ERRATA

April 2022

County of Wellington Wellington Road 7, Bosworth Bridge EA No. B007028 Municipality Class Environmental Assessment

Project File Report – January 2022

The table below identifies revisions to the Project File Report (January 2022) for the above-noted study based on comments received following filing of the Project File Report (PFR).

SECTION	REVISION
1.1 Background Page 1	The following key plan is to be added in section 1.1: Ref County Road 109 Arthur
1.6 Policy Context Page 5	 The following new section (1.6 Policy Context) is to be added in the report: 1.6) Policy Context The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development while protecting resources of provincial interest, public heath and safety, and the quality of the natural and built environment. The project File Report considers the proposed development in the County of Wellington is in the context of Provincial Policy Statement (PPS). The Project Team has reviewed the Provincial Policy Statement 2020 as it replaced the Provincial Policy Statement issued April 30, 2014 and other policy context as a part of this EA.

3.6 Built Heritage Resources Page 19

• The following is to be replaced to Section 3.6:

3.6) Cultural Heritage Environment

Cultural heritage resources include built heritage resources, cultural heritage landscapes and archaeological resources.

3.6.1) Built Heritage Resources and Cultural Heritage Landscapes

The subject structure is not listed on the Township of Mapleton municipal heritage register or inventory of cultural heritage resources and is not designated under the Ontario Heritage Act (OHA). The Bosworth Bridge is not provincially-owned, and therefore, is not identified as a provincial heritage property. It is also not recognized provincially through an Ontario Heritage Trust easement or commemorative plaque and is not included on the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) Ontario Heritage Bridge List.

The Bosworth Bridge is not recognized federally as a heritage resource, i.e., national historic site or federal heritage property.

A Cultural Heritage Evaluation Report (CHER) was completed by Unterman McPhail Associates for the Bosworth Bridge in December 2015 (see Appendix E). The CHER determined that the bridge is of cultural heritage value or interest, specifically possessing design or physical, historical or associative. and contextual values. Its cultural heritage attributes include the:

- o Cast-in-place concrete abutments and wingwalls;
- Steel truss components comprising the Warren Camelback steel pony truss structure;
- o One span design;
- o Original horizontal steel guardrail;
- Cast-in-place, original concrete handrail on all four corners; and
- o Commemorative plaque.

The bridge was found to be of cultural heritage value or interest (CHVI) therefore a Heritage Impact Assessment of the Bosworth Bridge was completed by WSP (dated September 16, 2021) of the Bosworth Bridge to assess the impacts of the structure's proposed replacement and recommend appropriate mitigation measures. The HIA is included in Appendix E.

3.6.2) Archaeological Resources

A Stage 1 Archaeological Assessment (Project Information Form number P1105-0037-2021) was undertaken, dated August 18, 2021 by WSP for Bosworth Bridge. The archaeological recommendations have been made based on the background historic research, property inspection, and indicators of archaeological potential as outlined in the Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 Standards and Guidelines for Consultant Archaeologists. Its purpose is to identify areas of archaeological potential and further archaeological assessment (e.g. Stage 2,3,4) as necessary. The Stage 1 AA is included in Appendix I. The Stage 1 AA has been entered into the Ontario Public Register of Archaeological Reports. The following recommendations for the Stage 2 Archaeological Assessment include: • Where ploughing is not possible, the study area must be subject to test pit survey at 5 m intervals as per Section 2.1.2 of the Standards and Guidelines for Consultant Archaeologists (MHSTCI, 2011). These areas include manicured lawn, overgrown shrub, and the wooded areas. The agricultural field must be subject to pedestrian survey at 5 m intervals as per Section 2.1.1 (Standards and Guidelines for Consultant Archaeologists, 2011). Prior to pedestrian survey, the field must be ploughed and weathered to allow for ideal conditions for the identification of archaeological resources. Soil visibility must be at least 80% in order for pedestrian survey to proceed. • Areas visually confirmed to have been previously disturbed no longer retain archaeological potential and no further work is required. *The Conestogo River is identified as a Cultural Heritage* River and therefore holds potential for underwater archaeological materials. An underwater archaeological survey and visual confirmation is required should any construction works impact the water. See above for the recommended revisions 3.7 Archaeology Page 19 3.9 Climate Change The following new section (3.9 Climate Change) is to be Page 20 added in the report: 3.9) Climate Change From a Greenhouse gas (GHG) perspective on climate change, the contaminates of concern from motor vehicle emissions are carbon dioxides (CO2), methane (CH4), and nitrous oxide (N2O). These GHGs can be further classified according to their Global

Warming Potential. The Global Warming Potential is a multiplier developed for each GHG, which allows comparison of the ability of each GHG to trap heat in the atmosphere, relative to carbon dioxide.

