

Staff Report



To Committee of the Whole
Service Area Infrastructure, Development and Environment
Date Tuesday, October 7, 2025
Subject **Macdonell and Allan’s Structures Environmental Assessment – Notice of Completion**

Recommendation

1. That the Macdonell and Allan’s Structures Environmental Assessment be approved, and that staff be directed to issue a Municipal Class Environmental Assessment Notice of Completion.
 2. That staff be directed to salvage, retain, and conserve the steel railing system and salvageable elements of the superstructure of Allan’s Bridge for functional or commemorative re-use in the vicinity of Allan’s bridge.
 3. That staff be directed to engage with the Arts and Culture Advisory Committee and Heritage Advisory Committee to identify opportunities for historical commemoration and placemaking, and heritage conservation within the project area during the design process.
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Executive Summary

Purpose of Report

This report summarizes the Macdonell and Allan’s Structures Environmental Assessment report and engagement.

Key Findings

The Macdonell Bridge has limited serviceable life remaining, with a one-to-five-year replacement timeline recommended in the 2023 Ontario Structural Inspection Manual (OSIM) inspection. Along with an assessment of alternatives for the Macdonell Bridge, the Allan’s Bridge, Ward to Downtown Pedestrian Bridge, and Allan’s Spillway and Sluiceway structures were undertaken to gain a fulsome understanding of how to improve the structures in the area. Alternatives were assessed to identify the preferred alternatives consisting of:

- 1) The Macdonell Bridge be replaced entirely and widened to accommodate active transportation on the north side;
- 2) The Allan’s Bridge be removed, and a commemorative heritage feature be developed;
- 3) Allan’s Dam Sluiceway and Spillway be rehabilitated; and,
- 4) The Ward to Downtown Pedestrian Bridge be constructed using a simplified design to the south of the Guelph Junction Railway (GJR) bridge.

Two engagement events have been held throughout the Environmental Assessment, resulting in 659 public engagement interactions through in-person and online surveys.

The final design timeline for the infrastructure improvements is planned for 2026-2027 as part of the Macdonell Street Reconstruction project. Construction is currently anticipated to take place from 2028-2030 and is subject to the progress of the overall downtown infrastructure renewal program.

Strategic Plan Alignment

The completion of the Macdonell and Allan's Structures Environmental Assessment is a milestone achievement towards Strategic Goal 12 **Make downtown a vibrant place for everyone** and supports other City strategic initiatives. Downtown Renewal will replace and improve our aging infrastructure and upgrade our utility services including modernizing and upgrading the streetscape to provide the foundation for community success over generations.

Future Guelph Theme

People and Economy

Future Guelph Objectives

People and Economy: Make downtown a vibrant place for everyone

Financial Implications

There are no financial implications associated with this report.

The preliminary total project cost for the detailed design and construction of all structures is estimated at approximately \$13.3M. The project budget in the 2025 adopted budget and forecast is \$25M and includes additional scope beyond the structure work and contingency, such as the reconstruction of neighbouring intersections, watermains, sewers, and utilities. The budget timing and cost will be updated in the 2026 and future budget updates and may be revised as the detailed design progresses.

