

May 19, 2020

Kennedy Road Overpass

Technical Fact Sheet

Project overview

The Pitt Meadows Road and Rail Improvement Project aims to eliminate the rail crossings at Harris Road and Kennedy Road intersecting with the CP rail corridor in Pitt Meadows, BC. Information contained within this fact sheet is current as of the date noted and the reader should be aware that VFPA's approach to the project or information within the fact sheet may have evolved since this date. Updated technical documents will be issued as part of the procurement activities. The project is further described on the project webpage, which contains general project information, current as of May 2019: www.portvancouver.com/pittmeadowsroadandrail

Figure 1 – Project location



Funding and project partners include the Government of Canada, the Vancouver Fraser Port Authority (port authority), Canadian Pacific Railway (CP), and the City of Pitt Meadows. The total project value for the Kennedy Road overpass is estimated to be approximately \$50 million.

General arrangement drawings for the Kennedy Road Overpass component of the Pitt Meadows Road and Rail Improvements Project are provided as Attachment 1.

Figure 2 – Project rendering



Procurement strategy and timeline

- The proposed form of contract is anticipated to be Design-Build, with an open Request for Qualifications and a Request for Proposals to three selected proponents. Delivery model selection will not be finalized until the start of procurement.

Milestone	Target Date
RFQ Issuance	Q3/Q4 2020
RFQ Close	Q4 2020/Q1 2021
RFP Issuance	Q4 2020/Q1 2021
RFP Close	Q1/Q2 2021
Notice of Award / Selection of Preferred Proponent	Q2 2021
Construction Start	Q3 2021
Construction Completion	Q4 2023

Possible advanced works

- There are no planned advance works for the Kennedy Road Overpass at this time.

Technical challenges and risks

- **Environmental issues and permits** – The Kennedy Road Overpass project may require an approval under the Agricultural Land Commission (ALC) Act (lands south of the railway at Kennedy Road are in the Agricultural Land Reserve (ALR)) as either a temporary by-pass or a new Kennedy Road alignment may involve impacts to ALR lands. Kennedy Road and local agricultural ditches in the area are potentially fish bearing. A FLNRO WSA Notification is likely required and it is possible that a FLNRO WSA Approval will be required. A DFO request for review is anticipated. No known archaeological sites exist but further investigation studies are planned for the project area.
- **Geotechnical conditions** – Considering the expected high to moderate compressibility of the shallow organic soils and upper silt/clay layer, preload/surcharge may be required to limit the post-construction settlements where granular fill is placed for the approach embankments. The low undrained shear strength of the silt/clay may govern the temporary stability of the embankment fills; hence, construction staging will generally be required. Due to the presence of potentially liquefiable granular material, ground improvement may be required depending on the seismic performance requirements of the proposed structure and approach fills. The use of lightweight fill (EPS, CDF) could be a cost-effective option. Depending on flood level requirements, the lightweight fill may need to be combined with a mineral fill platform to control buoyancy. Pile foundations are expected to be founded on the lower clay/silt layer. Differential settlements between grade-supported and pile structures should be carefully evaluated. The till-like (Vashon Drift) soils are expected to be encountered about 100m deep or more. Attachment 2 provides details of the extent of the ground investigation that have or will be carried out prior to the project RFP.
- **Canadian Pacific** – The proposed structure will cross the CP Rail main line in the Cascade Subdivision, west of the Vancouver Intermodal Facility. Currently there are three tracks, with an estimated 56 freight and 7 West Coast Express commuter train movements per day at the Kennedy Road crossing in 2020, with 24-hour operations. Very limited track closures will be permitted; however, the availability of closures will be agreed with CP and defined within the RFP documents.
- **Utilities** – The contractor may be responsible for temporarily diverting utilities during construction. There are several utilities within the existing Kennedy Road, which could be diverted or protected by the contractor during construction. We do not anticipate any advance works for the utilities at Kennedy Road.
- **Design reviews** – The port authority, the City of Pitt Meadows and CP will all have significant roles in reviewing and accepting the contractor's designs. The resulting review process will likely be more complex, and longer than for a typical design-build project that may have only one or two parties reviewing submissions. The Contractor's schedule will need to allow for additional complexity in the review process and additional time in the schedule for design reviews.