

Welcome

Macdonell and Allan Structures
Municipal Class Environmental Assessment Studies

Heritage Guelph

January 20, 2025



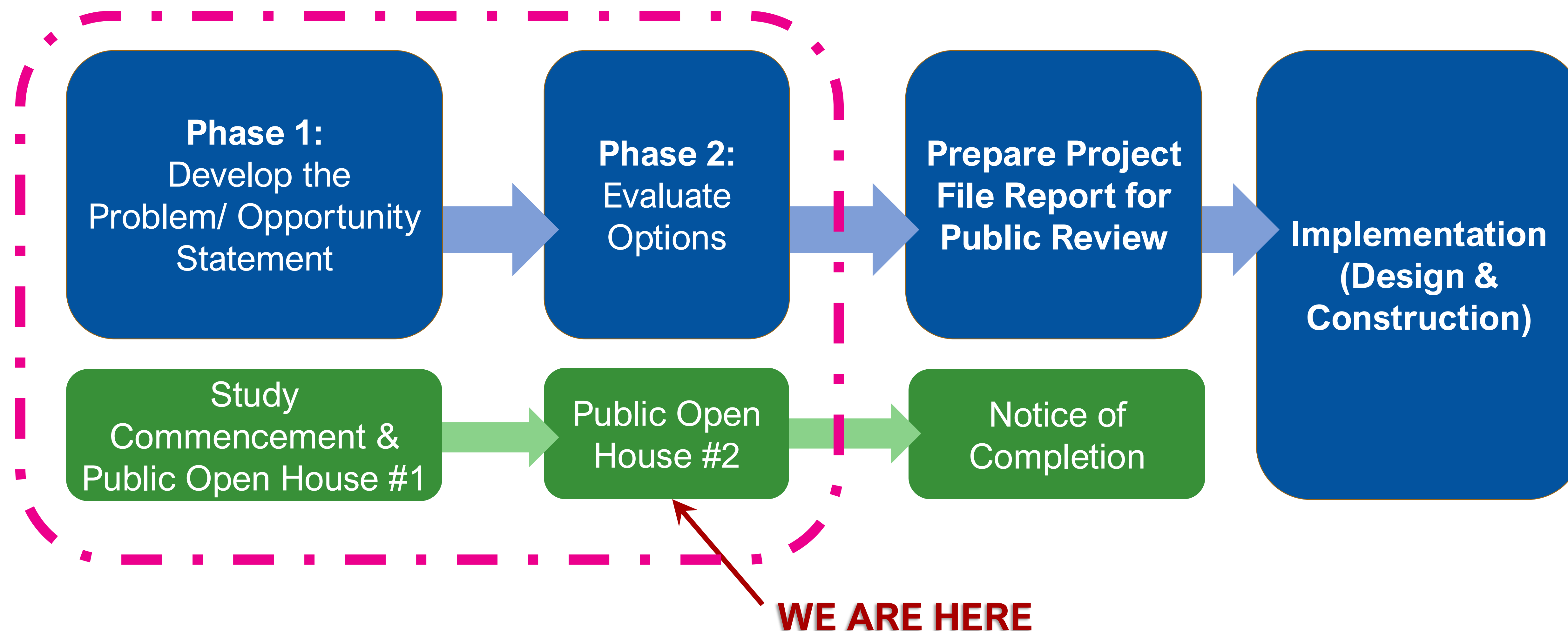
**Downtown
Renewal**

Creating a place for everyone.

