MINISTRY OF TRANSPORTATION OF ONTARIO, EASTERN REGION

GWP 4203-15-00
Hawkesbury Bridge Replacements
Transportation Environmental Study Report Addendum



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THE PUBLIC RECORD

An electronic version of this Transportation Environmental Study Report (TESR) Addendum is available for review on the project website at www.cr17bridges.com.

Ce document hautement spécialisé n'est disponible qu'en anglais en vertu du règlement 671/92, qui en exempte l'application de la Loi sur les services en français. Si vous vouloir des renseignements en français, veuillez contacter l'une des personnes suivantes de l'équipe de projet : Brad Craig (BCraig@dillon.ca) ou Joanna Zhang (Joanna.Zhang2@ontario.ca).

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Acronyms, Abbreviations, Definitions

Acronym or Abbreviation	Definition
AA	Archaeological Assessment
ACM	Asbestos-containing Material
The Addendum Study	Hawkesbury Bridge Replacements TESR Addendum Study
APU	Assessment of Past Uses
CNR	Canadian National Railway
CR	County Road
DFO	Fisheries and Oceans Canada
E-N/S Ramp	Westbound off-ramp
EA	Environmental Assessment
ESC	Erosion and Sediment Control
m	metre
MECP	Ministry of the Environment, Conservation and Parks
MNRF	Ministry of Natural Resource and Forestry
MTAC	Municipal Technical Advisory Committee
MTO Class EA	Class Environmental Assessment for Provincial Transportation Facilities
MTO	Ontario Ministry of Transportation
N/S-W ramp	Westbound on-ramp
NHIC	Natural Heritage Information Centre
OGN	Ontario Government Notice
PIC	Public Information Centre
ROW	Right-of-way
SAR	Species at Risk
SCC	Species of Conservation Concern
TESR	Transportation Environmental Study Report
W-N/S ramp	Eastbound off-ramp
UCPR	United Counties of Prescott and Russel
The Undertaking	Hawkesbury Bridge Replacements

1.0 Overview of the Undertaking

1.1 Project Summary

In November 2020, the Ministry of Transportation (MTO) completed the Preliminary Design and Transportation Environmental Study Report (TESR) for the Hawkesbury Bridge Replacements ("the Undertaking"). The Study Area consists of the Canadian National Railway (CNR)/Hawkesbury Creek Overhead and the County Road (CR) 17 Underpass at Highway 34 (referred to as the Highway 34 Overpass in the 2020 TESR) in the United Counties of Prescott and Russell (UCPR), as shown in **Figure 1.**

As described in the 2020 TESR, major components of the Undertaking include:

- Replacement of the bridge structures;
- Modifications to the eastbound off-ramp (W-N/S ramp) and westbound on-ramp (N/S-W ramp) at the CR 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2020 and 2023, feasibility studies identified additional interchange configuration alternatives and associated construction staging alternatives for the Undertaking. Municipal consultation during that time also identified the desire for free-flow access entering CR 17, which the 2020 TESR Recommended Plan did not provide, and concerns were expressed regarding the recommended detour routes. As a result, in early 2024, MTO retained Dillon Consulting and Jacobs to review and update the TESR Recommended Plan and to complete a TESR Addendum for the Undertaking ("the Addendum Study"). The Addendum Study identified and evaluated new interchange configuration alternatives, construction staging alternatives and detour route alternatives. **Table 1** provides a summary of the changes to the 2020 TESR Recommended Plan that are now recommended and documented in this TESR Addendum. Property requirements, utility protections or relocations and environmental impacts were also reassessed based on the changes to the Recommended Plan.

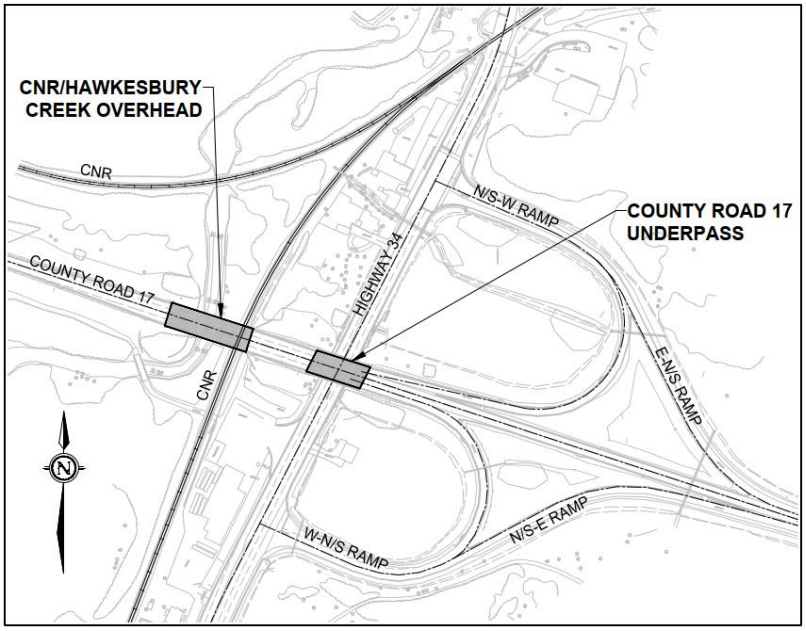


Figure 1. Study Area

Table 1. Summary of Changes to the Recommended Plan

Recommended Plan Feature	2020 TESR Recommendation	TESR Addendum Recommendation
General Bridge Arrangement	The new CNR/Hawkesbury Creek Overhead will be a 71.0 metre (m) two-span bridge with a span arrangement of 38.0 m (west span) and 33.0 m (east span). The two spans will be continuous over the Hawkesbury Creek (west span) and over the CNR tracks (east span). The new replacement structure for the CR 17 Underpass will be a single span bridge with a total length of 36.0 m.	No change.
Alignment and Profile	The existing alignment of CR 17 will be maintained. The vertical profile for the replacement structures will be raised marginally (maximum 500 mm) in order to provide the minimum vertical clearance of 7.01 m over CNR tracks and to provide the minimum vertical clearance of 5.0 m over Highway 34.	No change.
Cross-sections	• The replacement bridges will be reduced from four to two lanes (eliminating the existing speed change lanes). • The proposed cross-section of the new replacement structures has a total width of 13.0 m and includes: ○ 0.5 m North Barrier Wall ○ 2.5 m Shoulder ○ Two 3.5 m Travelling Lanes ○ 2.5 m Shoulder ○ 0.5 m South Barrier Wall	• The replacement bridges will maintain four lanes (two travelling lanes and two speed change lanes). • The proposed cross-section of the new replacement structures has a total width of 18.0 m and includes: ○ 0.5 m North Barrier Wall ○ 1.5 m Shoulder ○ Two 3.5 m Travelling Lanes ○ Two 3.5 m Speed Change Lanes ○ 1.5 m Shoulder ○ 0.5 m South Barrier Wall
Interchange Configuration	• A new intersection of the CR 17 and Highway 34 N/S-W and W-N/S ramps is recommended. The W-N/S ramp will be facilitated via a channelized right turn including a right turn lane and the N/S- W ramp will be facilitated by a stop control T-Intersection with no acceleration lane.	• The CR 17 and Highway 34 interchange will maintain the existing free-flow interchange configuration with a like-for-like replacement of the N/S-W and W-N/S ramps.
Construction Staging	• The bridges will be replaced via lateral slide which uses accelerated bridge replacement construction, whereby the new bridge decks are constructed on temporary supports immediately north of the existing bridges. When the foundations are constructed, and new bridge decks are complete, the existing	• Construction staging alternatives for three and four-lane structures were evaluated, and lateral slide is still recommended.

Recommended Plan Feature	2020 TESR Recommendation	TESR Addendum Recommendation
	bridges will be demolished, and the new bridges will be slid into place.	
Construction Traffic Management	• A two-to-four-week full closure of CR 17 is required to complete the work. CR 17 traffic will be detoured along CR 4 and Main Street heading east-west and along Tupper Street heading north-south. • Two or three weekend full closure of Highway 34 near the bridges is required to complete the work. During the weekend closures, Highway 34, traffic will be detoured via a temporary north-south bypass through the interchange.	• A three-to-five-week full closure of CR 17 is required to complete the work. CR 17 traffic will be detoured along CR 4 and Main Street heading east-west and along McGill Street heading north-south. • A minimum of three overnight full closures of Highway 34 at the bridges is required to complete the work. During the overnight closures, Highway 34 traffic will be detoured via a temporary north-south bypass through the interchange.
Utilities	• The low pressure Enbridge gas main located on the west side of Highway 35 at the CR 17 Underpass west abutment will be protected during construction. • An existing guy wire supporting the hydro pole in the northwest quadrant of the CR 17 and Highway 34 intersection will be removed and replaced with three temporary guy wires located outside of the proposed work zone in advance of construction and will be reinstated to existing conditions following construction. • The existing underground Bell duct structure (and Cogeco cables within the Bell duct structure) under the east curb of Highway 34 will be relocated to accommodate the removal of the existing structure. • The existing Hydro One underground conduits located east of Highway 34 will be protected during construction. • The 400 mm diameter watermain located west of the CR 17 Underpass east abutment will be protected during construction.	• Isolated footings will be utilized to support the offline structures while spanning over the Enbridge gas mains. • To facilitate access and egress into the site for the offline construction of the structures, a conflicting guy wire of a Hydro One pole will be removed and the pole will be supported by push pole bracing during construction and replaced with guy wires once construction has completed. • No change to the protection or relocation of the existing underground Bell duct structure, the existing Hydro One underground conduits, and the 400 mm diameter watermain.
Property	• A standard grade separation reconstruction agreement between CNR and MTO in accordance with the Railway Safety Act is required to replace the existing Hawkesbury Creek & CNR Overhead structure.	• In addition to the CNR standard grade separation agreement, modifications to the Les Jardin Lamoureux Snack Bar property, located at 1466 Highway 34 are required to be in accordance with the Highway Corridor Management Manual.

1.2 Transportation Environmental Study Report (TESR) Addendum

As per the requirements of the MTO Class Environmental Assessment for Provincial Transportation Facilities (MTO Class EA), as amended in 2000, this TESR Addendum documents the Environmental Assessment (EA) process followed and the proposed changes to the Recommended Plan for the Hawkesbury Bridge Replacements since completion of the 2020 TESR. This Addendum also contains the following in respect to the Undertaking:

- Purpose and objectives of the Addendum;
- An overview of the EA Addendum process;
- Summary of the stakeholder, public and Indigenous Community consultation process undertaken during the Addendum Study;
- An inventory of updated existing conditions in the Study Area;
- The generation and evaluation of new interchange configuration, construction staging and detour route alternatives;
- Changes to the Recommended Plan;
- Anticipated impacts to the environment from the new Recommended Plan and identification of mitigation strategies; and
- Commitments to further work and environmental effects monitoring.

We encourage you to review the information in this TESR Addendum and contact the Project Team to discuss any questions, comments or concerns regarding information related to the project by **February 22, 2025.** Note that only the changes to the 2020 TESR, as documented in this TESR Addendum, are eligible for comment. Members of the Project Team that can be contacted include:

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In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for a Section 16 Order to require that a higher level of study be completed (that is, a Comprehensive EA) or that conditions be imposed (such as, requirement for further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester's contact information and full name and be received by **February 22, 2025.**

Requests should specify what kind of order is being requested (request for conditions or a request for a Comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request. This will ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Email: Minister.MECP@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4VV 1P5
Email: EABDirector@ontario.ca

Requests should also be copied to **Joanna Zhang, MTO**, by mail or by email (at the address provided above). Please visit the MECP website for more information on requests for orders under Section 16 of the Ontario *Environmental Assessment Act* at: https://www.ontario.ca/page/class-environmental-assessments-section-16-order

2.0 Environmental Assessment Process

2.1 Ministry of Transportation Class Environmental Assessment

The MTO Class EA (2000) is a provincially approved planning process that MTO must follow to meet the requirements of the Ontario *Environmental Assessment Act*. Under this process, existing environmental conditions are identified, alternatives are evaluated, mitigation measures are developed, and consultation is held with public, agency, interest and Indigenous groups to provide ample opportunity for comment throughout the study. Provided that this process is effectively followed, projects and activities included under the MTO Class EA do not require formal review and approval under the Ontario *Environmental Assessment Act*.

This study is following the approved environmental planning process for Group 'B' undertakings in accordance with the MTO Class EA (2000). Group B projects are defined as major improvements to existing provincial transportation facilities. In accordance with MTO's Class EA, any significant modification to the Undertaking that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent and the proponent must prepare a TESR Addendum in respect of the change(s). **Figure 2** illustrates the environmental assessment process followed for this study.

It is noted that in December 2023, a new amendment to the MTO Class EA was approved with a subsequent version approved in early 2024 to include reference to Municipal Expressways. The 2023 and 2024 amended documents state that within 12-months after the 2023 amendment to the Class EA came into effect, proponents may follow the requirements and procedures of either the Class EA as it read before that amendment or the amended Class EA. It was determined by MTO that the Addendum Study would continue to proceed in accordance with the MTO Class EA, as amended in 2000.

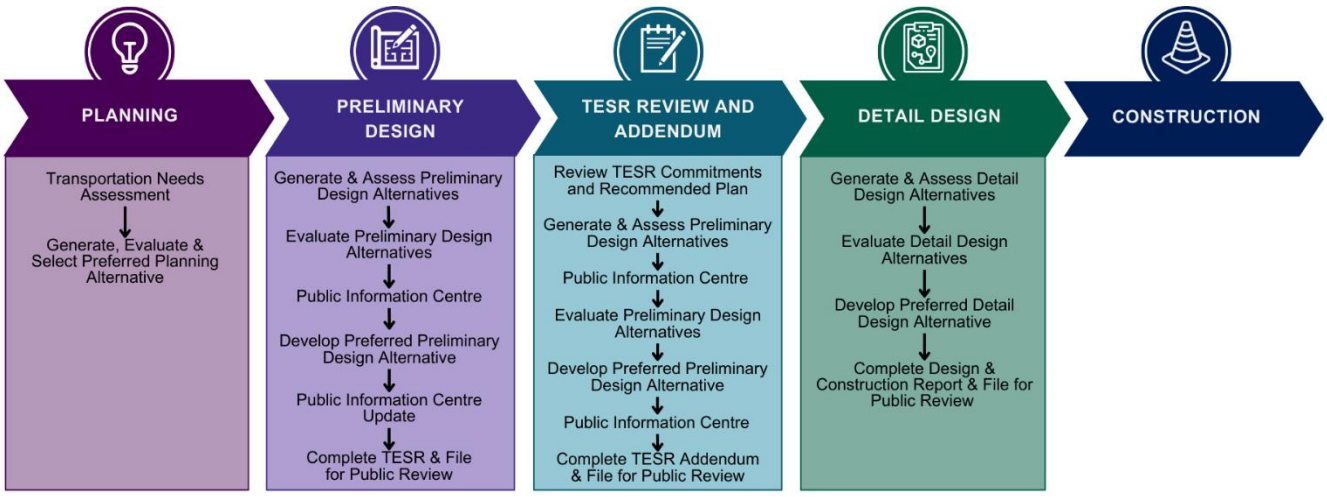


Figure 2. MTO Class EA (2000) Process for Group B Projects

2.2 Consultation Process

One of the objectives of the MTO Class EA is to ensure that every opportunity is given, from the earliest stages of project planning, for directly affected or interested parties to provide their comments, questions or concerns regarding the study and that their input is considered in decision-making. Therefore, it is a requirement for Group 'B' projects under the MTO Class EA to consult with federal and provincial agencies,

local municipalities, Indigenous communities, local elected representatives, external agencies, interest groups, and members of the public on an on-going basis throughout the Addendum Study.

For the Addendum Study, stakeholders, Indigenous communities and the public were kept informed of the project and were encouraged to provide input through the use of the following:

- Ontario Government Notices (OGNs) published in local newspapers;
- Notification letters sent via email to representatives on the contact list;
- A bilingual project webpage;
- Two in-person Public Information Centres (PICs);
- Filing of the TESR Addendum for public review.

2.2.1 Ontario Government Notices

OGNs have been published throughout the course of the Addendum Study to advertise the PICs and Filing of the TESR Addendum for 30-day public review. As the Project is in a French Language Service Area as designated by the *French Language Services Act*, English notices were published in The Review and French notices were published in Le Regional. A total of six OGNs were published, as listed in **Table 2**, and are included in **Appendix A**.

Table 2. OGN Newspaper Publishing

Notice	Newspaper	Date
Notice of PIC No. 1 (English)	The Review	May 1, 2024
Notice of PIC No. 1 (French)	Le Regional	April 30, 2024
Notice of PIC No. 2 (English)	The Review	October 9, 2024
Notice of PIC No. 2 (French)	Le Regional	October 8, 2024
Notice of Addendum (English)	The Review	January 22, 2025
Notice of Addendum (French)	Le Regional	January 21, 2025

2.2.2 Study Contact List

The project specific contact list, as documented in the 2020 TESR, includes local elected representatives; relevant federal, provincial and municipal departments; local emergency services; school boards and utility companies, potentially affected Indigenous communities, and local residents, businesses and interest groups that may be directly impacted by the Undertaking. The contact list was updated with current contacts for this TESR Addendum study and includes the parties listed in **Table 3.** As the Addendum Study progressed, additional individuals or organizations who expressed interest in the Hawkesbury Bridge Replacements were added to the contact list.

Table 3. Contact List Parties

Interest	Party / Organization
Indigenous Communities	• Algonquins of Pikwakanagan • Algonquins of Ontario • Métis Nation of Ontario – Consultation Unit
Local Elected Representatives	• MPP - Glengarry Prescott-Russell • Mayor of Hawkesbury • Mayor of Township of Champlain
Federal and Provincial Agencies	• Ministry of Tourism, Culture and Sport • Ministry of Natural Resources and Forestry • Ministry of Indigenous Affairs and Reconciliation • Raisin Region Conservation Authority
Utility Companies	• Allstream • Bell Canada • Cogeco Inc. • Enbridge Gas Distribution • Rogers Communications • Telus Corporation • Hydro Hawkesbury • Hydro One • Hawkesbury Waterworks
Municipal Technical Advisory Committee	• Town of Hawkesbury – Director of Public Works • UCPR – Director of Public Works • UCPR – Roads Manager • Township of Champlain – Director of Public Works • Ontario Provincial Police – Hawkesbury Detachment • Hawkesbury Fire Department
School Boards	• Conseil des Écoles Catholiques du Centre-Est • Conseil des Écoles Publiques de l'Est de l'Ontario • Upper Canada District School Board • Catholic District School Board of Eastern Ontario
General Public in Hawkesbury and L'Original	• Residents and local business representatives, as well as individuals and organizations who expressed interest in the project

2.2.3 Notification Letters

Prior to PIC No. 1, notification letters were sent out to the contact list notifying them that a TESR Addendum for the Hawkesbury Bridge Replacements was underway and that an in-person PIC would be held on May 16, 2024. The notification letter provided an overview of the Undertaking and the study process, contact information of Project Team members, the address of the project website, the time and location of the PIC and encouraged individuals to provide any comments or questions. Letters to local elected officials and Indigenous communities were signed and sent directly by MTO on April 29, 2024 and April 30, 2024, respectively. Notification letters were sent to external agencies and interest groups by Jacobs on behalf of Dillon on May 1, 2024.

Prior to PIC No. 2, notification letters were sent out to the contact list notifying them that a second in-person PIC would be held on October 17, 2024. The notification letter provided an overview of the Undertaking and the study process, contact information of Project Team members, the address of the project website, the time and location of the PIC and encouraged individuals to provide any comments or questions. Letters to local elected officials and Indigenous communities were signed and sent by MTO on September 24, 2024 and October 2, 2024, respectively. Notification letters were sent to external agencies and interest groups by Jacobs on behalf of Dillon on October 2, 2024.

At Study Completion, notification letters regarding the filing of the TESR Addendum were sent by MTO to elected officials on January 17, 2025 and to Indigenous Communities on January 21, 2025. Letters were sent to external agencies by Jacobs on behalf of Dillon on January 21, 2025**.**

Notifications letters were distributed via email where possible or otherwise by posted mail. The letters were provided in English and stated, in French, that the letter could be provided in French upon request. Sample notification letters are included in **Appendix B.**

2.2.4 Project Website

The *Accessibility for Ontarians with Disabilities Act* (AODA) compliant, bilingual project website used during the study process for the 2020 TESR (cr17bridges.com) was used during the Addendum Study to provide background information and key documentation, including the 2020 TESR, OGNs and PIC display materials.

2.2.5 Public Information Centres (PICs)

During the Addendum Study, two in-person PICs were held in Hawkesbury at the Royal Canadian Legion Branch 472 to provide an opportunity for interested parties to review and provide feedback on the Undertaking. Both PICs were organized as informal "drop-in" sessions which allowed attendees to review the displayed material (in French and English) at their leisure. Project team members were present at the venue to discuss the Project and answer questions. Attendees were encouraged to sign the sign-in sheet, discuss the Project with Project Team members, and submit comments via the comment sheets provided, by email, or via the project website.

PIC No. 1 was held on May 16, 2024 from 4:00 PM to 8:00 PM. Local elected representatives and municipal staff were also offered the opportunity to attend an advance session at the venue from 3:00 PM to 4:00 PM to meet and discuss with the Project Team. The purpose of PIC No. 1 was to provide an update on the Project and to present the design changes under consideration. The display boards were in English and French and covered the following topics:

- Project description
- Project background
- EA and addendum process
- Features of the 2020 TESR Recommended Plan under review
- Interchange configuration alternatives
- Construction staging alternatives
- Alternatives evaluation criteria and evaluation process
- Next steps (including project website address and Project Team contacts)

PIC No. 2 was held on October 17, 2024 from 4:00 PM to 7:00 PM. Local elected representatives and municipal staff were offered the opportunity to attend the venue from 3:00 PM to 4:00 PM. The purpose of PIC No. 2 was

to present the results of the evaluation and the updated Recommended Plan. The display boards were in English and French and covered the following topics:

- Project description
- Project background
- EA and addendum process
- Features of the 2020 TESR Recommended Plan under review
- Summary evaluation of interchange configuration alternatives
- The Preferred Interchange Configuration Alternative
- Summary evaluation of construction staging alternatives
- The Preferred Construction Staging Alternative
- Summary evaluation of detour routes
- The Preferred Detour Route Alternative
- Summary of changes to anticipated environmental impacts
- Next steps (including project website address and project team contacts)

Following the events, electronic copies of the display boards were posted to the project website. **Appendix C** also provides a copy of the display boards.

2.2.6 Comments Received

During PIC No. 1, comments were received and discussed verbally. One additional comment was received via email, and another was submitted through the project website following the event. Comments received indicated that generally, attendees were in favour of both interchange alternatives being carried forward for further assessment (alternatives 3 and 4), but that Alternative 4 was slightly more preferred.

During PIC No. 2, two comment sheets were submitted at the venue. Verbal discussions with attendees and comments received at the PIC indicated that generally, attendees were in favour of the Preferred Interchange Configuration Alternative and associated bridge configurations.

Table 4 provides a summary of all comments received and how they were addressed. **Appendix D** provides a copy of all comments and responses.

Table 4. Summary of Comments and Responses

No.	Date Received	Received Via	Party	Summary of Comment Received	How it was Addressed
01	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	There is need for an advanced green turning movement for south to west movements from Highway 34 to CR 17.	Warrants have been reviewed and an advanced green turning movement from Highway 34 to CR 17 is not warranted at this location.
02	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	The cement plant proposed west of the site has/will significantly increase truck volume.	Considered in the assessment of alternatives.
03	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	The Tupper Street intersection with CR 17 used to cause several collisions prior to signalization.	Considered in the assessment of alternatives.
04	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Traffic through Hawkesbury during the PIC seemed to be heavier than typical due to the upcoming long weekend.	Considered in the assessment of alternatives.
05	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Everyday there is significant traffic at 4:00 pm from Vankleek Hill to Hawkesbury.	Considered in the assessment of alternatives.
06	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Main Street East at Cameron/Champlain Street is a pinch point along one of the detours under its current condition due to on street parking and narrow right-of-way (ROW), especially for trucks.	Considered in the assessment of detour route alternatives.
07	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	The connecting link funding will be used to upgrade signals along McGill Street.	Noted.
08	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Recommendation to check contract documents for requirements for vibration monitoring of the high-pressure concrete pipe watermain that runs N/S immediately east of the structures.	A requirement to monitor the watermain during construction has been documented in the Preliminary Design Report for the next phase of design.
09	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Recommendation to review the County/Municipality Council Meeting Minutes for details of the previous project presentation.	Noted and reviewed.
10	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Festivals within Hawkesbury are the last weekend of June, the Labour Day long weekend, and sometime in August.	Noted for the assessment of detour route alternatives and development of the construction schedule.
11	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	The detour ramp surfing needs to be revised as it is not necessary to close CR 17 under all stages.	A three-two-five-week closure of CR 17 is required to demolish the existing bridges, complete the new abutments and piers, jack and slide the new structures into place, and construct a grade raise and associated ramp tie-ins. During this closure traffic will be detoured along Main Street / CR 4 heading east-west and along McGill Street heading north-south. A minimum of three overnight closures of Highway 34 are required to demolish the existing CR 17 Underpass, erect new girders, and jack and slide the new structure into place. Ramp-surfing will only be in place for overnight closures of Highway 34 and CR 17.
12	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	The horizontal curve south of the structures on Highway 34 causes some sight distance issues.	This horizontal curve is outside the study area for this project.

No.	Date Received	Received Via	Party	Summary of Comment Received	How it was Addressed
13	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Significant industrial and commercial development is planned for around Tupper Street.	Considered in the assessment of alternatives.
14	May 16, 2024	Verbal Discussions	PIC No. 1 Attendee(s)	Generally, in favour of both interchange configuration alternatives, but more so Alternative 4.	Considered in the assessment of interchange configuration alternatives.
15	May 31, 2024	Project Website	Public	As a daily user of the interchange, I support rebuilding the bridge with same current configuration despite this being a more costly option. The bridge will be built with a lifespan of 50-75 years, so this extra cost is minimal and building it wider helps plan for future widening. I do not support the speed reduction on the bridges with the stop-go configuration alternative.	Considered in the assessment of interchange configuration alternatives.
16	May 31, 2024	Email	Ministry of Citizenship and Multiculturalism	Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of PIC#1 for the above-referenced project. Please find MCM's initial letter on this project attached[1]. Do not hesitate to contact us if you have any questions or require further information.	Considered in the assessment of alternatives and environmental impacts and mitigation measures. No known archaeological sites, cultural heritage landscapes or built heritage resources will be impacted by the project.
17	October 17, 2024	Verbal Discussions	PIC No. 2 Attendee(s)	Generally, in favour of the selected interchange configuration.	Noted for confirmation of the Preferred Interchange Configuration Alternative.
18	October 17, 2024	Verbal Discussions	PIC No. 2 Attendee(s)	Inquiries about timing of project implementation.	Construction will be completed in three phases over two construction seasons and is anticipated to commence in 2027.
19	October 17, 2024	Verbal Discussions	PIC No. 2 Attendee(s)	Recommendation for an advanced green phase for left-turning vehicles at the north ramp terminal entering the N-W Ramp.	Warrants have been reviewed and an advanced green is not warranted at this location.
20	October 17, 2024	Verbal Discussions	PIC No. 2 Attendee(s)	Questions regarding signal warrant at the south ramp terminal under existing conditions.	Warrants have been reviewed and signals are not warranted at this location.
21	October 17, 2024	Verbal Discussions	PIC No. 2 Attendee(s)	What are the signal requirements at CR 24 and CR 4 during the closure of CR 17?	Temporary signals are not required at this location during the detour of CR 17.
22	October 17, 2024	Comment Sheet	Public	The original proposed design would be dangerous for westbound truckers. The current configuration and the selected alternative are safer for truckers.	Noted for confirmation of the Preferred Interchange Configuration Alternative.
23	October 17, 2024	Comment Sheet	Public	The new alternative is good, and the Highway 34 closures will have minimal impacts. Local residents can further alleviate traffic congestion during Highway 34 closures by planning around closure dates.	Noted for confirmation of the Preferred Interchange Configuration Alternative.

1. **Appendix D** provides a copy of the letter.

2.2.7 MTAC Meetings

A Municipal Technical Advisory Committee (MTAC) was established with Public Works staff from the Town of Hawkesbury, Township of Champlain, the UCPR and local Emergency Services. A list of the MTAC representatives is included in the contact list, as listed in **Table 3**. The Project Team met with the MTAC at key project milestones to discuss project specific issues and ensure municipal interests were considered as the design progressed. Two MTAC meetings were held virtually during the Addendum Study. The first meeting was held on March 26, 2024 to reintroduce the Project and provide an update, and to present the alternatives under consideration. The second meeting was held on August 15, 2024 to provide a project status update, review the Preferred Alternative, and to discuss construction staging, traffic impacts and other municipal impacts. MTAC representatives were generally in favour of the Preferred Alternative for the interchange configuration. MTAC meeting notes are included in **Appendix F.**

2.2.8 Indigenous Consultation

Consultation with Indigenous communities, including First Nations and Métis, was carried out in accordance with the Provincial Environmental Office Info-Bulletin Consultation with Aboriginal Peoples (December 2009). A list of identified Indigenous communities that could be potentially impacted by the works is included in the contact list, as listed in **Table 3**. Letters were sent to Indigenous community representatives prior to both PICs and at Filing of the TESR Addendum. No responses were received. Sample Indigenous community notification letters are included in **Appendix B.**

3.0 Existing Conditions Updates

The Project Team reviewed the 2020 TESR to update the documentation of existing conditions. This section provides a summary of the updated existing conditions within the Study Area.

3.1 Structures

3.1.1 Condition Assessment

The 2020 TESR noted that a structural site investigation of both bridges conducted on November 7, 2017, found the condition of both bridges to be generally fair with localised areas in poor condition. Updated structure site investigations of both bridges were conducted by Jacobs on November 15 and 16, 2023. The investigations were limited to a general visual inspection of the accessible bridge elements to confirm the findings of a previous MTO Ontario Structure Inspection Manual inspection (dated December 30, 2022). The condition of both bridges was identified as still fair with localised areas in poor condition, as shown in **Figure 3** to **Figure 6.**



Figure 3. CR 17 Underpass Bridge Deck



Figure 5. CNR/Hawkesbury Creek Overhead Bridge Deck



Figure 4. Under-deck of CR 17



Figure 6. South View of CNR/Hawkesbury Creek Overhead

3.2 Natural Environment

3.2.1 Methodology

The 2020 TESR documented the existing natural heritage conditions of the Study Area based on background information reviews and field investigations completed in 2015 and 2017 and documented in the Terrestrial Ecosystem Existing Conditions Report (MMM Group 2017), Terrestrial Ecosystem Impact Assessment Report (TEIAR; Dillon 2019), and Fish and Fish Habitat Impact Assessment Report (Dillon 2019), respectively.

As part of the feasibility studies for alternative interchange configurations, an update to the existing natural heritage conditions was completed by Dillon in 2020 and included a revised (extended to the east) study area, as shown in **Figure 7**. This update consisted of a desktop study of the vegetation communities, the Tributary to Hawkesbury Creek and Species at Risk (SAR) screening for the additional lands to the east as well as the existing TEIAR Study Area, along with a field investigation visit to ground truth the findings and to further update the existing conditions information for the revised study area.

Upon initiation of this TESR addendum, another update to terrestrial and aquatic existing conditions was completed in May 2024 via desktop evaluation of existing reports, field investigation results and online available sources, including:

- Ministry of Natural Resource and Forestry (MNRF) Natural Heritage Information Centre (NHIC) online database;
- MNRF's Land Information Ontario Database;
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk (SAR) Online Mapping Tool; and
- Various wildlife atlases, including:
    - Ontario Breeding Bird Atlas (Bird Studies Canada, 2024);
    - Ontario Butterfly Atlas (MNRF, 2024);
    - Ontario Herpetofaunal Atlas (ORAA, 2024);
    - Ontario Odonata Atlas (MNRF, 2024); and
    - Atlas of the Mammals of Ontario (MNRF, 2024).

Reports previously completed for the Project were reviewed to identify any updates to vegetation communities, natural heritage features and SAR in the Study Area since 2020. The 2024 desktop review did not include confirmatory on-site assessments or evaluations. The review was documented in the *County Road 17 Bridge Replacements (GWP 4023-15-00) Natural Heritage Existing Conditions Update Memo 2024*, provided in **Appendix F**.

3.2.2 Vegetation Communities

The 2020 update mapped detailed vegetation communities using the Ecological Land Classification (ELC) for the revised study area and verified and updated the ELC communities documented in the TESR. **Figure 7** shows the ELC communities within the Study Area and **Table 5** describes the ELC communities not previously documented in the 2020 TESR. The mapping of ELC communities previously identified in the TESR remains largely the same with minor changes including, the gravel lot now occurs as a Golden Forb Meadow (MEFM1-1), a small isolated Fresh-Moist Poplar Deciduous Forest (FODM8-1) along Highway 34 now occurs as a Dry-Fresh Manitoba Maple Deciduous Forest (FODM4-5) and the Dry-Fresh Sugar Maple-Beech Deciduous Forest (FOD5-2) now contains a Fresh-Moist Manitoba Maple Lowland Deciduous Forest (FODM7-7).

Table 5. Descriptions of Additional ELC Communities within the Study Area

ELC Code	Classification	Vegetation
FODM3	Dry-Fresh Poplar-White Birch Deciduous Forest	This forest community canopy and sub-canopy was dominated by Paper Birch (*Betula papyrifera*) with occasional to rare Trembling Aspen (*Populus tremuloides*). The ground layer contained an occasional abundance of sapling Trembling Aspen, Sensitive Fern (*Onoclea sensibilis*), Hairy Goldenrod (*Solidago hispida*) and rare Common Buckthorn (*Rhamnus cathartica*). The forest was observed to be a young to mid-age community with little to no snags.
FODM4-5	Dry-Fresh Manitoba Maple Deciduous Forest	This forest community canopy and sub-canopy contained mixture of abundant Manitoba Maple (*Acer negundo*) and Staghorn Sumac (*Rhus hirta*) with occasional occurrences of Trembling Aspen, Wild Black Cherry (*Prunus serotina*) and rare occurrences of Sugar Maple (*Acer saccharum*). The understory and ground layers contained occasional Virginia Creeper (*Parthenocissus quinquefolia*), Common Buckthorn, Wild Black Currant (*Ribes americanum*) and sapling Green Ash (*Fraxinus pennsylvanica*), Sugar Maple and Alternate-leaved Dogwood (Cornus alternifolia). Garbage and remnants of dumping were observed throughout. Evidence of Emerald Ash Borer (*Agrilus planipennis*) throughout with very rare snags and an abundance of deadfall.
FODM7-7	Fresh-Moist Manitoba Maple Lowland Deciduous Forest	This forest community canopy is dominated by Manitoba Maple with a sub-canopy that contained occasional to rare Manitoba Maple and American Elm (*Ulmus americana*). The understory and ground layers are densely occupied by an abundant combination of Sensitive Fern, Common Buckthorn, Black Raspberry (*Rubus occidentalis*), Virginia Creeper (*Parthenocissus quinquefolia*) and Poison-hemlock (*Conium maculatum*).
MAMM1	Graminoid Mineral Meadow Marsh	This marsh community was dominated by Lake-bank Sedge (*Carex lacustris*) with abundant Sensitive Fern and occasional to rare Purple Loosestrife (*Lythrum salicaria*) and Spotted Jewelweed (*Impatiens capensis*).
MAMM1-12	Common Reed Graminoid Mineral Meadow Marsh	This marsh community was dominated by European Common Reed (*Phragmites australis ssp.australis*) with rare occurrences of Narrow-leaved Cattail.
MAMM1-2	Cattail Graminoid Mineral Meadow Marsh	This marsh community was dominated by Narrow-leaved Cattail.
MASM1-1	Cattail Mineral Shallow Marsh	This marsh community was dominated by Narrow-leaved Cattail. Very shallow standing water was observed within this community (<0.05m).
MASM1-12	Common Reed Mineral Shallow Marsh	This marsh community was dominated by European Common Reed. Very shallow standing water was observed within this community (<0.05m).

ELC Code	Classification	Vegetation
MEFM1-1	Golden Forb Meadow	This meadow was dominated by Goldenrod species (*Solidago sp.*) with occasional Reed Canary Grass (*Phalaris arundinacea*) and Canada Anemone (*Anemone canadensis*).
MEGM4	Fresh-Moist Graminoid Meadow	This meadow community was dominated by Grass species (*Poaceae sp*.) such as Reed Canary Grass, Common Timothy (*Phleum pratense*) and Fowl Mannagrass (*Glyceria striata*).
SWDM4	Mineral Deciduous Swamp	This swamp community canopy was dominated by American Elm and Black Ash (*Fraxinus nigra*) with occasional Trembling Aspen. Ground layer contained occasional Sensitive Common Buckthorn and Canada Anemone and sapling Black Ash. Occasional Black deadfall was observed on the ground layer. Evidence of Emerald Ash Borer throughout.
SWDM4-5	Poplar Mineral Deciduous Swamp	This swamp community canopy was dominated by Trembling Aspen with occasional to rare Balsam Poplar (*Populus balsamifera*) associates. Ground layer contained abundant Sensitive Fern and occasional Philadelphia fleabane (*Erigeron philadelphicus*).
SWTM3	Willow Mineral Deciduous	This thicket was dominated by Peach-leaved Willow (*Salix amygdaloides*) with occasional Red-osier Dogwood (*Cornus sericea ssp sericea*) and Black Raspberry. The ground layer contained abundant Lake-bank Sedge with occasional Sensitive Fern and Purple Loosestrife.

Figure 7. 2020 Natural Environment Site Investigation Results



Vegetation Significance and Species at Risk

The TESR identified potential for significant woodlands and identified several units of unevaluated wetlands in the Study Area.

The presence and boundaries of woodlands in the Study Area was ground-verified in 2020. These woodlands were assessed based on the definition of significant woodlands in the Natural Heritage Reference Manual to determine whether they meet the criteria of significance. Based on the 2024 desktop review, no updates or changes were identified for the presence of woodlands in the Study Area.

Desktop reviews in 2020 and in 2024 reconfirmed that there are unevaluated wetlands but no significant wetlands within the Study Area.

The 2020 TESR also states that Butternut individuals were identified in the Study Area within the deciduous forest communities and eight Butternuts were assessed by a qualified Butternut Health Assessor in 2017. One Butternut individual was field verified as a hybrid (and as such, not afforded protection), and of the seven remaining, four were dead and three were in poor condition and were all assessed as non-retainable specimens (Category 1). During the 2020 update assessment, one additional individual was observed in the Study Area as a sapling in excellent condition. This individual did not undergo a formal Butternut health evaluation, and as such, has the potential to be categorized as a Category 2 (Retainable) or Category 3 (Archivable) tree. Potential for Butternut saplings within the Study Area may occur, as regeneration for Butternut has a likelihood since the completion of the 2017 Butternut assessment survey and report. Additionally, two previously identified Butternuts were uprooted and now occur as deadfall.

