CITY OF BRANTFORD

THREE GRAND RIVER CROSSINGS

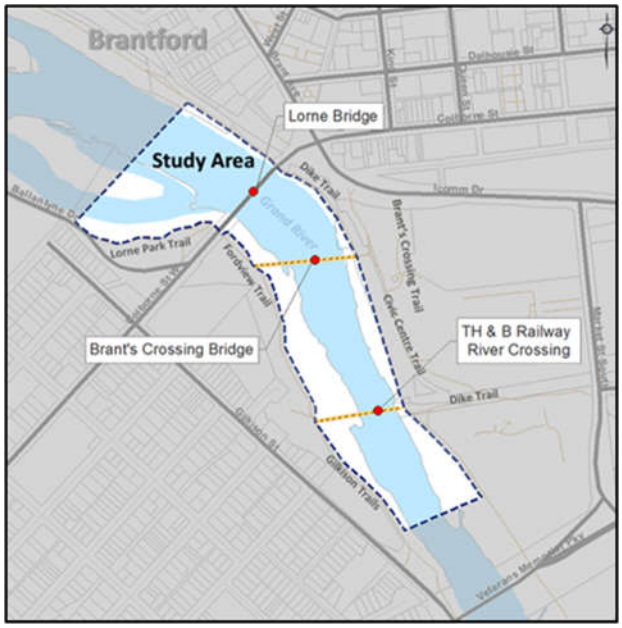
MUNICIPAL CLASS EA

VIRTUAL PUBLIC INFORMATION CENTRE (PIC) 2

FREQUENTLY ASKED QUESTIONS (FAQ) DOCUMENT

FIRST POSTED ON APRIL 22, 2021

1. INTRODUCTION



In March 2020, the City of Brantford initiated a Schedule 'B' Municipal Class Environmental Assessment (EA) for three crossings over the Grand River, including the Lorne Bridge, Brant's Crossing Bridge and the TH&B Crossing Bridge. The study encompasses an area approximately 175 metres wide starting 200 metres north of Lorne Bridge to 200 metres south of the TH&B Crossing Bridge along the Grand River. The study is intended to identify the short and long-term plans for the three Grand River Crossings. The first Virtual Public Information Centre (PIC) was held between May and July 2020. PIC #1 provided an overview of the project, including the EA process, alternative solutions being considered and criteria that would be used to evaluate the alternatives. A Frequently Asked Questions document was posted to the City's project webpage following the conclusion of the PIC# 1 process.

Presentation slides for PIC #2 were posted to the project webpage on March 18th, 2021. A live presentation for PIC #2 was hosted virtually on April 1st, 2021. PIC #2 presented the existing conditions, evaluation of alternative solutions and the recommended solution.

All documents presented during PIC #1 and PIC #2 can be accessed at:

www.brantford.ca/ThreeGrandRiverCrossings

As detailed during PIC #2, the recommended Overall Crossing Strategy includes the following recommendations for each crossing:

- **Lorne Bridge:** Rehabilitate
- **Brant's Crossing Bridge:** Replace and Raise
- **TH&B Crossing Bridge:** Rehabilitate and Remove at End of Useful Life

This document provides a consolidated question and answer list for comments submitted to the Project Team throughout the PIC #2 process. To understand the background of the Three Grand River Crossings Municipal Class Environmental Assessment, it is suggested that you review the material presented during PIC #1 and PIC #1 prior to reviewing this document.

2. FREQUENTLY ASKED QUESTIONS

Several questions and comments have been submitted to the Project Team throughout the second Virtual Public Information Centre process. The questions and comments received up to April 15th, 2021 have been responded to in the section below.

2.1 How were impacts to the natural environment considered during this study?

As part of this Environmental Assessment (EA), a Natural Environment Report was prepared to investigate vegetation, wetlands and significant valleys, wildlife and wildlife habitats, threatened and endangered species, and fish and fish habitat within the Study Area. The report also details possible impacts to the natural environment based on the alternative solutions being considered as well as recommended mitigation measures. Overall, impacts to the natural environment for the recommended solution are anticipated to be temporary and can be mitigated. The details on the mitigation measures for the recommended solution will be prepared following completion of this EA, during the design phase, which will include obtaining permits from regulatory agencies such as the Grand River Conservation Authority, Departments of Fisheries and Oceans and the Ministry of Natural Resources and Forestry.

2.2 How was the long-term vision for the City of Brantford considered during this study, including impacts to the social environment?

This EA supports the long-term vision for the City of Brantford as described in the City's Official Plan and the Transportation Master Plan. These Plans, in turn, align with Provincial policies and legislations regarding land use and growth planning. This EA study considers heritage value and use by the public, both in the interim and in the longer term. This information, in addition to other factors such as technical viability and potential environmental impacts, was used to evaluate alternatives for each crossing and to evaluate overall crossing strategies to identify a Recommended Solution.

2.3 How does this study consider the broader transportation network within the City of Brantford?

The main goal of this EA was to primarily assess the deteriorating condition and age-related concerns of the crossings. Additionally, this study examined alternative solutions to maintain or improve the pedestrian, cyclist, and vehicular connectivity needs and to accommodate the growth of Brantford identified in the City's Official Plan and Transportation Master Plan (TMP). Recommendations for the City-wide road, transit and active transportation network and other measures to address the future growth demands (such as the Oak Park Road extension) are contained within the TMP. This EA incorporates the analysis and evaluations undertaken in the TMP. The requirements for the City-wide transportation network are beyond the scope of this study.

In evaluating the alternatives to improve the active transportation connectivity in this area the option to widen the Lorne Bridge was explored, but not carried forward as the recommended approach due to the negative social and economic impacts. Also, the existing road network and bridge are considered to currently operate within acceptable levels of service.

