



Staff Report

Operations

Report To: Committee of the Whole
Meeting Date: March 10, 2020
Report Number: CSOPS.20.008
Subject: Bridges 2, 3 and 13 Environmental Assessment – Follow up
Prepared by: Jeffery Fletcher, Manager of Solid Waste and Special Projects

A. Recommendations

THAT Council receive Staff Report CSOPS.20.008, entitled “Bridges 2, 3 and 13 Environmental Assessment – Follow up” and consider the following recommendations:

A: THAT Council adopt the solution identified in the Bridge 2/3 (6th Sideroad) Progress Report that positions replacing existing bridges with single lane bridges or structures as the preferred option;

B: THAT Council adopt the solution identified in the Bridge 13 (Main Street, Heathcote) Progress Report that positions replacing the existing bridge with a single lane bridge or structure as the preferred option;

AND THAT Council approve the issuance of the “Notice of Completion” for the thirty-day public and agency review and comment period for Bridges 2, 3 and 13.

B. Overview

Bridges 2/3 on the 6th Sideroad and Bridge 13 in Heathcote have been identified as requiring improvements or replacement due to age and deteriorating condition. Concurrent Environmental Assessments (EA) have been conducted on both bridge sites to assist in selecting a preferred solution. This report is the follow up to Staff Report (CSOPS.19.078) on the draft conclusion of the EA and prior to the Notice of Completion and finalization of the Project File.

C. Background

This is a follow-up to Staff Report (CSOPS.19.078). Council requested more information and the Council discussion also influenced a reconsideration of the weighting of the options. This report outlines the additional information and presents the studies’ preferred solutions.

The Town issued the Notice of Commencement on April 11, 2019 for a class EA under the Environmental Assessment Act to determine the preferred methods of improvement to address structural conditions and roadway safety at Bridge 2/3 on the 6th Sideroad (see Attachment #1)

crossing the Mill Creek and Bridge 13 on Main Street (see Attachment #2) crossing a tributary of the Beaver River in Heathcote.

The bridges have severe deterioration, do not meet current standards and have been posted with reduced load ratings. Bridges 2/3 is to be posted at 10 Tonne and Bridge 13 is posted at 5 Tonne. The 2017 and 2019 Town wide bridge inspection program (conducted every other year) has identified that replacement of Bridge 2/3 will be needed within the next 1 to 5 years and the condition index is described as poor. The 2019 inspection report also identified that major repairs are required on Bridge 13. Although the bridge condition index of Bridge 13 is positioned as “good” the report author cautions that the design and specific construction of the foundation is unknown.

Other Considerations for Bridges 2/3

A single lane bridge will meet the current and projected future demands on the 6th Sideroad crossing of Mill Creek. A new single lane crossing will provide appropriate traffic flow and will be a sufficient width to allow use by large farm equipment. Bridges are not built at a width between a single and double lane. An in-between width would lead to serious potential for head on collisions as a wide single lane would give the perception of a double lane.

A new bridge will also increase the load rating from the current 10 tonne. Bridge rehabilitation will not increase the current load rating, which even with rehabilitation will continue to decrease. Farm equipment currently using this bridge and even Town road plowing equipment are likely to be over 10 tonnes.

The estimated replacement cost has been considered for a permanent and utilitarian type structure. Any consideration for a decorative bridge would increase the estimated cost.

Temporary structures are available, such as a Bailey bridge. However, the advantage of a temporary structure in this application is not evident. Even for a temporary style deck, the existing abutments and wingwalls would need replacement. A temporary bridge would reduce the width compared to the current width. A shorter service life would also be expected. The temporary nature will also require more frequent inspection. A temporary bridge could be less expensive than a permanent replacement, however the longer term cost advantage is not apparent.

Other Considerations for Bridge 13

Although this bridge services only three separately owned properties it is the only available and viable access to the properties, farm and home. An alternative road was considered but no viable route is available.

This bridge site was identified as having some cultural heritage value, but the heritage features do not prevent altering or replacing the bridge. However, some professional documentation and or sympathetic modifications or salvage should be expected.

