



CITY OF BRANTFORD

THREE GRAND RIVER CROSSINGS MUNICIPAL CLASS EA

**May 27, 2020 & June 17, 2020 – Virtual Public Information Centre (PIC) 1
Transcript of Overview Presentation
First Posted on May 27, 2020**

This document provides documentation of the verbal content of the Virtual PIC 1 first posted on May 27, 2020. Each section starts with an indication of a slide number followed by a time stamp. The time stamp may be used to advance the video to sections of greater interest.

Slide 1 – Introduction - 00:0:00,00

Welcome to the Virtual Public Information Centre for the Three Grand River Crossings Municipal Class Environmental Assessment.

I will be presenting on behalf of GM BluePlan Engineering Limited, the consulting firm selected by the City of Brantford to assist with this project.

Slide 2 – Project Overview and Background - 00:0:15,00

The City of Brantford has initiated this Municipal Class Environmental Assessment, or MCEA for short, to review alternatives for three bridges over the Grand River, including the Lorne Bridge, Brant's Crossing Bridge and the TH&B Crossing Bridge.

The Lorne Bridge is located to the north of the study area on Colborne Street West. Brant's Crossing Bridge is located approximately 150 meters south of Lorne Bridge and TH&B Crossing Bridge is located approximately 275 meters south of Brant's Crossing Bridge.

The proposed study area extends 200 m up and downstream of the bridges and to the top of the adjacent river banks.

The purpose of this Public Information Centre, or PIC for short, is to introduce the study to stakeholders and the public, and offer an opportunity for interested parties to review and provide comments to the Project Team.

Slide 3 – Municipal Class Environment Process - 00:1:07,00

The Three Grand River Crossings study is being undertaken as a Schedule “B” Municipal Class Environmental Assessment, which is a two phase planning process under the Ontario Environmental Assessment Act.

The primary goal of the study is to minimize, mitigate, and avoid impacts on the community and surrounding environment.

Phase 1 of the process is to identify the problem and opportunity. As part of Phase 1, the Notice of Study Commencement was issued to stakeholders and the public on March 5th, 2020.

Phase 2 of the process involves “Alternative Solutions”. The first step is to develop alternative solutions to the problem and/or opportunity. We are currently at the second step in the process, Public Information Centre #1 (PIC).

Following this PIC, there will be an inventory of the natural, social, technical and economic environments. Next, alternative solutions will be evaluated and recommended solutions will be identified. The recommended solutions will then be presented at a second Public Information Centre.

Following the second PIC a preferred solution will be selected, at which point the project team will review and confirm the choice of schedule for the Municipal Class Environmental Assessment.

Slide 4 – Key Objectives - 00:2:15,00

This study was initiated with the following key objectives: Consider a reasonable range of appropriately planned potential solutions; Consider impacts to all aspects of the environment including social, natural, technical and economic environments;

Select a preferred solution through a transparent decision-making process; and, encourage public participation throughout the process.

Pictured below are elevation views of the Lorne Bridge, Brant’s Crossing Bridge and TH&B Crossing Bridge. The following slides will provide an overview and background of the Three Grand River Crossings, starting with the Lorne Bridge.

Slide 5 – Lorne Bridge - 00:2:52,00

The Lorne Bridge consists of three unique structures: the Lorne Arch Bridge, Girder Bridge and Pedestrian Underpass, all of which are pictured below, and are each shown at the bottom of this slide.

The Lorne Arch Bridge consists of three concrete spandrel arches spanning the Grand River. The original structure was built in 1924 and has undergone several rehabilitations.

The Lorne Girder Bridge is immediately east of the Lorne Arch Bridge and is comprised of a multiple single span precast, prestressed box girders that span a former railway corridor.

The Lorne Bridge Pedestrian Underpass is immediately west of Lorne Arch Bridge and is a single span precast, concrete box culvert. The structure serves as an underpass at Lorne Park for pedestrian and cyclists to travel under Colborne Street West.

Slide 6 – Lorne Bridge - 00:3:40,00

The Lorne Bridge currently carries five lanes of traffic on Colborne Street West, with sidewalks on the north and south sides of the bridge.

Currently there are no formal cycle lane pavement markings in the roadway and cyclists typically share the sidewalk with pedestrians.

