

Appendix A

Cultural Heritage Report and Heritage Impact Assessment
January 03, 2023

CULTURAL HERITAGE EVALUATION REPORT AND HERITAGE IMPACT ASSESSMENT

BLAKENEY BRIDGE, MISSISSIPPI MILLS, ONTARIO



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Client: Lanark County

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Table of Contents

PROJECT INFORMATION	2
EXECUTIVE SUMMARY	3
ABOUT THE CHER	3
ABOUT THE HIA	3
1 INTRODUCTION.....	4
1.1 METHODOLOGY	4
1.2 RESEARCH.....	4
1.3 EXISTING CONDITIONS AND CONTEXT.....	5
1.4 PLANNING CONTEXT	6
2 HISTORY	8
2.1 INDIGENOUS PRE-CONTACT HISTORY	8
2.2 BLAKENEY AREA	8
2.3 BLAKENEY BRIDGE.....	8
3 DESIGN	10
3.1 ENGINEERING AND CONSTRUCTION.....	10
3.2 AESTHETICS	11
3.3 PRE-1925 LANARK COUNTY ROAD BRIDGES.....	11
4 HERITAGE EVALUATION	13
4.1 REGULATION 9/06 EVALUATION TABLE	13
4.2 CONCLUSION OF THE EVALUATION	14
5 STATEMENT OF CULTURAL HERITAGE VALUE	15
6 SOURCES	16
6.1 ENGINEERING REPORTS AND DRAWINGS	16
6.2 HERITAGE PROCESS GUIDANCE.....	16
6.3 PROVINCIAL DOCUMENTS AND DATABASES	16
6.4 HISTORY AND HERITAGE	17
7 FIGURES.....	18
APPENDIX A: QUALIFICATIONS OF THE CONSULTANT	32
APPENDIX B: BLAKENEY BRIDGE, SCREENING RESULTS FOR BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES (MCEA)	33
APPENDIX C: HERITAGE IMPACT ASSESSMENT FOR THE BLAKENEY BRIDGE PROJECT.....	36
PURPOSE	36
BLAKENEY BRIDGE OPTIONS.....	36
CATEGORIES OF IMPACTS.....	37
RELEVANT POTENTIAL IMPACTS ON HERITAGE VALUE AND ATTRIBUTES	38
CONCLUSION.....	38

PROJECT INFORMATION

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Property Information	Owner: County of Lanark Structure Name: Blakeney Bridge Municipality: Mississippi Mills Address: 138 Blakeney Road (at crossing of the Mississippi River); Lot 26, Concession IX, Township of Ramsay, County of Lanark (just west of Blakeney, 8 km downstream from Almonte and 11 km upstream from Pakenham), 139 Blakeney Road, Mississippi Mills Date of Construction: 1915 (replacing an 1830s bridge) Date of Modifications: ??? Site Visit Date: 1 November 2022 Report Date: 22 December 2022

EXECUTIVE SUMMARY

Contentworks Inc. was engaged by Lanark County in fall 2022 to conduct of cultural heritage study for the Municipal Class Environmental Assessment for a project to rehabilitate or replace Blakeney Bridge. Julie Harris is the author (see **Appendix A** biography.) Based on the results of the *Screening for Built Heritage Resources and Cultural Heritage Landscapes, Heritage Bridge Evaluation for Municipal Class EA (MCEA) Process* (see **Appendix B** for the MCEA screening results), the need for a Cultural Heritage Evaluation Report (CHER) was identified. The heritage evaluation documented in the CHER, which determined that the Blakeney Bridge is a Built Heritage Resource of cultural heritage value or interest, indicated that a Heritage Impact Assessment (HIA) was also needed to complete cultural heritage studies for the MCEA. As discussed in the HIA, the replacement of Blakeney Bridge by a proposed modular two-lane bridge continues the use of this historic crossing over the Mississippi River with an engineering work that follows its predecessors in being a pragmatic solution for its location without intruding significantly on the picturesque qualities of its setting.

About the CHER

Blakeney Bridge (Figure 1 and Figure 2) is a one-lane bridge crossing the Mississippi River near the village of Blakeney in the amalgamated municipal of Mississippi Mills (Figure 3). The bridge was constructed in 1915 to replace an older bridge erected in the 1830s (Figure 4). The current bridge has a concrete substructure (piers and abutment walls), rigid frame steel and concrete superstructure, and plain steel barrier walls/railings.

A review of federal, provincial, and municipal registers, inventories, and databases for the CHER indicates that there are no formally designated built heritage or cultural heritage landscape resources within the Blakeney Bridge study area.

Applying criteria outlined in *Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest* under the *Ontario Heritage Act* (as amended to 2022), Contentworks finds that:

- Blakeney Bridge is a Built Heritage Resource of cultural heritage value.

About the HIA

Lanark County plans to replace Blakeney Bridge two-lane modular steel bridge configured for one-way traffic using a traffic control system that will provide space for active transportation modes during normal operation (Figure 5 and Figure 6). The HIA, which is integrated into this report as **Appendix C**, considers the impact of the proposed option on the heritage values and attributes of the current Blakeney Bridge and suggests mitigation measures that can help conserve the bridge's heritage value.

The HIA, recognizing that Blakeney Bridge will be replaced by a new structure, recommends that:

- A full photographic record of the bridge prior to its dismantling should be undertaken for deposit with Archives Lanark.
- All work should be planned to allow full and safe use of Blakeney Park during as much of the construction phase as possible
- Historic interpretation panels could be added to Blakeney Park to tell the story of the history of Blakeney Bridge.

1 INTRODUCTION

1.1 Methodology

The CHER evaluates the heritage value of Blakeney Bridge (Figure 1 and Figure 2) by considering evidence and opinions pertinent for applying criteria outlined in *Regulation 9/06: Criteria for Determining Cultural Heritage Value or Interest* under the *Ontario Heritage Act* (as amended to 2022). Regulation 9/06 is to be used by municipalities to assess whether a property is of sufficient heritage value or interest and eligible for full designation. The process of writing a CHER requires the collection and analysis of information about the property itself – history, design and context – and comparative information that can be used to measure value against the criteria. The research and analysis work for this CHER follows guidance from the *Ontario Heritage Tool Kit* by the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

The qualifications of the heritage consultant who authored this report are provided in Appendix A. All comments regarding the condition of the bridge are based on the author’s opinion unless directly quoted from an authoritative report.

The purpose of this report is to evaluate the heritage value of the bridge and the associated landscape. The author recognizes that additional information concerning the bridge and landscape may not have been used for this report because sources could not be accessed, were not pertinent for the purposes of the evaluation, time was not available to conduct research, or other reasons.

Due to COVID-19 restrictions, archival research was limited to materials provided on request to the author by Archives Lanark.

1.2 Research

1.2.1 Library and Archival Research

Information resources used for this report are generally included in the Sources section of this report or in footnotes. Other sources, that are not referenced individually, include newspaper articles and other digitized materials that were reviewed, but not used directly.

1.2.2 Field Review

A site visit to the study area was conducted by Julie Harris, Heritage Specialist, on 1 November 2022 to document existing conditions.

1.2.3 Public Open House

A public information session open house was held in Almonte on 1 December 2022. Approximately 35 individuals from Blakeney, Pakenham and Almonte attended the open house. Participants provided additional insights into the community’s understanding and appreciation of the heritage value of the study area and Blakeney Bridge.

1.2.4 Municipal and Agency Information

To identify previously identified built heritage resources or cultural heritage landscapes in the study area and the former village of Blakeney, online databases of the Ontario Heritage Trust and the Town of Mississippi Mills (Figure 7) were queried. Table 1 shows the results of the queries.

Table 1: Municipal and Agency Information

Database Name	Database URL + Search parameters	Results
Ontario Heritage Act Register, Ontario Heritage Trust	www.heritagetrust.on.ca/pages/tols/ontario-heritage-act-register Parameters: Mississippi Mills, Blakeney, Ramsay	No results
Municipality of Mississippi Mills Community Map	http://cgis.com/cpal/?map=MMills Parameters: Geographic area mapping	No cultural heritage resources (built or cultural landscapes) within a 500 m ¹ radius of the bridge have been listed on the municipality's Heritage Register.

1.3 Existing Conditions and Context

1.3.1 Project Site

Blakeney Bridge is located on the Mississippi River near the former village of Blakeney that is now part of the Municipality of Mississippi Mills (Figure 3). The existing bridge was constructed in 1915 to replace an 1830s timber bridge (Figure 4). The current bridge uses a plain concrete substructure (piers, retaining walls and abutment walls), a steel and concrete superstructure, and steel barrier walls/railings (Figure 5, Figure 8, Figure 9 and Figure 10). Blakeney Bridge has not been identified previously by the municipality or any other community or level of government as being of potential cultural heritage value or interest.

