>Ongoing project control meetings</li> <li>Ongoing review of Risk Register</li> <li>Ongoing review of project schedule, scope and budget</li> </ul>
<b>Key activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>Ongoing project control meetings</li> <li>Ongoing review of Risk Register</li> <li>Ongoing review of project schedule, scope and budget</li> </ul>

## 4. PROJECT DEVELOPMENT

### Communications and Stakeholder Engagement

Completed this Month	<ul style="list-style-type: none"><li>• Provided updates to interested stakeholder groups as requested</li><li>• Reviewed Design-Builder communications submissions</li><li>• Supported the Design-Builder with traffic and construction notifications to the public, community, and stakeholders</li><li>• Ongoing Project website updates</li><li>• Ongoing enquiry response</li></ul>
Key Activities for Next 3 months	<ul style="list-style-type: none"><li>• Continue to support the Design-Builder regarding upcoming traffic and construction notifications to the public, community and stakeholders</li><li>• Ongoing enquiry response</li><li>• Ongoing Project website updates</li></ul>

### Environment

Completed this Month	<ul style="list-style-type: none"><li>• Ongoing regular weekly meetings with the Design-Builder regarding environmental components of the Project</li><li>• Ongoing securing, extension, and amendment of environmental permits</li><li>• Environmental Work Plans and reports received and implemented</li><li>• Design-Builder environmental protection measures and mitigations ongoing for the Delta Nature Reserve (DNR), Burns Bog, and Project interface locations</li><li>• Habitat Offsetting/Landscaping site work has commenced in specific areas, most notably in Section 1</li></ul>
Key Activities for Next 3 months	<ul style="list-style-type: none"><li>• On-site environmental monitoring of the Design-Builder's environmental mitigation measures to confirm compliance during construction,</li><li>• On-going submission review in accordance with the DBA requirements</li><li>• Continue to monitor excavations around archaeology sites and assist the Design-Builder where possible</li></ul>

### Agriculture

Completed this Month	<ul style="list-style-type: none"><li>• Design-Builder sourcing and reviewing off-site peat material, in particular near sensitive bog locations</li></ul>
Key activities for Next 3 months	<ul style="list-style-type: none"><li>• Monitor construction to meet Agricultural Land Commission (ALC) conditions and proceed with any action items</li></ul>

### Indigenous Groups

Completed this Month	<ul style="list-style-type: none"><li>• Ongoing review and sharing of key Project documents with Indigenous Groups</li><li>• Meetings ongoing with Design-Builder and Project team</li><li>• Continued communication with Indigenous groups regarding Project construction activities</li></ul>
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	<ul style="list-style-type: none"> <li>Contracting and employment opportunities for environmental monitoring ongoing</li> </ul>
Key Activities for Next 3 months	<ul style="list-style-type: none"> <li>Responses to Indigenous Group comments on key Project documents</li> <li>On-going consultation and engagement relating to geotechnical, environmental, and archaeological works</li> </ul>

## 5. DESIGN-BUILD PROGRESS

### Safety

Completed this Month	<ul style="list-style-type: none"> <li>Pacific Gateway Constructors is the Prime Contractor on the Project Site</li> <li>Onsite safety training sessions held for all staff</li> <li>Ongoing COVID-19 protocol implementation</li> </ul>
Key Activities for Next 3 months	<ul style="list-style-type: none"> <li>Construction activities and ongoing site safety training sessions as required</li> <li>Daily &amp; weekly safety briefings for active site crews</li> <li>Monthly mass safety meetings</li> <li>Ongoing COVID-19 protocol implementation</li> </ul>
Safety Incidents	<ul style="list-style-type: none"> <li>None this month</li> </ul>

### Design

Completed this Month	<ul style="list-style-type: none"> <li>Ongoing meetings with various regulatory agencies/stakeholders</li> <li>Continued development and review of design including detour implementation, landscape, drainage, roadway, electrical, structural, and bridge design</li> <li>Ongoing review of Project-wide guide sign designs</li> </ul>
Key Activities for Next 3 months	<ul style="list-style-type: none"> <li>Ongoing review of design submissions</li> <li>Ongoing meetings with various regulatory agencies/stakeholders as required</li> </ul>