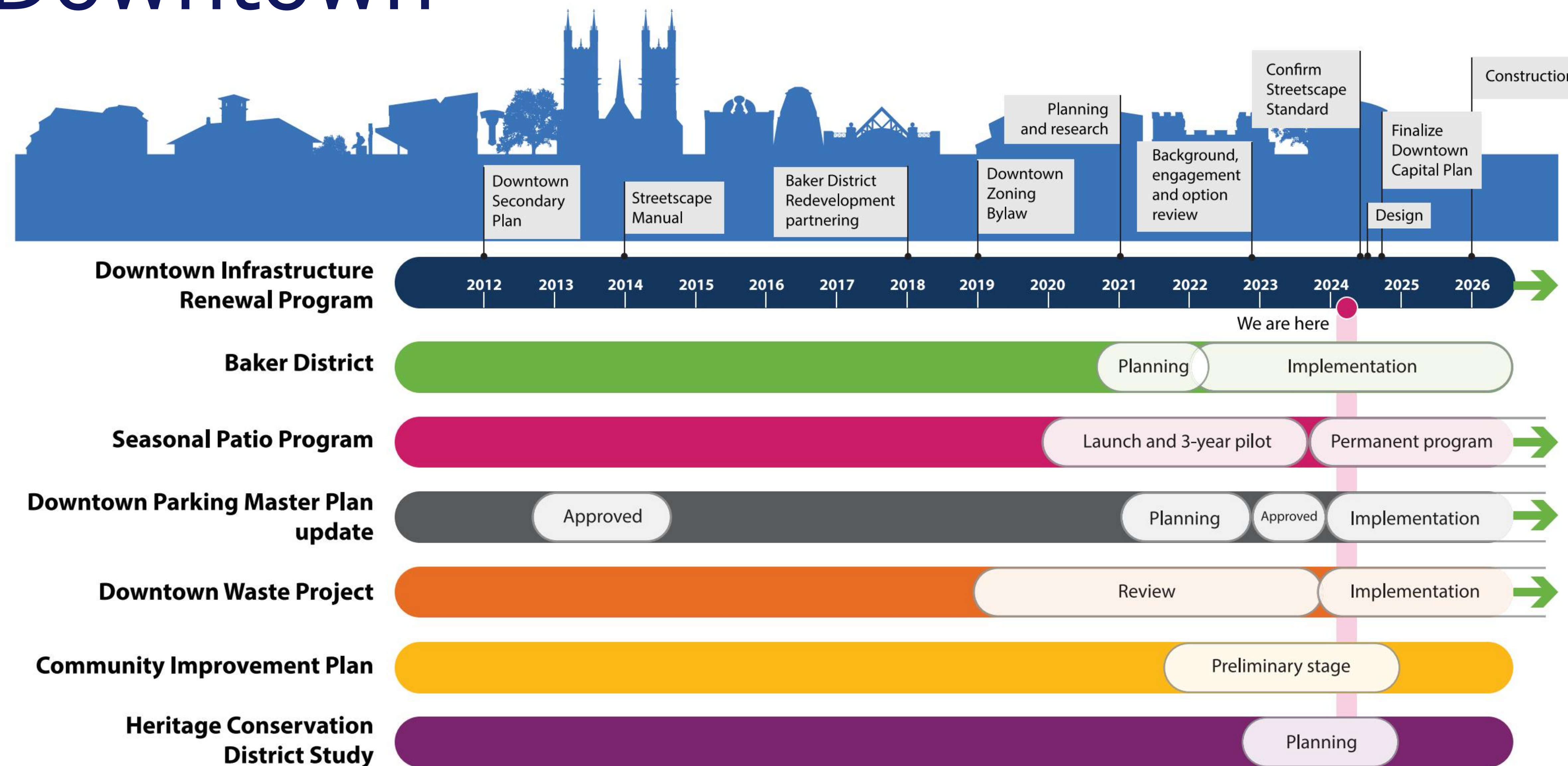


What is the Municipal Class Environmental Assessment Process?

- Ensures all reasonable options are considered.
- Reduces impact on the natural, cultural, social and economic environment.
- Input from the public, interested parties, Indigenous Communities, and technical agencies is essential.