The extant crossing was constructed in 1915 and is on a straight alignment that consists of three separate structures spanning the Mississippi River via two islands using the same configuration as the original 1830s bridge (Figure 11 and Figure 12). One single span and two two-span bridges make up the crossing with a single-lane-wide deck. The east bridge has a single span of 13.1 m. The west bridge has two spans totalling 26.8 m. The middle bridge has two spans totalling 26.5 m. The superstructure is made up of twin steel girders with steel floor beams and stringers.

In spring 2022, an enhanced inspection of the Blakeney Bridge determined that deterioration of the bridge was accelerating and that the bridge should be replaced.²

1.3.2 Study Area

The study area is centred on Blakeney Bridge and extends about 150 m to the north from the bridge towards Blakeney Park and islands in the Mississippi River and 50 m to the south along the Mississippi River's west shore. The area covers the bridge and views to the bridge from public spaces (Figure 13).

¹ There is no fixed distance to be considered because each project must be considered individually in its own context and the context of the types of resources of heritage interest or value. For this project, a distance of 500 m was chosen because the bridge is in a rural area. Views to and from Blakeney Bridge are included within the 500 m radius of the project.

² Lanark County, "Blakeney Bridge History," [fall 2022].

The village of Blakeney is an old village originally known, in order, as Norway Pine Falls, Snedden's Mills and Rosebank (Figure 14 and Figure 15). In 1865, the Brockville and Ottawa Railway passed through the upper reaches of Blakeney on the north side of the Mississippi River. The village was officially named Blakeney in 1874 when the post office was opened near the railway. Only the lower part of the former villa near the Mississippi River is included in the study area.

In the 19th century, Blakeney's position on the Mississippi River provided waterpower and commerce to support sawmills, a gristmill, an inn, a tannery, brewery, flour mill, cheese factory, woollen mill, blacksmith shop, general store, post office and Presbyterian church (Figure 16, Figure 17 and Figure 18). None of these buildings are extant. One of the last buildings, a storage shed for the woolen mill, was located very close to the east abutment of the bridge until the shed was demolished in 1991 (Figure 19).

The riverbanks in the study area are heavily treed. The river itself is very picturesque due to rapids that form just downstream from the bridge. The bridge is nestled between the banks and sits on piers that are connected to an island and rock outcroppings in the river. The study area includes some private properties, as well as Blakeney Park (Figure 2, Figure 20 and Figure 21). Mississippi Mills describes the park as follows:

A pleasant network of trails and footbridges follows the course of the Mississippi as it rushes through a series of rapids and falls at Blakeney. In early spring it's a popular destination for whitewater kayakers, as it reaches Class IV in the degree of difficulty. Today the original beauty of the area is complimented with trails and small bridges contributed by volunteers of the Almonte Fish & Game Association. Visitors and locals enjoy swimming, fishing kayaking, walking and having picnics along the river while up on the hill residents appreciate the quiet atmosphere of the hamlet.³

The park is managed by the Almonte Fish and Game Association, a local volunteer organization that has dedicated time and funds to maintaining the park's trails, bridges, memorial benches, and picnic areas.⁴

1.4 Planning Context

1.4.1 Provincial Context

Cultural heritage in the form of built heritage and cultural heritage landscapes is established as an area of interest to the Province of Ontario through various obligations, including the *Ontario Heritage Act*, the *Environmental Assessment Act*, the *Planning Act* and the *Provincial Policy Statement* (2020). Bridges are of relevant concern to each of these act. They can be heritage properties or built heritage of cultural heritage value or interest as individual structures or properties or as part of a heritage conservation district or cultural heritage landscape. The Blakeney Bridge has not been designated through the *Ontario Heritage Act*.

1.4.2 Lanark County

³ Mississippi Mills, "Trails and Walks," online at www.mississippimills.ca/en/explore-and-play/trails-and-walks.aspx.

⁴ Heather Atkinson, "Blakeney Rapids Park After Dark," *The Millstone*, 7 July 2021, online at <https://millstonenews.com/blakeney-park-after-dark/>.

Blakeney Bridge is the responsibility of Lanark County. The Lanark County Sustainable Communities Official Plan was adopted by the Council of the County of Lanark on 27 June 2012. The Vision Statement of the Plan contains the following:

Lanark County is proud of its heritage and cherishes its small-town character, rural way of life, sense of community and distinctive natural features. We want to strengthen and diversify the economy effectively manage growth, protect the environment, preserve our heritage and maintain our unique character for future generations.

The Official Plan's objectives in section 1.2 include:

6. The distinct character and heritage of our towns, villages, hamlets and rural and waterfront areas will be maintained.

The Official Plan also references several objectives for roads and infrastructure that are relevant for decision-making about the future of Blakeney Bridge.

1.4.3 Municipality of Mississippi Mills

Blakeney Bridge is located with the Municipality of Mississippi Mills, which is an amalgamated community that includes the former village of Blakeney. The Community Official Plan for Mississippi Mills was approved by Council on 13 December 2005. The Municipality describes itself as having scenic beauty, impressive heritage buildings and cultural richness. The Official Plan states:

Much of Mississippi Mills' built heritage, both rural and urban, remains relatively intact. It provides a valuable record of the Municipality's historical past. The many heritage buildings, structures and streetscapes developed prior to contemporary planning regulations continue to be significant elements of our community.⁵

The Official Plan aims to protect and preserve "the essential elements of [villages, including Blakeney] as growth-related changes occur." The plan includes a "citizen's heritage advisory committee" established to advise and assist on heritage resource matters, including heritage designation under the Ontario Heritage Act. Blakeney Bridge has not been designated by the municipality.⁶

⁵ Municipality of Mississippi Mills, *Community Official Plan*, 2005: 10. Online at www.mississippimills.ca/en/municipal-services/resources/Documents/Planning/MUNICIPALITY-OF-MISSISSIPPI-MILLS-COMMUNITY-OFFICIAL-PLANAdopted-OPA-21COPA-No.-21_24_26_Consolidated.pdf.

⁶ Confirmed through a telephone conversation with Roxanne Sweeney, Planning Clerk, Municipality of Mississippi Mills, 3 January 2023.

2 HISTORY

2.1 Indigenous Pre-Contact History

The area around the former village of Blakeney is within a much larger territory held for thousands of years by Algonquin Anishinaabeg people. A summary of Indigenous history is included in the Stage 1 and Stage 2 Archaeological Assessment by Matrix Heritage (November 2022) prepared for the Blakeney Bridge project.

2.2 Blakeney Area

The settlement era in Blakeney parallels the settlement of Lanark County. It is generally described as beginning in 1821 when groups of people from the Lanarkshire, Scotland, arrived in Lanark County to take land in the surveyed townships of Dalhousie, Lanark, North Sherbrooke and Ramsay. In 1823, a second major influx of settlers arrived, mostly Irish Catholics from Ireland.⁷ Among the first families to arrive in Blakeney were members of the Snedden family. The extended family farmed, owned mills and operated an inn. The area was known originally as Pine Falls, then Snedden's Mills, then Rosebank, and, finally, Blakeney in 1874. The settlement was a stopping point on the line of the Brockville and Ottawa Railway that passed through the area beginning in 1865.

The Mississippi River provided waterpower for a set of mills that employed many people in Blakeney throughout the 19th century. The first mills were used to saw logs taken from the forest cleared for agriculture. In addition to a flour mill and grist mill, Blakeney was the site of a three-storey woolen mill built by Peter McDougall in 1873. The mills were powered through a man-made channel from the river to a holding pond on the east side of Blakeney Road, just beyond the bridge and harnessing the rapids flowing around an island to the north of the bridge. Remnants of machinery from the mills have been installed in Blakeney Park.

2.3 Blakeney Bridge

The current bridge crossing the Mississippi River at Blakeney was built in 1915 to replace a timber crossing from the 1830s that would most likely have been built by local land owners for Pakenham Township. The minutes of a Township meeting on 16 April 1836 about the original bridge, which was already built, instructed John Curnyn⁸ to:

... get that bridge near Hally's repaired in a substantial manner as soon as possible and to put up guide posts, at the cross roads beyond the bridge pointing to Mr. Snedden's, Mr. Dickson's and Mr. Lowrie's shewing the respective distance to each of these places for the guidance of travellers or strangers and what underbrushing he did on the roads to have it done to the with of thirty feet or nearly so.⁹

⁷ The settlement era summary is more completely described in Matrix Heritage, *Stage 1 and 2 Archaeological Assessment, Blakeney Bridge, Part Lots 25 and 26, Concession 9, Geographic Township of Ramsay, Lanark County, Ontario*, prepared for Lanark County, November 2022.

⁸⁸ No information about John Curnyn was discovered in sources used for this study.

⁹ Minutes of Freeholders and Household – Pakenham Township, Renfrew County, Later Lanark County, January 4, 1836 – 1849, also Minutes of Municipal Councillors of Pakenham Township – 1850, as copied by

Photographs from the early 1900s of the 1830s bridge depict a timber crossing on the site of the current bridge using the islands to support the crossing (Figure 4 and Figure 12).