Traffic counts for the bridge are expectedly low and are between 2 and 16 AADT. It was identified, anecdotally during the study, that large commercial vehicles (school bus, dump trucks and farm equipment) frequently make use of the bridge and are likely to be over the 5 tonne load limit posted on the bridge. This over-weight use of the bridge should be addressed with the landowners to prevent further damage to the bridge and avoid potential safety concerns. Further coordination should also be had with the local emergency services with regard to fire protection and contingency plans for equipment using or not using the bridge.

This over 5 tonne use of the bridge highlights the challenge of selecting an option to only rehabilitate the bridge. Rehabilitation may improve safety and longevity of the existing aging structure, but it will not increase the 5 tonne load limit.

It is technically possible to sell or “give” the bridge to the landowners that use the bridge. However, the buyers would need to be willing and the advantage to the landowners is not apparent, unless they are threatened by complete loss of access.

The Town is not legally required to keep any bridge open, but a scenario with no bridge access would seriously limit emergency service and day-to-day access to the farm and house.

D. Analysis

Study Conclusion – Bridges 2/3

The EA has completed the phases associated with a Schedule ‘B’ project and has now identified a preferred solution in the Executive Summary of the Draft Project File (see Attachment #3). After further consideration and feed-back from council during the presentation of initial study conclusions (Staff Report CSOPS.19.078), the preferred option is to replace Bridges 2 and 3 with single lane bridges or structures. The option to permanently close the existing bridges has been removed as an equally preferred option.

Replace the Bridges with Single-Lane Bridges

This option has a much higher cost than repairing or closing, but it would eliminate load postings, improve road safety and avoid the need for a permanent detour. Part of the EA process included gaining input from the public. Local users of the bridge and near-by residents expressed strong opinions that the bridges should not be closed. It was expressed that a detour would cause additional travel on routes characterized as being less safe and would cause increased travel time to access farmlands.

Traffic counts for this bridge site have been documented as “low-volume” at 98 vehicles per day, which is well below the 400 AADT (Average Annual Daily Traffic) threshold for low volume identified by the MTO Structural Manual. It is also recognized that the near-by trail networks result in use of the bridge via active transport. These active forms of transport may not necessarily be collected by the traffic counting equipment and are likely to add slight increase to counts of bridge use, but it would still be classified as low volume.

Staff recommend finalizing the EA Project File based on selecting replacing the existing bridges with single lane structures, as the solution. This will also permit the Town to release the Notice of Completion and allow an opportunity for further public comment during the 30 day period. The 2020 Proposed Town Budget has earmarked \$2,171,200 for the replacement of Bridges 2 and 3 in 2020.

Study Conclusion – Bridge 13

The EA has completed the phases associated with a Schedule 'B' project and has identified a preferred solution in the Executive Summary for the Draft Project File (see Attachment #2).

Replace Existing Bridge with Single Lane Bridge

This option has a high cost however it would eliminate load postings, provide a low maintenance solution (especially with a concrete culvert) and provide a solution more resilient to climate change impacts such as increased flooding and erosion protection.

Staff recommend finalizing the EA project file based on selecting the option of replacing with a single lane bridge or structure. This will also permit the Town to release the Notice of Completion and allow an opportunity for further public comment during the 30 day period. The 2020 Proposed Town Budget has currently earmarked only \$122,000 in 2021 for minor repair of Bridge 13. A decision to replace Bridge 13 will require an associated increase to this capital project line.

E. The Blue Mountains Strategic Plan

Goal #5: Ensure Our Infrastructure is Sustainable
Objective #2 Avoid Unexpected Infrastructure Failure and Associated Costs and Liability
Objective #4 Ensure that Infrastructure is Available to Support Development

F. Environmental Impacts

Significant alterations to municipal infrastructure require prescribed environmental study, which take into consideration the impacts the solutions could have on the natural and cultural environment. The level of impacts in each option are weighed against other impacts such as cost. Options for mitigating natural and cultural impacts (such as historic significance) are also put forth.

G. Financial Impact

Each alternative has a financial estimate associated with it and these are outlined in the tables below. According to the 2019 Bridge Inspection Report almost \$5.3 million in bridge repair and replacement costs are needed within the next 5 years and spread among 17 bridges. Included in this list are the two bridge sites in these EAs. Bridges 2 and 3

The EA study cost estimate for replacement of Bridges 2/3 with a single lane bridge is \$1.7 million, which aligns with the 2019 Inspection Report figure for two lane bridges of almost \$2 million. The alternative solution of closing and removing the bridges is estimated at \$525,000. The table below compares estimated replacement costs for Bridges 2/3 from multiple sources.