3.2.3 Wildlife Communities

The presence of Hawkesbury Creek enhances wildlife opportunity in the Study Area by increasing habitat diversity and offering a corridor for movement. The mix of forests, thickets, meadows and marshes along the creek is habitat preferred by many wildlife species; however, due to the proximity of urban development, wildlife use is limited to species tolerant of disturbed conditions. A general wildlife assessment was completed through incidental observations during the 2020 field investigations. The following species were observed and are considered common in the UCPR area:

- Eastern Gray Squirrel (*Sciurus carolinensis*)
- Gray Catbird (*Dumetella carolinensis*)
- Mallard (*Anas platyrhynchos*)
- Northern Flicker (*Colaptes auratus*)
- Wild Turkey (*Meleagris gallopavo*)
- Woodchuck (*Marmota monax*)

Significant Wildlife Habitat

Table 6 provides a summary of the habitat criteria and description of candidate and confirmed significant wildlife habitat in the Study Area, based on the ELC classifications for significant wildlife habitat as defined under the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015).

Table 6. Candidate and Confirmed Significant Wildlife Habitat

Significant Wildlife Habitat	Species	Habitat Criteria/Description
Seasonal Concentration Areas		
Bat Maternity Colonies (Candidate)	Big Brown Bat Silver-haired Bat	Supported by mixed and deciduous forests and swamps with large diameter dead or dying trees with cavities. Areas that have the potential to support bat maternity habitat include treed communities in the Study Area (that is, all FOD, SWM, SWD communities).
Turtle Wintering Areas (Candidate)	Midland Painted Turtle Snapping Turtle	Occur in permanent waterbodies and large wetlands with sufficient dissolved oxygen. Areas that have the potential to support turtle wintering in the Project footprint include drains, watercourses and Open Aquatic (OAO) areas where the depth of water during the overwintering period is such that it will not freeze. Preliminary criteria have identified all large open wetlands, watercourses and waterbodies in the Study Area to provide candidate habitat.
Rare Vegetation Communities or Specialized Habitat for Wildlife		
Amphibian Breeding Habitat (Woodland) (Candidate)	All amphibian species	Suitable specialized habitat type includes wetlands, ponds or areas that are likely to support vernal (seasonal) pooling that are within or adjacent to a woodland. Areas in the Study Area that have the potential to support amphibian breeding habitat include all FOD and WOD communities.
Amphibian Breeding Habitat (Wetland) (Candidate)	All amphibian species	Suitable habitat types include swamps, marshes, fens, and bogs which support high species diversity and contain presence of shrubs and logs to support structure for calling, foraging and concealment. Areas may contain permanent water bodies with abundant emergent vegetation.
Turtle Nesting Areas (Candidate)	Midland Painted Turtle Snapping Turtle (SC)	May be found where exposed mineral soil (sand or gravel) is found adjacent (less than 100 m) or within ELC communities such as shallow marshes (MAS) as documented within the Study Area. Best nesting habitat is close to water and away from roads and sites less prone to loss of eggs by predation. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not considered to be SWH.
Habitats of SCC Excluding the Habitats of Endangered and Threatened Species		
Special Concern and Rare Wildlife Species (Candidate)	All Special Concern and Provincially Rare species (S1-S3, SH) with potential habitat features in the Study Area.	Potentially suitable SWH for SCC species includes the FODM8-1 for Wood Thrush and Eastern-wood Pewee, and Tributaries 1 and 2 of Hawkesbury Creek for Silver Lamprey.
Special Concern and Rare Wildlife Species (Confirmed)	All Special Concern and Provincially Rare species (S1-S3, SH) identified in the Study Area during field investigations (Barn Swallow).	Barn Swallow were observed nesting under the CNR/Hawkesbury Creek Overhead.

Species of Conservation Concern

Based on the 2024 background review, six Species of Conservation Concern (SCC) have potential to occur in the Study Area, as listed in **Table 7**.

Table 7. SSC with Potential to Occur in the Study Area

Scientific Name	Common Name	SARA Status[1]	ESA Status[2]	S-Rank[3]
Chelydra serpentina	Snapping Turtle	SC	SC	S3
Thamnophis sauritus	Eastern Ribbonsnake	SC	SC	S4
Hylocichla mustelina	Wood Thrush	THR	SC	S4B
Contopus virens	Eastern Wood-pewee	SC	SC	S4B
Hirundo rustica	Barn Swallow	THR	SC	S4B
Ichthyomyzon unicuspis pop. *1*	Silver Lamprey (Great Lakes – Upper St. Lawrence populations)	SC	SC	S3

1. Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal *Species at Risk Act*, 2002; THR = Threatened; SC = Special Concern;
2. SAR in Ontario List under the provincial *Endangered Species Act*, 2007;
3. Ontario S-rank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperiled; S1 = critically imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario.

In 2020, a Breeding Bird Survey was completed at nine point-count monitoring stations across the Study Area and a total of 18 species were observed. All species observed are considered Secure (S-rank of S5), Apparently Secure (S-rank of S4) or not a suitable target for conservation activities (S-rank of SNA) in Ontario. A survey for migratory bird nests was also completed at the CNR/Hawkesbury Creek CNR Overhead, the CR 17 Underpass, and the exterior of the existing utility building on site. Barn Swallow nests were observed within the Study Area. Barn Swallow and their active nests are afforded protection under the *Migratory Birds Convention Act*.

Two species identified as SCC with potential to occur in the Study Area have been removed from the updated list. Northern Map Turtle (*Graptemys geographica*) has been removed from the updated list due to lack of suitable habitat in the Study Area, as this species typically inhabits large rivers and lakes, which are not present within the Study Area. River Redhorse (*Moxostoma carinatum*) has also been removed from this list due to it no longer being mapped in the Study Area by the DFO Aquatic SAR Mapping Tool or NHIC.

Species at Risk

The 2020 desktop review identified SAR listed as Endangered (END) or Threatened (THR) under the provincial *Endangered Species Act*, 2007 with historical occurrences in the general vicinity of the Study Area. Based on the habitat requirements specific to each of the potential SAR identified during the desktop review, **Table 8** provides a list of SAR identified to potentially occur within the Study Area.

Table 8. Potential SAR with Records in and/or Adjacent to the Study Area

Scientific Name	Common Name	SARA Status[1]	ESA Status[2]	S-Rank[3]
Dolichonyx oryzivorus	Bobolink	THR	THR	S4B
Sturnella magna	Eastern Meadowlark	THR	THR	S4B
Emydoidea blandingii	Blanding's Turtle	THR	THR	S3

Scientific Name	Common Name	SARA Status[1]	ESA Status[2]	S-Rank[3]
Myotis leibii	Eastern Small-footed Myotis	---	END	S2S3
Myotis lucifugus	Little Brown Myotis	END	END	S4
Myotis septentrionalis	Northern Myotis	END	END	S3
Pipistrellus subflavus	Tri-colored Bat	END	END	S3?
Fraxinus nigra	Black Ash	---	END	S4
Juglans cinerea	Butternut	END	END	S2?

1. Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002;
2. SAR in Ontario List under the provincial ESA, 2007;
3. Ontario S-rank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperiled; S1 = critically imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario.

The 2020 investigations identified Black Ash in the Study Area; however, Black Ash was not listed under the provincial *Endangered Species Act*, 2007 at the time and thus targeted surveys for Black Ash were not conducted and the exact locations of Black Ash within each respective ELC community have not been documented. In January 2022 Black Ash was uplisted to Endangered, and in January 2024, was afforded species and habitat protection.

One SAR identified to have potential habitat within the Study Area in the 2020 TESR, Barn Swallow, has since been downlisted from a provincial status of Threatened to Special Concern. This species and its habitat are no longer afforded protection under the *Endangered Species Act,* 2007.

Potential for SAR bats, Little Brown Myotis, Northern Myotis and Tri-colored Bat, and their habitat were also identified in 2020. Habitat for these individuals may occur within the woodland communities identified within the Study Area due to the presence of suitable large trees with cracks and cavities (that is, roosting trees and snags).

3.2.4 Aquatic Communities

As described in the 2020 TESR, water features occur within the Study Area including Hawkesbury Creek and a Hawkesbury Creek tributary (Tributary 1), both documented as containing fish. In 2020, identification of watercourses with the potential to provide fish habitat was undertaken within the revised Study Area. The extent of Tributary 1 was further surveyed and observed to extend until the entrance to the westbound CR 17 off-ramp where the tributary also crosses CR 17 via a concrete box culvert and continues southwest. The presence of fish within Tributary 1 was confirmed by visual observation within pooling habitat east of the inlet to the box culvert that crosses Highway 34. Watercress (*Nasturtium officinale*) was observed within some portions of the tributary, which further supports the tributary's designation as a coldwater thermal regime, as documented in the TESR.

During verification of ELC, a second unnamed tributary of Hawkesbury Creek (Tributary 2) was identified within the Study Area (refer to **Figure 7**) and was observed to have low flow with a substrate dominated by muck/organics and abundant emergent vegetation. Thermal regime information for this tributary was unavailable online; however, an abundance of chemotrophic iron-oxidizing bacteria film was observed throughout Tributary 2 which can be an indicator of coldwater thermal regime.

One provincially listed Special Concern species, Silver Lamprey was not identified in the 2020 TESR but is currently mapped by the DFO Aquatic SAR Online Mapping Tool as having potential to occur in Hawkesbury Creek and the Hawkesbury Creek tributaries within the Study Area.

3.2.5 Designated Substances and Contaminants

As documented in the 2020 TESR, a Designated Substances Survey of the CR 17 Underpass was completed in 2017 by Golder Associates. An updated survey was not completed for this TESR Addendum; however, since no work has been undertaken on the bridges since completion of the 2017 survey, it is assumed that the findings are still relevant.

3.3 Social/Economic Environment

3.3.1 Land Use

The bridges are located along the boundary of the Town of Hawkesbury (to the north) and the Township of Champlain (to the south) in the UCPR. The UCPR Official Plan was updated in 2022 and is in full effect as of July 2023. Per Schedule A2 of the UCPR Official Plan (2022), the land north of the bridges is an Urban Policy Area, as shown in **Figure 8**. The south and west portions of the Study Area are designated as a Rural Policy Area and the area to the southeast is designated as a Trade and Industry Policy Area.



Figure 8. UCPR Official Plan (2022) Land Use Designations Within and Around the Study Area

3.3.2 Noise

Existing noise disturbances within the Study Area occur due to vehicle traffic on Highway 34 and CR 17, and occasional trains on the CN rail line. Temporary noise disturbances are anticipated to occur from construction equipment during construction, but post construction noise will remain the same as current conditions.

The Town of Hawkesbury noise By-law No. 59-2010 permits the operation of construction equipment or construction activities on Monday to Friday from 7:00 a.m. to 9:00 p.m.; on Saturday from 8:00 a.m. to 6:00 p.m.; and on Sunday from 9:00 a.m. to 6:00 p.m. As stated in the 2020 TESR, while municipal noise by-laws do not apply to provincial transportation projects (including MTO and MTO agents [such as contractors]) and therefore a noise exemption permit is not required for this project, MTO is committed to making all reasonable attempts to work within local noise bylaws, except when nightwork is required.

3.3.3 Transportation Network

There are no significant changes to the description of the transportation network documented in the 2020 TESR. **Table 9** and **Table** 10 provide the traffic volume on Highway 34 and CR 17.

Table 9: Highway 34 Traffic Volume

LHRS	Location	AADT 2023	DHV %	DHV	% Comm	LOS
27650 (0.20 offset)	Highway 34 at County Road 17	13,626	10.2%	1,390	8.8%	*

*The lane geometry does not fit a typical analysis for either a two-lane or multi-lane (four-lane) cross-section, as turn lanes are located to the north and south of the ramp terminals. Therefore, the Level of Service (LOS) was not reported.

Table 10: County Road 17 Traffic Volume

LHRS	Location	AADT 2023	DHV %	DHV	% Comm	LOS
27650 (0.20 offset)	County Road 17 at Highway 34	7,178	10.2%	732	22.2%	B

3.3.4 Utilities

As documented in the 2020 TESR, the following utilities existing with the Study Area:

- A 100 mm diameter Enbridge gas main;
- A high-pressure Enbridge gas main;
- An underground Bell duct;
- Underground and overhead Hydro One cables;
- A 400 mm diameter Township of Champlain watermain.

There are no changes to the existing utilities within the Study Area since the 2020 TESR.

3.4 Cultural Environment

3.4.1 Built Heritage Resources and Cultural Heritage Landscapes

As documented in the 2020 TESR, a Cultural Heritage Evaluation Report was completed in May of 2017 for the CR 17 Underpass and surrounding area, and the CNR/Hawkesbury Creek Overhead was previously evaluated for cultural heritage value or interest. The bridges and Study Area were found to not be of cultural heritage value or interest.

3.4.2 Archaeology

A Stage 1 Archaeological Assessment (AA) was carried out under Project Information Form number P340-0055-2017 in August 2017 to determine archaeological potential in the Study Area. A subsequent Stage 2 AA was carried out under Project Information Form number P340-0083-2018 in April 2018 on areas located within 100 meters from the historic CNR corridor running underneath CR 17 in the Study Area. The Stage 2 AA revealed no artifacts or archaeological features, and no further archaeological work was recommended for the Study Area.

4.0 Project Needs Assessment and Justification

4.1 Problem and Opportunity

The CNR/Hawkesbury Creek Overhead and CR 17 Underpass structures have undergone several rehabilitations throughout their lifetime. Despite previous rehabilitations, a condition assessment of the bridges carried out in December of 2016 determined that there are localized areas of poor condition on both structures.

Based on the condition assessment, it was determined that both structures are nearing the end of their useful service life and require major rehabilitation or replacement; thus, MTO initiated the Hawkesbury Bridge Replacements EA study to identify a Recommended Plan for the bridge replacements, which was documented in a TESR in 2020.

The 2020 TESR documented the identification and evaluation of three reasonable planning alternatives including, do nothing, structural rehabilitation, and structural replacement. It was determined that complete bridge replacement is the optimal solution to address the existing structural deterioration of the bridges. The TESR also identified a Preferred Design for replacement of the bridges including, reducing the bridges from four lanes to two lanes by eliminating the existing speed change lanes and modifying the W-N/S Ramp and N/S-W Ramp at the CR 17 and Highway 34 interchange.

After completion of the 2020 TESR, feasibility studies were undertaken that identified new additional interchange configuration alternatives and associated bridge cross-sections, as well as construction staging alternatives for three and four-lane structures. Municipal consultation during that time also identified the desire for free-flow access entering CR 17, which the 2020 Preferred Design did not provide, and concerns were expressed regarding the recommended detour routes. Thus, it was determined that an addendum to the TESR would be undertaken to reevaluate interchange configuration, construction staging and detour route alternatives.

5.0 Generation and Assessment of Design Alternatives

To select the Preferred Alternatives and develop a Recommended Plan for the Undertaking, first, the Preferred Structural Configuration Alternative from the 2020 TESR was reviewed by the Project Team. It was determined that the bridge configuration (a two span continuous bridge over Hawkesbury Creek and CNR and a single span structure over Highway 34) is still appropriate and that no changes are required. Next, a new set of interchange configuration alternatives were identified based on the previously completed feasibility studies and were evaluated. Then suitable construction staging alternatives for three and four-lane structures were identified and evaluated. Lastly, alternatives for detour routes required during closures of Highway 34 and CR 17 to accommodate the Preferred Construction Staging Alternative were identified and evaluated. A reasoned-based decision-making process was applied to evaluate and identify the Preferred Alternatives based on an assessment of the advantages, disadvantages, and associated trade-offs under each of the following criteria:

- Social/Cultural Environment
    - Traffic
    - Property
    - Safety
    - Archaeology/Heritage
    - Noise
- Natural Environment
    - Aquatic and terrestrial ecosystems
    - Contaminated materials
- Technical Considerations
    - Construction
    - Demolition
    - Geology
    - Utilities
    - Free-flow access
- Cost

The criterion for free-flow access was added to the criteria used for the 2020 TESR based on municipal feedback.

5.1 Interchange Configuration Alternatives

The feasibility studies undertaken after completion of the 2020 TESR identified additional interchange configurations. The feasibility studies identified two additional interchange configuration alternatives to be evaluated alongside the 2020 Preferred Alternative. The free-flow two-lane alternative identified in the 2020

TESR was also identified for re-assessment in this study due to the stated desire by the municipality for this to be reconsidered. The interchange configuration alternatives identified for the Addendum Study include:

- Alternative 1 – Two-lane structures, W-N/S Ramp facilitated via a channelized right turn, and N/S-W Ramp facilitated by a stop control T-Intersection (Preferred Alternative in the 2020 TESR), as shown in **Figure 9**;
- Alternative 2 – Two-lane structures, W-N/S Ramp facilitated via a channelized right turn, and N/S-W free-flow access further east from existing, as shown in **Figure 10**;
- Alternative 3 – Three-lane structure for the CNR/Hawkesbury Creek Overhead and a four-lane structure for the CR 17 Underpass with a free-flow N/S-W Ramp, as shown in **Figure 11;**
- Alternative 4 – Replaces the existing structures with four-lane structures and maintains the existing free-flow interchange configuration in a like-for-like replacement of the ramps, as shown in **Figure 12.**

Based on a preliminary assessment of the alternatives against the evaluation criteria, Alternative 1 (2020 Preferred Alternative) was screened out for further evaluation because it does not provide free-flow access entering CR 17. Alternative 2 was also screened out for further evaluation due to its anticipated impact to private property. Alternative 3 and Alternative 4 were both supported by the public and the Town/Township/County, but Alternative 4 was preferred. **Table 11** provides a summary of the evaluation of the remaining interchange configuration alternatives.



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MINISTRY OF TRANSPORTATION
HIGHWAY 34 & COUNTY ROAD 17, HAWKESBURY
PRELIMINARY DESIGN

Ontario

THE DETAILS SHOWN ON THIS DRAWING ARE PRELIMINARY AND ARE PROVIDED FOR INFORMATION ONLY

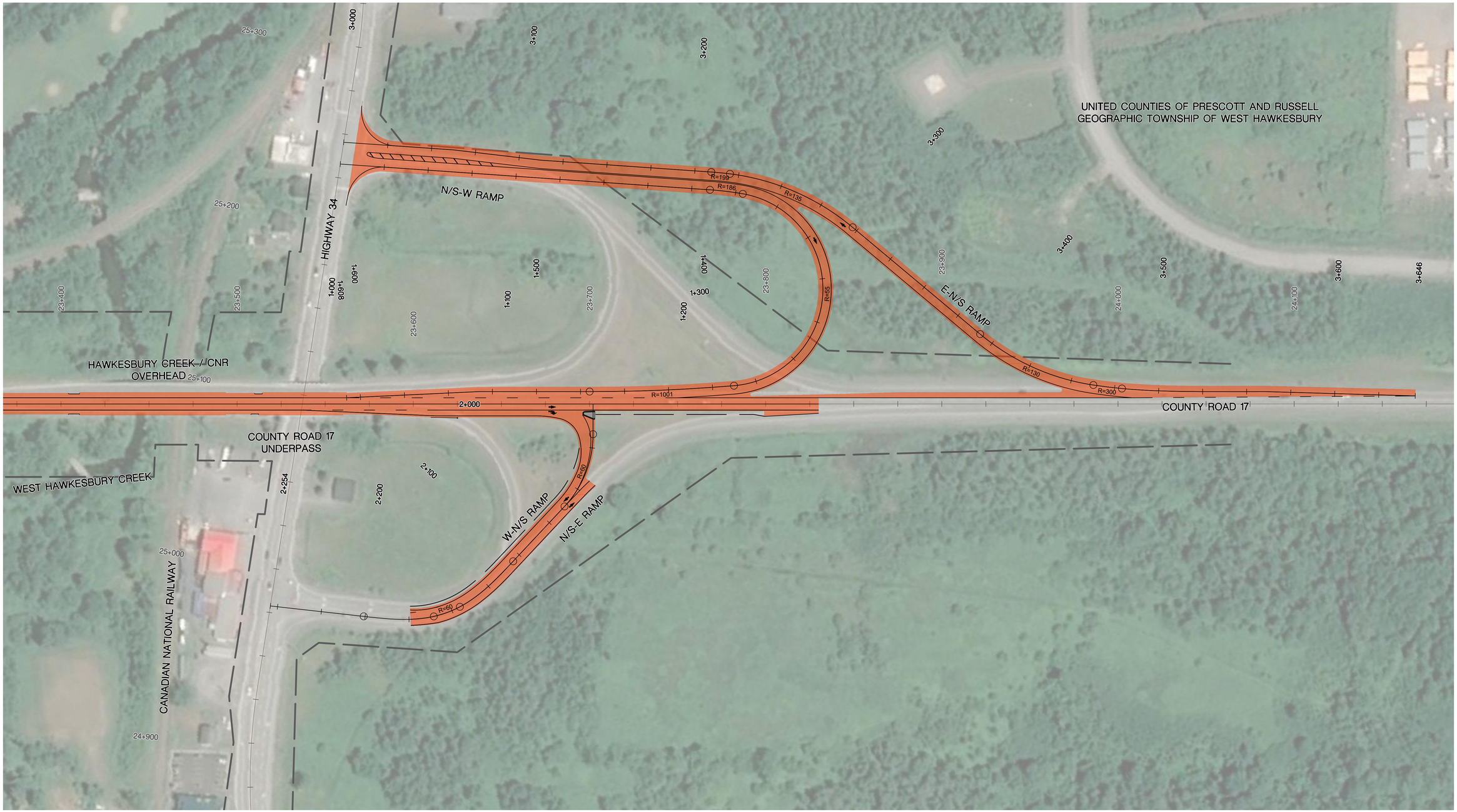
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DATE: Jan 2025

DILLON CONSULTING

LONG LIST OF ALTERNATIVES
ALTERNATIVE 1 - INTERSECTION WITH TWO-LANE STRUCTURES

FIGURE 9



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MINISTRY OF TRANSPORTATION
HIGHWAY 34 & COUNTY ROAD 17, HAWKESBURY
PRELIMINARY DESIGN

Ontario

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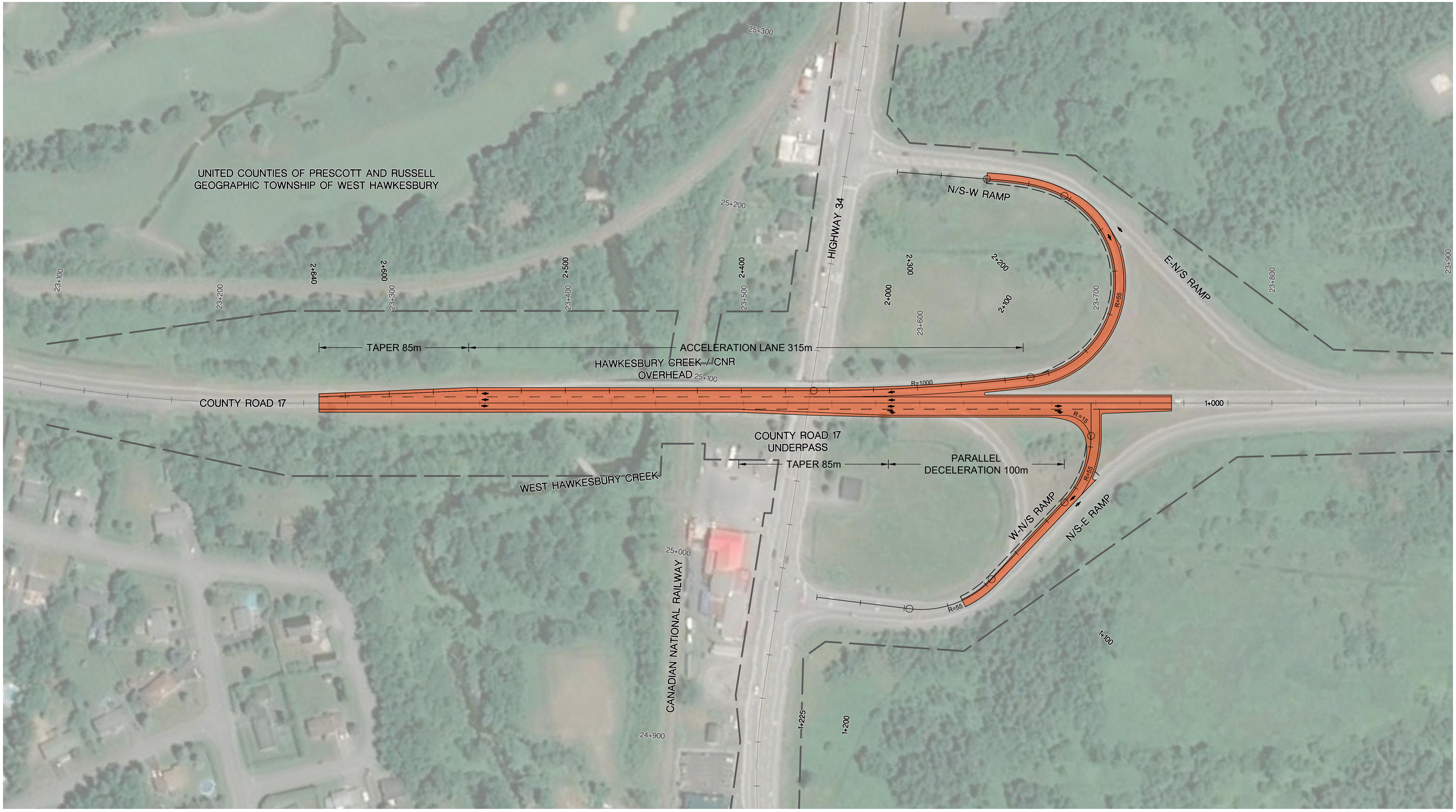
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PROJECT No. 17-5180
DATE: Jan 2025

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LONG LIST OF ALTERNATIVES
ALTERNATIVE 2 - PARCLO A
WITH TWO-LANE STRUCTURES

FIGURE 10



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MINISTRY OF TRANSPORTATION
HIGHWAY 34 & COUNTY ROAD 17, HAWKESBURY
PRELIMINARY DESIGN

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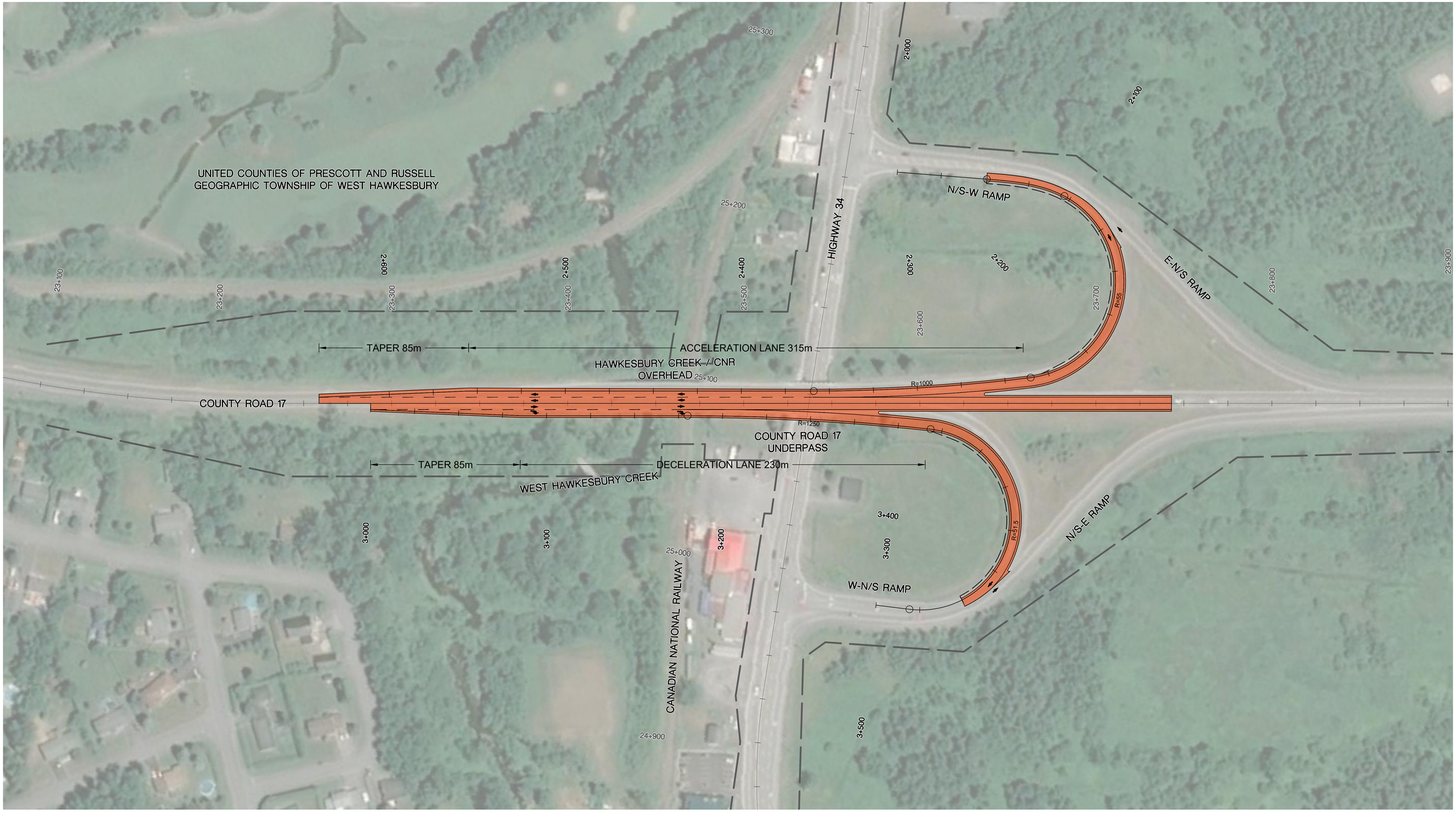
PROJECT No. 17-5180
DATE: Jan 2025

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LONG LIST OF ALTERNATIVES

ALTERNATIVE 3 - PARCLO A
WITH THREE AND FOUR-LANE
STRUCTURES

FIGURE 11



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MINISTRY OF TRANSPORTATION
HIGHWAY 34 & COUNTY ROAD 17, HAWKESBURY
PRELIMINARY DESIGN

Ontario

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PROJECT No. 17-5180
DATE: Jan 2025

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LONG LIST OF ALTERNATIVES
ALTERNATIVE 4 - PARCLO AB WITH FOUR-LANE STRUCTURES

FIGURE 12

Table 11. Summary Evaluation of Interchange Configuration Alternatives

Evaluation Criteria	Alternative 3	Alternative 4
Natural Environment	• No anticipated impacts to SAR habitat. ✓	• No anticipated impacts to SAR habitat. ✓
Social and Cultural Environment	• Operates at a similar level of service compared to existing conditions. ✓ • Free-flow movements are not warranted based on highway classification and observed traffic volumes. ✗ • Additional property is not required. ✓ • No impacts to archaeology and built heritage. ✓ • No change in noise impacts compared to existing conditions. =	• Operates at a similar level of service compared to existing conditions. ✓ • Free-flow movements are not warranted based on highway classification and observed traffic volumes. ✗ • Additional property is not required. ✓ • No impacts to archaeology and built heritage. ✓ • No change in noise impacts compared to existing conditions. =
Technical Considerations	• Not a standard interchange design in Ontario and is inconsistent with driver expectations. ✗ • Meets design criteria. ✓ • Potential for wrong way left turn movements from CR 17 onto the W-N/S Ramp. ✗	• Is a standard interchange design in Ontario and is consistent with driver expectations. ✓ • W-N/S Ramp maintains existing radii but does not meet current design standards. ✗ • No potential for wrong way left turn movements from CR 17 onto the W-N/S Ramp. ✓
Preferred Alternative	Not Preferred	**Preferred**

Notes:
✓ = positive
✗ = negative
= = neutral

Alternative 4 is the Preferred Interchange Configuration Alternative because:

- The configuration is a standard interchange design in Ontario,
- It is consistent with driver expectations,
- It has no potential for wrong-way left turns from CR 17 onto the W-N/S ramp.

5.2 Construction Staging

The construction staging alternatives in the 2020 TESR were re-evaluated for Interchange Configuration Alternative 3 and 4, as the new interchange configuration alternatives include three or four lanes on the structure as opposed to the two lanes identified in the 2020 TESR. The following three construction staging alternatives were identified for evaluation in this Addendum Study:

- Alternative 1 – Lateral Slide
- Alternative 2a – Single Lane Staged Construction
- Alternative 2b – Two Lane Staged Construction

5.2.1 Alternative 1 – Lateral Slide

Staging Alternative 1 uses an accelerated bridge construction technique whereby the new bridge decks are constructed on temporary supports immediately north of the existing bridges. Following the construction of the new bridge decks off-line, a three-to-five-week closure of CR 17 is required to demolish the existing bridges, complete the new abutments and piers, jack and slide the new structures into place (as shown in **Figure 13**), and construct the roadway grade raise and associated ramp tie-ins. A minimum of three overnight closures of Highway 34 is required to demolish the existing CR 17 Underpass, erect new girders, and jack and slide the new structure into place.

CNR/Hawkesbury Creek Overhead Bridge **CR 17 Underpass Bridge**

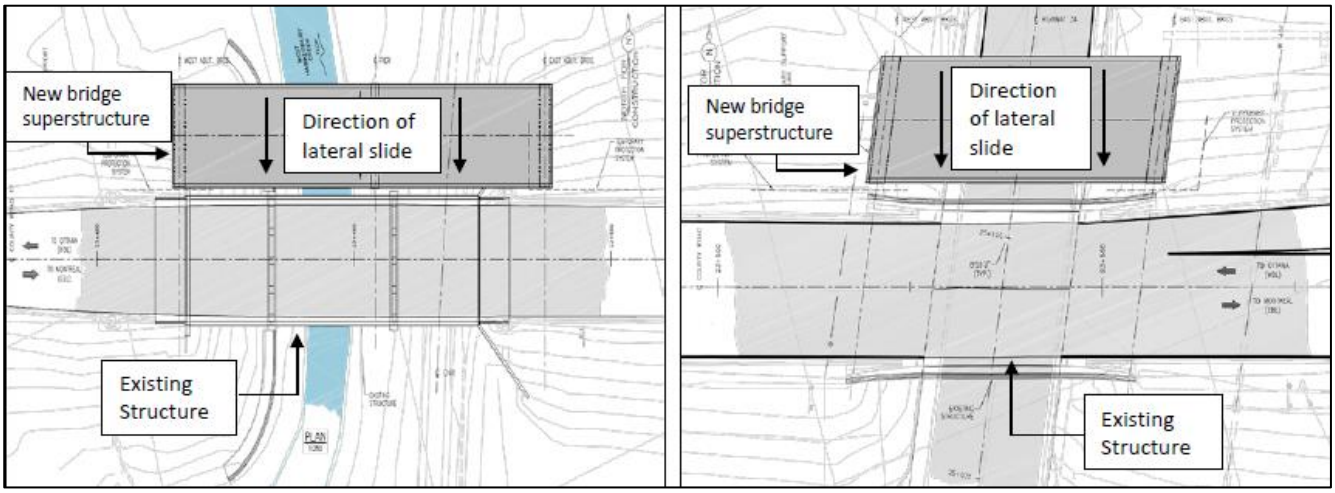


Figure 13. Construction Staging Alternative 1 - Lateral Slide

5.2.2 Alternative 2 – Staged Construction

Staged Construction uses conventional construction techniques to remove and construct the new bridges in two stages. Two staged construction sub-alternatives, (2a) single lane and (2b) two lane, were identified for the Addendum Study.

Both sub-alternatives require a minimum of two overnight closures and lane reductions of CR 17 to demolish and construct the structures and a two-week closure to construct a grade raise and associated ramp tie-ins. A minimum of four overnight closures of Highway 34 are required to demolish the existing CR 17 Underpass and erect new girders. Both sub-alternatives also require a winter shutdown stage, during which two 3.5 m lanes are maintained with minimum 0.5 m shoulders. No acceleration lane is provided for westbound vehicles entering the roadway, and no deceleration lane is provided for eastbound vehicles exiting the roadway. These ramps are controlled by a temporary intersection.

Alternative 2a: Single Lane Staged Construction

Staging Alternative 2a, shown in **Figure 14**, reduces CR 17 to a single bi-directional lane during the construction of the north portion of the two structures, requiring additional overbuilding of the structure. In this configuration, the east stop bar for the lane shift is located no further east than the westbound off-ramp (E-N/S Ramp) bullnose to maintain the function of the exit ramp. This results in a lane shift with a posted speed of approximately 60 to 70 km/h. The N/S-W ramp must be maintained during construction and is controlled by a separate traffic signal from the traffic signals being used for bi-directional single-lane traffic on CR 17. All three sets of traffic signals are integrated with separate phases provided for each movement. The W-N/S ramp is maintained through the single-lane operation.

Two lanes of traffic can be maintained during the construction of the south portion of the structures.

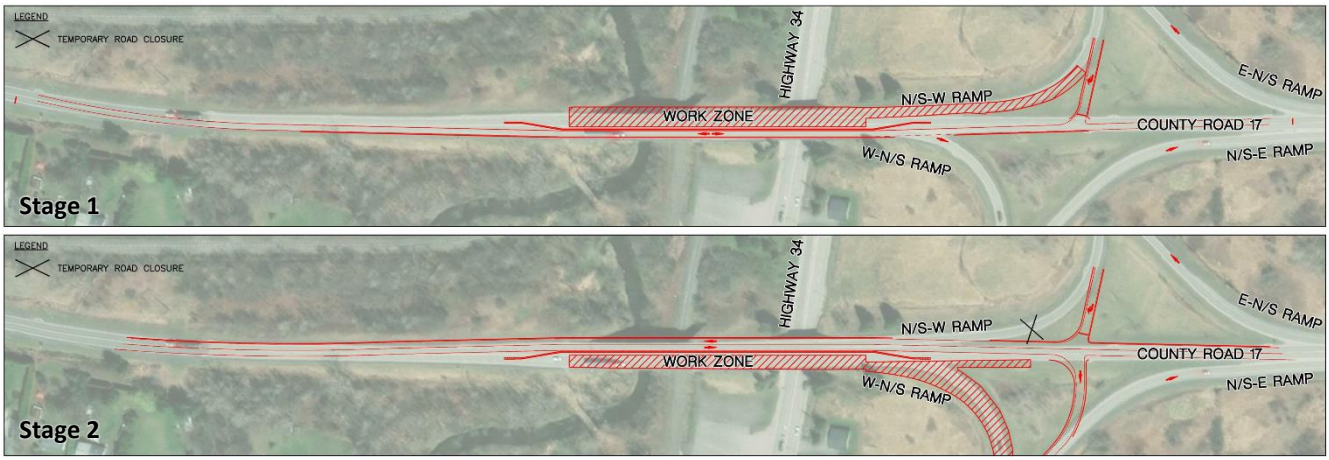


Figure 14. Staging Alternative 2a - Single Lane Staged Construction

Alternative 2b: Two Lane Staged Construction

Staging Alternative 2b, shown in **Figure 15**, maintains two 3.5 m lanes of traffic throughout construction by overbuilding the north side shoulders of the structures by 2.8 m. Lane shifts on the east limits are required to end the staging at the bullnose of the E-N/S ramp in order to minimize the impacts and maintain the function of the E-N/S ramp. This results in a lane shift with a posted speed of 70 km/h. During the first phase of construction, the N/S-W ramp is maintained as a stop-controlled intersection and the W-N/S movement continues to operate as an exit ramp.