In 1914 or 1915, Lanark County hired B.T. Mitchell to draw up plans (not located) for a new bridge at Blakeney.¹⁰ In the same year, the contract for the construction of the bridge was awarded to Ontario Bridge Co., which used Bradford and Serson¹¹ for the concrete work. The bridge was described as a “steel girder type with concrete abutments, piers and covering of cement” with five spans of 43 ft (13.1 m) each. The cost was \$8,300.¹²

In 1959, an inspection of Blakeney Bridge for the Lanark Roads Committee described Blakeney Bridge as having five 40-ft (12.2 m) spans, and being 16 ft (4.9 m) wide with a maximum load of 15 tons. The committee was told that “The superstructure of bridge in good condition, piers and abutments fair, shows cracks in wingwalls and scouring of base of piers.”¹³ In 1975, the committee reported that a tender for the replacement of the deck on the Blakeney Bridge had been awarded to Logan Contracting Limited for \$33,053.¹⁴

Since 1975, other repairs have been made to Blakeney Bridge including:

- 1993 - remedial work in 1993 on a collapsing abutment (Figure 22 and Figure 23)
- 1995 - repairs to the south abutment on the north island by removing old abutment concrete and replacing abutments¹⁵
- 2000 - major refurbishment
- 2007 - emergency repairs

A 1995 memo prepared in advance of a request to the Ontario government about supplementary funding to replace the bridge described the crossing as not being travelled by large or heavy vehicles due to the load and width restrictions, but that the “restrictions do make it very inconvenient for local farmers drawing hay and produce” and for local deliveries.¹⁶ Concerns were also raised about the amount of summer traffic on the one-lane bridge and safety hazards for pedestrians. The picturesque relationship between the bridge and its surroundings was also noted in the memo. “Since any new structure will attract significant attention due to the environment in the area (as well as some unique fish habitat), we anticipate a requirement for fairly extensive review of alternative structures and construction techniques.”¹⁷ Reports and drawings were prepared to replace the bridge in 1996. The lack of provincial funding for replacement led the County to choose refurbishment in 2000.

(Mrs. M) Viola Reid. Minutes provided courtesy of Archives Lanark.

¹⁰ “Lanark County Council,” *The Lanark Era*, 7 July 1915: 8, as accessed through Newspapers.com. The article discusses a dispute over payment of the fees for the design work.

¹¹ No information was located during research for this CHER about Bradford and Serson.

¹² [Blakeney Bridge,] *Bathurst (Perth) Courier*, n.d. Typed copy provided by Archives Lanark. See also: “Fifteen Years Ago,” *The Arnprior Chronicle*, 14 August 1930: 2. Online at <https://search.adarchives.org/media/arnprior-chronicle---1930-08-14/arnprior-chronicle---1930-08-14.pdf>. The contract is also referenced in *Good Roads*, 27 March 1915: 5, (online through Google Books).

¹³ Archives Lanark, “A special meeting of the Lanark County Highway Committee,” 3 June 1959.

¹⁴ Archives Lanark, “A special meeting of the Lanark County Highway Committee,” 11 September 1975.

¹⁵ County of Lanark/Moller Engineering Services Ltd., Blakeney Bridge, Con. IX, Lot 26, Ramsay Township, Repairs to Abutment, 13 September 1993. [Work undertaken in 1995.]

¹⁶ Archives Lanark, copy of a memo about Blakeney Bridge from the County of Lanark, 1995.

¹⁷ Archives Lanark, copy of a memo about Blakeney Bridge from the County of Lanark, 1995.

3 DESIGN

3.1 Engineering and Construction

Ontario passed the Highway Improvement Act in 1901, which made road-building grants available to county governments.¹⁸ The purpose of the act was to improve transportation of goods and agricultural products over roads to reach markets. In 1913-4, a provincial Royal Commission on Public Roads and Highways was held that led to the creation of the Ontario Department of Public Works and Highways in 1917. By this time, cars and trucks were becoming the primary users of roads in all developed parts of the province.

At the time of its construction in 1915, Blakeney Bridge represented an economical, tested, and practical solution for a bridge in a low-traffic area. Blakeney Bridge is a steel girder bridge with a concrete deck that replaced its original deck (poured concrete over a steel frame) in 1975. The bridge consists of five 40-ft (12.2 m) spans, each of which is 16 ft (4.9 m) wide. The single-lane bridge was built on the footprint of the previous bridge using the same configuration, but contemporary (to the time) construction materials.

The bridge was built only three years after the influential Good Roads Association held its annual convention in 1912 in Toronto and recommended that all new bridges from 4 to 40 feet in length be constructed with a superstructure of steel beams embedded in concrete. Within a decade, however, reinforced concrete replaced steel and concrete for standard road-bridge construction. In 1924 alone, the shift to reinforced concrete led to the construction of at least 24 examples in Ontario.¹⁹

Blakeney Bridge's abutments, piers and wing walls/retaining walls were constructed of concrete cast directly on bedrock.²⁰ The original railing of the 1915 bridge, composed of riveted steel posts and steel piping (Figure 23), was replaced in 2000 with the current system of guiderails and handrails (Figure 9). In 2000, major repairs were also made to the concrete work to stabilize sections by replacing and reinforcing sections of the piers, wing walls, retaining walls and abutments.

An extant example of a bridge which used concrete poured over steel girders and beams for its deck, rather than reinforced concrete, is the Seneca Bridge in Haldimand, County, Ontario, which has a municipal designation under the Ontario Heritage Act (Figure 24). The Seneca Bridge, which was also built before the switch to reinforced concrete decks, dates from 1913. It is a short, single-span bridge crossing Black Creek that is now used exclusively for active transportation purposes. It retains its original concrete in steel deck.²¹

¹⁸ Larry McNally, "Roads, Streets and Highways," in *Building Canada: A History of Public Works* (Toronto: University of Toronto Press, 1988): 38.

¹⁹ Phyllis Rose, "Bridges," in *Building Canada: A History of Public Works* (Toronto: University of Toronto Press, 1988): 20.

²⁰ A description of the bridge in 2000 states that the concrete work "appeared" to be constructed of unreinforced concrete, but since there are no records indicated that the concrete work was replaced, rather than repaired, it is reasonable to state that reinforcement was not used originally. See: Lanark County/Harmer Podolak Engineering Consultants Inc., Preliminary Design Report, Blakeney Bridge, April 2000: 1.

²¹ "Seneca Bridge," listed in the Canadian Inventory of Historic Places, online at

3.2 Aesthetics


Blakeney Bridge is situated in a very picturesque location due to its position crossing a set of small islands in the Mississippi River (Figure 1). When approached from the village side along Blakeney Road on the east end of the bridge, a curve in the road leads to the unexpectedly narrow bridge set within a Canadian Shield landscape of rock, trees and rapids (Figure 8 and Figure 10). When approached from the west end, the bridge is fully visible, which allows for an appreciation of the width of the Mississippi River at this point (Figure 1). The low profile of the bridge, which sits level with the centre island that serves as the base for one of the crossings, helps focus visual attention on the landscape rather than the bridge (Figure 5).

The 107-year-old Blakeney Bridge has a symbiotic relationship with its surroundings. Blakeney Park is popular, in part, because the bridge is a known regional landmark for swimmers, paddlers and others who use the Mississippi River. The bridge is known because it provides access to the park and river.

3.3 Pre-1925 Lanark County Road Bridges

Blakeney Bridge was erected in 1915. While an inventory of road bridges in Lanark County owned by any level of government has not been undertaken, Blakeney Bridges appears to be among a very limited number of pre-1925 road bridges extant in the county.²² One bridge – the Andrewsville Bridge, which spans the Rideau River connecting Lanark County and the United Counties of Leeds and Grenville, was recently evaluated for a cultural heritage study as part of a MCEA to review alternatives for the bridge.²³ Three other road bridges in the county from the pre-1925 era are listed in the Historic Bridges Database, an online volunteer led listing of historic bridges in North America: the Beckwith Street Bridge in Smiths Falls, the Beckwith Street Swing Bridge over the Tay River in Perth, and the Pakenham Bridge (municipally designated heritage property). Blakeney Bridge is the youngest in the set.

Table 2: Road Bridges of Lanark County Listed in the Historic Bridges Database




Bridge Name	Location	Summary	Photo
Andrewsville Bridge	Pakenham (over the Mississippi River)	Built in 1904, the Andrewsville Bridge has been evaluated as having historical, cultural and cultural value, including its Pratt-truss design, Dominion Bridge engineering, design by architect George T.	 <p>Source: LHC Heritage Planning and Archaeology.</p>

<https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=11173>.

²² A search using the HistoricBridges.org database, which is an American and Canadian volunteer project, includes 10 bridges listed as being in Lanark County, including railway bridges. See:

https://historicbridges.org/b_a_list.php?ct=&c=&ptype=county&pname=Renfrew+County,+Ontario.