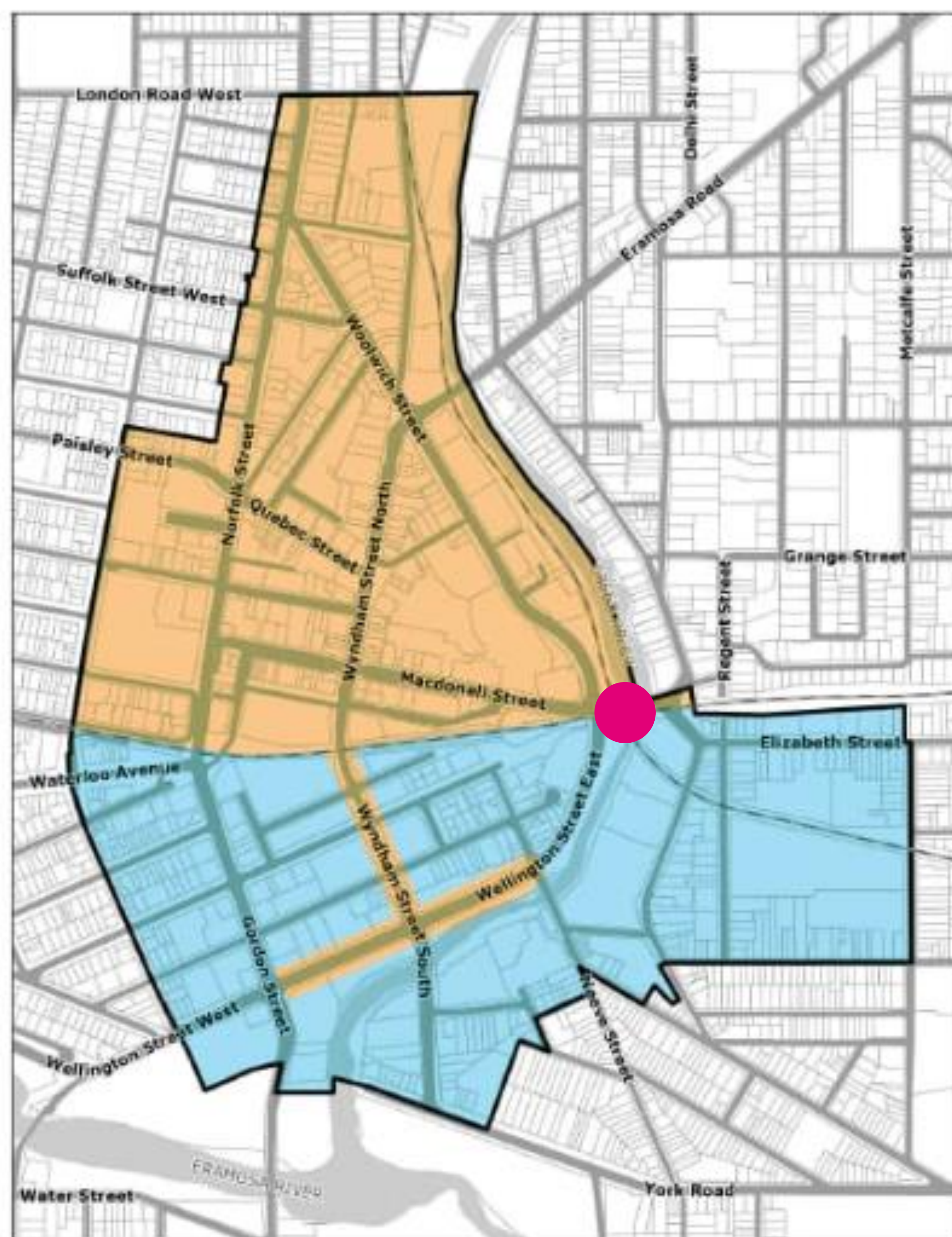


Our Future Downtown



The **Downtown Renewal program** is a massive undertaking by the City to transform how Downtown Guelph looks, feels, and functions, while also preserving its unique cultural heritage. The City is making significant investments in infrastructure, redevelopment, and transportation to make Downtown Guelph an even stronger cultural and civic hub for the City and the wider area. Our renewal efforts will create the foundation for future prosperity, sustainability, and well-being in the Downtown.

Downtown Infrastructure Renewal Program (DTIRP)



Scope: Reconstruction of municipal infrastructure within the Downtown Secondary Plan area north of the Metrolinx corridor, plus Wyndham Street South and Wellington – area in orange.

Drivers: Enable growth and maintain state of good repair of municipal infrastructure within the Downtown Secondary Plan Area

Projects:

- Wyndham St. N. EA (completed)
- **Macdonell and Allan's Structures EA**
- Capital Implementation Plan
- Wyndham /Wellington Water and Wastewater Capacity Improvements – DTIRP Phase 0
- Wyndham St N. – DTIRP Phase 1

