CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
Transportation Division

TO: Chair and Members Public Works Committee	**WARD(S) AFFECTED:** WARDS 6 & 7
COMMITTEE DATE: December 3, 2012	
SUBJECT/REPORT NO: Mountain Park Avenue Bridge Municipal Class Environmental Assessment (PW12096) - (Wards 6 & 7)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department **SIGNATURE:**	**PREPARED BY:** Margaret Fazio Senior Project Manager, Environmental Planning (905)546-2424, Extension 2218 Lorissa Skrypniak Acting Manager, Transportation Planning (905) 546-2424, Extension 2732

RECOMMENDATION

(a) That the General Manager, Public Works, be authorized and directed to file the Mountain Park Road Bridge Class Environmental Assessment Project File Report with the Municipal Clerk for a minimum thirty (30) day public review period;

(b) That upon completion of the minimum thirty (30) day public review period, the General Manager, Public Works, be authorized and directed to proceed with the implementation of the preferred alternative, to be funded through the Capital Budget Process for 2013.

EXECUTIVE SUMMARY

The Mountain Park Avenue Bridge is a single span girder structure, built in 1930, which carries pedestrian and vehicular traffic over the Sherman Cut Access Road, adjacent to the Juravinski Hospital and Cancer Centre (Appendix “A”).

The City of Hamilton has completed a study using the Municipal Class Environmental Assessment (EA) process, to address improvements needed for the Mountain Park Avenue Bridge. The purpose of this study is to recommend a preferred alternative that

will address structural issues of the existing structure. The Project File Report is complete and ready to be filed on the public record for the minimum 30-day review period. Upon Council approval of this Class EA and subject to comments received during the review, staff will proceed with the detailed design and implementation of the preferred alternative.

Alternatives for Consideration - See Page 6 and Appendix "B"

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: The funding for proposed works is to be brought forward through the 2013 Capital Budget Process.

Staffing: There are no staffing changes anticipated.

Legal:

Municipal Class Environmental Assessment Process
The study has been conducted in accordance with the Municipal Class EA process with the intent to determine the preferred alternative to address the structural issues and the heritage value of the existing structure. As a result, the study has fulfilled the Class EA requirements for Phases 1 and 2 to determine the preferred solution has been confirmed to be a Schedule B project. This study will therefore fulfil all legal requirements of the planning process pertaining to the bridge.

The City will be providing the Project File Report to the public for a minimum thirty (30) day review in order for the public to provide any final comments that they may have with respect to this planning process. This will also be an opportunity for a Part II Order (appeal) for the public and agencies.

HISTORICAL BACKGROUND

The Mountain Park Avenue Bridge is a single span girder structure which carries pedestrian and vehicular traffic over the Sherman Cut access road in the City of Hamilton (see map below). Mountain Park Avenue is classified as a local road roadway in the City of Hamilton Official Plan (Approved by the Ministry of Municipal Affairs and Housing on March 16, 2011. The plan is currently being appealed to the Ontario Municipal Board). Currently, the bridge consists of two lanes located over a road, and has an operational status of being open and in use.

The original bridge was built in 1930 and was called the Mountain Park Avenue Bridge over Mountain Boulevard. Multi-use pathways connect to the existing sidewalks on the structure from the adjacent Mountain Drive Park. The Juravinski Hospital and Cancer Centre (Hamilton Health Sciences Centre) is adjacent to the west side of the structure and utilizes Mountain Park Avenue as an exit route for ambulance traffic leaving the facility, heading eastbound.

Inspections of the bridge were completed in September 2011 and July 2012 and identified a number of deficiencies with the current structure. The 2012 Inspection

Report, completed by AMEC Environment & Infrastructure, recommends the bridge be replaced within five years.

The Municipal Engineers Association Class Environmental Assessment (EA) document (October 2000, as amended 2007 and 2011) applies to the construction, reconstruction or alteration of a structure over 40 years old, confirmed to have heritage value.

A recently completed Built Heritage and Cultural Heritage Landscape Report confirmed that this bridge has moderate heritage value. Based on these findings, the City of Hamilton retained a consulting firm to complete the Municipal Class EA to assess alternatives for replacing the existing structure.

