MUNICIPALITY OF WEST GREY

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR STRUCTURE 28 (LANTZ BRIDGE)

ENVIRONMENTAL SCREENING REPORT

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MUNICIPALITY OF WEST GREY

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ENVIRONMENTAL SCREENING REPORT

June 22, 2021

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File No. BR1334

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ENVIRONMENTAL SCREENING REPORT

1.0 INTRODUCTION

1.1 Introduction

The Township of West Grey initiated a Municipal Class Environmental Assessment (MCEA) study in June of 2020 to identify the best strategy for resolving structural deficiencies identified with Structure 28 (Lantz Bridge) on Concession 2 WGR, which spans the Saugeen River. The study process followed the procedures set out in the Municipal Class Environmental Assessment document, dated June 2000, as amended in 2007, 2011 and 2015 (Municipal Engineers Association, 2000). B. M. Ross and Associates Limited (BMROSS) was engaged to conduct the Class EA investigation on behalf of the Municipality.

The Class EA investigation involved an evaluation of options to resolve deficiencies identified with Lantz Bridge. The framework of the study built upon recommendations from recent engineering inspections, which identified problems with the capacity and structural integrity of the bridge structure.

The purpose of this report is to document the MCEA planning and design process followed for this project. The report includes the following major components:

- An overview of the general project area.
- A summary of the deficiencies associated with the existing structure.
- A description of the alternative solutions considered for resolving the defined problem(s).
- A synopsis of the decision-making process conducted to select a preferred alternative.
- A detailed description of the preferred alternative.

1.2 Municipal Class Environmental Assessment (MCEA) Process

Municipalities must adhere to the Environmental Assessment Act of Ontario (EA Act) when completing road, sewer or waterworks activities. The Act allows the use of the Municipal Class Environmental Assessment process for most types of municipal infrastructure projects. A MCEA is an approved planning document which describes the process that proponents must follow in order to the meet the requirements of the EA Act. The MCEA approach allows for the evaluation of alternatives to a project, and alternative methods of carrying out a project, and identifies potential environmental impacts. The process involves mandatory requirements for consultation. MCEA studies are a method of dealing with projects that the following common characteristics:

- They are recurring.
- They are usually similar in nature.
- They are usually limited in scale.
- They have a predictable range of environmental effects.
- They are responsive to mitigating measures.

If a MCEA planning process is followed, a proponent does not have to apply for formal approval under the EA Act. The development of this investigation has followed the procedures set out in the MCEA. Figure 1.1 presents a graphical outline of the procedures.

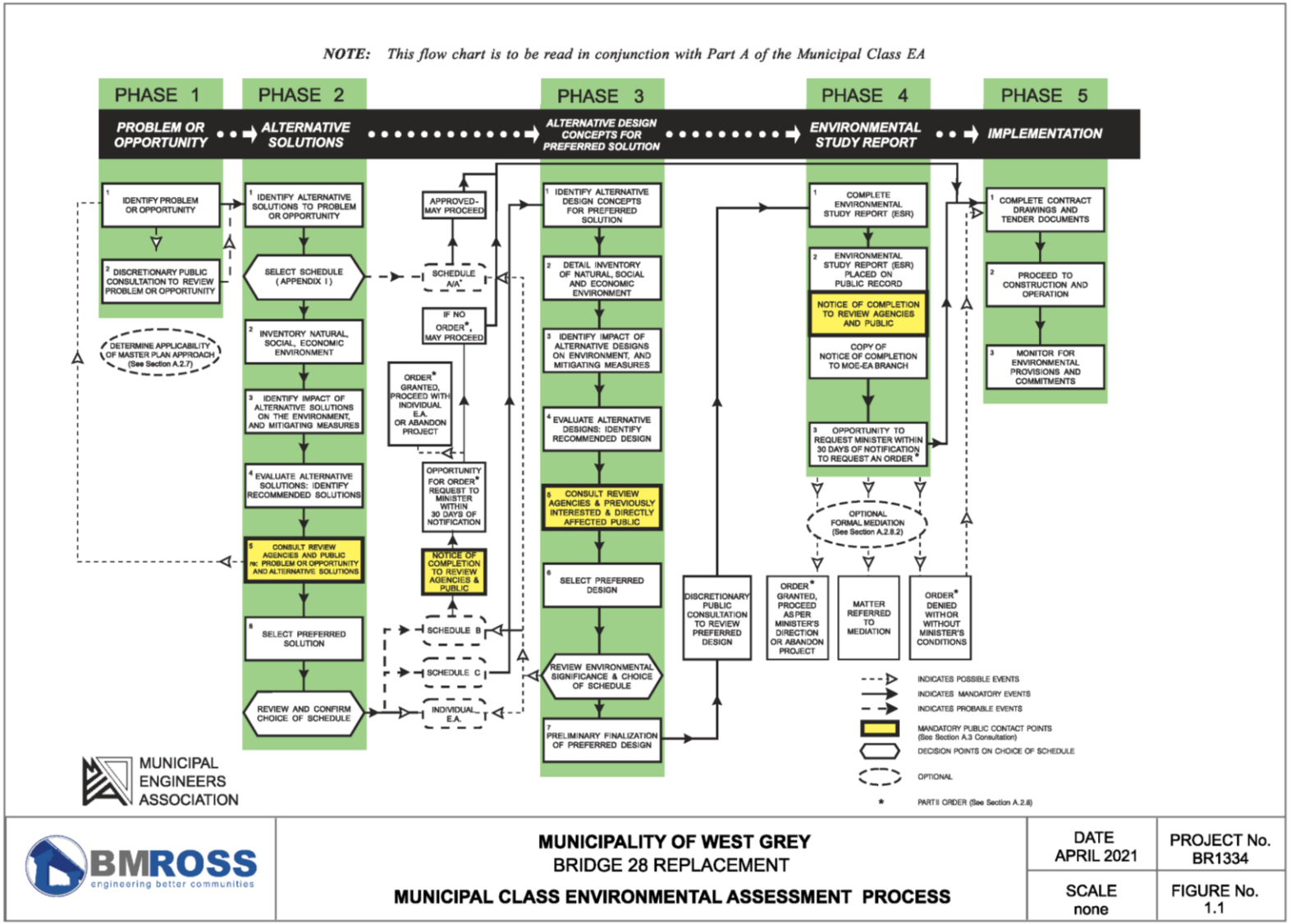
The MCEA planning process is divided into the following phases:

- Phase 1 – Problem identification.
- Phase 2 – Evaluation of alternative solutions to the defined problems and selection of the preferred solution.
- Phase 3 – Identification and evaluation of alternative design concepts and selection of a preferred design concept.
- Phase 4 – Preparation and submission of an Environmental Study Report (ESR) for public and government agency review.
- Phase 5 – Implementation of the preferred alternative and monitoring of any impacts.

Throughout the MCEA process, proponents are responsible for having regard for these principles of environmental planning:

- Consultation with affected parties throughout the process.
- Examination of a reasonable range of alternatives.
- Consideration of effects on all aspects of the environment.
- Application of a systematic methodology for evaluating alternatives.
- Clear documentation of the decision-making process to permit traceability.

Figure 1.1 Municipal Class Environmental Assessment Process



1.3 Classification of Project Schedules

Projects are classified into different project schedules according to the potential complexity and the degree of environmental impacts that could be associated with the project. Four schedules are included in the MCEA process:

- Schedule A - Projects that are approved with no need to follow the MCEA process.
- Schedule A+ - Projects that are pre-approved but require some form of public notification.
- Schedule B – Projects that are approved following the completion of a screening process that incorporates Phase 1 and 2 of the MCEA process as a minimum.
- Schedule C – Projects that are approved subject to following the full MCEA process.

The MCEA process is self-regulating, and municipalities are expected to identify the appropriate level of environmental assessment based upon the project and alternatives they are considering.

1.4 Mechanism to Request a Higher Level of Environmental Assessment

Under the terms of the MCEA, the requirements to prepare an Individual Environmental Assessment for approval is waived. However, if it is found that a project going through the MCEA process has associated with it significant environmental impacts, a person/party may request that the Municipality of West Grey voluntarily elevate the project to a higher level of environmental assessment. A request may be made to the Ministry of Environment, Conservation and Parks for an order requiring a higher level of study, or that a condition be imposed on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on Aboriginal and treaty rights. Requests made to the Ministry on other grounds will not be considered.

2.0 BACKGROUND REVIEW

2.1 Background Review

A background review was carried out to obtain a general characterization of the project study are and to identify factors that could influence the selection of alternative solutions to the defined problem.

The background review for this MCEA process incorporated the following activities:

- Assembly of information on the existing infrastructure and the environmental setting.
- Identification of infrastructure deficiencies at the bridge site.
- Preliminary assessment of the defined deficiencies and potential remediation.

A desktop analysis of the project setting was completed as part of the background review process. The following represents the key sources of information for this analysis:

- Ontario Structure Inspection Manual (OSIM) Report (WSP, 2018).
- Grey County GIS Mapping Services (Grey County, 2020).
- Government of Canada, Species at Risk Public Registry website (Government of Canada, 2017).
- Ministry of Natural Resources, Natural Heritage Information Centre website (Ministry of Natural Resources and Forestry, 2017).
- Atlas of Breeding Birds of Ontario website (Bird Studies Canada, 2009).
- Saugeen Valley Conservation Authority, Watershed Report Card.
- Saugeen Valley, Grey Sauble and Northern Bruce Peninsula Source Protection Area, Saugeen Valley Source Water Protection Assessment Report (Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, 2015).
- County of Grey, Official Plan (OP) and Zoning By-Law.
- Municipality of West Grey. Files and discussion with staff.

2.2 Municipal Class EA Framework

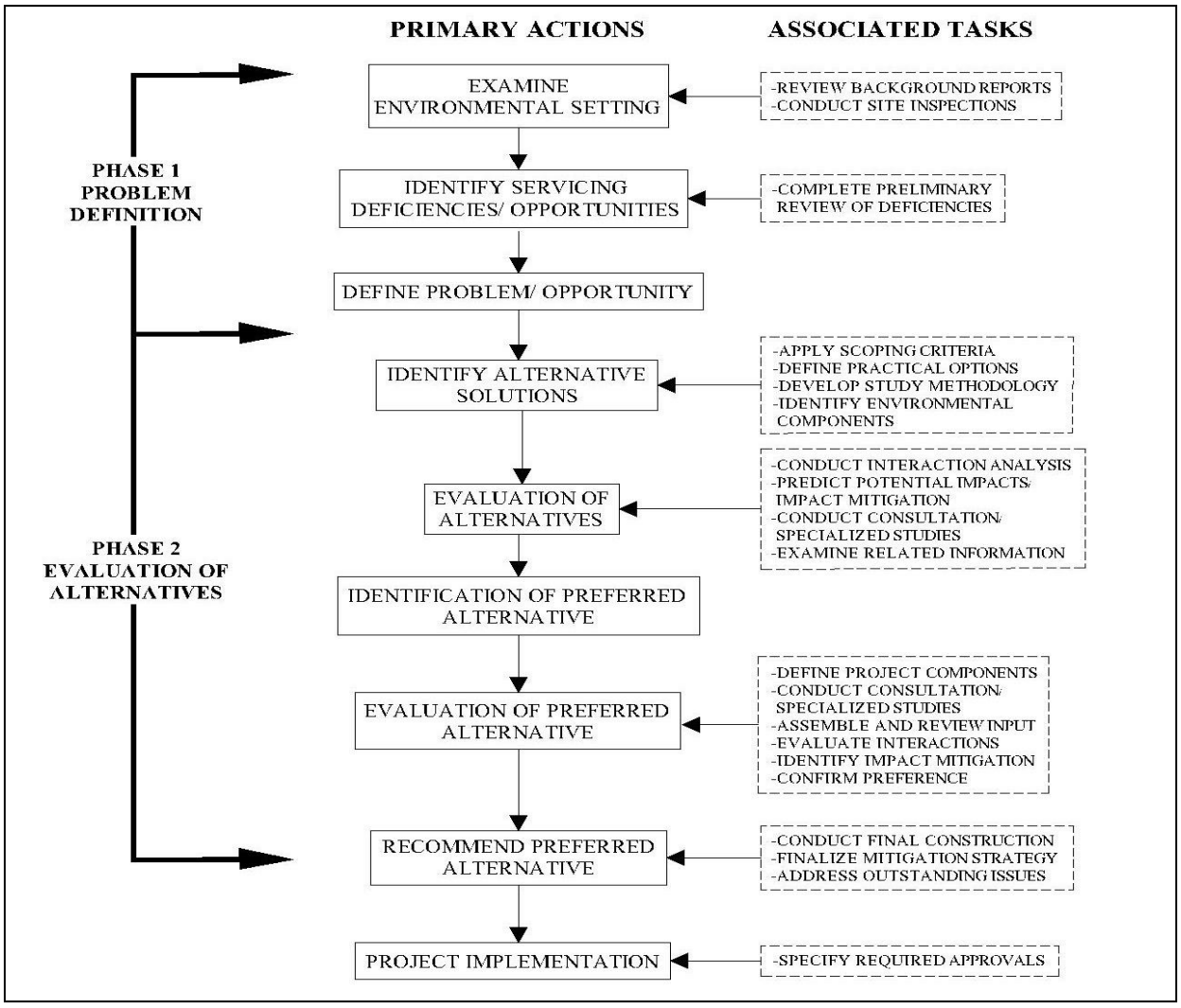
2.3 General Approach

The Municipality of West Grey initiated a formal MCEA process in June of 2020 in order to define and evaluate options for resolving deficiencies associated with Structure 28 (Lantz Bridge) on Concession 2 WGR. It was identified at the outset of the MCEA process that the proposed project may include components which would categorize the work as a Schedule B activity (e.g., reconstruction and/or relocation of a water crossing). For this reason, the assessment followed the environmental screening process prescribed for Schedule B projects in the MCEA document. The Schedule B screening process incorporates the following primary components:

- Background review.
- Problem/opportunity definition.
- Identification of practical solutions.
- Evaluation of alternative solutions.
- Selection of a preferred alternative solution and implementation.

Figure 2.1 illustrates the general tasks associated with the screening process. The following section of this report document the findings associated with each stage of the assessment.

Figure 2.1 MCEA Process and Tasks for Schedule B Activities



2.4 General Description of the Municipality

The Municipality of West Grey was formed by the amalgamation of the former Townships of Normanby, Bentinck and Glenelg, the Town of Durham and Village of Neustadt. The current population of West Grey is approximately 12,500 residents within an 880 km^2 area. In general, the Municipality is comprised of a number of small urban centres dispersed through a rural landscape. Durham is the largest urban settlement area in the Municipality with a population of over 1,100 residents.

West Grey is located in the southwestern corner of Grey County, bounded by the Municipalities of Brockton and South Bruce (in Bruce County) and Town of Hanover to the west, Town of Minto and Township of Wellington North (in Wellington County) to the south, Township of Southgate and Municipality of Grey Highlands to the east and Township of Chatsworth to the north. County Road 4 runs east and west through the

Municipality and Provincial Highway 6 is the major north-south transportation link. These roads intersect in Durham. Figure 2.2 illustrates the location of West Grey and the general location of the bridge site.

Lantz Bridge (or Structure 28) is located within the former Township of Bentinck, and northwest of the community of Durham. The bridge spans the Saugeen River along Concession 2 WGR, in a north to south orientation at the crossing. A photograph of the bridge crossing is included as Figure 2.3.

2.5 Project Study Area Description

The landscape that surrounds the crossing is typical of rural municipality, as it is surrounded by a mixture of natural features along the river valley, actively farmer agricultural fields and rural residential homes.

The bridge spans the Saugeen River, which outlets into Lake Huron approximately 100 km downstream at Southampton. The Saugeen River watershed encompasses nearly the entirety of the Municipality of West Grey within its boundary. Lantz bridge is a single-span Warren Pony Truss bridge. The span of the structure is 15 m, with two trusses and a roadway width of 15.4 m. It is assumed, based on the construction materials and design that the structure was built in the 1920s. Past engineering inspections of the structure identified advanced deterioration in several structural components of the bridge. In January 2021, the severe degradation of the south stringers necessitated closure of the bridge to vehicular traffic. Photos of the structure are included as Figure 2.4.

2.6 Environmental Setting

2.6.1 Significant Natural Areas

The project study area is located within the Saugeen River watershed, which is managed by the Saugeen Valley Conservation Authority. The study area is situated within a primarily rural landscape, however at the bridge site, the forested river valley extends east and west from the bridge providing some natural habitat within the predominately agricultural landscape. A review of sensitive natural heritage features in the vicinity of the project area was carried out through the course of the MCEA process. The Ontario Ministry of Natural Resources and Forestry's (MNRF) Natural Heritage Information Centre (NHIC) database was consulted to verify the current status of significant features in the general vicinity of the bridge site. From this database, six significant natural areas were identified within a 5 km radius of the site (Ministry of Natural Resources and Forestry, 2017). Figure 2.5 illustrates the natural features located within the vicinity of the bridge site.

Figure 2.2 General Study Area Location and Lantz Bridge Site

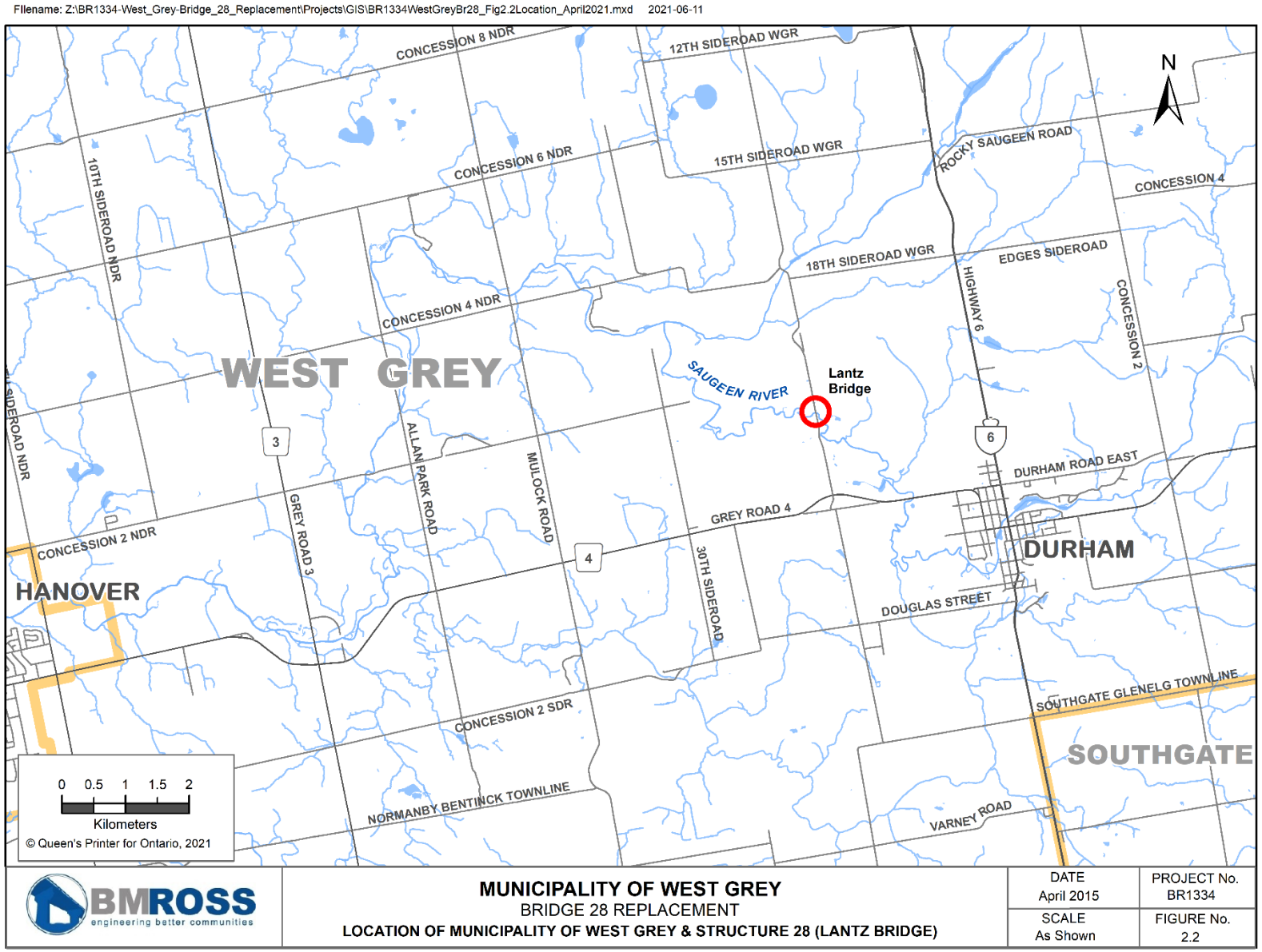
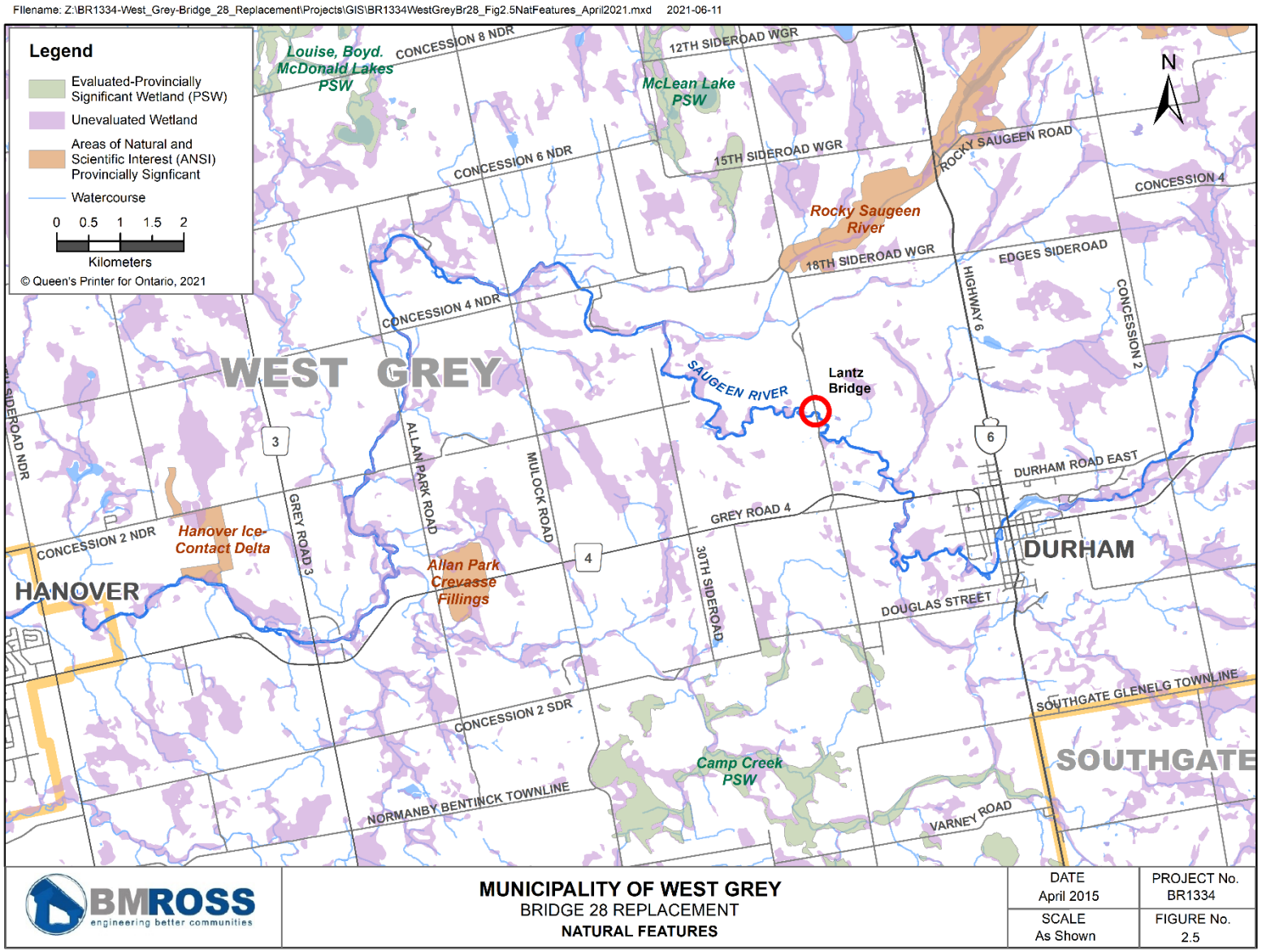


Figure 2.3 Lantz Bridge, looking downstream

Figure 2.4 Lantz Bridge, looking south along Concession 2 WGR

Figure 2.5 Significant Natural Features in the Vicinity of the Study Area



2.6.2 Areas of Natural and Scientific Interest (ANSI)

The MNRF has identified significant natural features that are representative of significant terrestrial and geologic features within the landscape, such as wetlands, woodlands and geologic formations. There are five ANSI features located within 5 km of the bridge site. Three of the features are Life Science ANSIs, representing biodiverse and natural landscapes and the remaining two are Earth Science ANSIs, which represent glacial landforms. The following ANSI are noted as within 5 km of the bridge site, but given the distance between the site and these features, no impacts to the ANSI are anticipated:

- Rocky Saugeen River (Life Science ANSI)
- Saugeen Kame Terrace (Earth Science ANSI)
- Allan Park Crevasse Fillings (Earth Science ANSI)
- Camp Creek Wetland Complex (Life Science ANSI)
- McLean Lake Wetland Complex (Life Science ANSI)

2.6.3 Aquatic Habitat (Saugeen River)

The Saugeen River is the third largest river and watershed in Southern Ontario. The project area is within the Upper Main Saugeen River watershed, which is 782 km^2 in area. The length of this portion of the Saugeen River is approximately 115 km. The main tributaries within this watershed include: Habermehl, Camp Creek, and Styx River. The watershed is predominately agricultural but also contains forested and urban areas. The physiography of the watershed consists mostly of spillways and till plains, however, it also contains a limited amount of kame moraines, drumlines, till moraines, peak and muck and esker features. The soils within the watershed consist of mostly of medium to moderately fine loam, silty loam, organic material and fine to moderately coarse sandy loam with small amounts of alluvium, bottomlands, coarse sandy loams, loamy sands and clay loam. The watershed also includes 56 dams, 13 of which are considered large. The mean stream flow for this section of the Saugeen River is 34.7 cm/s.

A copy of the Upper Main Saugeen River watershed report card is included in Appendix A.

2.6.4 Species at Risk

An evaluation of the presence of significant species and their associated habitats within the area of Structure 28 has been incorporated into the project planning process. The protection for species at risk and their associated habitats is directed by the following federal and provincial legislation:

- The Federal Species at Risk Act, 2002 (SARA) provides for the recovery and legal protection of listed wildlife species and associated critical habitats that are extirpated, endangered, threatened or of special concern and secures the necessary actions for their recovery on lands that are federally owned. Only

aquatic species and bird species included in the Migratory Bird Convention Act (1994) are legally protected on lands not federally owned; and

- The provincial Endangered Species Act, 2007 (ESA) provides legal protection of endangered and threatened species and their associated habitat in Ontario. Under this legislation, measures to support their recovery are also defined.

Based on the information available for the occurrence of species at risk and their associated habitats from the following sources: a summary of federally and provincially recognized species with the potential to be present within the project study area are listed in Table 2.1:

- Ministry of Natural Resources and Forestry, Species at Risk by Area
- Natural Heritage Information Centre, Make a Natural Heritage Map.
    - It is noted there is not a 1 km NHIC square corresponding with the study area. The nearest square to the east, 17MJ8786 was consulted.
- Environment Canada, Species at Risk Public Registry. SARA Schedule 1 Species List (Government of Canada, 2017).

Table 2.1 Species at Risk Within Grey County

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Likelihood of Presence or Impact to Habitat
Bird	Bald Eagle	*Haliateetus leucocephalus*	Not applicable	Special Concern	Low
Bird	Barn Swallow	*Hirundo rustica*	Threatened	Threatened	Low
Bird	Bank Swallow	*Riparia riparia*	Threatened	Threatened	Low
Bird	Black Tern	*Chlidonias niger*	Not applicable	Special Concern	Low
Bird	Bobolink	*Dolichonyx oryzivorus*	Threatened	Threatened	Low
Bird	Red-headed Woodpecker	*Melanerpes erythrocephalus*	Threatened	Special Concern	Low
Bird	Cerulean Warbler	*Setophaga cerulea*	Endangered	Threatened	Low
Bird	Chimney Swift	*Chaetura pelagica*	Threatened	Threatened	Low
Bird	Common Nighthawk	*Chordeiles minor*	Threatened	Special Concern	Low

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Likelihood of Presence or Impact to Habitat
Bird	Eastern Meadowlark	*Sturnella magna*	Threatened	Threatened	Low
Bird	Eastern Whip-poor-will	*Antrostomus vociferus*	Threatened	Threatened	Low
Bird	Eastern Wood-Pewee	*Antrostomus vociferus*	Not applicable	Special Concern	Low
Bird	Grasshopper Sparrow	*Ammodramus savannarum*	Special Concern	Special Concern	Low
Bird	Golden-winged Warbler	*Wermivora chrysoptera*	Threatened	Special Concern	Low
Bird	King Rail	*Rallus elegans*	Endangered	Endangered	Low
Bird	Least Bittern	*Ixobrychus exilis*	Threatened	Threatened	Low
Bird	Loggerhead Shrike	*Lanius ludovicianus migrans*	Endangered	Endangered	Low
Bird	Louisiana Waterthrush	*Seiurus motacilla*	Threatened	Threatened	Low
Bird	Olive-sided Flycatcher	*Contopus copperi*	Threatened	Special Concern	Low
Bird	Peregrine Falcon	*Falco peregrinus*	Special Concern	Special Concern	Low
Bird	Short-eared Owl	*Asio flammeus*	Special Concern	Special Concern	Low
Bird	Wood Thrush	*Hylocichla mustelina*	Threatened	Special Concern	Low
Bird	Yellow Rail	*Coturnicops noveboracensis*	Special Concern	Special Concern	Low
Fish	Black Redhorse	*Moxostoma duquesnei*	Not applicable	Threatened	Low
Mussel	Fawnsfoot	*Truncilla donaciformis*	Not applicable	Endangered	Low

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Likelihood of Presence or Impact to Habitat
Fish	Northern Brook Lamprey	*Ichthyomyzon fossor*	Special Concern	Special Concern	Low
Fish	Redside Dace	*Clinostomus elongatus*	Endangered	Endangered	Low
Insect	Hungerford`s Crawling Water Beetle	*Brychius hungerfordi*	Endangered	Endangered	Low
Insect	Monarch	*Danaus plexippus*	Special Concern	Special Concern	Moderate
Insect	West Virginia White	*Pieris virginiensis*	Not applicable	Special Concern	Low
Mammal	American Badger, jacksoni supspecies	*Taxidea taxus jacksoni*	Endangered	Endangered	Low
Mammal	Eastern Small-footed Bat	*Myotis leibii*	Not applicable	Endangered	Low
Mammal	Gray Fox	*Urocyon cinereoargenteus*	Threatened	Threatened	Low
Mammal	Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered	Low
Mammal	Northern Myotis	*Myotis septentrionalis*	Endangered	Endangered	Low
Plant	American Ginseng	*Panax quiquefolius*	Endangered	Endangered	Low
Plant	American Hart`s-tongue Fern	*Asplenium scolopendrium var. americanum*	Special Concern	Special Concern	Low
Plant	Butternut	*Juglans cinerea*	Endangered	Endangered	Low
Plant	Eastern Prairie	*Platanthera leucophaea*	Endangered	Endangered	Low

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Likelihood of Presence or Impact to Habitat
	Fringed Orchid				
Plant	Tuberous Indian-Plantain	*Arnoglossum plantagineum*	Special Concern	Special Concern	Low
Reptile	Eastern Ribbonsnake	*Thamniphis sauritus*	Special Concern	Special Concern	Moderate
Reptile	Massasauga Rattlesnake	*Sistrunrus catenatus*	Threatened	Threatened	Low
Reptile	Milksnake	*Lampropeltis Triangulum*	Special Concern	Not applicable	Moderate
Turtle	Blanding`s Turtle	*Emydoidea blandingii*	Threatened	Threatened	Moderate
Turtle	Northern Map Turtle	*Graptemys geographica*	Special Concern	Special Concern	Moderate
Turtle	Snapping Turtle	*Chelydra serpentina*	Special Concern	Special Concern	Moderate
Turtle	Spotted Turtle	*Clemmys guttata*	Endangered	Endangered	Low

The above table is based on potential habitat and occurrences throughout the entire County of Grey, as provided by the MNRF. The County incorporates a large area and a wide variety of environs that include terrestrial and aquatic habitat. The bridge site is a previously disturbed area, with limited habitat opportunities. Furthermore, the area was recently disturbed in conjunction with the installation of a gas main along the shoulder of the road. A review of occurrence data from the NHIC databased did not reveal any species at risk within the vicinity of the bridge site.