²³ LHC Heritage Planning and Archaeology, Draft Report: Cultural Heritage Evaluation Report, Andrewsville Bridge Spanning the Rideau river, Lanark County and the United Counties of Leeds and Grenville, ON, 20 June 2022. Online at: www.lanarkcounty.ca/en/roads-trails-and-transit/resources/Documents/LHC0295_AndrewsvilleBridge_CHER_30June2022.pdf.

		Martin, rural context, Rideau Canal context, and landmark status.	
Beckwith Street Bridge	Smiths Falls	The date of the stone-arch bridge structure is not determined. It sits below a wider modern deck.	 <p>Source: Historicbridges.org</p>
Beckwith Street Swing Bridge	Perth	Built in 1889; rivet-connected truss bridge, that may be among the oldest metal bridges in Ontario.	 <p>Source: Historicbridges.org</p>
Pakenham Bridge	Pakenham (over the Mississippi River)	The five-arch stone bridge at Pakenham was built in 1903 and rebuilt in 1984 as a reinforced concrete bridge clad in the same stones as the original bridge. The County of Lanark designated the bridge as a municipal heritage property in 1984 (By-law 84-36).	 <p>Source: Contentworks.</p>

4 HERITAGE EVALUATION

The criteria for determining cultural heritage value or interest as set out in under Ontario Regulation 9/06 established under the OHA, as amended in 2005. These criteria were developed to assist municipalities in the evaluation of properties considered for designation. The regulation states that:

A property may be designated under section 29 of the Act if it meets one or more of the following criteria for determining whether it is of cultural heritage value or interest:

1. The property has design value or physical value because it,
 - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,
 - ii. displays a high degree of craftsmanship or artistic merit, or
 - iii. demonstrates a high degree of technical or scientific achievement.
2. The property has historical value or associative value because it,
 - i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,
 - ii. yields, or has the potential to yield , information that contributes to an understanding of a community or culture, or
 - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
3. The property has contextual value because it,
 - i. is important in defining, maintaining, or supporting the character of an area,
 - ii. is physically, functionally, visually or historically linked to its surroundings, or
 - iii. is a landmark.

4.1 Regulation 9/06 Evaluation Table

Table 3: Cultural Heritage Evaluation Table for Blakeney Bridge

Criteria	Assessment Y/N	Rationale
Design or Physical Value		
i. rare, unique, representative or early example of a style, type, expression, material or construction method.	No	While Blakeney Bridge appears to be a rare example of a road bridge type (poured concrete deck on steel frame) that was used in the building of many road bridges in Ontario for a few years prior to 1925, the bridge's most unique element – the deck – has been replaced.
ii. displays a high degree of craftsmanship or artistic merit.	No	As a comparison, the Pakenham Bridge is an example of a bridge displaying a high degree of artistic

		merit.
iii. demonstrates a high degree of technical or scientific achievement.	No	The bridge represents a pragmatic solution to a straightforward crossing.
Historical or Associative Value		
i. direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	Yes	The configuration of the bridge, with three separate structures consisting of two spans and a single span linked over islands in the Mississippi River, is constructed on the same footprint as the original 1830s bridge.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture	No	
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	No	
Contextual Value		
i. Important in defining, maintaining, or supporting the character of an area	Yes	Blakeney Bridge is a component in a rural landscape along the Mississippi River at Blakeney. The landscape includes the bridge, Blakeney Rapids, and Blakeney Park. The contribution of the bridge to the landscape is primarily related to its low profile and its physical connection to the rocky islands that support the structure.
ii. Physically, functionally, visually or historically linked to its surroundings	Yes	A bridge has been located at Blakeney on the Mississippi River in this specific location for nearly 200 years.
ii. Landmark	Yes	Blakeney Bridge is well-known regionally.

4.2 Conclusion of the Evaluation

Blakeney Bridge is Built Heritage Resource of Cultural Heritage Value or Inter using the criteria of Regulation 9/06 in the categories of Historical or Associative Value and Contextual Value.

5 STATEMENT OF CULTURAL HERITAGE VALUE

It has been determined through the application of the Criteria for Determining Cultural Heritage Value under Ontario Regulation 9/06 of the *Ontario Heritage Act* that Blakeney Bridge is of cultural heritage value for Historical/Associative and Contextual reasons.

Heritage Values

Blakeney Bridge was constructed in 1915 to cross the Mississippi River on the same site as a timber bridge built at Blakeney in the 1830s. The extant bridge has historical/associative and contextual values related to the history of Blakeney and its setting.

Blakeney Bridge is of historical and associative value because it is located on the same footprint as the first bridge dating from the 1830s. The one-lane bridge served to facilitate travel and communications for over 100 years, until larger and heavier local traffic became a concern. Its modest appearance is consistent with its history as a rural bridge that was primarily for local use.

In its low profile of Blakeney Bridge and its use of the natural formation of rock islands are key factors in creating a picturesque composition when approaching Blakeney Bridge from the road at either end or from the west shore of the Mississippi River.

Description of Heritage Attributes

The heritage attributes of Blakeney Bridge are:

- Its position on the Mississippi River on the site of the original 1830s bridge
- The lightness of its design, which provides a clear view of the Canadian Shield landscape and the rapids of the Mississippi River.

6 SOURCES

6.1 Engineering Reports and Drawings

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6.3 Provincial Documents and Databases

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Ontario Heritage Trust. Ontario Heritage Act Register database. Online at: www.heritagetrust.on.ca/en/pages/tools/ontario-heritage-act-register.

6.4 History and Heritage

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7 FIGURES



Figure 1: Looking northeast from the shore of the Mississippi River to Blakeney Bridge. Source: Contentworks, 1 November 2022.



Figure 2: Aerial view of Blakeney Rapids Park and the islands of the Mississippi Rapids, looking south (upstream.) The west portion of Blakeney Bridge is marked by an arrow added to the image. Source: Mississippi Mills website, no date.

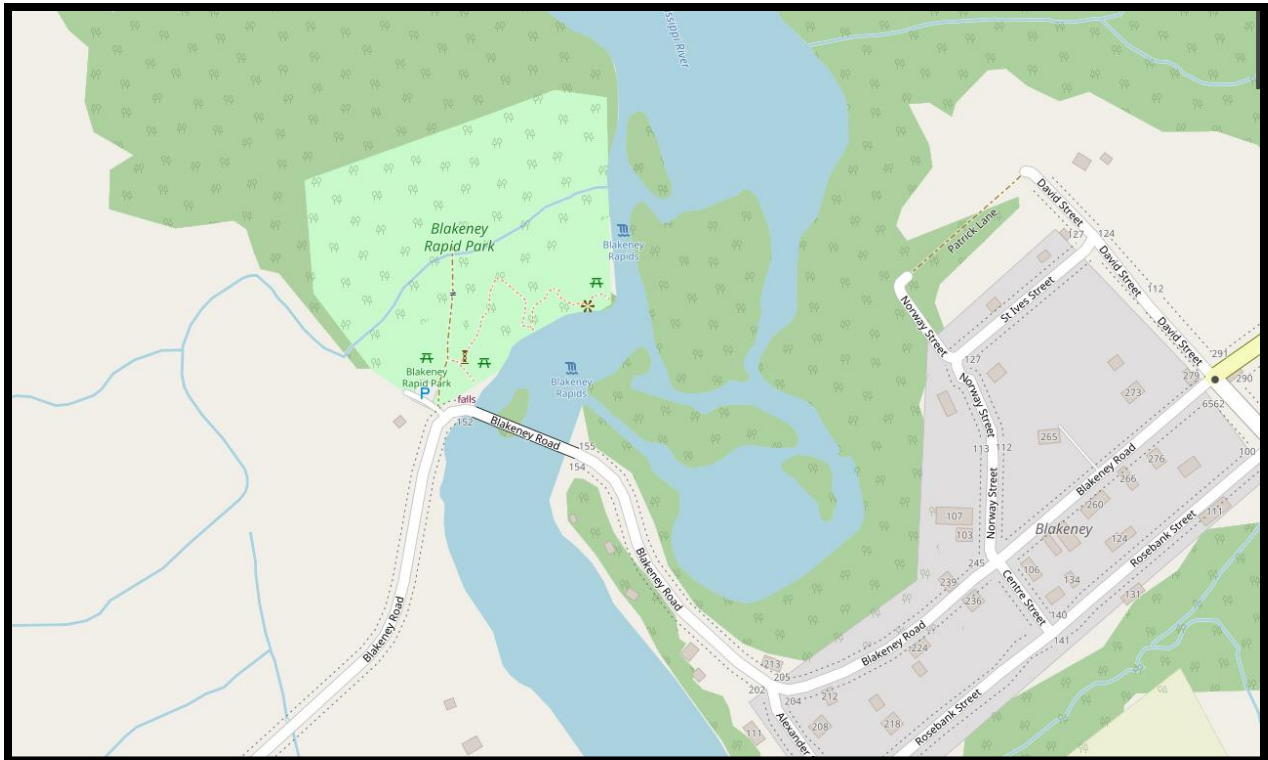


Figure 3: Map of the area around the Blakeney Bridge. Source: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community. Accessed 20.12.2022 through Ontario Historical County Maps, online at <https://www.arcgis.com/apps/webappviewer/index.html?id=8cc6be34f6b54992b27da17467492d2f>.