Bridge 2/3 Comparative Estimates of Replacement Cost

Source of Estimated Cost	Bridge 2/3 Replacement Cost
2017 Bridge Inspection Report, CC Tatham (single lane)	\$1,720,000
2019 Bridge Inspection Report, BM Ross (two lane)	\$1,966,000
Current Bridge Environmental Assessment (single lane)	\$1,700,000

There are various options for bridge construction and available construction alternatives have been considered. The options can vary in capital cost however the basic cost starts at an estimated \$1.4 million for this particular Bridge 2/3 site. The Table below outlines some estimated replacement cost alternatives for Bridges 2 and 3 and the related outcomes.

Single Lane Crossing Type	Construction Cost Estimate	Comment
Prefabricated/Modular Truss Bridges	\$1.4 million	Lower life, higher maintenance, more narrow platform width than current (4.75 reduced to 4.2 metres)
Concrete Box Culvert	\$1.7 million	Long life, low maintenance, Dual cell structure may be needed for span, suitability needs to be confirmed
Corrugated Steel Pipes	\$1.7 million	Lowest life, Available depth may limit use, need more site investigation, suitability needs to be confirmed

Concrete Rigid Frame Bridges	\$1.7 million	Longest life, low maintenance, maintain or increase platform width
Deck on Girder Bridges	\$2.5 million	Long life, moderate maintenance, maintain or increase platform width, reduced resilience

The EA considered the options outlined in the Table below which provides a brief summary of the option and cost:

Bridge 2/3 Options	Estimated Cost	Summary
Do Nothing	\$0	Doing nothing will eventually result in closure.
Permanently Close and Remove the Existing Bridges	\$525,000	Would force traffic to detour to seasonal roads (7 km or 10 minutes) or longer detour routes (14km to 16 minutes) on year round roads.
Repurpose the Bridge to Non-Vehicular Traffic	\$300,000	Will ultimately result in on-going repairs and the need to remove the bridges.
Rehabilitate the Existing Bridges	\$675,000	Repairs would be short lived and high maintenance costs would continue with no improvement to the load carrying capacity.
Replace with Single Lane Bridges (Preferred Solution)	\$1.4 to \$2.5 million	This preferred solution allows for a long service life and increased load capacity and is an opportunity to increase the structures resilience to climate change
Replace with Two Lane Bridges	\$2,300,00	It is often considered that single lane bridges should be replaced with two lanes for safety and future development, however with no projected development in this area and the very low traffic – two lanes were ruled out

Bridge 13

The 2019 Bridge Inspection Report indicates that Bridge 13 should be repaired in the next 1 to 5 years. This inspection report identifies costs of \$172,000 in total. This is a similar cost to the

high and low cost estimate in the EA of \$100,000 to \$225,000 under the options to rehabilitate. The 2019 Inspection Report did not include an estimate to replace Bridge 13.

There are various options for bridge construction and available construction alternatives for Bridge 13 have been considered. The options can vary in capital cost however the basic cost starts at an estimated \$500,000 for this particular Bridge 13 site. The Table below outlines estimated replacement cost alternatives for Bridge 13 and the related outcomes.

Single Lane Crossing Type	Construction Cost Estimate	Comment
Prefabricated/Modular Truss Bridge	\$500,000	Lower life, higher maintenance, more narrow platform width than current (4.5 reduced to 4.2 metres)
Concrete Rigid Frame Bridge	\$575,000	Longest life, low maintenance, maintain or increase platform width
Concrete Box Culverts	\$600,000	Longest life, lowest maintenance, maintain or increase width, suitability needs to be confirmed
Corrugated Steel Pipe	\$600,000	Lowest life, multiple culverts has high maintenance, suitability needs to be confirmed
Timber Deck on Girder Bridge	\$750,000	Long life, high maintenance, maintain or increase platform width, best cultural heritage preservation

The EA study cost estimate for replacement of Bridge 13 with a single lane bridge is between \$575,000 and \$750,000 depending on the design approach (bridge or culvert).