The Department of Fisheries and Oceans (DFO) Canada Aquatic Species at Risk Mapping website and MNRF NHIC website database were consulted to determine the likelihood of any species at risk within the vicinity of the project study area. From the DFO mapping, this section of Saugeen River is not identified as critical habitat nor were any aquatic species at risk identified.

2.7 Source Water Protection

The project study area is located within the Saugeen Valley Source Protection Area Region (Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, 2015). Within the vicinity of the study area is the community of Durham, which is serviced by municipal groundwater wells. In accordance with Source Water Protection guidelines, the Well Head Protection Areas (WHPAs) were reviewed to identify vulnerable groundwater areas associated with well site. The WHPAs for the Durham wells are illustrated on Figure 2.6. This figure also shows Highly Vulnerable Aquifers (HVA) and Significant Groundwater Recharge Areas (SGRA) within the area of the bridge site. The bridge site is within a HVA and SGRA, with a vulnerability score of 6. Given this vulnerability score, there are no policies that apply with respect to Source Water Protection at this site (Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, 2015). The Saugeen Valley Source Protection Area was contacted during the initial steps of the MCEA process (see Section 5.3 The response from the Risk Management Official identified that the site is not within a vulnerable source protection site where any Source Protection Plan policies would apply and that no further comments would be given.

At the bridge site, the adjacent rural properties are serviced by individual private well supplies. The nearest residence is approximately 50 m (164 ft) from the bridge site. Given this distance, impacts to private wells are not anticipated at this time.

2.8 Climate Change

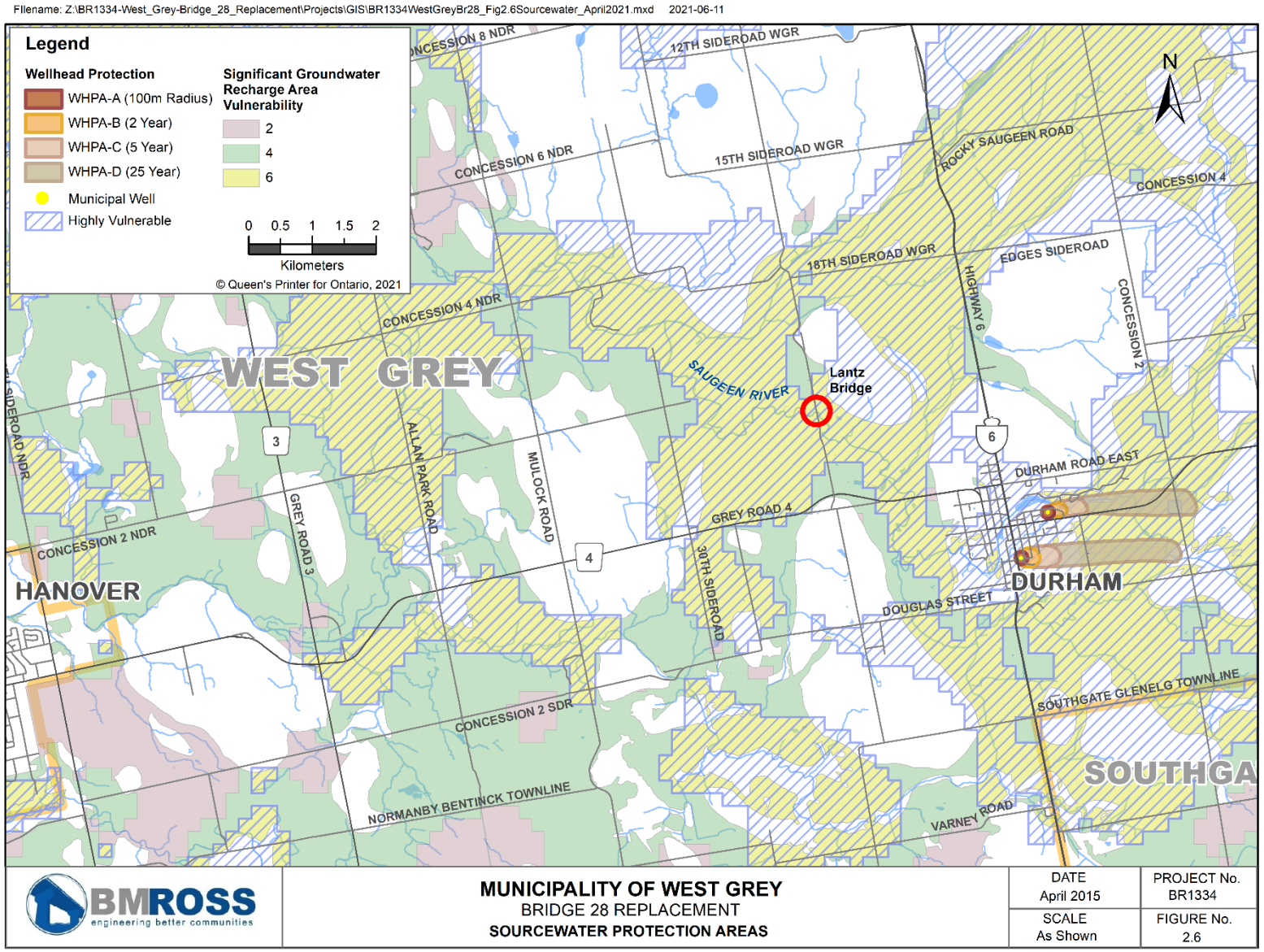
As part of the MCEA process, the impacts associated with climate change need to be evaluated. Some of the phenomena associated with climate change that will need to be considered include:

- Changes in the frequency, intensity and duration of precipitation, wind and heat events.
- Changes in soil moisture.
- Changes in sea/lake levels.
- Shifts in plant growth and growing seasons.
- Changes in the geographic extent of species ranges and habitat.

There are two approaches that can be utilized to address climate change in project planning. These are as follows:

I. Climate Change Mitigation – reducing a project's impact on climate change. Strategies may include:
    a. Reducing impact of greenhouse gas emissions related to the project.
    b. Alternative method to completing the project that would reduce adverse contributions to climate change.

Figure 2.6 Source Water Protection Areas within Vicinity of Lantz Bridge



II. Climate Change Adaption – increasing the projects and local ecosystems resilience to climate change. Strategies may include:
    a. Reducing vulnerability to climate-related severe weather events.
    b. Alternative methods of carrying out the project that would reduce negative impacts associated with climate change.

Through the evaluation of alternatives of the MCEA process, a consideration of each of these approaches is included and considered in the final determination of the preferred approach to completing a project.

2.9 Planning Policies

2.9.1 Provincial Planning Policy

The Provincial Policy Statement, 2020 (PPS) provides policy direction related to land use planning and development across the province. Local planning policies and land use decisions must conform with the policies of the PPS. The intent of the PPS is to promote the long-term prosperity, environmental health, public safety and social wellbeing through efficient land use and development patterns (Ministry of Munical Affairs and Housing, 2020).

With respect to municipal infrastructure projects, there are a number of policies within the PPS that need considered. The first section of the PPS identifies policies directing land use to achieve efficient and resilient development and land use patterns. Policy 1.1 outlines the goal of healthy, liveable and safe communities that are sustained by: 1.1 g) necessary infrastructure and public service facilities to meet current and projected needs and i) preparing for the regional and local impacts of a changing climate.

The PPS also outlines the importance of rural areas, and maintaining rural assets, amenities and protecting the environment. Section 1.1.4.1 of the PPS promotes supporting healthy, integrated and viable rural areas through e) efficient use of infrastructure and public service facilities, and i) providing opportunities for economic activities in prime agricultural areas.

Section 1.6 of the PPS is dedicated to infrastructure and public services facilities. The policies in this section of the PPS promotes the efficient provision of public infrastructure and service facilities, that are prepared for the impacts of climate change and will accommodate future need. Planned infrastructure is to be financially viable over their life cycle and sufficient to meet existing and future need. Additionally, per Section 1.6.4, infrastructure should support the effective and efficient delivery of emergency services and ensure the protection of public health and safety.

With respect to transportation systems, the PPS promotes networks that are safe, energy efficient and facilitate the movement of people and goods (Section 1.6.7.1).

The PPS also promotes the conservation of significant built heritage resources and significant cultural heritage landscapes.

2.9.2 Adjacent Land Uses

Land uses located adjacent to the bridge site include a wooded area, pastureland, actively cultivated agricultural lands, rural farm and residential properties. South of the bridge site is a concrete plant.

2.9.3 Land Use Planning

The County of Grey Official Plan and Municipality of West Grey Zoning By-Law were consulted to determine land use designations in the project study area. Agricultural lands located adjacent to the bridge site are designed as 'Rural' in the County of Grey Official Plan and zoned A2 – Rural. The river valley and wooded areas located adjacent to the river valley are designated as Hazard Lands in the County of Grey Official Plan and zoned NE: Natural Environment. The concrete plant located south of the site is zoned M4: Extractive Industrial.

Section 7.2 of the County of Grey Official Plan identifies permitted uses on lands designated Hazard, which includes public utilities:

7.2 Hazard Land

1) *Permitted uses in the Hazard Lands land use type are forestry and uses connected with the conservation of water, soil, wildlife and other natural resources. Other uses also permitted are agriculture, passive public parks, public utilities and resource based recreational uses. The aforementioned uses will only be permitted where site conditions are suitable and where the relevant hazard impacts have been reviewed.*

The construction of a bridge is permitted regardless of zoning designation, per Section 6.34 of the Municipality of West Grey Zoning Bylaw, which stipulates:

"any building, structure, use, service or utility of any department of the Corporation of the Municipality of West Grey, the Corporation of the County of Grey, or Federal or Provincial Government, Ontario, or any telephone, telegraph or gas company shall be permitted in any zone (except for the NE, NE2 and FL zones, unless written approval has been given by the Saugeen Valley Conservation Authority and Municipality of West Grey…"

2.10 Cultural Heritage Environment

An assessment of potential impacts to archaeological resources, built heritage resources and cultural heritage landscapes must be undertaken in conjunction with the MCEA process. To aid in the determination of potential for cultural heritage landscapes and archaeological and built heritage resources, the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) provides screening checklists. The checklists were completed and are included in Appendix B.

2.10.1 Archaeological Resources

The area around the structure has been extensively disturbed from previous infrastructure activities including most recently the installation of a natural gas pipeline. Given this and the results of the MHSTCI checklist, the potential for archaeological resources is considered low.

2.10.2 Built Heritage Resources

Given the age of the structure, a Cultural Heritage Evaluation Report (CHER) is required to assess the cultural heritage value of the structure and to identify potential impacts associated with the proposed project. In August 2020, Timmins Martelle Heritage Consultants were retained to complete the assessment. The CHER is included in Appendix C.

The determination of cultural heritage value is defined through Ontario Regulation 9/06 of the *Ontario Heritage Act*. In keeping with the Act, various aspects of the structure are examined to determine if they have value within the following categories:

- Design value or physical value.
- Historic value or associative value.
- Contextual value.

Lantz Bridge was examined based on the above criteria and was determined to meet one of the criteria for design or physical value due to the Warren Pony Truss bridge design, which is representative of the type of bridge that was common in Grey County in the early 20th century. The bridge has no historical, associative or contextual value.

The following are the heritage attributes associated with the cultural heritage value or interest of the bridge:

- The bridge's form and design as a single-span Warren Pony Truss bridge
- Intact features that represent the bridge's typology and era, specially its four-panel truss structure with riveted construction, outriggers and lattice-style handrails

The CHER notes that the existing structure has a number of structural concerns, in addition to safety concerns relating to the narrow width and poor alignment with the road. Retention of the structure, while undertaking the identified repairs or modifications is not considered a feasible option. Given this, the CHER recommends documentation of the structure is undertaken, with particular attention to the single-span Warren Pony Truss structure through drawings and/or photographs prior to replacement. The photographs and documentation should be archived locally within the Grey County archives. Incorporating limited components salvaged from the bridge, including truss components or portions of the lattice railing may also be considered.

2.11 Air Quality, Dust and Noise

The existing structure is not considered a source of air quality or dust emissions. The nearest sensitive receptor is a residence, located approximately 100 m from the bridge site. Currently, there are existing sources of dust and emissions within the study area, including a Class A License pit and cement plant. This facility is located approximately 325 m southwest of the bridge site. The site of the bridge is buffered from the pit and cement plant by the wooded area that surrounds the river valley.

Recently, a gas pipeline was installed along Concession 2 WGR. There were local impacts to air quality and noise associated with the construction of the pipeline. Following construction, the road surface was gravel and there have been local complaints regarding dust and noise. It is noted that the Township anticipates paving the Concession 2 WGR this year.

2.12 Former Bentinck Township Structure Rating and Rationale Report

In 2018, WSP completed a comprehensive review of the structures within the former Bentinck Township for the Municipality of West Grey. This report assessed the value, condition, scale, historical significance and impacts to the community (e.g., detours, emergency response) of the bridges and culverts greater than 3 m in span within the former Bentinck Township. The intent of the report was to assist the Municipality in determining structures that may be suitable for closure in the future, as well as provide recommendations for asset management (WSP, 2018).

Structure 28 was included in the assessment of structures. The report identifies the structure (as of 2018) had poor structural condition based on the BCI and a low asset value based on the condition and life-cycle age. Closure of Structure 28 was identified as having a significant impact on emergency response and would result in a significant increase in response times. The structure is also considered to be relatively important to operation of traffic flow and operation of the traffic network. The report also identified that closure of the structure would have high impacts on municipal services (such as waste collection) and school bus routes. Related to this, closure of this structure would have a significant impact with respect to detours, as it would result in a significant detour.

The report states that Bridge 28 requires work in the immediate future and that it is not a candidate for rehabilitation.

2.13 Identified Structural Deficiencies

Recent engineering inspections of the structure have identified significant problems with the structural condition of the bridge. These deficiencies are identified within the Ontario Structural Inspection Manual (OSIM) inspection report prepared by WSP in 2018. Further deterioration of the structure was observed in January 2021 and summarized in a letter from BMROSS to the Municipality of West Grey.

2.13.1 Summary of Deficiencies (2018)

The following represent the primary structural deficiencies and safety concerns associated with the existing crossing:

- Ballast walls are in poor condition, with severe cracking, efflorescence, delamination and spalling.
- Abutment bearings are not uniformly loaded/are unstable.
- Concrete abutment walls are in poor condition with severe cracking, efflorescence, delamination and spalling.
- Deck stringers are in poor condition.
- Severe spalling of the deck soffit with exposed rebar, delamination, cracking efflorescence and wet areas.
- Severe cracking, spalls and delamination of the concrete curbs.
- Load limit posting.
- Railings and barrier system do not meet bridge code and have localized damage to the steel beams.
- The bridge is a single lane structure.
- The structure is poorly aligned with the road.

Figure 2.7 Cracked Ballast Wall and Abutment

Photo credit: WSP 2018 OSIM

Figure 2.8 Severe Spalling and Delamination of Wingwall

Photo credit: WSP, 2018 OSIM

Figure 2.9 Curb, Barrier Wall and Barrier Protection (Not to Code)

Photo credit: WSP, 2018 OSIM

Figure 2.10 Misaligned Approach (looking northbound), September 2019

2.13.2 Condition Investigation – January 2021

In January 2021, BMROSS conducted a site review of the structure at the request of the Municipality. This review included a review of the stringers at the north and south ends of the structures, which had previously been identified as the areas of greatest concern. A visual inspection identified perforations through the webs of two out of the six girders at the north end and four of six at the south end. It was estimated that the capacity of the remaining north stringers in their current condition is equal to approximately 2 stringers in their original, new condition.

At the south end, a perforation in the cross member at the abutment (to which the stringers are attached) was also noted. Given the condition of the southerly stringers, it is suspected that the two most westerly and east-most stringers on the south end do not help to support the deck at the abutment. The remaining two stringers on the south side are suspected of having approximately 50% of their original shear capacity. Based on the condition of these stringers, it is our opinion they would be unable to support the weight of a 5-tonne vehicle.

At the time of this inspection, concerns were also noted with the crossbeam connections and diagonal bracing under the deck. However, given the severe degradation of the southern stringers, it was decided that further investigation work pertaining to the bridge was not required and it was recommended that the Municipality close the structure to vehicle traffic.

2.13.3 Preliminary Engineering Assessment

There are a number of existing issues and concerns associated with this structure. In addition to the severe deterioration of the structure, there are also concerns regarding the narrow width of the structure, the bridge not being in alignment with the roadway and the fact that the bridge was not designed to support current traffic loads. Given the extent and significance of the identified deficiencies, the bridge should be subject to complete replacement.

3.0 MCEA PROCESS

3.1 Identification of Problem/Opportunity

The first phase of the MCEA process includes the definition of the problem or opportunities, which need to be addressed. Based up on a review of the deficiencies identified during recent engineering inspections, the following problem statement has been developed for this project:

There are significant deficiencies with Structure 28 (Lantz Bridge) spanning the Saugeen River along Concession 2 WGR. The deficiencies include the condition, alignment and width of the structure. The deterioration of the condition of the structure recently resulted in its closure to vehicle traffic.

The preliminary engineering review for this structure, identified that replacement may be a solution to the identified problem/opportunity. Given this potential solution, a Schedule B MCEA was initiated to ensure to the proper level of investigation is carried out. Schedule B projects are approved subject to a screening process which incorporates Phase 1 and 2 of the MCEA process (i.e., problem identification and evaluation of alternative solutions). The purpose of the screening report is to identify alternative solutions, potential impacts associated with those solutions, and document the decision-making process in selection of a preferred solution, and plan for appropriate mitigation of impacts identified with the preferred solution.

3.2 Identification of Practical Alternatives

The second phase of the MCEA process involves the identification and evaluation of feasible and practical alternative solutions to the defined problem. Once the feasible and practical alternatives are identified, the technical, economic, and environmental impacts associated with implementation are evaluated. Mitigation measures that could lessen environmental impacts are also defined. A preferred solution or solutions is then selected.

3.2.1 Initial List of Alternative Solutions

Initially, a long list of alternatives is generated as part of Phase 2 of the MCEA process. These alternatives are evaluated in terms of practicality and feasibility to produce a short list of practical alternatives for a more detailed evaluation and review. The long list of alternatives and their evaluation is summarized in Table 4.1.

Table 3.1 Long List of Alternatives Considered

Alternative	Evaluation	Carried Forward for Further Evaluation (Yes or No)
Do Nothing	• Considered if impacts of other alternatives are too great or cannot be mitigated. • Would result in continued closure of the structure. • Would have significant impacts on local residents and local transportation network.	Yes – must always be considered – Carry forward as Alternative 1.
Repair or rehabilitate the Existing Structure	• Condition of the structure has deteriorated to a point where rehabilitating or repairing components is not considered practical or feasible due to costs and extent of repairs and rehabilitation required. • Repairs and rehabilitation will not address concerns regarding the alignment of the bridge within the road allowance or substandard width of structure. • Repairs will not significantly increase the lifespan of this structure. • Repairing the structure would still result in a functionally deficient bridge (i.e., would likely still have a load limit). • 2018 WSP study identified rehabilitation is not a feasible option for the structure.	No – not considered a feasible or practical solution
Replace the Existing Structure with a Single Lane Bridge	• Would allow for reopening of Concession 2 WGR. • Addresses structural deficiencies and would address concerns around alignment with roadway and width. • A new structure would not have a load limit. • More costly option.	Yes – carry forward as Alternative 2.

Alternative	Evaluation	Carried Forward for Further Evaluation (Yes or No)
Replace the Existing Structure with a Two-Lane Bridge	• Would allow for reopening of Concession 2 WGR. • Addresses structural deficiencies and would address concerns around alignment with roadway and width. • A new structure would not have a load limit. • Most costly option.	Yes – carry forward as Alternative 3.
Closure and Removal	• Would have significant impacts on local residents and local transportation network. • Previous studies determined this structure is an important component of the local transportation network.	No – not considered a feasible or practical solution.

A limited number of practical solutions to the defined opportunity were identified, following a preliminary evaluation of the long list of alternatives. These alternatives build upon the findings of a preliminary engineering assessment completed as part of the outset of the MCEA process. The alternatives caried forward for further evaluation include:

3.2.2 Alternative 1 – Do Nothing

This option proposes that no improvements or changes be made to address the identified problems. The Do Nothing Alternative may be implemented at any time if the design process prior to construction. This decision is typically made when the costs of all alternatives, both financial and environmental, significantly outweigh the benefits.

With respect to this structure, the Do Nothing alternative would result in the structure remaining closed to vehicle traffic. This does not address the structural deficiencies associated with the structure and will have significant impacts to local residents and the overall local transportation network.

3.2.3 Alternative 2 – Replace the Existing Structure

This option involves the removal of the existing structure and replacement with a new single lane bridge.

3.2.4 Alternative 3 – Replace the Existing Structure with a Two-Lane Bridge

This option involves the removal of the existing structure and replacement with a new, two-lane bridge. There are multiple design alternatives with respect to the type of structure (e.g., wooden, concrete) that may be considered.

3.3 Evaluation of Alternatives

Following the identification of practical and feasible alternative solutions, the alternatives are evaluated. The purpose of this is to examine the potential environmental impacts associated with the proposed works and to examine potential mitigation measures for any identified impacts. The evaluation stage generally involved the following activities:

- Preliminary technical review of the alternatives.
- Evaluation of environmental alternatives.
- Preliminary selection of a preferred alternative.
- Consultation with the general public and review agencies.
- Final selection of the preferred alternative.

3.4 Evaluation Methodology and Procedure

The evaluation of alternatives was carried out using a comparative assessment methodology, designed to predict the nature and magnitude of environmental impacts resulting from each defined option and to assess the relative merits of the alternative solutions. The evaluation methodology involved the following principal tasks:

- Identification of existing environmental conditions (baseline conditions, inventories).
- Assessment of existing land use activities, infrastructure, natural features and socioeconomic characteristics.
- Review of proposed alternatives and related works.
- Determination of the level of complexity required to complete the impact assessment.
- Identification of environmental components and subcomponents that may be affected by the defined alternative (i.e., define evaluation criteria).
- Prediction of the environmental impacts (positive, negative) resulting from the construction and operation of the defined options.
- Identification and evaluation of measures to mitigate adverse effects.
- Selection of a preferred alternative following a comparative analysis of the relative merits of each option.

3.5 Environmental Evaluation Methodology

Section 4.2 of this report identified the practical alternative solutions to resolve the defined problem. As part of the evaluation process, it is necessary to determine what effect or impact each alternative will have on the environment and what measures can be taken to mitigate the impact. The two main purposes of this exercise are to:

- Minimize or avoid adverse environmental effects associated with a project.
- Incorporate environmental factors into the decision-making process.

Under the terms of the EA Act, the environment is divided into five general components:

- Natural environment.
- Social environment.
- Cultural environment.
- Economic environment.
- Technical environment.

The identified environmental component can be further subdivided into specific elements that have the potential to be affected by the implementation of a solution. Potential impacts are noted in the following section of the report. Table 4.2 provides an overview of the specific environmental components considered relevant to this investigation. These components were identified following the initial round of public and agency input and following a preliminary review of each alternative with respect to technical considerations and the environmental setting of the project.

Table 3.2 Environmental Components Evaluated

Environmental Component	Sub-Components
Natural Environment	• Aquatic habitat • Aquatic Species at Risk • Hydraulic flow characteristics • Water quality/quantity • Significant natural features • Species at Risk • Vegetation • Mammals, Birds, Amphibians • Air quality, dust and noise • Source Water Policies • Physiographic features and soils • Drainage characteristics • Erosion • Climate Change
Social	• Local disruptions • Quality of life • Health and safety
Cultural	• Heritage and cultural resources
Economic	• Capital and operating costs • Lifecycle costs
Technical	• Traffic patterns/volumes • Pedestrian/vehicular safety • Agricultural use

The environmental effects of each alternative on the specific components are generally determined through an assessment of various impact predictors (i.e., impact criteria). Given the works associated with the alternative solutions, the following key impact criteria were examined during the course of the assessment:

- Nature (direct, indirect of cumulative)
- Magnitude (including the scale, intensity, geographic scope, frequency and duration of potential impacts)
- Technical complexity
- Mitigation potential (which considers avoidance, compensation and degree of reversibility)
- Public perception
- Scarcity and uniqueness of affected components
- Compliance with the applicable regulations and public policy objectives

Using the above criteria, the potential impacts of each practical alternative were systematically evaluated. The significance of the potential impacts posed by each alternative were evaluated considering the anticipated severity of the following:

- Direct changes occurring at the time of project completion.
- Indirect effects following project completion.
- Induced changes resulting from a project.

For the purposes of this MCEA, impact determination criteria developed by Natural Resources Canada have been applied to predict the magnitude of environmental effects resulting from the implementation of the project. Table 4.3 summarizes the impact criteria.

Table 3.3 Level of Impact Effects and Criteria

Level of Effect	General Criteria
High	Implementation of the project could threaten sustainability of the feature and should be considered a management concern. Additional remediation, monitoring and research may be required to reduce impact potential.
Moderate	Implementation of the project could result in a resource decline below baseline, but impact levels should stabilize following project completion and into the foreseeable future. Additional management actions may be required for mitigation purposes.
Low	Implementation of the project could have a limited impact upon the resource during the lifespan of the project. Research, monitoring and/or recovery initiatives may be required for mitigation purposes.
Minimal	Implementation of the project could impact upon the resources during the construction phase of the project but would have negligible impact on the resource during the operation phase.

Given the criteria defined above, the significance of adverse effects is predicted on the following assumptions:

- Impacts from a proposed alternative assessed as having a Moderate or High level of effect on a given feature would be considered significant and
- Impacts from a proposed alternative assessed as having a Minimal to Low level of effect on a given feature would not be considered significant.

3.6 Environmental Evaluation

The potential interactions between the identified alternatives and environmental features (Table 4.4) were examined as part of the evaluation of alternative phase. The purpose of this analysis was to determine, in relative terms, the environmental effects of constructing and operating each identified option on the defined environmental component and subcomponents. The impact criteria described in Table 4.3 were used. In this regard, the level of effect for the environmental interactions were rated as High, Moderate, Low and Minimal. Potential mitigation measures were also considered as part of this evaluation.

Table 4.4 summarizes the outcome of the environmental effects analysis carried out for the alternatives.

Table 3.4 Environmental Effects and Impacts Analysis of Alternatives

Component	Alternative 1 – Do Nothing	Alternative 2 – Construct a Replacement Structure (New One-Lane Structure)	Alternative 3 – Construct a Replacement Structure (New Two-Lane Structure)
Natural – aquatic habitat	• Should the structure fail and need to be removed, there may be impacts to aquatic habitat. • Level of Impact: Low to Moderate	• Some impacts to aquatic habitat are anticipated as a result of construction-related activities. Additional impacts may occur related to sediment and erosion control during construction of the approach and new abutments. • The watercourse will continue to pass through the site and be separated from the work areas during construction to minimize impacts as much as possible. • Level of impact: Moderate	• Some impacts to aquatic habitat are anticipated as a result of construction-related activities. Additional impacts may occur related to sediment and erosion control during construction of the approach and new abutments. • The watercourse will be isolated at the bridge site during construction to minimize impacts as much as possible. • Level of impact: Moderate
Natural – aquatic species at risk	• No identified aquatic species at risk at the site. • Level of Impact: Minimal	• No identified aquatic species at risk at the site. • Level of Impact: Low to Moderate.	• No identified aquatic species at risk at the site. • Level of Impact: Low to Moderate
Natural – hydraulic flow characteristics	• No change from current conditions • Hydraulic modeling shows the existing structure has sufficient clearance for the 10-year flood but not the 20-year flood. • Level of Impact: Minimal	• Hydraulic capacity improved by increasing the span, maintaining soffit elevation and raising the road profile. This would reduce the potential for flooding at the bridge during high flow events such as the regional storm. • Level of Impact: Low	• Profile of roadway could be improved by lower the soffit elevation, increasing the span and raising the road profile. This would reduce the depth of flooding on the bridge during high flow events such as the regional storm. • Level of Impact: Low
Natural – water quality/quantity	• Continued deterioration of the structure, or failure may locally impact water quality. • Level of Impact: Moderate	• Some short-term impact to water quality may occur as a result of construction-related activities. Additional impacts may occur related to sediment and erosion during the reconstruction of the approach. • Implementation of sediment and erosion control measures and isolation of the watercourse during construction will minimize impacts as much as possible. • Level of Impact: Low to Moderate	• Some short-term impact to water quality may occur as a result of construction-related activities. Additional impacts may occur related to sediment and erosion during the reconstruction of the approach. • Implementation of sediment and erosion control measures and isolation of the watercourse during construction will minimize impacts as much as possible. • Level of Impact: Low to Moderate
Natural – significant natural features	• No ANSIs within close proximity to the site. • Level of Impact: Minimal	• No ANSIs within close proximity to the site. • Level of Impact: Minimal	• No ANSIs within close proximity to the site. • Level of Impact: Minimal
Natural – species at risk	• No species at risk identified as present at the site. • Level of Impact: Minimal	• No species at risk identified as present at the site. • Level of Impact: Minimal	• No species at risk identified as present at the site. • Level of Impact: Minimal
Natural – vegetation	• No change from current conditions • Level of Impact: Minimal	• Some vegetation along roadside may be removed to permit construction of bridge and realignment of approach. Area has previously been disturbed due to recent utility construction. • Disturbed areas adjacent to the bridge will be restored upon completion of construction. • Level of Impact: Low	• Some vegetation along roadside may be removed to permit construction of bridge and realignment of approach. Area has previously been disturbed due to recent utility construction. • Disturbed areas adjacent to the bridge will be restored upon completion of construction. • Level of Impact: Low

Component	Alternative 1 – Do Nothing	Alternative 2 – Construct a Replacement Structure (New One-Lane Structure)	Alternative 3 – Construct a Replacement Structure (New Two-Lane Structure)
Natural – birds, mammals and amphibians	• Should the structure fail and need to be removed there may be impacts to terrestrial habitat. • Level of Impact: Low	• Some impacts to terrestrial habitat are anticipated as a result of construction and realignment of approach. Area has previously been disturbed due to recent utility construction. • Disturbed areas adjacent to the bridge will be restored upon completion of construction. • Level of Impact: Low	• Some impacts to terrestrial habitat are anticipated as a result of construction and realignment of approach. Area has previously been disturbed due to recent utility construction. • Disturbed areas adjacent to the bridge will be restored upon completion of construction. • Level of Impact: Low
Natural – air quality and noise	• No change from current conditions. • Level of Impacts: Minimal	• Impacts related to air quality and noise will be limited to the construction period. • Work will include driving of sheet piles and H-piles. • Impacts are not anticipated to be significant. • Standard construction mitigation measures will be implemented to minimize construction-related impacts on air quality and ambient noise levels. • Not anticipated to have any impacts on air quality or noise during operation. • Located approximately 100 m from nearest sensitive receptor. Site is surrounded by woodland, which will help mitigate noise impacts. • Level of Impact: Low	• Impacts related to air quality and noise will be limited to the construction period. • Work will include driving of sheet piles and H-piles. • Impacts are not anticipated to be significant. • Standard construction mitigation measures will be implemented to minimize construction-related impacts on air quality and ambient noise levels. • Not anticipated to have any impacts on air quality or noise during operation. • Located approximately 100 m from nearest sensitive receptor. Site is surrounded by woodland, which will help mitigate noise impacts. • Level of Impact: Low
Natural – Source Water Protection	• No change from current conditions. • Level of Impacts: Minimal	• Project site is within Highly Vulnerable Aquifer and Significant Groundwater Recharge Area. • No applicable protection policies. • Level of Impact: Low	• Project site is within Highly Vulnerable Aquifer and Significant Groundwater Recharge Area. • No applicable protection policies. • Level of Impact: Low
Natural – physiographic characteristics and soils	• No change from current conditions. • Level of impacts: Minimal	• New abutments will bear on H-piles. • Will have some construction-related impacts to soil locally. Excess, uncontaminated material will used onsite as much as possible. Excess material will be transported per O.Reg. 406/19. Amount of excess material not anticipated to be significant. • Level of Impact: Low	• New abutments will bear on H-piles. • Will have some construction-related impacts. Excess, uncontaminated material will be used onsite as much as possible. Excess material will be transported per O.Reg. 406/19. Amount of excess material not anticipated to be significant. • Level of Impact: Low
Natural – drainage and erosion	• No change from current conditions. • Level of Impacts: Minimal.	• Construction will result in excavation and regrading. • Implementation of sediment and erosion controls measures during construction will mitigate impacts.	• Construction will result in excavation ad regrading. • Implementation of sediment and erosion control measures during construction will mitigate impacts.
Natural – climate change	• Structural integrity of structure is already compromised. Increased storm frequency and intensity as a result of climate change has the potential to further damage structure. • Level of Impacts: High	• New structure will be designed with consideration given to increased storm frequency and intensity to reduce vulnerability to climate change impacts. • Construction will require heavy equipment that will release Green House Gases (GHGs) as emissions. • Impacts related to construction may be reduced through equipment and materials selection.	• New structure will be designed with consideration given to increased storm frequency and intensity to reduce vulnerability to climate change impacts. • Construction will require heavy equipment that will release Green House Gases (GHGs) as emissions. • Impacts related to construction may be reduced through equipment and materials selection.