The bridge has a 30 tonne load limit in the winter; and, the original structure was built in 1924, and the bridge has been identified as requiring major structural repairs to maintain the crossing.

Specifically, concrete throughout the structure is deteriorating. An example of typical concrete deterioration on the Lorne Bridge is shown in the first photograph to the right. Additionally, cracking on the concrete spandrel arches is shown in the second photograph on right.

Photographs at the bottom of the slide show overall views of the Lorne Bridge, including elevation views and a view of the roadway over the bridge.

Slide 7 – Brant's Crossing Bridge - 00:4:31,00

Brant's Crossing Bridge is a four span bridge that was originally designed to convey railway traffic and has been converted to carry pedestrian and cyclist traffic across the Grand River.

The bridge was closed in February 2018 following a flooding and ice jam event. A structural investigation took place following the flooding event and it was recommended that the City of Brantford keep the bridge closed until the necessary repairs can take place to ensure its safe use by the public.

Photographs to the right of the slide show the damage that was caused by the 2018 ice jamming. The water and ice came up to the underside of the bridge. The second

photograph on the right shows the deflection of an anchor bolt on the bearings of the bridge, a result of the ice jamming.

Photographs at the bottom of the slide show overall views of Brant's Crossing Bridge, including elevation views and a view of the walkway over the bridge.

Slide 8 – Structural Deficiencies of Brant's Crossing Bridge - 00:5:25,00

This slide shows photographs of the structural deficiencies that can be found throughout Brant's Crossing Bridge. The top left photograph shows deterioration of the concrete abutment.

The top middle photograph shows one of the seized roller bearings. The bridge relies on these bearing to expand and contract and these bearings are no longer functioning as intended.

The top right photograph shows severe corrosion on one the bridge girders. The girder has begun to wear away; however, a complete hole through the girder has not yet developed.

The three bottom photos show holes, or complete section loss, in various members of the structure. Complete section loss is an advancement of the corrosion depicted in the top right photo.

Slide 9 – TH&B Crossing Bridge - 00:6:08,00

The TH&B Crossing Bridge currently carries pedestrian and cyclist traffic over the Grand River. The bridge was temporarily closed following the February 2018 flooding and ice jam event. The bridge was reopened following structural investigations but was identified as requiring structural repairs in the near future to maintain the existing crossing.

The timber deck of the bridge is not capable of supporting the City's desired maintenance equipment. The first photograph on the right shows deterioration on the concrete abutment. The second photo on the right shows a deformation of one of the steel piers of the bridge. It should be noted that the deformation of this pier was present prior to the 2018 flooding event.

Photographs at the bottom of the slide show overall views of TH&B Bridge Crossing, including elevation views and a view of the walkway over the bridge.

Slide 10 – 2018 Grand River Flooding and Ice Jam Event - 00:6:58,00

On February 21, 2018 the Grand River experienced ice jamming and high flows in the vicinity of the Three Grand River Crossings. Water levels in the Grand River rose to the underside of the TH&B and Brant crossings.

Several bridges in the City were closed on the day of the event, including the Three Grand River Crossings. The Lorne Bridge and the TH&B Crossing Bridge have since been reopened while Brant's Crossing Bridge has remained closed.

The flooding and ice jam event prompted detailed structural investigations of the Brant's Crossing Bridge and the TH&B Crossing Bridge which took place in the summer of 2018.

Photos at the bottom of the slide show the height of the water, ice and debris at each of the crossings on the day of the event.

Slide 11 – Problem/Opportunity Statement - 00:7:42,00

The problem identified for this study is that structural investigations have identified the need for structural repairs to each of the Three Grand River Crossings.

The City plans to identify the short and long-term plans for the Three Grand River Crossings. The study will include determining the feasibility of removing the winter load limit on Lorne Bridge and the need for one or both of the TH&B Crossing Bridge and Brant's Crossing Bridge based on an assessment of the technical, economic, social and environmental factors, including impacts to the active transportation network and the risks of future flooding events of the Grand River.

Slide 12 – Background Studies - 00:8:17,00

To inform the evaluation of alternative solutions a variety of background studies are being completed.

For the Social Environment the following studies will be completed: a Built Heritage Resources and Cultural Heritage Landscape and Resources Report; an Archaeological Assessment Report; a Noise and Vibration Report; and a Wayfinding Strategy Report

For the Economic Environment high-level cost estimates and a lifecycle costs analysis will be completed.