This study shall fulfil the requirements of a Schedule B Process, due to overall cost is estimated less than $2.3M. In addition, this bridge's heritage value (based on the Built Heritage Report) will be considered during the detailed design process. Note: The proposed works do not trigger any archaeological or Endangered Species impacts.

The bridge's design and construction are currently scheduled for 2013.

POLICY IMPLICATIONS

This recommendation will not bind the Corporation or alter or contravene any established City Policy.

RELEVANT CONSULTATION

Members of Council

The Mountain Park Avenue Bridge spans the border of Wards 6 and 7. The recommendation of the Environmental Assessment (EA) study, that is the full replacement of the existing Mountain Park Avenue Bridge, was discussed with Ward 6 Councillor Tom Jackson and Ward 7 Councillor Scott Duvall.

Public

The Class Environmental Assessment process required public consultation according to the requirements of a Schedule B project. Consultation plans were developed and followed.

Public consultation was carried out in the form of a Notice of Study Commencement issued on September 20 & 27, 2012 in the Mountain News and on September 21 & 28, 2012 in the Hamilton Spectator and a mail out to pertinent agencies, City staff and 996 residences/land owners within the immediate study area.

A Notice of Interim Report in place of a Public Information Centre was issued on October 4 & 11, 2012, in the Mountain News, and on October 5 & 12, 2012 in the Hamilton Spectator. Direct mail was also sent to pertinent agencies and all those members of the public and land owners who expressed interest after the Notice of Study Commencement was published.

The pertinent project information was made available throughout the study on the project website: www.hamilton.ca/MountainParkBridgeEA.

Consultations with the Ministry of the Environment regarding the overall public consultation process took place before the formal start of the process.

Agency Consultation

Responses, expressions of interest and other comments were received from various individuals and agencies, including City's initiated contact with Juravinski Hospital and Cancer Centre, the Niagara Escarpment Commission and The Assembly of First Nations as well as the Consultation and Accommodation Unit (CAU) of Aboriginal Affairs and Northern Development Canada (AANDC). All comments have been addressed and contained with the Project File Report.

ANALYSIS / RATIONALE FOR RECOMMENDATION

Municipal Class Environmental Assessment Process

The Class Environmental Assessment (Class EA) study follows the planning and design process of the Municipal Engineers Association (MEA) *Municipal Class Environmental Assessment*, October 2000, as amended in 2007 and 2011. The City is completing this study in accordance with the planning process applicable to Schedule 'B' projects under the Municipal Class EA. These projects are approved under the Environmental Assessment Act (EA Act), as long as they are planned, designed and constructed according to the requirements of the Class EA document.

The specific requirements of the above Class EA process depend on the type of project, its complexity and the significance of environmental impacts. Four categories of projects are identified in the Municipal Class EA document, including Schedule A, A+, B and C projects. The replacement of the Mountain Park Avenue Underpass is classified as a **Schedule B** Project. It has been identified as such because it is being considered for reconstruction or alteration, it is a structure that is more than 40 years old, confirmed to have some heritage value, and its reconstruction would cost less than $2.3M (budget approved through the Capital Budget pre-approval policy).

Schedule B projects follow Phases 1 and 2 of the Class EA process. Phase 1 of the Class EA consisted of identifying the problem or opportunity. Phase 2 of the Class EA consisted of identifying alternative solutions to the problem or opportunity, evaluating the alternatives solutions, identifying recommended solutions, consulting with review agencies and the public, selecting the preferred solution(s), and confirming the Municipal Class EA schedules for subsequent phases to design and implement the solution(s). Phase 2 includes an impact assessment of the recommended design of the new bridge, including measures to avoid/mitigate any adverse impacts and documentation of the Class EA process in a Project File Report (PFR). This Report is placed on the public record for a thirty (30) day review by the public and review agencies, with opportunity to request a Part II Order (appeal) to the Minister of Environment (MOE).

Screening of Alternative Solutions

The Mountain Park Avenue Municipal Class Environmental Assessment Study (August 2010) has followed the Municipal Engineers Association Municipal Class Environmental Assessment (EA) process for Schedule B projects, fulfilling Phase 1 and 2 portion of the process.

The Class EA process recognizes that there are many ways of solving a particular problem and requires various alternative solutions to be considered. A possible alternative solution to address the problem and opportunity statement would be to replace the Mountain Park Avenue Bridge which would maintain traffic safety and operations on and below the bridge – on Sherman Cut.

