



Monthly Status Report

Reporting Period March 2021

1. Introduction

1.1 Project Overview

The Kicking Horse Canyon Project — Phase 4 (KHCP4) is located on the Trans-Canada Highway approximately 4 km east of the Highway 95 junction at Golden BC. It is the final phase of the 26 km-long Kicking Horse Canyon Project which has been incrementally improving the highway to a modern four lane standard at a 100 km/h design speed, including bridge replacements and natural hazard reduction features to improve safety and reliability. The scope of work includes:

- Widening 4 km of two lane and 0.8 km of three lane highway to four lanes
- Highway realignment to a 100 km/h design speed
- Installation of median barrier, wildlife exclusion fencing and passages
- Provision of snow avalanche and rock fall hazard reduction measures; and
- Shoulder widening for cyclists

Construction of the fourth and final phase to complete the remaining – and most difficult – 4.8 kilometres is expected to be substantially complete in winter 2023-24.

Additional information and updates about the Project can be found on the Project's website https://www.kickinghorsecanyon.ca/

1.2 Project Delivery

Transportation Investment Corporation, a provincial Crown corporation, is delivering and overseeing this \$601 million Project. The Project will be delivered under B.C.'s Community Benefits Agreement and the Project workforce will be provided by B.C. Infrastructure Benefits.

The project is cost-shared, with the Government of Canada contributing \$215 million.

Kicking Horse Canyon Constructors (KHCC) has been selected to design and construct the fourth and final phase of the Kicking Horse Canyon Project near Golden.

The Project is a multi-phase project to improve safety and mobility over approximately 26 kilometres of two-lane highway. Three phases of work have been completed. The fourth and final phase to transform the remaining section of about 4.8 kilometres is being prepared for construction and is expected to be substantially complete in winter 2023-24. This section will also feature four lanes of divided highway, along with improved avalanche and rock fall protection, fencing and passage for wildlife, and wider shoulders to accommodate cyclists.

1.3 Project Goals

Based on the Ministry's mandate and results of consultation to date, seven primary goals have been identified for the Project:

Transportation: Improve highway safety, capacity, and reliability of the highway corridor.

Financial: Plan and deliver the project, that meets the approved scope, schedule and budget targets cost effectively.

Environment: Reduce wildlife collision rates and minimize impacts on future wildlife movements.

Economic Development: Support the growth of the local and regional economy by improving highway safety and reliability and assist the efficient movement of people and goods along the project corridor.

Social and Communities: Engage with Indigenous Communities, local communities, and key stakeholders to identify opportunities, issues and information pathways that will inform the delivery of the project.

Deliverability: Constructible and operable.

2. Project Update

2.1 Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Meet the approved scope.	•	The project includes the widening of 4.8km of Highway 1 to a 4-lane 100km/hr. standard.
	Schedule	Delivered within the approved schedule.	•	The Project is on schedule to be completed by Winter 2023/2024.
	Budget	Delivered within the approved budget Total project budget is \$601 million.	•	The project spending for the month of March 2021 was \$14.4 million and total project spending to date is \$131.3 million. Total Federal Recoveries to date are \$57.0 million. The Project remains on budget.
	Safety	Take every reasonable step to ensure that our work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.	•	 The Project is defining Health and Safety requirements within Project Management Plan (PMP). Workplace OHS committee in place and active. Monitoring of COVID-19 situation is ongoing. No lost time this month.