The EA considered the options outlined in the Table below which also provides a brief summary of the option and cost:

Bridge 13 Options	Estimated Cost	Summary
Do Nothing	\$0	Significant safety issues would persist and eventually the bridge would fail or be closed due to limited load carrying capacity.
Rehabilitate the Existing Bridge	\$225,000	Even with this amount spent the underlining foundation of the bridge is not improved and the load capacity would remain 5 tonne.
Replace with a Single Lane Bridge (Preferred Solution)	\$500,000 to \$750,000	The preferred option, the cost is high, however it includes an option to replace with a concrete culvert and improves resilience, safety and load capacity.
Replace with Two Lane Bridges	\$1,000,000	Based on the extremely low volume road traffic and no development potential, a single lane bridge meets the needs of this crossing.
Rehabilitate and Download Bridge to Residents	\$100,000	The landowners would need to be willing participants in the transfer of land and bridge structure.

H. In Consultation With

Jim McCannell, Manager of Roads and Drainage

I. Public Engagement

The topic of this Staff Report is the subject of a Public Information Centre which has taken place on July 9, 2019. Those who provide comments at the Public Information Centre, including anyone who has asked to receive notice regarding this matter, will be included on the notification list associated with these bridge projects.

J. Attached

1. Attachment 1 Bridge Site 2/3 Location Map
2. Attachment 2 Bridge Site 13 Location Map
3. Attachment 3 Bridge Site 2/3 Draft Project File Executive Summary
4. Attachment 4 Bridge Site 13 Draft Project File Executive Summary

Respectfully submitted,

Jeffery Fletcher
Manager of Solid Waste and Special Projects

Shawn Carey
Director of Operations

For more information, please contact:
Jeffery Fletcher
ManagerSolidWaste@thebluemountains.ca
519-599-3131 extension 238