2.4 Why was the bridge downstream of the Study Area at Veteran's Memorial Parkway not included in this EA?

The EA specifically looks at the three bridges that were identified in structural investigations as needing repairs. The Veteran's Memorial Parkway bridge was not included in this study as it was not identified as having the same structural deterioration as the other three bridges included in this EA.

2.5 There are concerns with the existing cycling facilities on Lorne Bridge. Can Lorne Bridge accommodate dedicated cycling lanes without reducing vehicular capacity?

The bridge deck was widened during the construction works in the 1980's and cannot be further widened. Adding dedicated cycling lanes to the bridge would come at the expense of reduced vehicular capacity.

2.6 There are concerns with the existing shared-use trail under Lorne Bridge, on the east riverbank. Will the trail be improved or realigned?

Trail alignment and connectivity is being investigated by the City of Brantford, outside of this Class EA. For questions related to the trail, please contact the City of Brantford.

2.7 Will pedestrian and cyclist connectivity within the study area be maintained following the implementation of the recommended Overall Crossing Strategy?

The recommended Overall Crossing Strategy would provide for vehicle isolated, accessible and convenient crossing for both pedestrians and cyclists at the current Brant's Crossing Bridge location. The replacement bridge would allow for a wider deck, similar to the width of the TH&B Crossing Bridge, that would allow cyclists space to ride across the bridge. The recommended Overall Crossing Strategy also proposes minor repairs to TH&B Crossing Bridge in the interim which will provide the cyclist facilities over the Grand River and ensure a connection is available until Brant's Crossing Bridge is reopened. Additionally, the existing sidewalks on either side of Lorne Bridge will be maintained following its rehabilitation.

2.8 Can the condition of the wood deck on the TH&B Bridge Crossing be improved?

The rehabilitation of the TH&B Crossing Bridge will include a full replacement of the existing wood deck. A variety of materials for the new deck could be explored during the detailed design phase.

2.9 The side walls of the TH&B Crossing Bridge are tall and difficult to see over as you travel across the bridge. Is it possible to lower these walls to provide a more accessible view of the area?

The recommended solution for the TH&B Crossing Bridge is to complete minor repairs to the structure, and eventually remove the structure at the end of its useful life. As the walls of this bridge are the structural element of the bridge, they cannot be opened up to provide better views; however, it may be possible to slightly raise the existing bridge deck so that users could more easily see above of these walls.

2.10 When will Brant's Crossing Bridge be re-opened?

A minor rehabilitation is required to reopen the Brant's Crossing Bridge in the short term. However, a major rehabilitation is required in order to have the bridge remain open beyond approximately 3 to 5 years. A major rehabilitation would be required to keep the crossing open for somewhere between 15 to 30 years. After that, it is expected that repairs would become ineffective and replacement would be required.

Should the recommend solution of replacing and raising the Brant's Crossing Bridge be endorsed by Council, the City of Brantford would determine if fast tracking the currently recommend replacement alternative would be more desirable than completing minor repairs that would have limited to no benefit for the new structure.

2.11 What will the Brant's Crossing Bridge look like following its replacement?

The replacement of the Brant's Crossing Bridge would include the removal of existing steel superstructure and major repairs to the concrete substructure, including adding additional height to account for flooding impacts. A new steel superstructure would then be installed on the repaired foundation. For the purposes of this study, a prefabricated steel truss has been considered as the replacement superstructure and would be somewhat similar to the existing truss structure. A staircase and ramp may be required at the east and west approaches to the bridge to provide access to the raised structure. The geometry and aesthetics of the crossing would be evaluated during the design phase of the project, following the completion of this EA.

2.12 What is the history of water or ice levels rising to the underside of the Brant's and TH&B Crossing Bridges?

According to records back to 1965, river water gauges indicated that in February of 1996 and February 2018 the underside of the bridges were submerged. Additionally, an event in February 1984 was very close to or may actually have risen to the undersides of the bridges.

2.13 What is a 100-year return period event (or 100-year storm or 100-year flood)? Do they occur only once in 100 years?

A return period represents the likelihood of a storm event occurring, in any given year. A 100-year return period event has a 1 in 100 chance of occurring, regardless of what happened in the previous year.

An example would be the chance of pulling the single red jellybean from jar of white jellybeans. The number of total jellybeans in the jar is equal to the return period event referenced. i.e., for a 100-year storm there would be 100 jellybeans in the jar.

2.14 What are the impacts of ice jams and flooding events on each of the crossings?

A Hydraulic Impact Study was completed to review the flood behaviour of the Grand River in the vicinity of the three existing bridge crossings and to identify opportunities to enhance hydraulic function of each crossing.

The Lorne Bridge meets hydraulic evaluation criteria under both 100-year return period for open water flow and ice jam events. No hydraulic improvement opportunities were present. Both Brant's Crossing and TH&B Crossing Bridges are acceptable under 10-year return period open flow events, but not under ice jam conditions.

As part of the recommended Overall Crossing Strategy, Brant's Crossing Bridge will be replaced and raised to reduce the risk of flooding impacts at the crossing to less that 1% in any given year. The TH&B Crossing Bridge will eventually be removed at the end of its useful life, at which point risks associated with flooding impacts will be eliminated at the crossing.

2.15 How was the cultural heritage environment considered during this study?

As part of this Environmental Assessment (EA), a Cultural Heritage Evaluation Report (CHER) was completed, which identified all three bridges as retaining cultural heritage attributes. A Heritage Impact Assessment is being completed to identify appropriate mitigation measures based on the recommended Overall Crossing Strategy.

2.16 What is the cost of this EA?

The current expected cost of the assessment is approximately $470,000. The EA is required based on provincial legislation prior to completing any major rehabilitative work on the bridges.