

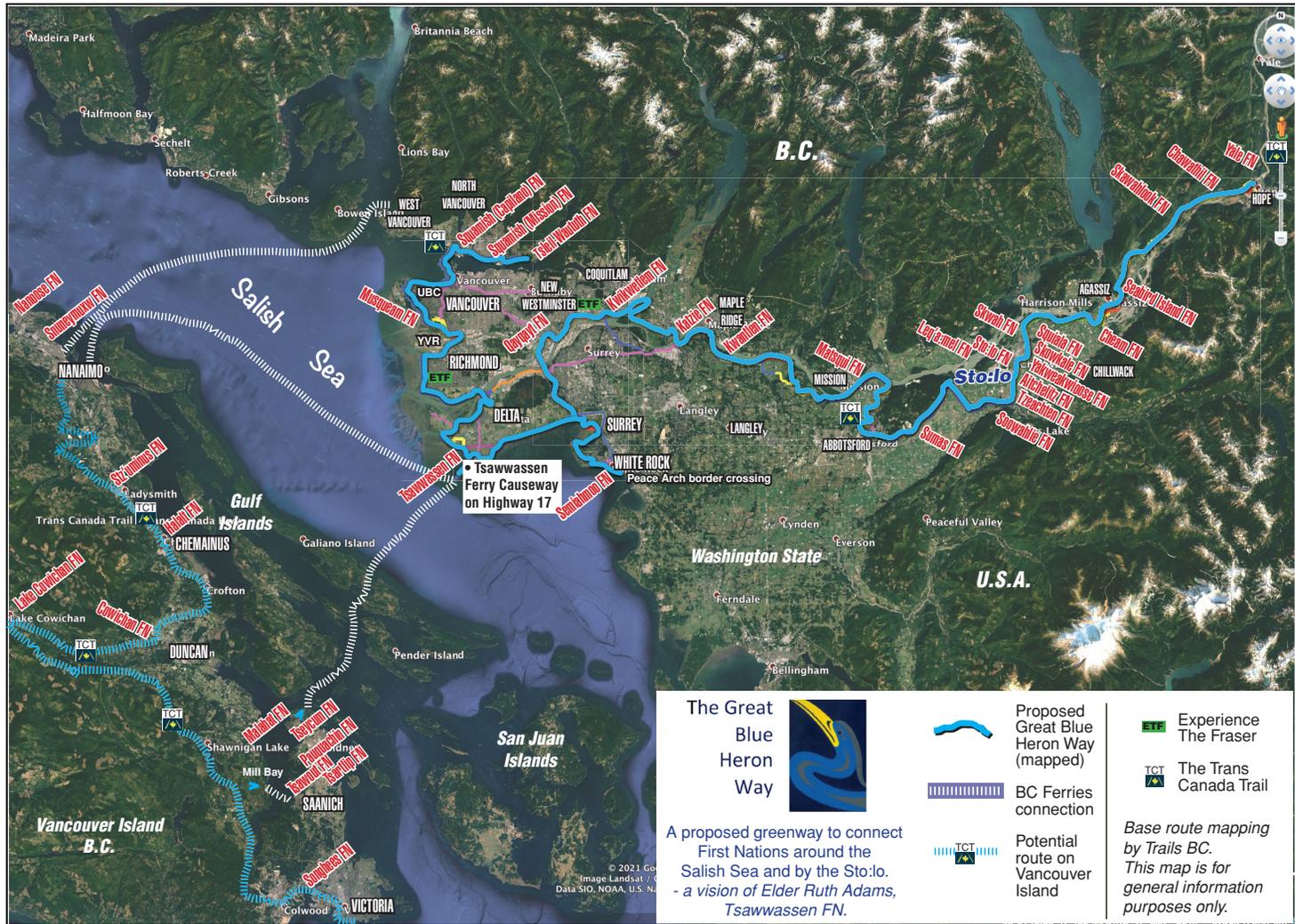
Business Case presented by the Great Blue Heron Way, a non-government organization, for the inclusion of improved Active Transportation infrastructure on Highway 17 from Tsawwassen Dr to the Tsawwassen Ferry.