In the second phase of construction, when the south portion of the new structure is being reconstructed, traffic shifts to the new partially built structure. Similar constraints for the length of the lane shift are present to ensure the E-N/S ramp is maintained but with a posted speed of approximately 60-70 km/h. During this phase, access to CR 17 is provided from the N/S-W and W-N/S ramps via a channelized intersection.

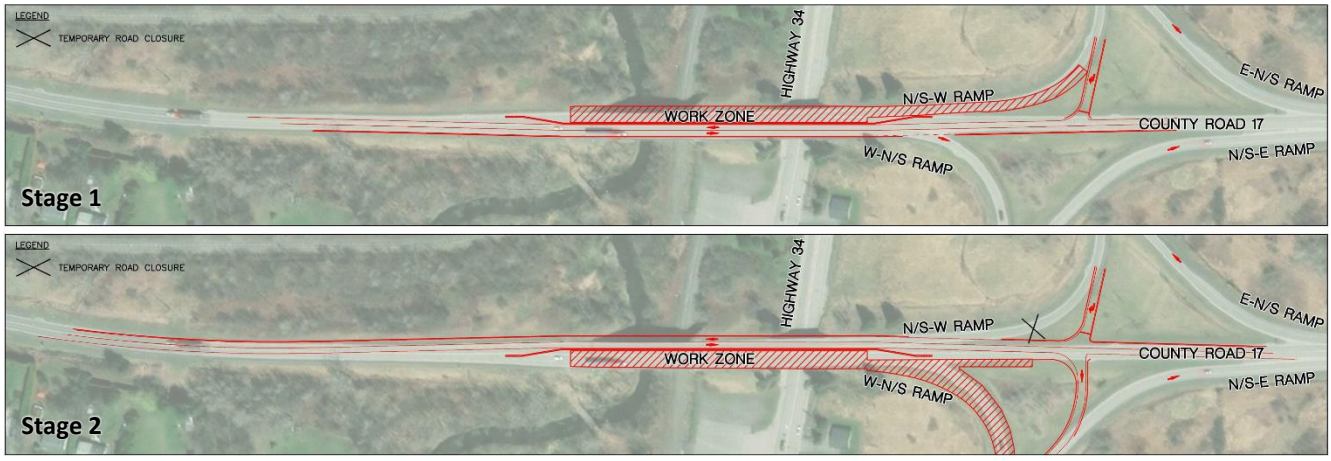


Figure 15. Staging Alternative 2b - Two Lane Staged Construction

5.2.3 Evaluation of Construction Staging Alternatives

Table 12 provides a summary of the evaluation of construction staging alternatives**.**

Table 12. Summary Evaluation of Construction Staging Alternatives

Evaluation Criteria	Alternative 1: Lateral Slide	Alternative 2a: Single-Lane Staged Construction	Alternative 2b: Two Lane Staged Construction
Natural Environment	• Impacts to potential SAR habitat for Black Ash, Butternut, and bats. =	• Impacts to potential SAR habitat for Black Ash, Butternut, and bats. =	• Impacts to potential SAR habitat for Black Ash, Butternut, and bats. =
Social and Cultural Environment	• Requires full closure of CR 17 for 3-5 weeks. ✗ • Requires minimum 3 overnight closures of Highway 34 near the bridges. ✗ • No expected delays on CR 17. ✓ • Construction off-line increases safety for traffic and construction workers. ✓ • Shortest construction duration resulting in the fewest temporary noise impacts. ✓	• Requires 2 overnight closures or lane reductions of CR 17 for a 2-week closure. ✓ • Requires minimum 4 overnight closures of Highway 34 near the bridges. ✗ • Expected delays of 3-4 minutes on CR 17 during single lane phase. ✗ • Increased exposure to safety risks due to working adjacent to CR 17 traffic. ✗ • Longer construction duration than Alternative 1. ✗	• Requires 2 overnight closures or lane reductions of CR 17 for a 2-week closure. ✓ • Requires minimum 4 overnight closures of Highway 34 near the bridges. ✗ • No expected delays on CR 17. ✓ • Increased exposure to safety risks due to working adjacent to CR 17 traffic. ✗ • Longer construction duration than Alternative 1. ✗
Technical Considerations	• Maintains existing conditions during the winter shutdown. ✓ • Fewer contractors have experience with lateral slide. Increased constructability risk. ✗ • Temporary support of existing structure during construction is not required. ✓	• CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. ✗ Construction industry has more experience with conventional construction. ✓ • Temporary support will be required at CNR/Hawkesbury Creek Overhead. ✗	• CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. ✗ • Construction industry has more experience with conventional construction. ✓ • Temporary support of existing structure during construction is not required. ✓
Preferred Alternative	**Preferred**	Not Preferred	Not Preferred

Notes:
✓ = positive
✗ = negative
= = neutral

Alternative 1 – Lateral Slide is the Preferred Construction Staging Alternative because:

- It as it maintains the existing configuration during the winter shut down;
- It does not require additional support of the existing structures during construction;
- It is not anticipated to result in delays on CR 17;
- It increases safety for traffic and construction works with off-line construction;
- It accommodates a shorter construction duration.

5.3 Detour Routes

Detour routes are required to accommodate closures of CR 17 and Highway 34 at the bridges during construction. Due to municipal concerns with the previously recommended detour routes, detour routes were reevaluated during the Addendum Study.

For the closure of CR 17, two detour alternatives were identified:

- Alternative 1 – Main Street and Tupper; CR 17 traffic will be detoured along CR 4 / Main Street heading east-west and along Tupper Street heading north-south, as shown in **Figure 16**;
- Alternative 2 – Main Street and McGill Street; CR traffic will be detoured along CR 4 / Main Street heading east-west and along McGill Street heading north-south, as shown in **Figure 17**.

A summary of the evaluation of the two CR 17 detour alternatives is provided in **Table 13**.

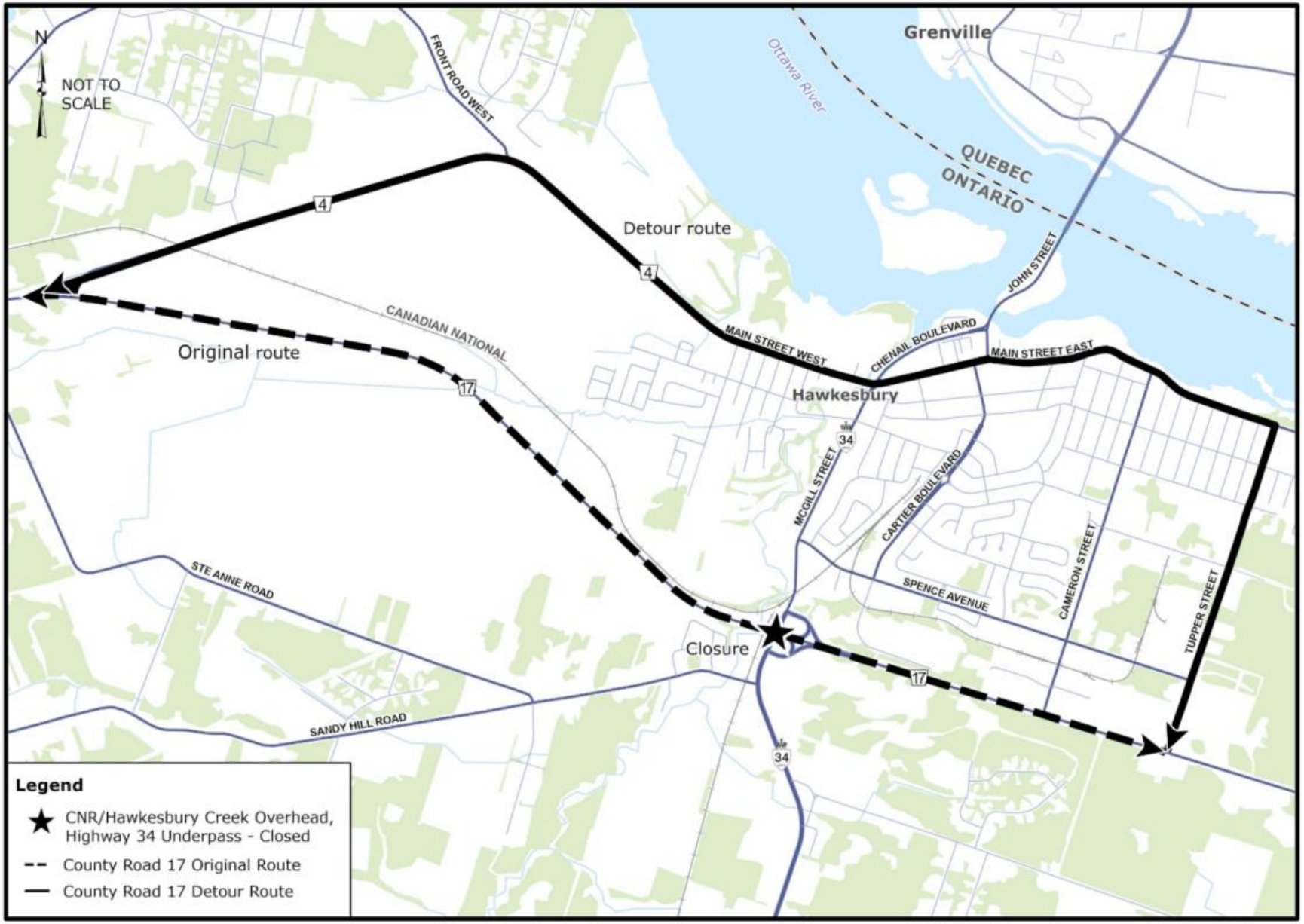


Figure 16. CR 17 Detour Alternative 1 - Main Street and Tupper Street

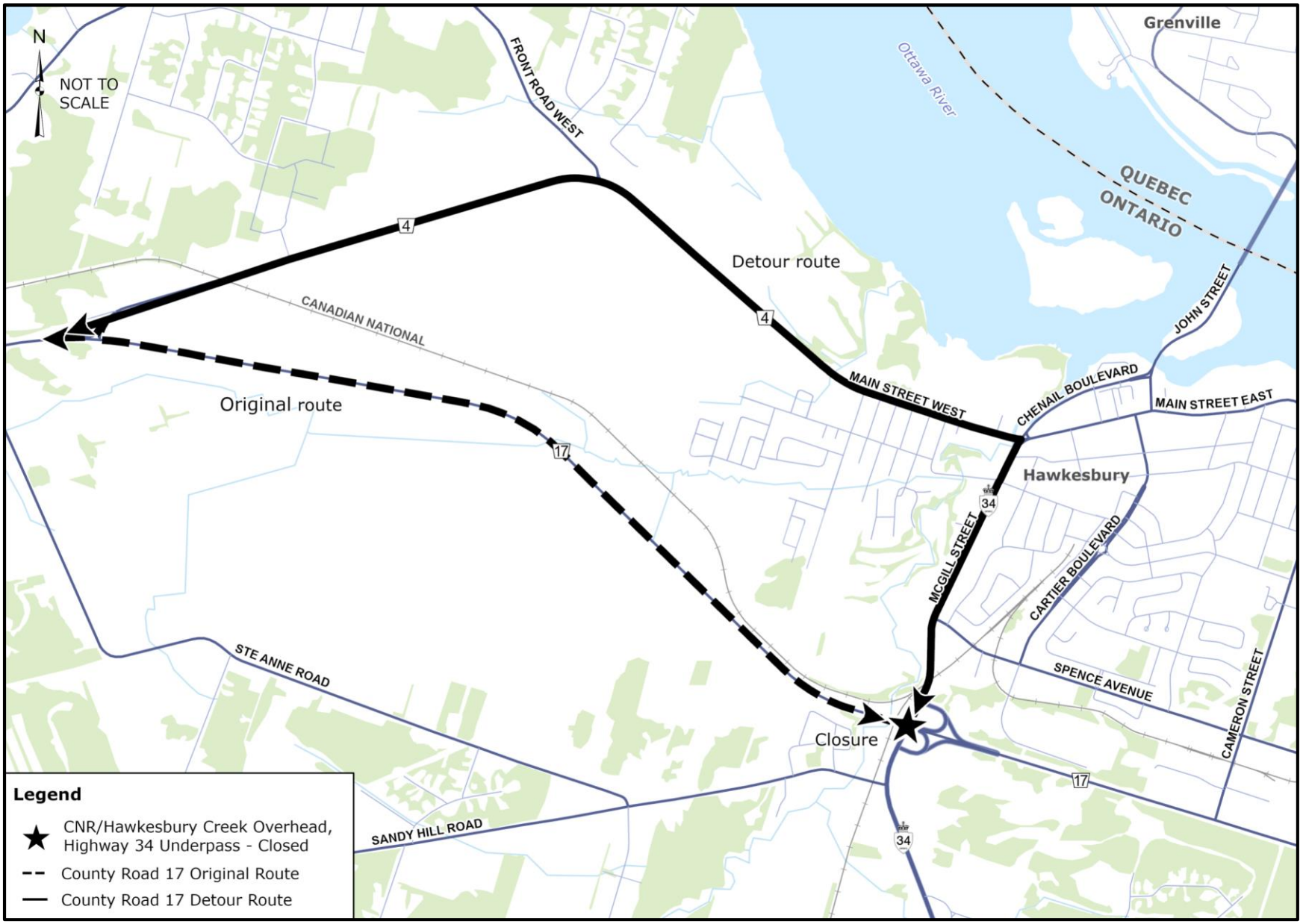


Figure 17. CR 17 Detour Route Alternative 2 - Main Street and McGill Street (Preferred)

Table 13. Summary Evaluation of the CR 17 Detour Route Alternatives

Evaluation Criteria	Alternative 1 Tupper Street / Main Street Detour Route	Alternative 2 Highway 34 / McGill Street Detour Route
Natural Environment	• No anticipated impacts to SAR habitat. ✓	• No anticipated impacts to SAR habitat. ✓
Social and Cultural Environment	• Anticipated 8 minute out of way travel. ✗	• Anticipated 7 minute out of way travel. ✓
Technical Considerations	• Main Street East is impacted by the detour route. • Requires a portion of parking to be removed on Main Street East to accommodate trucks. ✗ • Requires temporary signals at Tupper Street / Main Street intersection and modifications to four existing (only applicable to Lateral Slide construction staging alternative). ✗	• Main Street East is not impacted by the detour route. ✓ • No impacts to parking on Main Street. ✓ • No additional roadways improvements required beyond what the municipality is currently planning. ✓
Preferred Alternative	Not Preferred	**Preferred**

Notes:
✓ = positive
✗ = negative
= = neutral

Alternative 2 is the Preferred Detour Route Alternative because:

- Main Street East is not impacted by the detour,
- The detour does not impact parking on Main Street,
- No improvements are required beyond what the municipality is currently planning.

For Highway 34, it was determined that the only feasible alternative is to detour traffic via a temporary north-south bypass through the interchange (that is, ramp surfing) to bring Highway 34 traffic around the CR 17 Underpass, as shown in Figure 18.

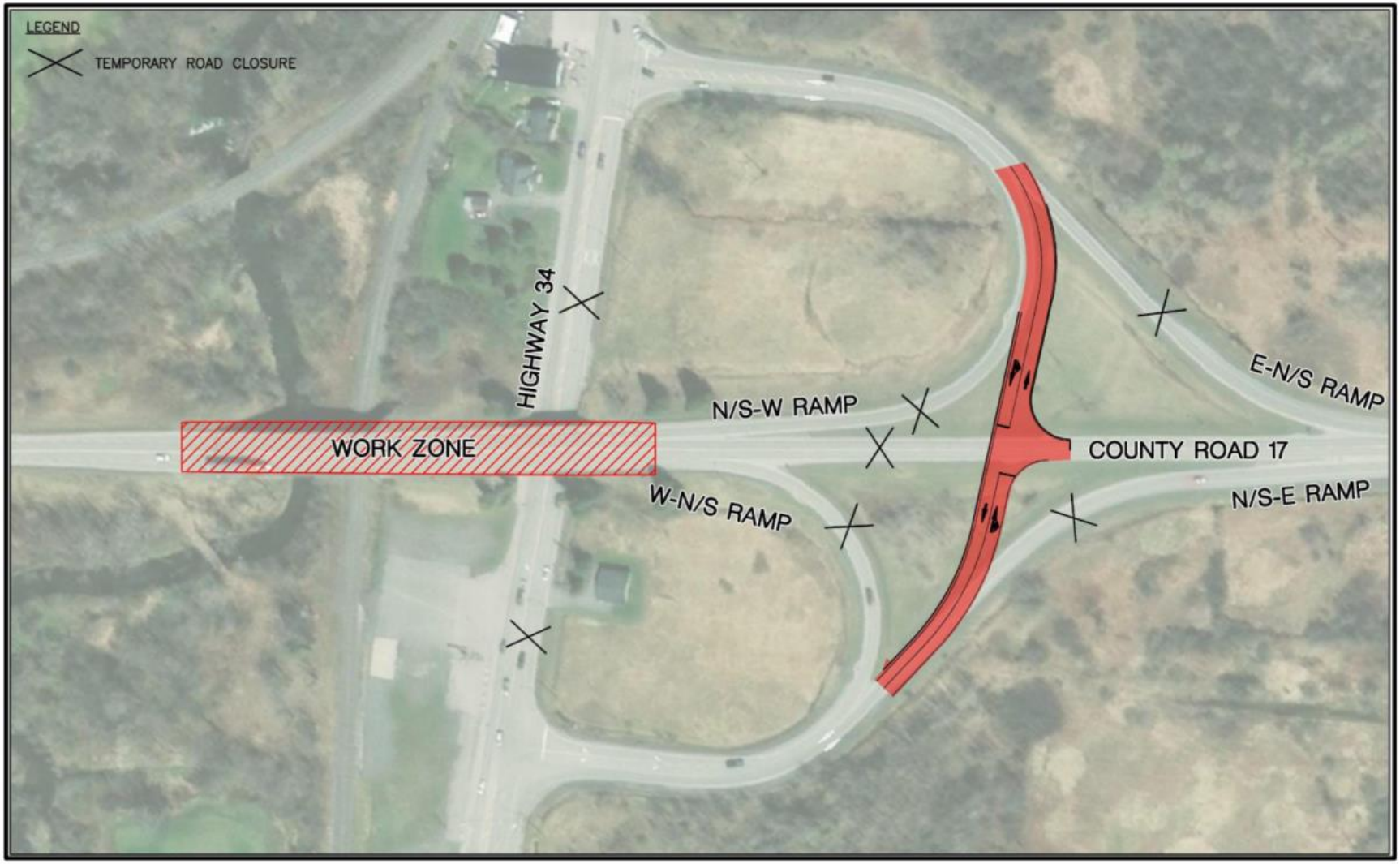


Figure 18. Highway 34 Detour Route

6.0 The Recommended Plan

6.1 Changes to the Recommended Plan and Implementation

Changes to the Recommended Plan are described below. The Recommended Plan is available in **Appendix G**.

6.1.1 General Bridge Arrangement

The replacement CNR/Hawkesbury Creek Overhead structure is still recommended to be a 71 m long (38 m over Hawkesbury Creek and 33 m over the CNR tracks) continuous two-span concrete slab-on-steel I-girder bridge. The replacement CR 17 Underpass structure is still recommended to be a 36 m long single span concrete slab-on-steel I-girder bridge. However, the structures are now proposed to be 18 m (instead of 13 m) to accommodate two through lanes and two speed change lanes along CR 17 (instead of two through lanes). Updated General Arrangement drawings are provided in **Appendix H**.

6.1.2 Alignment and Profile

The existing alignment of CR 17 will be maintained, as stated in the 2020 TESR, and the vertical profile for the replacement structures will be raised to provide the minimum vertical clearance over the CNR tracks and Highway 34. Revisions to the existing ramps alignments are required.

6.1.3 Cross-Section

Changes to the proposed cross-sections of the replacement structures include increasing the total cross-section width from 13.0 m (two through lanes with 2.5 m shoulders) to 18.0 m (two through lanes, two speed changes and 1.5 m shoulders). The new proposed cross-sections for the CNR/Hawkesbury Creek Overheard and CR 17 Underpass are illustrated in **Figure 19** and **Figure 20**, respectively, and include:

- 0.5 m north barrier wall
- 1.5 m north shoulder
- Two 3.5 m travelling lanes
- Two 3.5 m speed change (ramp) lanes
- 1.5 m south shoulder
- 0.5 m south barrier wall

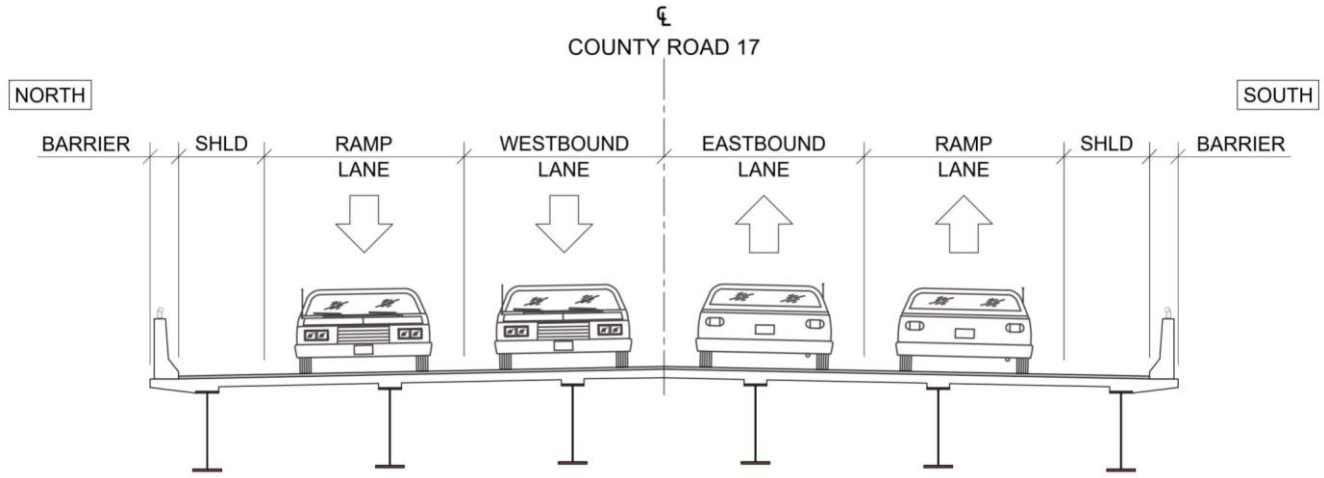


Figure 19. Illustration of the CNR/Hawkesbury Creek Overhead Cross-Section

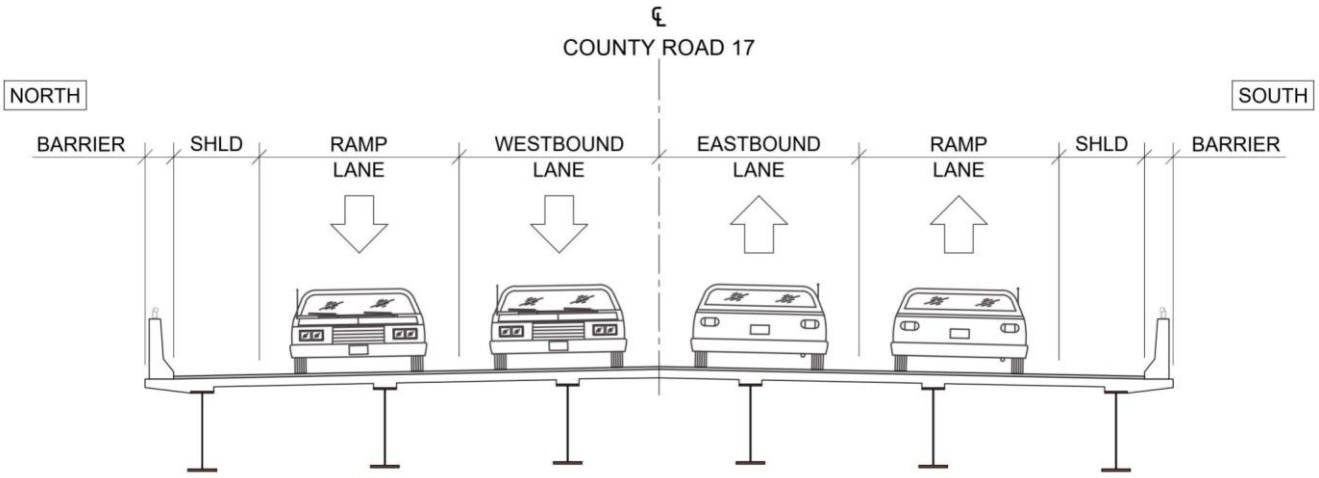


Figure 20. Illustration of CR 17 Underpass Cross-Section

6.1.4 Interchange Modifications

This Addendum replaces the interchange design proposed in the 2020 TESR with a like-for-like replacement of the W-N/S and the N/S-W ramps that maintains the existing free-flow interchange configuration, as shown in **Figure 12**. The proposed W-N/S Ramp and the N/S-W Ramp widths are 4.75 m, with 2.5 m wide right shoulders and 1.0 m wide left shoulders.

6.1.5 Utilities

The existing underground Bell duct structure, Hydro One underground conduits, and the 400 mm diameter watermain will still be protected or relocated as described in the 2020 TESR.

The Enbridge gas main located in the vicinity of the CR 17 Underpass west abutment will also still be protected during construction for site access. Temporary isolated footings will be utilized to support the offline structures while spanning over the gas main.

To facilitate access and egress into the site for the offline construction of the structures, a guy wires for a conflicting Hydro One pole will be removed. The pole will be supported by push pole bracing.

6.1.6 Property

As stated in the 2020 TESR, standard grade separation reconstruction agreement between CNR and MTO in accordance with the *Railway Safety Act* is required to replace the existing CNR/Hawkesbury Creek Overhead structure.

Additionally, modifications to the Les Jardin Lamoureux Snack Bar property, located at 1466 Highway 34 are required to be in accordance with the Highway Corridor Management Manual. Consultation will be undertaken between MTO and the property owner during detail design.

6.1.7 Construction Traffic Management

Based on the changes to the 2020 Recommended Plan, a three-to-five-week full closure of CR 17 is required to demolish the existing bridges, complete the new abutments and piers, jack and slide the new structures into place, and construct a grade raise and associated ramp tie-ins. During the closure, CR 17 traffic will be detoured along Main Street / CR 4 heading east-west and along McGill Street heading north-south, as shown in **Figure 17**. The additional expected travel time for vehicles along the detour route is seven minutes.

A minimum of three overnight closures of Highway 34 is required to demolish the existing CR 17 Underpass, erect new girders, and jack and slide the new structure into place. During the overnight closures, Highway 34 traffic will be detoured via ramp surfing to maintain north-south traffic movements along Highway 34, as shown in **Figure 18**. A temporary intersection at Highway 34 and CR 17 will be constructed for the ramp surfing operation. Two of the Highway 34 closures will coincide with closures of CR 17.

Single lane closures will be required and controlled via flagging during final roadway paving and line painting.

As stated in the 2020 TESR, signage will be installed to direct traffic during the various stages of construction. Bilingual Advanced Notification Signage will be installed near the CR 17 and Highway 34 interchanges at least two weeks in advance of construction to notify motorists of the road closures. They will also be installed at strategic locations, such as along Highway 417, to maximize the number of motorists that receive the message. The signs will notify motorists of expected delays due to construction, as well as to provide advanced notice of the detour so that motorists can adjust their travel routes and times accordingly.

6.1.8 Excess Materials

As part of the scope of work completed for the Project Area during the Assessment of Past Uses (APU), Dillon requested a search of environmental databases via ERIS and conducted a Site reconnaissance.

The Project Area has been historically used as agricultural and community land use (i.e. agricultural fields and roadways and/or ROWs). It is currently community land use, as an active roadway and/or ROWs; CR 17 and Highway 34 and the associated interchange.

The evaluation of the information obtained for the Project Area during the APU indicates that there is the potential presence of impacts to soil on the Project Area related to the fill imported to the Project Area to construct the interchange, roads and/or ROWs as well as application of salt to the road surfaces in winter months. In addition, the current and historical land uses of the surrounding properties also indicate the potential for environmental impacts to Project Area soils.

It is estimated that approximately 16,000 m^3 of material will be excavated during construction. If this excavated material is deemed suitable, it can be used as fill for the grade raise or disposed of on-site. The north or south loops ramps and along the north foreslope of CR 17 west of Hawkesbury Creek have been identified as potential areas for disposal. Appropriate terrestrial and archaeological studies should be completed during detailed design if these locations are selected for disposal of material.

It is recommended that the Contaminants of Potential Concern (COPC) identified in this APU are investigated further with a Sampling Analysis Plan (SAP) and Soil Characterization Report (SCR) prior to the planned construction works to characterize the soil to aid in the selection of reuse sites, if onsite reuse is not feasible.

6.1.9 Drainage

Surface water drainage for the interchange is predominantly conveyed by roadside ditches and culverts passing beneath the road structure. There is an external drainage area located east of the interchange, which is split north and south of County Road 17 (CR17). Runoff collected within the interchange and the area to the east, ultimately discharging into the Hawkesbury Creek, a tributary of the Ottawa River.

A preliminary hydrologic and hydraulic assessment was conducted to evaluate the existing interchange configuration, temporary works, and the preferred alignment. The criteria for the assessment applied the MTO Highway Drainage Design Standards (2024) (HDDS).

The following deficiencies with the existing drainage system were identified:

- The 150 mm diameter corrugated steel pipe (CSP) culvert at St 23+764 running west to east beneath W-NS Ramp is substandard and does not meet the minimum requirements of the MTO HDDS WC-8.
- The 450 mm CSP culvert at St 23+650 (referred to as Culvert E in the Jacobs-Dillon Memo) running east to west beneath the E-NS ramp is substandard and does not meet the minimum requirements of the MTO Highway Drainage Design Standard WC-8. Additionally, the surveyed inverts indicate that the culvert has a reverse slope.

During the construction phase, temporary works are required. The interchange ramps will be realigned so that the W-NS and NS-E ramps connect at a single point and intersect with CR17. These works will increase the impervious area within the interchange, requiring roadside ditches along CR 17 and temporary culverts beneath the temporary ramps.

There are no notable changes compared to the existing alignment, drainage patterns, or impervious areas of the ramps or the roadway. Based on the preliminary design and information available, the existing ditch geometry and culvert sizes are sufficient to meet the MTO HDDS criteria.

6.2 Environmental Impacts, Mitigation and Commitments

6.2.1 Anticipated Environmental Impacts

Based on the updated Recommended Plan and updates to the existing conditions, environmental impacts were reassessed and are described below.

Terrestrial Environment

In general, the proposed works associated with the Recommended Plan have the potential to:

- Increase erosion and sedimentation of lands adjacent to the construction area;
- Indirectly affect potentially non-retainable (Category 2 and Category 3) Butternut trees located outside of the vegetation removal area for trees not assessed by a qualified Butternut Heath Assessor in 2020;
- Indirectly or directly affect potentially non-retainable (Category 2 and Category 3) Black Ash trees, which have not yet been identified and require further assessment;
- Remove or disturb woodland, meadow and wetland habitat;
- Increase vulnerability of areas cleared of vegetation to invasion by non-native species; and

- Result in a loss and/or disruption to wildlife and/or wildlife habitat, including:
    - Temporary decrease in potential marginal migratory bird nesting habitat in areas cleared of woodland and meadow vegetation within the Study Area;
    - Potentially destruct migratory bird nests, eggs or young in vegetated areas prior to and during construction (such as site preparation);
    - Temporarily disrupt wildlife movement and wildlife avoidance of habitat areas adjacent to Hawkesbury Creek and its tributaries during replacement due to disturbance associated with construction activity;
    - Harm or temporarily harass herptiles, which include SCC that could move along riparian habitat or in-water through the Study Area during construction (such as Snapping Turtle and Eastern Ribbonsnake);
    - Remove or impact SAR vegetation, including Butternut and Black Ash; and
    - Harm or temporarily harass Barn Swallow, Eastern Wood-Pewee, Wood Thrush and their nests.

Aquatic Environment

Minor works below the high-water mark are proposed; thus, the works may result in the following impacts:

- Result in deleterious materials entering adjacent watercourses, including potential habitat for Silver Lamprey;
- Disruption of approximately 23 m^2 of indirect fish habitat within the high-water mark due to the installation of rock protection at the new bridge footing and sections of eroded shoreline adjacent to Hawkesbury Creek;
- Siltation at the site and sedimentation downstream.

Contamination

Potential impacts to contaminated materials as a result of the proposed works includes:

- Possible disturbance of ACM at the Undertaking site in the overpass curb/rail wall joint material and in the drain pipe caulking on the CR 17 Underpass.
- Possible airborne exposure to silica dust from disturbance of concrete and asphalt.

Social/Economic Environment

The proposed works associated with the bridge replacements and the rerouting of traffic during construction have the potential to impact the social/economic environment in the following ways:

- Temporary noise disturbances to nearby residents and businesses during construction.
- Single lane and complete road closures will result in temporary disruptions to local traffic and emergency service access. The detour route for the closure of CR 17 will result in an additional seven minutes of travel time. Emergency services will utilize additional routes (such as Sandy Hill Road) to bypass the detour route if required.

Cultural Environment

There is potential for the proposed works to disturb unknown or previously undocumented archaeological resources.

6.2.2 Proposed Mitigation

Terrestrial Environment

The following is a summary of mitigation measures and commitments recommended to protect the terrestrial environment during construction works:

- Minimize vegetation removal to the extent possible and confine work to the designated construction areas.
- Follow tree felling and grubbing procedures as outlined in OPSS 201, Construction Specification for Clearing, Close Cut Clearing, Grubbing.
- Disturbed vegetated areas along Hawkesbury Creek should be re-vegetated to minimize invasion and colonization by non-native species and increase shade/cover for wildlife.
- Erosion and sediment control (ESC) measures will be placed surrounding all watercourses, significant woodlands and wetlands, which may also act as wildlife exclusion fencing, which will be erected before the turtle active season (April 1 to October 30).
- Areas temporarily cleared of vegetation to facilitate bridge construction should be stabilized (that is, vegetated or seeded) prior to removal of erosion and sedimentation control measures.
- ESC measures shall be monitored regularly and/or after every 10 mm or greater rainfall event as they could require periodic cleaning, maintenance and/or re-construction. If deficiencies are found, they should be repaired and/or replaced promptly.
- Grading, placement of topsoil and seeding specifications will be implemented to decrease erosion potential and promote suitable vegetation regeneration.
- A dewatering plan (if applicable) should be prepared in accordance with environmental best management practices.
- If wildlife is encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way.
- Tree removals should occur outside of the active window for bats (April 1 to September 30) of any given year.
- Preventative measures (such as netting) should be erected under the CNR/Hawkesbury Creek Overhead prior to April 1 to mitigate Barn Swallow nesting from occurring.
- Tree and vegetation removals to occur outside of the active window for breeding birds (April 1 to August 31) and active window for bats (April 1 to September 30).
- If breeding birds and/or nests are encountered, works should not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest.
- Complete a tree inventory within the area of impact during detail design, specifically targeting SAR (Black Ash and Butternut). Suitable Butternut and Black Ash trees are to be retained in the Study Area, and no earthworks are to occur within 30 m of the stem of healthy individuals.

- Workers should be vigilant and check work areas and machinery for the presence of reptiles prior to each day of construction.
- If SCC or SAR are encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way.
- If a turtle nest is encountered during construction, it is recommended that a qualified biologist extract the nest and transport the eggs to a suitable wildlife care facility such as a turtle trauma centre.

Aquatic Environment

Mitigation measures and commitments to prevent impacts to fish and fish habitat during the proposed works includes:

- No in-water works or work below the high-water mark to occur between October 16-March 15 of any given year to protect hibernating turtles.
- No in-water works or work below the high-water mark to occur in Hawkesbury Creek or its tributaries between March 15 to July 15 of any given year for considerations of spawning fish species.
- ESC measures will be placed surrounding all watercourses and wetlands.
- Handling of fuel, excess materials and debris will be properly managed on-site and removed as per the standard construction practices necessary to protect watercourses.
- All materials used or generated (such as organics, soils, woody debris, temporary stockpiles, construction debris) will be temporarily stored, handled and disposed of during site preparation, construction and clean-up in a manner that prevents entry into the watercourses.
- All disturbed terrestrial riparian areas will be restored to preconstruction conditions with a native grass seed mix and stabilized to prevent erosion.

Contamination

To reduce possible impacts from the disturbance of contaminated materials at the project site, the following mitigation measures and commitments are recommended:

- Any repair, removal, or disturbance of ACMs within the bridge structures will be conducted in accordance with O. Reg. 278/05, Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations, as amended;
- Disturbance of silica containing materials will be conducted in accordance with the *Ontario Health and Safety Act* and the Ministry of Labour Silica Guideline to minimize the spread of dusts.

Social/Economic Environment

To reduce impacts to the social/economic environment during construction, the following mitigation measures and commitments are recommended:

- Standard dust control measures will be implemented where practical to control airborne dusts during construction activities.
- The Contractor shall maintain equipment in good operating condition and avoid unnecessary idling.
- All reasonable attempts will be made to work within local noise bylaws. Where this is not feasible (such as when overnight work is required), MTO will work within the spirit of the local bylaw and continue to provide clear and consistent communication with the municipality.

- Full closure of CR 17 and Highway 34 within the vicinity of the project site and associated detours will be advertised in advance and include appropriate signage.
- Notification of road closures and associated detours will be sent directly to Emergency Services.
- Undertake consultation with adjacent property owner and CNR during detail design.

Cultural Environment

To mitigate impacts to the cultural environment during construction, the following measures and commitments will be implemented:

- Should previously undocumented archaeological resources be discovered, the proponent or person discovering the potential archaeological resource must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

- Should human remains be discovered, in accordance with the *Funeral, Burial and Cremation Services Act*, the proponent or person discovering the remains shall notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

6.2.3 Summary Table of Environmental Concerns and Commitments

Table 14 provides a list of the potential impacts to the natural, social/economic and cultural environment from implementation of the Recommended Plan, the agencies of concern, and the measures developed to mitigate or minimize impacts.

Table 14. Summary of Environmental Concerns and Commitments

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
Natural Environment				
1.0 Terrestrial Environment				
1.1	Loss and/or disruption to wildlife and/or wildlife habitat.	MNRF Town of Hawkesbury	1.1.1	Exclusion fencing will be installed in select areas immediately adjacent to the work area at the Hawkesbury Creek.
			1.1.2	If wildlife is encountered in the construction area, work will be temporarily suspended until the animal is out of harm's way.
			1.1.3	If reptiles and amphibians are persistently found in the construction zone and allowing them to vacate in accordance with the wildlife encounter protocol described herein is found to delay construction activity, a Scientific Wildlife Collectors Permit under the Fish and Wildlife Conservation Act, 1997 may be sought by a qualified professional in order to complete wildlife salvages and transport these herptiles to an alternative habitat location.
			1.1.4	If a turtle nest is encountered during construction, a qualified biologist will extract the nest and transport the eggs to a suitable wildlife care facility such as a turtle trauma center.
			1.1.5	Tree removals should occur outside of the active window for bats (April 1 – September 30) of any given year. If tree removals are required in this window and appear to be potentially suitable maternity roost habitat (such as cracks and crevices, peeling bark), then a bat exit survey should occur prior to removal.
1.2	Increased erosion of and sedimentation of lands adjacent to the Study Area. Increased vulnerability of areas cleared of vegetation to invasion by non-native species.	MNRF MECP Town of Hawkesbury	1.2.1	Minimize vegetation removal to the extent possible.
			1.2.2	Follow tree felling and grubbing procedures as outlined in OPSS.PROV 201: Construction Specification for Clearing, Close Cut Clearing, Grubbing.
			1.2.3	Areas temporarily cleared of vegetation to facilitate bridge construction will be stabilized (that is vegetated or seeded) prior to removal of erosion and sedimentation control measures.
			1.2.4	Disturbed vegetated areas along Hawkesbury Creek will be re-vegetated to minimize invasion and colonization by non-native species and increase shade/cover for wildlife.