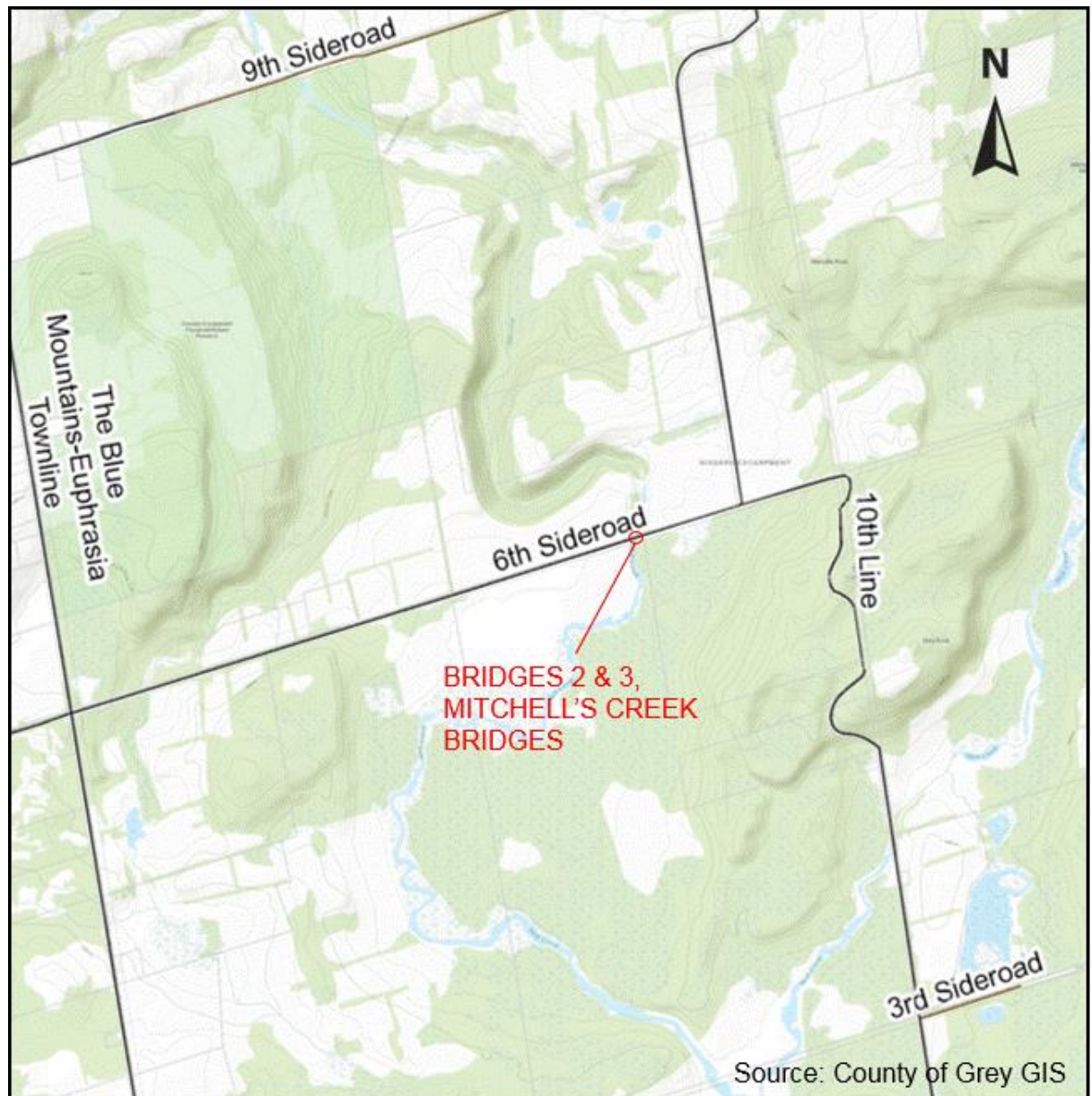
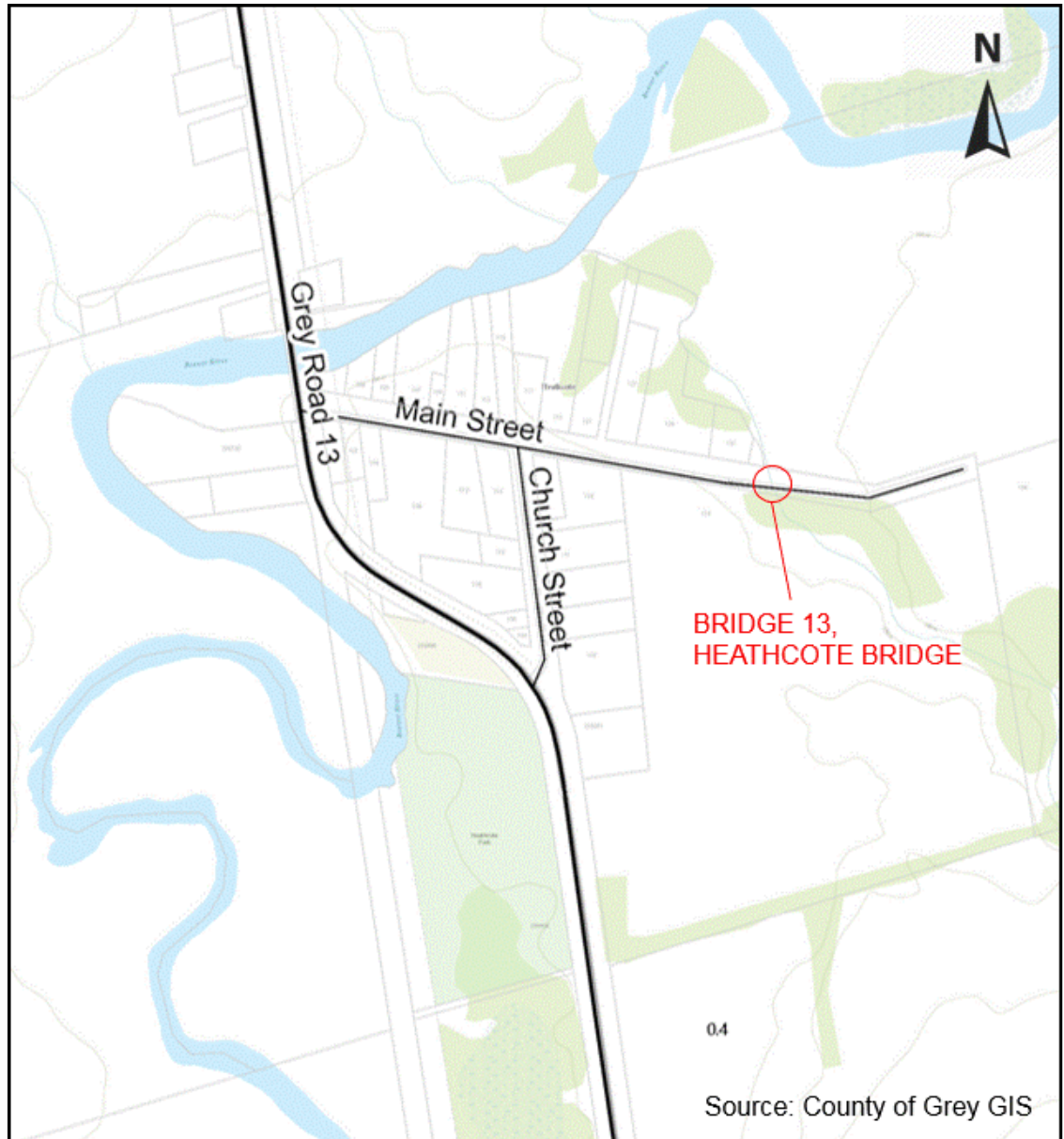
**BRIDGES 2 & 3 CLASS EA SCHEDULE A+**