	Quality	Implement an effective Quality Management System.	•	Reviewed contractor Quality Management Plan and provided comments.
	Environmental	Ensure our work is performed in an environmentally responsible manner.	•	Submission reviews for plan and permit submissions.Complete tree removal for archaeological investigation
	Archaeology	Ensure the work is performed in a manner that meets the standards of the Heritage Conservation Act.	•	 Initiated winter Systematic Data Recovery (SDR) fieldwork. Site form update provided to the Branch Winter Methods permit amendment issued by Branch Continued work towards approval of site alteration permits for archaeological sites
	Operations	Implement improvements to the Alternate Route along H93/95	•	 Completed electrical and civil for Alternate Route and Golden enhancements Pass system for local commuters during extended closures finalized. Passes ready for distribution in early April 2021.
	Design and Construction	Development of a reference concept, technical requirements/specifications, and related technical studies for the Project	•	Geotechnical borehole drilling at Cut 3 was completed Rockfall attenuator repair at KM 6.9 was completed
	Community Benefits	Work collaboratively with BCIB and successfully implement the Community Benefits Agreement.	•	 Project Team is actively working with BCIB. BCIB labour working onsite; permits have been issued.
Partners/Stakeholders	Indigenous Groups	Continue to build and maintain a positive collaborative working relationship.	•	Received signatures on one Accommodation Agreement Continued drafting on second Accommodation Agreement
	Third Parties	Continue to build and maintain positive relationships and secure agreements with Project partners and other third parties.	•	 Provided BC Hydro with Letter of Authority to support approval of temporary utilities. CP Rail Agreement finalized.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	•	 Issued monthly project newsletter. Developed local/commuter traffic pass system for extended closures. Collaborated with School District to refine school safety program.

Status	Description
	Managing critical issues, negotiating resolution; action required immediately
0	Managing some issues, negotiating resolution; action required in the near term
	Stay the Course – no action required

3. Project Documents and Achievements to Date

	Project Planning and	Preliminary Design Report (2008)
	Development	Options Evaluation (2014)
		Delivery Options Report (2016)
		Budget Disclosure Statement (2017)
		• Business Case (2016)
		Business Case Supplemental Memo (2019)
		• Cost Report (2019)
		Risk Report (2019)
	Procurement	Relationship Review Process Description (2019)
ery		Relationship Review Consultant Protocol (2019)
eliv		Design-Build RFQ Closed November 2019
Project Delivery		Archaeology RFP Closed January 2019
roje		Design-Build RFP Issued December 2019
٩		Preferred proponent chosen (September 2020)
		Limited Notice to Proceed Agreement (LNTP) signed and implemented
		(September 2020)
	Environmental	Environmental Synopsis Report (2016)
		• Various Environmental Reports (2005 – 2016)
	Archaeology	Archaeological and Heritage Resource Management Plan (AHRMP)
	Archaeology	(July 2020)
	Operations	Planning for Traffic Management and Closures during construction
	Operations	Training for Trainic Wanagement and closures during construction
	Technical	Reference concept design developed (2016)
		Reference concept design updated (2019)
		Various geotechnical reports (2005-2019)
	Community Benefits	Community Benefits Agreement (July 2018)
		BCIB Health and Safety Program (March 2020)
		BCIB Apprenticeship and Training Targets (March 2020)
		BCIB Sub-Appendix with the Kicking Horse Project Information (March
		2020)
		BCIB – AIRCC Enabling Agreement Executed (May 2020)
ers	Indigenous Relations	Ongoing engagement and consultation
Partners / Stakehold	maigenous Kelations	- Ongoing engagement and consuitation
- 2 2		

Third Parties	Contribution Agreement – Government of Canada (2017)
Public and Stakeholder Engagement Third parties	 Community Liaison Committee established (2018) Held Public Information Sessions in Golden and Radium (2019) Held public presentations to various stakeholders (2019-2020)

4. March Highlights and Three Month Lookahead

4.1 Project Management

Scope:	 Effectively manage Project's contracts, scope, schedule, and cost Implement and efficient document control and records management system Ensure Project controls are governed by provincial policies such as the Ministry of Finance Capital Asset Management Framework (CAMF) and the Core Policy and Procedures Manual (CPPM)
Accomplished in Month:	 Completion of revisions to the Project Risk Management Plan, approved for use Continued revisions to Project Management Plans Performance Measurement Plan approved for use
Three Month Lookahead:	 Continued revisions to Project Management Plans Implement Project Management Plans Qualitative Risk Review

4.2 Safety

Scope:	 Establish Occupational Health and Safety (OH&S) Project delivery objectives and performance measures. Manage Project OH&S activities. Monitor relevant OH&S performance metrics. Ensure the Project complies with relevant WorkSafeBC regulations and government requirements. Identify specific health and safety roles and responsibilities Outline relevant health and safety management processes and activities
Accomplished in Month:	 Review and comment regarding Kicking Horse Canyon Constructors (KHCC) plans and proposed courses of action including work method statements, inspection and testing plans Update construction phase planning for Provincial oversight Conduct surveillance audits of KHCC safety performance

Implement Province's site surveillance process including orienting Quality Surveillance Technicians in Golden

- Oversight of KHCC onsite project work
- No injuries or lost time this month.