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
1.2	Increased erosion of and sedimentation of lands adjacent to the Study Area (cont'd). Increased vulnerability of areas cleared of vegetation to invasion by non-native species (cont'd).	MNRF MECP Town of Hawkesbury	1.2.5	Develop and implement an ESC plan to mitigate impacts on riparian habitat. ESC measures should contain the construction area.
			1.2.6	Minimize the disturbance of existing well-vegetated ditches and grassed slopes.
			1.2.7	Protect undisturbed slopes and sensitive ditching with silt fence and temporary flow check dams. These measures should remain in place until exposed soils are stabilized.
			1.2.8	Place erosion control blanket on 2:1 slopes where height warrants its use.
			1.2.9	Place appropriately sized rip rap and geotextile at new and existing storm sewer outlets.
			1.2.10	ESC measures shall be monitored regularly and/or after every 10 mm or greater rainfall event as they could require periodic cleaning, maintenance and/or re-construction. If deficiencies are found, they should be repaired and/or replaced promptly.
			1.2.11	Grading, placement of topsoil and seeding specifications will be implemented to decrease erosion potential and promote suitable vegetation regeneration.
			1.2.12	The site shall be stabilized prior to removal of ESC measures.
			1.2.13	A dewatering plan (if applicable) will be prepared in accordance with environmental best management practices.
1.3	Potential destruction of migratory bird nests, eggs or young. Temporary decrease in potential marginal migratory bird nesting habitat.	MNRF ECCC Town of Hawkesbury	1.3.1	Tree and vegetation removals to occur outside of the active window for breeding birds (April 1 to August 31).
			1.3.2	Vegetation removal will only occur during the restricted period if a qualified Avian Biologist conducts a nest search of the area prior to work commencing and determines that active nests are not observed in proximity to the work area. Should active nests be found, a buffer shall be applied to the area around the nest until the young have left the nest.
			1.3.3	If breeding birds and/or nests are encountered, works will not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest.

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
1.3	Potential destruction of migratory bird nests, eggs or young (cont'd). Temporary decrease in potential marginal migratory bird nesting habitat (cont'd).	MNRF ECCC Town of Hawkesbury	1.3.4	Exclusionary netting for Barn Swallows should be erected under bridges proposed for removal before April 1 to avoid nest establishment if bridge superstructures cannot be removed prior to this date. If removals are required and netting is not erected, a nest search can be conducted.
1.4	Potential harm or temporary harassment of SCC herptiles and birds and SAR.	MNRF MECP Town of Hawkesbury	1.4.1	Work will be confined to the designated construction areas.
			1.4.2	Workers shall be vigilant and check work areas and machinery for the presence of reptiles prior to each day of construction.
			1.4.3	Temporary wildlife exclusion fencing will be installed in proximity to the creek to exclude herptiles from the general construction area prior to construction and left in place during the turtle active season (April 15 to October 1).
			1.4.4	Exclusion fencing installed for herptiles should follow guidelines set out on the MNRF's SAR Branch Best Practices Technical Note on Reptile and Amphibian Exclusion Fencing (MNRF 2013) in order to provide the most effective protective function and prevent mortality to herptiles.
			1.4.5	Exclusion fences shall be included on contract drawings and specifications.
			1.4.6	If construction begins after April 15, a wildlife sweep of the construction area is recommended prior to fence installation and construction to observe any herptile nests present in the area.
			1.4.7	If these species are encountered in the construction area, work will be temporarily suspended until the animal is out of harm's way. If the species persists in the work area, a person qualified to handle the species will be contacted to relocate the animal.
			1.4.8	Any SAR sightings will be reported to MNRF's NHIC.
			1.4.9	Suitable Butternut and Black Ash trees are to be retained in the Study Area, and no earthworks are to occur within 30 m of the stem of healthy individuals.
1.5	Indirect or direct impacts to SAR trees.	MECP MNRF	1.5.1	Complete a tree inventory within the area of impact during detailed design, specifically targeting SAR (Black Ash and Butternut).
			1.5.2	Complete a Butternut Health Assessment and/or Black Ash Health Assessment, respectively, as required.
			1.5.3	Suitable Butternut and Black Ash trees are to be retained in the Study Area.

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
1.5	Indirectly or directly affect SAR trees (cont'd).	MECP MNRF	1.5.4	A 25 m buffer will be applied to Category 2 and Category 3 Butternut trees.
			1.5.5	A 30 m buffer will be applied to Category 2 and Category 3 Black Ash trees.
2.0 Fish and Fish Habitat				
2.1	Indirect disruption of fish habitat within the high-water mark.	DFO MNRF Town of Hawkesbury	2.1.1	No in-water works or work below the high-water mark to occur in Hawkesbury Creek or its tributaries between March 15 to July 15 of any given year for considerations of spawning fish species.
			2.1.2	All disturbed terrestrial riparian areas will be restored to preconstruction conditions with a native grass seed mix and stabilized to prevent erosion.
			2.1.3	No in-water works or work below the high-water mark to occur between October 16 and March 15 of any given year to protect hibernating turtles.
2.3	Siltation at the site and sedimentation downstream.	MNRF MECP Town of Hawkesbury	2.3.1	Appropriate ESC measures will be surrounding all watercourses and wetlands to prevent migration of loose soils and accumulated sediment downstream.
2.4	Introduction of deleterious substances in the watercourse.	MECP Town of Hawkesbury	2.4.1	Handling of fuel, excess materials and debris will be properly managed on-site and removed as per the standard construction practices to prevent any deleterious substances from entering the watercourse.
			2.4.2	All materials used or generated (such as organics, soils, woody debris, temporary stockpiles, construction debris) will be temporarily stored, handled and disposed of during site preparation, construction and clean-up in a manner that prevents entry into the river.
3.0 Contamination				
3.1	Possible disturbance of ACMs.		3.1.1	The Contractor will be notified of the potential to encounter designated substances.
			3.1.2	Any repair, removal, or disturbance of ACM's within the bridge structures will be conducted in accordance with Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations, as amended (O. Reg. 278/05)

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
3.2	Possible airborne exposure to silica dust.		3.2.1	Disturbance of silica containing materials will be conducted in accordance with the *Ontario Health and Safety Act* and the Ministry of Labour Silica Guideline to minimize the spread of dusts.
			3.2.2	Standard dust control measures will be implemented where practical to control airborne dusts and minimize exposure to silica during construction activities.
Social and Cultural Environment				
4.0 Archaeology				
4.1	Possible disturbance of sites containing archaeological potential.	MCM Indigenous Communities Town of Hawkesbury	4.1.1	Should previously undocumented archaeological resources be discovered, the proponent or person discovering the potential archaeological resource must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
			4.1.2	Should human remains be discovered, in accordance with the *Funeral, Burial and Cremation Services Act*, the proponent or person discovering the remains shall notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.
5.0 Noise				
5.1	Temporary disturbance to nearby residents and businesses during construction.	Local Residents Town of Hawkesbury	5.1.1	The contractor will be encouraged to adhere to the local Noise By-Law where feasible.
			5.1.2	The Contractor shall maintain equipment in good operating condition and avoid unnecessary idling.
6.0 Traffic				
6.1	Temporary disruptions to traffic from single lane and complete road closures.	Local Residents Emergency Services Town of Hawkesbury	6.1.1	Short duration road closures will occur during off-peak periods.
			6.1.2	Full road closures will be timed to avoid major community events.
			6.1.3	All road closures and associated detours will be advertised in advance and include appropriate signage.
			6.1.4	Notification of road closures and associated detours will go directly to Emergency Services.

I.D. #	Issue/Concern/Potential Effect	Concerned Agencies	I.D. #	Proposed Mitigation/Protection/Monitoring
7.0 Property				
7.1	A standard grade separation reconstruction agreement between CNR and MTO in accordance with the *Railway Safety Act* is required to replace the existing CNR/Hawkesbury Creek Overhead structure.	MTO CNR	7.1.1	Consultation will be undertaken between MTO and CNR during detail design.
7.2	Modification to the Les Jardin Lamoureux Snack Bar property, located at 1466 Highway 34 is required to comply with the Highway Corridor Management Manual.	MTO Property Owner	7.2.1	Consultation will be undertaken between MTO and the property owner during detail design.

7.0 Monitoring

Monitoring will be conducted by an independent on-site Contract Administrator (CA), retained by MTO, to ensure that environmental protection measures, as outlined in this study and in the contract package, are being followed during construction. This includes making sure that the implementation of mitigation measures and key design features is in line with commitments made to external agencies during the planning and design stage.

It is the responsibility of the CA to evaluate the effectiveness of the mitigation plan to confirm that individual mitigation measures are adequately addressing the anticipated impact and that additional mitigation measures are provided for any unanticipated environmental impact that may arise during construction. Should problems develop during construction, it is the responsibility of the CA to contact MTO and the necessary agencies.

8.0 Bibliography

Dillon Consulting, 2020. County Road 17 Bridge Replacements (GWP 4023-15-00) Natural Heritage Existing Conditions Update Memo.

Dillon Consulting, 2024. County Road 17 Bridge Replacements (GWP 4023-15-00) Natural Heritage Existing Conditions Update Memo 2024.

Jacobs. 2024. Structure Site Investigation Brief, MTO Site No. 27X-0050/B0 Hawkesbury Creek and CNR Overhead. Prepared for Dillon consulting.

Jacobs. 2024. Structure Site Investigation Brief, MTO Site No. 27X-0051/B0 County Road 17 Underpass. Prepared for Dillon consulting.

Ministry of Transportation, 2000. Class Environmental Assessment for Provincial Transportation Facilities.

United Counties of Prescot and Russel, 2022. United Counties of Prescot and Russel Official Plan.

Appendix A

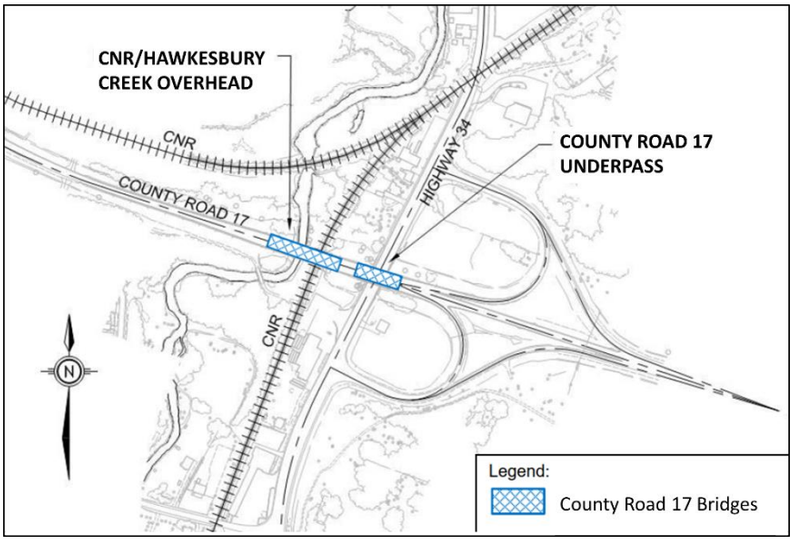
Ontario Government Notices

Notice of Public Information Centre No. 1

Hawkesbury Bridge Replacements
Transportation Environmental Study Report Review and Addendum

THE PROJECT

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

THE PROCESS

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Preferred Alternative Method (i.e., Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

PUBLIC CONSULTATION

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. Notices will be published in local newspapers and on the project website to advertise the time and location of the PICs.

The purpose of this notice is to advise that PIC No. 1 will be held on **May 16, 2024** from **4:00 PM** to **8:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**.

ADDITIONAL INFORMATION

If you have any comments or questions at this time, or wish to be added to the project mailing list to receive future notices, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
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Dan Brandao, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 449-7916
Email: Dan.Brandao@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cet avis est disponible en français sur demande.

Notice issued on May 1, 2024.

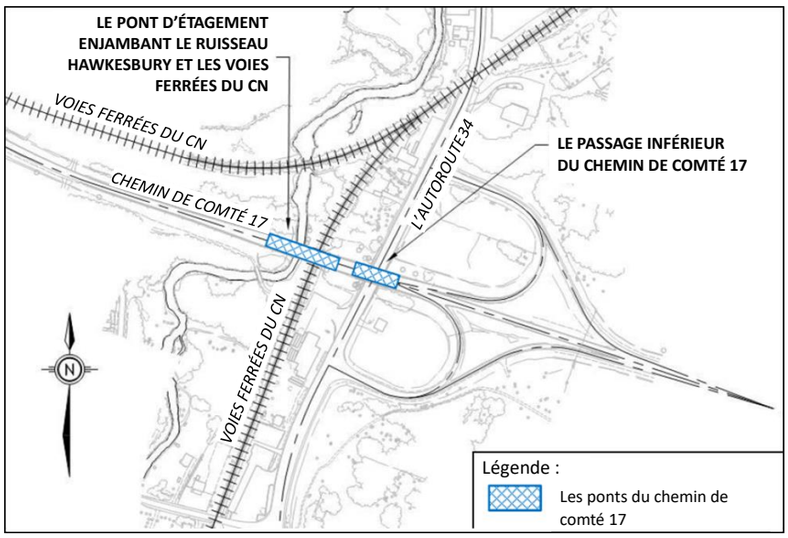
Ontario

Avis sur la séance d'information publique nº 1

Remplacement de ponts à Hawkesbury
Examen du rapport d'étude environnementale sur les transports et addenda

LE PROJET

Le ministère des Transports de l'Ontario (MTO) a retenu les services de Dillon Consulting Limited et de Jacobs pour réaliser la conception préliminaire et l'examen du rapport d'étude environnementale sur les transports (REET) et de l'addenda pour le remplacement du pont d'étagement surplombant le ruisseau Hawkesbury et les voies ferrées du CN et du passage inférieur enjambant la route de comté 17 à l'intersection de la route 34 dans les Comtés unis de Prescott et Russell. La route de comté 17 marque la frontière entre la ville de Hawkesbury et le canton de Champlain. Les deux structures ont atteint la fin de leur durée de vie utile et doivent être remplacées.



En novembre 2020, une étude d'évaluation environnementale de portée générale a été réalisée dans le cadre du projet de remplacement de ponts à Hawkesbury (« le projet »). Un REET a été diffusé aux fins d'examen public, étayant une conception préférée dans le cadre du projet, y compris les impacts environnementaux et les fermetures de routes envisagées, ainsi que les mesures d'atténuation proposées.

Les principales composantes du projet sont les suivantes :

- le remplacement des structures des ponts ;
- les modifications de la bretelle de sortie en direction est et de la bretelle d'entrée en direction ouest à l'échangeur de la route de comté 17 et de la route 34 ; et
- les fermetures de routes de courte durée (nécessaires pour minimiser les impacts sur les propriétés et réduire la durée globale des travaux), pendant lesquelles la circulation sera détournée.

Entre 2021 et 2023, d'autres configurations d'échangeurs (ainsi que d'autres options connexes de conception et de construction de ponts) ont été déterminées dans le cadre du projet. Par conséquent, il a été décidé qu'une révision du REET et de l'addenda était nécessaire pour réévaluer et confirmer la conception préférée du projet.

LE PROCESSUS

Le projet suit le processus de planification environnementale approuvé pour les entreprises du groupe B, conformément à l'évaluation environnementale de portée générale du MTO pour les installations provinciales de transport de 1999, telles qu'elles ont été modifiées en 2000 (ÉE de portée générale du MTO). Conformément à l'ÉE de portée générale du MTO, le promoteur doit examiner toute modification importante apportée au projet après l'émission de l'avis d'achèvement du REET (examen du REET) et préparer un addenda au REET relatif à cette modification.

À l'issue de l'examen du REET, un rapport comprenant tout addenda, documentant le processus d'examen du REET, y compris la méthode alternative préférée (c.-à-d. conception préférée), les impacts et mesures d'atténuation, ainsi que les conclusions de la consultation des parties prenantes, de la communauté autochtone et du public, sera diffusé sur le site Web du projet (www.cr17bridges.com/fr/) pour une consultation publique de 30 jours. Un avis sera publié dans les journaux locaux et affiché sur le site Web du projet au moment où le document pourra être consulté.

CONSULTATION PUBLIQUE

Deux séances d'information publique (SIP) en présentiel auront lieu au cours de l'examen du REET afin de partager les informations relatives au projet et de recueillir des commentaires. Des avis seront publiés dans les journaux locaux et sur le site Web du projet pour en annoncer l'heure et le lieu.

Le présent avis a pour but de vous informer que la SIP nº 1 se tiendra le **16 mai 2024** de **16 h** à **20 h** à la **Légion royale canadienne 472** située au **152, rue Nelson Est, à Hawkesbury, en Ontario**.

RENSEIGNEMENTS SUPPLÉMENTAIRES

Si vous avez des commentaires ou des questions, ou si vous souhaitez faire ajouter votre nom sur la liste de diffusion du projet pour recevoir les avis futurs, veuillez utiliser la fonction « Contactez-nous » sur le site Web du projet (www.cr17bridges.com/fr/) ou contacter l'un des membres suivants de l'équipe de projet :

Brad Craig
Consultant-gestionnaire de projet
Dillon Consulting Limited
130, avenue Dufferin, bureau 1210
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Tél. : 519 438-1288 poste 1318
Courriel : BCraig@dillon.ca

Dan Brandao, P.Eng.
Ingénieur de projet principal
Ministère des Transports de l'Ontario
1355, boul. John Counter, C. P. 4000
Kingston (Ontario) K7L 5A3
Tél. : 613 449-7916
Courriel : Dan.Brandao@ontario.ca

Les renseignements seront recueillis conformément à la *Loi sur l'accès à l'information et la protection de la vie privée*. À l'exception des renseignements personnels, tous les commentaires recueillis seront versés au dossier public. Si vous avez des exigences en matière d'accessibilité pour participer au projet, veuillez communiquer avec l'un des membres de l'équipe de projet indiqué ci-dessus.

This notice is available in English upon request.

Avis émis le 30 avril 2024.

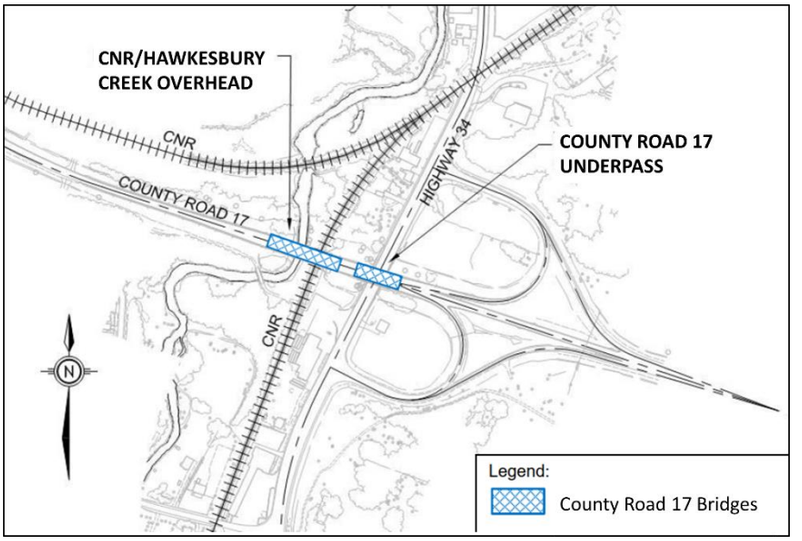
Ontario

Notice of Public Information Centre No. 2

Hawkesbury Bridge Replacements
Transportation Environmental Study Report Review and Addendum

THE PROJECT

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration alternatives (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

THE PROCESS

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Preferred Alternative Method (i.e., Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

PUBLIC CONSULTATION

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. PIC No. 1 was held in May 2024 to provide an update on the project and to present the interchange configuration and construction staging alternatives under consideration. PIC No. 2 is being held to present the evaluation of alternatives and the technically preferred alternative.

The purpose of this notice is to advise that PIC No. 2 will be held on **October 17, 2024** from **4:00 PM** to **7:00 PM** at the **Royal Canadian Legion Branch 472** located at **152 Nelson Street East, Hawkesbury, ON**.

ADDITIONAL INFORMATION

If you have any comments or questions at this time, or wish to be added to the project mailing list to receive future notices, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig, P.Eng.
Consultant Project Manager
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cet avis est disponible en français sur demande.

Notice issued on October 9, 2024.

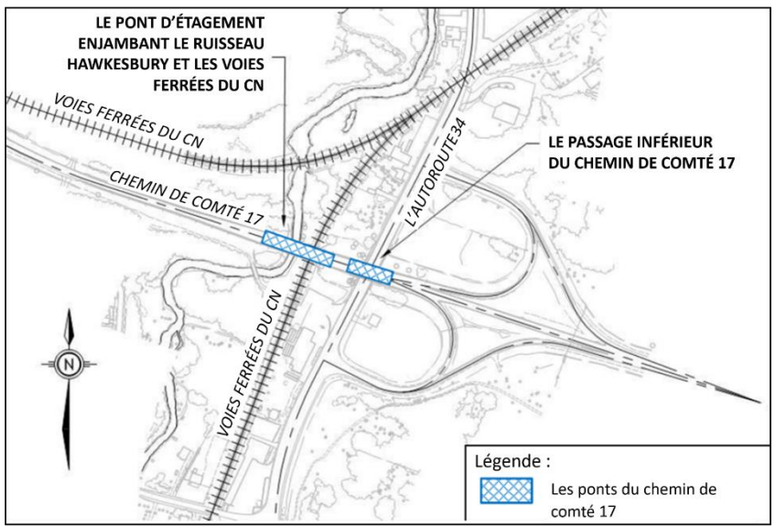
Ontario

Avis sur la séance d'information publique nº 2

Remplacement de ponts à Hawkesbury
Examen du rapport d'étude environnementale sur les transports et addenda

LE PROJET

Le ministère des Transports de l'Ontario (MTO) a retenu les services de Dillon Consulting Limited et de Jacobs pour réaliser la conception préliminaire et l'examen du rapport d'étude environnementale sur les transports (REET) et de l'addenda pour le remplacement du pont d'étagement surplombant le ruisseau Hawkesbury et les voies ferrées du CN et du passage inférieur enjambant la route de comté 17 à l'intersection de la route 34 dans les comtés unis de Prescott et Russell. La route de comté 17 marque la frontière entre la ville de Hawkesbury et le canton de Champlain. Les deux structures ont atteint la fin de leur durée de vie utile et doivent être remplacées.



En novembre 2020, une étude d'évaluation environnementale de portée générale a été réalisée dans le cadre du projet de remplacement de ponts à Hawkesbury (« le projet »). Un REET a été publié aux fins d'examen public, étayant une conception préférée dans le cadre du projet, y compris les impacts environnementaux et les fermetures de routes envisagées, ainsi que les mesures d'atténuation proposées.

Les principales composantes du projet sont les suivantes :

- Remplacement des structures des ponts
- Modification de la bretelle de sortie en direction est et de la bretelle d'entrée en direction ouest à l'échangeur de la route de comté 17 et de la route 34
- Fermetures de routes de courte durée (nécessaires pour minimiser les impacts sur les propriétés et réduire la durée globale des travaux), pendant lesquelles la circulation sera détournée

Entre 2021 et 2023, d'autres configurations d'échangeurs (ainsi que d'autres options connexes de conception et de construction de ponts) ont été déterminées dans le cadre du projet. Par conséquent, il a été décidé qu'une révision du REET et de l'addenda était nécessaire pour réévaluer et confirmer la conception préférée du projet.

LE PROCESSUS

Le projet suit le processus de planification environnementale approuvé pour les entreprises du groupe B, conformément à l'évaluation environnementale de portée générale du MTO pour les installations provinciales de transport de 1999, tel qu'elles ont été modifiées en 2000 (ÉE de portée générale du MTO). Conformément à l'ÉE de portée générale du MTO, le promoteur doit examiner toute modification importante apportée au projet après l'émission de l'avis d'achèvement du REET (examen du REET) et préparer un addenda au REET relatif à cette modification.

À l'issue de l'examen du REET, un rapport comprenant tout addenda, documentant le processus d'examen du REET, y compris la méthode alternative préférée (c.-à-d. la conception préférée), les répercussions et les mesures d'atténuation, ainsi que les conclusions de la consultation des parties prenantes, de la communauté autochtone et du public, sera publié sur le site Web du projet (www.cr17bridges.com/fr/) pour une consultation publique de 30 jours. Un avis sera publié dans les journaux locaux et affiché sur le site Web du projet au moment où le document pourra être consulté.

CONSULTATION PUBLIQUE

Deux séances d'information publique (SIP) en présentiel auront lieu au cours de l'examen du REET afin de faire part des informations relatives au projet et de recueillir des commentaires. La première SIP a eu lieu en mai 2024 pour présenter une mise à jour sur le projet et pour présenter les configurations d'échangeurs et les options d'étapes de construction. La deuxième SIP se tiendra pour présenter l'évaluation des alternatives et la conception préférée du projet.

Le présent avis a pour but de vous informer que la deuxième SIP se tiendra **le 17 octobre 2024** de **16 h** à **19 h** à la **Légion royale canadienne 472** située au **152, rue Nelson Est, à Hawkesbury, en Ontario**.

RENSEIGNEMENTS SUPPLÉMENTAIRES

Si vous avez des commentaires ou des questions, ou si vous souhaitez faire ajouter votre nom sur la liste de diffusion du projet pour recevoir les avis futurs, veuillez utiliser la fonction « Contactez-nous » sur le site Web du projet (www.cr17bridges.com/fr/) ou communiquer avec l'un des membres suivants de l'équipe de projet :

Brad Craig
Consultant-gestionnaire de projet
Dillon Consulting Limited
130, avenue Dufferin, bureau 1210
London (Ontario) N6A 5R2
Tél. : 519 438-1288, poste 1318
Courriel : BCraig@dillon.ca

Joanna Zhang, ing.
Ingénieure de projet principal
Ministère des Transports de l'Ontario
1355, boul. John Counter, C.P. 4000
Kingston (Ontario) K7L 5A3
Tél. : 613 539-7564
Courriel : Joanna.Zhang2@ontario.ca

Les renseignements seront recueillis conformément à la *Loi sur l'accès à l'information et la protection de la vie privée*. À l'exception des renseignements personnels, tous les commentaires recueillis seront versés au dossier public. Si vous avez des exigences en matière d'accessibilité pour participer au projet, veuillez communiquer avec l'un des membres de l'équipe de projet indiqué ci-dessus.

This notice is available in English upon request.

Avis émis le 8 octobre 2024.

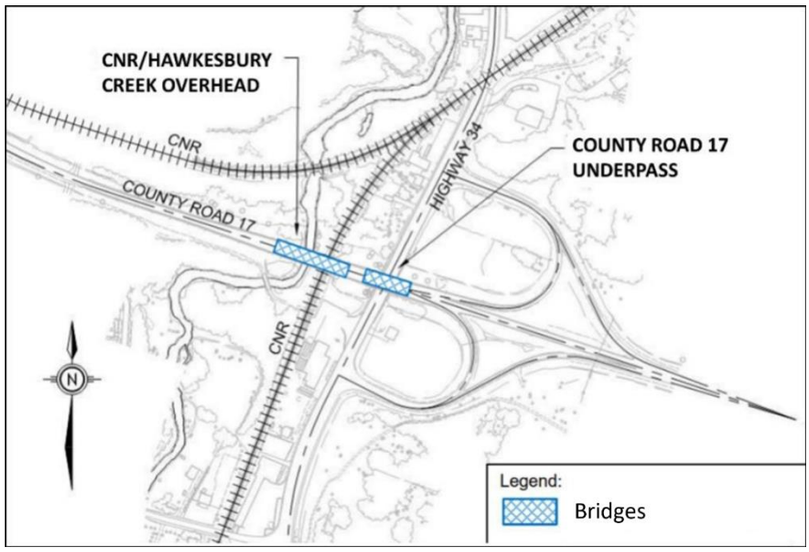
Ontario

Notice of Addendum

Hawkesbury Bridge Replacements
Transportation Environmental Study Report Addendum

THE PROJECT

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Addendum for the Hawkesbury Bridge Replacements in the United Counties of Prescott and Russell (the Project).



Major components of the Project include:

- Replacement of the CNR/Hawkesbury Creek Overhead Bridge and the County Road 17 Underpass Bridge at Highway 34;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

TESR ADDENDUM

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA), with opportunity for public input throughout. In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent and the proponent must prepare a TESR Addendum in respect of the change.

The TESR Addendum process for the Project, including the results of stakeholder, Indigenous Community and public consultation, updates to existing conditions and a description of the changes to the Preferred Design, has been documented in a TESR Addendum report. The TESR Addendum is now available on the project website (www.cr17bridges.com) for a 30-day public comment period from **January 21**, **2025**, to **February 22**, **2025**.

COMMENTS

Interested persons are encouraged to review the TESR Addendum and provide comments to the Project Team by **February 22**, **2025**. To submit comments or questions, or if you wish to be added to the project mailing list, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for a Section 16 Order to require that a higher level of study (that is, a Comprehensive EA) be completed or that conditions be imposed (such as, requirement for further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester's contact information and full name and be received by **February 22**, **2025**.

Requests should specify what kind of order is being requested (request for conditions or a request for a Comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request to ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Email: Minister.MECP@ontario.ca

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4VV 1P5
Email: EABDirector@ontario.ca

A copy of the request should also be sent to the Project Team members (MTO and Dillon) by mail or e-mail at the contact information provided above.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cet avis est disponible en français sur demande.

Notice first issued on January 21, 2025.

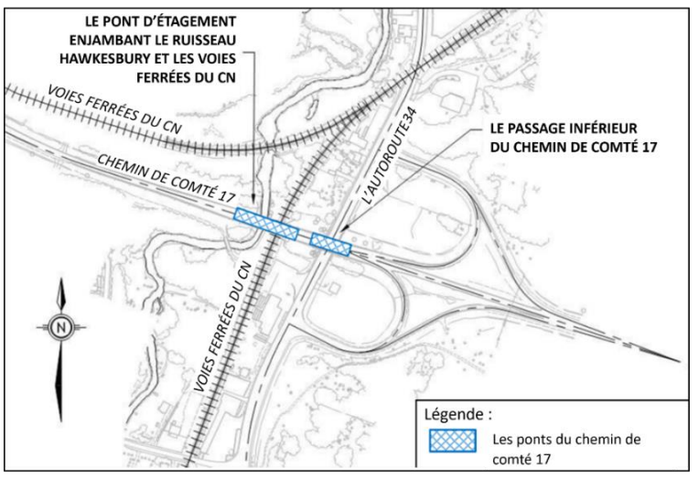
Ontario

Avis de dépôt d'un addenda

Remplacement de ponts à Hawkesbury
Examen du rapport d'étude environnementale sur les transports et addenda

LE PROJET

Le ministère des Transports de l'Ontario (MTO) a retenu les services de Dillon Consulting Limited et de Jacobs pour réaliser le concept préliminaire et l'addenda au rapport d'étude environnementale sur les transports (REET) pour le remplacement de ponts dans les comtés unis de Prescott et de Russell (le « projet »).



Les principales composantes du projet comprennent :

- le remplacement du pont d'étagement surplombant le ruisseau Hawkesbury et les voies ferrées du CN et du passage inférieur enjambant le chemin de comté 17 à l'intersection de l'autoroute 34;
- la modification de la bretelle de sortie en direction est et de la bretelle d'entrée en direction ouest à l'échangeur du chemin de comté 17 et de l'autoroute 34; et
- les fermetures de routes de courte durée (nécessaires pour minimiser les impacts sur les propriétés et réduire la durée globale des travaux), pendant lesquelles la circulation sera détournée.

Addenda au REET

Le projet suit le processus de planification environnementale approuvé pour les entreprises du groupe B, conformément à l'évaluation environnementale de portée générale du MTO pour les installations provinciales de transport de 1999, modifiée en 2000 (ÉE de portée générale du MTO), avec possibilité de participation du public tout au long du processus. Conformément à l'ÉE de portée générale du MTO, le promoteur doit examiner toute modification importante apportée au projet après l'émission de l'avis d'achèvement du REET (examen du REET) et préparer un addenda au REET relatif à cette modification.

Le processus d'addenda au REET du projet a fait l'objet d'un rapport qui fait état des résultats de la consultation des parties prenantes, de la communauté autochtone et du public, des mises à jour des conditions existantes et d'une description des changements apportés au concept préféré. L'addenda au REET est maintenant disponible sur le site Web du projet (www.cr17bridges.com) pour une période de consultation publique de 30 jours, soit du **21 janvier 2025** au **22 février 2025**.

COMMENTAIRES

Les personnes intéressées sont invitées à examiner l'addenda au REET et à faire part de leurs commentaires à l'équipe de projet avant le **22 février 2025**. Si vous avez des commentaires ou des questions, ou si vous souhaitez figurer sur la liste de diffusion du projet, veuillez utiliser la fonction « Contactez-nous » sur le site Web du projet (www.cr17bridges.com) ou contacter l'une des personnes suivantes de l'équipe de projet :

Brad Craig, ing.
Consultant-gestionnaire de projet
Dillon Consulting Limited
130, avenue Dufferin, bureau 1210
London (Ontario) N6A 5R2
Tél. : 519 438-1288, poste 1318
Courriel : BCraig@dillon.ca

Joanna Zhang, ing.
Ingénieure de projet principal
Ministère des Transports de l'Ontario
1355, boul. John Counter, C.P. 4000
Kingston (Ontario) K7L 5A3
Tél. : 613 539-7564
Courriel : Joanna.Zhang2@ontario.ca

En outre, une demande d'arrêté pris en vertu de l'article 16 exigeant un niveau d'étude plus élevé (c-.à-d. une EE complète) ou imposant des conditions (p. ex., en exigeant des études supplémentaires) peut être adressée au ministère de l'Environnement, de la Protection de la nature et des Parcs (MEPNP), uniquement si l'arrêté sollicité permet de prévenir, d'atténuer ou de pallier les incidences négatives sur les droits ancestraux des peuples autochtones et leurs droits issus de traités protégés par la Constitution. Les demandes fondées sur d'autres motifs ne seront pas prises en considération. Toute demande doit comporter les coordonnées et le nom complet de la personne qui la formule et être reçue avant le **22 février 2025**.

Les demandes doivent préciser le type d'arrêté sollicité (demande de conditions ou demande d'EE complète), la manière dont l'arrêté peut prévenir, atténuer ou pallier les incidences négatives potentielles sur les droits ancestraux des peuples autochtones et leurs droits issus de traités, ainsi que toute information à l'appui des affirmations contenues dans la demande pour permettre au ministère d'en entamer efficacement l'examen. Toute demande doit être envoyée par écrit ou par courrier électronique aux coordonnées suivantes :

Ministre de l'Environnement, de la Protection de la nature et des Parcs
Ministère de l'Environnement, de la Protection de la nature et des Parcs
777 Bay Street, 5th Floor
Toronto (Ontario) M7A 2J3
Courriel : Minister.MECP@ontario.ca

Directrice de la Direction des évaluations environnementales
Ministère de l'Environnement, de la Protection de la nature et des Parcs
135 St. Clair Ave. W, 1st Floor
Toronto (Ontario) M4V 1P5
Courriel : EABDirector@ontario.ca

Un exemplaire de la demande doit également être envoyé aux membres de l'équipe de projet (MTO et Dillon) par courrier ou par courriel aux coordonnées indiquées ci-dessus.

Les renseignements seront recueillis conformément à la *Loi sur l'accès à l'information et la protection de la vie privée*. À l'exception des renseignements personnels, tous les commentaires recueillis seront versés au dossier public. Si vous avez des exigences en matière d'accessibilité pour participer au projet, veuillez communiquer avec l'une des personnes de l'équipe de projet indiqué ci-dessus.

This notice is available in English upon request.

Avis publié le 21 janvier 2025.

Ontario

Appendix B

Notification Letters

Elected Officials

Ministry of Transportation

Planning and Design Section
1355 John Counter Boulevard
Postal Bag 4000
Kingston, ON K7L 5A3
Tel.: (613) 540-5120

Ministère des Transports

Section de la planification et de la conception
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston, ON K7L 5A3
Tél.: (613) 540-5120

Ontario

April 26, 2024

«Name»

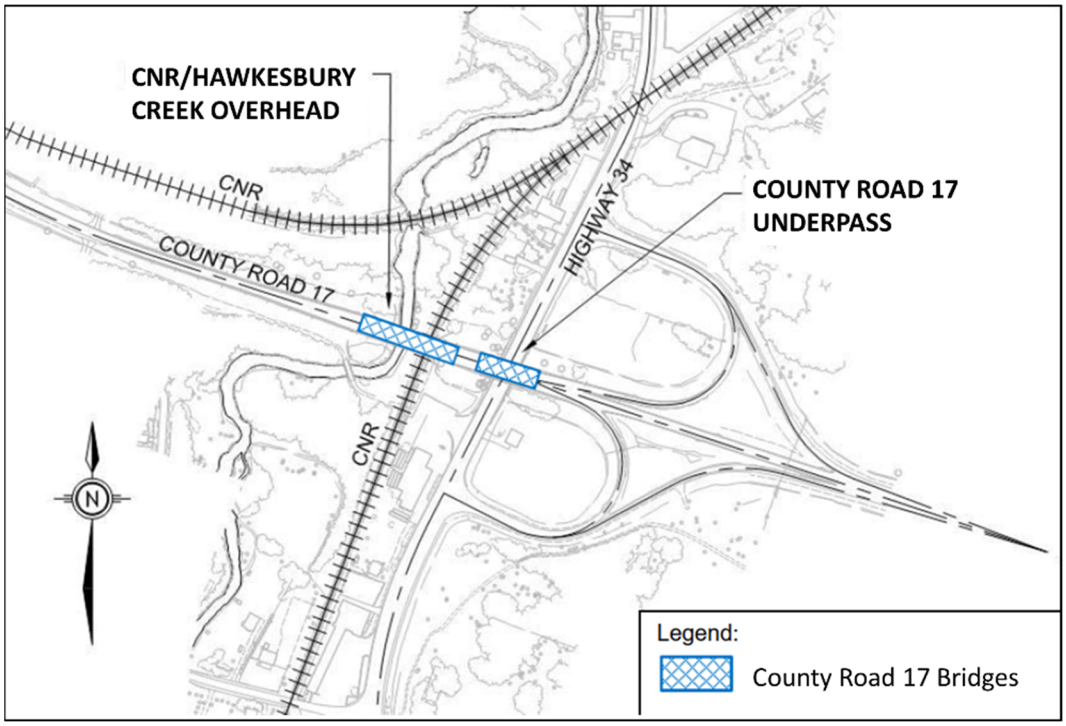
«Position»

«Address»

Re: Notice of Public Information Centre No. 1 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum | G.W.P. 4203-15-00

Dear «Name»,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Preferred Alternative Method (i.e. Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers (**Journal Régional on April 30** and **The Review on May 8**) and posted on the project website at that time to advertise that the document is available for review.