Prepared May 2021 by D.Grigg, Infrastructure Planner for the GBHW.

Executive Summary

This business case presented is for Active Transportation improvements along Highway 17 between Tsawwassen Drive and the Tsawwassen Ferry Terminal. A following business case will look at Tsawwassen Drive to 52 St.

The Great Blue Heron Way is the vision of Elder Ruth Adams, to connect First Nation communities and welcome all users, to safely walk and wheel on a cultural education pathway around the Salish Sea as close to wildlife habitat as is possible. The host nation is Tsawwassen First Nation (TFN) located where the four directions of the Great Blue Heron Way (GBHW) take travellers west along the ferry causeway to Vancouver Island, east to the Fraser Valley and BC Interior, north along the Salish Sea coast and south to the Peace Arch border crossing into the U.S.



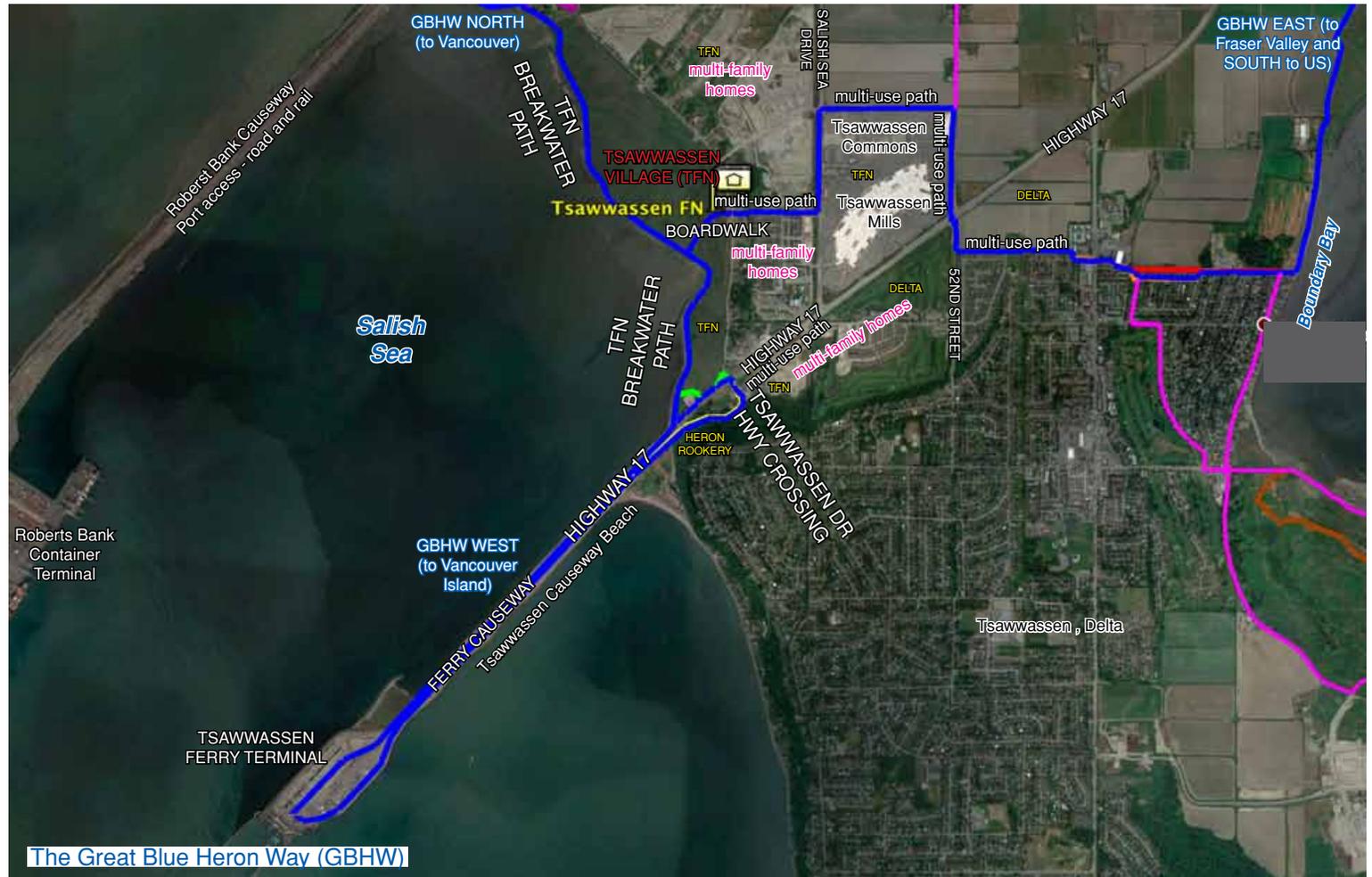
The meeting of the four directions of the GBHW is where this business case is located. Safe greenway access along the ferry causeway and across Highway 17 is required to connect existing multi-use pathways through TFN and Delta, the TFN Breakwater Path and the BC Government-funded Boardwalk (opened in 2016) that was intended to safely connect homes, businesses and the Tsawwassen Ferry terminal.