Three Month Lookahead:

- Prepare, review, and implement site specific implementation plans, processes, and flow diagrams, including safety and operational processes
- Prepare for and oversee KHCC's work onsite including implementation of Province staffing, site office supplies, Personal Protective Equipment (PPE), and vehicles
- Review KHCC construction specific plans and proposed courses of action under the review and consent procedure
- Workforce analysis and forecasting for BCIB (ongoing)
- Maintain Province's Safety Management Plan for implementation under Design Build Agreement (DBA) to align with Ministry of Transportation and Infrastructure (MoTI) requirements
- Conduct surveillance audits of KHCC safety management performance
- Manage Field Surveillance Technicians
- Oversee KHCC Project Work onsite for compliance to DBA

4.3 Quality

Scope:

- Establish quality management project objectives and performance measures.
- Monitor relevant quality management performance metrics.
- Manage Project quality management activities.
- Identify specific quality management roles and responsibilities

Accomplished in Month:

- Review and comment regarding KHCC Quality Management Plans (ongoing)
- Conduct surveillance audits of KHCC project work
- Review and comment regarding Kicking Horse Canyon Constructors (KHCC) plans and proposed courses of action including work method statements, inspection, and testing plans

Three Month Lookahead:

- Review KHCC quality specific management plans and provide comments
- Oversee quality of KHCC work onsite
- Record daily observation reports of work on site

4.4 Environmental

Scope:

- Complete environmental reviews of KHCC's submissions
- Support communications team with stakeholder engagement
- Provide environmental support to Project as and when needed

Accomplished in Month:

- Review and comment on KHCC's plan submissions including detailed management plans for the site
- Review and input on KHCC environmental permit submissions
- Site environmental surveillance completed twice during Project construction kickoff

Key Activities for Next 3 Months:

- Support at Stakeholder and Indigenous Group meetings and responding to followup comments and questions, as requested by the Province
- Ongoing review and comment on KHCC's environmental submissions
- Provide environmental support to Project as and when needed
- Site environmental surveillance

4.5 Archaeology

Scope:

- Managing, directing, and undertaking all archaeological work, including Archaeology Impact Assessment (AIA), Systematic Data Recovery (SDR), and archaeological monitoring
- Providing the Province and KHCC with information for the management of archaeological and heritage resources
- Responding to chance archaeological or heritage finds

Accomplished in Month:

- Continued SDR
- Initiated additional AIA
- Continue work towards approval of site alteration permits for archaeological sites in areas required for critical path construction.
- Executing ongoing lithic analysis and ongoing reporting on 2020 AIA and SDR programs
- Reviewed environmental procedure for hand falling

Key Activities for Next 3 Months

- Additional AIA, SDR and potentially additional sites or polygons under 2019-0208 or heritage investigation permit application
- Artifact analysis ongoing in the laboratory (1,500 + artifacts)
- 2020 SDR reporting
- 2020 AIA reporting for south and north portions of Dart Creek Forestry Service Road (FSR) and Winter SDR
- Submission of remaining 2020 site forms updates
- Alteration permit amendment requests

4.6 Operations

Scope:

 Develop plans for managing traffic along the Alternate Route H93/95 during full project closures

Develop an implement plans for enhancements along Arterial Route in Golden to support Alternate Route

• Establish agreements with other jurisdictions for provision of services along the Alternate Route

Accomplished in Month:

- Completed electrical and civil for Alternate Route and Golden enhancements
- Pass system for local commuters during extended closures. Passes ready for distribution in early April 2021
- Construction cameras received in Golden Office Installation sites confirmed installation procurement initiated.
- Alternate Route Signs Post installation by KHCC. KHCC committed to March 2021 installation of Alternate Route Signage.
- Weekly meetings with Parks Canada to identify local commuters for the Extended Closure Pass system. Pass system strategy finalized.