Figure 4: Timber bridge at Blakeney, [1900], looking towards the south (upstream) side of the bridge. Source: Ramsay Women's Institute, *Tweedsmuir History Book 7*, accessed online at http://images.ourontario.ca/Partners/FWIO/FWIO003203526_0040p.pdf.

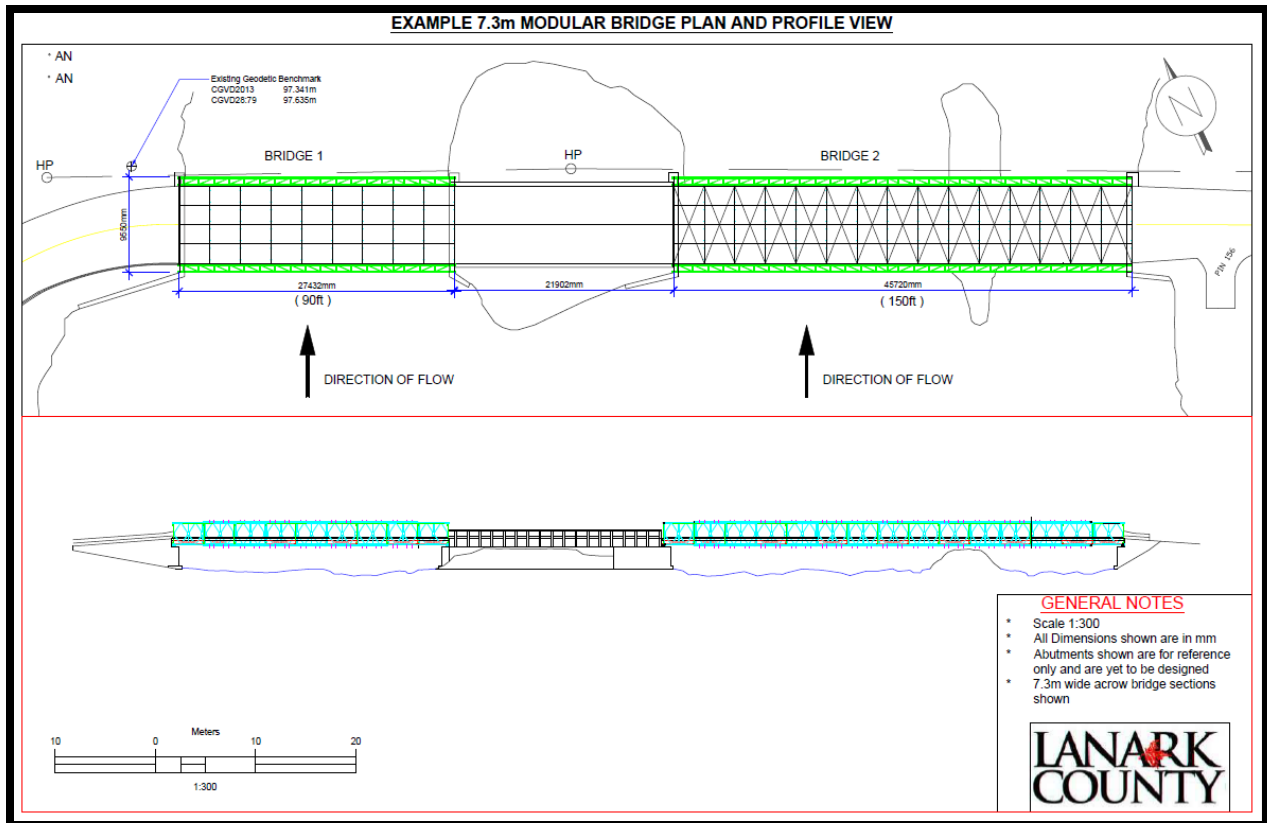


Figure 5: Plan and profile views for the double-lane modular steel bridge proposed. Source: Lanark County. 2022. Blakeney Bridge Replacement Options.



Figure 6: Lanark Highlands modular bridge. This bridge is the same design as the replacement bridge proposed for the Blakeney crossing. Source: [Acrow], n.d.

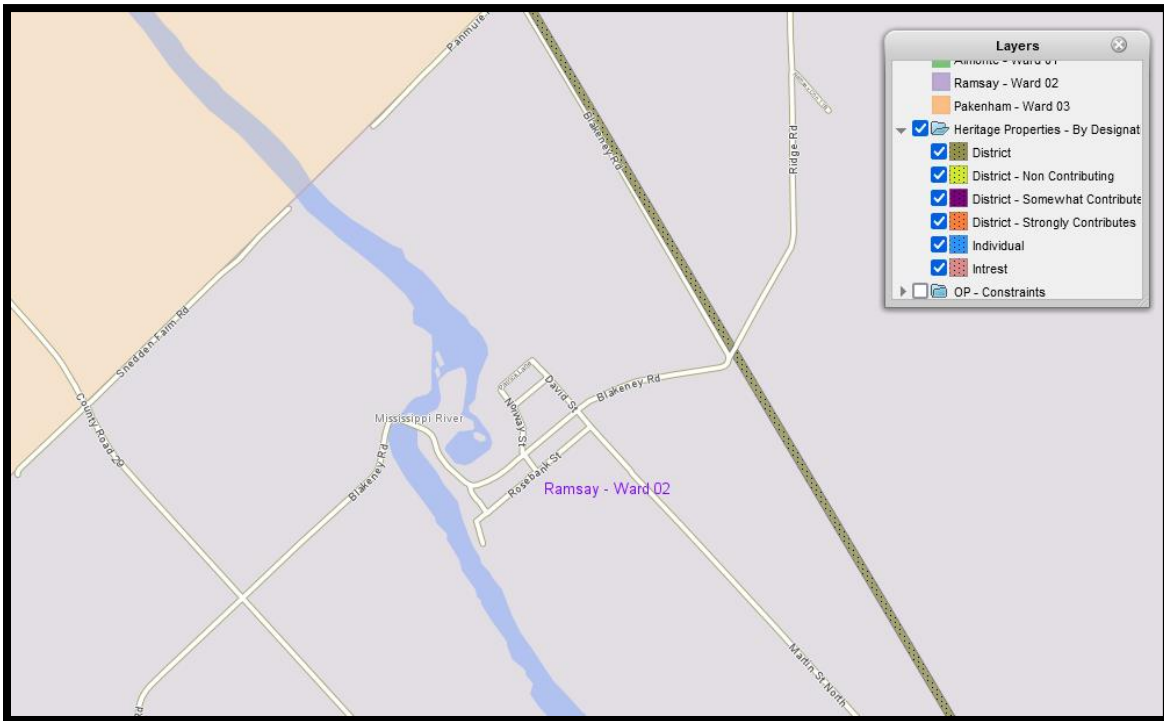


Figure 7: Municipality of Mississippi Mills Community Map displaying the results from Heritage properties (Listed and Designated Properties). The only heritage property shown on the map within a few kilometres of Blakeney Bridge is the Ottawa Valley Rail Trail, formerly the Canadian Pacific Railway's Ottawa Valley Railway. Source: <http://cgis.com/cpal/?map=MMills>.



Figure 8: East approach to Blakeney Bridge, November 2022. Source: Contentworks.



Figure 9: View of the upstream (south) side of the Blakeney Bridge looking from the west side. Source: Contentworks, November 2022.



Figure 10: Approach from the west side of the bridge on Blakeney looking southeast, 2015. Source: Lanark County, "Blakeney Bridge History."