Component	Alternative 1 – Do Nothing	Alternative 2 – Construct a Replacement Structure (New One-Lane Structure)	Alternative 3 – Construct a Replacement Structure (New Two-Lane Structure)
Social – local disruptions	• High level of impact to local residents. Currently the structure is closed, resulting in significant local disruptions to the transportation network. • Level of Impacts: High	• Will have moderate level of disruption during construction (from continued closure). • Construction of a one-lane structure will impact/prohibit some vehicles from utilizing the crossing due to substandard width. • Level of Impacts: High	• Will have moderate level of disruption during construction (from continued closure). • Construction of a two-lane structure will have sufficient width to accommodate all types of vehicles. Allows full utilization of the crossing. • Residents have expressed concerns that a two-lane bridge would increase traffic and speed. • Level of Impacts: Moderate
Social – quality of life	• High level of impact to local residents. Currently, the structure is closed. Continued closure will result in higher emergency response times locally, impacts to school bus routing, impacts to municipal services (snow clearing, waste collection). • Level of Impact: High	• Will restore access for local residents. • Access for certain types of vehicles will be limited due to substandard width of structure (e.g., agricultural equipment). • May impact local municipal services (e.g., snow clearing). • Level of Impact: Moderate	• Will restore access for local residents. • Will provide access for wider vehicles (e.g., agricultural & snow removal equipment). • Residents have expressed concerns that a two-lane bridge would increase traffic and speed. • Most efficient solution for the provision of municipal services (e.g., snow clearing, waste collection). • Level of Impact: Low
Social – health and safety	• Existing structure is closed due to structural and safety concerns. This option would not address existing health and safety concerns. • Level of Impact: High	• A new bridge will address structural safety concerns. • The single-lane option does not address concerns regarding substandard width of structure in relation to traffic levels, speed and sightlines. • Single lane structure would provide reduced side-clearance widths beside the vehicle driving lanes for pedestrians, cyclists. • Level of Impact: High	• A new, two lane bridges will address the structural safety issues as well as safety concerns regarding the width of the structure. • Meets the Canadian Highway Bridge Design Code requirements for traffic levels and speed. • Two lanes provide sufficient clearance for pedestrians and cyclists outside of the driving lanes and allows space for vehicles to shift over. • Residents have expressed concerns that a two-lane bridge would increase traffic and speed. • Provides a safer future emergency detour route. • Level of Impact: Minimal
Cultural – cultural heritage/archaeology	• Existing cultural heritage value of structure would remain in short-term. Over the long-term, the continued deterioration of the structure will impact the cultural heritage value. • Level of Impact: Moderate	• Removal of the existing structure will impact the cultural heritage value. • Recommended mitigation (per the Cultural Heritage Evaluation Report) is documenting and photographing the existing structure prior to removal. • Level of Impact: Moderate	• Removal of the existing structure will impact the cultural heritage value. • Recommended mitigation (per the Cultural Heritage Evaluation Report) is documenting and photographing the existing structure prior to removal. • Level of Impact: Moderate
Economic – capital and operating costs	• Least costly option in terms of capital and operating expenditures. • Long term capital cost may include removal of structure. • Township may be liable for damages should structure collapse. • Level of Impact: Minimal	• A new single lane structure is the second-least costly option in terms of capital costs. • Given the need to replace the substructure, the difference in cost between a single lane and two-lane structure is approximately 15%. • Level of Impact: High	• A two-lane structure is the costliest option in terms of capital costs. • No substantial difference in operating costs between a single and two-lane structure. • Is approximately 15% more costly to construct a two-lane structure compared to single lane. • Capital costs offset by ICIP grant funding. • Level of Impact: Moderate

Component	Alternative 1 – Do Nothing	Alternative 2 – Construct a Replacement Structure (New One-Lane Structure)	Alternative 3 – Construct a Replacement Structure (New Two-Lane Structure)
Economic – life cycle costs	• Structure has reached end of its life. • The Do-Nothing option has the lowest life cycle costs associated with it. • Level of Impact: Minimal	• A new single lane structure is estimated to have a life span of 75 years. • Replaces a deficient asset. • Would be a new asset, however this asset would be functionally deficient over its expected lifetime. • Level of Impact: High	• A new two-lane structure is estimated to have a life span of 75 years. • Replaces a deficient asset. • Would add a new asset that will require maintenance; however, a two-lane structure should meet future traffic needs. • Level of Impact: Low
Technical – traffic patterns/volumes	• Structure would remain closed. • Will continue to impact local transportation network and require detouring around closed structure over the long-term. • Level of Impact: High	• Would allow for reopening of crossing to some vehicles. Larger vehicles and agricultural equipment may still need to detour due to substandard width. • Single lane structure does not meet Canadian Highway Bridge Design Code requirements given traffic levels and speed. • Is not considered ideal if road is used in the future for a detour route (due to emergency or local construction). • Does not support potential increased traffic levels in the future. • Level of Impact: High	• Would allow for reopening of crossing to vehicle traffic, including larger vehicles and agricultural equipment. • Provides a sufficient structure for traffic levels and speed of road. • Supports use of the road as a future detour route (due to emergency or local construction). • Supports potential increases in traffic levels in the future. • Level of Impact: Low
Technical – pedestrian/vehicular safety	• Structure would remain unsafe and closed to vehicles and pedestrian traffic. • Level of Impact: High	• Would allow for reopening of crossing. • Not considered the safest option with respect to vehicle and pedestrian traffic. Given traffic levels, sight lines, and vehicle speeds, a single lane bridge does not meet requirements of the Canadian Highway Bridge Design Code. • Would not have sufficient clearances for pedestrian, cyclists and vehicle traffic and would pose risk for collisions. • Level of Impact: High	• Would allow for reopening of crossing. • Is considered the safest option with respect to vehicle and pedestrian traffic. Meets the requirements of the Canadian Highway Bridge Design Code. • Has sufficient side clearances for pedestrian, cyclists and vehicles traffic. • Minimizes risk associated with collisions at bridge site. • Level of Impact: Low
Technical – agricultural use	• Structure would remain closed. • Does not support movement of wider agricultural equipment. • Level of Impact: High	• Would allow for reopening of crossing. • Does not support movement of wider agricultural equipment. • Level of Impact: High	• Would allow for reopening of crossing. • Supports movement of wider agricultural equipment. • Level of Impact: Low

3.7 Evaluation Summary

Three alternative solutions were considered for evaluation. These were:

- Alternative 1- Do Nothing
- Alternative 2 – Replacement with a single lane bridge
- Alternative 3 – Replacement with a two-lane bridge

The anticipated impacts, which include impacts to the natural, social, cultural and technical environments were evaluated for each of the above noted alternatives.

Alternative 1, do nothing, has the fewest impacts to the natural and cultural environments. However, it does not address the current structural condition of the bridge, which since starting this MCEA has resulted in the closure of the structure. It also does not address the issues associated with the alignment and substandard width of the structure. At this point in time, doing nothing would see the structure remain closed, which has significant impacts to the transportation network.

The second alternative solution is replacement of the existing structure with a single lane bridge. This alternative would have impacts to the natural environment due to the need to remove the existing structure and construction of a new bridge. Replacement of the existing structure with a single lane bridge would address the structural concerns associated with the current Lantz Bridge, however it does not address concerns regarding the alignment and width of the structure. A single lane bridge has greater impacts from a technical standpoint as it would not meet the requirements of the Canadian Highway Bridge Design Code. The amount of traffic, speed and type of vehicles that utilize the road do not support the use of a single lane bridge. With a single lane bridge, there would not be room for vehicles to shift over when they meet pedestrians or bicycles. From an economic perspective, the cost of a single lane bridge is only approximately 15% lower than a two-lane bridge. Installation of a single lane structure would also see a functionally deficient asset added to the municipal inventory.

Similar to Alternative 2, Alternative 3 would have impacts to the natural environment as it would involve removal of the existing structure and installation of a new bridge. A two-lane bridge is the costliest of the options; however, it would provide a structure that meets the requirements of the CHBDC. It would also provide sufficient clearances between vehicles and pedestrians or cyclists utilizing the crossing. Installation of a two-lane bridge will also address the concerns regarding the alignment of the bridge with the roadway. Residents raised concerns regarding a two-lane bridge resulting in increased traffic and speed and other issues with Concession 2 WGR. The intent of the bridge is not to serve as a traffic calming measure; however, the Municipality may consider other safety measures to address concerns along the roadway.

3.8 Selection of Preferred Alternative

Based on the results of the assessment above and a review of the technical requirements associated with the project, the preferred solution is Alternative 3, replacement of the existing structure with a two-lane bridge. There are a number of attributes associated with this alternative that justifies its consideration as the preferred option for addressing the deficiencies associated with Lantz Bridge:

- Addresses existing deterioration in the condition of Lantz Bridge that has resulted in its recent closure.
- Is the most appropriate alternative to address concerns regarding the substandard width and alignment of the current crossing.
- Meets the requirements of the Canadian Highway Bridge Design Code.

4.0 PUBLIC CONSULTATION PROGRAM

4.1 General

Public consultation is an integral component of the MCEA process. Public consultation allows for an exchange of information which assists the proponent in making informed decisions during the evaluation of alternative solutions. During Phases 1 and 2 of the study process, consultation was undertaken to obtain input from the general public, stakeholders, and review agencies that might have an interest in the project.

The components of the public consultation program employed during the initial MCEA study are summarized in this section of the Screening Report and documented in Appendix D.

4.2 Initial Notice

Contents:	General study area description, summary of proposed works
Issued:	June 25, 2020
Placed in:	Hanover Post, Municipality of West Grey website
Circulated to:	34 adjacent property owners, 10 review agencies
Input period:	Concluded July 27, 2020

Comments received from the public as a result of the Notice are include within Table 5.1.

Table 4.1 Summary of Initial Public Comments

Stakeholder	Summary of Comments
Email from resident (June 19, 2020)	• Concerned about for pedestrian and cyclist safety if traffic is increased. • Concerned a two-lane bridge will increase traffic. • Noted concerns about s-bends north and south of the bridge.
Email from resident (June 23, 2020)	• Concerned that a two-lane bridge will decrease safety at the bridge and road. • Current bridge requires vehicle traffic to slow down. Two lanes will allow motorists to cross without slowing down, making it more dangerous for pedestrian and cyclists. • Location popular with people fishing and kayaking, often have cars parked on the side of the road. • Noted only one accident on the bridge in the last ten years. • Noted additional safety concerns along Concession 2 – blind curves north and south of the road. • Expect traffic will increase with the two-lane option, including large trucks which were previously not permitted to cross the road due to the load limit.
Email from resident (June 29, 2020)	• Would like to see bridge repaired and maintained as is.
Email from resident (July 21, 2020)	• Concerned that a two-lane bridge will increase traffic and more issues with existing safety concerns along Concession 2. • Two-lane bridge may result in more maintenance required. • Concerned that the increase in traffic may impact agricultural users of the road. • With other bridges in the Municipality needing repairs, should money be spent on expensive improvements and increased maintenance. What are the future costs for maintaining a more expensive bridge? • Do not support a two-lane bridge.
Email from resident (July 23, 2020)	• Present span is too narrow and acts as a partial dam in times of flooding. At one time, the approaches were lower, and this allowed water to flow over the road on either side of the bridge. Water currently forced under the bridge. • Foundations nearly 100 years old and should be replaced. • Amount of traffic does not justify a two-lane bridge now and in the future. • Support option for a single lane bridge. Most reasonable in terms of cost and practicality.
Email from resident (July 26, 2020)	• Would like to see Lantz Bridge remain as single lane bridge

Stakeholder	Summary of Comments
Phone call from resident (May 10, 2021)	• Does not want a single lane bridge. • Would like to see a modern, two-lane bridge with concrete deck and girders. • There are lots of cash crop operations around that need two lane bridge to get equipment across.

4.3 Government Review Agencies

Input into the MCA process was solicited from government review agencies by way of direct mail correspondence. Agencies that might have an interest in the project were initially sent a letter describing the nature of the project and a copy of the Notice of Study Commencement. Appendix D. contains a copy of the information circulated to the review agencies and a list of the agencies requested to comment on the project. Formal written correspondence from the agencies is also provided. A summary of the comments received can be found in Table 5.2.

Table 4.2 Summary of Review Agency Comments

Agency	Summary of Comments	Response
Carl Seider, Risk Management Official, Grey Sauble Conservation, July 3, 2020, by email	• Lantz Bridge is not located within a vulnerable source protection area where local Source Protection Policies apply, therefore, we will not be providing further comment on this project.	• Noted.
Stephanie Lacey-Avon, Grey County Planning and Development, July 20, 2020, by email	• Noted that the study site is located within Hazard Lands and Significant Valleylands as defined in the Grey County Official Plan. • County planning staff recommend that comments are received from the local conservation authority (Saugeen Valley Conservation Authority). • County Transportation Services currently have no concerns. • Provided consultation occurs with the SVCA, County planning staff have no further concerns with the subject application. • The County requests notice of any decision rendered with respect to this file.	• Confirmed that SVCA is being consulted as part of the process.

Agency	Summary of Comments	Response
Erik Downing, Saugeen Valley Conservation Authority (SVCA), July 28, 2020, by email	• SVCA is interested to receive additional information and reports, as they are made available. • An SVCA permit will be required for the proposed works as indicated in the report. The preferred proposal is acceptable to the SVCA in principle, pending the review of detailed reports and plans yet to be provided to the SVCA. • Noted that for Section 35 of the Fisheries Act, the proponent is now required to contact the Department of Fisheries and Oceans.	• Noted.

4.4 Aboriginal Consultation

4.4.1 Aboriginal Consultation Process

The Crown has a duty to consult with First Nation and Métis communities if there is a potential to impact on Aboriginal or treaty rights. This requirement is delegated to project proponents as part of the MCEA process, therefore, the project proponent has a responsibility to conduct adequate and thorough consultation with Aboriginal communities as part of the MCEA consultation process. The project area is located within the traditional territory of the Saugeen Ojibway Nation, and also contains a number of sensitive natural features which may be of concern to First Nation and Métis communities in the area. These features include Saugeen Creek and forested areas around the crossing.

4.4.2 Background Review

In order to identify Aboriginal communities potentially impacted by the project, the Aboriginal and Treaty Rights Information System (ATRIS) was consulted. A search was conducted for Aboriginal Communities, including their traditional territories within a 50 km radius of the project study area. Utilizing this process, five Aboriginal and Métis communities were identified in conjunction with this project: Chippewas of Saugeen First Nation, Chippewas of Nawash Unceded Nation, Historic Saugeen Métis, Métis Nation of Ontario, and Great Lakes Métis Council. Correspondence was subsequently forwarded to each community/organization detailing the proposed project and asking for input. Appendix D contains a list of First Nation and Métis communities contacted as part of the consultation process. A consultation log which summarizes all of the consultation efforts with First Nation and Métis communities is found within Appendix D.

4.4.3 Initial Consultation Phase

A response to the initial letter and Notice of Study Commencement were received from the Historic Saugeen Métis. All the First Nation and Métis communities identified were

circulated a copy of the Notice of Commencement in addition to a letter outlining the project. A summary of the comments received are included below in Table 5.3.

Table 4.3 First Nation and Métis Community Comments

Aboriginal Community	Comments/Concerns	Actions Taken
Chris Hachey, Coordinator, Lands, Resources and Consultation, Historic Saugeen Métis (HSM)	HSM interests relate to environmental effects, sustainability, and potential for archaeological resources. Look forward to further consultation as information becomes available.	Noted and filed.

4.5 Public Information Meeting

A virtual Public Information Centre was held on Thursday, May 20, 2021, via Zoom. A Notice of Public Information Centre was issued in the Hanover Post, the two weeks prior to the meeting. The Notice was also mailed out to local property owners, First Nation and Métis communities. Residents that had previously submitted comments were also emailed a copy of the Notice. The format of the meeting included a presentation by the study team, followed by a question and comment period. Representatives from BMROSS and the Municipality of West Grey were in attendance. The meeting was arranged to serve several purposes:

- Provide local residents and other stakeholders with additional details on the MCEA process and a forum to express their views.
- Provide area residents with an overview of the recommendations identified in conjunction with the MCEA investigations.
- Provide residents with an opportunity to ask questions.
- Identify the preliminary preferred alternative recommended by the Municipality.

Approximately 30 persons were in attendance. A copy of the presentation materials and notes from the meeting are included in Appendix D. Table 5.4 summarizes the comments and questions from the public meeting.

Table 4.4 Summary of Comments and Questions from Public Information Centre

Question/Comment	Response
A resident raised concerns about safety at the corner at Hwy 4. Concerned about the road becoming a bypass for Durham. Also concerned about bend to the north of the bridge and sight lines.	Concerns noted. With respect to the bridge, the new bridge will be realigned within the roadway which will help with the sight lines in the immediate vicinity of the bridge. There will also be some tree trimming likely in the vicinity of the bridge. Will also have increased side clearance on the bridge so there more space to accommodate pedestrians and vehicle traffic. Improvements at the intersection and curves to the road are outside of the scope of the project.
How can concerns about large truck traffic be addressed if the bridge cannot be restricted to a one-lane structure. Could a load restriction be put in place? Noted concerns with speeds on the road north of the bridge. Asked Council to monitor and track traffic following construction of the bridge.	It will be difficult to restrict truck traffic on the road given there are existing industries located along the road, but ultimately any restrictions with respect to load limits, truck traffic, would be a decision of Council to implement a bylaw following review of applicable data.
What is the earliest start date for construction?	The earliest likely date for the start of construction is late August. If construction doesn't proceed this year, construction would not start until July next year due to in-water timing restrictions.
What chemicals is the wooden bridge treated with? What is the composite weave that goes into the laminates?	The treatment process has been recognized as having minimal impacts on aquatic species, it has been used in columns that sit in the water and is approved for use in the Canadian Highway Bridge Design Bridge Code. For this bridge, we are not proposing to use wood for the substructure, so the wood will not be directly in the water. The Douglas fir/larch wood material is treated with Pentachlorophenol. A Glass fibre reinforced polymer mesh is used in the laminated girders to increase their strength.

Question/Comment	Response
Is there still an opportunity to submit comments and feedback. Who do they submit to and is there a timeline for when submissions must be received by?	Comments can be sent to the study team. It was requested comments be sent to her within a week of the meeting if possible. There will also be a 30-day public comment period when the Notice of Completion is issued.
Is the Municipality required to post the Notice of Completion?	Yes. Municipality is required to post the Notice of Completion. It will also be mailed out to adjacent property owners and those we have been in contact with regarding the project.
A resident anticipates additional truck traffic with gravel pit and cement plant and raised concerns about safety and wear and tear on the bridge. Would support restriction on bridge.	Any traffic restrictions would be a Council decision, but the bridge will be designed to support traditional road traffic, including truck traffic.
Resident asked for a meeting to discuss the potential encroachment on their property.	After the current stay at home order is lifted, a meeting with the property owners and Hydro One will be organized. The Township will schedule this meeting.
Property owners in the area asked a previous Council to keep trucks from the cement truck from going north on Concession 2. Since that time a gravel pit has opened. The resident stated serious concerns about the s-bend, speed and that a two-lane bridge will open the road up for more traffic.	Concerns noted.
Our property abuts the bridge site. Will there be restricted access during construction?	Likely will be times when access to your laneway will be restricted. It was suggested a meeting be organized with the property owner to discuss the access if there are going to be restrictions.
When will paving be done? Especially to the north of the bridge	The tender for paving has gone out. Bids expected in a couple weeks and is hopeful that road will be paved this year. Township staff will start to clear some trees out along the s-bends.
Resident expressed concerns with s-bend and trucks. How soon can Council start on that process? Also expressed concerns regarding Enbridge restoration timeline.	The first step is a Council Report to provide Council with the information, and then Council can make a decision.

Question/Comment	Response
Are there any wooden bridges in Grey, Bruce or Wellington Counties? Are there any locally. How many companies manufacture this wooden design bridge? Are we going to get the expected lifespan out it? Would there only be one company bidding on the tender?	A company that has provided some of the preliminary information regarding the wooden bridge worked on the wooden pedestrian bridge in Durham. They have also done projects in northern Ontario and in other Provinces. Many others have been built in other provinces. Ontario has not been as aggressive in using wood, tend to be used for larger span projects. Wood bridges such as this, incorporate some newer technology. There are other companies that could bid on the work, but it will depend on their availability and desire to submit.
Is a one lane bridge totally out of the question. We share the same concerns about additional traffic. Could a height or weight restriction be used?	When we looked at the Bridge Code, when it comes to the existing traffic levels and speed it suggests that a one lane bridge is not appropriate. The Bridge Code supporting documents also suggests that one lane bridges are only generally appropriate for seasonal and local access roads. Generally, when you design a new bridge, you are to design it for the project future use, and it would not be designed to have a weight or height restriction.
Another resident raised concerns about traffic, speed and the trees along the s-bend. Only remembers one collision on the bridge and does not understand concerns with alignment.	Concerns regarding the overall safety of the road are noted.
Why is the bridge unsafe for pedestrian traffic?	When the bridge was closed, it was closed to vehicle traffic. It may be possible to open a section of bridge for pedestrian traffic.
Will the road be paved prior to the bridge being replaced?	The road will be paved before the bridge is replaced.
Concession 2 has become very busy, feel for safety reasons a two-lane bridge is the best option.	Noted.
Noted preference for concrete bridge. There is a culvert to the east of the bridge, that culvert was filled in. Will the culvert be replaced or repaired?	Will need to investigate culvert.

5.0 IDENTIFICATION OF POTENTIAL IMPACTS AND MITIGATION MEASURES

5.1 Framework of Analysis

Following the selection of Alternative 3 as the preliminary preferred alternative, a study framework was developed to further evaluate the potential impacts of implementing this project. For reference, a preliminary site plan has been included (Figure 5.1). The purpose of this review was to assess the environmental interactions resulting from the construction and operation of the proposed works, and to determine in the identified interactions would generate potential environmental impacts.

The assessment of the preferred alternative incorporated these activities:

- Preliminary assessment of potential design options.
- Assessment of the construction and operational requirements of the proposed works.
- Consultation with the public, stakeholder groups and government agencies.
- Reviewing engineering methodologies associated with the construction of a two-lane bridge.
- Prediction of the environmental interactions between the proposed works and the identified environmental components.
- Evaluation of the potential impacts of the project on the environmental features, including residual effects following mitigation.

5.2 Potential Design Options

The preferred solution identified through the evaluation of alternatives is the replacement of Lantz Bridge with a two-lane bridge. There are a number of potential design options for a two-lane bridge that may be considered. The options include:

- A wooden superstructure with wooden deck.
- A bridge with steel girders and a concrete deck.
- A bridge with concrete box girders and concrete deck.

These options will all comply with the Canadian Highway Bridge Design Code and Transport Association of Canada (TAC) manual for local, undivided roads. For each design option, the deck width will be 9 m and it is proposed that the road on the approaches will have a 6.6 m paved surface and 1.2 m gravel shoulders. The deck thickness on a new structure will be greater than the existing bridge, so it is expected a grade increase of 0.6 m on the approaches will be required. Given the wider road platform and grade increase, it is expected that side slopes will need to be built out further.

A summary of each design option is provided in Table 5.1.

Table 5.1 Summary of Design Options

Wooden Superstructure and Wooden Deck	Steel Girders and Concrete Deck	Concrete Box Girders and Concrete Deck
• Shortest construction period, approximately 12 weeks. • Deck components delivered and assembled to on-site and then lifted into place. • Expected to have a 75-year life expectancy. • Submitted as a potential design option for grant opportunity. • More sustainable materials. • Probable construction cost: $1,403,000 + HST.	• Longest construction period, approximately 16 weeks. • Anticipated to have a longer lead time for delivery of materials (3.5 to 4 months). • Girders would be hot dip galvanized to extend life. • Probable construction cost is $1,363,000 + HST.	• Second longest construction period, approximately 15 weeks. • Longer lead time for delivery of materials than wood, similar to steel girders. • Precast girder of high strength concrete will be hoisted in place to span river. • Probable construction cost: $1,403,000 + HST.

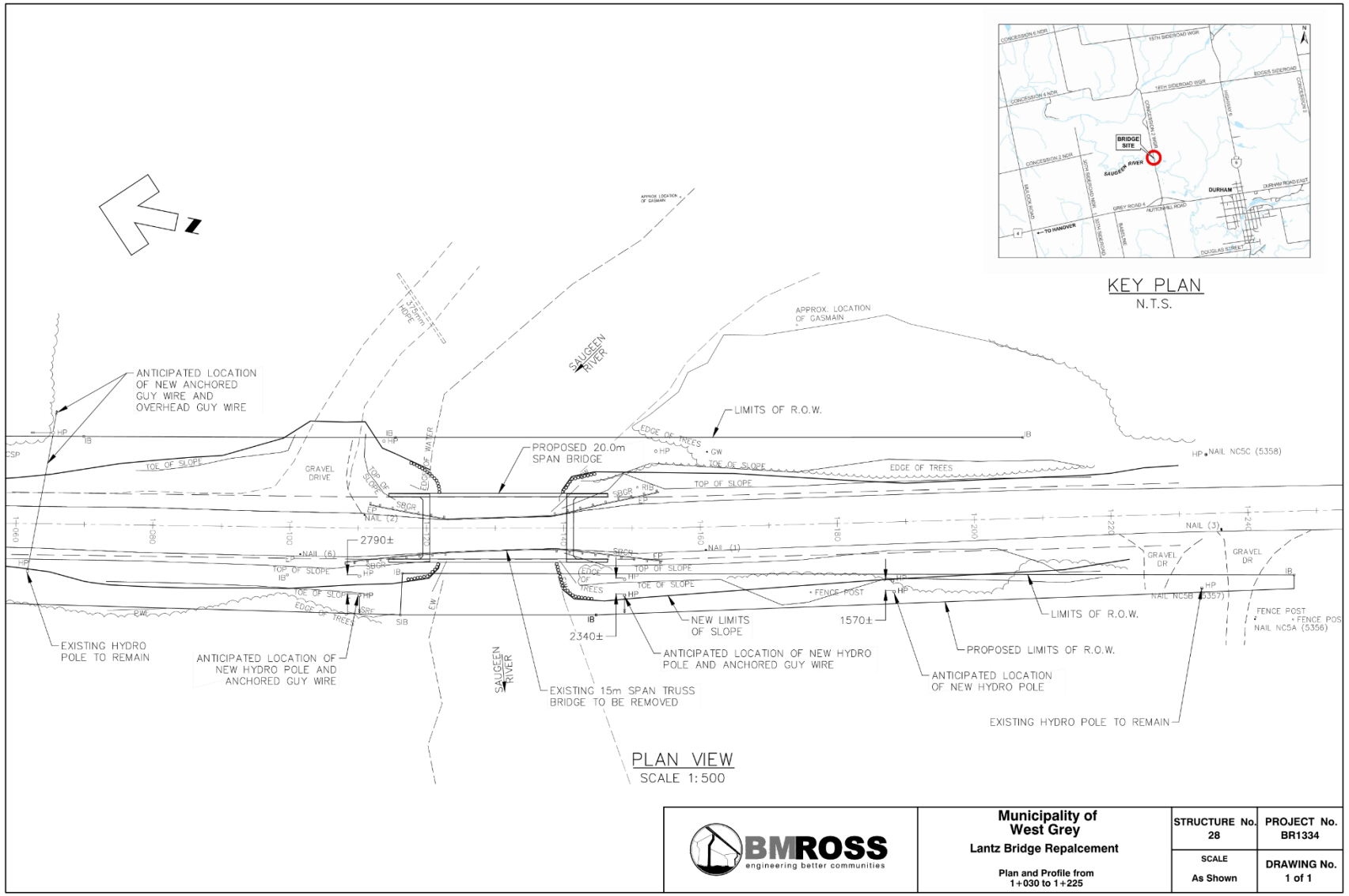
Given the shorter delivery and construction time frames, a wooden superstructure bridge is being considered the preferred design alternative.

5.3 General Project Scope

The works summarized below and illustrated conceptually in Figure 5.1 represent the scope of construction planned for this project. The project is expected to involve the following general components:

- Contractor mobilization to the site.
- Traffic Control Plan implementation.
- Establishment of temporary storage areas.
- Site clearing/vegetation removal.
- Installation of sediment control devices.
- Removal of the existing structure.
- Isolation of the riverbanks using steel sheet pile.
- Excavation.
- Temporary stockpiling of excavation of material.
- Construction of abutments and wing walls.
- Installation of beams and deck.
- Reconstruction of approach roads.
- Site grading.
- Site restoration (seeding/topsoil).

Figure 5.1 General Site Plan, Replacement of Lantz Bridge



5.4 Impact Assessment and Mitigation Measures

5.4.1 Assessment of Impacts

In reviewing the various criteria identified in Section 4.3 of this report and additional comments received during the consultation program, a number of specific environmental elements were identified which could be adversely affected by the implementation of the preferred alternative. The potential impacts are associated with the following environmental or project components:

- Sediment and Erosion Control
- Saugeen River
- Traffic Disruption
- Cultural Heritage impacts
- Quality of Life
- Construction-Related impacts

5.5 Discussion of Potential Impacts

5.5.1 Sediment and Erosion Control

A detailed set of sediment and erosion control measures will be specified in the tender documents that the contractor will have to follow during construction. At minimum, sediment and erosion control measures implemented at the site will consist of straw bale barriers within roadside ditches at concentrated flow paths and sediment fencing along the riverbanks adjacent to the bridge side to prevent surface water laden with sediment from entering the channel. All disturbed areas will be seeded following construction with a suitable seed-and-mulch mixture. Seed will not be placed on rip rapped areas. This fencing will be installed prior to demolition and maintained during the entire construction period until the site is fully restored.

