

Fraser River Tunnel Project

Project Overview



This image is a conceptual rendering for illustrative purposes only.



Background

The Ministry of Transportation and Infrastructure (the Ministry) has received approval of its business case to replace the George Massey Tunnel with a new eight lane, toll-free tunnel that includes an active transportation crossing for the first time.

The existing tunnel is a four-lane vehicular traffic immersed tube tunnel (ITT) below the Fraser River on Highway 99 within the Metro Vancouver region of British Columbia. It is an essential link in a corridor of regional, provincial and national importance. In addition to connecting communities south and north of the Fraser River, the corridor provides a connection to the international transportation gateways of the region's port and airport facilities.

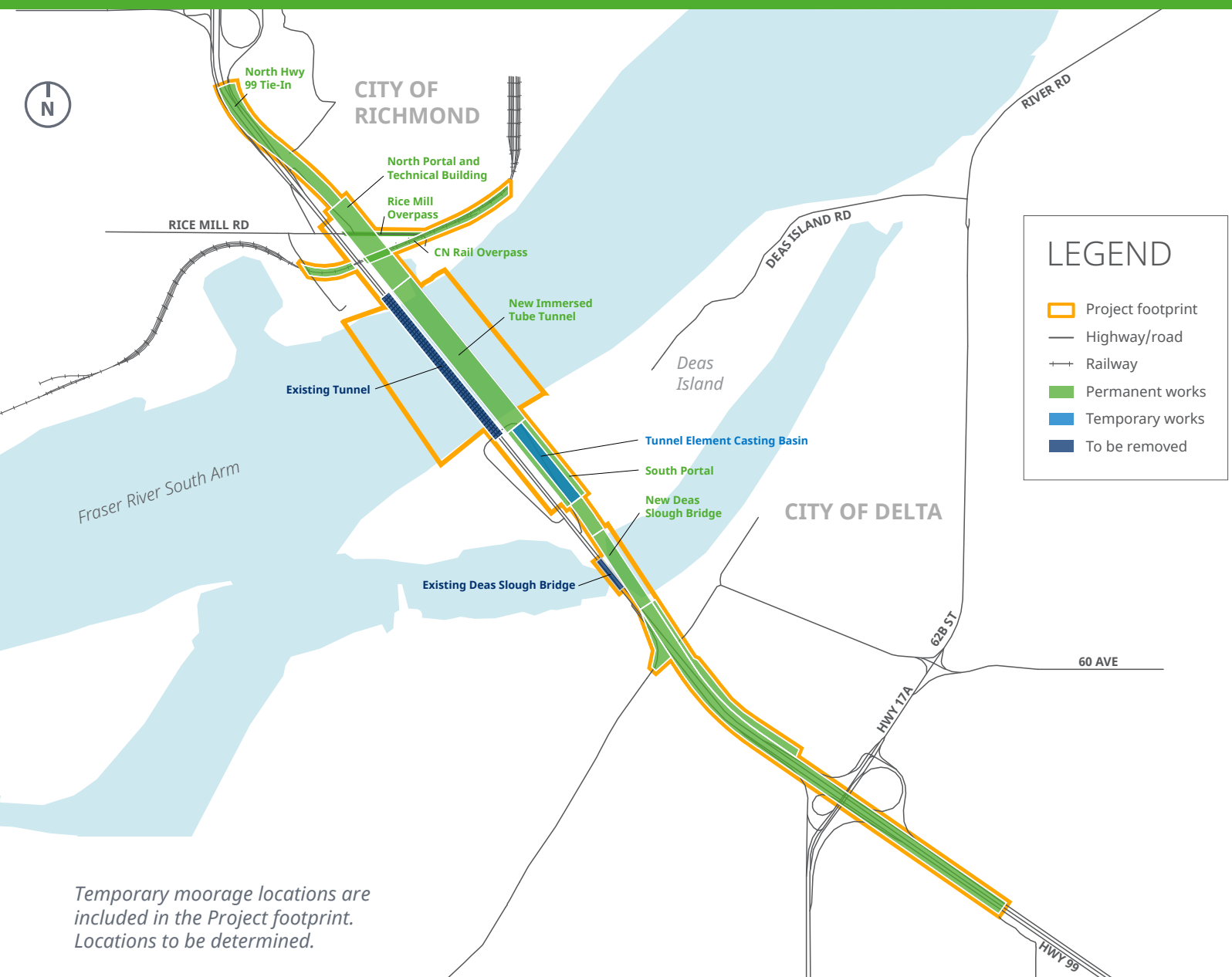
Now more than 60 years old, the existing tunnel suffers from traffic congestion and reliability challenges, particularly reflected in traffic delays and queues in the non-peak direction, and safety challenges related to the congestion, as well as seismic performance and roadway clearances.

Project Description

The Highway 99 Tunnel Program (the Program), of which the new ITT and related scope elements (collectively, the Fraser River Tunnel Project or the "Project") will form part, is estimated to cost \$4.15 billion.

The Program includes the Fraser River Tunnel Project, the new Steveston Interchange Project, the Bridgeport Road bus connection, Highway 99 and 17A off-ramp widening and bus-on-shoulder lanes on Highway 99.

The Fraser River Tunnel Project is headlined by the new eight-lane ITT, which will replace the existing George Massey Tunnel, providing people with a toll-free crossing that aligns with regional interests. The Project will be designed to modern standards for seismic performance and vehicle clearances and will also include a separated active transportation corridor for pedestrians and cyclists. The Project is planned to be open to the public in 2030.