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. Notices will be published in local newspapers and on the project website to advertise the time and location of the PICs.

The purpose of this notice is to advise that PIC No. 1 will be held on **May 16, 2024** from **4:00 PM to 8:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**. We would also like to invite yourself, Council members and municipal staff to attend the venue from 3:00 PM to 4:00 PM for an opportunity to speak with the Project Team.

If you have any comments or questions at this time, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Dan Brandao
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 449-7916
Email: Dan.Brandao@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cette lettre est disponible en français sur demande.

Sincerely,

Dan Brandao, P.Eng. | Senior Project Engineer
Engineering Program Delivery East | Ministry of Transportation Ontario
1355 John Counter Boulevard, Postal Bag 4000
Kingston, ON K7L 5A3
Tel: 613-449-7916 | E-Mail: dan.brandao@ontario.ca

Enclosed: Notice of Public Information Centre No. 1 (English)
Notice of Public Information Centre No. 1 (French)

Cc: Nathan Ellis, MTO Environmental Planner
Frank Vanderlaan, MTO Area Manager
Jordan Broad, Dillon Project Manager
Anna Fawcett, Jacobs Environmental Planner

Indigenous Communities

Ministry of Transportation

Reginal Services & Relationships
East Operations Branch
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613-545-4600
Fax: 613-547-1777

Ministère des Transports

Services Régionales & Relations
Opérations de l'Est
1355 Boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613-545-4600
Téléc: 613-547-1777

Ontario

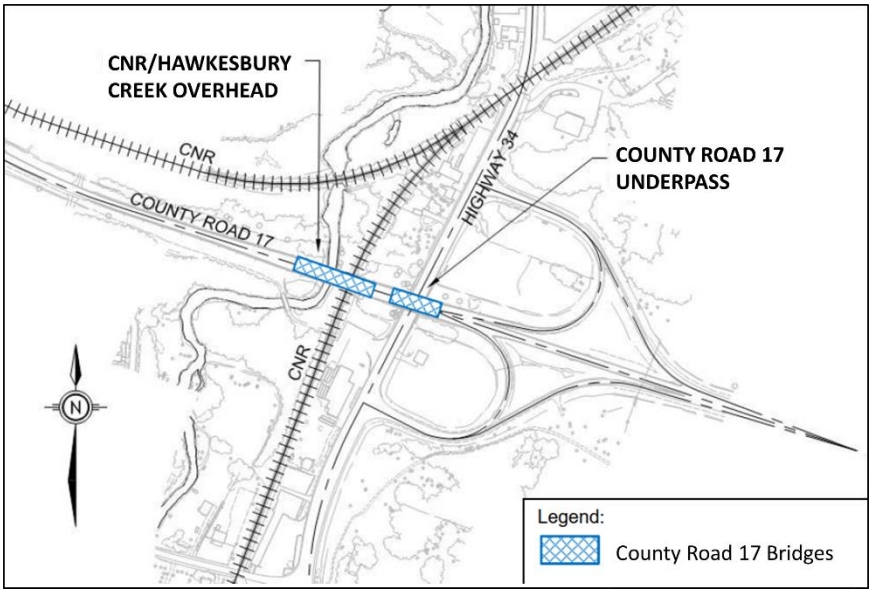
April 30, 2024

[NAME]
[ORGANIZATION/COMMUNITY]
[CONTACT INFORMATION]

Re: Notice of Public Information Centre No. 1 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum | G.W.P. 4203-15-00

Dear [NAME],

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

During the original Class EA Study, a Stage 1 Archeological Assessment was completed. The assessment concluded that much of the study area has been previously disturbed; however, in accordance with the Ontario Ministry of Tourism, Culture and Sport Standards and Guidelines for Consultant Archaeologists (2011), areas located within 100 meters from historic transportation corridors that have not been previously disturbed require further investigation. A subsequent Stage 2 Archeological Assessment was carried out on areas located within 100 meters from the historic Canadian National Railway corridor in the study area. A test pitting survey was conducted and revealed no artifacts or archeological features.

Terrestrial ecosystem and fish and fish habitat field investigations were also completed for the study area. Species at Risk (SAR) that were observed on site include Snapping Turtle and Butternut. Other SAR that were not observed but that may have potential habitat within or adjacent to the study area includes the Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis, Tri-Colored Bat, Barn Swallow, River Redhorse, and potentially Channel Darter downstream from the study area. Impact assessments were completed to determine the anticipated impact on terrestrial ecosystems and fish and fish habitat, including SAR, and to develop mitigation measures.

Between 2021 and 2023, additional interchange configuration (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Preferred Alternative Method (i.e. Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. Notices will be published in local newspapers and on the project website to advertise the time and location of the PICs.

The purpose of this notice is to advise that PIC No. 1 will be held on **May 16, 2024** from **4:00 PM to 8:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**. We would also like to invite yourself, Council members and municipal staff to attend the venue from 3:00 PM to 4:00 PM for an opportunity to speak with the Project Team prior to the public arriving.

To learn more information about the project, please visit the project website at www.cr17bridges.com. If you have any comments or questions or wish to meet with the Project Team please feel free to contact the undersigned.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact the undersigned.

Sincerely,

Franca Sacchetti

Franca Sacchetti
Director, East Operations

Enclosed: Notice of Public Information Centre No. 1

cc: Dan Brandao, MTO Senior Project Engineer
Nathan Ellis, MTO Environmental Planner
Frank Vanderlaan, MTO Area Manager
Peter Copping, MTO Indigenous Liaison Specialist
Jordan Broad, Dillon Project Manager
Anna Fawcett, Jacobs Environmental Planner

External Agencies

DILLON CONSULTING

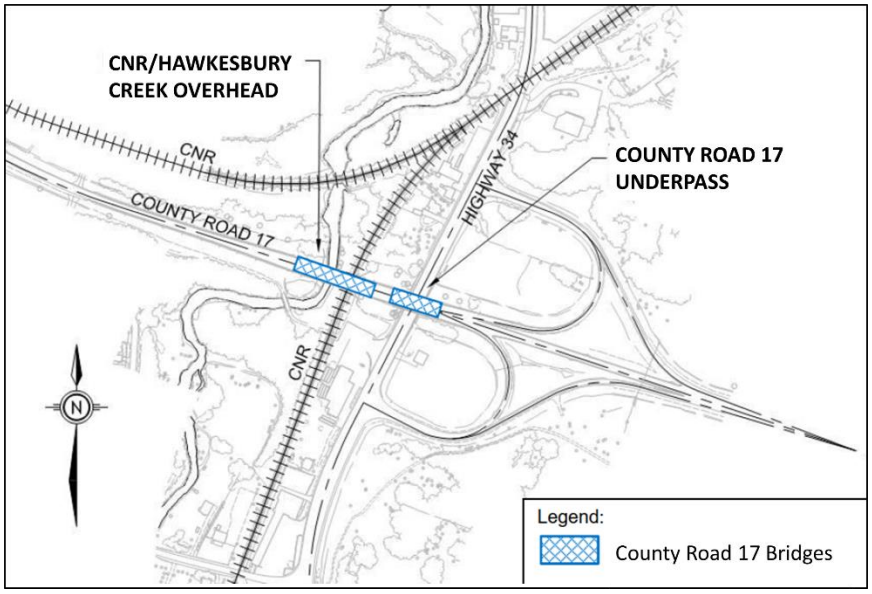
130 Dufferin Avenue
Suite 1210
London, ON N6A 5R2
T 519.438.6192
dillon.ca

May 1, 2024

Subject: Notice of Public Information Centre No. 1 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum | G.W.P. 4203-15-00

Dear Sir/Madam,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been

determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Preferred Alternative Method (i.e. Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. Notices will be published in local newspapers and on the project website to advertise the time and location of the PICs.

The purpose of this notice is to advise that PIC No. 1 will be held on **May 16, 2024** from **4:00 PM to 8:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**.

If you have any comments or questions at this time, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig, P. Eng.
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Dan Brandao, P. Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 449-7916
Email: Dan.Brandao@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cette lettre est disponible en français sur demande.

Sincerely,

_____

Brad Craig
Consultant Project Manager

Elected Officials

Ministry of Transportation

Engineering Program Delivery East
1355 John Counter Boulevard, Postal Bag 4000
Kingston, ON K7L 5A3
Tel: 613-539-7564

Ministère des Transports

Mise en oeuvre du programme relatif à l'ingénierie – Est
1355 Boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél : 613-539-7564

Ontario

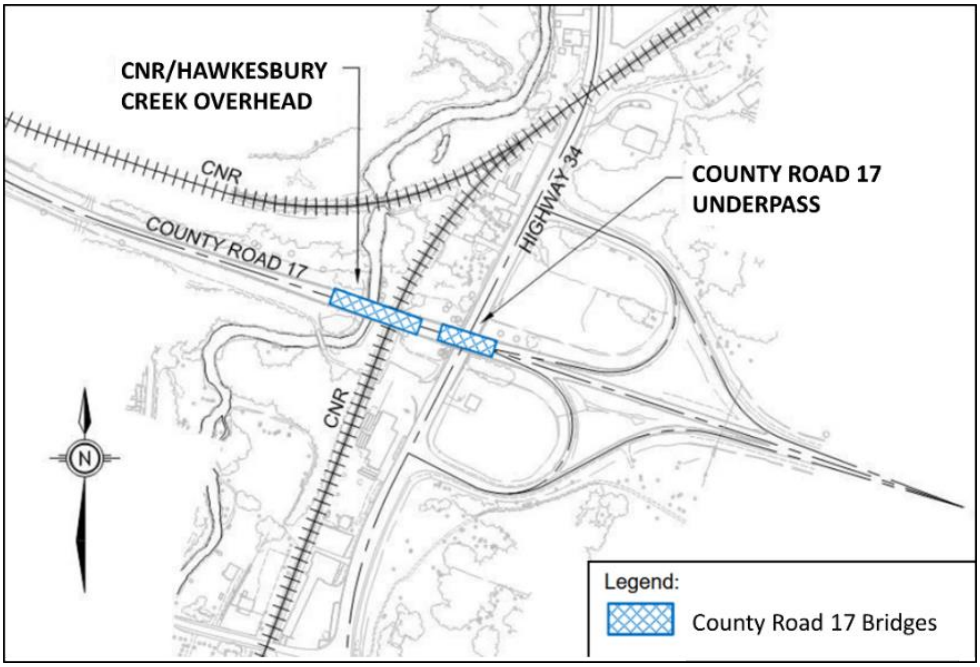
October 1, 2024

«FIRST_NAME» «LAST_NAME»
«JOB TITLE»
«ORGANIZATION»
«ADDRESS»

Subject: Notice of Public Information Centre No. 2 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum (GWP 4203-15-00)

Dear «TITLE/NAME»,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration alternatives (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Technically Preferred Alternative (i.e., Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers (The Review and Le Regional) and posted on the project website at that time to advertise that the document is available for review.

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. PIC No. 1 was held in May 2024 to provide an update on the project and to present the interchange configuration and construction staging alternatives under consideration. PIC No. 2 is being held to present the evaluation of alternatives and the Technically Preferred Alternative.

The purpose of this notice is to advise that PIC No. 2 will be held on **October 17, 2024** from **4:00 PM to 7:00 PM** at the **Royal Canadian Legion Branch 472** located at **152 Nelson Street East, Hawkesbury, ON**. We would also like to invite you, Council members and municipal staff to attend the venue from 3:00 PM to 4:00 PM for an opportunity to speak with the Project Team.

If you have any comments or questions at this time, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig, P.Eng.
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3

Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cette lettre est disponible en français sur demande.

Sincerely,

_____

Joanna Zhang, P.Eng.
MTO Senior Project Engineer

Enclosed: Ontario Government Notice (OGN) No.2 (English)
Ontario Government Notice (OGN) No.2 (French)

Cc: Nathan Ellis, MTO Environmental Planner
Frank Vanderlaan, MTO Area Manager
Jordan Broad, Dillon Project Manager
Anna Fawcett, Jacobs Environmental Planner

Indigenous Communities

Ministry of Transportation

Regional Services & Relationships
East Operations Branch
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613-545-4600
Fax: 613-547-1777

Ministère des Transports

Services Régionales & Relations
Opérations de l'Est
1355 Boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613-545-4600
Téléc. 613-547-1777

Ontario

October 2, 2024

«FIRST_NAME» «LAST_NAME»
«POSITION»
«ORGANIZATION/COMMMUNITY»
«ADDRESS»

Subject: Notice of Public Information Centre No. 2 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum (GWP 4203-15-00)

Dear «NAME»,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell since both bridges have reached the end of their useful service life and require replacement. A key map of the study area is included below.

Purpose

The purpose of this notice is to advise you that the second of the two planned in-person Public Information Centres (PIC 2) will be held on **October 17, 2024** from **4:00 PM to 7:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**.

PIC No. 1 was held in May 2024 to provide an update on the project and to present the interchange configuration and construction staging alternatives under consideration. PIC No. 2 is being held to present the evaluation of alternatives and the Technically Preferred Alternative.

Background

In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.
Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration alternatives (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

During the 2020 Class EA Study, a Stage 1 Archeological Assessment was completed. The assessment concluded that much of the study area has been previously disturbed; however, in accordance with the Ontario Ministry of Tourism, Culture and Sport Standards and Guidelines for Consultant Archaeologists (2011), areas located within 100 meters from historic transportation corridors that have not been previously disturbed require further investigation. A subsequent Stage 2 Archeological Assessment was carried out on areas located within 100 meters from the historic Canadian National Railway corridor in the study area. A test pitting survey was conducted and revealed no artifacts or archeological features.

Terrestrial ecosystem and fish and fish habitat field investigations were also completed for the Study Area. Species at Risk (SAR) that were observed on site include Snapping Turtle and Butternut. Other SAR that were not observed but that may have potential habitat within or adjacent to the study area includes the Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis, Tri-Colored Bat, Barn Swallow, River Redhorse, and potentially Channel Darter downstream from the study area.

An updated desktop review was completed in May 2024 to identify SAR listed as Endangered or Threatened under the *Endangered Species Act*, 2007 with historical occurrences in the general vicinity of the Study Area. Based on the habitat requirements specific to each of the potential SAR identified during the desktop review, SAR and/or their habitat were identified to potentially occur within the Study Area. Of the species identified, one species (Black Ash), was not previously identified. Black Ash was uplisted to an Endangered species in January 2022, and in January 2024, was afforded species and habitat protection. Additionally, one SAR previously noted, Barn Swallow, has been downlisted from a provincial status of Threatened to Special Concern. An updated impact assessment has been completed to determine the anticipated impact on terrestrial ecosystems and fish and fish habitat, including SAR, and to develop mitigation measures.

Process

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Technically Preferred Alternative (i.e., Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-

day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

To learn more information about the project, please visit the project website at www.cr17bridges.com. If you have any comments or questions, have any accessibility requirements in order to participate in this project, or wish to meet with the Project Team please contact the undersigned.

Freedom of Information and Protection of Privacy

Information collected during this detail design study will be used in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments will be maintained on file for use during the study and, with the exception of personal information and other protected information, including information outlined in section 15.1 (information received in confidence from an Indigenous community), may be included in study documentation and become part of the public record. Information received in confidence from an Indigenous community may be protected and not made public, such as information on sites of cultural significance, harvesting areas and resources, traditional ecological knowledge and land use values.

Accessibility

The Ontario Public Service is committed to creating an accessible organization by preventing, identifying and removing barriers for people with disabilities. Please contact the MTO if you have accessibility requirements in order to participate in this project.

Cette lettre est disponible en français sur demande.

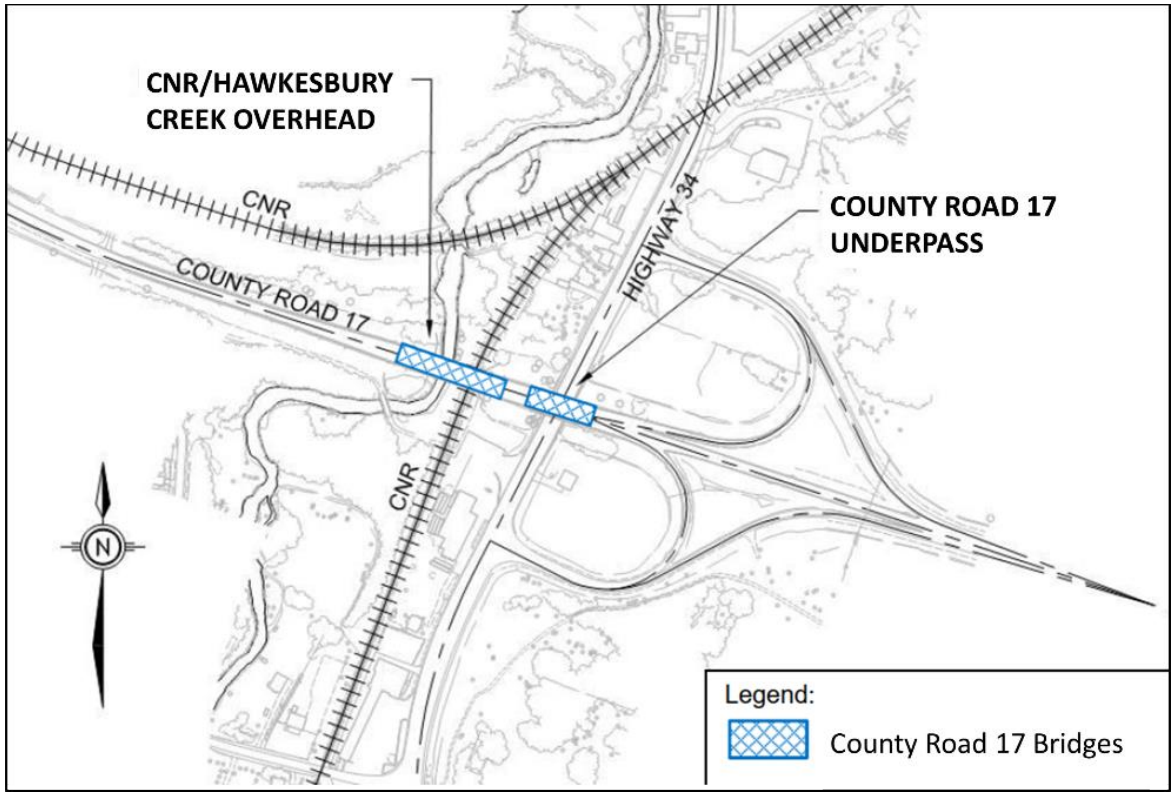
Should you have any comments, questions or concerns on the proposed activities, or would like any additional information, please contact me, Franca Sacchetti, Director of East Operations at Franca.Saccetti@ontario.ca, or Peter Copping, Indigenous Liaison Specialist by email at Peter.A.Copping@ontario.ca or by phone at **613-539-3148**.

Sincerely,

_____

Franca Sacchetti
Director, East Operations

Key Map


CNR/HAWKESBURY
CREEK OVERHEAD
CNR
COUNTY ROAD 17
HIGHWAY 34
COUNTY ROAD 17
UNDERPASS
CNR
N
Legend:
County Road 17 Bridges

External Agencies

DILLON CONSULTING

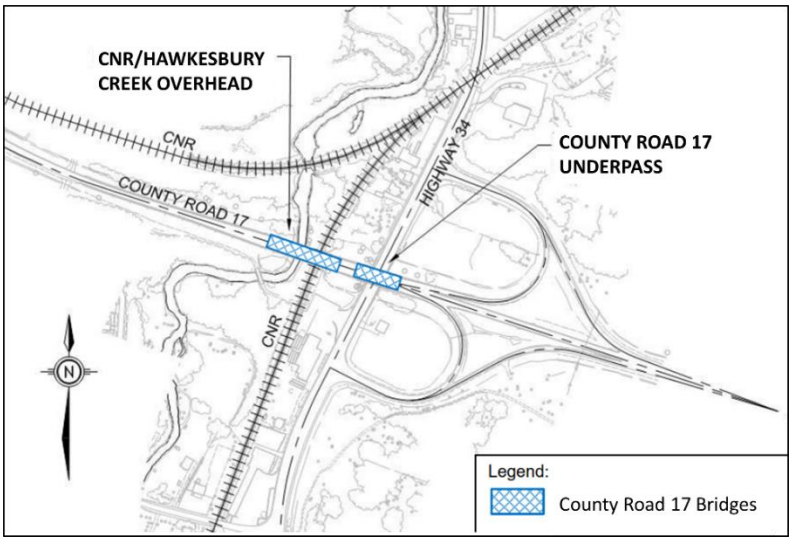
130 Dufferin Avenue
Suite 1210
London, ON N6A 5R2
T 519.438.6192
dillon.ca

October 2, 2024

Subject: Notice of Public Information Centre No. 2 – Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum (GWP 4203-15-00)

Dear Sir/Madam,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.



In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Major components of the Project include:

- Replacement of the bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.

Between 2021 and 2023, additional interchange configuration alternatives (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA). In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent (TESR Review) and the proponent must prepare a TESR Addendum in respect of the change.

At completion of the TESR Review, a TESR Addendum report, documenting the TESR Review process including the Technically Preferred Alternative (i.e. Preferred Design), impacts and mitigation measures, and the results of stakeholder, Indigenous Community and public consultation, will be made available on the project website (www.cr17bridges.com) for a 30-day public comment period. A notice will be published in local newspapers and posted on the project website at that time to advertise that the document is available for review.

Two in-person Public Information Centres (PICs) will be held during the TESR Review to share project information and to collect feedback. PIC No. 1 was held in May 2024 to provide an update on the project and to present the interchange configuration and construction staging alternatives under consideration. PIC No. 2 is being held to present the evaluation of alternatives and the Technically Preferred Alternative.

The purpose of this notice is to advise that PIC No. 2 will be held on **October 17, 2024** from **4:00 PM to 7:00 PM** at the **Royal Canadian Legion Branch 472** located on **152 Nelson Street East, Hawkesbury, ON**.

If you have any comments or questions at this time, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig, P. Eng.
Consultant Project Manager
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P. Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cette lettre est disponible en français sur demande.

Sincerely,



Brad Craig
Consultant Project Manager

Elected Officials

Ministry of Transportation

Engineering Program Delivery East
1355 John Counter Boulevard, Postal Bag 4000
Kingston, ON K7L 5A3
Tel: 613-539-7564

Ministère des Transports

Mise en oeuvre du programme relatif à l'ingénierie – Est
1355 Boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél : 613-539-7564

Ontario

January 17, 2025

«Name»
«Position»
«Organization»
«Address»

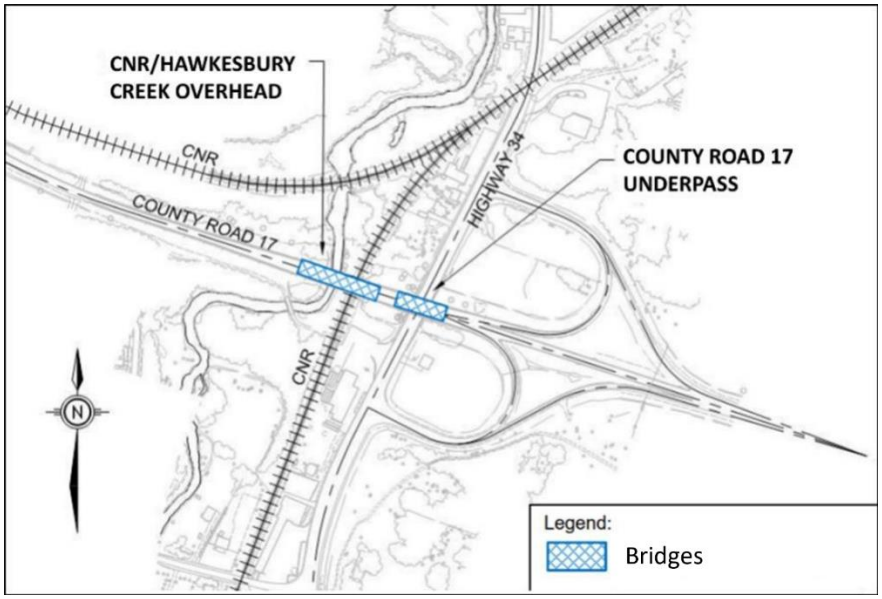
RE: Notice of Addendum – Hawkesbury Bridge Replacements Transportation Environmental Study Report Addendum (GWP 4203-15-00)

Dear «Name»,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Addendum for the Hawkesbury Bridge Replacements in the United Counties of Prescott and Russell (the Project).

Major components of the Project include:

- Replacement of the CNR/Hawkesbury Creek Overhead Bridge and the County Road 17 Underpass Bridge at Highway 34;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.



In November 2020, a Class Environmental Assessment Study (EA) was completed for the Hawkesbury Bridge Replacements Project (the Project). A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Between 2021 and 2023, additional interchange configuration alternatives (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA), with opportunity for public input throughout. In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent and the proponent must prepare a TESR Addendum in respect of the change.

The TESR Addendum process for the Project, including the results of stakeholder, Indigenous Community and public consultation, updates to existing conditions and a description of the changes to the Preferred Design, has been documented in a TESR Addendum report. The TESR Addendum is now available on the project website (www.cr17bridges.com) for a 30-day public comment period from **January 21, 2025** to **February 22, 2025**.

Interested persons are encouraged to review the TESR Addendum and provide comments to the Project Team by **February 22, 2025**. If you wish to submit any comments or questions, please do not hesitate to contact me.

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for a Section 16 Order to require that a higher level of study (that is, a Comprehensive EA) be completed or that conditions be imposed (such as, requirement for further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester's contact information and full name and be received by **February 22, 2025**.

Requests should specify what kind of order is being requested (request for conditions or a request for a Comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request to ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Email: Minister.MECP@ontario.ca

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4VV 1P5
Email: EABDirector@ontario.ca

A copy of the request should also be sent to me by mail or e-mail at the contact information provided above.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact me.

Sincerely,

_____

Joanna Zhang, P.Eng.
MTO Senior Project Engineer

Enclosed: Ontario Government Notice (English) - Notice of Filing of Addendum
Ontario Government Notice (French) - Avis de dépôt d'un addenda

c: Nathan Ellis, MTO Environmental Planner
Ben Munroe, MTO Area Manager
Brad Craig, Consultant Project Manager, Dillon
Jordan Broad, Consultant Deputy Project Manager, Dillon
Anna Fawcett, Consultant Environmental Planner, Jacobs

Ministry of Transportation

Regional Director's Office
East Region
1355 John Counter Boulevard
Kingston, Ontario K7L 5A3
Tel.: 647-638-5359
Fax: 613-547-1777

Ministère des Transports

Bureau du directeur régional
Opérations de l'est
1355 Boulevard John Counter
Kingston, Ontario K7L 5A3
Tél.: 647-638-5359
Téléc.: 613-547-1777

January 21, 2025

«Name/Title»
«Organization/Community»
«Address»

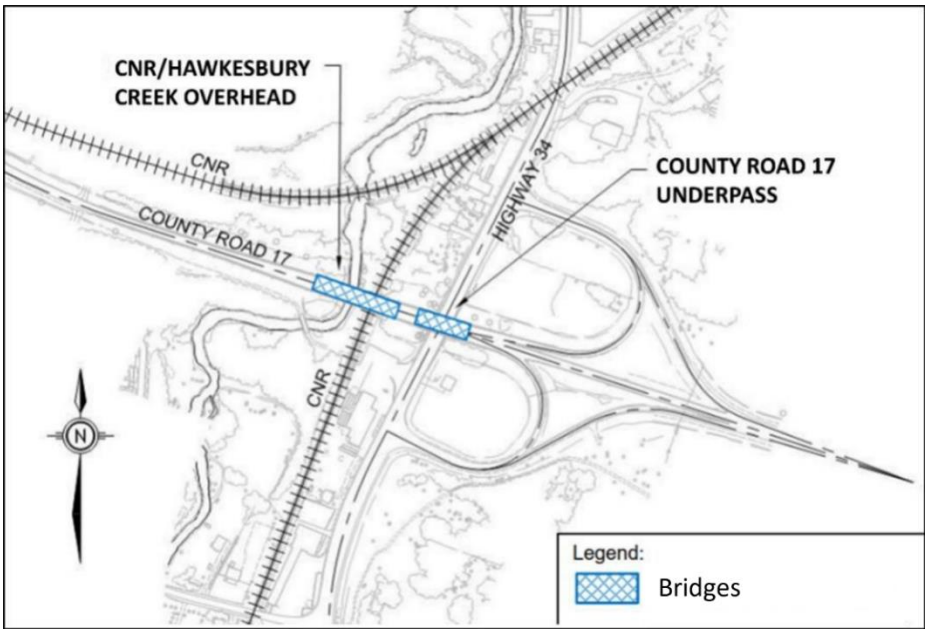
Subject: Notice of Filing of the Hawkesbury Bridge Replacements Transportation Environmental Study Report Addendum (GWP 4203-15-00)

Dear «Name/Title»,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Addendum for the Hawkesbury Bridge Replacements in the United Counties of Prescott and Russell (the Project).

Major components of the Project include:

- Replacement of the CNR/Hawkesbury Creek Overhead Bridge and the County Road 17 Underpass Bridge at Highway 34;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.



The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA), with opportunity for public input throughout. In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be reviewed by the proponent and the proponent must prepare a TESR Addendum in respect of the change.

The TESR Addendum process for the Project, including the results of consultation, updates to existing conditions and a description of the changes to the Preferred Design, has been documented in a TESR Addendum report. The TESR Addendum also includes a description of anticipated impacts from the proposed works and recommended mitigation measures. Anticipated impacts include temporary decrease in potential marginal migratory bird nesting habitat; potential harm or temporary harassment of Species of Conservation Concern herptiles and birds; indirect or direct impacts to Species at Risk trees; indirect disruption of fish habitat within the high-water mark. Measures have been recommended to minimize or mitigate these impacts. There is also potential for the proposed works to disturb unknown or previously undocumented archaeological resources; however, Stage 1 and Stage 2 Archaeological Assessments were previously completed, and the Stage 2 Archaeological Assessment revealed no artifacts or archeological features, and no further archeological work was recommended.

The TESR Addendum is now available on the project website (www.cr17bridges.com) for a 30-day public comment period from **January 21, 2025** to **February 22, 2025**.

Interested persons are encouraged to review the TESR Addendum and provide comments to the Project Team by **February 22, 2025**. To submit comments or questions, or if you wish to meet with the Project Team please contact one of the following Project Team members:

Brad Craig, P.Eng.
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
1355 John Counter Boulevard, Postal Bag 4000
Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for a Section 16 Order to require that a higher level of study (that is, a Comprehensive EA) be completed or that conditions be imposed (such as, requirement for further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester's contact information and full name.

Requests should specify what kind of order is being requested (request for conditions or a request for a Comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request to ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
Ministry of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Email: Minister.MECP@ontario.ca

Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4VV 1P5
Email: EABDirector@ontario.ca

A copy of the request should also be sent to the Project Team members (MTO and Dillon) by mail or e-mail at the contact information provided above.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

If you have any questions or comments, or if you require further information regarding this project, please feel free to contact me, Franca Sacchetti, Director of East Operations at franca.saccetti@ontario.ca, or Peter Copping, Indigenous Liaison Specialist at peter.a.copping@ontario.ca.

Sincerely,

Franca Sacchetti
Regional Director, East Region

Cette lettre est disponible en français sur demande.

External Agencies

DILLON CONSULTING

130 Dufferin Avenue
Suite 1210
London, ON N6A 5R2
T 519.438.6192
dillon.ca

January 21, 2025

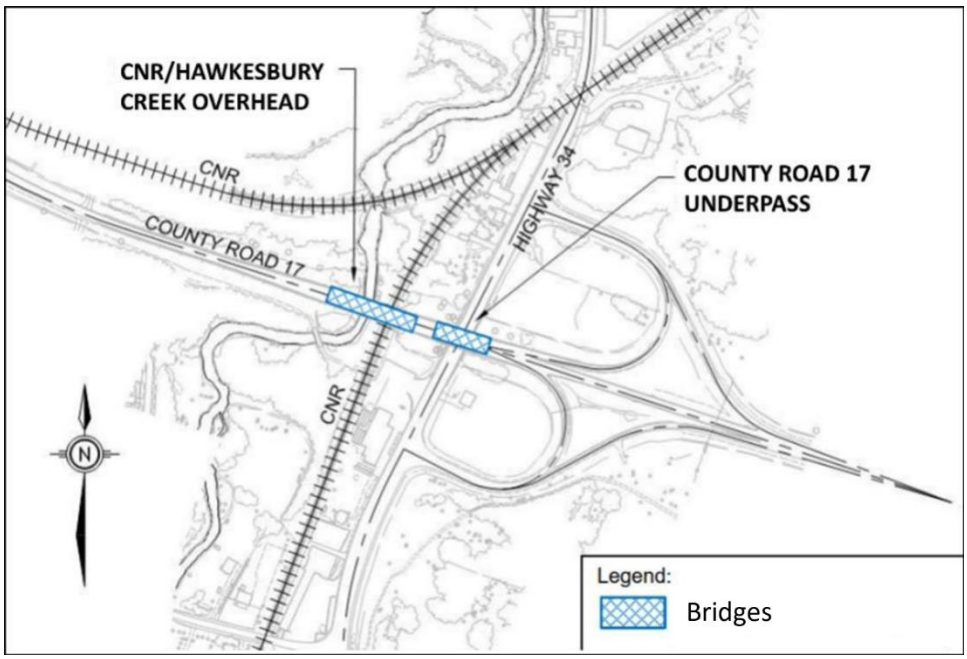
Subject: Notice of Addendum – Hawkesbury Bridge Replacements Transportation Environmental Study Report Addendum (GWP 4203-15-00)

Dear Sir/Madam,

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Addendum for the Hawkesbury Bridge Replacements in the United Counties of Prescott and Russell (the Project).

Major components of the Project include:

- Replacement of the CNR/Hawkesbury Creek Overhead and County Road 17 Underpass At Highway 34 bridge structures;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Short duration road closures (required to minimize property impacts and reduce the overall duration of construction), during which traffic will be detoured.



The Project is following the approved environmental planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities, 1999, as amended in 2000 (MTO's Class EA), with opportunity for public input throughout. In accordance with MTO's Class EA, any significant modification to the Project that occurs after the Notice of Completion of the TESR has been issued must be

reviewed by the proponent and the proponent must prepare a TESR Addendum in respect of the change.

The TESR Addendum process for the Project, including the results of stakeholder, Indigenous Community and public consultation, updates to existing conditions and a description of the changes to the Preferred Design, has been documented in a TESR Addendum report. The TESR Addendum is now available on the project website (www.cr17bridges.com) for a 30-day public comment period from **January 21, 2025** to **February 22, 2025**.

Interested persons are encouraged to review the TESR Addendum and provide comments to the Project Team by **February 22, 2025**. To submit comments or questions, or if you wish to be added to the project mailing list, please use the "Contact Us" function on the project website (www.cr17bridges.com) or contact one of the following Project Team members:

Brad Craig, P.Eng.
Consultant Project Manger
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
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Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
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Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for a Section 16 Order to require that a higher level of study (that is, a Comprehensive EA) be completed or that conditions be imposed (such as, requirement for further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requester's contact information and full name and be received by **February 22, 2025**.

Requests should specify what kind of order is being requested (request for conditions or a request for a Comprehensive EA), how an order may prevent, mitigate or remedy potential adverse impacts on Aboriginal and treaty rights, and any information in support of the statements in the request to ensure that the ministry is able to efficiently begin reviewing the request. The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks
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A copy of the request should also be sent to the Project Team members (MTO and Dillon) by mail or e-mail at the contact information provided above.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of

the public record. If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed above.

Cette lettre est disponible en français sur demande.

Sincerely,

_____

Brad Craig
Consultant Project Manager

Appendix C

PIC Material

WELCOME!

Public Information Centre #1

Hawkesbury Bridge Replacements

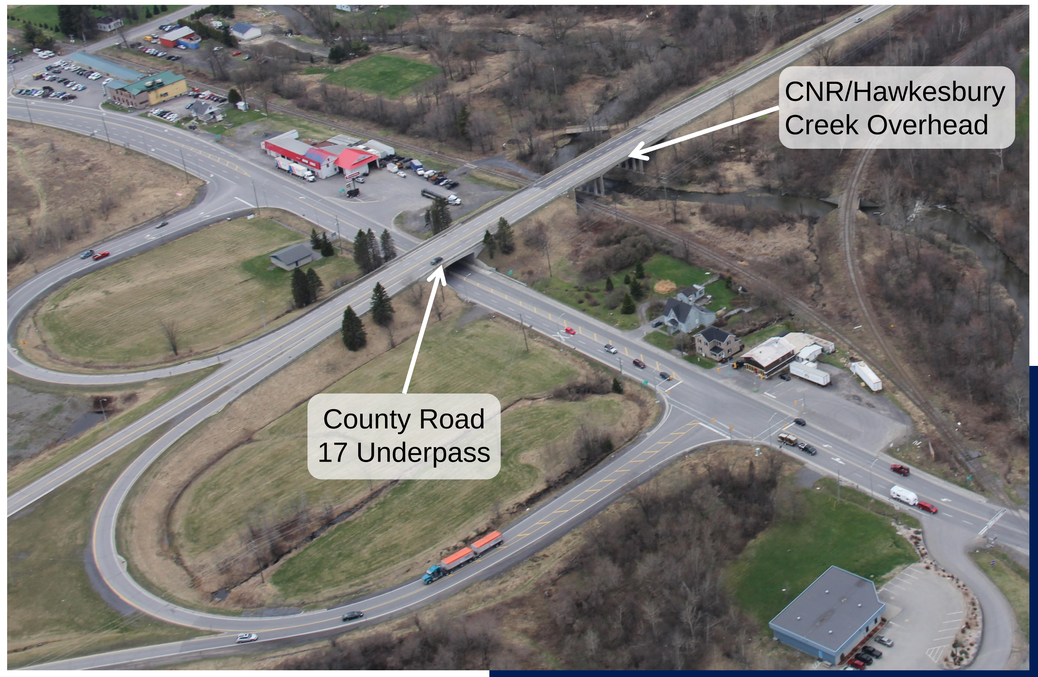
Transportation Environmental Study Report Review and Addendum

May 16, 2024 @ 4:00 PM – 8:00 PM

Ontario

DILLON CONSULTING

Jacobs



Project Description

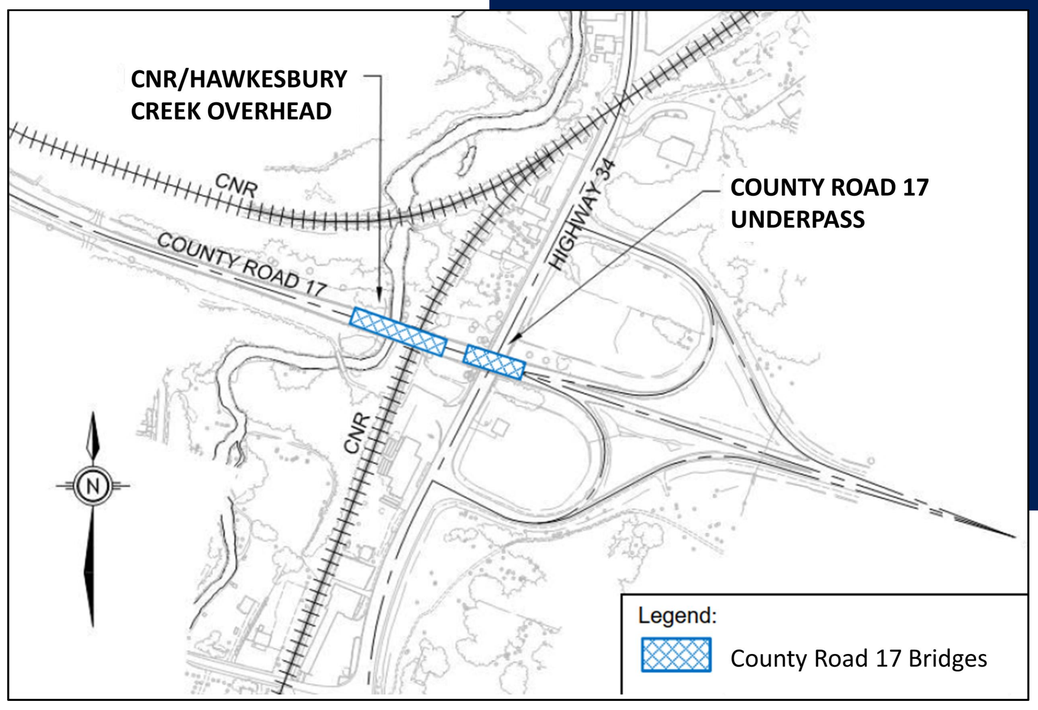
The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) for the replacement of the following two bridges:

- CNR/Hawkesbury Creek Overhead
- County Road 17 Underpass (at Highway 34)

Both bridges are nearing the end of their useful service life and require replacement. Major components of the Project includes:

- Replacement of the two bridges;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Temporary road closures of Highway 34 and County Road 17 during construction during which traffic will be detoured

Construction is anticipated to be initiated in 2027 subject to approvals and funding.