5.5.2 Saugeen River – Watercourse Isolation

The Saugeen River through the bridge site has been identified as a fisheries classification with a coldwater thermal regime by DFO. A timing window for in-stream construction works has been established from July 15 to September 30th. To minimize potential impacts to the channel, the watercourse will be isolated by installing steel sheet piling along the edge of the existing channel once the existing truss is removed. The steel sheet piling will remain in place until the abutments are built and restoration work on the side slopes has been completed. After completion of construction, the steel sheeting will be cut off at ground level or removed and covered with rock rip rap erosion protection. With these measures in place, all excavation and construction adjacent river can be undertaken without risk to the watercourse.

5.5.3 Cultural Heritage

As discussed in Section 3.7 of the report, built heritage resources will potentially be impacted by the proposed project. The CHER report indicated that the existing bridge structure was determined to have heritage value and that removal of the bridge would negatively impact the heritage features. The Municipality is committed to documenting the existing structure and, if it is feasible, incorporating elements of the railing or truss into the design of the new structure.

5.5.4 Potential Impacts to Residents/Adjacent Properties

The properties immediately adjacent to the proposed bridge replacement site may experience some constructed related impacts (noise, traffic disruption, restricted access) associated with the proposed bridge replacement project. The Contract Administrator and Contractor will work with adjacent property owners to coordinate access and laydown areas.

Access to driveways may be restricted for short periods of time during contractor mobilization to the site and removal of the existing bridge. Additional restrictions are also likely during reconstruction of the approaches at the end of the construction period. Access to all residential structure should be maintained during the construction period. Local residents will be advised in advance should temporary road closures beyond the current closures be required.

During the course of the MCEA process, local residents identified concerns with traffic levels following re-opening of the crossing. The replacement bridge will be designed to accommodate traffic and vehicles, per the requirements of the Canadian Highway Bridge Design Code. There may be an increase in traffic as a result of the replacement of the current one-lane structure with a new structure that does not have a load limit on it. It is beyond the scope of this MCEA to address transportation network issues and bridges are not designed for or intended as traffic control measures. Similarly, local concerns with other features of the road beyond the bridge site are beyond the scope of the project. These concerns were noted and conveyed to municipal staff.

5.5.5 Construction Impacts

Construction-related activities associated with project implementation have the potential to impact upon existing environmental features, the general public, and construction workers. The Contractor will therefore be responsible for carrying out these activities in accordance with industry safety standards and all applicable legislation. Mitigation measures will also be incorporated into the construction specifications to ensure that operations are conducted in a manner that limits detrimental effects to the environment.

Table 6.2 outlines a series of mitigation measures that are typically incorporated into construction specifications. For this project, contract specifications may need to be modified depending on the nature of the construction activities and any additional requirements of the regulatory agencies.

Table 5.2 Summary of Mitigation Measures for Construction Activities

Construction Activity	Planned Mitigation
Refuelling and Maintenance	• Identify suitable locations for designated refueling and maintenance areas. • Restrict refueling or maintenance if equipment near watercourses. • Avoid cleaning equipment in watercourses and in locations where debris can gain access to sewers or watercourses. • Prepare to intercept, clean-up, and dispose of any spillage which may occur (whether on land or water).
Traffic Control	• As applicable, the Contractor shall prepare and submit a traffic plan to the Project Engineer for review and acceptance. If it is necessary to detour traffic, the Contractor will co-ordinate the routing and provide adequate signage and barricades. • Traffic flow for private access should generally be maintained at all times during construction. If access to a private driveway has to be restricted for a period of time the property owner will be notified and access would be restored by the end of each working day. • A minimum of one lane of traffic, controlled by barricades, delineators, etc. shall be maintained for emergency vehicles to access the road from each end of the block.
Disposal	• Dispose of all construction debris in approved locations. • Avoid emptying fuel, lubricants or pesticides into sewers or watercourses. • Dispose of all construction debris in approved locations. • Avoid emptying fuel, lubricants or pesticides into sewers or watercourses.
Work in Sensitive Areas	• Inform the Contract Administrator of the proposed schedule for each watercourse crossing or other work in sensitive areas. • Avoid encroachment into unique natural areas; do not disturb habitats of rare or endangered species. • Schedule construction in sensitive areas to minimize the disruption and interference to activities such as fish mitigation and spawning. • Slopes disturbed by the construction will be stabilized upon completion of the work.
Silt Control	• Excavation and construction adjacent to the watercourse shall not proceed until the channel has been isolated from the work area through the installation of steel sheet piling and sediment fencing parallel to the riverbanks. • Silt fences shall be installed and maintained down slope from any stockpile locations.

Construction Activity	Planned Mitigation
Drainage and Water Control	• All portions of the work should be properly and efficiently drained during construction. • Provide temporary drainage and pumping to keep excavation and site free from water. • Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with approval agency requirements. • Provide settling ponds and sediment basins as required. • Do not direct water flow over pavements, except through approved pipes/troughs.
Dust Control	• Cover or wet down dry materials and rubbish to prevent blowing dust or debris. • Avoid the use of chemical dust control products.
Site Clearing	• Protective measures shall be taken to safeguard trees from construction operations. • Restrict tree removal to areas designated by the Contract Administrator. • Minimize stripping of topsoil and vegetation. • Soils excavated from the site are to be re-used on site if possible or disposed of in accordance with Excess Soil regulations.
Sedimentation and Erosion Control	• Erect sediment fencing to control excess sediment loss during construction period. • Minimize the removal of vegetation from sloped approaches to watercourses. • Protect watercourses and ditches from sediment intrusion. • Install straw bale check dams in ditch lines following rough grading of ditches. • Complete restoration works following construction.
Noise Control	• Site procedures should be established to minimize noise levels in accordance with local bylaws. • Nighttime or Sunday work shall not be permitted, except in emergency situations.

5.6 Operational Phase

Upon completion of the planned construction, the Municipality will maintain the bridge in accordance with regular municipal practices. In this regard, the new bridge will be subject to maintenance activities and inspections in the future and will be added to the public works department maintenance schedule and budget allocation, as determined by the Municipality. Standard response procedures would also be employed to resolves problems with the constructed works, as well as emergencies.

5.7 Cost Recovery

The probable capital cost of the project is approximately $1,403,000 + HST (including engineering and contingency allowance). The proponent intends to finance the capital costs of the work through their public works budget and through a Provincial/Federal Infrastructure Fund (ICIP) grant that was applied for in 2019.

6.0 APPROVALS AND ENVIRONMENTAL COMMITMENTS

6.1 General

Implementation of the recommended solution is subject to the receipt of all necessary approvals. Following a review of the existing framework of legislation, it was determined that two formal approvals may be required to permit construction of the proposed works. This section of the report identifies the applicable legislation and summarizes the intent of the associated approvals process.

The recommended solution is considered a Schedule B project under the terms of the MCEA document, as the project involves the reconstruction of a water crossing, where the reconstructed facility will not be for the same purpose, use, capacity and the same location. This project is approved following the completion of an environmental screening process.

The following activities are required in order to compete the formal MCEA screening process:

- Complete the 30-day review period, defined in the Notice of Completion.
- Address any outstanding issues.
- Finalize the Screening Report.
- Advise the Municipality and MECP when the MCEA study process in complete.

6.2 Conservation Authorities Act

The proposed bridge replacement will involve construction on lands regulated by the Saugeen Valley Conservation Authority (SVCA). In accordance with the Conservation Authorities Act, an application will be submitted to the Conservation Authority to obtain approval for the project. The application will set out measures proposed to protect sensitive lands, such as stream banks, during construction in order to minimize the negative impacts of the project on the ecology of the area.

6.3 Fisheries and Oceans Canada (DFO)

A Request for Project review will be submitted to Fisheries and Oceans Canada for review of the project in regard to potential impacts to fisheries resources and Species at Risk mussels. The application will be submitted with supporting documentation indicating how the project would mitigate potential impacts to fish and mussel habitat. As little impacts to fish habitat are expected, due to isolation of channel during construction, we do not anticipate significant concerns being presented by DFO for this project.

7.0 CONCLUSION AND PROJECT IMPLEMENTATION

7.1 Selection of a Preferred Alternative

Given the foregoing, Alternative 3 – Replace the Existing Structure with a Two-Lane Bridge is identified as the preferred solution to the identified problem. Further to that, Option 3A with the structure that includes the wooden girders and wooden deck was identified as the preferred structure type. A recommendation to this effect was presented to and supported by staff of the Municipality of West Grey.

7.2 Impact Mitigation

Based upon a review of the current environmental setting, there were no impacts associated with the implementation of the preferred alternative that could not be mitigated. Therefore, the implementation of the proposed preferred alternative is appropriate for the identified problem and is not expected to result in any significant impacts to the natural, social, economic, cultural or technical environment.

7.3 Final Public Consultation

A Notice of Completion will be circulated to local residents, stakeholders and government review agencies. The Notice will identify the preferred alternative and provide the process for providing comments and submitting a Part II order request to the Minister of Environment, Conservation and Parks.

7.4 Environmental Commitments

As an outcome of the MCEA process, the Municipality is committed to carrying out of the following measures to mitigate potential environmental impacts related to project implementation:

- Implementation of standard construction mitigation measures during the construction phase of the project o minimize constructed-related impacts to the natural and social environments.
- Submission of relevant applications for required approvals, as well as implementation of all conditions issued in association with the subsequent approvals.

8.0 SUMMARY

This report documents the Municipal Class Environmental Assessment process conducted to define a solution to deficiencies identified with key components of Structure 28 (Lantz Bridge) spanning the Saugeen River along Concession 2 WGR in the Municipality of West Grey.

The MCEA process considered several options to address the deficiencies identified at the crossing, including construction of a new single lane bridge, construction of a two-lane bridge or doing nothing. Following the receipt of input from agencies, First Nation and Métis communities and adjacent property owners, replacement of the crossing will a full capacity two lane structure was selected as the preferred alternative. This represents the most practical approach to resolving the defined problems with the existing crossing.

The proposed project is a Schedule B activity under the terms of the MCEA and is approved subject to the completion of a screening process. The Municipality of West Grey intents to proceed with implementation of this project upon completion of the MCEA investigation and after receipt of all necessary approvals.

All of which is respectively submitted.

Yours very truly

B. M. ROSS AND ASSOCIATES LIMITED

Per _____

Lisa J. Courtney, MCIP, RPP

Environmental Planner

LJC:hv

9.0 REFERENCES

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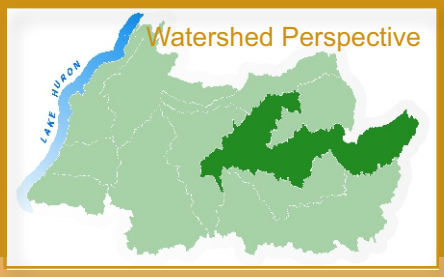
Appendix A

Upper Main Saugeen River Watershed Report Card

WATERSHED REPORT CARD



Upper Main Watershed

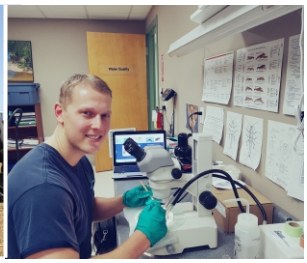
This watershed drains 782 sq. kms. The river is 116 kms in length in this section with an average gradient of 1.67 metres per km. Main tributaries include Habermehl and Camp Creek as well as the Styx River.

This watershed is predominantly agricultural. It includes the main communities of Hanover, Durham and Priceville.

Working to Keep Your Future Green

Staff work with partners and organizations in implementing projects that aim to improve the local environment. Research, lab and field work, data analysis, observations, testing, and so much more, is completed by staff in helping to determine the best and most applicable environmental measures to apply in each sub-watershed.

Watersheds are complex systems where everything is connected. We all live downstream.


Saugeen Conservation is a proud member of Conservation Ontario

1078 Bruce Rd. 12, P.O. Box 150, Formosa ON N0G 1W0 Tel. 519-367-3040 Email: publicinfo@svca.on.ca www.svca.on.ca

Alternative formats of this report are available upon request.

General Information

Area
782 sq. km

Municipalities
Municipality of Brockton, Town of Hanover, Municipality of West Grey, Municipality of South Bruce, Township of Chatsworth, Township of Southgate, Municipality of Grey Highlands, Township of Melancthon

Physiography
40% spillway, 30% till plain (drumlinized), 13% kame moraine, 6% drumlin, 4% till moraine, 4% peat and muck, 1% esker, 1% water

Soils
38% medium to moderately fine loam, 27% silty loam, 15% organic material, 12% fine to moderately coarse sandy loam, 4% other (may include small percentages of alluvium, breypan, bottomlands etc), 3% coarse sandy loam and loamy sand, and 0.2% clay loam

Dams
In total there are 56 dams in the watershed, of which 13 are considered large dams (greater than 3 metres in height).

Sewage Treatment Facilities
Hanover, Durham

Woodlot Size
Many large forests with forest interior conditions

Land Use
58% agriculture; 35% forested; 1.4% urban

Provincially Significant Natural Areas
- Saugeen Kame Terrace, Allan Park Crevasse Fillings, Allan Park Ice - Marginal Delta, Hatherton Esker, Harrison Lake Fen, Beaver Meadow, Camp Creek, Louise-Boyd-McDonald Lakes, Maxwell, McLean Lake, Mountain Creek, Turner-Gilles -Wilcox Lakes, Welbeck Wetland, Proton Staion, Portlaw Fen

Groundwater Aquifer Sources
Guelph Formation, Salina Formation, Catfish Creek Till Formation, Glaciolacustrine Formation

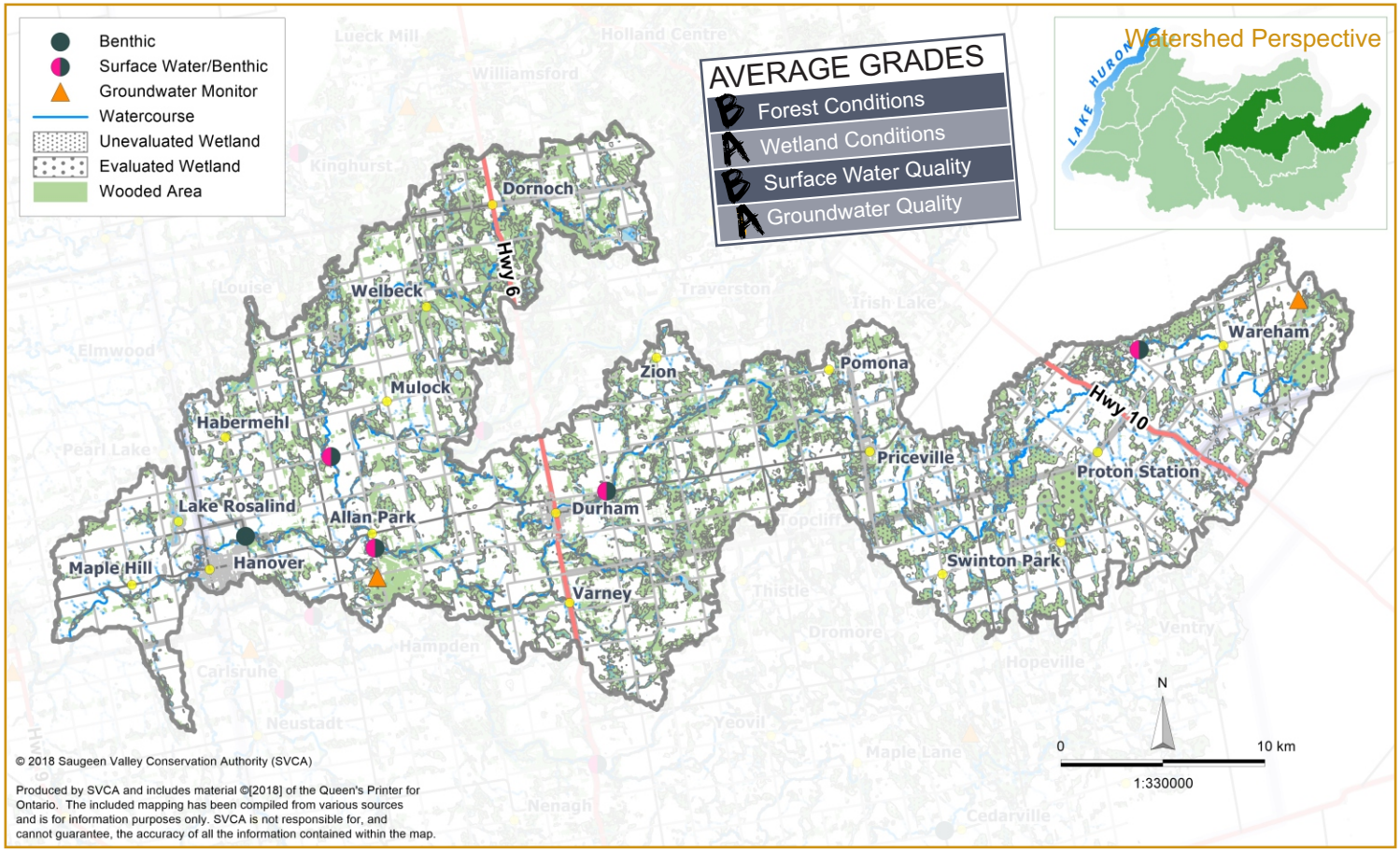
Stream Flow (mean)
mean annual flow - 34.7 cubic metres per second (cms)

Stream Flow (low) *
7Q10 flow[1] - 4.37 cms 7Q20 flow[2] - 3.93 cms

Rare Species (obtained from the National Heritage Information Centre (NHIC) Website)
American Badger, Ebony Boghaunter, Redside Dace, Clamp-tipped Emerald, Eastern Small-footed Bat, Eastern Ribbonsnake, Harlequin Darner, Hart's-tongue Fern, Milksnake, Northern Long-eared Bat, Scarlet Beebalm

* [1] 7Q10 - the lowest mean flow for seven consecutive days that has a 10-year recurrence interval period, or a 1 in 10 chance of occurring in any one year.

[2] 7Q20 - the lowest mean flow for seven consecutive days that has a 20-year recurrence interval period, or a 1 in 20 chance of occurring in any one year.



	Indicators	2002 - 2006	2007 - 2011	2012 - 2016	Indicator Description
Forest Conditions	Forest Cover (% of Area)	B 34.6	A 35.9	**A 35.9**	Forest cover is the percentage of the watershed that is forested or wooded. ***Environment Canada suggests that 30% forest cover is the minimum required to support healthy wildlife habitat.***
	Forest Interior (% of Area)	C 7.3	C 7.8	**C 7.5**	Forest interior refers to the protected core area found inside a woodlot. It is the sheltered, secluded environment away from forest edges and open habitats. ***Environment Canada recommends that a minimum of 10% of a watershed should be interior forest cover to sustain healthy plant and animal species.***
	Riparian Cover (% of Area)	B 43.0	B 43.6	**B 44.6**	Riparian Cover is the percentage of forested habitat along a given waterway. ***Environment Canada guidelines suggest that at least 75% of stream length should have 30 metre naturally vegetated buffers. Forested vegetation represents about two-thirds with the rest being marsh, meadow, and shrub thicket.***
	Average Grade	B	B	**B**	Grade B indicates good ecosystem conditions. Some areas may require enhancement.
Wetland Conditions	Wetland Cover	No Data	A 23.7	**A 23.7**	Wetland cover is the percentage of existing wetland in a watershed. ***Environment Canada suggests that 10% wetland cover is the minimum needed for a healthy watershed. Grade A indicates excellent ecosystem conditions and protection may be required. Some areas may require enhancement to maintain this level of quality.***

	Indicators	2002 - 2006	2007 - 2011	2012 - 2016	Indicator Description
Surface Water Quality	Benthic Invertebrates (FBI)	A 4.09	C 5.46	**C 5.48**	Benthos or benthic invertebrates are bottom dwelling insects, crustaceans, worms, mollusks, and related aquatic animals that live in watercourses. They are good indicators of water quality, responding quickly to environmental stressors such as pollutants. ***The Modified Family Biotic Index (FBI) using New York State tolerance values provide stream health information and values ranging from 1 (healthy) to 10 (degraded).***
	Total Phosphorus (mg/L)	B 0.02	A 0.016	**A 0.010**	Total phosphorus is indicative of nutrient levels within a watercourse. Phosphorus is required for the growth of aquatic plants and algae, however, concentrations above the Provincial Water Quality Objective may result in unhealthy stream conditions. ***The Provincial Water Quality Objective is 0.03 mg/L.***
	E. coli (cfu/100mL)	B 48	B 39	**A 25**	*E. coli* originate from the wastes of warm blooded animals, including humans, livestock, wildlife, pets and waterfowl. ***The Ontario Recreational Water Quality Guidelines suggest that waters with less than 100 CFUs/100mL are safe for swimming.***
	Average Grade	B	B	**B**	Grade B indicates good ecosystem conditions. Some areas may require enhancement.
Groundwater Quality	Nitrite + Nitrate (mg/L)	No Data	A 0.61	**A 0.87**	Nitrates are present in water as a result of decaying plant or animal material, the use of fertilizers, domestic sewage or treated wastewater, as well as geological formations containing soluble nitrogen compounds. ***The Ontario Drinking Water Standard for nitrite + nitrate is 10 mg/L.***
	Chloride (mg/L)	No Data	A 1.67	**A 1.85**	While chloride can be naturally occurring, the presence of elevated chloride may indicate contamination from road salt, industrial discharges, or landfill leachate. ***The Ontario Drinking Water Standard for chloride is only for aesthetic purposes with an objective of 250 mg/L.***
	Average Grade	No Data	A	**A**	Grade A indicates excellent ecosystem conditions and protection may be required. Some areas may require enhancement to maintain this level of quality.

Forest Conditions

The Upper Main Saugeen River Watershed scores an average grade of 'B' which is the same as the last report card. Forest cover exceeds the Environment Canada guidelines of 30% forest cover but falls short of the guidelines for forest interior and forested riparian cover scoring 'C' and 'B' grades, respectively. The recommendation is that 50% of the 30 metre wide riparian zone should have forest cover. The Upper Main Saugeen River Watershed has 44.6% of the riparian zone forested. Tree planting along riparian zones and on marginal farmland should be considered to ensure the forest conditions are improved.

Wetland Conditions

This report card summarizes the conditions of both 'evaluated' and 'unevaluated' wetlands. Looking at all of the wetlands the Upper Main Saugeen Watershed scores an 'A' grade with 23.7% wetland cover in the watershed. Existing wetlands should be protected to maintain this grade.

The wetland evaluation system was created to protect important wetlands valued at a provincial scale. Under the Planning Act, provincially significant wetlands are protected from development and alteration.

Surface Water Quality

The Upper Main Saugeen River scores an average grade of 'B' for surface water quality. The overall grade is the same as the last report card. The average total phosphorus concentration is below the Provincial Water Quality Objective of 0.03 mg/L. E. coli continues to fall below the recreational guidelines of 100 CFU/100mL and improved from a 'B' to an 'A' grade. The grade for benthic invertebrates remained at a 'C'. Increased efforts should be made to encourage landowners and the agricultural community to preserve and enhance natural land cover. In addition to managing current land use practices, climate change and invasive species pose significant threats and efforts will need to be made to address these stressors to maintain or improve the current scores.

Groundwater Quality

The groundwater quality in the three monitoring wells in this area continues to score an 'A' grade. The wells monitor three overburden aquifers. It should be noted that groundwater aquifers do not conform to watershed boundaries but rather flow in an east to west direction through the watershed. There have been no exceedences of the Ontario Drinking Water Standards during this study period.

Ecosystem Grade Description

A	Excellent conditions.
B	Good conditions. Some areas may require enhancement and/or improvements.
C	Conditions that warrant general improvements.
D	Poor conditions. Overall improvements necessary.
F	Degraded conditions, in need of considerable improvement.

What is being done *in this Watershed?*

- ✓ **Saugeen Conservation** aims to improve watershed health through virtually all its programs.
- ✓ **Saugeen Conservation** is a key player in providing assistance and technical expertise to local groups, committees, ministries etc. that work to improve the local environment.
- ✓ Through **Saugeen Conservation's tree planting efforts and Ontario's 50 Million Tree Program,** a total of 145,043 trees were planted in this watershed during this report period.
- ✓ The **Ministry of Natural Resources and Forestry** (OMNRF), has stocked brown trout, completed habitat restoration projects and assigned fishing sanctuary designations to sections of this river.
- ✓ The **OMNRF in partnership with the Ontario Steelheaders**, monitor fish that are radio chipped to determine the success of rainbow trout in successfully migrating beyond the fishway at Maple Hill Power Dam.
- ✓ The **Ontario Steelheader's Association and the Lake Huron Fishing Club** release adult rainbow trout into this river system on an annual basis. (This was discontinued in 2016.)
- ✓ Saugeen Conservation works closely with **local agricultural organizations** to provide ongoing workshops and seminars for farmers on a variety of different conservation topics.
- ✓ **Grey Bruce Sustainability Network** works closely with Saugeen Conservation on several different environmental and educational projects.
- ✓ The **Bruce Grey Woodlands Association** hosts various workshops and tours on forestry related topics.

What is being done *in this Watershed?*

- ✓ The **Forest Health Collaborative helps to** educate municipalities and the public on forest health issues.
- ✓ **Stewardship Grey Bruce** offers funding and technical support for landowners in the watershed interested in completing habitat enhancement projects.
- ✓ The **Lake Huron Fishing Club** (with funding from Bruce Power), works with local schools in setting up fish aquariums to educate students about the importance of a healthy fishery.
- ✓ Saugeen Conservation offers over **50 different hands-on environmental programs** to over 10,000 children annually, including the Grey Bruce Children's Water Festival and the Bruce Grey Forest Festival (the latter of which is held in this watershed).
- ✓ Staff have implemented the **Yellow Fish Road Program,** (a program of Trout Unlimited Canada), which educates students and the public about storm drains and how they are corridors to local rivers and streams.
- ✓ Saugeen Conservation established a **2.5 acre Tall Grass Prairie** at Allan Park Conservation Area. Funding from Hydro One was received as part of the Bruce to Milton Biodiversity and Enhancement project.
- ✓ The **Grey-Bruce ALUS** program recognizes land stewardship and assists farmers in implementing and funding projects to produce ecosystem services. ALUS aims to improve the biodiversity on the agricultural landscape.
- ✓ **Saugeen Nature** is active in the Saugeen Watershed through education and other partnerships. They promote the wide use and conservation of natural resources and encourage the preservation of wild species and natural areas in Grey and Bruce counties.
- ✓ **Environmental self assessments** are available for the rural non-farm landowner with the release of The Rural Landowner Stewardship Guide for the Lake Huron Watershed. This guide provides a framework for landowners to evaluate their property and help determine best management practices.

Recognizing our Important Partners

Appendix B

Built Heritage and Archaeological Checklists

Ontario

Ministry of Tourism, Culture and Sport

Programs & Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

Criteria for Evaluating Archaeological Potential

A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area may contain archaeological resources i.e., have archaeological potential
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Archaeological assessment

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a licensed consultant archaeologist (see page 4 for definitions) to undertake an archaeological assessment.

The assessment will help you:

- identify, evaluate and protect archaeological resources on your property or project area
- reduce potential delays and risks to your project

Note: By law, archaeological assessments **must** be done by a licensed consultant archaeologist. Only a licensed archaeologist can assess – or alter – an archaeological site.

What to do if you:

- **find an archaeological resource**

  If you find something you think may be of archaeological value during project work, you must – by law – stop all activities immediately and contact a licensed consultant archaeologist

  The archaeologist will carry out the fieldwork in compliance with the *Ontario Heritage Act* [s.48(1)].

- **unearth a burial site**

  If you find a burial site containing human remains, you must immediately notify the appropriate authorities (i.e., police, coroner's office, and/or Registrar of Cemeteries) and comply with the *Funeral, Burial and Cremation Services Act*.

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages when completing this form.

Project or Property Name

Lantz Bridge

Project or Property Location (upper and lower or single tier municipality)

Municipality of West Grey, County of Grey

Proponent Name

Municipality of West Grey

Proponent Contact Information

Vance Czerwinski, Director of Infrastructure and Public Works 519-369-2200 x 227

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	☐	☑

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

	Yes	No
2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?	☐	☑

If Yes, do **not** complete the rest of the checklist. You are expected to follow the recommendations in the archaeological assessment report(s).

The proponent, property owner and/or approval authority will:

- summarize the previous assessment
- add this checklist to the project file, with the appropriate documents that demonstrate an archaeological assessment was undertaken e.g., MTCS letter stating acceptance of archaeological assessment report

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., environmental assessment document
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Are there known archaeological sites on or within 300 metres of the property (or the project area)?	☐	☑
4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property (or project area)?	☐	☑
5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or project area)?	☐	☑
6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?	☐	☑
7. Has the property (or project area) been recognized for its cultural heritage value?	☐	☑

If Yes to any of the above questions (3 to 7), do **not** complete the checklist. Instead, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment of your property or project area.

If No, continue to question 8.

	Yes	No
8. Has the entire property (or project area) been subjected to recent, extensive and intensive disturbance?	☑	☐

If Yes to the preceding question, do **not** complete the checklist. Instead, please keep and maintain a summary of documentation that provides evidence of the recent disturbance.

An archaeological assessment is not required.

If No, continue to question 9.

	Yes	No
9. Are there present or past water sources within 300 metres of the property (or project area)?	☐	☐

If Yes, an archaeological assessment is required.

If No, continue to question 10.

	Yes	No
10. Is there evidence of two or more of the following on the property (or project area)?	☐	☐

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

If Yes, an archaeological assessment is required.

If No, there is low potential for archaeological resources at the property (or project area).

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., under the *Environmental Assessment Act, Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

In this context, the following definitions apply:

- **consultant archaeologist** means, as defined in Ontario regulation as an archaeologist who enters into an agreement with a client to carry out or supervise archaeological fieldwork on behalf of the client, produce reports for or on behalf of the client and provide technical advice to the client. In Ontario, these people also are required to hold a valid professional archaeological licence issued by the Ministry of Tourism, Culture and Sport.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may be already in place for identifying archaeological potential, including:

- one prepared and adopted by the municipality e.g., archaeological management plan
- an environmental assessment process e.g., screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport under the Ontario government's Standards & Guidelines for Conservation of Provincial Heritage Properties [s. B.2.]

2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?

Respond 'yes' to this question, if all of the following are true:

- an archaeological assessment report has been prepared and is in compliance with MTCS requirements
  - a letter has been sent by MTCS to the licensed archaeologist confirming that MTCS has added the report to the Ontario Public Register of Archaeological Reports (Register)
- the report states that there are no concerns regarding impacts to archaeological sites

Otherwise, if an assessment has been completed and deemed compliant by the MTCS, and the ministry recommends further archaeological assessment work, this work will need to be completed.

For more information about archaeological assessments, contact:

- approval authority
- proponent
- consultant archaeologist
- Ministry of Tourism, Culture and Sport at archaeology@ontario.ca

3. Are there known archaeological sites on or within 300 metres of the property (or project area)?

MTCS maintains a database of archaeological sites reported to the ministry.

For more information, contact MTCS Archaeological Data Coordinator at archaeology@ontario.ca.

4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property?

Check with:

- Aboriginal communities in your area
- local municipal staff

They may have information about archaeological sites that are not included in MTCS' database.

Other sources of local knowledge may include:

- property owner
- local heritage organizations and historical societies
- local museums
- municipal heritage committee
- published local histories

5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or property area)?

Check with:

- Aboriginal communities in your area
- local municipal staff

Other sources of local knowledge may include:

- property owner
- local heritage organizations and historical societies
- local museums
- municipal heritage committee
- published local histories

6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulation Unit, Ontario Ministry of Consumer Services – for database of registered cemeteries
- Ontario Genealogical Society (OGS) – to locate records of Ontario cemeteries, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to locate early cemeteries

In this context, 'adjacent' means 'contiguous', or as otherwise defined in a municipal official plan.