Though traffic volumes are expected to increase in the future, emission rates are also predicted to go down due to improvements in technology. Therefore, total emissions, including greenhouse gas emissions, are expected to be similar between the existing and proposed configurations.

Bridge replacement Option 3 met the MTO Highway Drainage Design Standards and is hydraulically more efficient than the existing bridge. There will be no flooding impact on the upstream and no overtopping on Wellington Road 7 during the Regional Storm event. Therefore, hydraulic performance for the proposed replacement bridge options for the Bosworth Bridge (B007028) on Wellington Road 7 will be designed considering climate change impacts in the detail design phase.

3.10 Source Water Protection

• The following new section (3.10 Source Water Protection) is to be added in the report:

3.10 Source Water Protection

The site is located in the Grand River Source Protection Area (LERSPC, 2022 and MECP, 2021). The following Table 1 summarizes the Source Water Protection Areas.

Table 1: Source Water Protection Areas

Source Protection Area	Grand River
Wellhead Protection Area	D; Source: 2
Wellhead Protection Area E	No
Intake Protection Zone	<i>3; Source: 2.7</i>
Issue Contributing Area	No
Significant Recharge Area	Yes
Highly Vulnerable Aquifer	No
Event Based Area	No
Wellhead Protection Area Q1	No
Wellhead Protection Area Q2	No

	Intake Protection Zone Q No
	As per Table 1 the site is located in a wellhead protection area-D (WHPA-D), intake protection zone-3 (IPZ-3), and a significant groundwater recharge area. WHPA-D is defined as the 25-year time of travel capture zone, and is delineated by groundwater modelling. The surface water intake is located on the Grand River in the City of Kitchener. IPZ-3 is delineated to include all watercourses / waterbodies that contribute water to the sources. Significant groundwater recharge areas are delineated based on a model which utilized surficial geology, land cover and climatic conditions.
4.1 Assessment and Evaluation of	• The following replaces the seventh bullet in Section 4.1:
Alternatives Page 21	Cultural Heritage Environment, including impact on archaeological resources, built heritage resources and cultural heritage landscapes.
Table 4.1: Evaluation of Alternative Planning Solutions (Cultural Environment)	The following highlighted revisions is to be added to Table 4- 1: Cultural Heritage Environment
Page 26	Cultural Hertuge Environment
	 Do Nothing ✓ No impacts to archaeological resources ✓ No impacts to built heritage resources ✓ No impacts to cultural heritage landscapes resources
	 ○ Rehabilitation ✓ Low potential for impacts to archaeological resources ✓ Maintains all heritage attributes of the bridge except for the bridge railings which require replacement to meet modern standards.
	 ○ Replacement ✓ Low potential for impacts to archaeological resources ✓ Demolition would result in the loss of bridge heritage attributes ✓ Impacts can be mitigated locating the bridge at its original location and adopting a design that draws from the materials and design inspiration of the

	,
	current bridge while maintaining legibility (i.e. using steel girders instead of concrete) ✓ Mitigation will include documentation and photographic recording prior to removal replacement
6.7 Archaeology Page 47	• The following is to be added in section 6.7:
Ü	Archaeological assessments will be undertaken by a licensed archaeologist. MHSTCI recommends that any required further assessments (e.g. Stage 2,3,4) be completed as early as possible in the detailed design phase and prior to any ground disturbing activities.
6.10 summary of Future Commitments Page 48	• The following highlighted revision is to be added to the last bullet in section 6.10:
	All lands within the study area have been disturbed by previous construction activities and therefore, archaeological materials are not anticipated to be encountered during construction activities. If archaeological materials are encountered during construction, all work shall cease, and MHSTCI will be notified at archaeology@ontario.ca. A licensed archaeologist will carry out an archaeological assessment in accordance with the Ontario Heritage Act and the Standards and Guidelines for Consultant Archaeologists.
	If human remains are encountered, all activities must cease immediately, and the local police and coroner must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified (at archaeology@ontario.ca) to ensure that the site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.