### Construction

Completed this Month	<p><b>Segment 1 – River Road / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>Preparation for Hwy 17 Eastbound (EB) ramp opening in November, including River Road East roundabout gravelling</li> <li>Columns installation for future guide signs at River Road/Highway 17 interchange</li> </ul> <p><b>Segment 2 – Highway 91C / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>Embankment fill commenced on north side of Hwy 17</li> <li>Hwy 17 structure column installation ongoing</li> <li>Hwy 17/Hwy 91C intersection temporary lights installation complete</li> <li>Hwy 17/River Road detour paving ongoing</li> </ul>
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	<p><b>Segment 3 – Highway 91C / Weigh Scale Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91C north sand embankment completed</li> <li>• Sand preload removal begins south side of Hwy 91C</li> </ul> <p><b>Segment 4 – Highway 91 / Nordel Way interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91 west side grading and paving ongoing</li> <li>• Nordel Way structure embankment on west side of Hwy 91 ongoing</li> <li>• Hwy 91 west side ramp gravelling and paving completed; opened to traffic</li> </ul>
<b>Key Activities for Next 3 months</b>	<p><b>Segment 1 – River Road / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>• River Road East roundabout completion and open to traffic</li> <li>• Paving and opening ramp to Hwy WB with signal</li> <li>• Temporary traffic signals on Hwy 17 WB</li> </ul> <p><b>Segment 2 – Highway 91C / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>• Design Builder working on permits and approvals</li> <li>• Preload of north and south sides of Hwy 17</li> <li>• Structure columns installation and girder installation with full detour activation of Hwy 17</li> <li>• Hwy 17/Hwy 91C interchange detour implementation</li> <li>• Full closure of 96<sup>th</sup> Street</li> </ul> <p><b>Segment 3 – Highway 91C / Weigh Scale Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91C EB to Hwy 17 detour implementation</li> <li>• Weigh Scale structure construction</li> </ul> <p><b>Segment 4 – Nordel Way / Highway 91 Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91 west side alignment embankment completion</li> <li>• Sand preload removal and commence drilled shafts of Nordel Way structure</li> <li>• Preload removal in southeast quadrant of Nordel interchange</li> <li>• Embankment fill on east side of Hwy 91</li> </ul>

## Traffic Management

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>• Hwy 91 SB to Nordel Way EB off-ramp closures</li> <li>• Hwy 17 WB nighttime slow lane closure</li> <li>• Hwy 91C WB nighttime slow lane closures</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>• Nighttime lane closures Hwy 17 EB, WB, and Hwy 91C</li> <li>• Nighttime lane closures Nordel Way to Hwy 91 SB on-ramp for Hwy 91 west side construction</li> <li>• Weekend day and night closures in Hwy 91 SB slow lane</li> <li>• 2 minute closures on Hwy 91C and 96<sup>th</sup> Street for rock truck crossings</li> <li>• Weekend day and night closures in Hwy 17 EB and WB slow lanes</li> </ul>

## Quality

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>• Ongoing monitoring of quality management system</li> <li>• Ongoing quality audits with Design-Builder</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>• Ongoing implementation and monitoring of quality management system</li> <li>• Ongoing quality audits</li> </ul>

## 6. Milestones Achieved Date

The milestone dates shown in DBA Schedule 3 Appendix A have been updated in the October 2021 Works Schedule submitted by the Design-Builder as follows:

<b>Activity Name</b>	<b>DBA Milestone Date:</b>	<b>Milestone Date (October 2021 Works Schedule)</b>
<b>Construction Start</b>		
Highway 91 / Nordel Way Interchange	April 6, 2020	June 16, 2020
Delta Nature Reserve Boardwalk	July 2, 2020	N/A
Highway 91C / Weigh Scale Interchange	April 6, 2020	August 14, 2020
Highway 91C/ Highway 17 Interchange	April 6, 2020	July 12, 2020
Highway 17 / River Road Interchange	April 6, 2020	May 8, 2020
<b>Construction Complete</b>		
Highway 91 / Nordel Way Interchange	September 15, 2022	November 28, 2022
Delta Nature Reserve Boardwalk	October 6, 2020	March 8, 2021
Highway 91C / Weigh Scale Interchange	March 15, 2023*	November 30, 2022
Highway 91C/ Highway 17 Interchange	March 15, 2023*	November 30, 2022
Highway 17 / River Road Interchange	October 4, 2021	November 25, 2021
Substantial Completion Date	November 30, 2022	November 30, 2022
Total Completion Date	May 31, 2023	May 31, 2023

\* Deferred completion date for limited alignments; majority of Section complete for November 30, 2022

Non-conforming Milestone dates and corrective actions to address schedule delays are under discussion with the Design-Builder.



## 7. Site Photographs



S1: Guide sign pile to be installed. Taken October 5, 2021



S1: CSP Culvert installation. Taken October 12, 2021



S2: Hwy 17/91C I/C - New asphalt pavement. Taken October 18, 2021



S1: Ditch lined with membrane, clear crush. Taken October 20, 2021



S1: Wetland pond excavation. Taken October 25, 2021



S1: Sunbury structure east - embankment fill placement. Taken October 27, 2021

## 8. Project Cost Report

- To date, \$153.7 million has been spent on the Project
- The approved capital Project budget is \$260 million