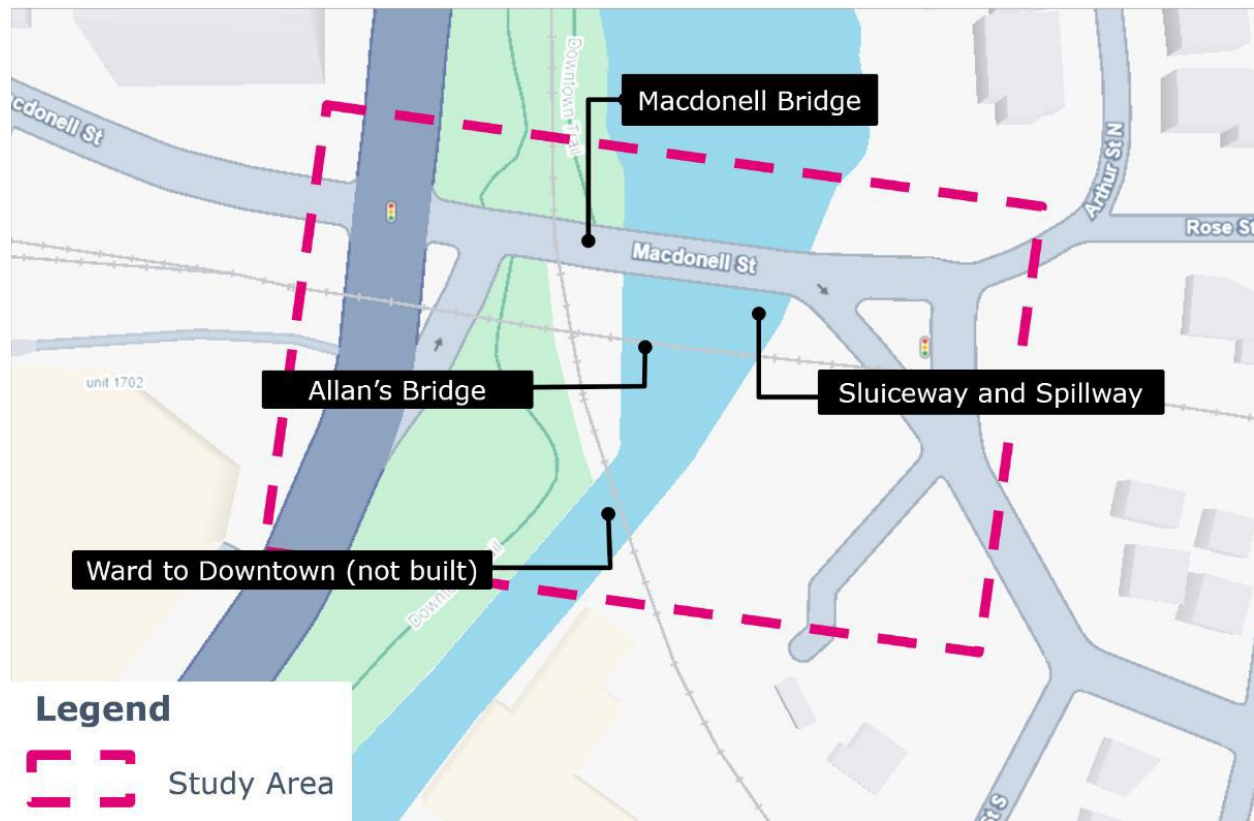
Report

The City of Guelph was founded in the location of the current-day intersection of Macdonell Street and Wellington Street, where legend has it that John Galt felled the first tree to begin clearing the land for the settlement that would become Guelph. It was from this spot that the radial plan street plan originates, on the bank of the Speed River. The Speed River is a vital part of the City of Guelph's identity, particularly the Downtown area which is bound by the river to the east and south. The river crossing at Macdonell Street is an important connection into Downtown Guelph from the east, and the Allan's Dam structure currently creates a mill pond that has been in place for over a hundred years.

The [Environmental Assessment](#) explored the existing infrastructure needs of the five structures within the area of the Macdonell Street River crossing and presented alternatives for rectifying the identified problems. The study area is depicted in Figure 1: Macdonell and Allan's Structures Environmental Assessment (EA) Study Area. The Executive Summary of the EA document is provided as Attachment 1 for reference.

Following completion of the environmental assessment, the project will proceed to the detailed design stage beginning in 2026, in conjunction with the road design of Macdonell Street. Construction is anticipated to begin in 2028.

Figure 1: Macdonell and Allan's Structures Environmental Assessment Study Area



Currently the Macdonell Bridge is the sole structure supporting public crossing of the river by transportation modes like driving, cycling and walking between Wellington Street East and Arthur Street to the west. The Allan's Bridge, which is currently closed due to the structural condition of the bridge, was previously used as a pedestrian bridge following the construction of the Macdonell Bridge in the 1960's. The Guelph Junction Railway crossing is informally used as a pedestrian crossing that is not endorsed and actively signed as not approved.

The Macdonell Bridge is reaching the end of its usable life while the Allan's Bridge is deemed unsafe for pedestrian use.

In 2012, the Downtown Secondary Plan proposed a new pedestrian bridge, known as the Ward to Downtown Bridge, crossing from the Macdonell Street and Wellington Street intersection alongside the Guelph Junction Railway Bridge to the east side of the Speed River. This bridge would provide a valuable active transportation connection between the Ward neighbourhood and Downtown and be a key link in a future trail connecting to the Guelph Innovation District lands.