The GBHW team includes Trails BC, to help ensure the most appropriate links into existing and proposed trail networks in BC and across Canada, including the Trans Canada Trail southern route through the Gulf Islands, part of the Tsawwassen First Nation Traditional Territories.

Project Identification

The project is to improve both walking and cycling infrastructure adjacent to, and crossing of, Highway 17 between the Tsawwassen Drive intersection and the Tsawwassen Ferry Terminal facilities at the end of the causeway. The project request does not include cycling infrastructure, such as signage and green cycle pathway painting, inside the terminal area.

The causeway road pavement, along the 60 kph speed limit western half, is illuminated by high Cobra head overhead lamps. There is no lighting along the 80kph speed limit eastern half of the causeway.



This map shows how the Great Blue Heron Way route (plotted by Trails BC) takes advantage of built multi-use trails away from Highway 17 — helpful for visitors, workers, and local established and new residents of Tsawwassen First Nation and Delta to access services and natural areas. Safe highway crossings are required.

Project Definition



The project covers the causeway roadside infrastructure for Active Transportation from the Tsawwassen Drive intersection to the ferry terminal. The existing Active Transportation infrastructure on Highway 17 is, at best, minimalist (photo north side of causeway looking towards ferry terminal, May 29, 2021). Only paint lines separate fast traffic from narrow bike lanes and the footpaths on the foreshore side of the concrete safety barriers are generally rudimentary (a sparse stone path in this location).

The posted speed limit is 80kph for the eastern (head end) of the causeway. The western, terminal approach is posted at 60kph. However, likely there is a high percentage of posted speed limit exceedance. This, unsubstantiated observation, is based on anecdotal evidence of drivers, having experienced tunnel congestion, attempting to make up for the lost time to meet scheduled ferry sailing times. Reinforcing this observation is a large overhead “Observe the Speed limits” sign at the entry to the causeway -which is somewhat uncharacteristic of provincially designated road signage and perhaps indicative of a MoTI acknowledgement of the need to slow traffic. For cyclists, alongside this fast traffic flow, the reduced sense of safety is an inhibiting factor in embracing Active Transportation modes.



On the south side of the causeway, the current variable width asphalt path on the foreshore side of the concrete barriers could potentially serve as a Multi-Use Path but is in need of maintenance and is partially obstructed by the overhead Cobra lamp bases. The asphalt path disappears halfway along the causeway and is replaced by a rough gravel head end section. For walking and cycling visitors the below par experience at the head end of the causeway is well matched by the tardy approach to the roadside pull in and Tourist Map Board. The approach could so easily be made very welcoming. (photos on left, May 29, 2021).