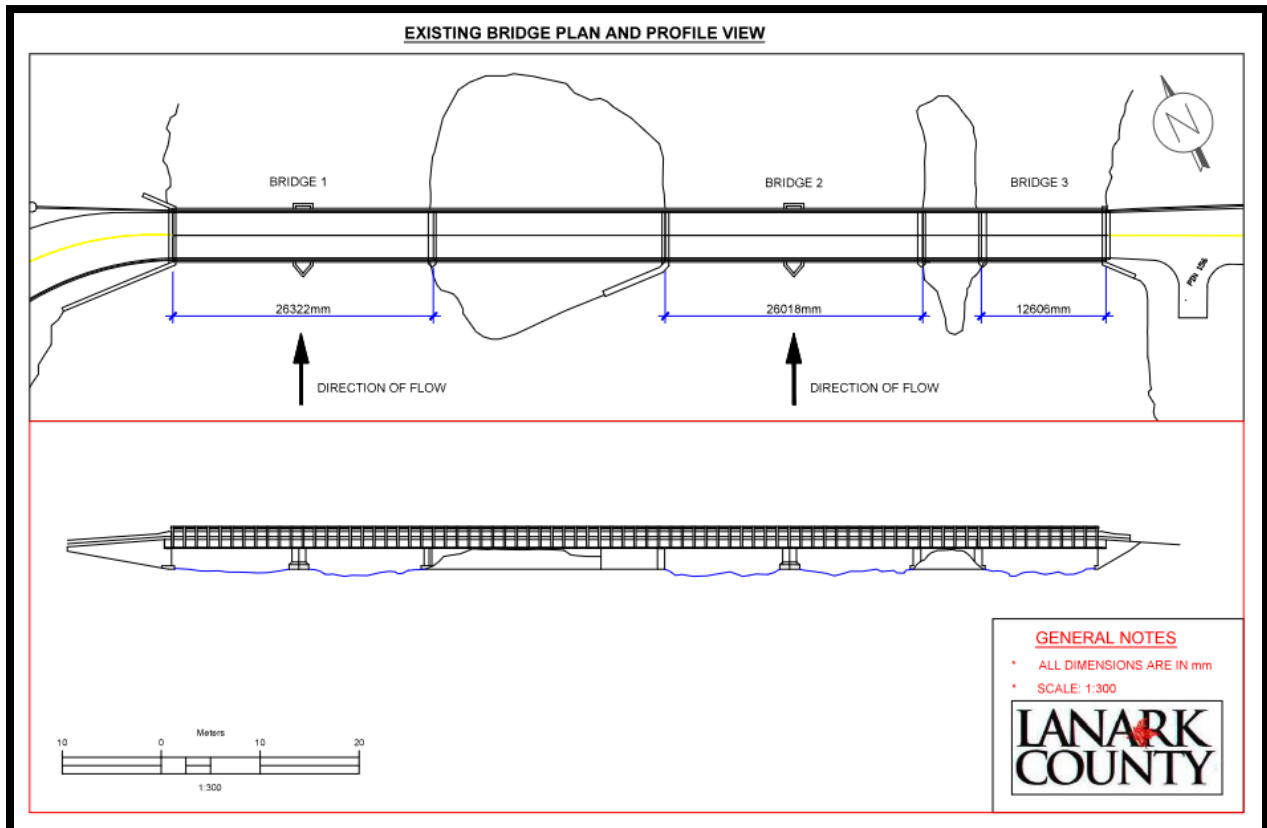


Figure 11: Current plan and profile views of the Blakeney Bridge. Source: Lanark County. 2022. Blakeney Bridge Replacement Options.



Figure 12: Timber bridge at Blakeney, [1910]. Source: "Pic of the Past," in Hilda Geddes, *The Canadian Mississippi River*, General Store Publishing House, p. 249. Courtesy of Archives Lanark.



Figure 13: Blakeney Bridge Study Area. The study area extends approximately 150 m from the centre bridge towards the shore and islands to the north and about 100 m upstream to the south. Source: Google maps, 2022, annotation by Contentworks.

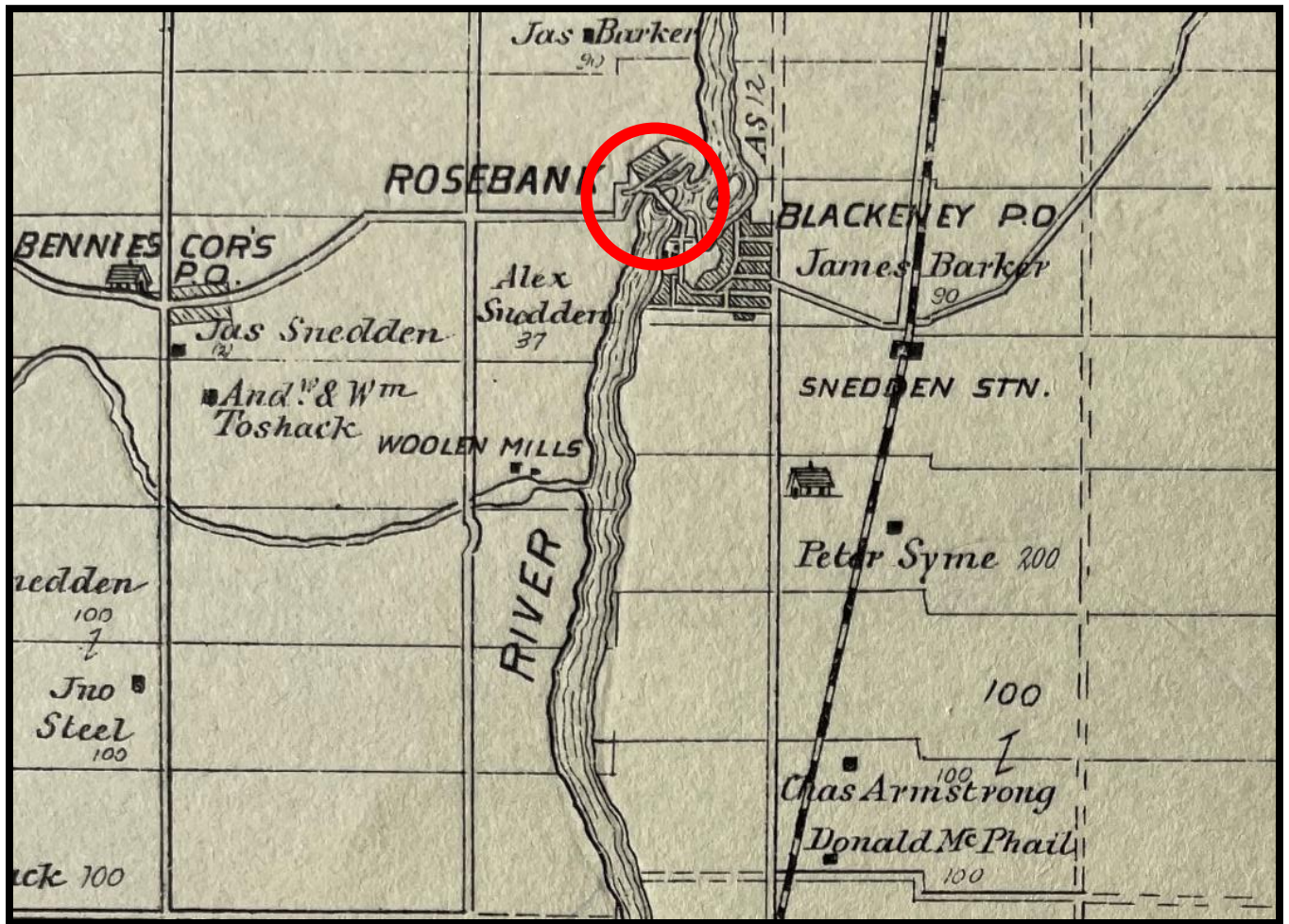


Figure 14: Illustrated atlas of Lanark County, 1880. H. Belden & Co., reprint 1972. Richardson, Bond & Wright, Owen Sound, Ont.



Figure 15: Historical County Map of Lanark County, Published by D.P. Putnam, 1863. Source: Accessed 19.11. 2022 through Ontario Historical County Maps, online at <https://www.arcgis.com/apps/webappviewer/index.html?id=8cc6be34f6b54992b27da17467492d2f>.

BLAKENEY, ONTARIO: Over 150 years ago...


When the first settlers arrived in this area in 1821, they recognized the potential for developing water power here in the "Bay" area of the Mississippi River. They built a sawmill, gristmill, and a timber slide to divert logs from the rapids into the "Bay" and on to calmer water. An inn at the Ninth Line corner provided lodging for those heading north to the lumber camps.

Known variously as Norway Pine Falls, Snedden's Mills, and Rosebank, the village received its present name of Blakeney in 1874. In 1865, the B & O railroad was extended towards Arnprior, passing near the village and opening up markets, so that by the late 1800s, Blakeney was a hive of activity with a flour mill, a large woolen factory, a sawmill, a cheese factory, a Presbyterian Church and manse, and a general store & post office. The original log bridge, which provided a vital crossing for the Bytown Road, was replaced with the present one in 1918.

Nothing remains of the early industries but stone foundations, but many new houses have been added to the homes of the early inhabitants, creating a pleasant hamlet in what is now the Ramsay Ward of the Town of Mississippi Mills.