7. Has the property (or project area) been recognized for its cultural heritage value?

There is a strong chance there may be archaeological resources on your property (or immediate area) if it has been listed, designated or otherwise identified as being of cultural heritage value by:

- your municipality
- Ontario government
- Canadian government

This includes a property that is:

- designated under *Ontario Heritage Act* (the OHA), including:
  - individual designation (Part IV)
  - part of a heritage conservation district (Part V)
  - an archaeological site (Part VI)
- subject to:
  - an agreement, covenant or easement entered into under the OHA (Parts II or IV)
  - a notice of intention to designate (Part IV)
  - a heritage conservation district study area by-law (Part V) of the OHA
- listed on:
  - a municipal register or inventory of heritage properties
  - Ontario government's list of provincial heritage properties
  - Federal government's list of federal heritage buildings
- part of a:
  - National Historic Site
  - UNESCO World Heritage Site
- designated under:
  - *Heritage Railway Station Protection Act*
  - *Heritage Lighthouse Protection Act*
- subject of a municipal, provincial or federal commemorative or interpretive plaque.

To determine if your property or project area is covered by any of the above, see:

- Part A of the MTCS Criteria for Evaluating Potential for Built Heritage and Cultural Heritage Landscapes

Part VI – Archaeological Sites

Includes five sites designated by the Minister under Regulation 875 of the Revised Regulation of Ontario, 1990 (Archaeological Sites) and 3 marine archaeological sites prescribed under Ontario Regulation 11/06.

For more information, check Regulation 875 and Ontario Regulation 11/06.

8. Has the entire property (or project area) been subjected to recent extensive and intensive ground disturbance?

Recent: after-1960

Extensive: over all or most of the area

Intensive: thorough or complete disturbance

Examples of ground disturbance include:

- quarrying
- major landscaping – involving grading below topsoil
- building footprints and associated construction area
  - where the building has deep foundations or a basement
- infrastructure development such as:
  - sewer lines
  - gas lines
  - underground hydro lines
  - roads
  - any associated trenches, ditches, interchanges. **Note**: this applies only to the excavated part of the right-of-way; the remainder of the right-of-way or corridor may not have been impacted.

A ground disturbance does **not** include:

- agricultural cultivation
- gardening
- landscaping

Site visits

You can typically get this information from a site visit. In that case, please document your visit in the process (e.g., report) with:

- photographs
- maps
- detailed descriptions

If a disturbance isn't clear from a site visit or other research, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment.

9. Are there present or past water bodies within 300 metres of the property (or project area)?

Water bodies are associated with past human occupations and use of the land. About 80-90% of archaeological sites are found within 300 metres of water bodies.

Present

- Water bodies:
  - primary - lakes, rivers, streams, creeks
  - secondary - springs, marshes, swamps and intermittent streams and creeks
- accessible or inaccessible shoreline, for example:
  - high bluffs
  - swamps
  - marsh fields by the edge of a lake
  - sandbars stretching into marsh

Water bodies not included:

- man-made water bodies, for example:
  - temporary channels for surface drainage
  - rock chutes and spillways
  - temporarily ponded areas that are normally farmed
  - dugout ponds
- artificial bodies of water intended for storage, treatment or recirculation of:
  - runoff from farm animal yards
  - manure storage facilities
  - sites and outdoor confinement areas

Past

Features indicating past water bodies:

- raised sand or gravel beach ridges – can indicate glacial lake shorelines
- clear dip in the land – can indicate an old river or stream
- shorelines of drained lakes or marshes
- cobble beaches

You can get information about water bodies through:

- a site visit
- aerial photographs
- 1:10,000 scale Ontario Base Maps - or equally detailed and scaled maps.

10. Is there evidence of two or more of the following on the property (or project area)?

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

- **Elevated topography**

  Higher ground and elevated positions - surrounded by low or level topography - often indicate past settlement and land use.

  Features such as eskers, drumlins, sizeable knolls, plateaus next to lowlands, or other such features are a strong indication of archaeological potential.

  Find out if your property or project area has elevated topography, through:

  - site inspection
  - aerial photographs
  - topographical maps

- **Pockets of well-drained sandy soil, especially within areas of heavy soil or rocky ground**

  Sandy, well-drained soil - in areas characterized by heavy soil or rocky ground - may indicate archaeological potential

  Find out if your property or project area has sandy soil through:

  - site inspection
  - soil survey reports

- **Distinctive land formations**

  Distinctive land formations include – but are not limited to:

  - waterfalls
  - rock outcrops
  - rock faces
  - caverns
  - mounds, etc.

  They were often important to past inhabitants as special or sacred places. The following sites may be present – or close to – these formations:

  - burials
  - structures
  - offerings
  - rock paintings or carvings

  Find out if your property or project areas has a distinctive land formation through:

  - a site visit
  - aerial photographs
  - 1:10,000 scale Ontario Base Maps - or equally detailed and scaled maps.

- **Resource extraction areas**

  The following resources were collected in these extraction areas:

  - food or medicinal plants e.g., migratory routes, spawning areas, prairie
  - scarce raw materials e.g., quartz, copper, ochre or outcrops of chert
  - resources associated with early historic industry e.g., fur trade, logging, prospecting, mining

  Aboriginal communities may hold traditional knowledge about their past use or resources in the area.

- **Early historic settlement**

  Early Euro-Canadian settlement include – but are not limited to:

  - early military or pioneer settlement e.g., pioneer homesteads, isolated cabins, farmstead complexes
  - early wharf or dock complexes
  - pioneers churches and early cemeteries

  For more information, see below – under the early historic transportation routes.

- **Early historic transportation routes** - such as trails, passes, roads, railways, portage routes, canals.

  For more information, see:

  - historical maps and/or historical atlases
    - for information on early settlement patterns such as trails (including Aboriginal trails), monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.
    - Archives of Ontario holds a large collection of historical maps and historical atlases
    - digital versions of historic atlases are available on the Canadian County Atlas Digital Project
  - commemorative markers or plaques such as local, provincial or federal agencies
  - municipal heritage committee or other local heritage organizations
    - for information on early historic settlements or landscape features (e.g., fences, mill races, etc.)
    - for information on commemorative markers or plaques

Ontario

Ministry of Tourism, Culture and Sport

Programs & Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
    - is a recognized heritage property
    - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
    - the main project area
    - temporary storage
    - staging and working areas
    - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Lantz Bridge

Project or Property Location (upper and lower or single tier municipality)

Municipality of West Grey, County of Grey

Proponent Name

Municipality of West Grey

Proponent Contact Information

Vance Czerwinski, Director of Infrastructure and Public Works, 519-369-2200 ext. 227

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	☐	☑

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found **not** to be of cultural heritage value?	☐	☑

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value?	☐	☑
b. a National Historic Site (or part of)?	☐	☑
c. designated under the *Heritage Railway Stations Protection Act*?	☐	☑
d. designated under the *Heritage Lighthouse Protection Act*?	☐	☑
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	☐	☑
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	☐	☑

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	☐	☑
b. has or is adjacent to a known burial site and/or cemetery?	☐	☑
c. is in a Canadian Heritage River watershed?	☐	☑
d. contains buildings or structures that are 40 or more years old?	☑	☐

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	☐	☑
b. has a special association with a community, person or historical event?	☐	☑
c. contains or is part of a cultural heritage landscape?	☐	☑

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act, Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's Ontario Heritage Toolkit or Standards and Guidelines for Conservation of Provincial Heritage Properties.

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's Standards & Guidelines for Conservation of Provincial Heritage Properties [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

i. designated under the *Ontario Heritage Act*

- individual designation (Part IV)
- part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note**: To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- Ontario Heritage Trust
- local land registry office (for a title search)

---

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- Ontario Heritage Trust - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

---

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

---

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act.* **Note**: To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- Ontario Heritage Trust

---

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the National Historic Sites website.

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the Directory of Designated Heritage Railway Stations.

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the Heritage Lighthouses of Canada website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – World Heritage Site website.

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- municipal heritage committees or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's Heritage directory – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a list of plaques commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a list of plaques commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a database of registered cemeteries
- Ontario Genealogical Society (OGS) – to locate records of Ontario cemeteries, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to locate early cemeteries

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the Canadian Heritage River System.

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide Heritage Property Evaluation.

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- municipal heritage committees or local heritage organizations
- Ontario Historical Society's "Heritage Directory" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through Ontario Trails.

Appendix C

Cultural Heritage Evaluation Report

Cultural Heritage Evaluation Report & Heritage Impact Assessment Lantz Bridge (Structure No. 28) West Grey, Grey County, ON

Submitted to

Lisa Courtney
B.M. Ross and Associates Ltd.
62 North Street, Goderich, ON N7A 2T4

Prepared by

Timmins Martelle Heritage Consultants Inc.

@ the Museum of Ontario Archaeology
1600 Attawandaron Road, London, ON N6G 3M6
Phone: (519) 641-7222 Fax: (519) 641-7220

TMHC File: 2019-257

Report Revision: September 2020

Executive Summary

B.M. Ross and Associates Ltd. has engaged Timmins Martelle Heritage Consultants Inc. (TMHC) to produce a Cultural Heritage Evaluation Report and Heritage Impact Assessment (CHER/HIA) that considers the potential heritage value of the Lantz Bridge in the Municipality of West Grey (the "Subject Site"), also known as Structure No. 28, and the potential heritage impacts of the bridge's proposed replacement.

This CHER/HIA is intended to provide a heritage evaluation of the Lantz Bridge against the criteria set out by the *Ontario Heritage Act* (OHA)'s O.Reg. 9/06, an assessment of the proposed development's impact on identified heritage attributes, and strategies for mitigating that impact. The HIA portion of this report follows the general format set out in the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) *InfoSheet #5: Heritage Impact Assessments and Conservation Plans*, which is included in the resource *Heritage Resources in the Land Use Planning Process* within the Ontario Heritage Toolkit.

The Subject Site consists of a single-span Warren pony truss bridge that carries Concession Road 2 West of Garafaxa Road (WGR) over the Saugeen River. The bridge is owned by the Municipality of West Grey and has not been municipally listed or designated under either Part IV or Part V of the OHA.

Evaluation of the Subject Site against the O.Reg. 9/06 criteria concluded that the property meets the criteria on the basis of its physical/design value.

The proposed development at the Subject Site consists of demolition of the existing bridge and replacement with a new two-lane structure.

This HIA concluded that the proposed development will cause impacts to the heritage value of the Subject Site. In order to address these impacts, mitigation measures have been recommended, including documentation of the bridge prior to demolition, and discussion with the Municipality of West Grey to gauge the desirability of incorporating features of the existing bridge into the new bridge.

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Project Personnel

Principal:	Holly Martelle, Ph.D.
Project Manager:	Tatum Taylor Chaubal, M.Sc. CAHP
Cultural Heritage Specialist:	Liam Smythe, B.U.R.Pl.
Project Administrator:	Kellie Theaker

Cultural Heritage Evaluation Report & Heritage Impact Assessment Lantz Bridge (Structure No. 28) West Grey, Grey County, ON

1.0 INTRODUCTION

1.1 Report Scope & Purpose

B.M. Ross and Associates Ltd. has engaged Timmins Martelle Heritage Consultants Inc. (TMHC) to produce a Cultural Heritage Evaluation Report and Heritage Impact Assessment (CHER/HIA) that considers the potential heritage value of the Lantz Bridge (the "Subject Site"), also known as Structure No. 28, and the potential heritage impacts of the bridge's proposed replacement.

Section 4.5.1 of *Recolour Grey*, the Official Plan of Grey County, states that the "the County will conserve and manage its heritage resources and cultural heritage landscapes when undertaking public works, managing public facilities or of heritage interest, or otherwise directly undertaking development or infrastructure projects which may have adverse effects on heritage resources."[1]

The *Municipality of West Grey Official Plan for the Settlement Areas of Durham and Neustadt* pertains only to the two settlement areas named within. Lands located outside these areas (in which Subject Site is located) are not subject to this Official Plan, and are therefore covered directly by the Official Plan of Grey County.

This CHER/HIA is intended to provide a heritage evaluation of the Lantz Bridge against the criteria set out by the *Ontario Heritage Act* (OHA)'s O.Reg. 9/06, an assessment of the proposed development's impact on identified heritage attributes, and strategies for mitigating that impact. The HIA portion of this report follows the general format set out in the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) *InfoSheet #5: Heritage Impact Assessments and Conservation Plans*, which is included in the resource *Heritage Resources in the Land Use Planning Process* within the Ontario Heritage Toolkit.

1.2 Client Contact Information

Lisa Courtney
B.M. Ross and Associates Ltd.
lcourtney@bmross.net

[1] Grey County, 2018

1.3 Property Overview

Located in the former Bentinck Township, now the Municipality of West Grey within Grey County, the Subject Site consists of a single-span Warren Pony Truss bridge that carries Concession Road 2 West of Garafaxa Road (WGR) over the Saugeen River. The bridge has a pair of four-panel, riveted trusses with outriggers, and a concrete deck. Lattice-style railings are mounted on each of the trusses, with modern guardrail barriers over top. The bridge sits on concrete abutments located on the north and south banks of the Saugeen River. The abutments have wingwalls that extend back from the abutment at a roughly 45-degree angle.

The bridge is situated in a rural area northwest of the community of Durham. Surrounding properties are primarily agricultural or residential in nature. To the north and south of the Lantz Bridge, Concession Road 2 WGR is a two-lane road with heavily worn asphalt paving. At the time of the field review in June 2020, tree removal and grading activities were occurring on the shoulders of the road in anticipation of installation of a natural gas line.

Image 1: East side and south abutment of Lantz Bridge (TMHC 2020)

1.4 Existing Heritage Status

The Lantz Bridge has not been municipally listed or designated under either Part IV or Part V of the OHA. No adjacent properties have been designated under Part IV of the OHA, and there are no National Historic Sites, Provincial Heritage Properties, or Ontario Heritage Trust-owned properties or conservation easements present on or adjacent to the Subject Site. TMHC contacted planning staff at Grey County, who confirmed that the County does not have a list or register of properties of known cultural heritage value or interest. Enquiries were also made to staff at the Municipality of West Grey, although no response has been received at the time of writing.

1.5 Summary of Proposed Activity

The Lantz Bridge is proposed for demolition due to deterioration of the current structure and road safety concerns resulting from the structure's narrow width and poor alignment with the roadway. The bridge replacement will allow for continued infrastructural functionality in this location. More information on the proposed development can be found in Section 5.0 of this report.

2.0 HISTORICAL RESEARCH & HERITAGE EVALUATION

This section includes a historical overview for the Subject Site. The Lantz Bridge is not currently recognized as a heritage property; therefore, this section also includes an evaluation following the OHA's O.Reg. 9/06 Criteria. The research and analysis in this section provide a foundation for the impact assessment in Section 6.0 of this HIA.

2.1 Historical Overview

Historic Context: Indigenous Land Use

Indigenous populations have inhabited the area of what are now Grey and Bruce Counties since the end of the last period of glaciation between 10,000 and 12,000 years ago. At the time of European contact in the early 17th century, the region was occupied by Algonquian-speaking Odawa groups who maintained a close relationship with the Iroquoian-speaking Petun peoples living along the southern shore of Nottawasaga Bay.[2] The Ojibwa (the "Chippewa," who called themselves "Anishinaabe"), who are also Algonquian speakers, lived in the region extending from the Georgian Bay area to the north shore of Lake Superior prior to European contact.[3] Both the Odawa and Ojibwa were disrupted and displaced by Iroquois hostilities in the 1650s,[4] but regrouped by the last quarter of the 17th century[5] and returned to their homeland. Around the year 1696, a fierce battle between the Ojibwa and Iroquois nations took place at Saugeen (present site of Southampton), resulting in the Ojibwa moving into the area where they remain today on a reserve adjoining the eastern boundary of the Town of Southampton.[6] The Ojibwa then retained all territories won during the battles until they surrendered them to the Crown more than a century later.

Historian P.S. Schmalz[7] indicates that a group of Ojibwa (including Mississauga), Potawatomi, Ottawa, and Caughnawaga settled in the area. Saugeen First Nation and the Chippewas of Nawash Unceded First Nation share the same traditional territories in southwestern Ontario. They were a part of the Three Fires Confederacy of Ojibwa, Odawa, and Pottawatomi. Throughout the eighteenth century, the territory was inhabited by several generations of Ojibwa, whose immediate territory was threatened neither by war nor by European settlers. Some of these Ojibwa were the Wahbadicks, the Newashes, the Wahwahnoses, and the Metegwob, who fished, trapped, and hunted along the many rivers, streams, and lakes of their lands.[8]

[2] Fox 1990:461
[3] Schmalz 1991
[4] Schmalz 1977
[5] Ferris 1989
[6] Schmalz 1977
[7] Schmalz 1977:1
[8] Schmalz 1977:2-9

The Chippewa surrendered portions of the present-day Grey and Bruce Counties in 1818 as part of the Lake Simcoe-Nottawasaga Treaty (Treaty No. 18).[9] This was done with the understanding that they would have continued use of the lands and that they would receive annuities for the lands surrendered. Large portions of these counties, including Bentinck Township, were included in the Saugeen Tract which was ceded in 1836 (Treaty No. 45 ½).[10] The surrender did not include the Saugeen Peninsula (Bruce Peninsula) and the area around the Chippewas of Nawash village (Keppel and Sarawak Townships; Owen Sound). The Peninsula was later surrendered on October 12, 1854 (Treaty No. 72), with the agreement that certain tracts of land be set aside for reserves and that the Ojibwa would receive all proceeds from the sale of the land. Both treaties allowed for the presence of five reservations on the Peninsula, including Saugeen, Chief's Point, Colpoy's Bay (Oxenden), Newash, and Cape Croker.[11] In 1857, the Colpoy's Bay and Nawash reserves were ceded (Treaty No. 82), and the Chippewas of Nawash moved to the Neyaashiinigmiing Indian Reserve Number 27 (Cape Crocker) on the southeast side of the Bruce Peninsula while the Saugeen First Nation retained their reserve at Southampton.

Historic Context: Early Settlement

The Subject Site is situated within the former Bentinck Township, currently within the Municipality of West Grey, Grey County, Ontario.

Prior to the formation of Wellington, Grey, and Bruce Counties, this region was part of the "Queen's Bush." The Queen's Bush consisted of an extensive tract of land surrendered by local Ojibwa populations to the British through the Treaty of Manitowaning (Treaty No. 45 ½) in 1836.[12] Some accounts suggest that the first Europeans to traverse the region were French explorer Samuel de Champlain and Jesuit missionaries who traveled here in the 17th century. The first Euro-Canadian settlers to establish homes in Bruce County were William Withers and Allan Cameron.[13] Survey of the Garafaxa Road commenced in 1837 to encourage settlement in the Queen's Bush, and the right of way was largely cleared by 1842.[14] The road took its name from Garafaxa Township near Fergus; however the origin of the name "Garafaxa" is unknown. It has been suggested that it is a corruption of "sassafrax," a shrub that grew in the area. As with most early settlement roads, the Garafaxa Road was initially very primitive, with sections frequently subject to flooding.[15] It was eventually graveled beginning in 1857,[16] and today this historic route forms part of Ontario Highway No. 6 between Fergus and Owen Sound.

[10] Lee 2004:21
[10] Lee 2004:21
[11] Davidson 1972:13
[12] Robertson 1906[1960]:11
[13] Robertson 1906: 429
[14] Marsh 1931: 236
[15] Bruce County Historical Notes 2002
[16] Marsh 1931: 239

Grey County was not formally established until the 1850s. Between 1840 and 1849 the region was considered part of the District of Wellington. As the various townships that would eventually make up Grey County were organized, those in the eastern half of the district were aligned with Simcoe County, those in the west were under the jurisdiction of Wellington County. Grey County was organized as a provisional county in 1852, and the first council meeting was held at the village of Sydenham. Melancthon Township and the Town of Shelburn became part of Dufferin County when it was formally established in 1881.[17]

The Village of Durham emerged as one of the earliest settlements in Grey County. In the spring of 1842, Archibald Hunter established a small shanty on the Garafaxa Road to be used as a stopping point for settlers. In 1848 the Crown Lands office was relocated to Durham from Owen Sound and was put under the direction of George Jackson, who assisted in the distribution of land grants in the county. Even before Bentinck Township was surveyed, several farm lots had been taken up along the Garafaxa Road, with at least five families settling there during the 1840s.[18] Dunsmuir's Mill was the first mill in the area, established on the Rocky Saugeen River north of Durham.[19]

Bentinck Township was surveyed in 1850 by John Stoughton Dennis. The Garafaxa Road divided the township in half, with Concessions increasing in number east and west of the road.[20] The township took its name from Lord George Bentinck, a British politician and statesman who had passed away two years prior.[21] Settlement of the Township was rapid; by 1861 Bentinck had a population of 3,331 people and was, by population, the second-largest township in the county after Normanby Township. By 1865, virtually all available lots had been claimed.[22] In the early years of Bentinck Township, mail was brought up from Guelph once per week and distributed from the Durham post office. Durham served as the commercial centre of Bentinck Township, growing significantly during the mid-to-late nineteenth century. It was established as the Town of Durham in 1878, and became an independent municipality.[23]

West of Durham along the Durham Road, the community of Allan Park emerged in the 1850s, named after surveyor Allan Park Bough. A post office was established in the community in 1855, and the settlement contained Anglican, Mennonite, and Methodist Churches. By the late nineteenth century, the community also contained a blacksmith shop, a woodworking shop, two shoemakers, a general store, and a hotel. A Canadian Pacific Railway station and stockyards were once located in the community, providing weekly shipments of livestock.[24]

[17] Campbell 1895: 3-4
[18] Marsh 1931: 171
[19] A History of Bentinck Township 1978: 2
[20] Campbell 1895: 13-14
[21] Smith 1865: 35
[22] Marsh 1931: 171
[23] Campbell 1895: 3-4
[24] A History of Bentinck Township 1978: 4

The community of Aberdeen also developed during the mid-nineteenth century, centered around the intersection of Concession Road 2 WGR and Side Road 18 northwest of Durham. The first sawmill was established here in 1851 by M.C. Scholfield, and the community was known for a period as Scholfield's Mills. The first log school was constructed during the 1850s, as was the first church. Materials for its construction were supplied by local resident J.W. Crawford, who would later give the community the name Aberdeen when he established the Aberdeen post office in 1880.[25] The community of Aberdeen continued to grow during the 1880s and 1890s. A blacksmith shop was constructed by Robert McCracken on Lot 43, Concession 3 WGR in 1881, and a shoemaker's shop was constructed on Lot 41, Concession 2 WGR, owned by a Mr. Joppes. *A History of Bentinck Township*, published in 1978, notes that the remains of two lime kilns were then visible on Lots 41 and 42, Concession 2 WGR, although no record of persons who owned or operated these kilns had been discovered.[26]

By 1895, Bentinck Township had a population of 5,828 residents. An electric power plant and dam were constructed on the Rocky Saugeen River at Aberdeen in 1896 and were used to provide electric power to the Town of Durham. The plant continued to serve in this capacity until the Township was connected to the Ontario Hydro Electric system in 1950.[27] Telephone service was established in Allan Park in 1912: originally operated as a municipally-owned system, it was later taken over by the Bell Telephone Company.[28]

Bentinck Township remained a largely rural municipality through the twentieth century. New housing developments were constructed in the Allan Park area during the 1970s, although the community itself declined in economic importance. The last business in Allan Park, a general store run by Joe Lobb closed in 1978.[29] That same year, the population of Bentinck Township was noted as 2,929 residents, roughly half of its population in the late nineteenth century. Grey County was significantly reorganized in 2001.The twenty-six municipalities formerly located within the county were amalgamated into just six. Only Owen Sound and Hanover retained their original boundaries. Bentinck Township was merged with Normanby and Glenelg Townships, the Village of Neustadt, and the Town of Durham to become the Township of West Grey.

[25] A History of Bentinck Township 1978: 2
[26] A History of Bentinck Township 1978: 134
[27] A History of Bentinck Township 1978: 134
[28] A History of Bentinck Township 1978: 135
[29] A History of Bentinck Township 1978: 135

Historic Context: Construction of the Lantz Bridge[30]

The Subject Site is located on Lot 51, Concessions 2 and 3 West of the Garafaxa Road (WGR) in the former Bentinck Township. Concession 3 WGR, was the first of the two lots within the Subject Site to be claimed. The Crown Patent for Lot 51, Concession 3 was granted to John Edge in August of 1849. Power-of-Attorney for the land passed to Sarah Edge in 1855. The lot passed through several owners though the late-nineteenth and early-twentieth centuries. It was eventually purchased by Thomas Lawrence in 1950, who retained ten acres in the west end, and subdivided the remainder into a series of forty-five acre lots.

Lot 51, Concession 2, was not settled until 1874 when the Crown Patent was issued to James Dargavel. The lot remained in the Dargavel family until 1897 when it sold to James W. Crawford for $3000. The 1880 *Illustrated Historical Atlas of the Counties of Grey & Bruce* (Map 1) does not identify landowners for Lot 51, Concessions 2 and 3 WGR. A resident named Quentin Campbell is shown one lot south on Lot 52, Concession 2 WGR; a dwelling is also indicated at this location. Additional dwellings and a sawmill are identified further north on Concession Road 2 WGR in the community of Aberdeen (although the community was not yet identified by that name). Concession Road 2 WGR is shown as an open road allowance between what is now Hutton Hill Road and 18th Sideroad, which would suggest that some form of crossing existed at the Saugeen River at this time.

During the early twentieth century, a number of articles in the *Durham Chronicle* and *Durham Standard* newspapers make reference to road and bridge construction projects throughout Bentinck Township and Grey County. References to Grey County bridge projects also appear in issues of the *Contract Record and Engineering Review* during this time. It appears that a significant number of road improvements and bridges were being completed in the area during the early part of the twentieth century. Flooding of the Saugeen River was also commonly reported in newspapers at this time: bridge washouts and replacements appear to have been frequent events. No specific references to the Lantz Bridge, or any bridge on Concession Road 2 WGR have been identified. A bridge inspection report completed for West Grey by WSP Inc. in 2018 identifies a construction date of 1920. Comparison with other bridges suggests that the design and materials of the Lantz Bridge are consistent with bridges of this period.

HistoricBridges.org, an extensive online resource that documents historic bridges and considers their relative integrity and significance, refers to the Lantz Bridge (the Subject Site) as the "Schenk Bridge." An article in the February 20, 1902, issue of *The Durham Chronicle* provides a summary of a recent Owen Sound City Council Meeting. At

[30] Due to the ongoing COVID-19 pandemic, libraries and archives remain closed to the public at the time of writing. Although efforts have been made to obtain as much information as possible, available research materials remain somewhat limited. TMHC staff contacted the Grey Roots Museum and Archives, who were unable to provide records or information pertaining to the Lantz Bridge.

this meeting, a Conrad Lantz was paid $5.50 for repairs to an unspecified bridge, and Andrew Schenk was paid $3.90 for inspecting the bridge. Although no specific connection to the Subject Site can be drawn, it would appear that both men were involved in bridge construction within Grey County, and may have had some involvement in the construction of this bridge.

Historic Context: Bridge Typology

HistoricBridges.org describes the Lantz Bridge (Schenk Bridge) in the following manner:

This bridge is a lighter weight design of pony truss bridge, compared to many of the other pony truss bridges in this county. Examples of this lightweight truss design, composed mainly of only paired angles, can be found elsewhere in Ontario, but they are not common in Grey County, although that is not to say they are common anywhere; like all riveted truss bridges, they are a disappearing bridge type that deserves to be preserved not demolished and replaced as many are.

Despite noting that Warren pony truss bridges are uncommon in Grey County, the HistoricBridges.org database includes twenty-two other Warren pony truss bridges located throughout Grey County. These include single-span bridges on Concession Roads 14, 16, 18, and the Normanby-Bentinck Townline over the Beatty Saugeen River.

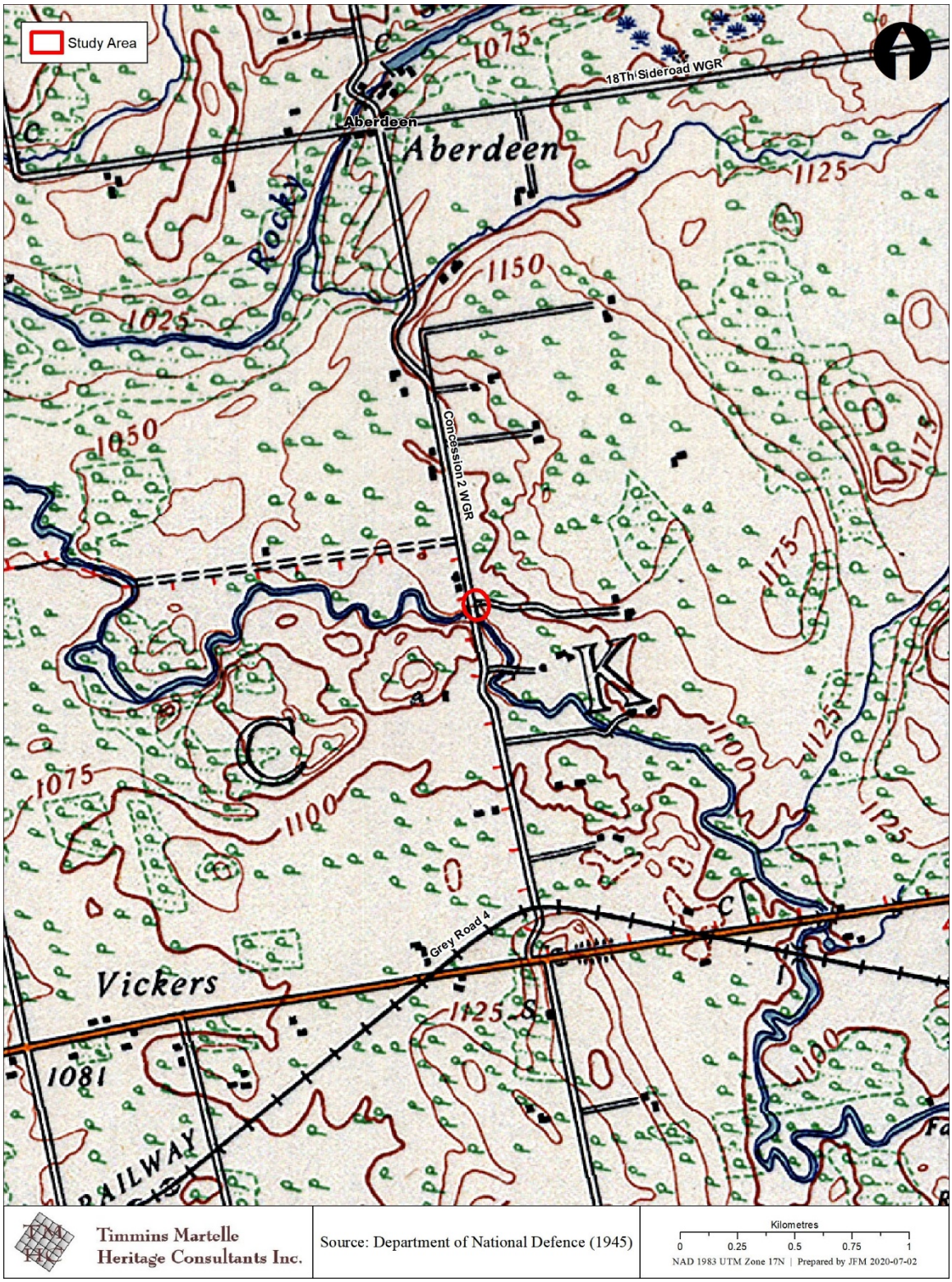
The Normanby-Bentinck bridge (Image 1), in particular, is of a very similar design to that of the Lantz Bridge, including the vertical truss members and outriggers, as well as the lattice-style railings. Other bridges which incorporate this railing style include a bridge on Sideroad 3 over the Sauble River in Chatsworth Township, the Kennedy Bridge on Concession 2 NDR over the Saugeen River in West Grey (Image 3), and the Concession Road 18 Bridge over the Beatty Saugeen, also in West Grey. It would appear that this handrail was a common design element for the period in which these bridges were constructed.