For the Natural Environment the following studies will be completed: a Natural Environment Assessment Report including Species at Risk; a Stormwater Management Report; a Phase 1 Environmental Site Assessment Report; and, a Hydrogeology Study Report.

For the Technical Environment the following studies will be completed:
a Site Survey; a Structural Evaluation Report; A Transportation and Traffic Analysis Report; An Active Transportation Strategy Report; A Geotechnical Investigation Report; And, a Hydraulic Impact Study

Slide 13 – Alternative Solutions for Lorne Bridge - 00:9:20,00

Alternative Solutions have been developed for the Three Grand River Crossings. The project team will begin to evaluate alternative solutions following the first Public Information Centre. The following alternative solutions are being considered for the Lorne Bridge:

Alternative 1A: Do Nothing - The do nothing Alternative represents no change to existing conditions. Selection of this alternative would postpone any action until further into the future, but would eventually lead to the selection of one of the other alternatives. Therefore, this alternative is not likely to be carried forward as it does not define a long term plan for the structure.

Alternative 1B: Close Crossing Permanently - Closing the bridge permanently would close the bridge to all users. This alternative is not likely to be carried forward to evaluation as this structure is a critical transportation link in the City and Colborne Street West is identified as a Major Arterial Road in the Official Plans.

Alternative 1C: Rehabilitate - The rehabilitation alternative would involve repairs to the existing bridge to maintain its use as a crossing over the Grand River. This study will investigate the potential to strengthen the bridge to remove the 30 tonne winter load limit and make improvements to the active transportation network over the structure.

Alternative 1D: Replace - The replacement alternative would replace part or all of the existing structure to maintain a crossing over the Grand River. Potential for improvements to the active transportation network over the crossing could be also included with a new structure.

Slide 14 – Alternative Solutions for Brant’s Crossing Bridge - 00:10:52,00

The following alternatives are being considered for Brant’s Crossing Bridge.

Alternative 2A: Do Nothing - Similar to Lorne Bridge, the do nothing alternative represents no change to existing conditions. Selection of this alternative would postpone any action until further into the future, but would eventually lead to the selection of one of the other alternatives.

Alternative 2B: Close Permanently - Closing the crossing permanently would close the bridge to all users. This alternative could involve retaining the structure as a monument

which would require the implementation of more restrictive measures to prevent the crossing of the structure. Permanent closure of the bridge could also alternatively result in the removal of the structure.

Alternative 2C – Rehabilitate - Rehabilitation of the bridge would involve repairs to re-open the crossing for pedestrian and cyclist use.

Alternative 2D – Replace – This alternative would also re-open the crossing for pedestrian and cyclist use.

Slide 15 – Alternative Solutions for TH&B Crossing Bridge - 00:11:52,00

The alternative solutions being considered for TH&B Crossing Bridge are the same as those being considered for Brant's Crossing.

Alternative 3A is Do Nothing. Alternative 3B is close the bridge permanently. Alternative 3C is rehabilitation. Alternative 3D is replace.

Slide 16 – Alternative Solutions for New Pedestrian River Crossing - 00:12:11,00

The final set of alternative solutions that will be considered during the study will be for a New Pedestrian River Crossing.

Alternative 4A: Do Nothing, would result in no new crossing constructed. Alternative 4B: Construct New Crossing would involve the construction of a new pedestrian river crossing within the Study Area.

The optimal location of the new crossing would be explored during the study and would consider links to the active transportation network, the natural environment impacts, among other evaluation criteria.

Slide 17 – Evaluation Framework - 00:12:39,00

This slide outlines the evaluation framework for developing, screening, evaluating and ultimately identifying the recommended solution.

At this Public Information Centre a long list of alternatives for each crossing was presented. The next step in the process is to screen each alternative against screening criteria.

The alternatives must be technically and economically viable, and meet the needs of the Problem and Opportunity Statement. Once the alternatives have been screened, the feasible alternative solutions for each crossing will be identified.

Feasible combinations of the short-listed alternatives will then be identified to create a list of Overall Crossing Strategy Alternatives.

A detailed evaluation will take place to evaluate each Overall Crossing Strategy Alternative, ultimately leading to the selection of a recommended Overall Crossing Strategy for the Three Grand River Crossings.