On the north side of the causeway the exterior walking path doesn't meet any standards. Between Tsawwassen Drive and the TFN Breakwater Path a gravel and dirt service road skirts between Highway 17 and the BC Hydro Sub-station. It is potholed and features at least two deep, often waterlogged, depressions. (far left looking east to Tsawwassen Drive) The second photo shows a trail skirting the north side of the sub-station to meet the TFN Breakwater Path, it's often muddy.

By glaring contrast, on the Island side, from the Swartz Bay Terminal, there is excellent access to the safe bike Lochside and Galloping Goose Trails.



As this screenshot (left) demonstrates -there is no protection for cyclists from fast traffic on either side of the causeway.

Pedestrians who elect the shoreline side of the concrete protection barriers must negotiate an unforgivingly and uneven narrow pathway.

Definitely not a Triple-A standard and because of the lack of eastern end lighting is unusable in the darker winter months. Bus service is available for those that are dependent on public transit. The bus headway is generally 40 mins. No bus shelters are provided along Highway 17.



The terminus of TFN Breakwater Path at Highway 17 head of causeway, north side.

Options

Three options are immediately apparent.

Option 1.

A one-way multi-use path (MUP) on the **north and south** sides of the causeway *supplemented* by a short two way MUP from the Tsawwassen Drive/Hwy17 intersection to the Tsawwassen First Nation (TFN) northside breakwater.

Option 2.

A two-way MUP on the **north side** of the causeway from the Tsawwassen Drive /Hwy 17 intersection to the ferry terminal.

Option 3.

A two-way MUP on the **south side** of the causeway from the Tsawwassen Drive / Hwy 17 intersection to the ferry terminal *supplemented* by a short two way MUP from the Tsawwassen Drive/Hwy17 intersection to the Tsawwassen First Nation (TFN) northside breakwater path.

Evaluation of options

There is little significance in terms of one option being safer than the others. There is little to no risk outside normal construction traffic management. The evaluation really comes down to one of efficiency of cost.

A single-width multi-use path on both sides is very likely to cost more than a multi-use path (MUP) on one side for the following reasons-

1. The aggregate width of two single MUPs will be greater than one double-width, say 2 x 3m paths compared with 1x 5m MUP. If pedestrian scale lighting is considered for the eastern end of the causeway then lighting on only one side only of the causeway is clearly a lower cost than lighting both sides.
2. The north side foreshore, immediately adjacent to the existing concrete barrier external footpath, is more rocky and irregular than that of the south side where for much of the causeway's length a sandy trail has been created to provide access to Tsawwassen Beach parking. The Tsawwassen Beach parking area also affords a very convenient truck turnaround and, with the creation of a gap in the concrete barrier, aids a return of construction vehicles eastwards. This potentially cost-saving feature is not possible on the north side and all construction vehicles will be required to return to Hwy 17 eastbound via the busy ferry terminal.
3. All options require safe crossing infrastructure of Highway 17 at Tsawwassen Drive to link to existing multi-use paths.

Preference

The marginal preference is for a double-width path on the south side for its potentially lower cost that, in turn, may lead to earlier successful project financing. Additionally, the sharing of the off-road foreshore area with others accessing Tsawwassen Beach will enhance the sense of personal security given that the area is somewhat remote from public "eyes on the street".

Recommendations

The recommendations are -

1. That a survey along the south shoreline be undertaken ASAP to confirm the assumptions made re foreshore topography.
2. That a draft concept be circulated with key stakeholders such as BC Ferries, TransLink, BC Tourism, BC Cycling Coalition, HUB Cycling, the City of Delta and the Tsawwassen First Nation.
3. That MoTI undertake a review of the posted speed limit from 52nd St to the Ferry Terminal with an objective of how the posted speed can be made consistent with the community desire for a safer urban environment for residents living on both sides of the highway. There is now a great number of family-orientated homes and workplaces with the development of the Tsawwassen First Nation Lands on both the north and south side of Highway 17. The only speed reduction currently is signage stating '50 km/hr when children are on the highway'.

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