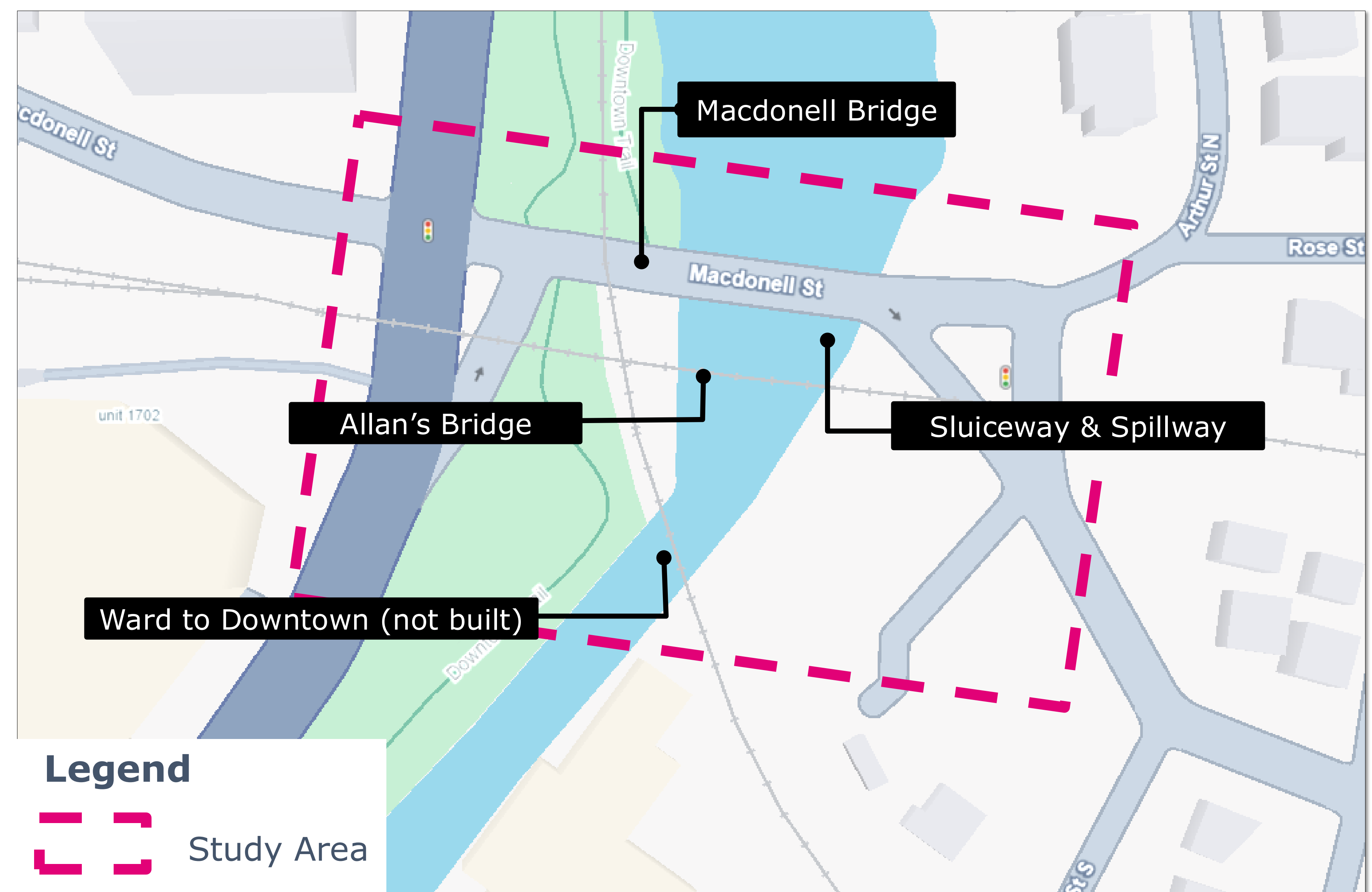


**Downtown
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Macdonell Bridge and Allan Structures EA – Study Area and Goals

- Part of the City's Downtown Infrastructure Renewal Program (DTIRP)
- Address structural deficiencies identified in recent bridge inspections.
 - Macdonell Bridge
 - Allan's Bridge
 - Sluiceway & Spillway
- Review options for the Ward to Downtown pedestrian/cyclist crossing
- Enhance road safety, operations, and connectivity for vehicles, pedestrians, cyclists and transit to support the community building goals of the City.