Key Activities for Next 3 Months:

- Construction camera design and installation
- Monitor Alternate Route performance during extended closures
- Monitor traffic management during evening and overnight closures
- Commuter pass distribution

4.7 Design and Construction

Scope:

- Development of a reference concept, technical requirements/specifications, and related technical studies for the Project
- Travel demand forecasting, traffic operations modelling, traffic data collection, and other related engineering services in support of the traffic management regime proposed for the Project
- Technical input to the procurement processes
- Provide technical support to the Project Team during the review of contractor submittals
- Compliance reviews during construction

Accomplished in Month:

- Site visit by Owner's Engineer (OE) Team members for construction kick-off and project walkthrough with CP Rail held in March
- Independent Engineer Consultant (TY Lin) given safety orientations
- Support onboarding of consultant for the slope survey monitoring program
- Completed review of KHCC progress payment submission
- Reviewed comments on OE Workplan for FY2021-22
- Mobilized one additional field staff to Golden
- Provided oversight to first highway closures
- 2 minor landslide events, March 21st & 23rd
- Single Lane Alternating Traffic Closures, 2-hour closures and overnight closures began
- Clearing and Grubbing underway at Cut 3, Dart Creek FSR and Disposal Site

- Access roads/pads for Geotech drilling at Lynx commenced
- Province LiDAR surveys began
- Rockfall fence install at Sheeps Bridge began
- Clearing of CP ditch at track level began

Key Activities for Next 3 Months:

- Participate in implementation activities, review submissions, participate in daily meetings and deal with issues as they arise
- Participate in ongoing weekly meetings with CP Rail
- Participate in communications working group meetings
- Support resolution of key issues including traffic management plan and traffic control plan compliance, and support CP Rail's review of submissions
- Manage the slope survey consultant
- Mobilize two additional field staff to Golden for construction observation and monitoring, in April 2021
- Conduct review of progress payment submissions
- Support risk management and contingency estimate processes

4.8 Community Benefits

Work collaboratively with BC Infrastructure Benefits Inc. (BCIB) to successfully implement the Community Benefits Agreement (CBA) Accomplished in Month Implementation of monthly meetings with BCIB, KHCC, the Allied Infrastructure and Related Construction Council (AIRCC) and the Province Thirty-two (32) BCIB workers on site, and one BCIB permit issued for clearing Continue to grow workforce onsite through BCIB labour and permitted work Continued regular meetings with BCIB and KHCC to discuss implementation of Community Benefit Agreement (CBA) on Kicking Horse Canyon Phase 4 (KHCP4)

4.9 Indigenous Groups

Scope:	 Fulfill Province's duty to consult with identified Indigenous communities Reach accommodation agreements with Indigenous communities through negotiation Facilitate Indigenous community engagement in environment and socio-economic review Develop indigenous requirements for inclusion in DBA Reach accommodation agreements with Indigenous Groups
Accomplished in Month:	 Pespesellkwe te Secepemc (PteS) accommodation agreement was finalized. Meet with Ktunaxa Economic group to discussion DBA and minimum Indigenous Employment Opportunities

• Collaborate with KHCP4 environment team to include Ktunaxa Lands CEMP and appendices comments into KCHP4 response to KHCC

- Accommodation Agreements sent Shuswap Indian Band (SIB) for final approval.
- Received Archaeology program support letters from Indigenous groups
- Met with Ktunaxa Lands Group to discuss Bighorn sheep concerns and continued project participation

Key Activities for Next 3 Months:

- Regular meetings continued to be held with all identified Indigenous Groups, including the Pespesellkwe, Ktunaxa, and Shuswap Indian Band.
- Finalize accommodation agreements (Shuswap Indian Band)
- Continued collaboration with KHCC Indigenous Contracting and Employment Coordinator (ICEC) to ensure Schedule 22 DBA requirements are met
- Continued support with Ktunaxa as per Strategic Engagement Agreement
- Continued collaboration with KHCP4 environment team to ensure Indigenous groups CEMP and appendices comments are included in KHCP4 response to KHCC

4.10 Third Parties

Scope: Develop utilities and rail agreements as required • Secure local and reginal government approvals as required • Province review of KHCC's temporary utilities design completed Accomplished in Month: Provided BC Hydro with Letter of Authority to support approval of temporary utilities • CP Rail Agreement was signed by all parties • Weekly meeting continues with CP Rail and CP Rail/KHCC. At least one meeting per week with CP Rail and one with both CP Rail/KHCC Joint site visit completed for pre-construction condition survey on March 16, 2021 Joint site visit completed for protection measure planning on March 25, 2021 • Review of KHCC utilities designs **Key Activities** for Next 3 Phase 1 temporary utility relocation starting April 2021 Months: Paving for Bulk Water Station proposed for June 2021 Complete clearing of ditches alongside CP Rail track Continue weekly meetings with CP Rail and CP Rail/KHCC