Rationale for Selection of Alternative Solutions

Alternative solutions were developed to address the problem and opportunity statement with a specific focus on improving structural integrity of the subject bridge and minimizing impact to safety and traffic operations on Mountain Park Avenue and the Sherman Cut below. In addition to the "Do Nothing" alternative specific alternatives were developed based on other possibilities than bridge replacement. Just removing and not replacing the bridge was considered, as well as removing it and replacing with only pedestrian alternatives.

The evaluation of the alternatives revealed that bridge replacement for vehicular as well as pedestrian use is the recommended alternative.

Identification and Description of Alternative Solutions

Five alternative solutions were identified and evaluated as part of this study and are described in **Table 1 Planning Alternative Solutions** contained in Appendix "B".

Preferred Alternative

The alternatives were assessed against the evaluation criteria as appropriate. The overall comparison of alternatives did not include the assignment of factor significance weightings, however long term cost and engineering considerations were considered to be the two most important criteria groupings.

The selection of the recommended alternative involved identifying and making trade-offs among the advantages and disadvantages of the alternatives. The alternative that had the best overall balance of advantages and disadvantages was recommended as the preferred alternative.

Recommended Alternative

The recommended alternative is **Alternative 4, Replace Bridge** with a structure that accommodates pedestrians and cyclists as well as vehicles. The new bridge will have a configuration similar to that of the existing structure. Sympathetic design elements to the existing bridge will be considered during the design phase, recognizing the bridge's moderate heritage value.

ALTERNATIVES FOR CONSIDERATION

The preferred alternative solution has been identified using an evaluation and screening process that fulfils the requirements of the Municipal Engineers Association (MEA) Municipal Class EA document for Phases 1 and 2 for Schedule B projects. These projects are approved under the Environmental Assessment Act (EA Act) once the required four phase process is complete and subject to a public review period.

The MEA Municipal Class EA document was approved under the Environmental Assessment Act. If the City does not follow the process outlined in the Municipal Class EA document, the City would be in violation of the document and as a result would have contravened the EA Act. The Minister of the Environment could revisit the approval of a project or take away the City's right to use the Municipal Class EA document.

The preferred alternative solution is to proceed with Alternative 4. There are two alternatives for Council to consider with respect to the recommendations of this report:

1. To file the Mountain Park Avenue Bridge Municipal Class Environmental Assessment, Schedule B project with the City Clerk for a minimum thirty (30) day public review period in order to complete the first two phases of the process. This will offer the public and agencies the opportunity for placement of a Part II Order (appeal) with the Minister of Environment and fulfill the City's legal obligations under the EA Act.

2. To not file the Mountain Park Avenue Municipal Class Environmental Assessment Phase 1 and 2, Schedule B project with the City Clerk for a minimum thirty (30) day public review period and, as a consequence, to not proceed with implementation.

Should Council not wish to approve the filing of the Mountain Park Avenue Municipal Environmental Assessment Class EA, Schedule B project, the Municipal Class EA process would be considered by the provincial government as incomplete and the City will not have approval under provincial environmental legislation to implement the recommended alternative, required to address structural problems of the existing subject bridge. The outcome would be equivalent to the do nothing alternative, which would result in the inability to effectively address both the short-term and the long-term infrastructure needs for the study area. Eventually the City would have to repeat the Class EA process, which would likely result in the same recommendations.

Due to the impacts and design requirements of the proposed bridge replacement to the existing Mountain Park Avenue, the delay in the replacement of the Mountain Park Bridge will prevent the reconstruction and/or modify the design and limits of the coordinated Mountain Park road reconstruction.

The alternative to not approve the filing of the Mountain Park Avenue Bridge Municipal Class EA Project File Report is not recommended.

CORPORATE STRATEGIC PLAN

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Financial Sustainability

- Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

Bridge replacement in a timely manner will ensure that there will continue to be a bridge that can safely be crossed by vehicles and other modes of transportation, without risk for those crossing underneath it on the Sherman Cut.

- Address infrastructure deficiencies and unfunded liabilities

The bridge replacement – recommended alternative, is the best long term fiscally responsible alternative.

Healthy Community

- Plan and manage the built environment

The bridge reconstruction is scheduled and budgeted for, pending Council's permission to endorse this study's recommendations, rather than let the bridge replacement become an emergency situation.