Macdonell and Allan's Structures Class EA Study Area

Ward to Downtown Pedestrian Bridge

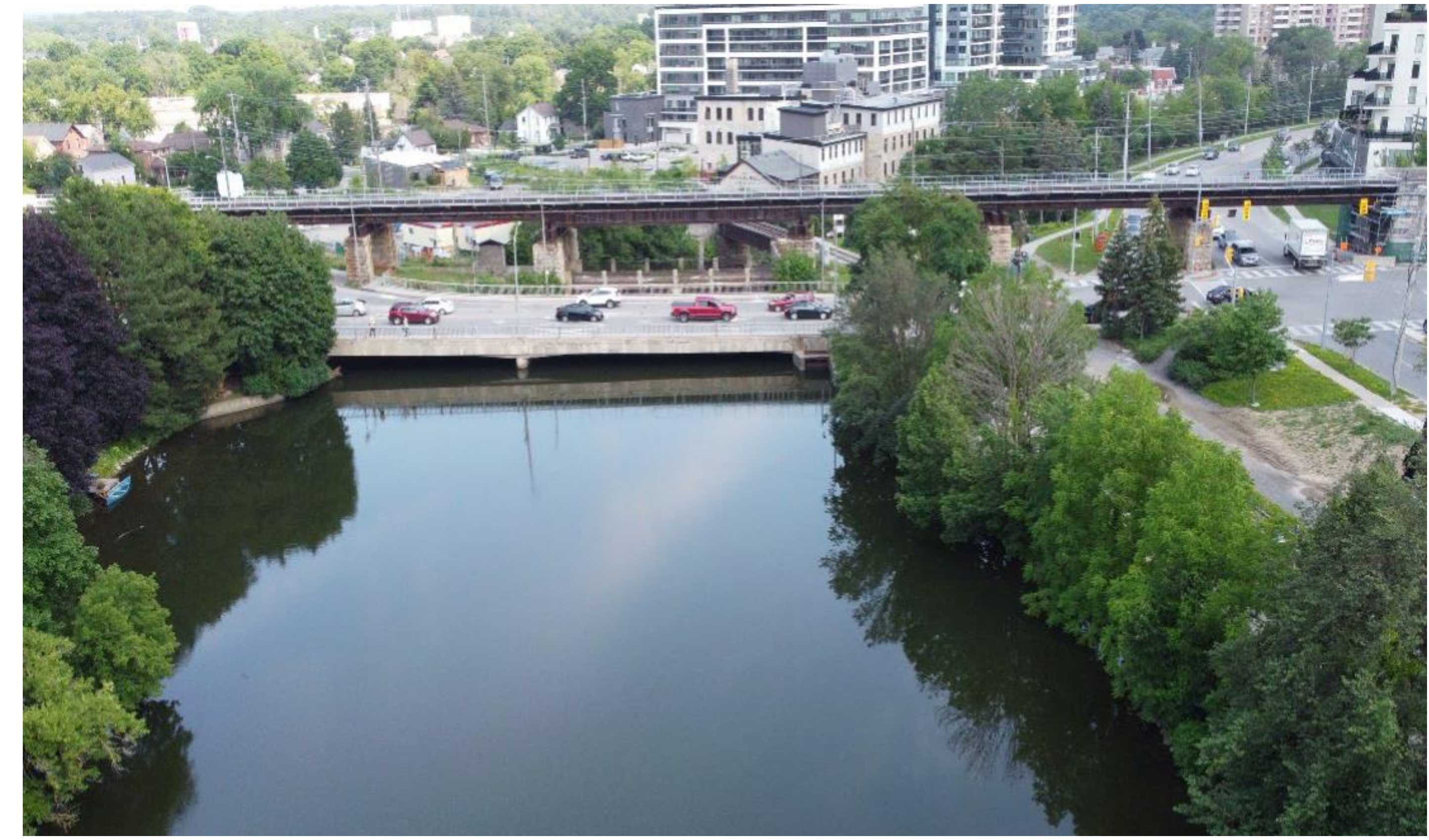
- Original EA initiated in 2017 in response to the predicted future growth and to provide connectivity across the Speed River between St. Patrick's Ward and Downtown.
- Recommended a crossing ~40m south of Macdonell Street, immediately south of the GJR Rail Bridge.
- Ultimately cancelled due to impacts on heritage properties due to excavation, property impacts, and cost.
- The need and justification, and alternatives review added to the scope of the Macdonell and Allan's Structures Class EA.