Legend

1. Snedden Stopping Place
2. Snedden Stone House (later Cheese Factory)
3. Glover's Cooper's Shop
4. Fenlon's Hotel (later Cheese Factory, then Nontell's Dance Hall)
5. Coxford's Cobbler Shop
6. Marshall's Sawmill (later Wm. Snedden's)
7. Dam for Sawmill
8. Storehouse for Woolen Mill
9. Gomersall & Littlewood Brewery
10. McDougall Woolen Mill (later P.J. Campbell's)
11. Gomersall's Tannery (site of first sawmill)
12. Bridge to Pine Isle
13. Livery Stables
14. Merilees Home
15. Oatmeal Mill
16. Flour & Grist Mill
17. Site of first gristmill
18. Timber Slide
19. Peter McDougall's House
20. General Store & Post Office
21. Blakeney Presbyterian Church (later United)
22. Church Manse
23. Usher's Home
24. York's Store
25. Orange Hall
26. Blacksmith Shop (Harry James)
27. Snedden's Station



Erected in 2010 by the Ramsay Women's Institute.
For more information: www.ramsaywi.ca

Ontario With permission from the Ontario Ministry of Natural Resources

Figure 16: Interpretation panel installed at Blakeney Rapids Park.

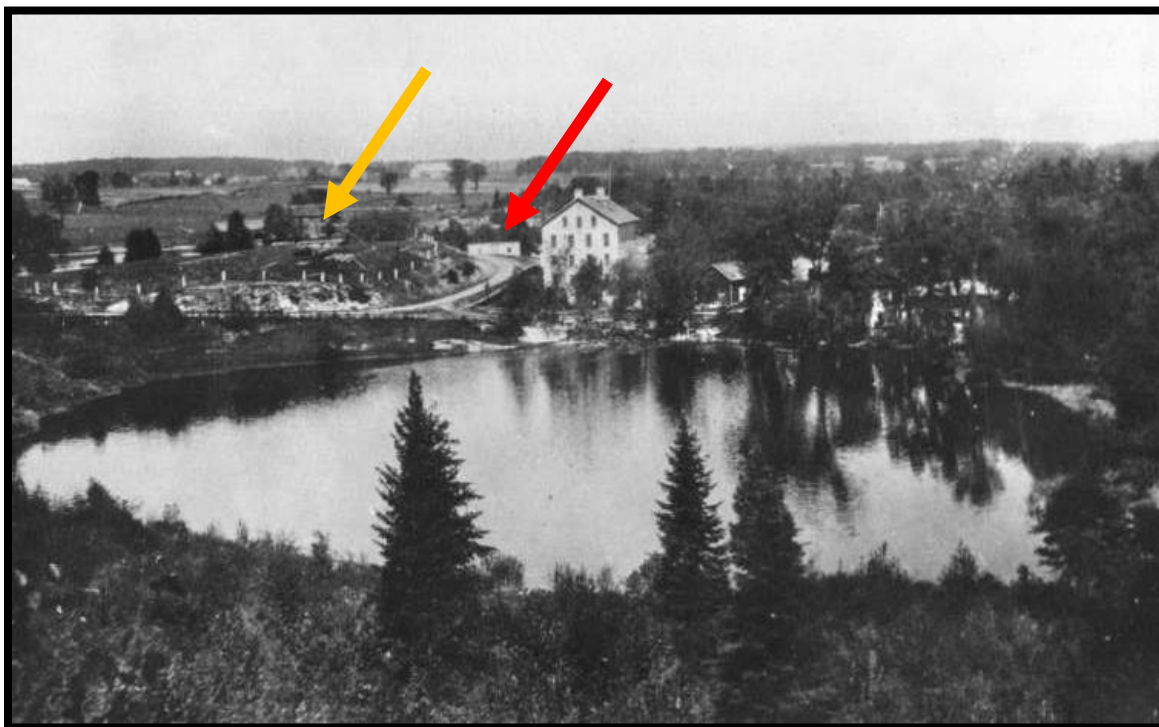


Figure 17: View of the Blakeney Woolen Mill on the other side of the containment pond that held water to power the mill. A shed located next to the Blakeney Bridge (demolished in 1991) is visible (at the red arrow) in the photograph. The former Snedden inn is to the left on the other side of the bridge (gold arrow). Source: Archives Lanark.



Figure 18: Former Blakeney Woolen Mill, on the pond above the bridge near town. Source: Library and Archives Canada, Colborne Powell Meredith, aO26959.



Figure 19: Storage shed from the woolen mill on the east end of the Blakeney Bridge on Blakeney Road. The shed was demolished in 1991. Source: Ramsay Women's Institute, *Tweedsmuir History Book 7*, accessed online at http://images.ourontario.ca/Partners/FWIO/FWIO003203526_0040p.pdf.



Figure 20: Blakeney Rapids Park, November 2022. Source: Contentworks.



Figure 21: View towards the Blakeney Bridge from Blakeney Rapids Park. Source: Contentworks, November 2022.

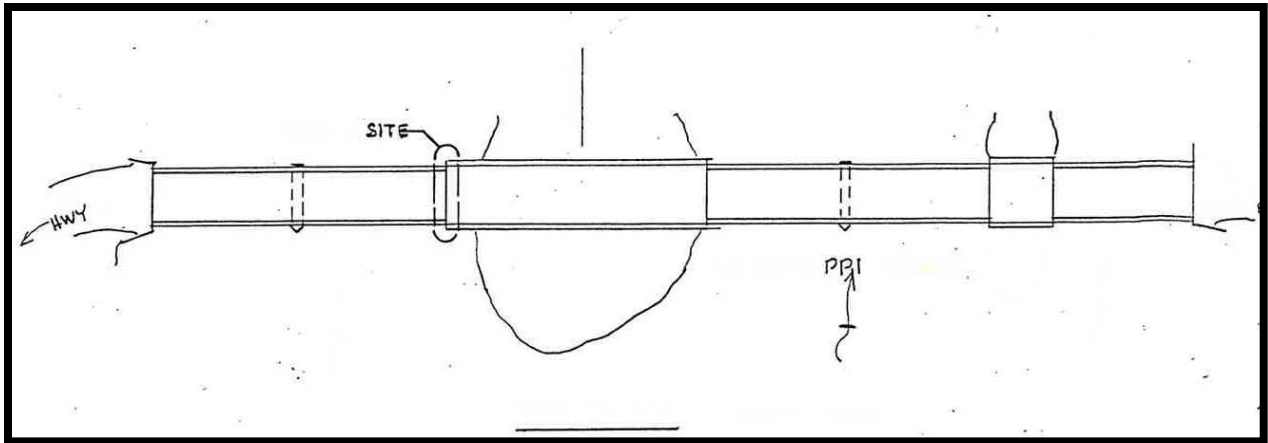


Figure 22: Drawing showing the location of the repair to the abutment on the island at the end of bridge 1 of the Blakeney Bridge. Source: County of Lanark/Moller Engineering Services Ltd., Blakeney Bridge, Con. IX, Lot 26, Ramsay Township, Repairs to Abutment, 13 September 1993.



Figure 23: Photograph of the abutment requiring repair, 1993. The original railing, composed of riveted steel posts and steel piping is visible in this photograph. The railing system was replaced in 2000 with the current guardrails with handrails. Source: County of Lanark, Repair Photos 1992, Blakeney Bridge



Figure 24: Seneca Bridge, 651 Caithness Street East, Haldimand County, 2005. The bridge is municipally designated under the Ontario Heritage Act. Source: "Seneca Bridge," listed in the Canadian Inventory of Historic Places, online at <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=11173>.

APPENDIX A: QUALIFICATIONS OF THE CONSULTANT

Contentworks is a heritage planning and public history firm established in 1999 that serves a wide range of government and private clients for comprehensive services in cultural resource management, policy development, architectural history, archival research, writing, data management and public participation.

The consultant (researcher, analysis and writer) for the Blakeney Bridge project is Julie Harris, M. Mus. Studies. She is a Professional Member of the Canadian Association of Heritage Professionals. Julie Harris is the principal of Contentworks and an expert in heritage theory, practice and documentation of many types, including landscapes, heritage structures, engineering works, Indigenous landscapes, and heritage conservation districts. She has been the project lead and primary author of approximately 200 heritage assessments (for a total of approximately 1,000 structures) of historic buildings, engineering works and landscapes for federal, provincial, municipal and private clients. She is a cited expert on cultural landscapes and heritage evaluation. Her publications include a recent book titled *Signposts and Promises: Canada and the Alaska Highway*. She has also published on the history of Canadian architecture, Indigenous history, agricultural research stations and airports.

APPENDIX B: BLAKENEY BRIDGE, SCREENING RESULTS FOR BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES (MCEA)

7.1.1 Part B1: Screening for Recognized Cultural Heritage Value or Interest

1. Is the proposed undertaking consistent with an approved conservation plan, if one exists?
No.
2. Has the bridge and the study area been evaluated before and found not be of cultural heritage value or interest (CHVI)?
No.
3. Is the bridge, or a parcel of land in the study area:
 - a. Designated under the *Ontario Heritage Act*?
No.
 - b. Subject to an agreement, covenant or easement entered into under Parts III or IV of the *Ontario Heritage Act*?
No.
 - c. Included on a register or inventory of heritage properties maintained by the municipality?
No.
 - d. Subject to a notice of:
 - i. Intent to designate?
No.
 - ii. Heritage Conservation Study by-law?
No.
 - e. Included in MHSTCI's list of provincial heritage properties?
No.
 - f. designated under the Heritage Railway Stations Protection Act?
No.
 - g. designated under the Heritage Lighthouse Protection Act?
No.
 - h. identified as a Federal heritage Building by Federal Heritage Buildings Review Office?
No.
 - i. a National Historic Site or part of one?
No.
 - j. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?
No.