- An engaged Citizenry

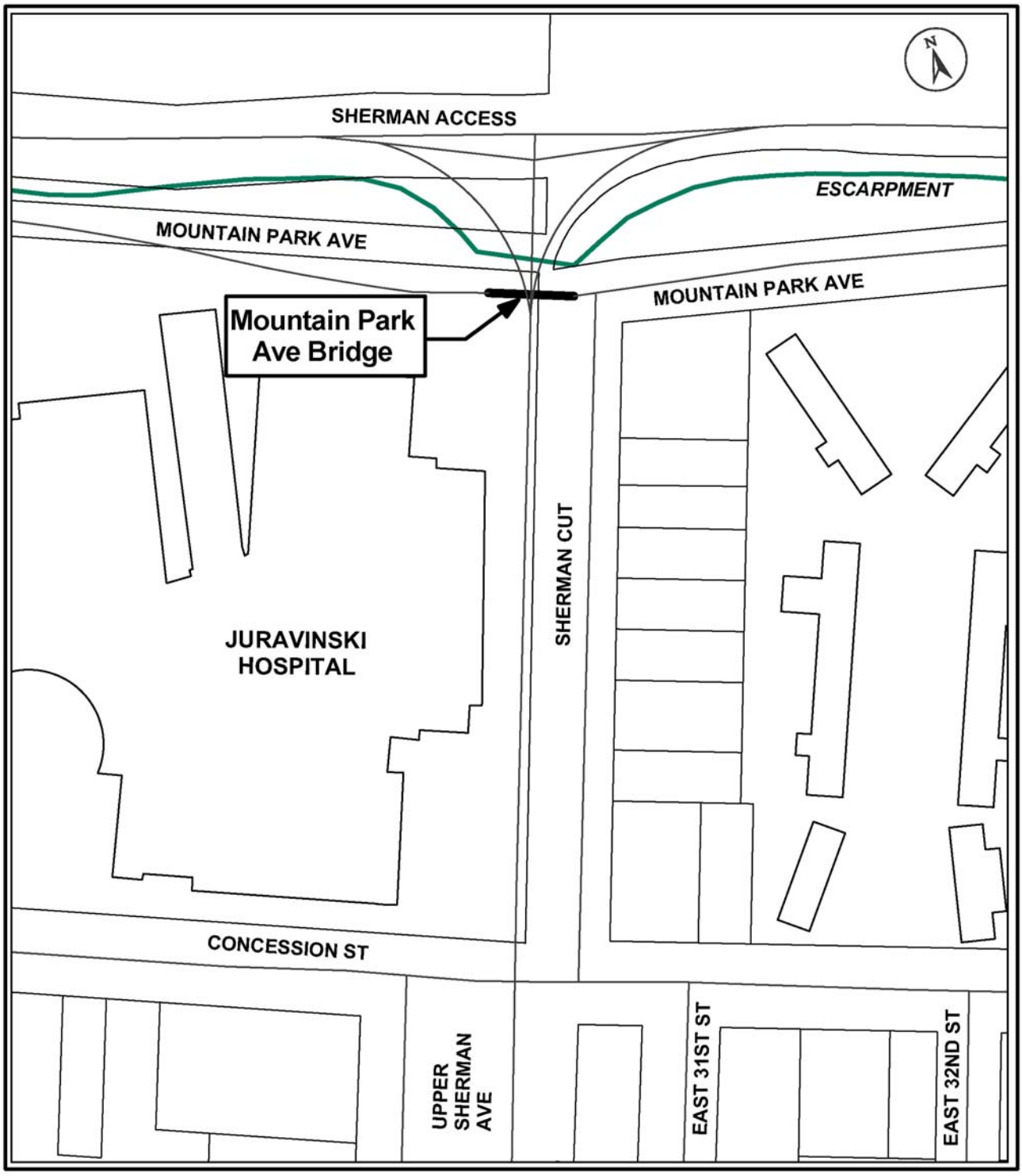
The EA process in its minimal form requires that public be consulted regarding the planning of capital works, such as the subject of this report. The public has been given the opportunity to engage in the process as per minimum legal requirements and City's augmented standard practice.