Recently cancelled 2023 tendered Ward to Downtown Pedestrian Bridge

Macdonell Bridge Alternatives

- 1. Do Nothing:** No improvements. Bridge continues to deteriorate.
- 2. Rehabilitate Bridge:** Undertake repairs to the existing bridge.
- 3. Rehabilitate + Widen the Bridge:** Undertake repairs to the existing bridge and widen up to 4.3m to accommodate active transportation facilities.
- 4. Replace Bridge for Vehicular Traffic Only:** Full bridge replacement with no opportunity for active transportation facilities improvements.
- 5. Replace + Widen Bridge to Accommodate AT*:** Full bridge replacement and widen to accommodate a multi-use path on the north side and sidewalk on the south side.



Macdonell Bridge Aerial View



Macdonell Bridge

Allan's Bridge Alternatives

1. **Do Nothing:** No improvements. Bridge continues to deteriorate.
2. **Minor Rehabilitation for Heritage Purposes Only:** Bridge is rehabilitated for cultural heritage purposes only with no active transportation accommodation.
3. **Rehabilitate Bridge for Pedestrians & Cyclists:** Superstructure is replaced to accommodate active transportation facilities.
4. **Remove Bridge:** Bridge is removed entirely.



























Allan's Bridge



Allan's Bridge Closure

Evaluation of Allan's Bridge Alternatives

EVALUATION CRITERIA	1. Do Nothing		2. Minor Rehabilitation of Bridge for Heritage Purposes Only		3.Rehabilitate Bridge for Pedestrians & Cyclists		4. Remove Bridge	
STRUCTURAL / TECHNICAL		Structural issues not addressed. Bridge would continue to deteriorate.		Some structural issues addressed. Bridge may require additional maintenance in the future.		Most structural issues addressed. Reduced concerns for durability and maintenance in the future.		No structural, durability or safety issues with the removal of bridge.
TRAFFIC OPERATIONS & SAFETY		No improvements.		Relocation of active transportation users to alternative routes (Macdonell St. & Ward to Downtown pedestrian bridge)		Improves active transportation facilities and connectivity to Downtown. Sightline issues with oncoming trains for peds & cyclists users.		Relocation of active transportation users to alternative routes (Macdonell St. & Ward to Downtown pedestrian bridge)
SOCIAL ENVIRONMENT		No changes to existing aesthetics of the bridge. Does not improve recreational value as active transportation is not accommodated.		No changes to existing aesthetics of the bridge. Does not improve recreational value as active transportation is not accommodated.		3rd active transportation crossing within study limits not required.		Removal of bridge will improve views of Speed River from Macdonell Bridge.
NATURAL ENVIRONMENT & CLIMATE CHANGE		No anticipated impacts on the natural environment. No changes.		No anticipated impacts on the natural environment. No changes.		No anticipated impacts on the natural environment.		Some minor anticipated impacts from bridge removal. Reduces overall footprint within Speed River.
HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS		Continued deterioration of cultural heritage resource. Confirm archeological.		Minor impact to a Known Built Heritage Resource. Confirm archeological.		Significant impact to a Known Built Heritage Resource. Confirm archeological.		Removal of a Known Built Heritage Resource can be mitigated through comemorative strategy
COST		\$2.9M Lifecycle costs		\$800K capital costs; \$1.6M lifecycle costs		\$1.9M capital costs; \$2.4M lifecycle costs		\$740K capital costs
OVERALL SCORE	12.0		12.0		9.0		14.0	
EVALUATION SUMMARY	Not Recommended		Not Recommended		Not Recommended		Recommended to be Carried Forward	