Design similarities between the Lantz Bridge and Normanby-Bentinck bridge, as well as others in Grey County suggest that the Lantz Bridge is of a relatively common design in Grey County, and represents the preferred approach to bridge building in the county in the early part of the twentieth century. It should also be noted that Pony Truss bridges are not particularly common in the Province of Ontario, and are disappearing as roads are widened and aging structures replaced.

Image 2: Bridge on Normanby-Bentinck Townline over Beatty Saugeen River. Note the similarities in design to those of the Lantz Bridge (HistoricBridges.org)

Image 3: Kennedy Bridge, Concession Road 2 NDR over Saugeen River. Note similar railing design (HistoricBridges.org)

Map 1: Location of Subject Site on an 1880 map (annotated by TMHC)



Map 2: Location of Subject Site on a 1945 topographic map (annotated by TMHC)

Map 3: Location of Subject Site on a current aerial photograph (annotated by TMHC)

2.2 Heritage Evaluation

The Subject Site is not known to have been municipally listed or designated under either Part IV or Part V of the OHA. The following section includes an evaluation of the property's potential heritage value for the purposes of this report.

Based on the research summarized in Section 2.1, the following table considers the property with respect to the OHA's *Ontario Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest*. A property may be designated under Section 29 of the OHA if it meets one or more of the following criteria for determining cultural heritage value or interest.

1. The property has design value or physical value because it:

Criterion	Summary of Response
i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,	Yes; the Lantz Bridge is a representative example of a Warren pony truss bridge, and is representative of the type of road bridge often used within Grey County during the early 20th century. Although other similar Warren Pony truss bridges are located throughout Grey County, surviving bridges of this type are uncommon throughout Ontario and are increasingly being demolished.
ii. displays a high degree of craftsmanship or artistic merit, or	No; the Subject Site's small Warren pony truss bridge does not demonstrate a high degree of craftsmanship or artistic merit relative to what is typical for this typology.
iii. demonstrates a high degree of technical or scientific achievement.	No; the Subject Site's small Warren pony truss bridge does not demonstrate a high degree of technical or scientific achievement relative to what is typical for this typology.

2. The property has historical value or associative value because it:

Criterion	Summary of Response
i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,	No; research did not determine the property to have associations with a theme, event, belief, person, activity, organization, or institution that is significant to the community.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or	No; the property is not known to yield information that contributes to an understanding of a community or culture.
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	No; the property is not known or believed to meet this criterion. The builder/contractor for the bridge was not determined.

3. The property has contextual value because it:

Criterion	Summary of Response
i. is important in defining, maintaining or supporting the character of an area,	No; the structure is a small bridge located on a rural road. It is not considered to be important in supporting or maintaining the character of the area.
ii. is physically, functionally, visually or historically linked to its surroundings, or	No; while, by its nature as a vehicular and pedestrian bridge, the property is integrated with the road it carries and the areas it connects, it is not considered to be physically, functionally, visually or historically linked to its surroundings in a way which construes cultural heritage value or interest.
iii. is a landmark.	No; the property is not currently known or believed to be considered a landmark.

Based on the research and analysis summarized in this CHER/HIA, the Lantz Bridge met one of the O.Reg. 9/06 Criteria for its design/physical value.

2.3 Statement of Cultural Heritage Value

The Lantz Bridge is a single-span Warren pony truss bridge, believed to have been constructed c.1920. The structure carries Concession Road 2 WGR over the Saugeen River. The bridge is located in a rural setting northwest of the community of Durham.

The property is a representative example of a Warren pony truss bridge in Grey County. It is similar in design and details to several other structures throughout Grey County and appears to reflect the preferred approach to bridge construction in the County during the early twentieth century. Despite the presence of other local examples, surviving Warren pony truss bridges are generally uncommon in Ontario as a whole, and are increasingly being replaced as roads are widened and improved.

The Lantz Bridge features a pair of four-panel riveted trusses with outriggers on the vertical chords, lattice-style railings and a concrete deck.

Heritage Attributes

Attributes of the Lantz Bridge that carry the property's heritage value include the following:

- The bridge's form and design as a single-span Warren pony truss bridge

- Intact features that represent the bridge's typology and era, specifically its four-panel truss structures with riveted construction, outriggers, and lattice-style handrails

3.0 EXISTING CONDITIONS

A site visit to the Lantz Bridge was undertaken by TMHC on June 22, 2020. The following photographs document the site's current conditions.

Image 4: Truss and railing on east side of structure and south abutment (TMHC 2020)

Image 5: West side truss structure with outriggers and south abutment (TMHC 2020)

Image 6: View south across structure (TMHC 2020)

Image 7: Detail of south abutment and wingwall showing deteriorated concrete (TMHC 2020)

Image 8: Detail of riveted truss construction (TMHC 2020)

Image 9: Detail of lattice style handrail (TMHC 2020)

Image 10: Detail of north abutment and east wingwall (TMHC 2020)

Image 11: View south from bridge showing rural landscape and construction activities (TMHC 2020)

4.0 POLICY REVIEW

4.1 Official Plan of Grey County

Section 4.5.1 of *Recolour Grey*, the Official Plan of Grey County, states that the "the County will conserve and manage its heritage resources and cultural heritage landscapes when undertaking public works, managing public facilities or of heritage interest, or otherwise directly undertaking development or infrastructure projects which may have adverse effects on heritage resources."[31]

The *Municipality of West Grey Official Plan for the Settlement Areas of Durham and Neustadt* pertains only to the two settlement areas named within. Lands located outside these areas (in which Subject Site is located) are not subject to this Official Plan, and are therefore covered directly by the Official Plan of Grey County.

4.2 Environmental Assessment Act (1990)

This CHER/HIA has been completed as part of the Class EA process in accordance with the Environmental Assessment Act. The Act includes within its definition of "environment" (1.1):

(c) the social, economic and cultural conditions that influence the life of humans or a community,

(d) any building, structure, machine or other device or thing made by humans

4.3 Standards & Guidelines for the Conservation of Historic Places in Canada (2010)

Parks Canada produced the *Standards & Guidelines for the Conservation of Historic Places in Canada* to provide guidance to governments, property owners, developers, and heritage practitioners across the country. This document outlines the conservation decision process and establishes pan-Canadian conservation principles. Section 4.4 of the *Standards & Guidelines* provides "Guidelines for Engineering Works, Including Civil, Industrial & Military Works." This section notes that, "Civil works, such as bridges, dams and canals, present a different challenge. These works often remain fully functional and so must meet stringent contemporary safety codes that did not exist at the time of their construction. Their continued use is contingent on meeting these standards, often necessitating significant rehabilitation."

[31] Grey County, 2018

5.0 DESCRIPTION OF PROPOSED DEVELOPMENT

The Lantz Bridge is proposed for demolition due to deterioration of the current bridge and road safety concerns resulting from the structure's narrow width and poor alignment with the roadway. The bridge replacement will allow for continued infrastructural functionality in this location.

6.0 IMPACT ASSESSMENT

According to the MTCS's *InfoSheet #5: Heritage Impact Assessments and Conservation Plans*, "Any impact (direct or indirect, physical or aesthetic) of the proposed development or site alteration on a cultural heritage resource must be identified. The effectiveness of any proposed conservation or mitigative or avoidance measures must be evaluated on the basis of established principles, standards and guidelines for heritage conservation." The following table includes an assessment of the proposed development against the types of potential impacts identified in *InfoSheet #5*.

Negative impact on a cultural heritage resource	Assessment for proposal at Subject Site
Destruction of any, or part of any, significant heritage attributes or features	The proposed development will result in the demolition and replacement of the existing bridge. This loss of heritage fabric should be addressed by mitigation measures, as discussed in Section 7 of this report.
Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance	The proposed development will result in the demolition and replacement of the existing bridge. This loss of heritage fabric should be addressed by mitigation measures, as discussed in Section 7 of this report.
Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;	The proposed development will not result in shadows that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings.
Isolation of a heritage attribute from its surrounding environment, context or a significant relationship	The proposed development will result in the demolition and replacement of the existing bridge. This loss of heritage fabric should be addressed by mitigation measures, as discussed in Section 7 of this report.
Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features	No significant views or vistas within, from, or of built and natural features related to the Subject Site have been identified.
A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces	No change in land use will occur as a result of the proposed development.
Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource	The Subject Site is not known to contain archaeological resources.
Other potential impacts	No other impacts have been identified.

Overall, the proposed development will result in the removal of all heritage fabric from the Subject Site. This impact should be addressed by mitigation measures, as discussed in Section 7 of this report.

7.0 CONSIDERED ALTERNATIVES AND MITIGATION STRATEGIES

While not directly applicable to this Subject Site, the Ministry of Transportation's *Heritage Bridge Guidelines for Provincially Owned Bridges*[32] offers a relevant and useful discussion of considerations for conservation and/or mitigation options. The Guidelines set forth the following eight options:

1) Retention of existing bridge with no major modifications undertaken
2) Restoration of missing or deteriorated elements where physical or documentary evidence (e.g. photographs or drawings) exists for their design
3) Retention of existing bridge with sympathetic modification
4) Retention of existing bridge with sympathetically designed new structure in proximity
5) Retention of existing bridge no longer in use for vehicular purposes but adapted for a new use
6) Retention of bridge as a heritage monument for viewing purposes only
7) Relocation of smaller, lighter single span bridges to an appropriate new site for continued use (see 4) or adaptive re-use (see 5)
8) Bridge removal and replacement with a sympathetically designed structure
    a. Where possible, salvage elements/members of bridge for incorporation into new structure or for future conservation work or displays
    b. Undertake full recording and documentation of existing structure

As discussed in further detail under Section 7.1, options involving retention of the existing bridge for ongoing infrastructural function, either with or without modification (Options 1-7 above) are not considered viable in the long term. The mitigation options (Option 8 above) have been discussed in Section 7.2.

7.1 Alternative Option

A 2018 Inspection Report for the bridge indicated that a number of repairs were required within the next five years, including repairs to the abutment walls, wing walls, soffit and substandard railing design. The bridge is currently under a load restriction due to its condition.

The repairs noted in the Inspection Report would not address a number of other issues identified with the current structure. The bridge's narrow width and poor alignment with the road have created safety concerns; agricultural equipment and ploughing/grading equipment operated by the Township are unable to cross the bridge, and a serious automobile accident recently occurred at this location. Retention of the structure, while undertaking the identified repairs or modifications, is thus not considered to be a feasible option.

[32] Ministry of Transportation

7.2 Mitigation Strategies for Preferred Option

Documentation of the Subject Site, with particular attention to its single-span, Warren Pony Truss structure, through drawings and/or photographs should be produced prior to demolition, and made available to future researchers through the Grey County archives (Grey Roots).

It may also be possible to incorporate limited components salvaged from the extant bridge into the new bridge including truss components, or portions of the lattice railing. Discussion with the Municipality of West Grey is recommended to gauge the desirability of this possible mitigation strategy.

8.0 CONCLUSION AND RECOMMENDATIONS

The Lantz Bridge is proposed for replacement due to deterioration of the current bridge and concerns about road safety due to the structure's narrow width and poor alignment with the roadway. This CHER/HIA provided a heritage evaluation of the bridge against the criteria set out by the *Ontario Heritage Act* (OHA)'s O.Reg. 9/06, an assessment of the proposed development's impact on identified heritage attributes, and strategies for mitigating that impact.

Based on the research and analysis summarized in this CHER/HIA, the Subject Site was found to meet the O.Reg. 9/06 Criteria for its physical/design value.

The impact assessment conducted for this CHER/HIA found that, while the proposed development is necessary to facilitate infrastructural functionality in this location, it will result in the removal of all heritage fabric from the Subject Site. Accordingly, the following mitigation measures have been recommended.

Documentation of the Subject Site, with particular attention to its single-span Warren pony truss structure, through drawings and/or photographs should be produced prior to demolition, and made available to future researchers through the Grey County archives (Grey Roots).

It may also be possible to incorporate limited components salvaged from the extant bridge into the new bridge such as truss components and portions of the railing. Discussion with the Municipality of West Grey is recommended to gauge the desirability of this possible mitigation strategy.

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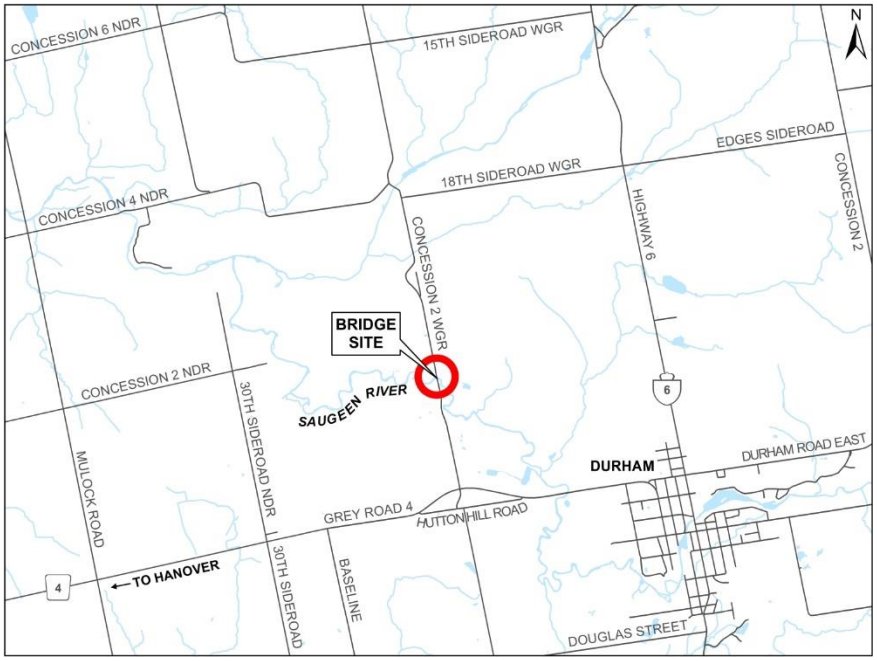
Appendix D

Consultation Materials

MUNICIPALITY OF WEST GREY
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE LANTZ BRIDGE

NOTICE OF COMMENCEMENT



The Municipality of West Grey has initiated a Class Environmental Assessment (Class EA) process to consider options associated with the Lantz Bridge (#28) which spans the Saugeen River along Concession 2 WGR, located approximately 2.5 km northwest of the community of Durham (as shown on the accompanying key plan). Recent inspections of the structure have identified significant deterioration with many bridge components. The Municipality is considering all reasonable options including, but not limited to: 1) Replacement of the existing steel truss bridge with a new two lane bridge in the same or new alignment, 2) Replacement of the existing steel truss bridge with a single lane bridge in the same or new alignment or 3) Repair or rehabilitation of the existing bridge.

THE ENVIRONMENTAL ASSESSMENT PROCESS: The planning for this project is following the planning process established for Schedule 'B' activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule 'B' projects are approved subject to the completion of a screening process. The purpose of the screening process is to identify potential environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts. The process includes consultation with the public, First Nation and Métis communities, stakeholders and review agencies. This notice is being issued to advise of the start of study investigations. There will be additional opportunities for public input and involvement as the study progresses.

PUBLIC INVOLVEMENT: Public input and comments are invited for incorporation into the planning and design of this project and will be received until July 27, 2020. Any comments collected in conjunction with the study, will be maintained on file for used during the project and may be included in project documentation. With the exception of personal information, all comments will become part of the public record. For further information regarding this project, please contact the project engineers: B.M. Ross and Associates: 62 North Street, Goderich, Ontario, N7A 2T4. Telephone (Toll Free): (888) 524-2641. Fax: (519) 524-4403. Lisa Courtney, Environmental Planner (e-mail: lcourtney@bmross.net), within 30 days from the date of this Notice

This Notice Issued June 25, 2020
Vance Czerwinski, Director of Infrastructure & Public Works Municipality of West Grey

B. M. ROSS AND ASSOCIATES LIMITED
Engineers and Planners
62 North Street, Goderich, ON N7A 2T4
p. (519) 524-2641 • f. (519) 524-4403
www.bmross.net

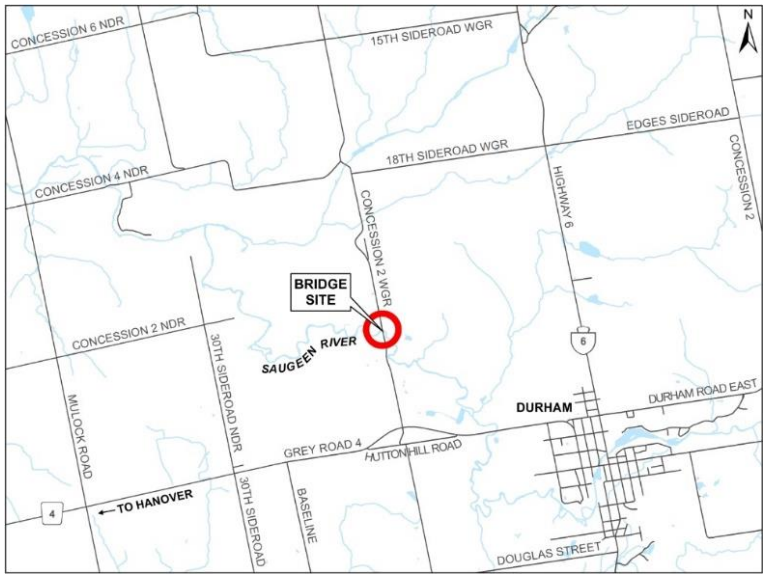
File No. BR1334

June 22, 2020

Agency List

RE: Municipality of West Grey
Class EA for the Lantz Bridge (Concession 2)

The Municipality of West Grey has initiated a Class Environmental Assessment (Class EA) process to consider options associated with Lantz Bridge (Structure #28) which spans the Saugeen River along Concession 2 (as shown on the accompanying key plan). Recent inspections of the structure have identified deterioration with several bridge components that need to be addressed to maintain the safety of the crossing. All reasonable alternatives are being considered in conjunction with the Class EA process, including but not limited to: 1) Replacement of the existing steel truss bridge with a new two lane bridge in the same or new alignment, or 2) Repair or rehabilitation of the existing bridge, 3) Replacement of the existing steel truss bridge with a single lane bridge in the same or a new alignment.



The planning for this project is following the planning process established for Schedule 'B' activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule 'B' projects are approved following the successful completion of a screening process. The purpose of the screening process is to identify and evaluate alternative solutions, and environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts. The process includes consultation with the public, First Nation and Métis communities, stakeholders and review agencies. This letter is being issued to advise of the start of study investigations. There will be additional opportunities for input and involvement as the study progresses.

Your organization was identified as possibly having an interest in this project and we are soliciting your input. Please forward your response to the undersigned by July 28. If you have any questions or require further information, please contact the undersigned at lcourtney@bmross.net or by phone at 1-888-524-2641.

Yours very truly

B. M. ROSS AND ASSOCIATES LIMITED

Per _____

Lisa Courtney, RPP, MCIP
Environmental Planner

LJC:hv
Encl.
cc. Vance Czerwinski, Municipality of West Grey

MUNICIPALITY OF WEST GREY
CLASS ENVIRONMENTAL ASSESSMENT
CLASS EA LANTZ BRIDGE
BR1334

REVIEW AGENCY CIRCULATION LIST

Review Agency	Contact Method	Involvement
Ministry of the Environment, Conservation and Parks (MECP) – EA Coordinator	Email: agency letter, Notice and Project Information Form (per streamlined process)	Mandatory Contact
Ministry of Natural Resources and Forestry Midhurst District	Mail agency letter	Potential Impact on Natural Features
Ministry of Heritage, Sport, Tourism and Culture Industries	Mail agency letter, copy of Notice. Email agency letter, copy of Notice	Potential Impact to Cultural Heritage Features and Archaeological Resources
County of Grey • Planning and Development Department; • Transportation Services	Mail agency letter, copy of Notice	• General information • Implications for long-term development
Saugeen Valley Conservation Authority	Mail: agency letter, copy of Notice	Potential Impact on Natural Features
Municipality of West Grey	Copies of correspondence	Proponent
Department of Fisheries and Oceans Canada	Mail: agency letter, copy of Notice	Burlington
Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region	Mail: agency letter, copy of Notice	Potential Impact related to Source Water Protection
Municipality of West Grey Fire Chief	Mail: agency letter, copy of Notice	Potential impact to emergency responses
West Grey Police Services	Mail: agency letter, copy of Notice	Potential impact to emergency responses

MUNICIPALITY OF WEST GREY
CLASS ENVIRONMENTAL ASSESSMENT
CLASS EA LANTZ BRIDGE
BR1334

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West Grey Police Services	Mail: agency letter, copy of Notice	Potential impact to emergency responses

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62 North Street, Goderich, ON N7A 2T4
p. (519) 524-2641 • f. (519) 524-4403
www.bmross.net

File No. BR1334

June 22, 2020

First Nation List

RE: Municipality of West Grey
Class EA for the Lantz Bridge (Concession 2)

The Municipality of West Grey has initiated a Class Environmental Assessment (Class EA) process to consider options associated with Lantz Bridge (Structure #28) which spans the Saugeen River along Concession 2 (as shown on the accompanying key plan). Recent inspections of the structure have identified deterioration with several bridge components that need to be addressed to maintain the safety of the crossing. All reasonable alternatives are being considered in conjunction with the Class EA process, including but not limited to: 1) Replacement of the existing steel truss bridge with a new two lane bridge in the same or new alignment, or 2) Repair or rehabilitation of the existing bridge, 3) Replacement of the existing steel truss bridge with a single lane bridge in the same or a new alignment.

The planning for this project is following the planning process established for Schedule 'B' activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule 'B' projects are approved following the successful completion of a screening process. The purpose of the screening process is to identify and evaluate alternative solutions, and environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts. The process includes consultation with the public, First Nation and Métis communities, stakeholders and review agencies. This letter is being issued to advise of the start of study investigations. There will be additional opportunities for input and involvement as the study progresses.

Your community has been identified as possibly having an interest in this project. For your convenience, a response form is enclosed along with a self-addressed stamped envelope. Please forward your response to our office by August 10, 2020. If you have any questions or require further information, please contact the undersigned at 1-888-524-2641 or by e-mail at lcourtney@bmross.net.

Yours very truly

B. M. ROSS AND ASSOCIATES LIMITED

Per _____
Lisa Courtney, RPP, MCIP
Environmental Planner

LJC:hv
Encl.
cc. Vance Czerwinski, Municipality of West Grey

Response Form

Project Name: Lantz Bridge Class Environmental Assessment

Project Description: Class Environmental Assessment to assess options for the Lantz Bridge, including replacement of the existing structure or rehabilitation/repairs to the existing structure

Project Location: Municipality of West Grey

(Key Plan of Project Location attached)

Please Detach and Return in Envelope Provided

Name of Aboriginal Community: _____

Please check appropriate box

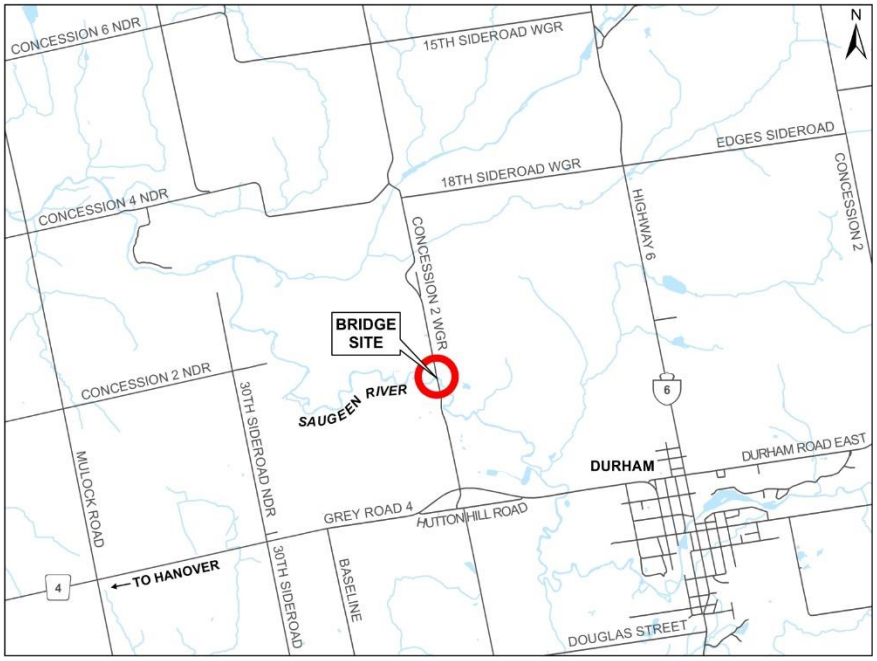
☐ **Please send additional information on this project**

☐ **We would like to meet with representatives of this project.**

☐ **We have no concerns with this project and do not wish to be consulted further**

MUNICIPALITY OF WEST GREY
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE LANTZ BRIDGE

NOTICE OF COMMENCEMENT



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This Notice Issued June 25, 2020
Vance Czerwinski, Director of Infrastructure & Public Works Municipality of West Grey

MUNICIPALITY OF WEST GREY
CLASS EA FOR LANTZ BRIDGE
BMROSS FILE BR1334

ABORIGINAL COMMUNITIES CIRCULATION LIST – June 2020

Aboriginal Community	Contact Method
Chippewas of Nawash Unceded First Nation Chief Gregory Nadjiwon R.R. #5 Wiarton, ON N0H 2T0	Email to Juanita Meekins at SON Environmental Office, copy executiveassistant@nawash.ca
Chippewas of Saugeen First Nation Chief Lester Anoquot Hwy. 21, R.R. # 1 Southampton, ON N0H 2L0	Email to Juanita Meekins at SON Environmental Office, copy sfn@saugeen.org
Saugeen Ojibway Nation (SON) – Chippewas of Saugeen & Chippewas of Nawash Land Use Planning: Juanita Meekins 25 Maadookii Subdivision Neyaashiinigmiing, ON N0H 2T0	Email Notice and Letter
Historic Saugeen Métis George Govier, Consultation Coordinator 204 High Street, Box 1492 Southampton, ON N0H 2L0	Mail letter and response form Email: saugeenmetis@bmts.com
Métis Nation of Ontario Suite 1100 – 66 Slater Street Ottawa, ON K1P 5H1	Mail letter and response form Email: consultations@metisnation.org
Great Lakes Métis Council Peter Coture, President 380 9th Street East Owen Sound, ON N4K 1P1	Mail letter and response form Email: metis@gmail.com
Infrastructure Canada	CC: First Nation and Métis Consultations

MUNICIPALITY OF WEST GREY
CLASS EA FOR LANTZ BRIDGE
BMROSS FILE BR1334

ABORIGINAL COMMUNITIES CIRCULATION LIST – June 2020

Aboriginal Community	Contact Method
Chippewas of Nawash Unceded First Nation Chief Gregory Nadjiwon R.R. #5 Wiarton, ON N0H 2T0	Email to Juanita Meekins at SON Environmental Office, copy executiveassistant@nawash.ca
Chippewas of Saugeen First Nation Chief Lester Anoquot Hwy. 21, R.R. # 1 Southampton, ON N0H 2L0	Email to Juanita Meekins at SON Environmental Office, copy sfn@saugeen.org
Saugeen Ojibway Nation (SON) – Chippewas of Saugeen & Chippewas of Nawash Land Use Planning: Juanita Meekins 25 Maadookii Subdivision Neyaashiinigmiing, ON N0H 2T0	Email Notice and Letter
Historic Saugeen Métis George Govier, Consultation Coordinator 204 High Street, Box 1492 Southampton, ON N0H 2L0	Mail letter and response form Email: saugeenmetis@bmts.com
Métis Nation of Ontario Suite 1100 – 66 Slater Street Ottawa, ON K1P 5H1	Mail letter and response form Email: consultations@metisnation.org
Great Lakes Métis Council Peter Coture, President 380 9th Street East Owen Sound, ON N4K 1P1	Mail letter and response form Email: metis@gmail.com
Infrastructure Canada	CC: First Nation and Métis Consultations

Grey County

Planning and Development

595 9th Avenue East, Owen Sound Ontario N4K 3E3
519-372-0219 / 1-800-567-GREY / Fax: 519-376-7970

July 20th, 2020

Lisa Courtney, RPP, MCIP, Environmental Planner
B.M. Ross & Associates Limited
Engineers & Planners
62 North Street, Goderich, ON N7A 2T4

RE: Class EA for the Lantz Bridge (Concession 2)
Municipality of West Grey
Applicant: B.M. Ross & Associates Limited

Dear Ms. Courtney,

This correspondence is in response to the above noted application. We have had an opportunity to review the application in relation to the Provincial Policy Statement (PPS) and the County of Grey Official Plan (OP). We offer the following comments.

The Municipality of West Grey has initiated a Class Environmental Assessment (Class EA) process to consider options associated with Lantz Bridge (Structure #28) which spans the Saugeen River along Concession 2. Recent inspections of the structure have identified deterioration with several bridge components that need to be addressed to maintain the safety of the crossing. All reasonable alternatives are being considered in conjunction with the Class EA process, including but not limited to: 1) Replacement of the existing steel truss bridge with a new two lane bridge in the same or new alignment, or 2) Repair or rehabilitation of the existing bridge, 3) Replacement of the existing steel truss bridge with a single lane bridge in the same or a new alignment.

The planning for this project is following the planning process established for Schedule 'B' activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule 'B" projects are approved following the successful completion of a screening process. The purpose of the screening process is to identify and evaluate alternative solutions, and environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts.

Schedule A of the County OP identifies these lands to be entirely within 'hazard lands'. Section 7.2(3) of the OP states,

> *In the Hazard Lands land use type, buildings and structures are generally not permitted. Minor extensions or enlargements of existing buildings and structures*

> *may be permitted subject to the policies of Section 7. Non-habitable buildings connected with public parks, such as picnic shelters may be permitted.*

Appendix B identifies a 'river' and 'significant valleylands' immediate adjacent to the river. Section 7.9(2) states,

> *No development will be permitted within 30 metres of the banks of a stream, river, or lake unless an environmental impact study prepared in accordance with Section 7.11 of this Plan concludes setbacks may be reduced and/or where it has been determined by the appropriate conservation authority these setbacks may be reduced.*

Section 7.7(1) states,

> *No development or site alteration may occur within Significant Valleylands or their adjacent lands unless it has been demonstrated through an environmental impact study that there will be no negative impacts on the natural features or their ecological functions.*

County planning staff recommend comments are received from the local conservation authority (Saugeen Valley Conservation Authority) to determine appropriate measures to ensure no negative impacts are incurred on the natural features or their ecological functions.

County Transportation Services have no concerns currently.

Provided consultation occurs with the local conservation authority, County planning staff have no further concerns with the subject application.

The County requests notice of any decision rendered with respect to this file.

If you wish to discuss this matter further, please do not hesitate to contact me.

Yours truly,

Stephanie Lacey-Avon
Planner
(519) 372-0219 ext. 1296
stephanie.lacey-avon@grey.ca
www.grey.ca

Lisa Courtney

From: Carl Seider <c.seider@greysauble.on.ca>
Sent: July 3, 2020 8:54 AM
To: Lisa Courtney
Cc: RMO Mailbox
Subject: Class EA for Lantz Bridge (Concession 2)
Attachments: GM_BluePlan_EA_Comments.pdf

Hi Lisa,

Please note that the Lantz Bridge located on Concession 2 WGR is not within a vulnerable source protection area where local Source Protection Plan policies apply, therefore we will not be providing further comments associated with this project.

If you have any further questions, please feel free to contact me directly.