Project Background



In November 2020, the TESR for the Hawkesbury Bridge Replacements Class Environmental Assessment Study was completed.

Municipal endorsement of the Preferred Alternative Method for the Project, outlined in the TESR, was not received.

Between 2021 and 2023, additional municipal consultation and feasibility studies were completed. Based on this work, it was determined that a TESR Review and Addendum would be required.

2020

TESR COMPLETION

The TESR was completed, and a Notice of Completion was issued to commence the 30-day public review period.

2021

MUNICIPAL CONSULTATION

Municipal endorsement was not received. The Town of Hawkesbury requested a ‘free flow’ interchange be provided.

2022

FEASIBILITY STUDIES

As a result of municipal feedback, feasibility studies were undertaken to identify additional interchange configuration alternatives and associated construction staging alternatives.

2023

FEASIBILITY STUDIES

New alternatives were identified, and it was determined that a TESR Addendum would be required to reassess and confirm the Preferred Alternative.

2024

TESR REVIEW AND ADDENDUM

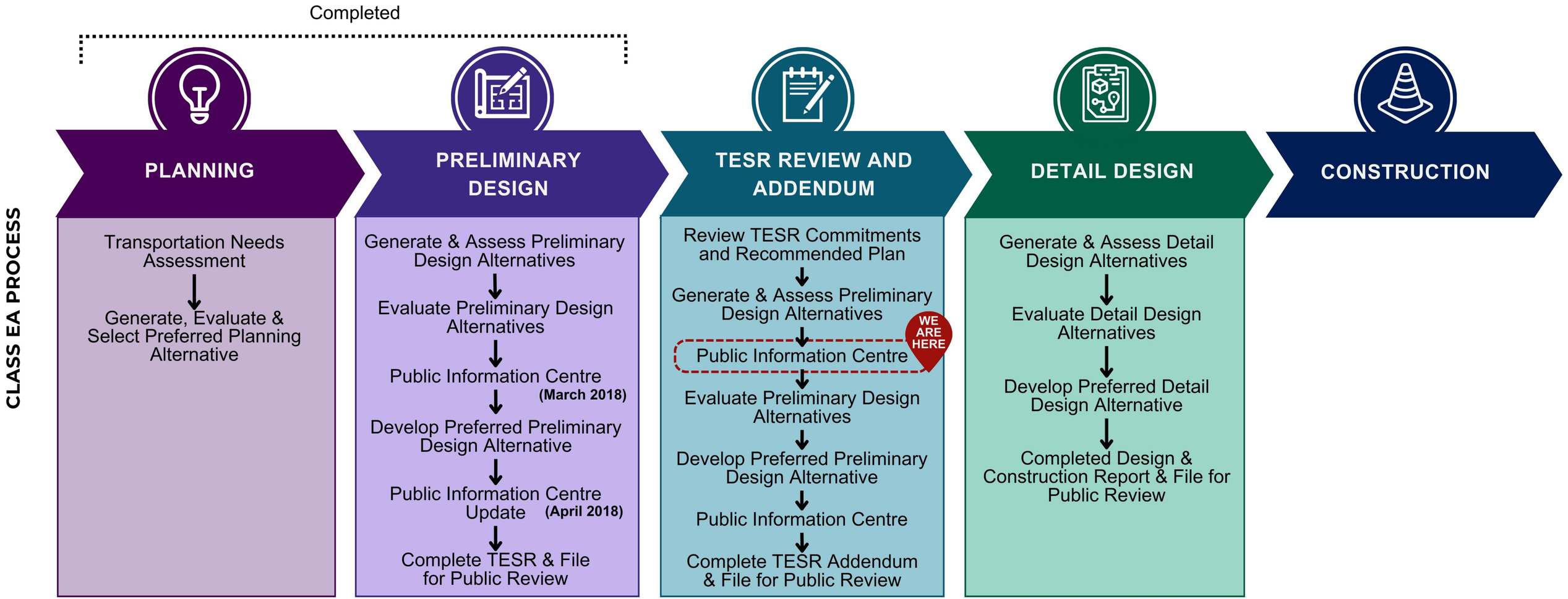
The TESR Review and Addendum has now commenced.

Environmental Assessment Process

The Project is following the process for Group B undertakings in accordance with MTO's *Class Environmental Assessment for Provincial Transportation Facilities*, 2000 (Class EA).

In November 2020, the Class EA Study for the Project was completed. A Transportation Environmental Study Report (TESR) was posted for public review, documenting a Preferred Alternative Method for the Project.

Any significant modification to the Project that occurs after completion of the TESR must be reviewed and a TESR Addendum must be prepared. Once complete, the TESR Addendum will be available on the project website (www.cr17bridges.com).



2020 TESR Recommended Plan Features – Currently Under Review

TESR RECOMMENDED PLAN FEATURE	BRIDGE LAYOUT	HORIZONTAL AND VERTICAL ALIGNMENTS	CROSS-SECTION	INTERCHANGE MODIFICATIONS	UTILITIES	PROPERTY	CONSTRUCTION TRAFFIC MANAGEMENT
SUMMARY OF TESR RECOMMENDATION	• The new CNR/ Hawkesbury Creek Overhead will be a 71 m long, 13 m wide, two-span concrete slab-on-steel I-girder bridge. • The new CR 17 Underpass will be a 36 m long, 13 m wide, single span concrete slab-on-steel I-girder bridge.	• The existing alignment of CR 17 will be maintained. • The replacement bridges will be raised in order to provide the minimum vertical clearance over the CNR tracks and over Highway 34.	• North Barrier Wall: 0.5 m • Shoulder: 2.5 m • Traffic Lanes: two @ 3.5 m • Shoulder: 2.5 m • South Barrier Wall: 0.5 m • Total width: 13 m	• New intersection of CR 17 and the Highway 34 on-ramp and off-ramp. • Off-ramp facilitated via a channelized right turn including a right turn lane. • On-ramp facilitated by a stop control T-Intersection, and no acceleration lane provided.	• Protection of Enbridge gas main, Hydro One underground conduits, and watermain during construction. • Relocation of underground Bell duct. • Removal and temporary replacement of guy wire supporting hydro pole; reinstated to existing conditions following construction.	• A standard grade separation reconstruction agreement between CNR and MTO in accordance with the *Railway Safety Act* is required to replace the existing CNR/Hawkesbury Creek Overhead bridge.	• Closure of CR 17 for 2-4 weeks: traffic detoured along CR 4 heading E-W through Hawkesbury Main St and heading N-S along Tupper St. • Closure of Highway 34 near the site for 2-3 weekends: traffic detoured to a temporary bypass east of Highway 34 to maintain N-S traffic movements along Highway 34.
RECOMMENDED PLAN IMPACTED BY TESR ADDENDUM?	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.

Alternative 1 (2020 Preferred Alternative)

Screened Out for Further Evaluation

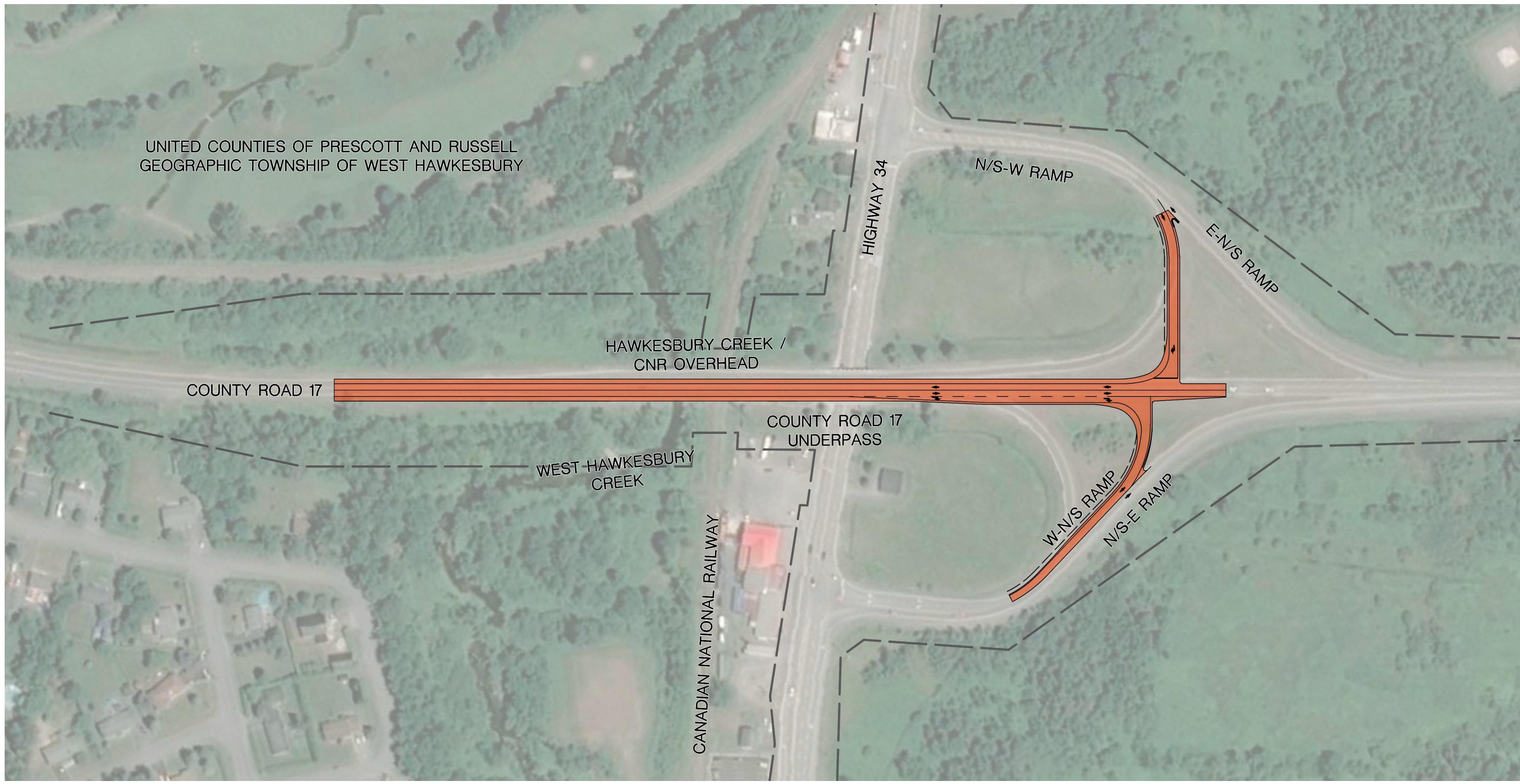
Posted Speed Limit: 70 km/h

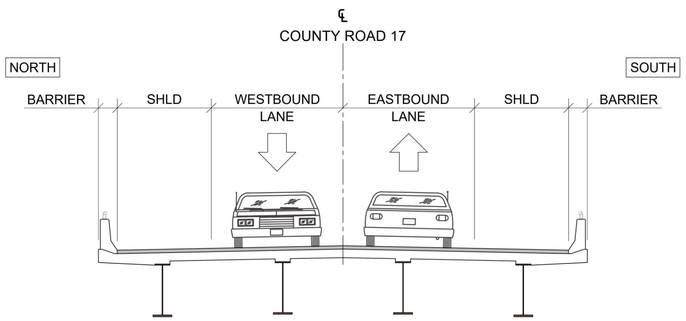
Advantages

- Does not impact private property
- Reduces new bridges to two lanes – lower cost

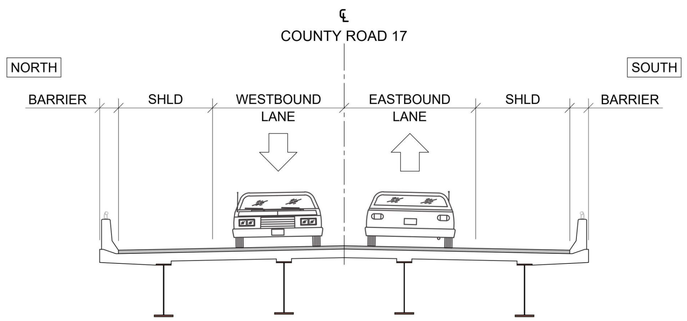
Disadvantages

- Does not maintain free flow traffic for N/S-W ramp (on-ramp)
- Non-standard interchange configuration in Ontario
- Potential for wrong way left turn movements from County Road 17 onto both N/S-W ramp and W-N/S ramp
- Lower traffic capacity than the existing interchange configuration





Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 2

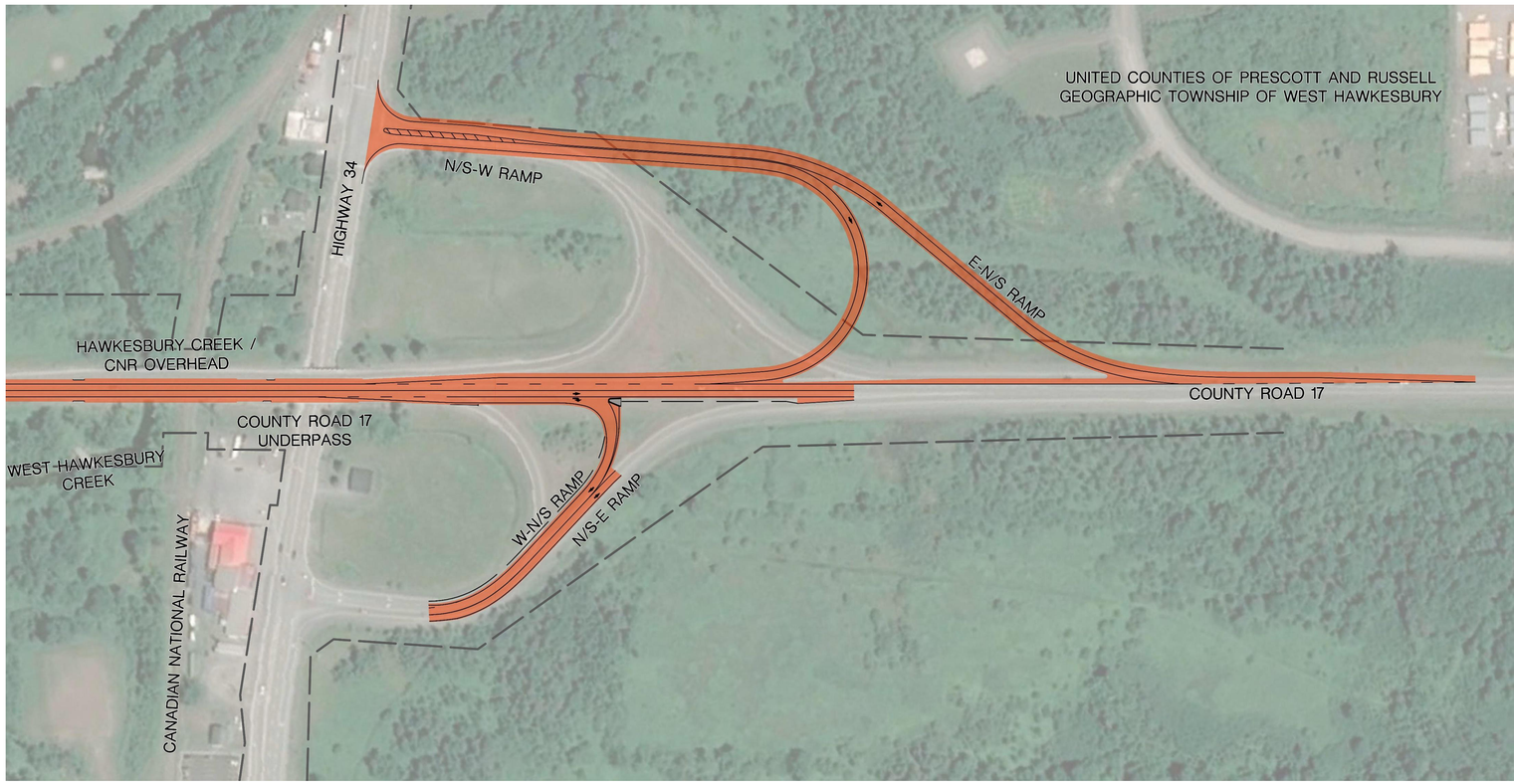
Screened Out for Further Evaluation
Posted Speed Limit: 70 km/h

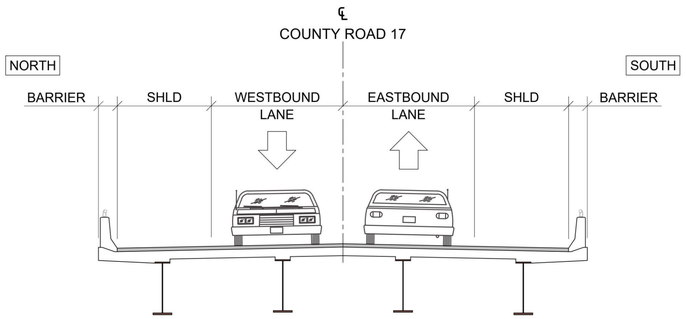
Advantages

- Maintains free flow traffic for N/S-W ramp
- Similar traffic capacity to the existing interchange configuration
- Reduces new bridges to two lanes – lower cost

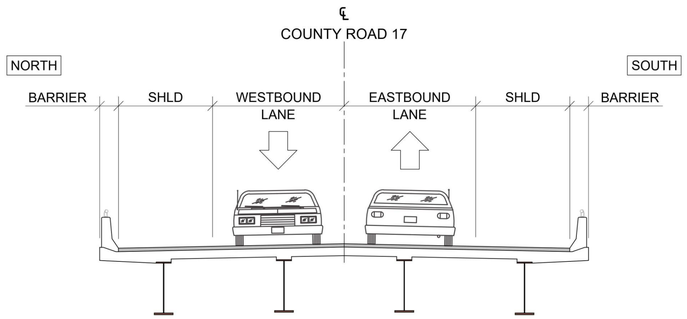
Disadvantages

- N/S-W and E-N/S ramps impact private property
- Potential for wrong way left turn movements from County Road 17 onto the W-N/S ramp
- Non-standard interchange configuration in Ontario





Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 3

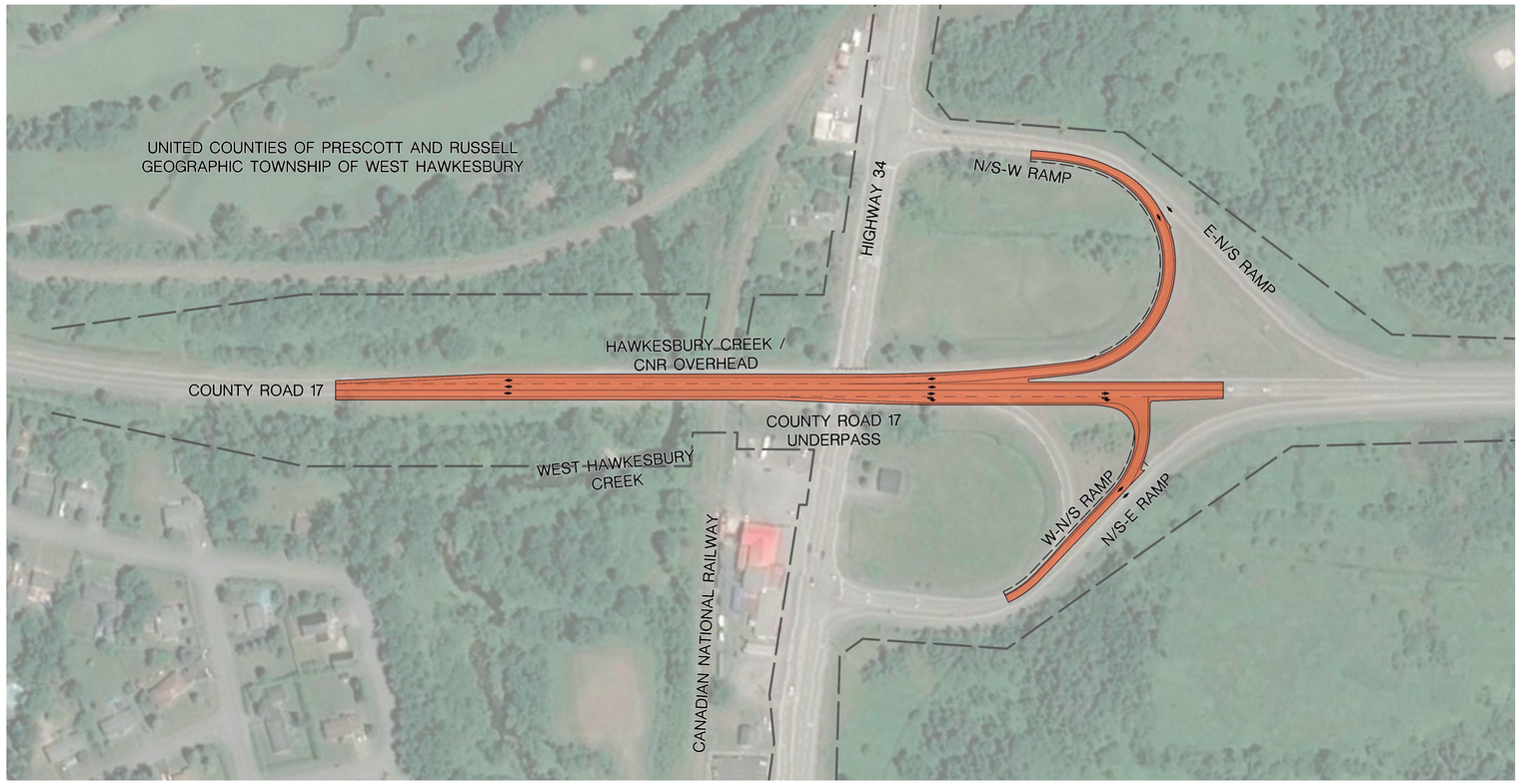
Carried Forward for Further Evaluation
Posted Speed Limit: 90 km/h

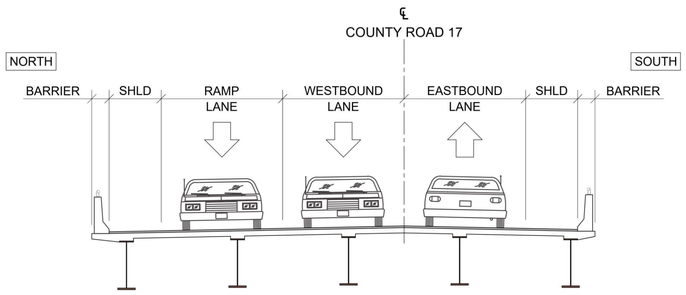
Advantages

- Maintains free flow traffic for N/S-W ramp
- Does not impact private property
- Meets design standards
- Similar traffic capacity to the existing interchange configuration
- Reduces new Hawkesbury Creek / CNR bridge to three lanes – lower cost

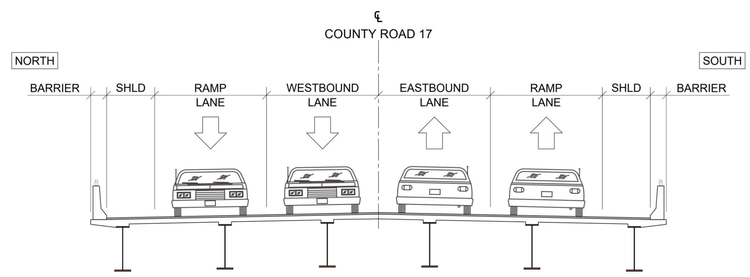
Disadvantages

- Non-standard interchange configuration in Ontario
- Potential for wrong way left turn movements from County Road 17 onto the W-N/S ramp





Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 4

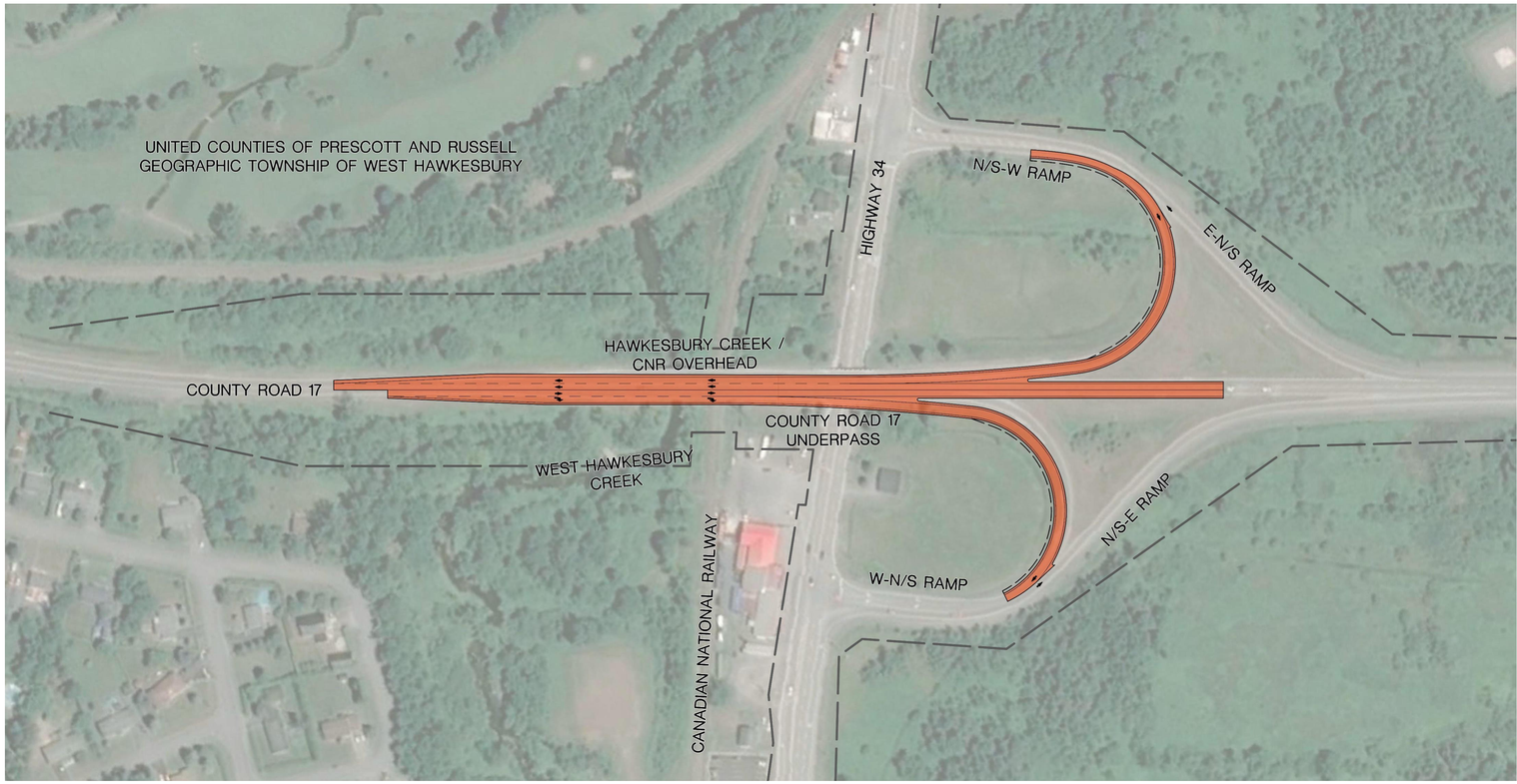
Carried Forward for Further Evaluation
Posted Speed Limit: 90 km/h

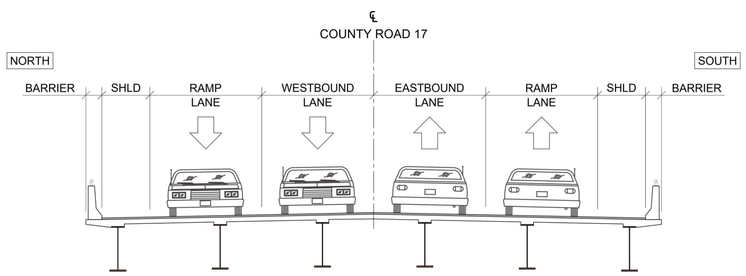
Advantages

- Maintains free flow traffic for all ramps
- Does not impact private property
- Standard interchange configuration in Ontario
- Similar traffic capacity to the existing interchange configuration
- No opportunities for left-turn movements from County Road 17
- Interchange similar to the existing configuration

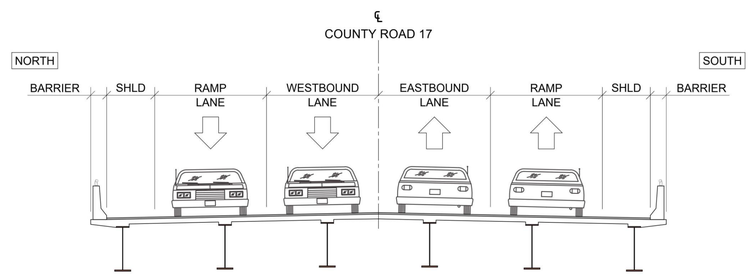
Disadvantages

- W-N/S ramp maintains existing radii but does not meet current design standards. There is limited history of accidents at this location.





Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

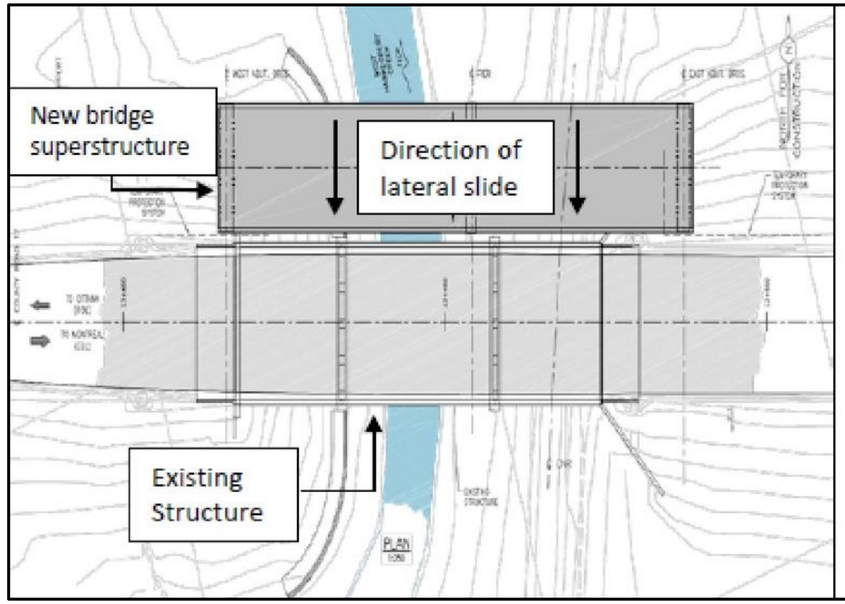
Construction Staging
Alternative 1: Lateral Slide

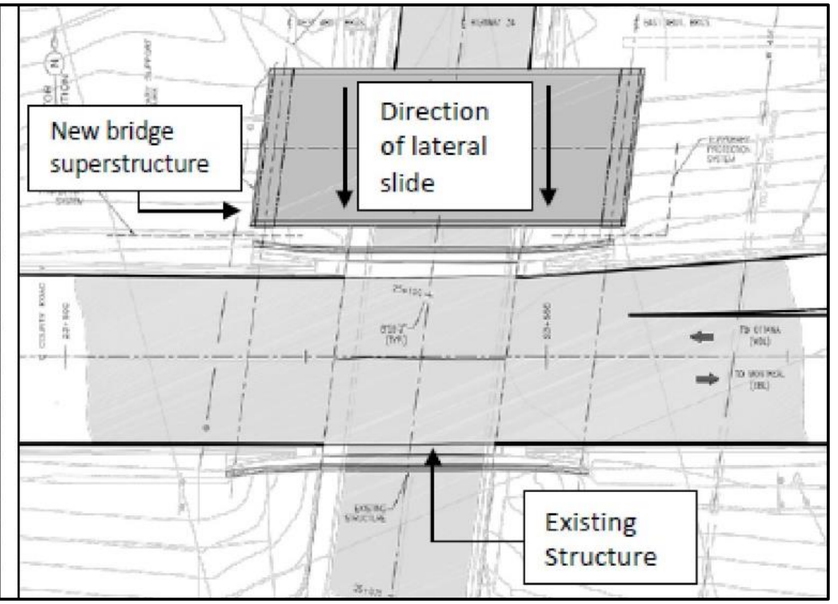
This alternative uses an accelerated bridge construction technique whereby the new bridge decks are constructed on temporary supports adjacent to (and north of) the existing bridges.

When the new bridge decks are constructed (off-line), a closure of 2-4 weeks is required to demolish the bridges, complete the new abutments and piers, and slide the new structures into place.

Construction operations are estimated to be 1.5 years for this staging option.

Impacts to utilities are being evaluated.





County Road 17 Closure

To accommodate the rapid demolition and lateral slide, County Road 17 will be closed completely for 2 to 4 weeks.

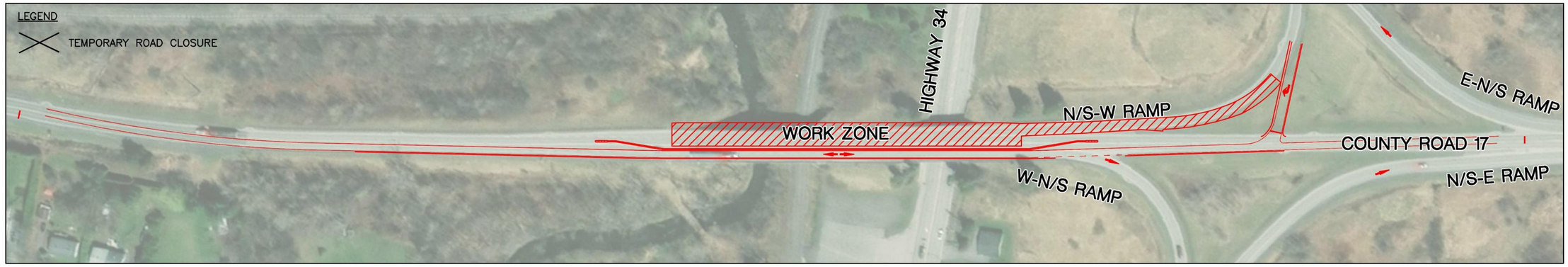
Highway 34 Closure

Three overnight closures of Highway 34 are required to erect the new girders, demolish the existing structure, and jack and slide the new structure into place.

Construction Staging

Alternative 2a: Single-Lane Staged Construction

Stage 1



Stage 2



This alternative uses conventional construction techniques to remove and construct the new bridges in two stages.

Stage 1 maintains one alternating lane of traffic during construction using temporary traffic signals on Country Road 17 and the N/S-W ramp. A delay of 3-4 minutes is expected for the AM and PM peaks. Stage 1 will be in place for one construction season. Stage 2 maintains two lanes of traffic during construction.

Construction operations are estimated to be 1.5 to two years for this staging option.

County Road 17 Closures

A minimum of two overnight closures or lane reductions of County Road 17 are required to demolish and construct the new bridge.

Highway 34 Closures

A minimum of four overnight closures of Highway 34 are required, to demolish the existing structure and erect the new girders.

Construction Staging

Alternative 2b: Two Lane Staged Construction

Stage 1



Stage 2



This alternative uses conventional construction techniques to remove and construct the new bridges in two stages.

Two lanes of traffic are maintained throughout construction.

Construction operations are estimated to be 1.5 to 2 years for this staging option.

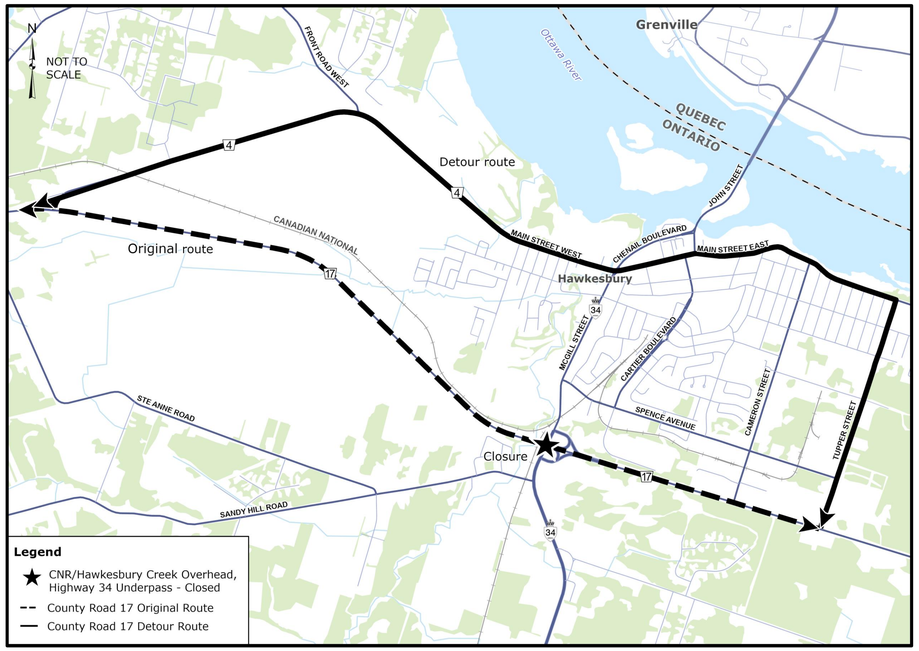
County Road 17 Closures

A minimum of two overnight closures or lane reductions of County Road 17 are required to demolish and construct the new bridge.