Commemorating Allan's Bridge

A commemorative strategy will be developed for Allan's Bridge, which may include:

- A commemorative plaque celebrating Allan's Bridge
- A lookout point where the Bridge was located
- Salvage and reuse of key components of the existing bridge
- Replicate the Allan's Bridge aesthetics on the new Ward to Downtown Multi-Use Trail Crossing



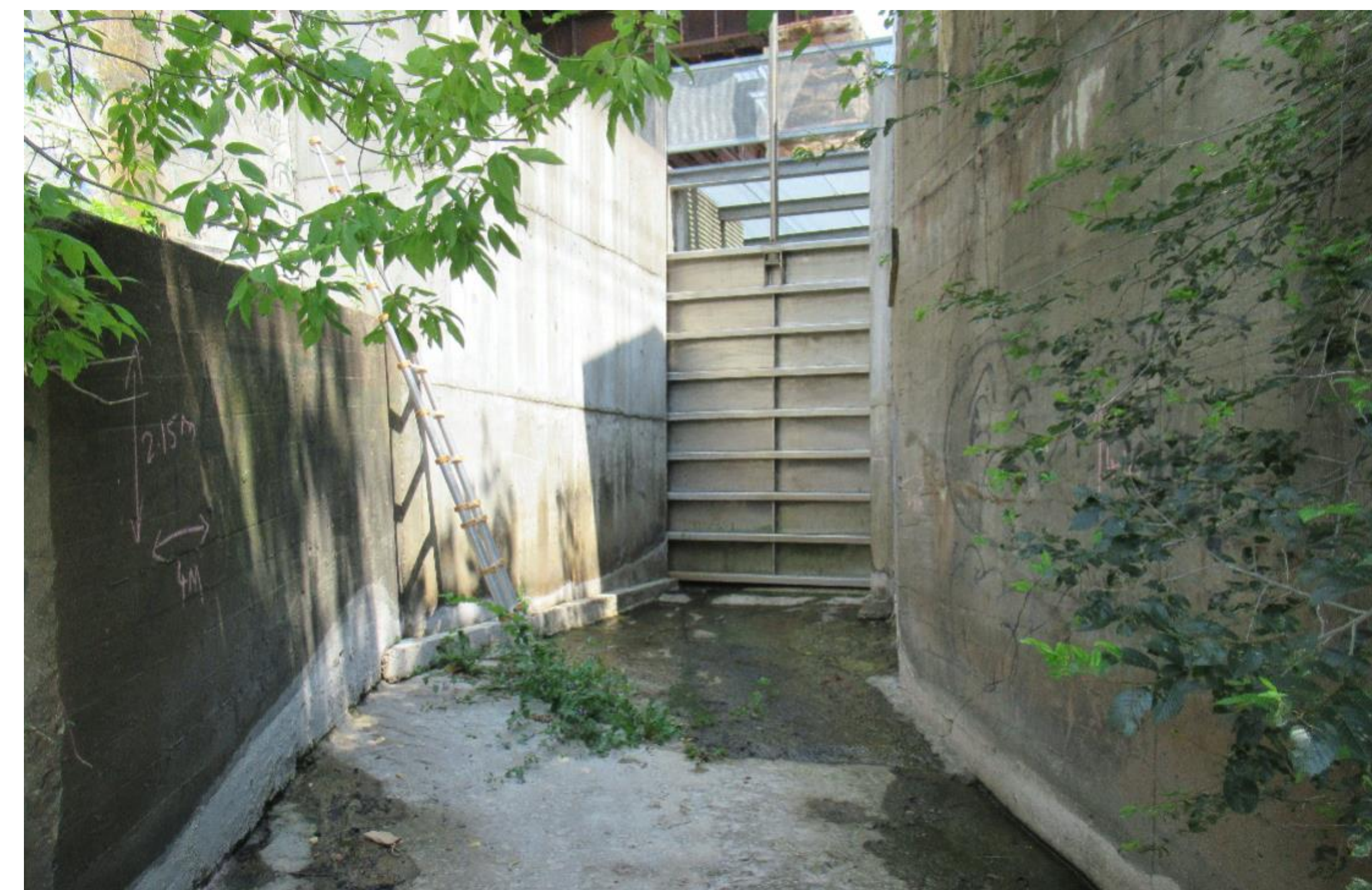
Burgoyne Bridge Plaque



Burgoyne Bridge, St. Catharines

Allan's Dam Sluiceway & Spillway Alternatives

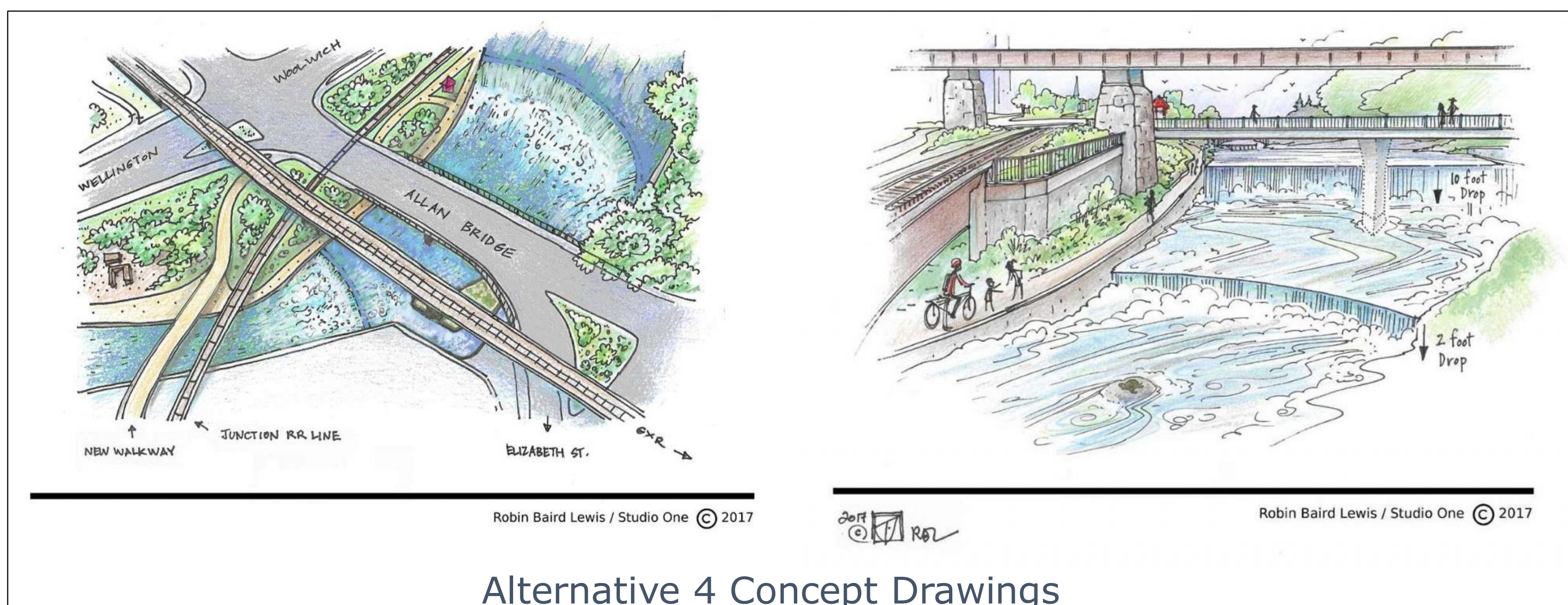
1. **Do Nothing:** No improvements. Sluiceway and spillway continue to deteriorate.
2. **Rehabilitate Sluiceway and Spillway:** Undertake necessary repairs to the existing sluiceway and spillway.
3. **Remove Sluiceway and Spillway:** Complete removal of the existing sluiceway and spillway. Speed River elevation is no longer controlled.
4. **Remove Sluiceway and Spillway and Build a New Dam Upstream with an Active Transportation Underpass:** Speed River elevation is controlled by a new dam further upstream, and an active transportation underpass is implemented under Macdonell Bridge.



The sluiceway is a concrete channel with a metal gate to carry excess water.



The spillway forms a weir to control the Speed River elevation, previously used for the now-removed Allan's Mill.