Regards,
Carl Seider
Risk Management Official, Grey Sauble Conservation
(519) 374-3000

1078 Bruce Road 12, P.O. Box 150, Formosa ON Canada N0G 1W0
Tel 519-367-3040, Fax 519-367-3041, publicinfo@svca.on.ca, www.svca.on.ca

Sent via email only

July 28, 2020

Lisa Courtney, RPP, MCIP
62 North St.
Goderich, ON
NA 2T4

Dear Ms. Courtney:

RE: Municipal Class Environmental Assessment
Lantz Bridge, Concession 2 WGR
Geographic Township of Bentinck
Municipality of West Grey

The Saugeen Valley Conservation Authority (SVCA) is interested to receive additional information and reports, as they are made available, associated with this Environmental Assessment throughout the course of the Assessment. An SVCA Permit will be required for the proposed works as indicated in the report. The preferred proposal is acceptable to the SVCA in principle pending the review of detailed reports and plans yet to be provided to the SVCA for the purpose of applying for an SVCA permit.

In the past, Conservation Authorities served as the first point of contact and the local service provider for review of Section 35 of the previous version of the Fisheries Act, and had entered into agreements with Fisheries and Oceans Canada to facilitate this process. Changes to the Fisheries Act effective November 25, 2013, have resulted in the cancellation of these agreements. It is now the responsibility of the proponent to contact the Department of Fisheries and Oceans at 1-855-852-8320 or http:/www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html to ensure their project addresses the Fisheries Act.

We trust these comments are helpful. Should questions arise, please do not hesitate to contact this office.

Yours Sincerely,

Erik Downing
Manager, Environmental Planning & Regulations
Saugeen Conservation
ED/
cc: Christine Robinson, Authority Member, via email
Tom Hutchinson, Authority Member, via email
Vance Czerwinski, West Grey, via email

Lisa Courtney

From: Chris Hachey <hsmlrcc@bmts.com>
Sent: July 8, 2020 1:32 PM
To: Lisa Courtney
Subject: Request for Comments - West Grey - Class EA, Lantz Bridge

Your File: BR1334
Our File: Grey County - West Grey (Projects)

Ms. Courtney,

The Historic Saugeen Métis (HSM) Lands, Resources and Consultation Department appreciates the opportunity to be consulted regarding the Class EA for the Lantz Bridge in West Grey. HSM interests related to the project largely focus on environmental effects / sustainability and the potential for archaeological resources associated with the project.

HSM looks forward to further consultation regarding this project as information becomes available.

Regards,

Chris Hachey

Coordinator, Lands, Resources and Consultation
Historic Saugeen Métis
204 High Street
Southampton, Ontario, N0H 2L0
Telephone: (519) 483-4000
Fax: (519) 483-4002
Email: hsmasstlrcc@bmts.com

Lisa Courtney

From: Juanita Meekins <juanita.meekins@saugeenojibwaynation.ca>
Sent: May 4, 2021 3:55 PM
To: Lisa Courtney
Subject: Re: BR1334 Lantz Bridge Replacement Virtual Public Information Centre

Categories: Archived

Good afternoon Lisa,

At this time the Environment Office has no comments at this time. If the scope of work needs to change can you please notify the Environment Office.

Thank you,

On Tue, May 4, 2021 at 10:27 AM Lisa Courtney <lcourtney@bmross.net> wrote:

> Hi Juanita,
>
> Hope you and yours are keeping well. We are hosting a virtual Public Meeting as part of the Municipal Class EA process for the Lantz Bridge Replacement (Municipality of West Grey). I've attached the Notice for your information. We will be posting the link to the meeting on the Municipality's website and if you wish I can send you the Zoom invite as well.
>
> If you have any questions about this project, please feel free to send me an email or give me a call at 519-440-6568.
>
> Thanks and cheers,
>
> ***Lisa J. Courtney, MSc., MCIP, RPP***
>
> ***B. M. Ross and Associates Limited***
>
> ***Engineers and Planners***
>
> *62 North Street*
>
> *Goderich, ON N7A 2T4*
>
> **Ph: (519) 524-2641**
>
> **lcourtney@bmross.net**
>
> **https://link.edgepilot.com/s/7c1eb23c/iY3anblrwkKCc3ZbrLW7RA?u=http://www.bmross.net/**

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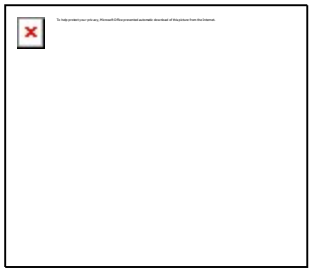
Juanita Meekins
Executive Assistant to Resources and Infrastructure
519-534-5507 (Office) 519-379-0558 (Cell)



25 Maadookii Subdivision
Neyaashiinigmiing
Ontario, N0H 2T0
saugeenojibwaynation.ca

Communications Log

Date	From	To	Aboriginal Community Contact Details	Medium (e.g. email, letter, phone call)	Communication Description	*Nature of Concern(s)	Follow-up required? (yes/no)
June 22, 2020	Proponent	Chippewas of Nawash Unceded First Nation	Contact Person Gregory Nadjiwon Title Chief Mailing Address RR 5 Wiarton ON N0H 2T0 Phone Number Email executiveassistant@nawash.ca	Email and Letter	Initial Project Letter, Map and Response Form	N/A	Yes
June 22, 2020	Proponent	Chippewas of Saugeen First Nation	Contact Person Lester Anoquot Title: Chief Mailing Address: Hwy 21 RR 1 Southampton ON N0H 2L0 Phone Number Email sfn@saugeen.org	Email and letter	Initial Project Letter, Map and Response Form	N/A	Yes
June 22, 2020	Proponent	Saugeen Ojibway Nation (SON) Environmental Office	Contact Person Name: Juanita Meekins Title Executive Assistant Mailing Address: 25 Maadookii Subdivision, Neyaashiinigmiing ON N0H 2T0 Phone Number Email juanita.meekins@saugeenojibwaynation.ca	Email and letter	Initial Project Letter, Map and Response Form	N/A	Yes
June 22, 2020	Proponent	Historic Saugeen Métis	George Govier, Consultation Coordinator 204 High Street, Box 1492 Southampton, ON N0H 2L0 saugeenmetis@bmts.com	Email and Letter	Initial Project Letter, Map and Response Form	N/A	Yes
June 22, 2020	Proponent	Métis Nation of Ontario	Suite 1100 – 66 Slater Street Ottawa, ON K1P 5H1 consultations@metisnation.org	Email and Letter	Initial Project Letter, Map and Response Form	N/A	No
June 22, 2020	Proponent	Great Lakes Métis Council	Peter Coture, President 380 9th Street East Owen Sound, ON N4K 1P1 metis@gmail.com	Email and Letter	Initial Project Letter, Map and Response Form	N/A	Yes
July 8, 2020	Chris Hachey, Historic Saugeen Métis	Proponent	204 High Street, Box 1492 Southampton, ON N0H 2L0 saugeenmetis@bmts.com	Email	Response to initial letter	HSM interests related to the project largely focus on environmental effects / sustainability and the potential for archaeological resources associated with the project. Look forward to further information as available	Yes
Oct 16, 2020	Proponent	SON	Contact Person Name: Juanita Meekins Title Executive Assistant Mailing Address: 25 Maadookii	Email	Follow up email regarding initial letter (no response to date)	N/A	Yes

			Subdivision, Neyaashiinigmiing ON N0H 2T0 Phone Number Email juanita.meekins@saugeenojibwaynation.ca				
April 8, 2021	Proponent	SON	Juanita Meekins, SON 519-534-5507	Phone call	Left voice mail asking to speak with Jaunita (no response to date)	N/A	
May 4, 2021	Proponent	Historic Saugeen Métis	Chris Hatchey hsmasstlrcc@bmts.com	Email	Emailed Notice of Virtual Public Meeting	N/A	No
May 4, 2021	Proponent	Great Lakes Métis Council	greatlakesmetis@gmail.com	Email	Emailed Notice of Virtual Public Meeting	N/A	N/A
May 4, 2021	Proponent	Métis Nation of Ontario	consultations@metisnation.org	Email	Emailed Notice of Virtual Public Meeting	N/A	N/A
May 4, 2021	Proponent	SON	Juanita Meekins, SON juanita.meekins@saugeenojibwaynation.ca	Email	Emailed Notice of Virtual Public Meeting	N/A	N/A
May 4, 2021	Juanita Meekins SON	Proponent	Juanita Meekins, SON juanita.meekins@saugeenojibwaynation.ca	Email	At this time the Environment Office has no comments at this time. If the scope of work needs to change can you please notify the Environment Office.	N/A	N/A

* For more detailed information regarding the nature of the concern(s) raised by the Aboriginal community, please refer to the Aboriginal Concerns Tracking table that can be found in xxx below.

** The proponent should ensure that a copy of all letters and emails exchanged between Aboriginal communities and the proponent, are sent to INFC for our files. INFC should also be provided with copies of all responses from Aboriginal communities to be included in our files.

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

LANTZ BRIDGE ON CONCESSION 2 WGR MUNICIPALITY OF WEST GREY

NOTICE OF VIRTUAL PUBLIC MEETING

THE PROJECT

The Municipality of West Grey has initiated a Municipal Class Environmental Assessment (MCEA) process to consider options associated with Lantz Bridge (Structure #28) which spans the Saugeen River along Concession 2 WGR (as shown on the accompanying key plan). Recent inspections of the existing steel truss structure have identified significant deterioration with several bridge components that have resulted in the closure of the structure. All reasonable alternatives are being considered in conjunction with the MCEA process, including but not limited to: 1) Repair or rehabilitation of the existing bridge, 2) Replacement of existing bridge with a new single lane bridge, or 3) Replacement of the existing bridge with a new two lane bridge, including the follow sub-options: 3A) Concrete bridge deck supported by precast concrete girders, 3B) Concrete bridge deck supported on steel girders, or 3C) Wood bridge deck supported on wood girders.

PUBLIC INVOLVEMENT:

Public consultation is a key component of this study and a **Virtual Public Meeting** has been scheduled to inform residents on the overview of the project and the Class EA process. This meeting will also provide residents with the opportunity to provide comments on the project. Details of the meeting are as follows:

Date: Thursday, May 20, 2021
Time: 6:30 to 8:00 p.m.
Format: Virtual Meeting via Zoom

THE ENVIRONMENTAL ASSESSMENT PROCESS:

The planning for this project is following the planning process established for Schedule 'B' activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule 'B' projects are approved following the successful completion of a screening process. The purpose of the screening process is to identify and evaluate alternative solutions, and environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts. The process includes consultation with the public, First Nation and Métis communities, stakeholders and review agencies.

Due to COVID-19 concerns, the meeting will be held virtually using the Zoom platform. Pre-registration is required to participate during the meeting. The meeting link will be provided to those who pre-register ahead of the meeting date. Representatives from the Municipality of West Grey and the project engineers, will give a presentation on the project and then take questions and comments from the public. Please contact Lisa Courtney at lcourtney@bmross.net or (888) 524-2641 x 238 to register for participation in the meeting. If you are unable to access the presentation material on-line, please contact BMROSS and alternative arrangements will be made.

Comments collected in conjunction with this project will be maintained on file for use during the project and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.

This Notice Issued May 5, 2021.
Vance Czerwinski, Municipality of West Grey

Municipality of West Grey
Lantz Bridge Conc. 2 WGR

May 20, 2021

1

Agenda

- Background and Condition of Lantz Bridge
- Municipal Class Environmental Assessment Process
- Problem/Opportunity
- Alternatives Solutions
- Evaluation of Alternative Solutions
- Preferred Solution
- Next Steps
- Questions, comments

2

Background

- Lantz Bridge (Structure 28) is located on Concession 2 WGR. Existing Bridge is a steel truss bridge with cross beams and stringers under a concrete deck, built about 1920, 15.5m span, 4.75m deck width, previously posted with 12 tonne limit

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2018 Structural Inspection

- Previous OSIM inspection by WSP identified following issues/concerns with the bridge:
  - Poor condition of ballast walls with severe cracking
  - Abutment walls in poor condition with severe cracking, spalling and delamination
  - Steel truss members are in fair to poor condition with blistering observed in some locations, pitted locations on connection plates also observed in photos.
  - Deck stringers in poor condition
  - Barrier protection is not to Code
  - Structure is a single-lane (doesn't meet Bridge Code for traffic levels and speed)
  - Structure is poorly aligned with the road.

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Condition of Structure 2018

Photo 7: Severe Spalling and Delamination of Wingwall

Photo 12: Typical Gusset Plate and Connection, Bearing Seat and Ballast Wall

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Condition of Structure 2018

Photo 16: View of Soffit, Floor Beams and Exterior Curb and Barrier

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January 2021 Structure Review

- January 15, 2021, the condition of the structure was reviewed by BMROSS.
- Suspect 4 of the 6 stringers at the south end currently provide 10% or less of original resistance. The other 2 provide 50% of original resistance. At the north end, suspect 2 out of 6 currently provide no resistance and the remaining 4 provide about 50%.
- Based on our review, it was recommended the structure be closed.

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Municipal Class Environmental Assessment (MCEA) Process

- Given condition of the bridge, Municipality applied for ICIP funding in 2019.
- Initiated a Municipal Class Environmental Assessment (MCEA) in 2020 to investigate options to address condition and issues with bridge.
- Following MCEA process for Schedule ‘B’ project, which includes: defining the problem and identifying and evaluating practical alternative solutions.

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MCEA Process

- Planning and design process for municipal infrastructure projects
- Conducted to evaluate potential environmental impacts of municipal projects and determine what mitigation measures can be put in place
- Involves consultation with public, regulatory agencies, adjacent property owners, First Nation and Métis communities
- Requires consideration of natural, social, cultural, economic and technical factors

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MCEA Study Phases

- Phase 1 – Problem Definition
- Phase 2 – Evaluation of Alternatives
- Phase 3 – Evaluation of Design Concepts
- Phase 4 – Prepare Environmental Study Report
- Phase 5 – Project Implementation

Phases that must be completed for Schedule B projects prior to implementation

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MCEA Consultation

- Project Initiation
  - Notice in Hanover Post, on municipal website
  - Letter sent to review agencies, First Nation and Métis communities
  - Notice sent to adjacent property owners
- Roadside meeting with adjacent property owners
- Public Information Centre
- Notice of Completion – issued when the screening report is ready for review

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Agency Input

Saugeen Valley Conservation Authority (SVCA)	Will require permit pending review of detailed reports and plans
Grey County	County Transportation Services have no concerns Provided consultation occurs with SVCA, have no further concerns.

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Initial Public Input

- Would like to see single lane bridge remain
- Narrow bridge slows traffic
- Concerns regarding more traffic, speed
- Concerns for pedestrian, cycling safety
- Concern road will become bypass, more truck traffic
- Aesthetic and historical value should be preserved
- Present span is too narrow and acts as a partial dam during flooding
- Amount of traffic doesn't justify a two lane bridge
- Larger bridge will require more maintenance and cost more
- Support for two lane bridge
- Two lane bridge needed for agricultural equipment to cross

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Activities/Studies Undertaken

- Cultural Heritage Evaluation of Bridge
- Topographic Survey of Site and Legal Survey
- Geotechnical Investigation
- Hydrology Study

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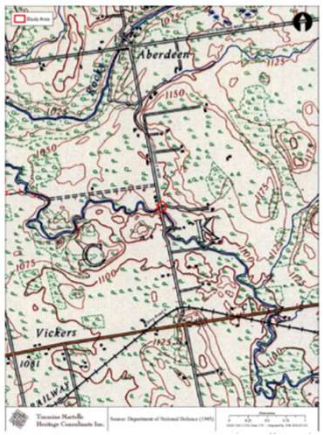
Cultural Heritage Assessment

- Cultural Heritage Evaluation Report (CHER) was required to assess cultural heritage value of structure due to its age
- Completed in August 2020 by Timmins Martelle Heritage Consultants
- CHER identified:
  - Bridge's form and design (Warren Pony Truss) is representative of the type of bridge common in Grey County in the early 20th century, but has no historical, associative or contextual value.
  - Given structural and safety concerns, retention/repair of the structure not considered feasible.
  - **Recommended documentation (through drawings and/or photographs) undertaken prior to replacement and considering incorporating truss components or portions of lattice railing into new structure.**



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Problem and Alternative Solutions

Identified Problem:

- *There are significant deficiencies with Structure 28 (Lantz Bridge) spanning the Saugeen River along Concession 2 WGR. The deficiencies include the condition, alignment and width of the structure. The deterioration of the condition of the structure recently resulted in its closure to vehicle traffic.*

Practical Alternative Solutions Evaluated:

- 1. Do Nothing (status quo)
- 2. Replace with Single Lane Structure
- 3. Replace with Two Lane Structure
  - 3A – Wood Superstructure
  - 3B – Steel Girders and Concrete Deck
  - 3C – Concrete Box Girders and Concrete Deck

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Alternatives Not Evaluated

- Rehabilitation/repair is not considered a feasible or practical solution due to:
  - Financial impacts to life cycle costs (i.e. will not significantly extend life of structure but will still have high costs associated with it)
  - Would still have functionally deficient structure (i.e. would still have a load limit).
- Removal and closure not considered feasible or practical due to impacts to adjacent residents and overall transportation network.

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Evaluation of Alternatives

- 1 – Do Nothing (Status Quo)
  - Bridge would remain closed.
  - Significant impacts on local transportation network, inconvenient for local residents, impacts to emergency services, municipal services (snow clearing, waste collection)
  - Does not resolve problem
  - Least costly option in terms of capital costs

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Evaluation of Alternatives (cont.)

- 2 – Replace with One Lane Structure
  - New structure would address structural safety concerns.
  - Construction of new structure may have some environmental impacts during construction but mitigation measures will minimize this potential.
  - A single lane structure **does not meet the Canadian Bridge Design Code requirements** given traffic levels, speed of roadway and usage type for this structure.
  - Larger vehicles, snow removal and agricultural equipment may not be able to utilize crossing due to substandard width.
  - Problematic if road needs to be used for a detour in the future (due to construction or an emergency).
  - Would have a functionally deficient bridge for the next 75 years.
  - Given need to replace entire substructure, cost difference between single lane and double lane is only 15%.

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Evaluation of Alternatives (cont.)

- 3 – Replace with Two Lane Structure
  - New structure would address structural safety concerns, as well as issues with substandard width and approaches.
  - Construction of new structure may have some environmental impacts during construction but mitigation measures will minimize this potential.
  - A two lane structure meets the Canadian Bridge Design Code requirements given traffic levels and speed of roadway.
  - Would have sufficient clearances for pedestrian, cyclists and vehicle traffic.
  - Larger vehicles, snow removal and agricultural equipment will be able to utilize crossing Provides sufficient infrastructure
  - Allows the road to be utilized if needed as a detour route.
  - Is a more costly option

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Design Alternatives (3A, 3B, 3C)

- All designed prepared to comply with CHBDC and TAC manual for local, undivided road.
- Existing road width varies from 6.3 to 7.0m. Proposing 6.6m paved surface and 1.2m gravel shoulders.
- Bridge deck thickness with all options is thicker; therefore, grade increase of about 0.6m required.
- With the wider road platform and grade increase, need to build side slopes out further and move ditches back.

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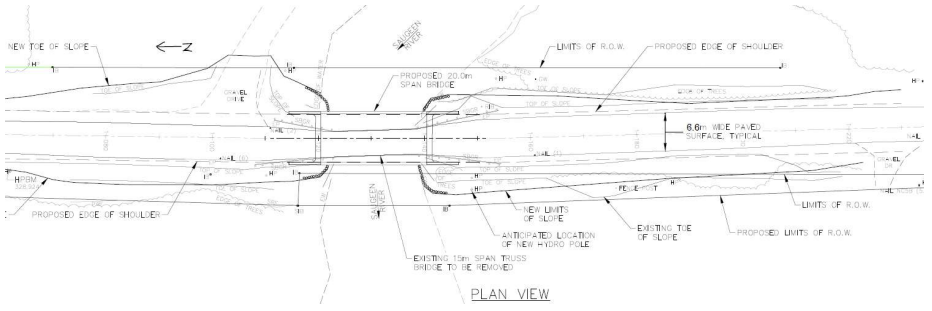
Site Plan



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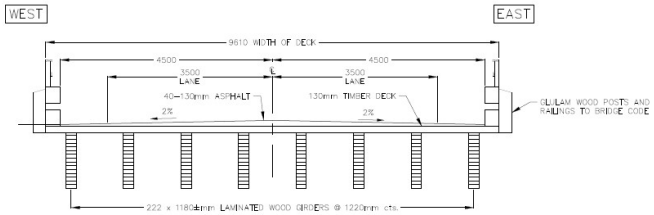
Option 3A

- Wood Superstructure with wood railings
  - Shorter construction period, 12 weeks.
  - Deck components can be delivered sooner and can be assemble to one side and lifted in place.
  - Originally proposed when grant application submitted.
  - Projected to provide similar life expectancy as other options.
  - Probable construction cost $1,403,000, + HST.



TYPICAL WOOD DECK SECTION
SCALE: 1:75

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Example of 3A – Wood Superstructure

22m Clear span bridge with wood superstructure bridge

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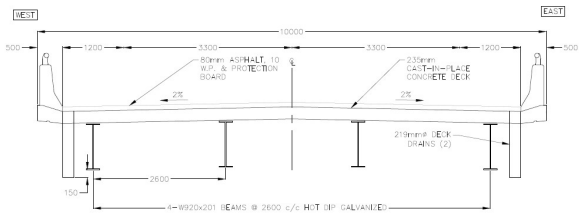
Option 3B

- Steel Girders with Concrete Deck
  - Longest construction period, 16 weeks.
  - Longer lead time for delivery anticipated than for wood, similar to precast concrete girders, about 3.5 to 4 months.
  - Girders would be hot dip galvanized to extend life.
  - Probable construction cost $1,363,000, + HST.



BRIDGE SECTION OPTION 2

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Example of 3B – Steel Girder with Concrete Deck

24m span steel girder with concrete deck and barrier walls

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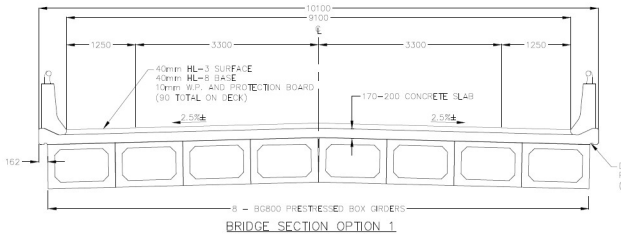
Option 3C

- Concrete Box Girders and Concrete Deck
  - Second longest construction period, 15 weeks.
  - Longer lead time for delivery anticipated than for wood, similar to steel girders, about 3.5 to 4 months.
  - Precast cast girder of high strength concrete and hoisted in place to span river.
  - Probable construction cost $1,403,000, + HST.



BRIDGE SECTION OPTION 1

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Example of 3C – Concrete Box Girder and Concrete Deck

22m span concrete box girders with concrete deck and barrier walls

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Summary of Option 3 Alternatives

- Construction costs for all alternatives are the same at about $1,400,000 plus HST
- Option 3A - Wood Superstructure should provide the shortest construction period and earliest delivery of materials.
- While we are more familiar with steel girder and precast concrete bridges in this area, the projected service life of all options are similar.
- Within the originally grant application submitted it was proposed that a new bridge structure with a wooden deck would be installed.
- Note: Pricing for all options are higher this year and are subject to Contractor availability

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Preferred Solution

- 3A – Replacement with a two lane, wooden superstructure bridge
  - Meets safety and design requirements of the Canadian Highway Bridge Design Code.
  - Addresses existing structural problems as well as functional issues (width, approaches).
  - Cost similar to other Option 3 alternatives.
  - Projected life expectance is similar.
  - Shortest construction duration.

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Regulatory Requirements

- Replacement of the structure will require:
  - Department of Fisheries and Oceans Canada (DFO)
    - Impact to Fish and Fish Habitat
    - Aquatic Species at Risk
  - Ministry of Natural Resources and Forestry (MNRF)
    - Impacts to Fish and Species at Risk
    - Establish In-Water Timing Windows
  - Saugeen Valley Conservation Authority
    - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Permit
    - Bridge Hydrology

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Next Steps

- Incorporate feedback and comments into EA screening report and finalize.
- Issue Notice of Completion, starting 30-day public review period.
- Prepare and submit approval applications
- Final Bridge Engineering Drawings
- Prepare Tender for Bridge Removal and Construction
- Construction and Restoration

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Questions, Comments?

Questions?

Please send comments to: Lisa Courtney, lcourtney@bmross.net

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B. M. ROSS AND ASSOCIATES LIMITED
Engineers and Planners
62 North Street, Goderich, ON N7A 2T4
p. (519) 524-2641 **www.bmross.net**

File No. BR1334

MUNICIPALITY OF WEST GREY

MUNICIPAL CLASS EA FOR LANTZ BRIDGE REPLACEMENT

Public Information Centre Notes

Details Thursday, May 20, 2021
Virtual Public Meeting via Zoom

Presentation	6:30 PM – 7:15 PM
Questions	7:15 PM – 8:00 PM

In Attendance:

Vance Czerwinski	) Municipality of West Grey
Ken Logtenberg	) B. M. Ross and Associates Limited (BMROSS)
Lisa Courtney	)

Members of the Public: 30 ±

6 :30 PM – 7:15 PM – PowerPoint Presentation

- Lisa began the presentation by thanking everyone for attending the virtual public meeting. She provided an explanation of the format of the meeting using the Zoom platform and then provided of the agenda for the presentation, which included an overview of condition of Lantz Bridge, the Municipal Class Environmental Assessment (MCEA) process, studies undertaken in conjunction with the MCEA process, the problem identified, alternative solutions and their evaluation, the preferred solution, regulatory requirements and next steps.
- Ken provided a summary of the condition assessment of the structure completed in 2018 by WSP and a more recent inspection by BMROSS in 2020. The 2018 assessment found numerous structural deficiencies with the condition of the bridge, as well as functional deficiencies (i.e. the alignment and width of the structure). Following the 2020 inspection by BMROSS, the structure was closed due to the deteriorated condition of the stringers.

- Lisa reviewed the MCEA process and the associated requirements. She noted that the MCEA for the Lantz Bridge is following the MCEA process for Schedule B projects. This requires that the first two phases of the MCEA process, identifying the problem and evaluating alternative solutions, are completed. The MCEA process also has requirements for consultation with review agencies, First Nation and Métis communities, adjacent property owners and the public. Lisa summarized the initial feedback received from review agencies and the public.
- A number of studies are being undertaken in conjunction with the MCEA process, including a cultural heritage assessment of the bridge, topographic and legal surveys, geotechnical investigation and hydrology study. These studies are used to assist in the evaluation of practical and feasible alternatives and to inform the design process.
- Lisa summarized the findings of the Cultural Heritage Evaluation Report completed by Timmins Martelle Heritage Consultants in August 2020. The form and design of the bridge is representative of the type of bridge commonly constructed in the early 20th century in Grey County, but Lantz Bridge has no historical associative or contextual value. The report recommended that the structure is documented through photographs and drawings prior to replacement and that consideration be given to incorporating the truss or lattice railing into the new structure.
- Lisa provided an overview of the identified problem: *There are significant deficiencies with Structure 28 (Lantz Bridge) spanning the Saugeen River along Concession 2 WGR. The deficiencies include the condition, alignment, and width of the structure. The deterioration of the condition of the structure recently resulted in its closure to vehicle traffic*.
- The following practical alternative solutions were summarized: 1. Do Nothing, 2. Replace with Single Lane Structure and 3. Replace with Two Lane Structure. Associated with option 3, there are three sub-options: 3A: Wood Superstructure, 3B: Steel Girders and Concrete Deck and 3C: Concrete Box Girders and Concrete Deck. Lisa noted that rehabilitation and repair of the structure was not considered a feasible or practical solution due to the financial costs and that it would address the functional deficiencies of the structure.
- Ken summarized the differences between the alternatives. He noted that Option 1 does not resolve the identified problem and has significant impacts to the transportation network.
- A single lane structure does not meet the Canadian Highway Bridge Design Code (CHBDC) for the traffic levels, speed and usage of the road. Some larger vehicles and agricultural equipment may not be able to utilize the crossing due to the substandard width. It would also be problematic if the road is used for a detour in the future (due to construction or an emergency). Additionally, the cost difference between a single lane and two lane structure is only 15%.
- The option of a two lane structure fully addresses the problem statement, including concerns with the substandard width and approaches. It would also meet the requirements of the CHBDC for the road now and in the future. It would also have

sufficient clearances for pedestrian, cyclists and vehicle traffic. It would also allow wider vehicles to utilize the crossing. This option is however, the costliest.

- Ken provided an overview of the design options. He noted that construction of a two lane bridge will include a wider road platform and a slight grade increase. Given this, the slide slopes of the road will be built out further and the ditches will be moved back. Some property acquisition to the southwest of the bridge may be required to accommodate moving the existing hydro poles.
- A wooden superstructure and wood railing bridge has the advantage of the shortest construction period. The probable cost is: 1.4 million + HST.
- A structure with steel girders and concrete deck has the longest construction period, and longer lead times for obtaining materials. The estimated cost is: 1.36 million + HST.
- A concrete box girder and deck structure is estimated to cost 1.4 million + HST. It would have the second longest construction period.
- Ken noted that the wooden structure has the advantage of the shortest construction period and earliest delivery of materials. The wooden structure was also a proposed feature included in the original grant application. The costs of the structure are all relatively close. Ken warned that prices are higher this year for materials and will be subject to Contractor availability.
- Given the evaluation of alternatives, replacement of the structure with a two-lane wooden superstructure bridge is the preferred solution. It meets the requirements of the CHBDC, addresses the structural and functional issues with the structure, will provide a structure with a 75-year life expectancy, and has the shortest construction duration.
- Ken explained the regulatory approvals that need to be obtained prior to any construction, including DFO and SVCA approvals.
- The next steps in the process include incorporating feedback and comments in to the EA screening report. The screening report is finalized and then a Notice of Completion is issued, which starts a 30-day public review period. Approval applications will be submitted and final design will be undertaken. Once the design is completed, tender documents are prepared and issued. Construction and restoration are the final steps.

7:15 PM – 8:00 PM Questions and Comments

After concluding the presentation, questions and comments were invited from the attending members of the public.

Summary of Questions (Q) and Comments (C):

C. A resident raised concerns about safety at the corner at Hwy 4. Concerned about the road becoming a bypass for Durham. Also concerned about bend to the north of the bridge and sight lines.

Response: Concerns noted. With respect to the bridge, Ken noted that the new bridge will be realigned within the roadway which will help with the sight lines in the immediate

vicinity of the bridge. There will also be some tree trimming likely in the vicinity of the bridge. Will also have increased side clearance on the bridge so there more space to accommodate pedestrians and vehicle traffic. Improvements at the intersection and curves to the road are outside of the scope of the project.

Q. How can concerns about large truck traffic be addressed if the bridge cannot be restricted to a one-lane structure. Could a load restriction be put in place? Noted concerns with speeds on the road north of the bridge. Asked Council to monitor and track traffic following construction of the bridge.

Response: Vance responded that it will be difficult to restrict truck traffic on the road given there are existing industries located along the road, but ultimately any restrictions with respect to load limits, truck traffic, would be a decision of Council to implement a bylaw following review of applicable data.

Q. What is the earliest start date for construction?

Response: Ken responded that the earliest likely date for the start of construction is late August. He noted that if construction doesn't proceed this year, construction would not start until July next year due to in-water timing restrictions.

Q. What chemicals is the wooden bridge treated with? What is the composite weave that goes into the laminates?

Response: Treatment process has been recognized as having minimal impacts on aquatic species, it has been used in columns that sit in the water and is approved for use in the Canadian Highway Bridge Design Bridge Code. For this bridge, we are not proposing to use wood for the substructure, so the wood will not be directly in the water. The douglas fir/larch wood material is treated with Pentachlorophenol.

A Glass fibre reinforced polymer mesh is used in the laminated girders to increase their strength.

Q. Is there still an opportunity to submit comments and feedback. Who do they submit to and is there a timeline for when submissions must be received by?

Response: Lisa responded that comments can be sent to her. She asked that comments be sent to her within a week of the meeting if possible. There will also be a 30-day public comment period when the Notice of Completion is issued.