Figure 1 – Key Map





BRIDGE 13 CLASS ENVIRONMENTAL ASSESSMENT SCHEDULE B

Figure 1 – Key Map



Executive Summary

STUDY OVERVIEW & OBJECTIVE

Bridges 2 & 3, also known as the Mitchell's Creek Bridges, are concrete monolithic T-beam bridges that are connected by a short stretch of 6th Sideroad. The bridges were constructed in the 1930's. The existing structures have a single span each, a driving platform width of 4.75 m and an overall width of 5.5 m. Bridge 2 has a span of 7.5 m, while Bridge 3 has a span of 7.9 m. An Average Annual Daily Traffic (AADT) number of 100 vehicles per day has been estimated at this stretch of 6th Sideroad. The Town completed traffic counts in the vicinity of the bridges in January, April and August, which support this estimate with a range of ADT from 22-110 over the course of all full days counted. Growth in this area is not expected to exceed the threshold of 400 AADT for low-volume roads noted in the MTO Structural Manual.

The existing bridges have several deteriorated elements, including abutments, girders and soffits, as well as substandard barriers and approach guide rail. They have been identified as having a 10 tonne load limit. The existing bridges are considered to be deficient with respect to load capacity and barrier protection.

Town of The Blue Mountains has identified the need to determine the most appropriate bridge management strategy with respect to these structures.

In consideration of the existing conditions, the Problem/Opportunity Statement, which sets the framework for the remainder of the Study, is as follows:

“Town of The Blue Mountains’ Bridges 2 & 3 show signs of deterioration and have been posted with a 10 tonne load limit. The Town has identified the need to assess alternative solutions for this crossing to provide an improved crossing or alternative route that will be most safe and cost effective, while minimizing impacts to the surrounding residents and environments.”

ALTERNATIVE SOLUTIONS

Six alternative solutions were explored with respect to the natural, social, physical and economic environments.

Alternative A is to do nothing, under which no repairs will be completed on the bridges and they will continue to deteriorate, and the load capacity of the structures will continue to decrease.

Alternative B is to permanently close and remove the existing bridges. With this alternative, turnaround points would be placed at either end of the bridges and all through-traffic would be permanently detoured onto alternate roads. There are reasonable alternate routes and there is limited traffic across the bridges. The road would require widening at the ends to create a cul-de-sac for turning around.



Alternative C is to repurpose the bridges to non-vehicular traffic. With this alternative, turnaround points would be placed at either end of the bridges and all through-traffic would be permanently detoured onto alternate roads. Non-vehicular traffic would continue to be allowed on the bridges. The bridges will continue to deteriorate, but at a slower rate without vehicular traffic, and the existing load posting would be sufficient. The road would require widening at the ends to create a cul-de-sac for turning around.

Alternative D is to rehabilitate the existing bridges. This will not resolve load capacity issues but will repair deterioration and increase safety.

Alternative E1 is to replace the bridges with single-lane bridges. This alternative addresses load capacity and barrier protection deficiencies.

Alternative E2 is to replace the bridges with two-lane bridges. This alternative will also address all the deficiencies of load capacity, and barrier protection.

ENVIRONMENT INVENTORIES

The purpose of the environment inventories is to provide the existing information from which the assessment of the alternative solutions can be based. A description of the Study area has been developed considering existing land uses and developments, the natural environment, physical environment, economic environment, and cultural/heritage environment. This will be further expanded to consider the improvement alternatives once they have been identified.