Slide 18 – Examples of Overall Crossing Strategy Alternatives - 00:13:34,00

This slide shows examples of some of the possible combinations that could be considered for an Overall Crossing Strategy Alternative.

It should be noted that the combinations will vary depending the outcome of the screening and the examples shown below are not meant to prejudice the MCEA Process. The combinations of the various individual structure alternatives will be evaluated at a later date and will be presented at PIC #2.

Some examples of possible Overall Crossing Strategy Alternatives Include:

Alternative A: Rehabilitate Lorne Bridge. Rehabilitate Brant's Crossing Bridge. Rehabilitate TH&B Crossing Bridge. And do not Construct a New Bridge Crossing

The example shown for Alternative B is to: Rehabilitate Lorne Bridge. Replace Brant's Crossing Bridge. Close and retain the structure for TH&B Crossing Bridge. And do not Construct a New Bridge Crossing.

The last example shown, Alternative C, could be: Rehabilitate Lorne Bridge. Close and remove the structure for Brant's Crossing Bridge. Close and remove the structure for TH&B Crossing Bridge and Construct a New Bridge Crossing.

To reiterate, the alternatives shown on this slide are only examples and are intended to illustrate a few of the possible combinations for the Overall Crossing Strategy.

Slide 19 – Evaluation Criteria: Social and Natural - 00:14:53,00

This slide shows the evaluation criteria for the Social and Natural Environments that will be used to evaluate the Alternative Solutions.

The criteria for evaluating the Social category includes: Property impacts, Impacts to Connectivity, Impacts of Construction, Public Health and Safety, Aesthetics, and lastly Cultural Heritage Resources.

The criteria for evaluating the Natural Environment includes: Impacts to Terrestrial Wildlife and Vegetation and, impacts to Aquatic Wildlife and Vegetation.

Slide 20 – Evaluation Criteria: Technical and Economic - 00:15:30,00

This slide shows the evaluation criteria for the Technical and Economic Environments that will be used to evaluate the Alternative Solutions.

The criteria for evaluating the Technical category includes design considerations such as the service life of the structure and its structural integrity, considerations for impacts to the transportation network, and lastly constructability.

For the Economic Environment, lifecycle costs, including maintenance requirements and the initial and future capital investment requirements will be evaluated.

Slide 21 – PIC 1 Process - 00:16:05,00

The process for this first Public Information Centre is shown on this slide. The first notice for Public Information Centre #1 was issued on May 20th and 21st 2020.

A second notice for Public Information Centre #1 was issued on May 27th and 28th.

This PIC presentation was posted to the project webpage on May 27th.

From May 27th to June 10th there will be a Question and Comment period. The questions and comments submitted during this period will be considered for inclusion in a Q&A video posted to the project webpage on June 17th. A notice will be posted on June 10th prior to this video being posted.

Following the Q&A Video there will be a second question period from June 17th to July 8th. Following this period a Question List and Frequently Asked Questions with answers will be posted to the project webpage on July 15th.

Slide 22 – Next Steps in MCEA Study - 00:17:03,00

As a recap of the schedule for this Municipal Class Environmental Assessment, including the next steps in the process:

The notice of study commencement was issued on March 5th 2020 and we are currently completing the first Public Information Centre.

There will be a second Public Information Centre in the fall of 2020 which will present the recommended solutions for the project. The study is currently scheduled to be complete by early 2021.

Slide 23 – Contact Information - 00:17:29,00

This concludes the first Public Information Centre for the Three Grand River Crossings Municipal Class Environmental Assessment.

Thank you for participating, and if you wish to submit comments or would like to be added to the project's stakeholder list please contact either: Sharon Anderson, the project Manager at the City of Brantford, or Jack Turner, the project manager for GM BluePlan Engineering.

Sharon's email address is: andersonsh@brantford.ca; Jack's email address: jack.turner@gmblueplan.ca

Comment sheets are available at the project website:
www.brantford.ca/ThreeGrandRiverCrossings

Comments submitted by June 10th 2020 will be considered for the Q&A video posted on June 17th. Comments submitted by July 8th will be considered for the Frequently Asked Questions list posted on July 15th.

It is preferred that requests to be added to the stakeholder list be sent by email and any questions and comments on the PIC materials be submitted electronically via the project webpage or by phone, or mail.

Once again thank you for participating in this Virtual Public Information Centre and we hope to hear from you.