Q. Is the Municipality required to post the Notice of Completion?

Response: Yes. Municipality is required to post the Notice of Completion. It will also be mailed out to adjacent property owners and those we have been in contact with regarding the project.

C. A resident anticipates additional truck traffic with gravel pit and cement plant and raised concerns about safety and wear and tear on the bridge. Would support restriction on bridge.

Response: Ken noted that any traffic restrictions would be a Council decision but the bridge will be designed to support traditional road traffic, including truck traffic.

Q. Resident asked for a meeting to discuss the potential encroachment on their property.

Response: Ken responded that after the current stay at home order is lifted, a meeting with the property owners and Hydro One will be organized. The Township will schedule this meeting.

C: Property owners in the area asked a previous Council to keep trucks from the cement truck from going north on Concession 2. Since that time a gravel pit has opened. The resident stated serious concerns about the s-bend, speed and that a two lane bridge will open the road up for more traffic.

Response: Concerns noted.

Q. Our property abuts the bridge site. Will there be restricted access during construction?

Response: Likely will be times when access to your laneway will be restricted. Ken suggested a meeting with the property owner to discuss the access.

Q. When will paving be done? Especially to the north of the bridge.

Response: Vance responded that the tender for paving has gone out. Bids expected in a couple weeks and is hopeful that road will be paved this year. Township staff will start to clear some trees out along the s-bends.

Q: Resident expressed concerns with s-bend and trucks. How soon can Council start on that process? Also expressed concerns regarding Enbridge restoration timeline.

Response: Vance responded that the first step is a Council Report to provide Council with the information and then Council can make a decision.

Q. Are there any wooden bridges in Grey, Bruce or Wellington Counties? Are there any locally. How many companies manufacture this wooden design bridge? Are we going to get the expected lifespan out it? Would there only be one company bidding on the tender?

Response: Ken responded that the company that has provided some of the preliminary information regarding the wooden bridge worked on the wooden pedestrian bridge in Durham. They have also done projects in northern Ontario. Many others have been built in other provinces. Ontario has not been as aggressive in using wood, tend to be used for larger span projects. Wood bridges such as this, incorporate some newer technology.

There are other companies that could bid on the work, but it will depend on their availability and desire to submit.

Q. Is a one lane bridge totally out of the question. We share the same concerns about additional traffic. Could a height or weight restriction be used?

Response: When we looked at the Bridge Code, when it comes to the existing traffic levels and speed it suggests that a one lane bridge is not appropriate. The Bridge Code supporting documents also suggests that one lane bridges are only generally appropriate for seasonal and local access roads. Generally, when you design a new bridge, you would not design it to be weight or height restricted.

C. Another resident raised concerns about traffic, speed and the trees along the s-bend. Only remembers one collision on the bridge and does not understand concerns with alignment.

Response: Concerns regarding the overall safety of the road are noted.

Q. Why is the bridge unsafe for pedestrian traffic?

Response: Ken noted that when the bridge was closed, it was closed to vehicle traffic. May be possible to open a section of bridge for pedestrian traffic.

Q. Will the road be paved prior to the bridge being replaced.

Response: Vance responded that the road will be paved before the bridge is replaced.

The meeting concluded at 8:00 PM. Lisa thanked everyone for attending and the questions and comments received.

Should there be any errors or omissions to these meeting notes, please notify the undersigned.

Meeting Notes Prepared by:

B. M. Ross and Associates Limited.
Lisa J. Courtney, R.P.P, M.C.I.P

Lisa Courtney

From:
Sent: June 19, 2020 2:35 PM
To: Vance Czerwinski
Cc: hotmail.com; Laura Johnston; Mayor WESTGREY; Lisa Courtney; Beth Hamilton
Subject: Re: Bridge and Road Upgrades Concession 2 WGR

Good morning Vance,

Thank you for letting me know about the upcoming meeting. I will attend the meeting on Monday. However, as you know, I am opposed to the upgrade of the Lantz bridge to a two lane bridge, my interest is in discussing an upgrade to the bridge that will make it safer for pedestrians and motorists as a one lane bridge. As well assuming an increase in the number of vehicles and the speed of the vehicles from increasing the bridge to two lanes I am also concerned about the two blind curves one north of the bridge and one south of the bridge. I don't know what role Lisa Courtney of BM Ross has in this project. Unlike I haven't been able to follow Council. Will Ms Courtney be able to respond to my concerns? Perhaps you can advise if the funding grant approvals from the federal and provincial government allow for a change to the original application for funding to upgrade to a two lane bridge.

Thank you Vance, have a nice weekend,

Sent from my iPad

On Jun 18, 2020, at 1:16 PM, Vance Czerwinski <vczerwinski@westgrey.com> wrote:

> As requested by Councillor Hamilton, I have contacted Lisa Courtney of BM Ross to attend an on-site meeting at the Lantz Bridge on Monday June 22, 2020 at 10:00 am, to answer your questions regarding the up-coming bridge project. I will attend this meeting as well and we will make every effort to answer your questions particularly regarding the Lantz Bridge Project and upcoming Concession 2 WGR road upgrades.
>
> I will also contact and invite him to the meeting as well.
>
> Please let me know, by responding to this email, your confirmation that you will attend the meeting, thanks.
>
> Regards,
>
> **Vance A. Czerwinski, C.E.T., CRS**
> Director of Infrastructure and Public Works
>
> <image001.jpg>402813 Grey Rd 4, RR 2, Durham ON N0G 1R0
> 519.369.2200 ext. 227 | f: 519.369.5962
> vczerwinski@westgrey.com | https://link.edgepilot.com/s/2af4e969/KcZvwVZV7kqz-eufSpfh7A?u=http://www.westgrey.com/

All municipal facilities and parks are closed until further notice during the COVID-19 pandemic. Staff is working to keep critical services operational during this difficult time. Updates will be posted to our website (https://link.edgepilot.com/s/2af4e969/KcZvwVZV7kqz-eufSpfh7A?u=http://www.westgrey.com/) and through our Facebook and Twitter accounts (@OurWestGrey). Calls to the West Grey office at 519-369-2200 will be answered as soon as possible.

For accurate information on COVID-19 please visit: https://link.edgepilot.com/s/23e366bb/2YKZqlueLUeAV_-Yu727YQ?u=http://www.ontario.ca/COVID-19

Lisa Courtney

From:
Sent:
To: Lisa Courtney
Subject: Re: Lantz bridge

Hi Lisa
Yes please add me to the contact list - my husband is interested and would like to see the bridge repaired and remain as is- his email is Thank you

Sent from my iPhone

> On Jun 29, 2020, at 10:17 AM, Lisa Courtney <lcourtney@bmross.net> wrote:
>
> Hello
>
> Thank you for your input. I appreciate you reaching out. I will add your comments to our records.
>
> May I add your email to our contact list for this project? Later in the Environmental Assessment process, we will have a public meeting about the bridge and I can email you a copy of the Notice for that meeting and any other project updates.
>
> Thanks very much,
>
> Lisa J. Courtney, MSc., MCIP, RPP
> B. M. Ross and Associates Limited
> Engineers and Planners
> 62 North Street
> Goderich, ON N7A 2T4
>
> Ph: (519) 524-2641
> lcourtney@bmross.net
> https://link.edgepilot.com/s/6c780c49/4iEbh7bOtkiyjom64lQmww?u=http://
> www.bmross.net/
>
> -----Original Message-----
> From:
> Sent: June 25, 2020 11:50 AM
> To: lcourtney@bmross.net
> Subject: Lantz bridge
>
> Hi Lisa
> I live just north of the bridge on Concession 2 and would like to see the bridge remain as it is with repairs as I feel the bridge slows traffic and adds character to the road.
> Thank you
>
> Concession 2 WGR

>
> Sent from my iPhone
>

Lisa Courtney

From:
Sent: July 23, 2020 4:59 PM
To: Lisa Courtney
Subject: Municipal Class Environmental Assessment Lantz Bridge
Attachments: Email to Vance Cerwinski and Council May 20.docx

Hello Lisa,

You may recall that meeting me at a meeting Mr. Czerwinski from Grey West Municipality arranged regarding the repair of the Lantz Bridge on Concession 2, WGR. I and a number of my neighbours attended the meeting as well as 2 Councillors from West Grey Council.

I've attached a copy of the content of an email I sent to Mr. Czerwinski in early May 2020 regarding the above project and my email was also forwarded to members of West Grey Council. I also raised some of these concerns at our meeting. Let me summarize for you my key concerns and thoughts about the above project:

1. Concession 2, WGR, is used by more than vehicular traffic. Individuals, couples, families walk on Concession 2 to the bridge and beyond, approaching from both the north and south. People launch their canoes and kayaks at the bridge and folks fish in the river at the bridge. Cars are often parked near the bridge, a good thing that causes the traffic to slow down. This summer is not a good representation of the number of pedestrians and cyclists on the road because of the disruption caused by the Enbridge pipeline construction which has reduced the pedestrian and cyclist traffic. I regularly walk my dog every morning before breakfast across the bridge to the stop sign at County Road 4 and back (my property abuts the bridge on the north west side). I have stopped walking on the road since the pipeline project started. The road is even more narrow now due to the placement of the pipeline.
2. Because the road narrows to 1 lane at the bridge, traffic is required to slow down. This is a good feature as there are pedestrians and cyclists using the bridge and the road.
3. Large trucks are not permitted to cross the bridge, even though many do, and as such the road has not been constructed to support heavy large vehicular traffic on a daily basis.
4. There are 2 existing locations approaching the bridge that have significant challenges with sight lines and sharp turns. One is on the south approach to the bridge where the Quarry's driveway joins Concession 2. The other is just north of where Robson Road joins Concession 2. That corner is a blind corner. Already dangerous because of the sharp turn, lack of visibility and the turn is on a hill. Both of those corners will need to be significantly improved for safety reasons if the amount of traffic increased, speed of the traffic increased and large trucks numbers increased using the road. Was consideration given to those existing safety issues when the application for funding was submitted? And does the grant reflect the need for other improvements?

Thank you for the opportunity to contribute my thoughts to the process. If you have any questions or require more information, I can be reached at or through this email address.

Sincerely,

Dear Mr. Czerwinski,

I recently became aware that the Municipality is planning to replace the one lane Lantz bridge on Concession 2, WGR, with a two lane bridge. I am writing to express my concern and alarm that the Municipality would consider enlarging the bridge to two lanes from one with a view that this will improve safety for motorists. I live on Concession 2, WGR, my property abuts the bridge/road allowance on the south west side. My house faces Concession 2 and I regularly see the traffic, both pedestrian and vehicular, that use the road. While replacing the bridge with a new one will ensure the safety of the bridge for all who use it, enlarging the bridge to two lanes will in my view decrease the safety for those who use the bridge and those who use Concession 2 in the general proximity of the bridge.

Council and staff may not be aware that the road and the bridge is used regularly by more than just motorists. There is regular pedestrian traffic on the road. People walk their dogs, go for walks with their children, families and friends, children walk and ride their bikes to school and pedestrians walk individually and as couples, myself and my family included. Often those approaching the bridge from the north use the bridge as a marker to show when it's time to turn around and walk back home. Pedestrians are on the road in winter as well as spring, summer, and fall. Cyclists regularly use the road in the non winter months. And as often as I see a single cyclist I also see groups of cyclists. And there are runners regularly throughout the year who also use the road and run across the bridge. The best feature of the current bridge, is that because it is one lane, vehicular traffic is required to slow down to cross the bridge. Motorists usually slow down regardless of whether there is a car approaching from the north or south. This makes it safer for both motorists and pedestrians alike. A two lane bridge which will enable motorists to cross the bridge without slowing down and at a greater speed will make it unsafe for anyone using or near the bridge or on Concession 2. Safety for pedestrians and other non vehicular traffic when sharing a road with cars can only be achieved by slowing down and reducing vehicular traffic

In the spring, summer, and fall there are people who fish from the bridge and on the river near the bridge. Again cars slowing down to cross the one lane bridge makes it safer for all. Most people fishing from the bridge or in proximity to the bridge, drive to the bridge. This means cars are often parked on the side of the road on either sides of the bridge. Again with traffic having to slow down to cross the bridge, it makes it safer for anyone in proximity to the bridge. The location of the bridge is also a popular spot for folks who kayak or paddle on the river. Again they come to the location in cars and the cars remain parked on the side of the road while the owners paddle down the river. It is a good thing that cars need to slow down to cross the bridge thereby making it safer for those who may be in the process of unloading their kayak, canoe from their car and launching it in the river.

I think, similar to our mayor, that the opportunity for people to access the river for fishing, paddling and walking to admire the beauty of the river and the lands around it is

an important feature to keep. And certainly making sure the bridge is in good condition and safe is important but increasing it to two lanes will increase the speed of the vehicular traffic and the number of cars using the bridge which will in my view make it much less safe for all. Improve the quality of the bridge and make it safer for the non vehicular traffic that also regularly use the bridge. To make it safer, add sidewalks or areas on the bridge, for pedestrians to use that safely separates the pedestrians from the vehicles. But don't enlarge it to two lanes. Other features could be added that support the use of the bridge by fisherfolks, kayakers and walkers and that result in it being safer for these folks to access the bridge. Enlarging the bridge to two lanes will likely result in those activities reducing or perhaps even stopping altogether as it will not be as safe as it is now for pedestrians, bikers, kayakers to use the bridge to support their pursuit of outdoor recreational activities.

In the 10 years that we have been living on Concession 2, I know of only one accident near or at the bridge. It happened at night, in the dark. I do not know if it involved more than one vehicle. Other than the safety concerns related to what I've mentioned above for the non vehicular traffic on and around the bridge, it is unclear what safety concerns there are for motorists other than the actual structure of the bridge. Having to slow down to cross a short one lane bridge does not add a significant amount of time to anyone's travel time and having to slow down only increases safety for motorists as they cross the bridge.

I commend the Municipality for having the foresight to pursue funding to improve the safety of the Municipality's roads and bridges however there are two much more dangerous spots on Concession 2 in close proximity to the Lantz bridge. One to the north where there is a significant bend in the road, a blind curve, and because it is at the end of a long straight stretch after the bridge, cars travel very quickly towards that curve and often around it. That curve is much more dangerous, in my view, than the Lantz bridge. There is also a significant curve south of the bridge in front of the cement quarry where cars travel very quickly around the curve again without good visibility of what's approaching from the other direction. Large trucks regularly exit and enter the quarry often taking a wide berth to access Concession 2.

I also expect that vehicular traffic will increase on Concession 2 as it will be seen as an even better bypass around Durham. I know that many people use Concession 2 as a bypass already but because of the one lane bridge, which is well marked, motorists need to slow down. Has this been considered given the two other unsafe spots I've mentioned?

I'm disappointed that I have not been informed of any consultations with the public regarding the replacement of the bridge. I contrast this with the outreach that Enbridge Gas has done regarding their Owen Sound natural gas enhancement project. We have received many notices from Endbridge about the project and I have spoken with representatives from the company about the project. The Municipality is spending public dollars and while that often means reduced budgets for things like consultation, it is tax payers money that is being used for the bridge project.

I think the more progressive approach these days for many reasons, is to decrease traffic, to slow traffic down and to enhance the ability of pedestrians and non vehicular traffic to use the roads and bridges while out of doors enjoying the beauty of the land. Use the acquired funds to improve the quality of the Lantz bridge, keep it at one lane and add safety features to support the use of the bridge by non vehicular traffic. Thank you for considering my concerns.

Concession Rd 2, WGR
Durham On
N0G 1R0
--

Lisa Courtney

From:
Sent: July 26, 2020 5:27 PM
To: lcourtney@bmross.net
Subject: Options - Lantz Bridge #28

Re Notice of Commencement

As requested the following options for the Lantz Bridge we would like to be placed on public record.

Lantz Bridge remain as a single lane bridge (repair or replace).

RR2
Durham, On N0G 1R0

Sent from my iPad

Lisa Courtney

From:
Sent: July 23, 2020 8:41 AM
To: lcourtney@bmross.net
Subject: Lantz Bridge.

Thank you for the opportunity to provide input. My comments are as follows.

1 The present span is too narrow and acts as a partial dam in times of flooding. At one time the approaches to the bridge were much lower.This allowed water to flow over the road either side of the bridge when the flow was high. Unfortunately the approaches were built up a number of years ago without adding culverts so now all the water is forced under the bridge.

2 The foundations are nearly a hundred years old and should be replaced.

3 The amount of traffic on the road does not justify a two lane bridge both now and likely in the future.

In conclusion option 2 seems the most reasonable in both cost and practicality.

Yours Sincerely.

Concession 2 WGR
West Grey, Ontario
N0G 1R0

July 27, 2020

Vance Czerwinski
Director of Infrastructure & Public Works
Municipality of West Grey
402813 Grey County Rd 4,
Durham, ON
N0G 1R0

Dear Mr. Czerwinski,

We are writing to express our concerns regarding the options associated with the Lantz Bridge (#28) (formerly Schenk's bridge) on Concession 2 WGR. We have lived in West Grey (former Bentinck Township) since 1989. While we recognize we are relative newcomers to the area, we have witnessed the evolution of our road and our community over the past 31 years.

As noted in the notice of commencement, there are three proposed options, two of which involve replacement of the bridge with one and two lane structures. We are recommending that repair and rehabilitation of the existing bridge is the better option for the ecosystem and the community.

Creating a two lane bridge would open up Concession 2 to a great deal more traffic, including northbound traffic from the E.C. King Ready Mix plant south of the bridge. Human nature being what it is, Concession 2 would potentially become a bypass around Durham for traffic, and particularly for heavy truck traffic attempting to avoid the steep hill and tight turns in the town of Durham.

There are several species of turtle (including snapping turtles and the painted turtle which are endangered in Ontario) that live and nest on properties in proximity to the river. We are fortunate to have turtles nest on our property. Increased rate of speed and volume would be detrimental to turtles and other wild life in proximity to the bridge. The recent environmental and habitat damage resulting from rerouting the river and the installation of the Enbridge Gas Line this summer, has already put significant increased pressure on the ecosystem.

One need look no further than the speed and volume of traffic on Grey Road 3, to see the potential for Concession 2 WGR. Our local police services are already stretched to cover a very large area and we are certain that additional policing would not be provided to regulate speed.

Further, with regards to law enforcement, there is already a lack of by-law/MNR enforcement with regards to the hours of operation for the existing Durham Ready Mix plant. (Work can often be heard as early as 5:30am and there have been occasions of jack-hammering in the cement mixers at 10:00pm.) A two lane bridge would allow the plant to take further liberties that impact the neighbouring homes with increased truck traffic.

The S bend in the road that is approximately 1km north of the bridge (starting at Robson's road) is already dangerous for traffic, pedestrians and cyclists and increased traffic would only exacerbate this danger.

The final aspect to consider is the aesthetic and historical value of this beautiful old steel bridge. New bridges are most often ugly concrete structures. This bridge is indicative of bridge structures of its time period and should be preserved as such..

Thank you for considering our concerns.

Sincerely,

CC: B.M. Ross and Associates,
62 North Street, Goderich, ON N7A 2T4
Attention: Lisa Courtney

Lisa Courtney

From: Lisa Courtney <lcourtney@bmross.net>
Sent: May 13, 2021 9:02 AM
To:
Subject: BR1334 RE: Lantz Bridge
Attachments: BM Ross Lantz Bridge_CHER-HIA_Revised.pdf

Categories: Archived

Hello
Thanks for reaching out. I have attached a copy of the Cultural Heritage Assessment Report that was completed. Please let me know if you have any troubles with the file. I would also like to invite you to the public meeting that is being held as part of the Municipal Class Environmental Assessment on Thursday May 20 at 6:30 PM via Zoom. The study team will present the EA process to date and then we will be taking questions and comments from the attendees. Below is the meeting information.
Thanks and cheers,

Lisa Courtney is inviting you to a scheduled Zoom meeting.

Topic: Lantz Bridge Municipal Class EA Public Information Centre
Time: May 20, 2021 06:30 PM Eastern Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/86487828512?pwd=aThiWWVlcmZ1ckpBaFgwWXhmR1luQT09

Meeting ID: 864 8782 8512
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- +1 204 272 7920 Canada
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- +1 587 328 1099 Canada
- +1 647 374 4685 Canada

Meeting ID: 864 8782 8512
Passcode: 463011
Find your local number: https://us02web.zoom.us/u/keqBTqsGYu

Lisa J. Courtney, MSc., MCIP, RPP
B. M. Ross and Associates Limited
Engineers and Planners
62 North Street
Goderich, ON N7A 2T4

Ph: (519) 524-2641
lcourtney@bmross.net
www.bmross.net

-----Original Message-----
From:
Sent: May 12, 2021 4:43 PM
To: lcourtney@bmross.net
Subject: Lantz Bridge

Good afternoon,

This is getting back to you in regards to the heritage assessment done on the Lantz Bridge. I would appreciate you sending me a copy of the assessment that's been done. Many of the families on Concession 2 WGR believe that the heritage and historical significance of the Lantz Bridge is too great to tear the bridge down and replace it with a modern bridge. The family has lived on this road and used this bridge for over 40 years now. The family has lived on this road for multiple generations and used this bridge on a daily basis throughout those generations. A bridge this age (I think it's 100 years old?!) is a special part of history and has helped form this area. We would like to find a way to either repair the bridge or have it replaced with a very similar bridge to keep the atmosphere it has created on Concession 2 and keep the memories alive.

I appreciate your help as we investigate this matter.

Sent from my iPhone

Lisa Courtney

From:
Sent: May 18, 2021 8:48 AM
To: lcourtney@bmross.net
Subject: Lantz bridge

Categories: Archived

Good morning Lisa

I am unable to be at the zoom meeting Thursday May 20 but I would like to leave a comment on the bridge. Concession 2 has become very busy as it is a bypass so I feel for safety reasons a 2 lane bridge would be best.

Thank you

Robson Road

Lisa Courtney

From:
Sent:
To: lcourtney@bmross.net
Subject: Lantz Bridge #28

Thank you for the opportunity to share our comments on the options on the Lantz bridge. As a resident that lives very near the bridge we are well aware that the bridge is in need of repair. The thought of the increased convenience of the bridge being two lanes at first seems very alluring. The increased ease for the snow plow, no more polite waving to our neighbours of "no, you go first over the bridge ", and for local farmers to be able to take the short route to fields that are rented. On the other hand is the increased traffic on a road that is not a very safe by pass for Durham. The curve that goes around the hill on Robson Road is a very tight curve. It already is dangerous with out big trucks using Concession 2 road. The maintenance on that part of the road will have to be increased. The wind in the winter consistently blows drifts across the road at Art Rivests. Snow plows would have to increase the number of trips plowing Concession 2. Then there is the cost of maintaining a busier road, and a bigger bridge. There is also the concern of increased traffic with the farm traffic. Concession 2 doesn't have many safe areas to pass a tractor with a wagon.
With other bridges in the municipality needing repairs should money be spent on such an expensive improvement? Is there going to be increased funds spent on maintaining Concession 2 due to the increased traffic? What are the future costs of maintaining a more expensive bridge? As a tax payer and a resident of Robson Road I don't feel investing in a double lane bridge is a good investment.
Please keep me updated on any other opportunities for community discussion on this topic.
Thanks

Sent from my iPhone

Lisa Courtney

From: Lisa Courtney <lcourtney@bmross.net>
Sent: May 28, 2021 3:23 PM
To:
Subject: BR1334 RE: Lantz Bridge Environmental Assessment results

Categories: Archived

Thanks again for your comments. I will include them in the EA document – you will see them summarized in the consultation section as well as incorporated into the evaluation section. A copy of your email will also be included (with personal information redacted) in the consultation appendix. I'm working towards getting that report finished and I will let you know when it's done and available for public review.
I hope you have a nice weekend too, cheers,

Lisa J. Courtney, MSc., MCIP, RPP
B. M. Ross and Associates Limited
Engineers and Planners
62 North Street
Goderich, ON N7A 2T4

Ph: (519) 524-2641
lcourtney@bmross.net
www.bmross.net

From
Sent:
To: Lisa Courtney <lcourtney@bmross.net>
Subject: Re: Lantz Bridge Environmental Assessment results

Hello Lisa,

Thank you for the informative presentation last week on the environmental assessment re: Lantz bridge replacement plan. Also thank you for responding so quickly to my questions this week!

I am in favour of a wooden bridge. It looks nicer, fits in better with the surrounding landscapes and the setting and I understand it has a friendlier environmental impact which is very important to me. My prefered solution, of course, is a one lane wooden bridge.

The main concern I have coming out of the EA findings is the decision to change the use of the road with the replacement of the one lane bridge with a two lane bridge. While this may not be the intended purpose, I believe it will be the resulting outcome of the bridge size change. An unintended outcome that will have a negative impact on the community. There is already an existing agreement in place with Miller's that their trucks are not to cross the bridge. This was done for safety reasons but also in consideration of how the road is used by pedestrians, cyclists, and other non vehicular uses. For the most part this agreement has been observed, but obviously will not be in the future. The increased volume and speed of traffic will change how the road is used and will discourage pedestrian and cyclist traffic for both safety and aesthetic reasons, ie. wind from passing vehicles, more air and noise pollution, etc. I also believe that the increased volume and speed of traffic will have a negative impact on the wild creatures and animals and the plants along the road and in the neighbourhood. More pollution - air and noise - that will travel further than the road

allowance. We are experiencing that now with the gravel road. I don't know if the EA assessed the impact on the flora and fauna around the bridge as well as the impact on the river in the design and build of the bridge.

When we spoke earlier this week we discussed the future use of the road and that it is included in the criteria of the Canadian Highway Bridge Design Code. You suggested that the bridge would be deficient for future use if it remained one lane. If the road usage remains the same, then the bridge will not be deficient. Single lane bridges are still built when located in low usage areas. I think the discussion of the future assumes there will be a need for an increase in traffic, at greater speeds and for bigger trucks. I think we should be thinking about it with a view to reduce vehicular traffic because of its negative environmental impact. The farming equipment that travels the road now is for local farms and it does not move quickly. It is the transport trucks and delivery trucks that cut through to avoid the hill in Durham or to cut some time off the trip to Hanover that have the greatest negative impact on the community. I would like to see that traffic be discouraged, not encouraged. There are other roads for those vehicles to use that are larger, better lighted with better visibility and safer with sidewalks and boulevards.

Just a couple of things to add to the comments I have already made. When I heard last year that the Municipality was planning to replace the single lane Lantz bridge with a two lane bridge, I decided to write to Council to express my concerns around safety on the road and the bridge with the change in the bridge from one lane to two. This particular part of Concession 2 WGR is used by local residents and non local folks as a walking road, cycling road and the bridge is used as a launch place for kayaks, canoes. As well, people fish from the bridge and near the bridge. The existing narrowing of the road to one lane to cross the bridge has served well to provide safety for the non vehicular traffic and the other non vehicle uses of the bridge and the road.

When I attended the first meeting in the spring of 2020, on the side of the road in front of my property, we were assured that the safety concerns residents had raised would be considered. The environmental assessment has not considered the safety of the road beyond the immediate north and south approach to the bridge. In my view this is a significant error on the part of the Municipality and very shortsighted. Given that there are two corners/curves, one to the south of the bridge by Miller's quarry site and one to the north by Robson Road, that already raise safety issues for the existing bridge, why the Municipality has not done the work on the broader safety issues, or at least shared any information they do have, is a puzzle to me.

At the meeting last week it was stated that the Municipality would do some type of assessment after the new bridge is in place, which makes no sense. Hopefully there will be no accidents, injuries or deaths as a result of the expansion of the bridge and the anticipated increased amount of vehicular traffic and anticipated increased speed of the traffic while that assessment is undertaken. The suggested use of guard rails on the blind hilled curve near Robson Road is a thought but if trucks and cars are already going off the road coming out of the one lane bridge, would guard rails really solve the problem of higher speeds and bigger vehicles?! I don't think so. I understand this was not the scope of the environmental assessment your firm undertook but appreciate that I can forward my comments to you so that they may be included in your report.

Thank you again Lisa for being so open to respond to my questions and comments. And for providing the opportunity to participate in this process.

Have an enjoyable weekend. Take care,

Lisa Courtney

From: Lisa Courtney <lcourtney@bmross.net>
Sent: May 28, 2021 9:41 AM
To:
Subject: BR1334 RE: Lanzt bridge virtual meeting

Categories: Archived

Hi
Hope you're doing well. Thanks again for your questions and checking in – I was just waiting on staff to confirm the grant numbers, so here is our response to your questions:

1. What is the amount of grant money/budget that we were given to erect a new bridge? What if construction goes over budget? The Municipality of West Grey was awarded $1,164,120 in grant funding from the federal and provincial governments towards the replacement of the Lantz Bridge. The municipality is contributing $232,880 to the project bringing the total project budget to $1,397,000. If the project goes over budget, the municipality will be responsible for those costs.
2. From this meeting, I take it that there doesn't appear to be an option but to do a 2 lane bridge. Can you confirm that a 1 lane bridge is no longer an option, or is a 1 lane still in the running? The option of a single lane bridge has been evaluated through the EA process. Through the evaluation of alternatives, it was identified that a single lane bridge would not meet the requirements of the Canadian Highway Bridge Design Code; would not support crossing of larger equipment like snow clearing and agricultural equipment, a single lane bridge is problematic if the road needs to be used for an emergency detour in the future, and the Township would still have a functionally deficient structure. Also, given that the cost difference between a single lane and two lane structure is only approximately 15%, from an asset management perspective, it is more beneficial to have a two lane structure. Given that, the two lane bridge is the preferred solution.

I hope these answer your questions. Let me know if you have any further questions or comments. Have a nice weekend,

Lisa J. Courtney, MSc., MCIP, RPP
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Engineers and Planners
62 North Street
Goderich, ON N7A 2T4

Ph: (519) 524-2641
lcourtney@bmross.net
www.bmross.net

From:
Sent: Friday, May 21, 2021 10:24:56 AM
To: Lisa Courtney <lcourtney@bmross.net>
Subject: Re: Lanzt bridge virtual meeting

Thank you for the acknowledgement.
Enjoy your weekend also.

From: Lisa Courtney <lcourtney@bmross.net>
Sent: May 21, 2021 7:58 AM
To:
Subject: RE: Lanzt bridge virtual meeting

Hi
Thanks for attending and for your comments. I am out of the office today, but I wanted to acknowledge that I have received your questions and I will get back to you when I get back in front of my computer next week.
Thanks again and I hope you enjoy the long weekend,

Lisa J. Courtney, RPP, MCIP
B. M. Ross and Associates Limited
Engineers and Planners
62 North Street
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Ph: (519) 524-2641
lcourtney@bmross.net
https://link.edgepilot.com/s/807b427d/owTAmI3Mjk6cW42f-inqnQ?u=http://www.bmross.net/

-------- Original message --------
From:
Date: 2021-05-20 9:08 p.m. (GMT-05:00)
To: Lisa Courtney <lcourtney@bmross.net>
Subject: Re: Lanzt bridge virtual meeting

From :
To : Lisa Courtney [lcourtney@bmross.net]
Date : Thursday, May 20 2021 21:08:42
Hi Lisa:

Thank you for chairing this evening's meeting, and as had expressed, your group & West Grey Township has their hands full with our issues/comments, but we appreciate your position.

I have some follow up questions following tonight's zoom meeting, yet I apologize if these questions were already answered / missed or overlooked by myself.

1. What is the amount of grant money/budget that we were given to erect a new bridge? What if construction goes over budget?
2. From this meeting, I take it that there doesn't appear to be an option but to do a 2 lane bridge. Can you confirm that a 1 lane bridge is no longer an option, or is a 1 lane still in the running?

And just a comment, I absolutely concur with the residents expressing concern with regards to the dangerous bends to the north of Lantz's bridge. I live just slightly north of these bends, close enough to be visible, and it will potentially be a disaster with the increase of trucks, plows, farm equipment etc. The traffic speed is insane as it is, and will no doubt present with concerns pending a bypass route having a 2 lane bridge. I have been a victim myself of a few near-miss accidents around these bends. However, realizing this is not your issue, I just want to express the suspected safety issues here with the production of a 2 lane bridge.
Thanks for listening,