A screening checklist for the bridges, and a Cultural Heritage Evaluation was completed by Stantec Consulting Ltd., with field work undertaken on March 29, 2017. The evaluation identifies Bridges 2 & 3 as having no cultural heritage value or interest under Ontario Regulation 9/06. No further cultural heritage work is required for any work to proceed.

A Stage 1 Archaeological Assessment was carried out by Stantec Consultants Ltd., with the field work completed on June 8, 2018. The assessment indicates that the Study area retains archaeological potential for the discovery and recovery of both Indigenous and Euro-Canadian archaeological material. There are two registered archaeological sites within 1 km of the Study area, and historic mapping for the Study area suggests that it is associated with a historical transportation route and in close proximity to an area of early Euro-Canadian industry in the form of the saw mill that was located immediately north of the Study area adjacent to Mitchell's (Mill) Creek. Any areas that are not considered previously disturbed or low lying and wet are recommended to have a Stage 2 Assessment undertaken if it is to be disturbed during construction. The areas identified for Stage 2 assessment include a significant portion of the property and include woodlot and active agricultural land. A Stage 2 Archaeological Assessment will be required if the proposed work is expected to cause disturbance of these areas.



No geotechnical investigation has been completed. An investigation will be required for some of the proposed alternative solutions; however the scope of the investigation can be defined once the preferred solution is identified.

With respect to the economic environment, the associated costs incurred in implementing and maintaining the structure improvements are considered. The costs will be considered in relation to the extent of required upgrades or improvements to the existing bridges and construction of new bridges. In addition, impacts to abutting lands will also be considered as part of the economic environment given the associated costs to obtain any required lands.

PREFERRED SOLUTION

An evaluation of the alternative solutions was completed based on information received from public agencies and local residents, including those working or living on the far side of the structure. On the basis of this evaluation, the preferred solution is to replace the bridges with two single lane structures. It best addresses all aspects of the Problem Statement. This alternative will require geotechnical investigation to confirm the foundation requirements for the final structure replacement.

NEXT STEPS

The project is classified as a Schedule A+ Class EA project. In order to ensure appropriate public consultation throughout the Study and determine the best solution, the Town has chosen to implement the steps associated with a Schedule B Class EA Process and complete Phases 1 and 2 of the Municipal Class EA planning and design process.

As a Schedule A+ Class EA project, the project is pre-approved and the Town may proceed to implementation.

However, due to the public interest in this project, the Town will be making the project file report available for review and comment over a 30-day period, similar to the Schedule B Class EA process.



Executive Summary

STUDY OVERVIEW & OBJECTIVE

Bridge 13, also known as the Heathcote Bridge, is a timber deck on steel girder bridge at the end of Main Street in Heathcote in Town of The Blue Mountains. The structure is estimated to have been built in the 1950's. The existing structure has a single 8.7 m span with an overall width of 5.3 m and a driving platform width of 4.5 m. The structure crosses a tributary of the Beaver River.

An Average Annual Daily Traffic (AADT) of 20 vehicles per day has been estimated at this structure, which provides access to two properties on the East side of the watercourse and a portion of a third property that abuts the watercourse on both sides. The Average Daily Traffic (ADT) taken from the Town's ongoing traffic counts in the vicinity of the bridge supports this estimate with an ADT of 16. Recent counts suggest an even lower ADT of only 2 vehicles. There is limited growth in this area, and no projected increases, which keeps the traffic volumes well below the threshold of 400 AADT for low-volume roads noted in the MTO Structural Manual.

The existing bridge has several deteriorated elements, including decking and bearings, and does not have barriers or approach guide rail. The structure has been posted with a 5 tonne load limit.

Town of The Blue Mountains has identified the need to improve the bridge, which is considered to be deficient with respect to load capacity and barrier protection.

Recent failure of a corner of the approach due to erosion was noted by the Town on May 15, 2019. Temporary repairs were completed by the Town.

In consideration of the existing conditions, the Problem/Opportunity Statement, which sets the framework for the remainder of the Study, is as follows:

"Town of The Blue Mountains has identified the need to evaluate alternative solutions for the management and improvement of the Bridge 13 crossing in order to improve safety at the bridge. The existing bridge is considered to be deficient with respect to barrier protection, load capacity and signage."