The Allan's Dam Structure consists of a spillway and a sluiceway to control the flow rate of the Speed River. The sluiceway is operated by the City to release or retain the mill pond north of the Allan's Dam. Both structures show signs of deterioration.

Alignment with City Policies

The alternatives for the various structures were assessed for adherence to existing approved City policies. The main guiding policies for the assessment were the City's heritage policies, the Transportation Master Plan and the Downtown Secondary Plan.

Recommended Preferred Alternatives

Macdonell Bridge

The Macdonell Bridge was initially assessed for five alternatives, including do nothing, rehabilitation, replacement, maintaining the bridge for cyclists and pedestrian use, or removing the bridge entirely. This long-list of alternatives was assessed and a short-list of viable alternatives selected which included rehabilitation of the bridge structure, rehabilitating the bridge structure and widening the deck, replacing the entire structure for vehicular traffic only, or replace the entire structure to accommodate active transportation on the north side. Ultimately the preferred alternative was to replace the existing bridge structure and accommodate active transportation on the north side.

The preferred alternative satisfies the goals of the Downtown Secondary Plan and Transportation Master Plan. It maintains vehicle and truck access from Wellington Street to Elizabeth Street while providing a safe path for pedestrians and cyclists travelling to and from Arthur Street to connect to Macdonell Street and the Downtown Trail.

Allan's Bridge

The Allan's Bridge was initially assessed for five alternatives, including do nothing, rehabilitate the bridge, replace the bridge, remove the bridge, or perform minor rehabilitation for heritage purposes only. This long-list of alternatives was assessed and a short-list of viable alternatives selected which included do nothing, minor rehabilitation for heritage purposes only, replacing the superstructure for pedestrians and cyclists, and removing the bridge.

The preferred alternative is to remove the bridge because there are risks that outweigh the level of service provided to the community (e.g., the structure does not provide a service level for active transportation that is commensurate with the capital and operating costs incurred). Based on structural inspections the bridge is in poor condition and has currently been closed to the public as a safety measure. The bridge is at risk of eventual collapse, representing an unacceptable risk to public safety and environmental risks to the Speed River. Restoring the bridge to a safe operating condition would require extensive removals, resulting in a complete replacement of the bridge superstructure, including the heritage attributes. It is further recommended, however, that a commemorative strategy be developed to honour the heritage aspects of this bridge crossing. With additional review by the Arts and Culture Advisory committee and the Heritage Advisory Committee, opportunities will be explored for historical commemoration, playmaking and / or heritage conservation.

The short-listed alternatives along with the preferred were presented to the Heritage Guelph (HG), and advisory committee to the City, at their [April 3, 2025 meeting](#). The committee passed the following motion:

1. That HG recommends preserving and retaining the bridge instead of building a new bridge;
2. The geographic location of the existing bridge is the most important aspect, given the long history of this site as a point of crossing;
3. Based on heritage value, the committee is not in support of the bridge being removed.

While the bridge merits designation under the Ontario Heritage Act (Cultural Heritage Evaluation Report, ASI, March 2025), Heritage Planning staff are of the opinion that the primary heritage value of the bridge is not the existing bridge, but the provision of a crossing known historically as Allan's Bridge. The defining architectural feature of the 1938 Allan's Bridge is the ornamental railing system, and worthy of conservation and retention to help tell the story of the succession of bridges in this location. Heritage Planning staff recommend that the steel railing system and salvageable elements of the substructure of Allan's Bridge be salvaged, retained, and conserved for functional or commemorative re-use in the vicinity of Allan's Bridge.

Allan's Sluiceway and Spillway

The Allan's Sluiceway and Spillway were initially assessed for five alternatives, including do nothing, rehabilitate sluiceway and spillway, remove sluiceway and rehabilitate spillway, remove sluiceway and spillway with an alternative for an active transportation underpass, remove sluiceway and spillway and build a new dam upstream and potentially add an active transportation underpass. This long-list of alternatives was assessed and a short-list of viable alternatives selected which included do nothing, rehabilitating the spillway and sluiceway, removing the spillway and sluiceway, and removing the spillway and sluiceway and build a new dam upstream with an active transportation underpass. Ultimately the preferred alternative was to rehabilitate the sluiceway and spillway.