Alternative 4 Concept Drawings

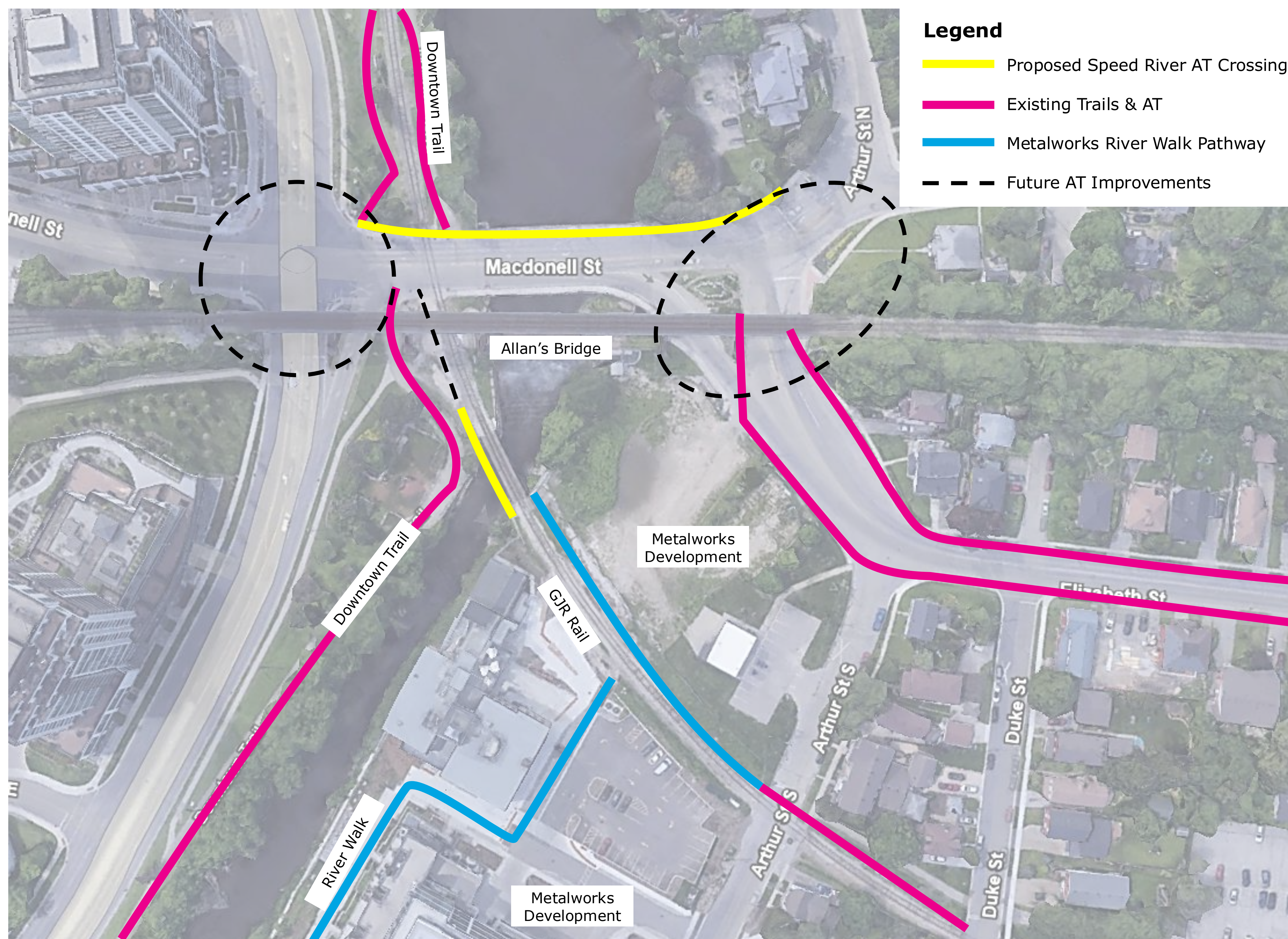
Ward to Downtown Multi-Use Trail Bridge Alternatives

1. **Do Nothing:** The Ward to Downtown Multi-Use Trail Bridge Crossing is not constructed and pedestrians and cyclists would be redirected to other bridges/crossings.
2. **Construct 2023 Tendered Bridge:** The Ward to Downtown Multi-Use Trail Bridge Crossing is constructed as per the City's recently cancelled 2023 Tender design.
3. **Construct a Modified Structure on South Side of GJR Rail Bridge:** The Ward to Downtown Multi-Use Trail Bridge Crossing is constructed in the previously identified location with a modified design using micro piles to reduce excavation requirements.
4. **Construct a Modified Structure on North Side of GJR Rail Bridge:** The Ward to Downtown Multi-Use Trail Bridge Crossing is constructed along the north side of the existing GJR Bridge.



Proposed location of Ward to Downtown Multi-Use Trail Bridge Crossing

Overall Recommended Solution



Pros:

- ✓ AT on Macdonell Bridge improves connectivity to Downtown and within the Cycling Network.
- ✓ Addresses trespassing / safety issues on GJR Rail Bridge
- ✓ Supports *City Policy (OPA 43)* to increase the number of crossings over the Speed River into the downtown core
- ✓ Provides direct link to proposed trail through St. Patrick's Ward between Macdonell Street and Huron Street

Cons:

- ✗ Removal of Designated Heritage structure (Allan's Bridge)
- ✗ Potential for minor encroachment into private cultural heritage property.

Capital Cost (structures only):
\$13.5M

Next Steps

1. Consult with additional stakeholders and technical agencies, as required, and complete necessary studies.
2. Confirm the preferred solution(s) in consideration of feedback heard from public, stakeholders, and technical agencies.
3. Prepare a Project File Report documenting the Class EA planning and design process followed.
4. Obtain Council approval on the study recommendations.
5. Submit Project File Report for 30-day public review.

Questions & Feedback