APPENDICES / SCHEDULES

Appendix "A" Study Area Map
Appendix "B" Evaluation of Alternative Solutions

Appendix "A"
Report PW12096

Study Area Map



Evaluation of Alternative Solutions

Planning Alternative Solutions		Description
Alternative 1	Rehabilitate Existing Bridge	• Localized disruption during rehabilitation as structure would be closed to through traffic • Existing hospital exit access maintained following construction; Temporary disruption during construction as all emergency vehicles exiting the hospital would be required to exit westbound • Rehabilitation of the structure allows for the greatest retention of its heritage value, however rehabilitations required are extensive (including railings and wing wall • Sympathetic heritage design considerations would be incorporated into the detail design, where possible • Minimal impact on terrestrial natural resources. Existing vegetation (shrubs and small trees) adjacent to the bridge would be removed as they are currently damaging the escarpment face and existing infrastructure • Some disruption to Juravinski Cancer Centre and existing apartment buildings during construction. Disruption typical for a roadway construction project (noise, dust). • Multi - use trail along Mountain Park Avenue/top of the escarpment closed at the crossing during rehabilitation • On-road cycling can be accommodated following construction – separate cycling lanes will not be provided; Temporary disruption during construction as all emergency vehicles exiting the hospital will be required to exit westbound Existing 1 hour parking lot along Mountain Park Avenue, east of crossing potentially used by public for short-term hospital visits. Public would be required to access hospital via Upper Sherman Avenue during construction • Conforms to Official Plan as the purpose of a local road is to provide direct land access and to enable the movement of low volumes of traffic to collector roads. No change to road designation planned following construction • Consistent with policies for "Transportation Systems" and "Transportation and Infrastructure Corridors", including maintaining or improving connectivity within and among transportation systems and modes (1.6.5.3) • High Cost (< $2.3M), not cost effective due to the asset life. Bridge replacement eventually required, even if rehabilitations completed. • Medium level of on-going maintenance required

Planning Alternative Solutions		Description
Alternative 2	Remove and Do Not Replace	• Would force local vehicular traffic on Mountain Park Avenue onto Concession Street; Would interrupt continuity of Mountain Park pathway system for pedestrians • Removal of bridge eliminates heritage feature, with no opportunity to replace crossing with a sympathetically designed structure • Minimal impact to terrestrial resources. Existing vegetation (shrubs and small trees) adjacent to the bridge would be removed as it is currently damaging the escarpment face and existing infrastructure • Removing the bridge would not directly impact the existing land uses, but would impact traffic patterns in the area • Multi-use trail along Mountain Park Avenue would not be continuous; Pedestrian/cycling access across Sherman Cut would require users to follow Poplar Street, Concession Street and Upper Sherman Avenue; Not consistent with City's Cycling Master Plan • Limited impact as access to hospital and parking lot is primarily from Concession Street; Existing 1 hour parking lot along Mountain Park Avenue, east of crossing potentially used by public for short-term hospital visits. Public would be required to access hospital via Upper Sherman Avenue. • Conforms to Official Plan as the purpose of a local road is to provide direct land access and to enable to movement of low volumes of traffic to collector roads. Access to Concession Street (a minor arterial) would be maintained via Poplar Street and Upper Sherman Avenue. • Not consistent with Policy 1.6.5.3 as removing the bridge limits the connectivity of the existing transportation system • Low Cost (< $500,000) • Low – Limited maintenance required on Mountain Park Ave. at either end of Sherman Cut

Planning Alternative Solutions		Description
Alternative 3	Replace Bridge with Pedestrian Only Structure	• Would force local vehicular traffic on Mountain Park Avenue onto Concession Street; Mountain Park sidewalk system maintained at crossing. Closures required during construction • Temporary disruption during construction as all emergency vehicles exiting the hospital will be required to exit westbound. • Opportunity to replace structure with a bridge that includes sympathetic heritage features; Sympathetic heritage design considerations would be incorporated into the detail design where possible • Minimal impact to terrestrial resources. Existing vegetation (shrubs and small trees) adjacent to the bridge would be removed as it is currently damaging the escarpment face and existing infrastructure • Removing the bridge would not directly impact the existing land uses, but would impact traffic patterns in the area • Multi-use trail along Mountain Park Avenue/top of the escarpment closed at the crossing during construction; Pedestrian/cycling access across Sherman Cut provided following construction • Limited impact to public as access to hospital and parking lot are primarily from Concession Street; Existing 1 hour parking lot along Mountain Park Avenue, east of crossing potentially used by public for short-term hospital visits. Public would be required to access hospital via Upper Sherman Avenue during construction • Conforms to Official Plan as the purpose of a local road is to provide direct land access and to enable to movement of low volumes of traffic to collector roads. Access to Concession Street (a minor arterial) would be maintained via Poplar Street and Upper Sherman Avenue • Not consistent with Policy 1.6.5.3 as a pedestrian only bridge limits the connectivity of the existing transportation system • Medium Cost (< $2.3M) • Low-On-going maintenance required on new bridge.