Highway 34 Closures

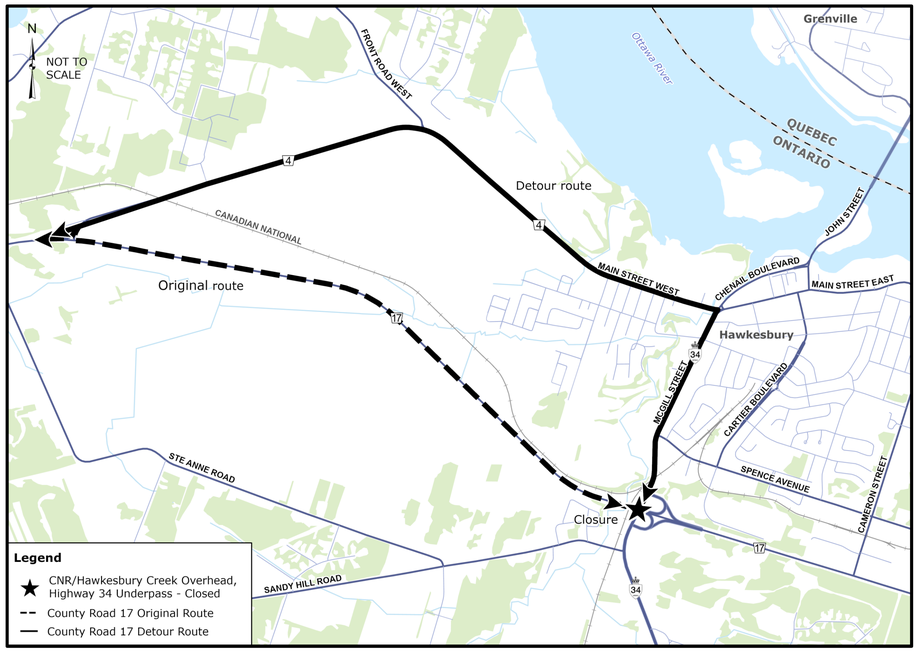
A minimum of four overnight closures of Highway 34 are required, to demolish the existing structure and erect the new girders.

County Road 17 Detour Routes



Detour Option 1

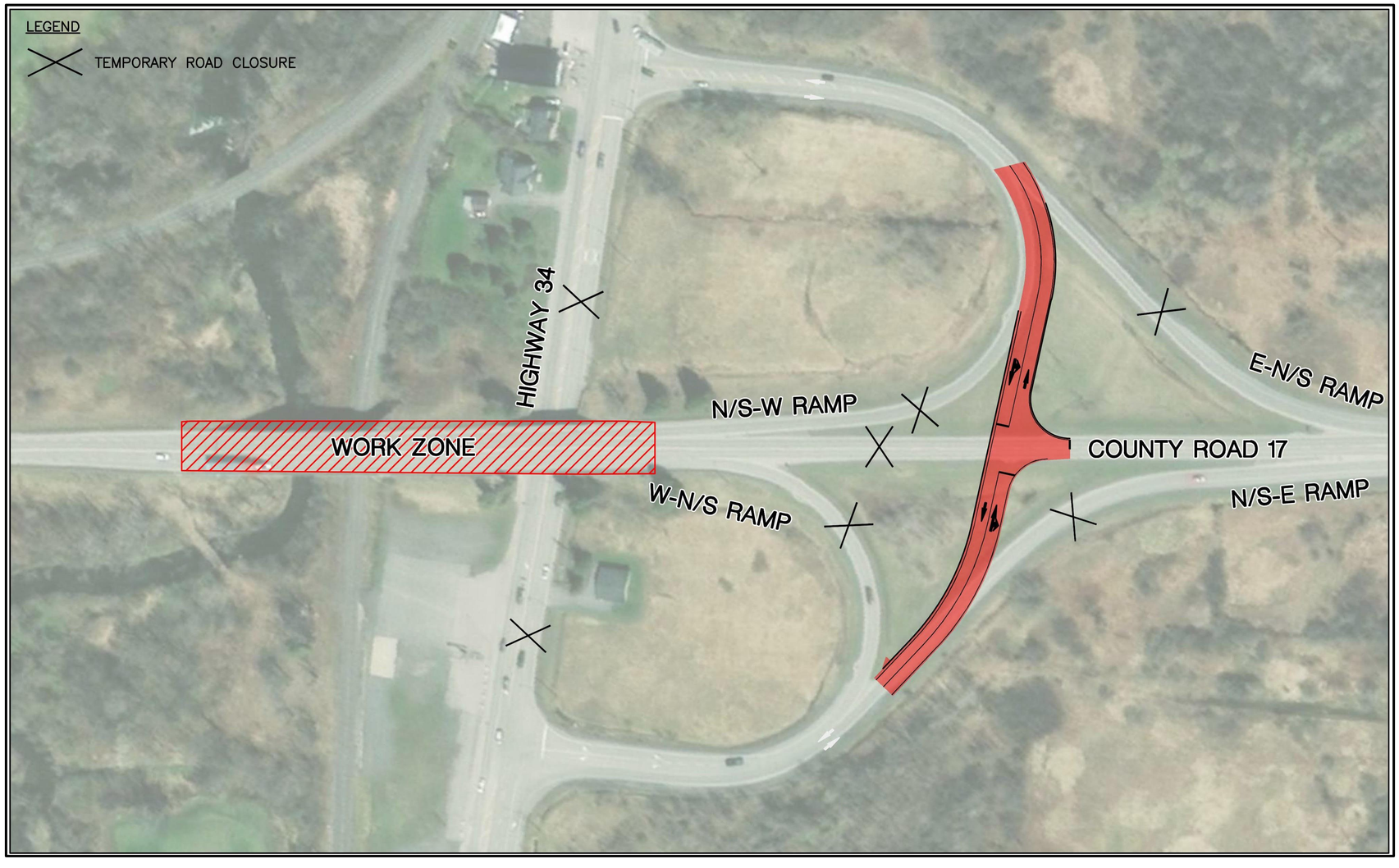
County Road17 traffic will be detoured along County Road 4 heading east-west through Hawkesbury Main Street and heading north-south along Tupper Street.



Detour Option 2

County Road 17 traffic will be detoured along Country Road 4 heading north-south along Highway 34.

Highway 34 Detour Route

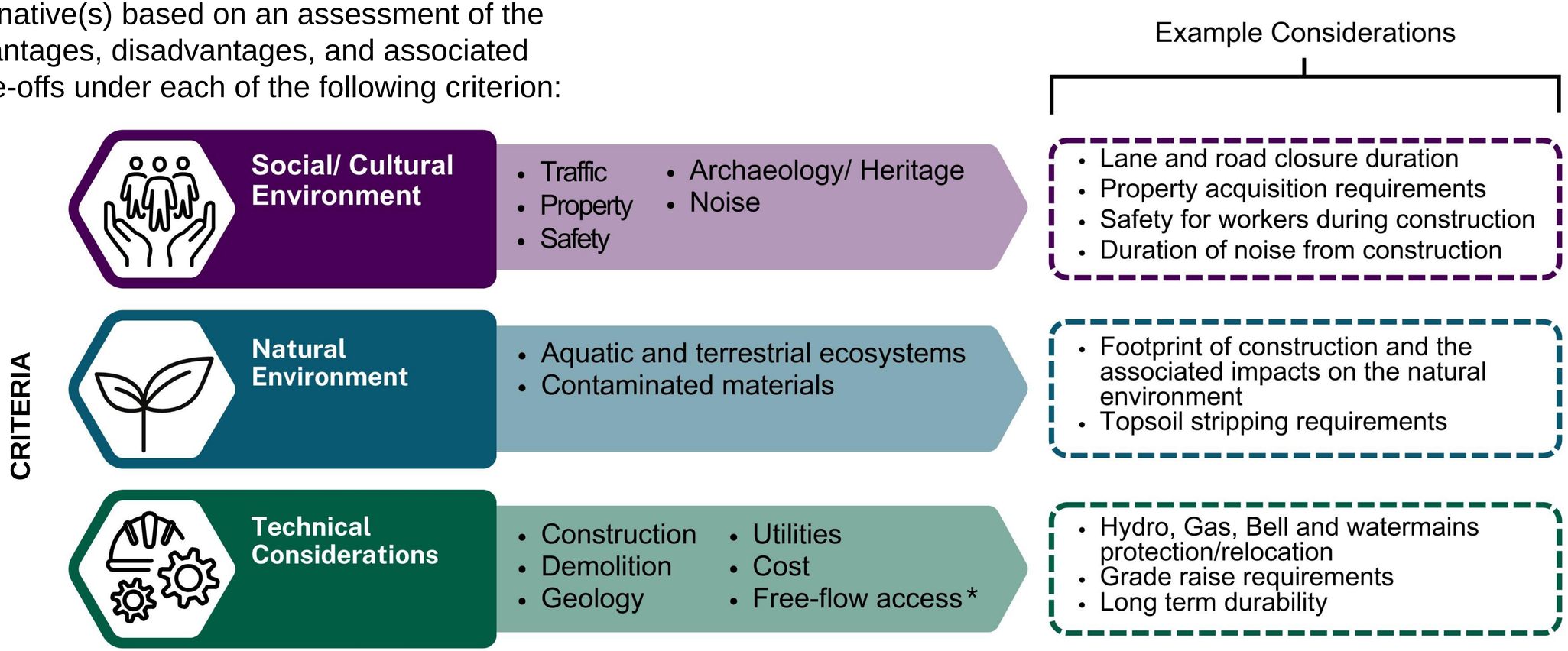


Highway 34 traffic will be detoured via a temporary north-south bypass through the interchange. This detour will be in place at times when Highway 34 is closed.

Alternatives Evaluation Criteria

Interchange Configuration alternatives, and **Construction Staging alternatives** will be evaluated to select a new Preferred Alternative for the Project. For consistency, the evaluation will follow the same methodology and use the same criteria as was used in the TESR.

A reason-based decision-making process will be applied to identify and determine the preferred alternative(s) based on an assessment of the advantages, disadvantages, and associated trade-offs under each of the following criterion:



* New criterion based on municipal feedback.

Next Steps

We welcome your feedback on the information provided.

Following this Public Information Centre, the Project Team will:

1. Review feedback received
2. Evaluate alternatives and select the Preferred Alternative(s)
3. Host a second Public Information Centre in Fall 2024
4. Finalize the Recommended Plan
5. Prepare the TESR Addendum, which will be made available on the project website (www.cr17bridges.com) for a 30-day public review period.

Project Team Contacts:

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Phone: (613) 449-7916
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Bienvenue !

Séance d’information nº 1

Remplacement de ponts à Hawkesbury

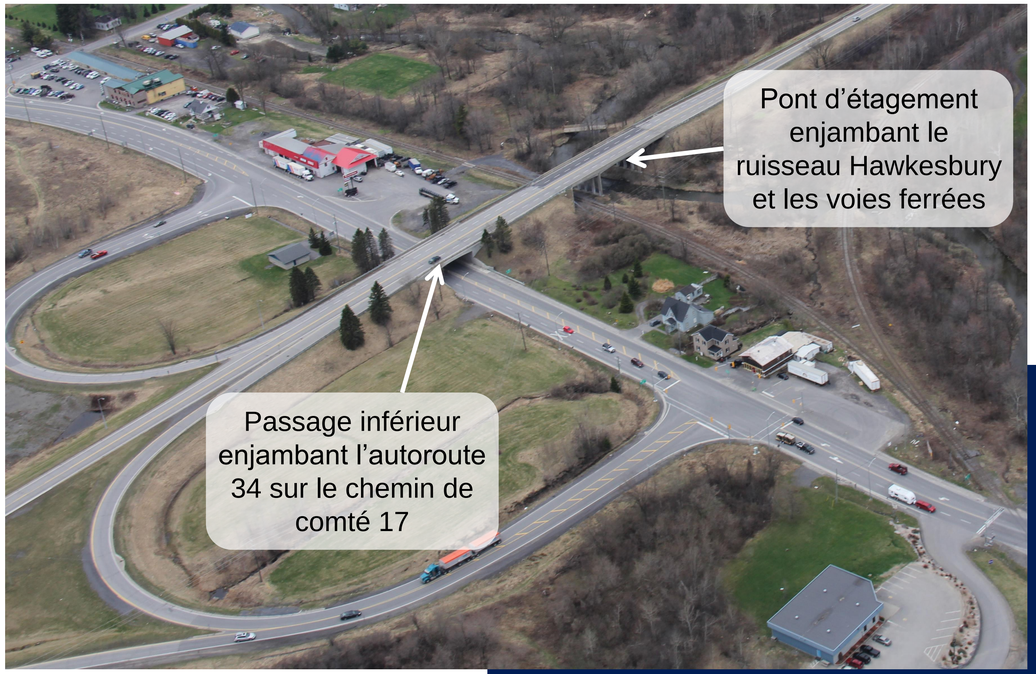
Examen du rapport d’étude environnementale sur les transports et addenda connexe

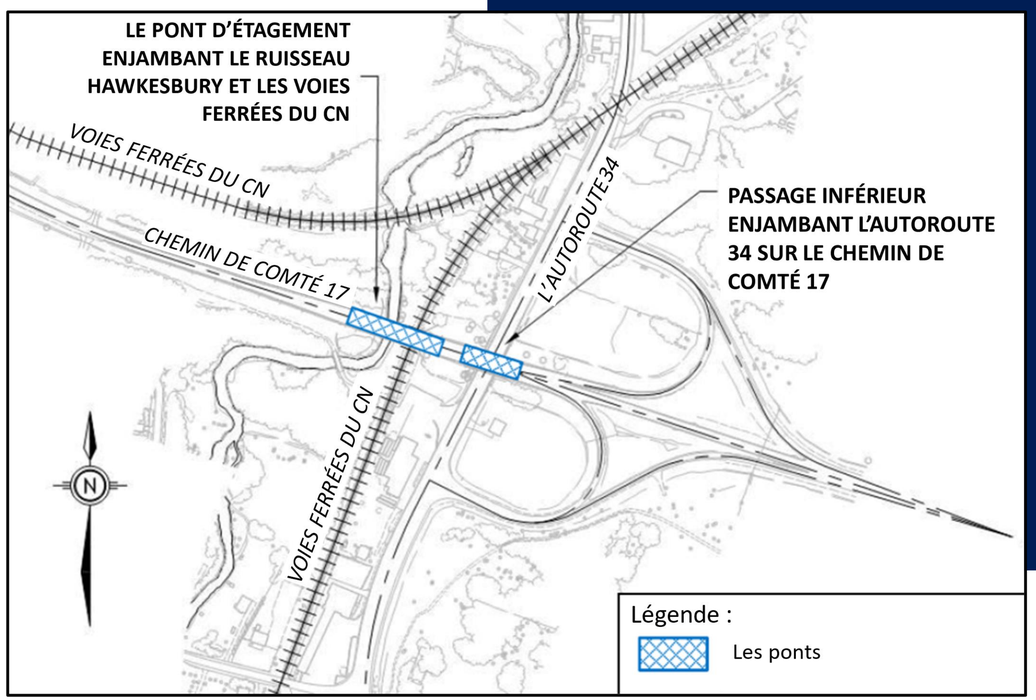
16 mai 2024 (16 h à 20 h)

Ontario

DILLON CONSULTING

Jacobs





Description du projet

Le ministère des Transports de l'Ontario (MTO) a retenu les services de Dillon Consulting et de Jacobs pour réaliser le concept préliminaire et le rapport d'étude environnementale sur les transports (REET) pour le remplacement des deux ponts suivants :

- Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées
- Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Les deux structures approchent de la fin de leur durée de vie utile et doivent être remplacées. Les principales composantes du projet sont les suivantes :

- Remplacement des deux ponts ;
- Modifications de la bretelle de sortie en direction de l'est et de la bretelle d'entrée en direction de l'ouest à l'échangeur du chemin de comté 17 et de l'autoroute 34 ;
- Fermetures temporaires de l'autoroute 34 et du chemin de comté 17 pendant les travaux, au cours desquelles la circulation sera détournée.

Les travaux de construction devraient débuter en 2027, sous réserve de leur approbation et de leur financement

Contexte du projet



En novembre 2020, le REET de l'étude d'évaluation environnementale de portée générale sur le remplacement des ponts à Hawkesbury a été achevé.

La municipalité n'a pas approuvé la méthode alternative préférée pour le projet, décrite dans le REET.

Entre 2021 et 2023, d'autres consultations municipales et études de faisabilité ont été réalisées. Sur la base de ces travaux, il a été jugé nécessaire de procéder à un examen du REET et à y adjoindre un addenda.

2020

ACHÈVEMENT DU REET

Le REET ayant été achevé, un avis a été diffusé pour lancer la période d'examen public de 30 jours.

2021

CONSULTATION MUNICIPALE

La municipalité n'a pas donné son aval. La ville de Hawkesbury exige la mise en place d'un croisement à niveaux multiples.

2022

ÉTUDES DE FAISABILITÉ

Suite à la rétroaction locale, des études de faisabilité ont été entreprises afin d'identifier d'autres options de configuration et d'échelonnement des travaux.

2023

ÉTUDES DE FAISABILITÉ

De nouvelles options ont été identifiées et il a été déterminé qu'un addenda au REET serait nécessaire pour réévaluer et confirmer l'option préférée.

2024

Examen du REET et addenda connexe

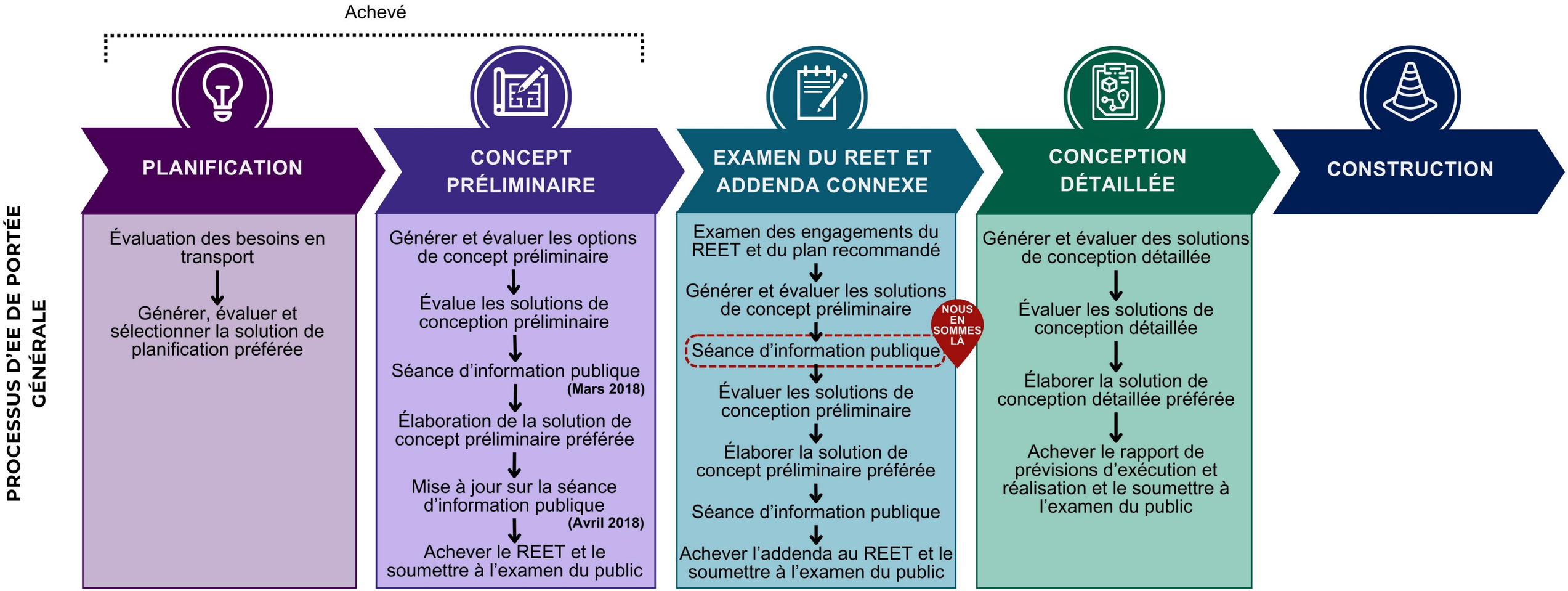
L'examen du REET a été entrepris.

Processus d'évaluation environnementale

Le projet suit le processus pour les entreprises du groupe B, conformément à l'évaluation environnementale de portée générale pour les routes provinciales, modifiée en 2000 (l'EE de portée générale).

En novembre 2020, l'EE de portée générale du projet a été achevée. Un rapport d'étude environnementale sur les transports (REET) a été diffusé aux fins d'examen public, étayant une méthode alternative préférée dans le cadre du projet.

Toute modification importante apportée au projet après l'achèvement du REET doit faire l'objet d'un examen et d'un addenda. Une fois achevé, l'addenda au REET sera diffusé sur le site Web du projet (www.cr17bridges.com).



Caractéristiques du plan recommandé dans le REET 2020 — en cours d'examen

CARACTÉRISTIQUES DU PLAN RECOMMANDÉ DU REET	DISPOSITION DU PONT	ALIGNEMENTS HORIZONTAUX ET VERTICAUX	SECTION TRANSVERSALE	MODIFICATIONS DE L'ÉCHANGEUR	SERVICES PUBLICS	PROPRIÉTÉ	GESTION DE LA CIRCULATION LORS DES TRAVAUX
RÉSUMÉ DES RECOMMANDATIONS DU REET	• Le nouveau pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées sera un pont à poutres en I en béton à deux travées, de 71 m de long et 13 m de large. • Le nouveau passage inférieur du CC 17 sera un pont à poutres en I en béton de 36 m de long et de 13 m de large, à une seule travée.	• Le tracé actuel du CC 17 sera maintenu. • Les ponts de remplacement seront surélevés afin d'assurer la hauteur libre minimale au-dessus des voies ferrées et de l'autoroute 34.	• Parapet nord : 0,5 m • Accotement : 2,5 m • Voies de circulation : deux de 3,5 m • Accotement : 2,5 m • Parapet sud : 0,5 m • Largeur totale : 13 m	• Nouvelle intersection entre le CC 17 et les bretelles d'accès et de sortie de l'autoroute 34. • Bretelle de sortie avec virage à droite canalisé, y compris une voie de virage à droite. • Bretelle d'accès avec arrêt à l'intersection en T, sans voie d'accélération.	• Protection de la conduite de gaz d'Enbridge, des conduits souterrains d'Hydro One et de la conduite d'eau principale pendant les travaux. • Déplacement du conduit souterrain de Bell. • Retrait et remplacement temporaire du haubanage supportant le poteau électrique ; rétablissement des conditions existantes après les travaux.	• Un accord standard de reconstruction d'un saut-de-mouton entre le CN et le MTO, conformément à la *Loi sur la sécurité ferroviaire*, est nécessaire pour remplacer le pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées.	• Fermeture du CC 17 pendant 2 à 4 semaines : déviation de la circulation sur le CC 4 en direction de l'est et de l'ouest par la rue principale de Hawkesbury et en direction du nord et du sud par la rue Tupper. • Fermeture de l'autoroute 34 près du site pendant 2 à 3 fins de semaine : circulation déviée vers une voie de contournement temporaire à l'est de l'autoroute 34 afin de maintenir les mouvements de circulation N-S le long de celle-ci.
L'ADDENDA AU REET A-T-IL UNE INCIDENCE SUR LE PLAN RECOMMANDÉ ?	Options en cours d'examen et d'évaluation.	À confirmer selon l'évaluation des options.	Options en cours d'examen et d'évaluation.	Options en cours d'examen et d'évaluation.	À confirmer selon l'évaluation des options.	À confirmer selon l'évaluation des options.	Options en cours d'examen et d'évaluation.

Option 1 (option privilégiée en 2020)

Écartée en vue d'une évaluation plus approfondie

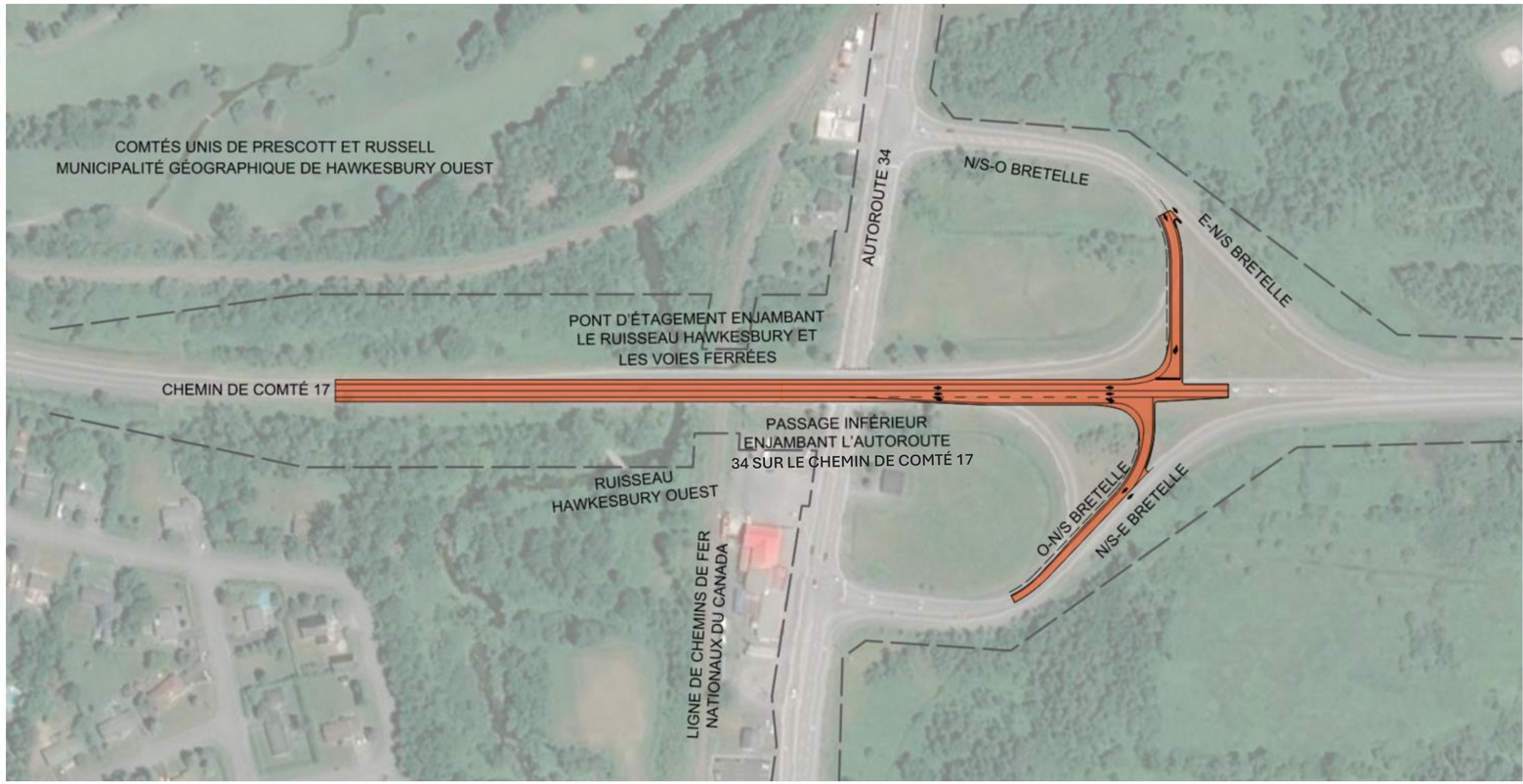
Limite de vitesse : 70 km/h

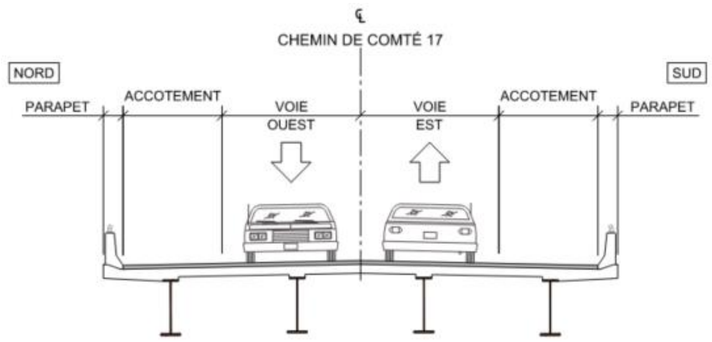
Avantages

- Aucun impact sur les propriétés privées
- Ramène les nouveaux ponts à deux voies (coûts moindres)

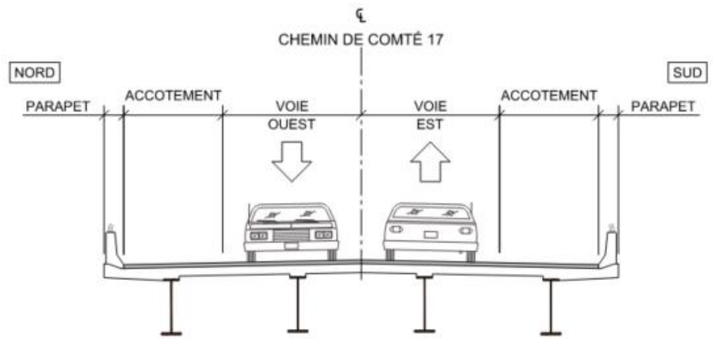
Inconvénients

- Ne maintient pas la fluidité de la circulation à la bretelle N/S-O (bretelle d'accès)
- Configuration d'échangeur non standard en Ontario
- Possibilité de tourner à gauche à contresens depuis le chemin de comté 17 sur la bretelle N/S-O et la bretelle O-N/S
- Capacité de circulation inférieure à celle de la configuration actuelle





Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées



Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Option 2

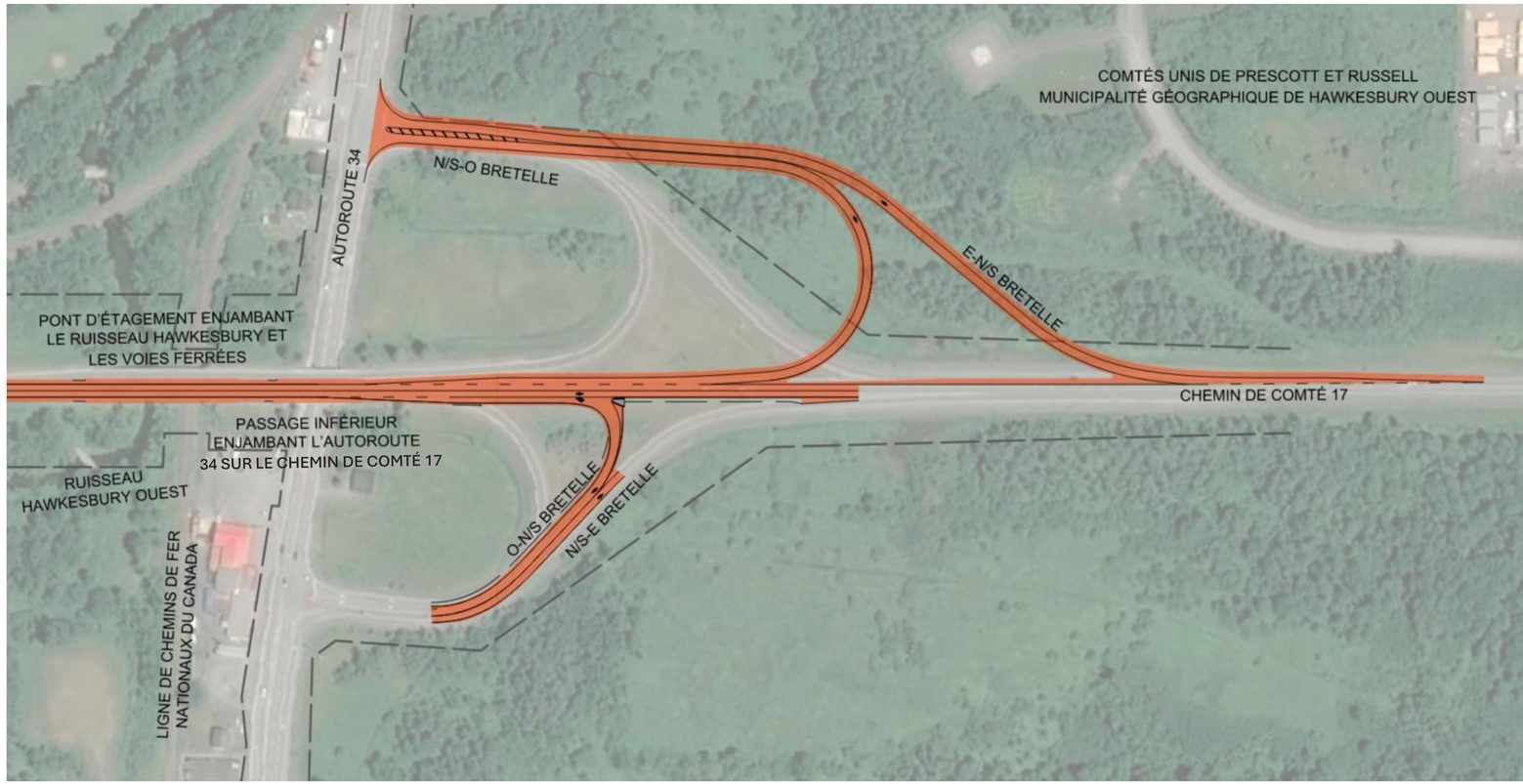
Écartée en vue d'une évaluation plus approfondie
Limite de vitesse : 70 km/h

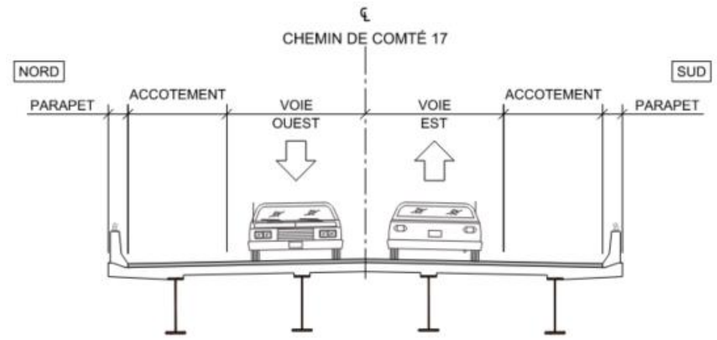
Avantages

- Maintient la fluidité de la circulation à la bretelle N/S-O
- Capacité de circulation similaire à celle de la configuration actuelle
- Ramène les nouveaux ponts à deux voies (coûts moindres)

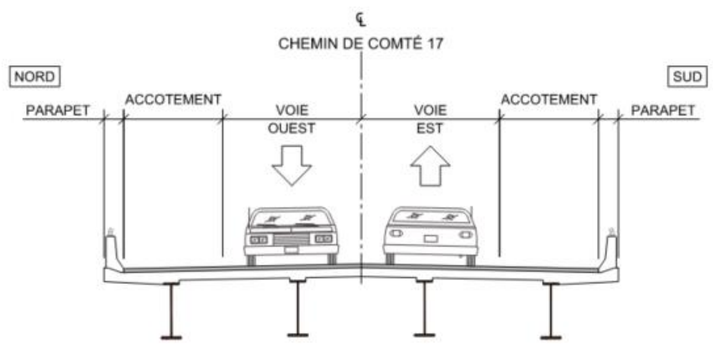
Inconvénients

- Impact sur les propriétés privées (bretelles N/S-O et E-N/S)
- Possibilité de tourner à gauche à contresens depuis le chemin de comté 17 sur la bretelle O-N/S
- Configuration d'échangeur non standard en Ontario





Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées



Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Option 3

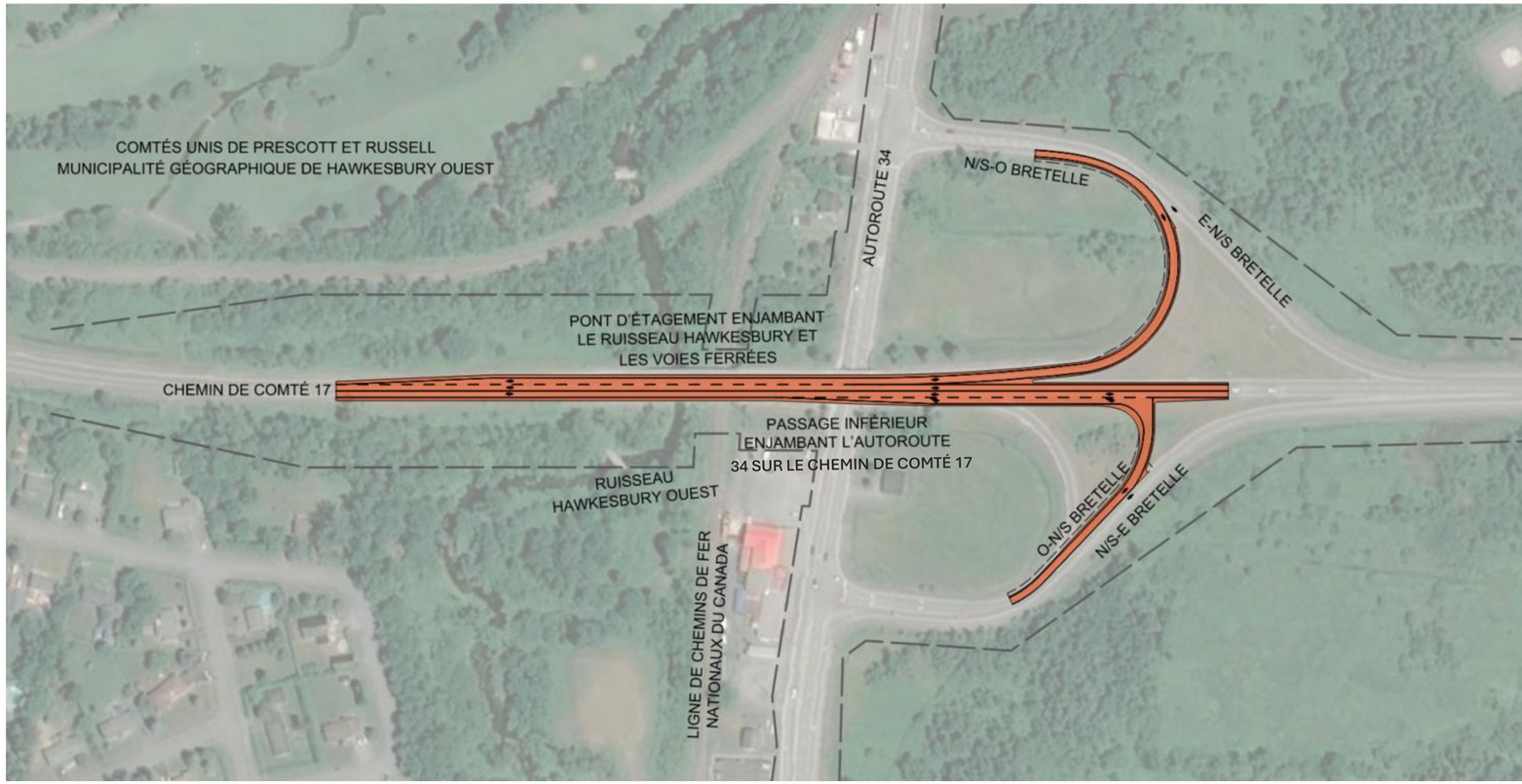
Retenue en vue d'une évaluation plus approfondie
Limite de vitesse : 90 km/h