4.11 Public and Stakeholder Engagement

Manage ongoing public and stakeholder communications and engagement Communications strategy and activities Determine communications and community relations for inclusion in the contract

Accomplished in Month:

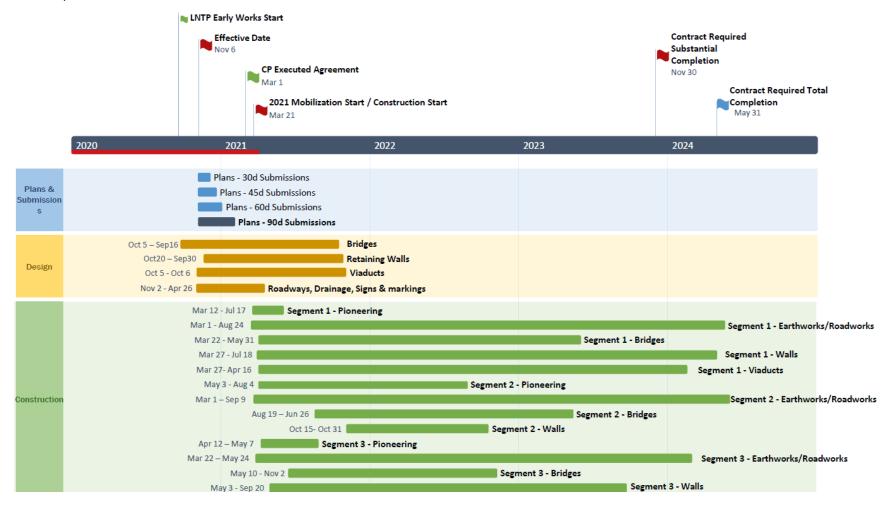
- Completed draft of incident communications plan for internal review
- Completed and deployed commuter pass system for limited access through construction zone during extended highway closures
- Issued second edition of project newsletter
- Successful meetings with key stakeholders including Parks Canada communities and Columbia Valley First Responders
- Prepare and review content to support Government Communication and Public Engagement (GCPE) virtual milestone event in April 2021 to mark start of significant construction

Key Activities for Next 3 Months:

- Oversee Design Builder's Communication and Public Engagement (C/PE) obligations and activities
- Continue to build awareness of construction and traffic management activities with media info bulletins, interviews, website updates, newsletters and advisories, and social media
- Update and continue to implement C/PE plan, including Community Liaison Committee (CLC), British Columbia Trucking Association (BCTA) and other key stakeholder outreach
- Prepare for public information session on KHCC design and traffic management (previously planned to occur in advance of construction)

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 – ROCK FENCE AREA BELOW IMPENDING SHEEP BRIDGE CONSTRUCTION.

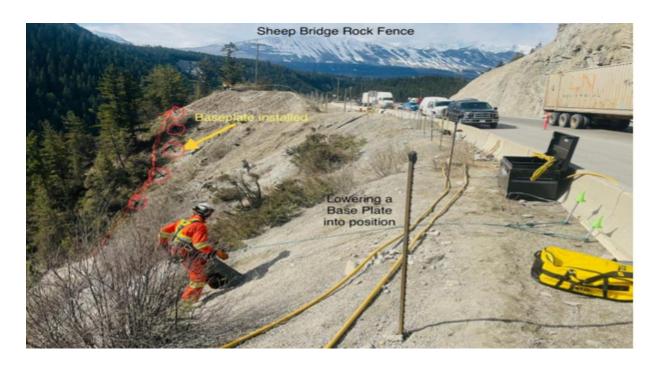


FIGURE 2 – SHEEP BRIDGE POST INSTALLATION OF THE ROCK FENCE



FIGURE 3 –EXCAVATOR CLEARING AND GRUBBING BOULDERS WITHIN THE CARIBOU FILL RIGHT OF WAY.