Overview of Scope of Work

The Project will involve the design and construction of temporary works for the casting and management of tunnel elements, permanent works in the form of new infrastructure in the alignment to be connected north and south of the Fraser River to Highway 99, and the decommissioning, removal and disposal of the existing tunnel and associated infrastructure.

Key scope elements include the following:

- > Temporary casting facility
- > Temporary ITT element moorage area(s)
- > Temporary outfitting jetty
- > Fabrication of ITT elements
- > Ground improvements and dredging
- > Immersion and outfitting of the ITT elements
- > Replacement of the Deas Slough Bridge
- > Construction of a south-bound lane from Steveston Highway Interchange
- > Connection to the Highway 99 corridor
- > Removal of the existing George Massey Tunnel and the existing Deas Slough Bridge

Project Considerations

There are several unique considerations that will impact contractor approaches to carrying out the project works.

These include:

- > A project site that is constrained by its right of way and proximity to existing infrastructure (e.g., existing George Massey Tunnel, utilities and active railways)
- > Busy marine traffic corridor and challenging marine logistics
- > Limited in-water construction windows
- > Environmental sensitivity of dredging and in-water work

Delivery

The Project will be delivered by the Ministry and TI Corp.

TI Corp is a wholly owned subsidiary of the BC Transportation Financing Authority (BCTFA), the Provincial owner of the transportation assets. Procurement of the Project will be managed by Infrastructure BC.

Procurement Model

The Project will be procured using a design-build-finance (DBF) approach, with specific narrow provisions to allow for pricing and financing to be finalized after Project work commences.

The Project requires an Environmental Assessment Certificate (EAC) from the BC Environmental Assessment Office (EAO). To achieve an expedited construction schedule, the Ministry intends to engage the successful proponent to commence design, permitting and other early-stage activities prior to issuance of the EAC. Once the EAC is received, the contract price will be finalized, private financing secured and the project agreement executed.

Financing and Payments

The Project scope will include partial private financing, invested early during design and construction, and repaid through completion payments at substantial completion.

The Province anticipates making partial payments until the full amount of private finance is invested, followed by full construction period payments until substantial completion milestones are reached.



The Opportunity

This Project provides an attractive opportunity for Canadian and international contractors to form an experienced, highly qualified, multi-disciplinary team to deliver this work.

Replacement of the existing George Massey Tunnel with a new, modern ITT addresses a priority need for the region. The Province is committed to funding and delivering the Project with broad regional support from Metro Vancouver municipalities, Indigenous groups and the public. The successful team will be selected through a collaborative competitive selection process and will benefit from access to a skilled and experienced local workforce.

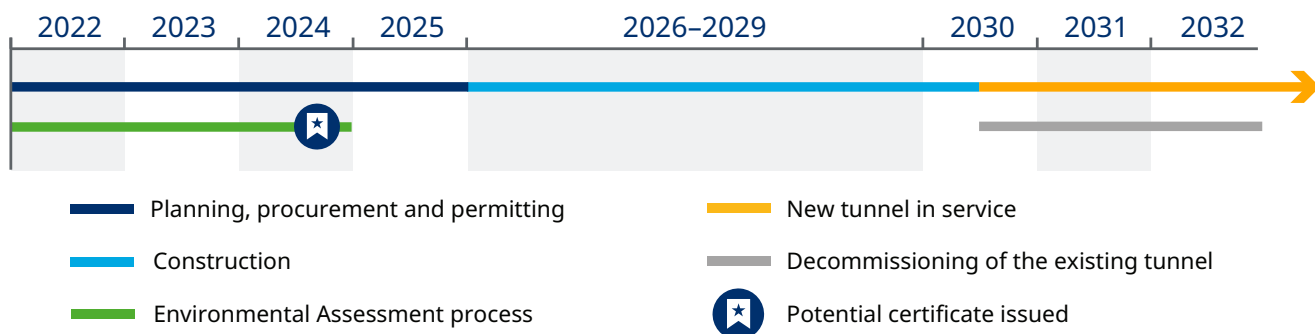
Contractor Areas of Expertise

The opportunity requires expertise in the following key project activities:

- > Tunnel element fabrication and immersion
- > Marine construction
- > Dredging
- > Large scale geotechnical works
- > Concrete basin construction and decommissioning
- > Highway and bridge construction
- > Existing George Massey ITT decommissioning

Anticipated Project Schedule

FRASER RIVER TUNNEL PROJECT



- > The Province has begun the EA planning and permitting process.
- > Request for Qualifications (RFQ) issuance is planned for early 2023 with a proponent shortlist expected by Summer 2023.
- > The Request for Proposals (RFP) is planned for issuance in Summer 2023, with a preferred proponent expected to be selected and a contract awarded in 2024.
- > The provincial environmental assessment is anticipated to be complete in 2024. Permitting is anticipated to be complete within one year following receipt of the EAC.
- > Construction works are anticipated to commence in 2026, with the design of the new ITT continuing following the award and opening scheduled by Q2 2030.
- > Decommissioning of the existing George Massey Tunnel will occur between 2030 and 2032.





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RECOGNITION OF TRADITIONAL TERRITORIES

The Province of BC acknowledges that the Fraser River Tunnel Project is located on Coast Salish traditional lands.