The recommended alternative was selected as the most cost-effective alternative while also maintaining the status quo of the river's water levels upstream of the Allan's Dam and preserving habitat that has been established along the river.

Of particular note is that a potential trail underpass of the Macdonell Bridge was evaluated as envisioned by community members. While feasible from an engineering perspective, an underpass would involve significant rehabilitation or removal of the spillway plus related works. This would result in significant lowering or removal entirely of the water in the mill pond. A replacement spillway upstream is not likely to be permitted by the Grand River Conservation Authority and upper governmental authorities as conservation policy favours naturalization of waterways rather than continued human intervention. Moreover, the cost of removal and reconstruction is prohibitive, and will not be well received by those who currently enjoy the mill pond. For these reasons, a trail underpass was not preferred.

Ward to Downtown Bridge

The Ward to Downtown Bridge was previously tendered in 2023, however due to unforeseen construction complications, it was cancelled and reassessed as part of the Macdonell and Allan's Structures Environmental Assessment (EA). The Ward to Downtown Bridge was integrated into the EA at the short-list stage. The short-list of viable alternatives included do nothing, construct the 2023 tendered bridge,

construct a modified structure on the south side of the Guelph Junction Railway (GJR) rail bridge, or construct a modified structure on the north side of the GJR rail bridge. The preferred alternative is to construct a modified structure located to the south of the GJR rail bridge.

The preferred alternative satisfies the goals of the Downtown Secondary Plan and Transportation Master Plan. The Ward to Downtown Bridge was originally proposed as a connectivity goal in the Downtown Secondary Plan, providing a safe active transportation connection between Downtown and the Ward neighbourhood. This bridge satisfies safety needs of providing a safe alternative to illegal crossing of the GJR rail bridge and is a key link in the off-road active transportation network.

GJR is planning to rehabilitate portions of their rail crossing bridge in the near future. Consideration was given to combining the efforts and adding the pedestrian crossing to the GJR bridge but for technical and cost reasons, this alternative was ruled out early in the evaluation. It is more effective to build a new pedestrian bridge than add onto the existing GJR bridge. The project team will coordinate with GJR to complete all necessary bridge work in an organized and minimally disruptive manner.

Financial Implications

There are no financial implications associated with this report.

The preliminary total project cost for the detailed design and construction of all structures is estimated at approximately \$13.3M. The project budget in the 2025 adopted budget and forecast is \$25M and includes additional scope beyond the structure work and contingency, such as the reconstruction of neighbouring intersections, watermains, sewers, and utilities. The budget timing and cost will be updated in the 2026 and future budget updates and may be revised as the detailed design progresses.

Consultations and Engagement

Extensive internal and external consultation has taken place to determine the preferred approach to the structures within the study area. To date, two public open house events have been held to discuss the reasonable alternatives for each structure and determine a preferred alternative for the area, with complementary online engagements.

Community feedback generally endorses the preferred alternatives, but some resistance has been heard surrounding the removal of the Allan's Bridge, and a desire to include an active transportation underpass to bypass the at-grade crossing of Macdonell Street, as proposed by Gateway Guelph. Two Public Information Centres (PIC's) - including both in person and online forums - were undertaken in November 2022 and [December 2024](#). The first open house collected feedback on all alternatives to gauge community preference, while the second open house presented the preferred alternatives to collect feedback from the community on the direction of the project. More detailed information on the engagement process and what we heard is publicly available on [Have Your Say](#).

Consultation with Indigenous nations including Mississaugas of the Credit First Nations (MCFN) and Six Nations of the Grand River were conducted in accordance with the requirements of the Municipal Class Environmental Assessment and all City policies and best practices. This included issuing project notification letters,

providing copies of relevant reports and designs for review, and attending an in-person meeting with MCFN staff to discuss the project and any input and feedback. No significant concerns have been noted with the project at this time.

Attachments

Attachment-1 Macdonell and Allan's Structures Schedule B Municipal Class Environmental Assessment

Attachment-2 Macdonell and Allan's Structures Municipal Class Environmental Assessment Studies Presentation

Departmental Approval

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