7.1.2 Part B2: Screening for potential Cultural Heritage Value or Interest

4. Will the proposed project involve a bridge structure that was:

a) constructed less than 40 years ago?

No.

b) constructed after 1956 with a plain concrete substructure, and the superstructure construction is with common steel and/or concrete products involving one of the following four bridge types?

- Rigid Frame
- Precast with Concrete Deck
- Culvert or Simple Span
- Steel Girders/Concrete Deck

No.

5. Will the project involve replacement of a bridge's substructure, or any alteration of adjacent lands?

Yes.

6. Is the bridge or project area described by an on-site municipal, provincial or federal commemorative or interpretive plaque?

Yes.

7. Does the project area contain a parcel of land that has or is adjacent to a known burial site or cemetery?

No.

8. Does the proposed project involve a crossing of a Canadian Heritage River?

No.

9. Is there local or Indigenous knowledge or accessible documentation suggesting that the property (or project area) is situated on a parcel of land that:

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? (For example: buildings or landscape features accessible to the public or readily noticeable and widely known, complexes of buildings, monuments, ruins)

Yes.

b) Has a special association with a community, person or historical event? (For example: Indigenous sacred site, traditional-use area, battlefield, birthplace of an individual of importance to the community, etc.)

No.

c) Contains or is part of a cultural heritage landscape (for example, an Indigenous trail, historic road or rail corridor, park, designed garden, unique landform, or any other area in which multiple features are valued together for their interrelationship, meaning or association)?

Yes.

7.1.3 Part B3: Screening for potential Cultural Heritage Impacts to the Bridge

10.

a) Will the proposed project leave the substructure of the bridge unchanged?

No.

b) Is the substructure of the bridge constructed with plain concrete with no untypical elements?

No.

11.

a) Is the superstructure of the bridge constructed with common steel and/or concrete products involving one of the following four bridge types?

- Rigid Frame
- Precast with Concrete Deck
- Culvert or Simple Span
- Steel Girders/Concrete Deck

Yes.

12.

a) Is work proposed on the parapet walls/railings of the bridge?

Yes.

b) If YES to (a), are the parapet walls/railings contain materials other than plain concrete and steel, or any untypical elements?

No.

c) Is the purpose of the work being done on the parapet walls/railings to upgrade them to meet current crash test standards?

N/A.

The responses to questions above indicate the need to hire a qualified person(s) to undertake a Cultural Heritage Evaluation Report (CHER). Do this during the EA study and follow its recommendations, which may include completing a Heritage Impact Assessment (HIA) if the structure or property is found to have cultural heritage value or interest (CHVI) and may be impacted by the project. Both the CHER and the HIA should be included in EA documentation and inform the decision-making in the EA process.

To develop a sympathetic design for railings, the proponent should first consider retaining the existing railing. If the existing railing is tall enough for pedestrian safety, consider providing a new barrier wall between road and sidewalk if adequate space and bridge capacity is available, and snow clearing operations can continue. If inadequate space and structural capacity exists, or snow clearing cannot be accommodated, or pedestrian Ontario Building Code safety requirements are not met, then the existing railings should be removed and replaced with a new Canadian Highway Bridge Design Code and OBC (if applicable) compliant barrier with a design that, as much as possible, uses the same materials and elements (vertical steel posts) as the original railing.

APPENDIX C: HERITAGE IMPACT ASSESSMENT FOR THE BLAKENEY BRIDGE PROJECT (2023)

Purpose

This assessment of potential impacts from the undertaking on identified Built Heritage Resources. The purpose of the HIA is to consider potential negative and positive impacts resulting from an intervention and consider mitigation that might reduce negative impacts on the cultural heritage values and attributes of a heritage resource. Blakeney Bridge has been assessed under the heritage evaluation criteria of ‘Ontario Regulation 9/06’. The CHER that is part of this report demonstrated that the subject bridge structure has some historical and contextual value

Blakeney Bridge Options

Background

Blakeney Bridge has been the subject of substantial engineering studies to address deficiencies in 1975, 1995, 2000 and 2017. The 2017 report by Jewell Engineering found the bridge to require significant work, even after the rehabilitation of the bridge in 2000. Alternatives that were examined were:

1. Major rehabilitation of the bridge.
2. Complete superstructure replacements with substructure modifications.
3. Complete single lane bridge replacements.
4. Complete two-lane bridge replacements.
5. Superstructure and three abutment replacements.

Of these five options, the ideal option to achieve heritage conservation aims would be to retain and rehabilitate the existing bridge.

Three options (single-lane, slightly wider single-lane, and two-lane) for modular bridges were presented at the Public Open House held in Almonte on 1 December 2022 that was well-attended by individuals from Blakeney, Pakenham and Almonte. While some individuals preferred an option that would retain and rehabilitate the existing bridge because they appreciated its heritage value and historic appearance, the majority of people attending the open house seemed to prefer a replacement option that could accommodate larger vehicles, when necessary, but also provide a safer crossing for active transportation users, primary pedestrians and cyclists. One participant stated that the replacement option should be a pragmatic design appropriate to a minor road and its rural setting, just as the 1915 bridge had been.

Selected Option

All options under consideration by Lanark County involve replacement of the bridge. The preferred option is a two-lane, modular, steel bridge in the same location of the 1915 bridge, but with two single-span sections, rather than two double-span and one single-span configuration (Figure 5 and Figure 6). This option allows for wider farm machinery to cross the bridge.

Because the option of replacing Blakeney Bridge with the two-lane modular bridge is strongly preferred by Lanark County, the HIA addresses this option only.

Categories of Impacts

Areas of potential impact are outlined in *Ontario Heritage Tool Kit InfoSheet #5: Heritage Impact Assessments and Conservation Plans* (Ministry of Tourism and Culture 2006). Potential impacts include direct and indirect impacts. The potential impacts pertinent to the Blakeney Bridge project are listed below.

Direct impacts:

- Destruction of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.

Indirect impacts:

- Shadows created 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
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features
- 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
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

The *InfoSheet* also provides direction on mitigation and avoidance. Methods of minimizing or avoiding a negative impact on a cultural heritage resource include, but are not limited to:

- Alternative development approaches
- Isolating development and site alteration from significant built and natural features and vistas
- Design guidelines that harmonize mass, setback, setting, and materials
- Limiting height and density
- Allowing only compatible infill and additions
- Reversible alterations
- Buffer zones, site plan control, and other planning mechanisms

Relevant Potential Impacts on Heritage Value and Attributes

Table 4: Heritage Impacts and Mitigations from the Replacement of the Blakeney Bridge

<p>Direct Impacts from the removal and replacement of Blakeney Bridge</p>	<p>Type: Destruction of any, or part of any, significant heritage attributes or features; and alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.</p> <p>Comments: Blakeney Bridge will be replaced on the same site as the existing bridge, just upstream from Blakeney Rapids and Blakeney Park.</p> <p>Level of impact: Low. The bridge will occupy the same location, albeit with a wider footprint, but it will continue to cross the Mississippi River over the set of small islands with a light and low profile.</p> <p>Mitigation: A full photographic record of extant Blakeney Bridge prior to its dismantling should be undertaken. The files should be deposited with Archives Lanark in a format preferred by the archives. Historic interpretation panels could be added to Blakeney Park to tell the story of the history of Blakeney Bridge.</p>
<p>Pertinent Indirect Impacts</p>	<p>Type: Isolation of a heritage attribute from its surrounding environment, context or a significant relationship</p> <p>Comments: The replacement of a 107-year-old bridge with a contemporary bridge (age and design) will change the character and views of the setting, which consists of the bridge, the rapids and the park.</p> <p>Level of Impact: Medium. The direct historical connections between Blakeney Bridge and the rich history of the village of Blakeney will be obscured.</p> <p>Mitigation: 1) All work should be planned to allow full and safe use of Blakeney Park during as much of the construction phase as possible. 2) The existing interpretation panel at Blakeney Park should be supplemented with a panel about the history of the crossing, its bridges, and the village of Blakeney.</p>

Conclusion

Blakeney Bridge has been assessed under the heritage evaluation criteria of ‘Ontario Regulation 9/06’. The CHER that is part of this report demonstrated that the subject bridge structure has historical and contextual value. While any mitigation to address the loss is only a partial solution, Lanark County has determined that the replacement of Blakeney Bridge is required. The proposed modular bridge continues the use of this historic crossing over the Mississippi River with an engineering work that follows its predecessors in being a pragmatic solution without intruding significantly on the picturesque qualities of its setting.