ALTERNATIVE SOLUTIONS

Seven alternative solutions were explored with respect to the natural, social, physical and economic environments.

Alternative A is to do nothing, under which no repairs will be completed on the bridge and it will continue to deteriorate and the load capacity of the structure will continue to decrease. The



structure will eventually require full closure, which is not practical, as the bridge is the only access to two properties.

Alternative B is to permanently close and remove the existing bridge. This alternative is not practical, as the bridge is the only access to two properties. This alternative was not considered further.

Alternative C is to repurpose the bridge to non-vehicular traffic. This alternative is not practical, as the bridge is the only access to two properties. This alternative was not considered further.

Alternative D is to rehabilitate the existing bridge. This will not resolve load capacity issues, but will resolve deterioration issues and increase safety.

Alternative E1 is to replace the bridge with a single-lane bridge. This alternative addresses load capacity and barrier protection deficiencies.

Alternative E2 is to replace the bridge with a two-lane bridge. This alternative will address all the deficiencies of load carrying capacity, and barrier protection. However it has the greatest impact to the environment as well as the greatest life cycle cost.

Alternative F is to rehabilitate and then download the bridge to the two property owners on the East side of the watercourse. This alternative requires minor rehabilitation work prior to downloading, but removes the structure from the Town's structure inventory. This will eliminate the future costs associated with the structure from the Town's budget, including maintenance and biannual inspection.

Alternative G is to provide alternate access to the two property owners on the East side of the watercourse. This will eliminate the need to maintain the structure, however it will require access across a number of properties, new road construction and, depending on the road accessed, new bridge construction. This alternative is not practical and was not considered further.

ENVIRONMENT INVENTORIES

The purpose of the environment inventories is to provide the existing information from which the assessment of the alternative solutions can be based. A description of the Study Area has been developed considering the existing land uses and developments, and the natural environment, physical environment, economic environment and cultural/heritage environment.

A screening checklist for the Bridge and a Cultural Heritage Evaluation was completed by Stantec Consulting Limited, with field work undertaken on March 29, 2017. The evaluation identifies Bridge 13 as having cultural heritage value or interest under Ontario Regulation 9/06, meeting one criteria of the regulation. An impact assessment was included within the Cultural Heritage Evaluation Report, addressing the potential for alterations and demolition as part of the Municipal Class Environmental Assessment process. It concluded that the optimal alternative was to



maintain the existing structure, while reclaiming structural elements, and constructing a sympathetic structure was the second preferred alternative.

A Stage 1 Archaeological Assessment was carried out by Stantec Consultants Limited, with the field work completed on June 8, 2018. The Assessment indicates that the Study Area retains archaeological potential for the discovery and recovery of both Indigenous and Euro-Canadian archaeological material. Any areas that are not considered previously disturbed or low lying and wet are recommended to have a Stage 2 Assessment undertaken if they are to be disturbed during construction.

No geotechnical investigation has been completed. An investigation will be required for many of the proposed alternative solutions, and the scope of the investigation will be defined once the preferred solution is identified.

With respect to the economic environment, the associated costs incurred in implementing and maintaining the structure improvements were considered. The costs have been considered in relation to the extent of required upgrades or improvements to the existing bridges and construction of a new bridge. In addition, impacts to abutting lands have also been considered as part of the economic environment given the associated costs to obtain any required lands.

The Natural Environment inventory identified no habitat for Species of Conservation Concern or spawning habitat within the areas adjacent to the bridge. It provides detailed recommendations on environmental protection measures to reduce the impact of construction on the natural environment.

PREFERRED SOLUTION

An evaluation of the alternative solutions was completed based on information received from public agencies and nearby local people, including those working or living on the far side of the structure. The evaluation was revised after Progress Report 2 to take into consideration feedback obtained at and following the Public Information Centre. On the basis of this evaluation, the preliminary preferred solution is to replace the bridge with another single lane structure. It best addresses all aspects of the Problem Statement. This alternative will require further investigation into the appropriate cultural heritage mitigation measures associated with the final structure replacement.

NEXT STEPS

Following the completion of the Class EA Schedule B process, which allows for one further point of public consultation and review, and provided there are no requests for a Part II Order, the Town may proceed to implementation.