Planning Alternative Solutions		Description
Alternative 4	Replace Bridge	• Localized disruption during reconstruction, as structure would be closed to through traffic • Existing access maintained following construction; Temporary disruption during construction as all emergency vehicles exiting the hospital will be required to exit westbound • Opportunity to replace structure with a bridge that includes sympathetic heritage features; Sympathetic heritage features would be considered in the detail design process, where possible • Minimal impact to terrestrial resources. Existing vegetation (shrubs and small trees) adjacent to the bridge would be removed as it is currently damaging the escarpment face and existing infrastructure • Some disruption to Juravinski Cancer Centre and existing apartment buildings during construction. Disruption typical for a roadway construction project (noise, dust) • Multi-use trail along Mountain Park Avenue/top of the escarpment closed at the crossing during construction; Pedestrian/cycling access across Sherman Cut provided following construction; Current status of Mountain Park Avenue as an on street signed cycling route will be maintained post construction. • Limited impact as access to hospital and parking lot is primarily from Concession Street; Existing 1 hour parking lot along Mountain Park Avenue, east of crossing potentially used by public for short-term hospital visits. Public would be required to access hospital via Upper Sherman Avenue during construction • Conforms to Official Plan as the purpose of a local road is to provide direct land access and to enable the movement of low volumes of traffic to collector roads. No change to road designation planned following construction • Consistent with Policy 1.6.5.3 • Medium Cost (< $2.3M) • Low Cost - On-going maintenance required on new bridge

Planning Alternative Solutions		Description
Alternative 5	Do Nothing	• No immediate impacts, however the bridge has limited lifespan due to the deterioration of critical elements, that are recommended for immediate rehabilitation and/or < 5 years. • Bridge will eventually be required to be removed if it is not rehabilitated; Would force local vehicular traffic on Mountain Park Avenue onto Concession Street; Would interrupt continuity of Mountain Park pathway system for pedestrians • Existing access maintained, however existing bridge has limited life-span if required rehabilitations are not completed. Bridge will eventually be required to be removed if it is not rehabilitated • No immediate impact, however existing bridge has limited life-span. Bridge will eventually be required to be removed if it is not rehabilitated; Future removal of bridge eliminates heritage feature, with no opportunity to replace crossing with a sympathetically designed structure • No immediate impacts, however existing vegetation should be removed as it is currently damaging the escarpment face and existing infrastructure • No immediate impacts to pedestrians and cyclists, however the existing bridge has a limited life-span. Bridge will eventually be required to be removed if it is not rehabilitated; Removing the bridge would not directly impact the existing land uses, but would impact traffic patterns in the area • No immediate impacts to the public access to the hospital, however the existing bridge has a limited life-span. Bridge will eventually be required to be removed if it is not rehabilitated; Limited impact as access to hospital and parking lot is primarily from Concession Street; Existing 1 hour parking lot along Mountain Park Avenue, east of crossing potentially used by public for short-term hospital visits. Public would be required to access hospital via Upper Sherman Avenue if the bridge is ultimately closed and then removed. • Conforms to Official Plan as the purpose of a local road is to provide direct land access and to enable to movement of low volumes of traffic to collector roads. Access to Concession Street (a minor arterial) would be maintained via Poplar Street and Upper Sherman Avenue • Not consistent with Policy 1.6.5.3 as discontinuing maintenance will eventually limit connectivity of the transportation system • High Cost, (> $2.3M) - not cost effective due to the limited current asset life comparing to that which could be achieved. Bridge replacement eventually required, even if rehabilitations completed • Medium Cost – on-going maintenance required.