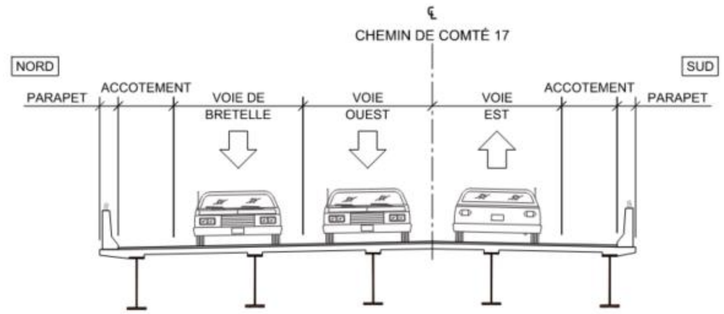
Avantages

- Maintient la fluidité de la circulation à la bretelle N/S-O
- Aucun impact sur les propriétés privées
- Conforme aux normes de conception
- Capacité de circulation similaire à celle de la configuration actuelle
- Ramène le nouveau pont sur le ruisseau Hawkesbury et les voies ferrées à trois voies (coûts moindres)

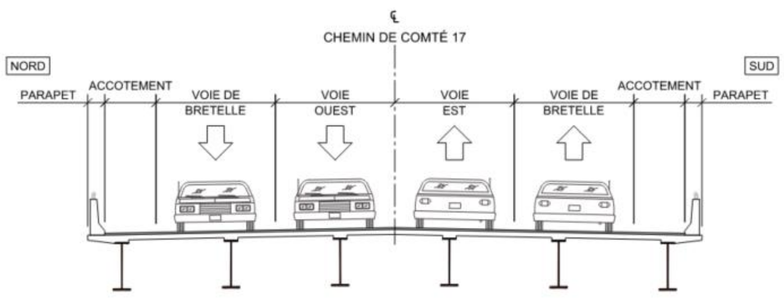
Inconvénients

- Configuration d'échangeur non standard en Ontario
- Possibilité de tourner à gauche à contresens depuis le chemin de comté 17 sur la bretelle O-N/S





Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées



Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Option 4

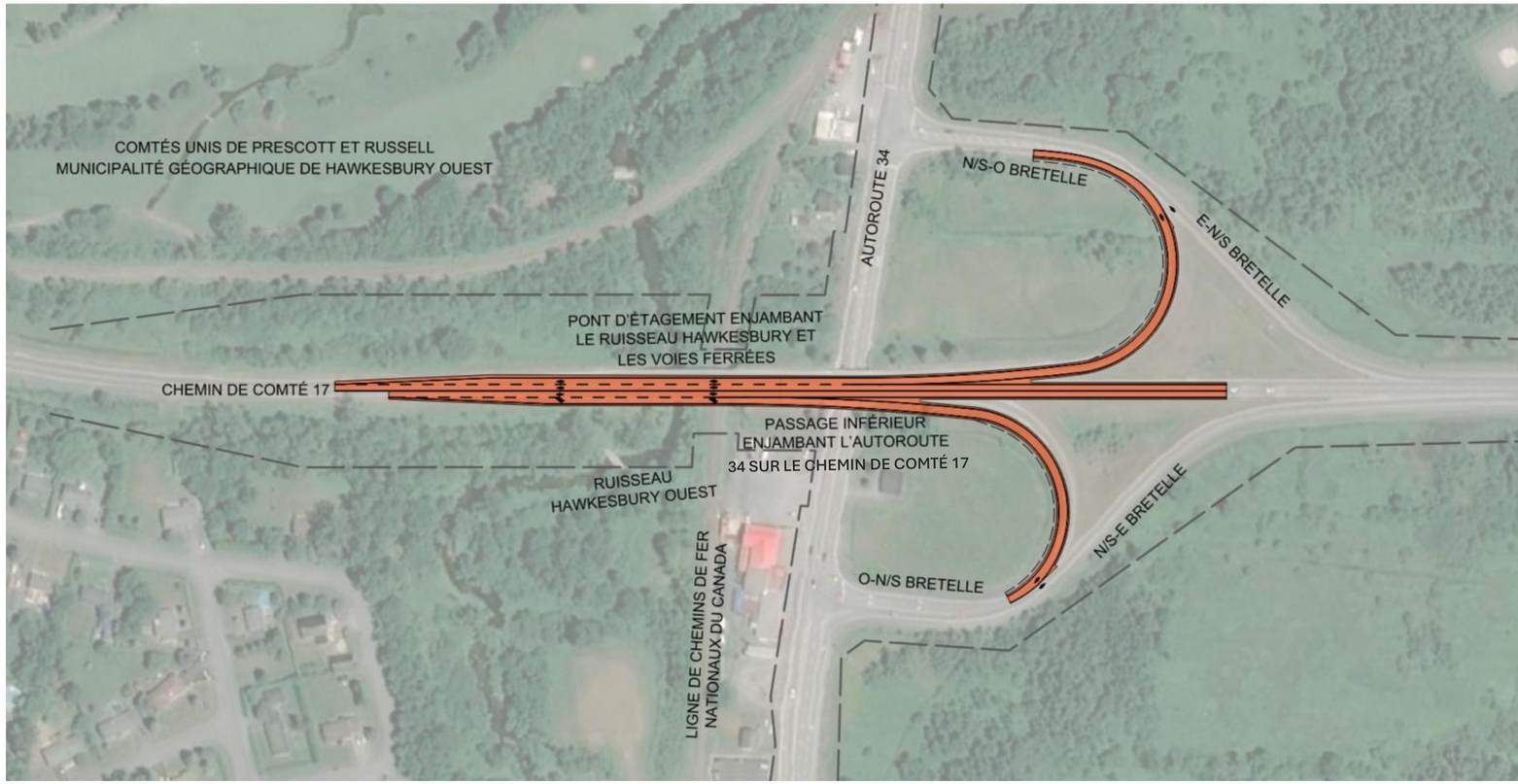
Retenue en vue d'une évaluation plus approfondie
Limite de vitesse : 90 km/h

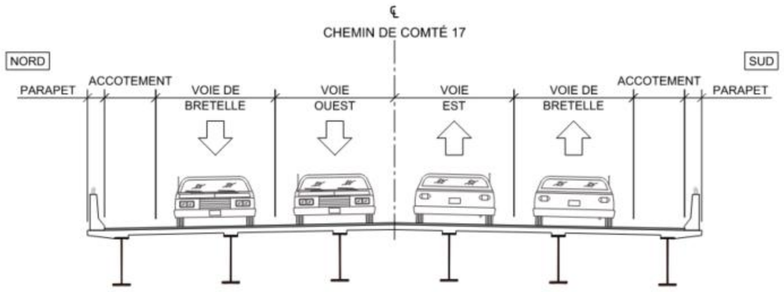
Avantages

- Maintient la fluidité de la circulation à toutes les bretelles
- Aucun impact sur les propriétés privées
- Configuration d'échangeur standard en Ontario
- Capacité de circulation similaire à celle de la configuration actuelle
- Impossibilité de tourner à gauche depuis le chemin de comté 17
- Capacité de circulation similaire à celle de la configuration actuelle

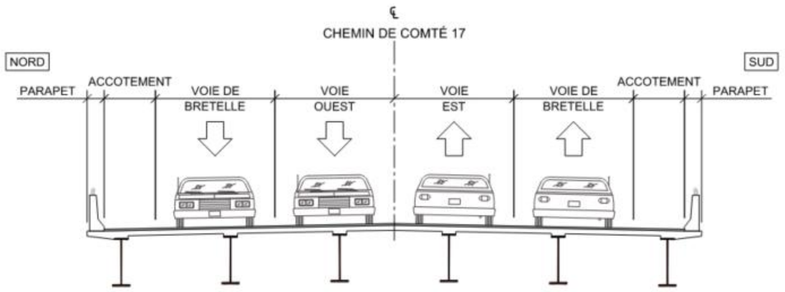
Inconvénients

- La bretelle O-N/S maintient les rayons de braquage existants, mais ne répond pas aux normes de conception actuelles. Ce lieu a connu quelques accidents par le passé.





Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées



Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

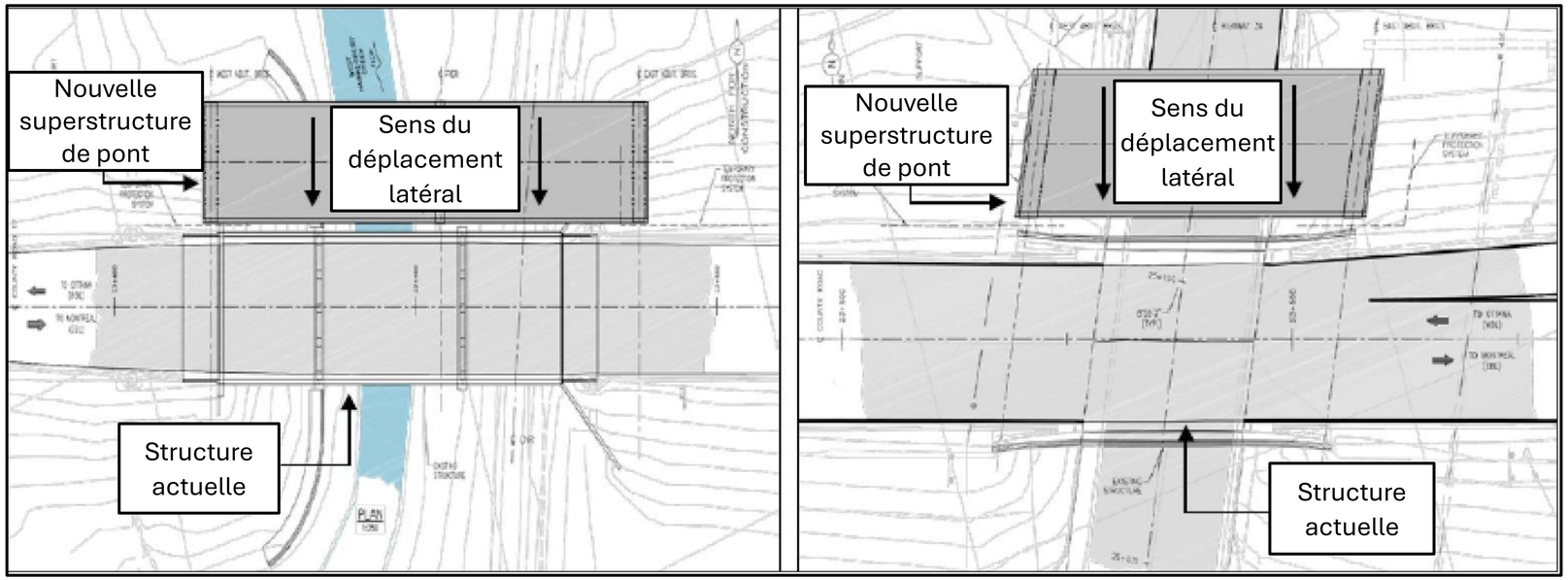
Étapes de construction

Option 1 : glissement latéral

Il est proposé de privilégier une technique de construction accélérée selon laquelle les nouveaux tabliers de pont seront construits sur des supports temporaires adjacents aux ponts actuels (et au nord de ceux-ci).

Une fois les nouveaux tabliers de pont construits, les passages devront être fermés pendant 2 à 4 semaines pour démolir les structures actuelles, achever les nouvelles culées et piles, et mettre en place les nouvelles structures par glissement.

Les impacts sur les services publics sont en cours d'évaluation.



<u>Fermeture du chemin de comté 17</u>

La démolition accélérée des structures actuelles et le glissement latéral des nouvelles structures nécessiteront la fermeture complète du chemin de comté 17 pendant 2 à 4 semaines.

<u>Fermeture de l'autoroute 34</u>

L'autoroute 34 devra être fermée à trois reprises pendant la nuit pour ériger les nouvelles poutres, démolir la structure existante et mettre en place la nouvelle structure par glissement.

Étapes de construction

Option 2a : aménagement de voies individuelles par étapes

Étape 1



Étape 2



Cette option préconise des techniques de construction conventionnelles pour démonter les structures existantes et les remplacer en deux étapes.

La première étape consiste à maintenir une voie de circulation alternative pendant les travaux avec des feux de signalisation temporaires sur le chemin de comté 17 et la bretelle N/S-O. On prévoit un retard de 3 à 4 minutes aux heures de pointe du matin et de l'après-midi. La deuxième étape maintient deux voies de circulation pendant les travaux.

Fermetures du chemin de comté 17

Au moins deux fermetures de nuit ou réductions de voies sur le chemin de comté 17 seront nécessaires pour démolir la structure existante et la remplacer.

Fermetures de l'autoroute 34

L'autoroute 34 devra être fermée au moins à quatre reprises pendant la nuit afin de démolir la structure existante et d'ériger les nouvelles poutres.

Étapes de construction

Option 2 b : aménagement de deux voies par étapes

Étape 1



Étape 2



Cette option préconise des techniques de construction conventionnelles pour démonter les structures existantes et les remplacer en deux étapes.

Deux voies de circulation seront maintenues pendant toute la durée des travaux.

Les opérations de construction sont estimées à un an et demi ou à deux ans pour cette option par étapes.

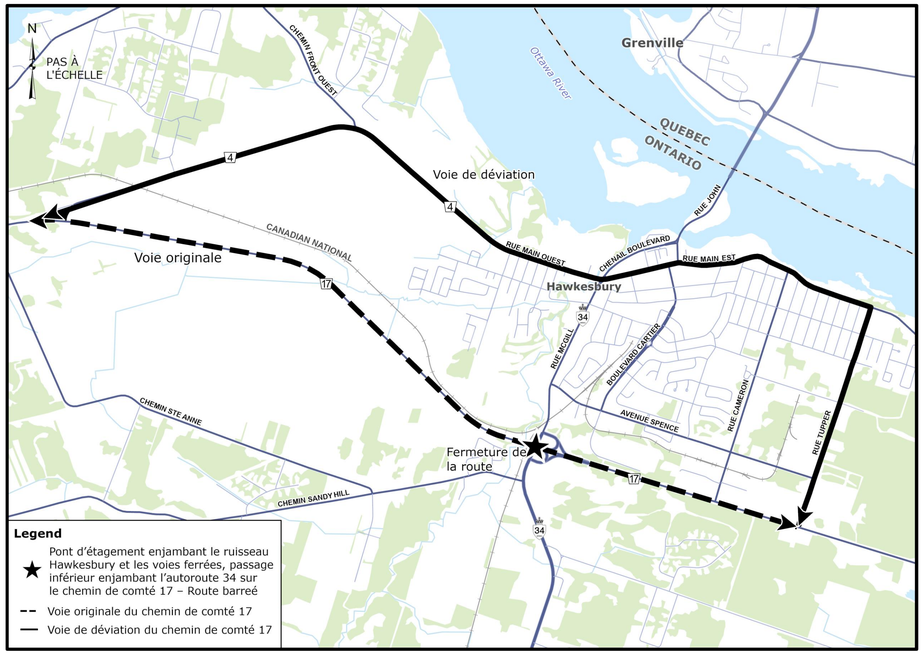
Fermetures du chemin de comté 17

Au moins deux fermetures de nuit ou réductions de voies sur le chemin de comté 17 seront nécessaires pour démolir la structure existante et la remplacer.

Fermetures de l'autoroute 34

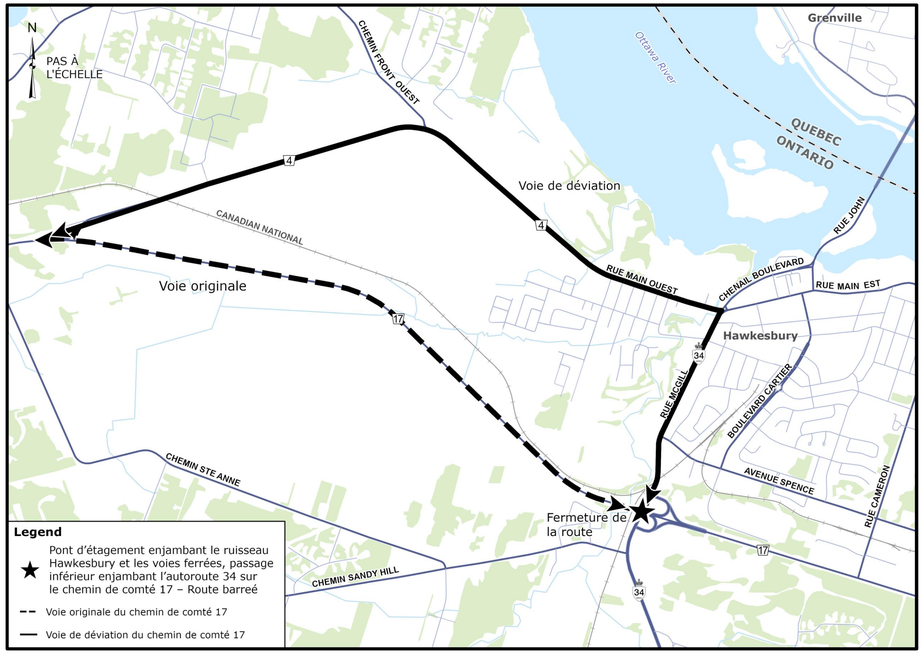
L'autoroute 34 devra être fermée au moins à quatre reprises pendant la nuit afin de démolir la structure existante et d'ériger les nouvelles poutres.

Voies de déviation du chemin de comté 17



Option 1

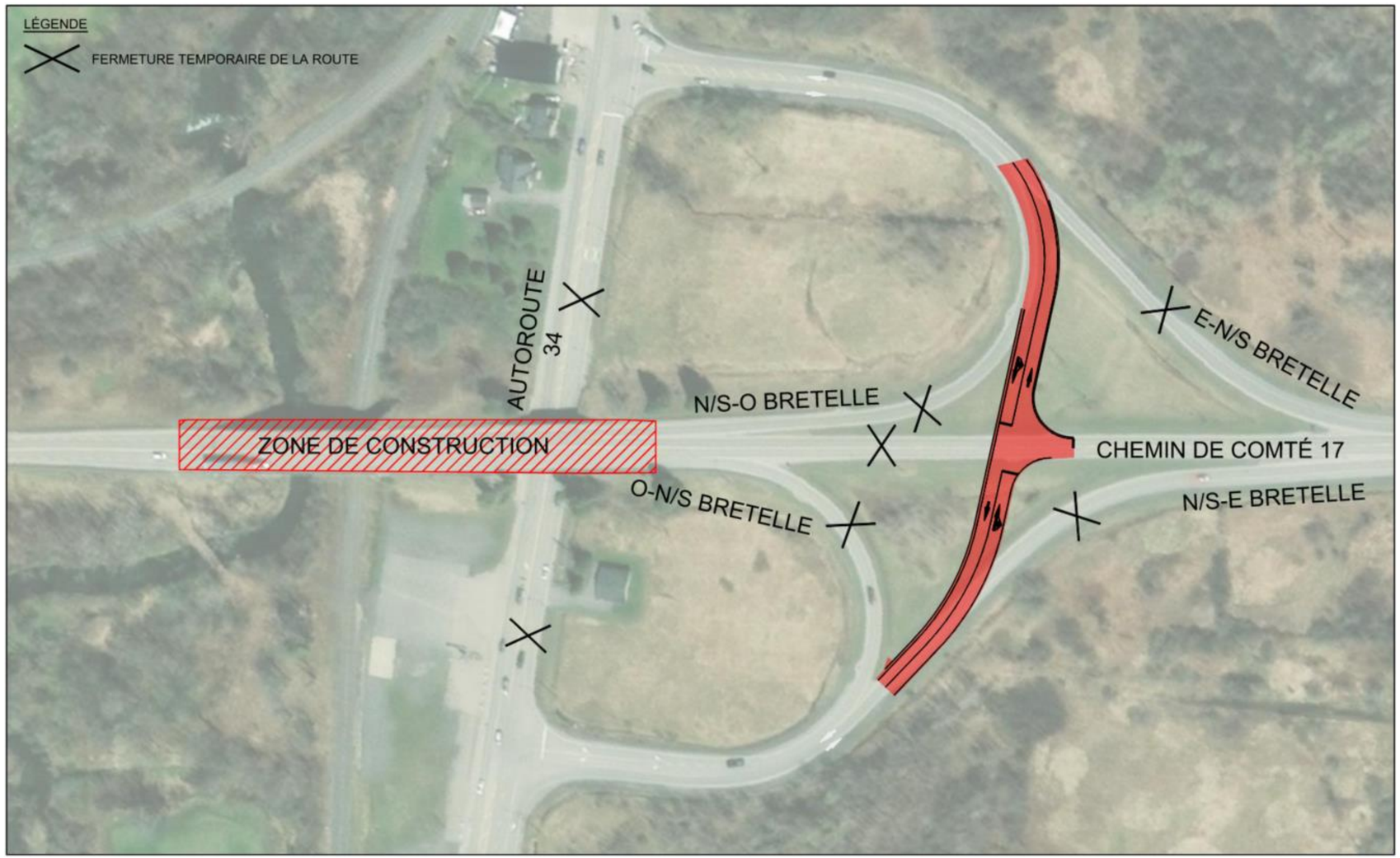
La circulation du chemin de comté 17 sera déviée le long du chemin de comté 4 en direction est-ouest par la rue principale de Hawkesbury et en direction nord-sud par la rue Tupper.



Option 2

La circulation de l'autoroute 34 sera déviée par un contournement temporaire nord-sud par l'échangeur.

Voie de déviation de l'autoroute 34

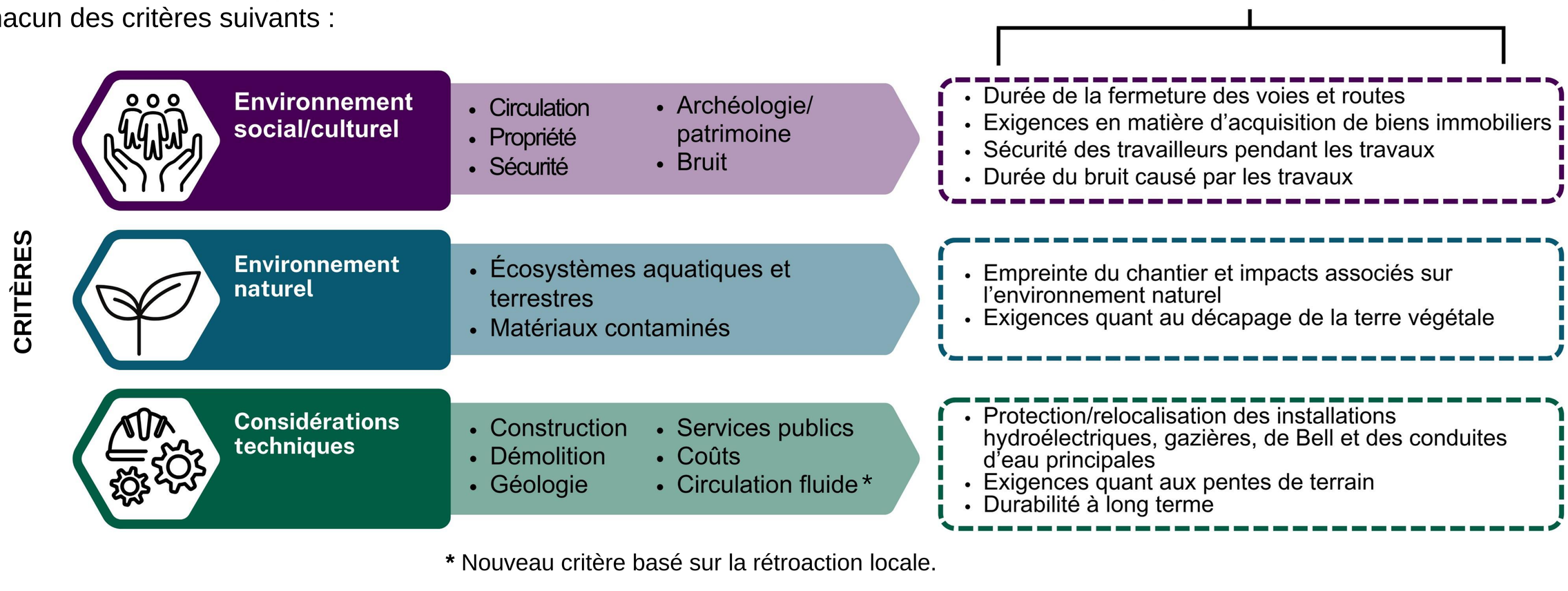


La circulation de l'autoroute 34 sera déviée par un contournement temporaire nord-sud par l'échangeur. Ce détour sera en place lorsque l'autoroute 34 sera fermée.

Critères d'évaluation des options

Les options de configuration et **d'échelonnement des travaux** seront évaluées afin de sélectionner une nouvelle solution préférée dans le cadre du projet. Dans un souci de cohérence, l'évaluation se fera selon la même méthodologie et les mêmes critères que ceux appliqués dans le REET.

Un processus décisionnel raisonné sera établi pour identifier et déterminer la ou les solutions préférées en se basant sur les avantages, les inconvénients et les compromis associés à chacun des critères suivants :



***** Nouveau critère basé sur la rétroaction locale.

Prochaines étapes

Nous vous invitons à nous faire part de vos commentaires sur les informations fournies.

À la suite de cette séance d'information publique, l'équipe de projet entend :

1. examiner les commentaires reçus
2. évaluer les options et sélectionner la ou les solutions préférées
3. organiser une deuxième séance d'information publique à l'automne 2024
4. finaliser le plan recommandé
5. préparer l'addenda au REET, qui sera diffusé sur le site Web du projet (www.cr17bridges.com) pour une période d'examen public de 30 jours.

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Courriel : BCraig@dillon.ca

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Ministère des Transports de l'Ontario
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Kingston, ON K7L 5A3
Tél. : 613 449-7916
Courriel : Dan.Brandao@ontario.ca

WELCOME!

Public Information Centre #2

Hawkesbury Bridge Replacements (GWP 4203-15-00)

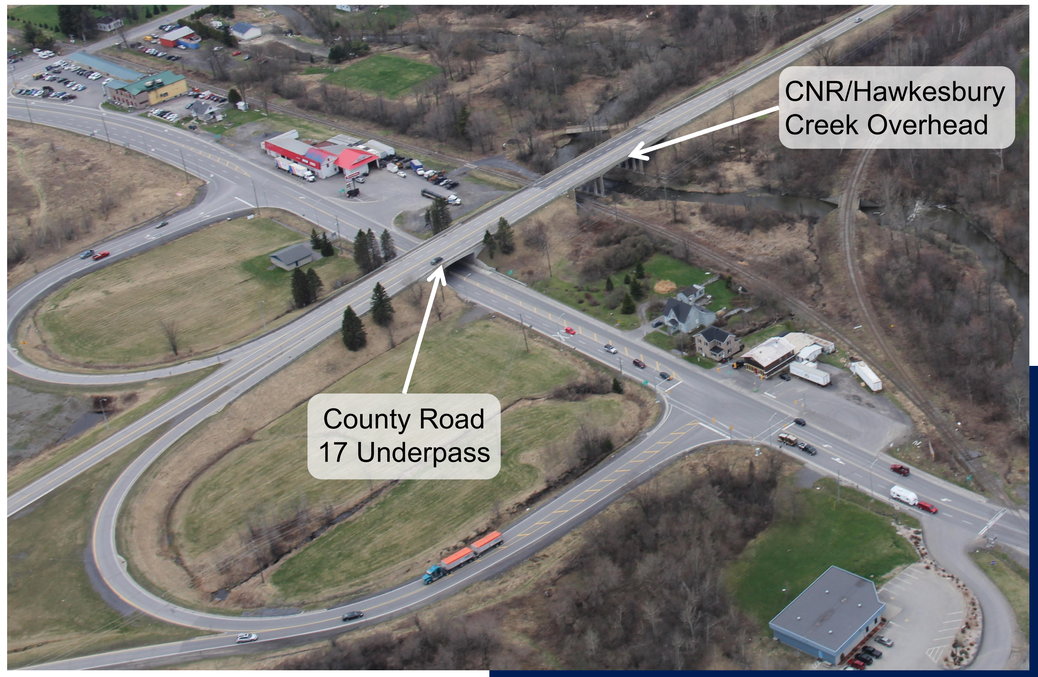
Transportation Environmental Study Report Review and Addendum

October 17, 2024 @ 4:00 PM – 7:00 PM

Ontario

DILLON CONSULTING

Jacobs



Project Description

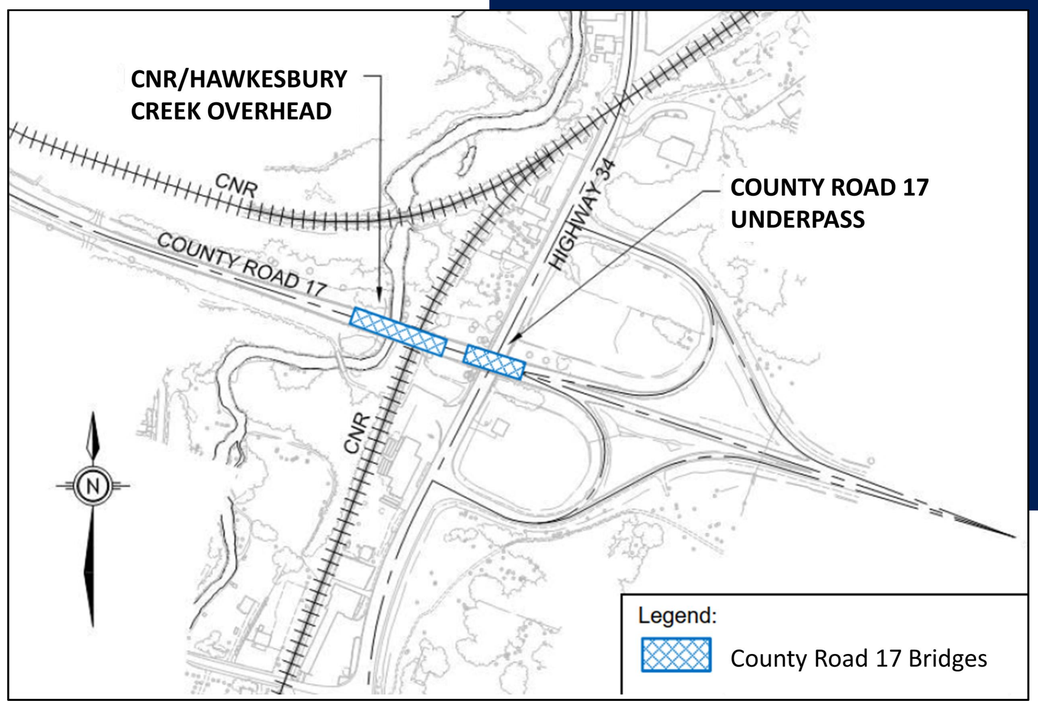
The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) for the replacement of the following two bridges:

- CNR/Hawkesbury Creek Overhead
- County Road 17 Underpass (at Highway 34)

Both bridges are nearing the end of their useful service life and require replacement. Major components of the Project includes:

- Replacement of the two bridges;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Temporary road closures of Highway 34 and County Road 17 during construction during which traffic will be detoured

Construction is anticipated to be initiated in 2027 subject to approvals and funding.



Project Background



In November 2020, the TESR for the Hawkesbury Bridge Replacements Class Environmental Assessment Study was completed.

Municipal endorsement of the Technically Preferred Alternative Method for the Project, outlined in the TESR, was not received.

Between 2021 and 2023, additional municipal consultation and feasibility studies were completed. Based on this work, it was determined that a TESR Review and Addendum would be required.

2020

TESR COMPLETION

The TESR was completed, and a Notice of Completion was issued to commence the 30-day public review period.

2021

MUNICIPAL CONSULTATION

Municipal endorsement was not received. The Town of Hawkesbury requested a 'free flow' interchange be provided.

2022

FEASIBILITY STUDIES

As a result of municipal feedback, feasibility studies were undertaken to identify additional interchange configuration alternatives and associated construction staging alternatives.

2023

FEASIBILITY STUDIES

New alternatives were identified, and it was determined that a TESR Addendum would be required to reassess and confirm the Technically Preferred Alternative.

2024

TESR REVIEW AND ADDENDUM

The TESR Review and Addendum has now commenced.

Environmental Assessment Process

The Project is following the process for Group B undertakings in accordance with MTO's *Class Environmental Assessment for Provincial Transportation Facilities*, 2000 (Class EA).

In November 2020, the Class EA Study for the Project was completed. A Transportation Environmental Study Report (TESR) was posted for public review, documenting a Technically Preferred Alternative Method for the Project.

Any significant modification to the Project that occurs after completion of the TESR must be reviewed and a TESR Addendum must be prepared. Once complete, the TESR Addendum will be available on the project website (www.cr17bridges.com).

CLASS EA PROCESS

Completed

PLANNING

- Transportation Needs Assessment
- Generate, Evaluate & Select Preferred Planning Alternative

PRELIMINARY DESIGN

- Generate & Assess Preliminary Design Alternatives
- Evaluate Preliminary Design Alternatives
- Public Information Centre **(March 2018)**
- Develop Preferred Preliminary Design Alternative
- Public Information Centre Update **(April 2018)**
- Complete TESR & File for Public Review

TESR REVIEW AND ADDENDUM

- Review TESR Commitments and Recommended Plan
- Generate & Assess Preliminary Design Alternatives
- Public Information Centre
- Evaluate Preliminary Design Alternatives
- Develop Preferred Preliminary Design Alternative
- Public Information Centre **WE ARE HERE**
- Complete TESR Addendum & File for Public Review

DETAIL DESIGN

- Generate & Assess Detail Design Alternatives
- Evaluate Detail Design Alternatives
- Develop Preferred Detail Design Alternative
- Completed Design & Construction Report & File for Public Review

CONSTRUCTION

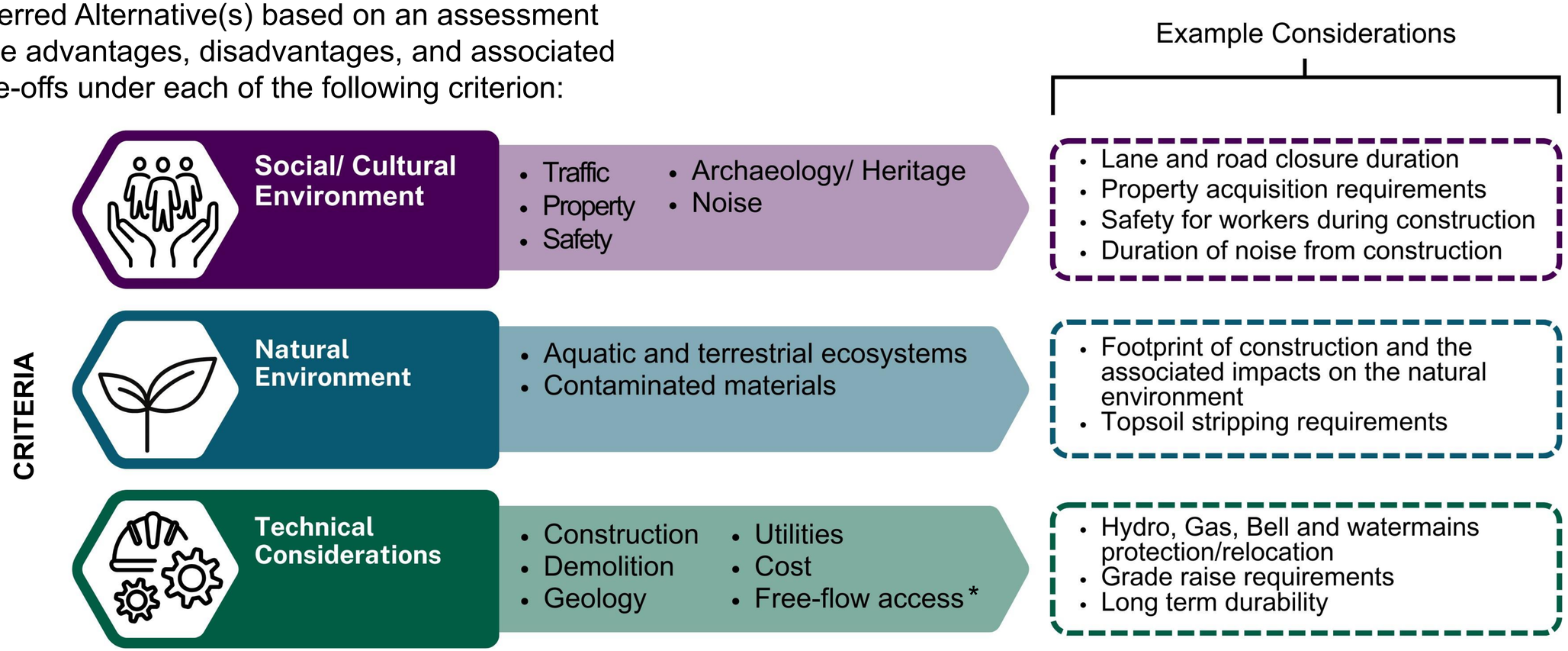
2020 TESR Recommended Plan Features – Currently Under Review

TESR RECOMMENDED PLAN FEATURE	BRIDGE LAYOUT	HORIZONTAL AND VERTICAL ALIGNMENTS	CROSS-SECTION	INTERCHANGE MODIFICATIONS	UTILITIES	PROPERTY	CONSTRUCTION TRAFFIC MANAGEMENT
SUMMARY OF TESR RECOMMENDATION	• The new CNR/ Hawkesbury Creek Overhead will be a 71 m long, 13 m wide, two-span concrete slab-on-steel I-girder bridge. • The new CR 17 Underpass will be a 36 m long, 13 m wide, single span concrete slab-on-steel I-girder bridge.	• The existing alignment of CR 17 will be maintained. • The replacement bridges will be raised in order to provide the minimum vertical clearance over the CNR tracks and over Highway 34.	• North Barrier Wall: 0.5 m • Shoulder: 2.5 m • Traffic Lanes: two @ 3.5 m • Shoulder: 2.5 m • South Barrier Wall: 0.5 m • Total width: 13 m	• New intersection of CR 17 and the Highway 34 on-ramp and off-ramp. • Off-ramp facilitated via a channelized right turn including a right turn lane. • On-ramp facilitated by a stop control T-Intersection, and no acceleration lane provided.	• Protection of Enbridge gas main, Hydro One underground conduits, and watermain during construction. • Relocation of underground Bell duct. • Removal and temporary replacement of guy wire supporting hydro pole; reinstated to existing conditions following construction.	• A standard grade separation reconstruction agreement between CNR and MTO in accordance with the *Railway Safety Act* is required to replace the existing CNR/Hawkesbury Creek Overhead bridge.	• Closure of CR 17 for 2-4 weeks: traffic detoured along CR 4 heading E-W through Hawkesbury Main St and heading N-S along Tupper St. • Closure of Highway 34 near the site for 2-3 weekends: traffic detoured to a temporary bypass east of Highway 34 to maintain N-S traffic movements along Highway 34.
RECOMMENDED PLAN IMPACTED BY TESR ADDENDUM?	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.

Alternatives Evaluation Criteria

Interchange Configuration alternatives, and **Construction Staging alternatives** were evaluated to select a new Technically Preferred Alternative for the Project. For consistency, the evaluation followed the same methodology and used the same criteria as was used in the 2020 TESR.

A reason-based decision-making process was applied to identify and determine the Technically Preferred Alternative(s) based on an assessment of the advantages, disadvantages, and associated trade-offs under each of the following criterion:



* New criterion based on municipal feedback.

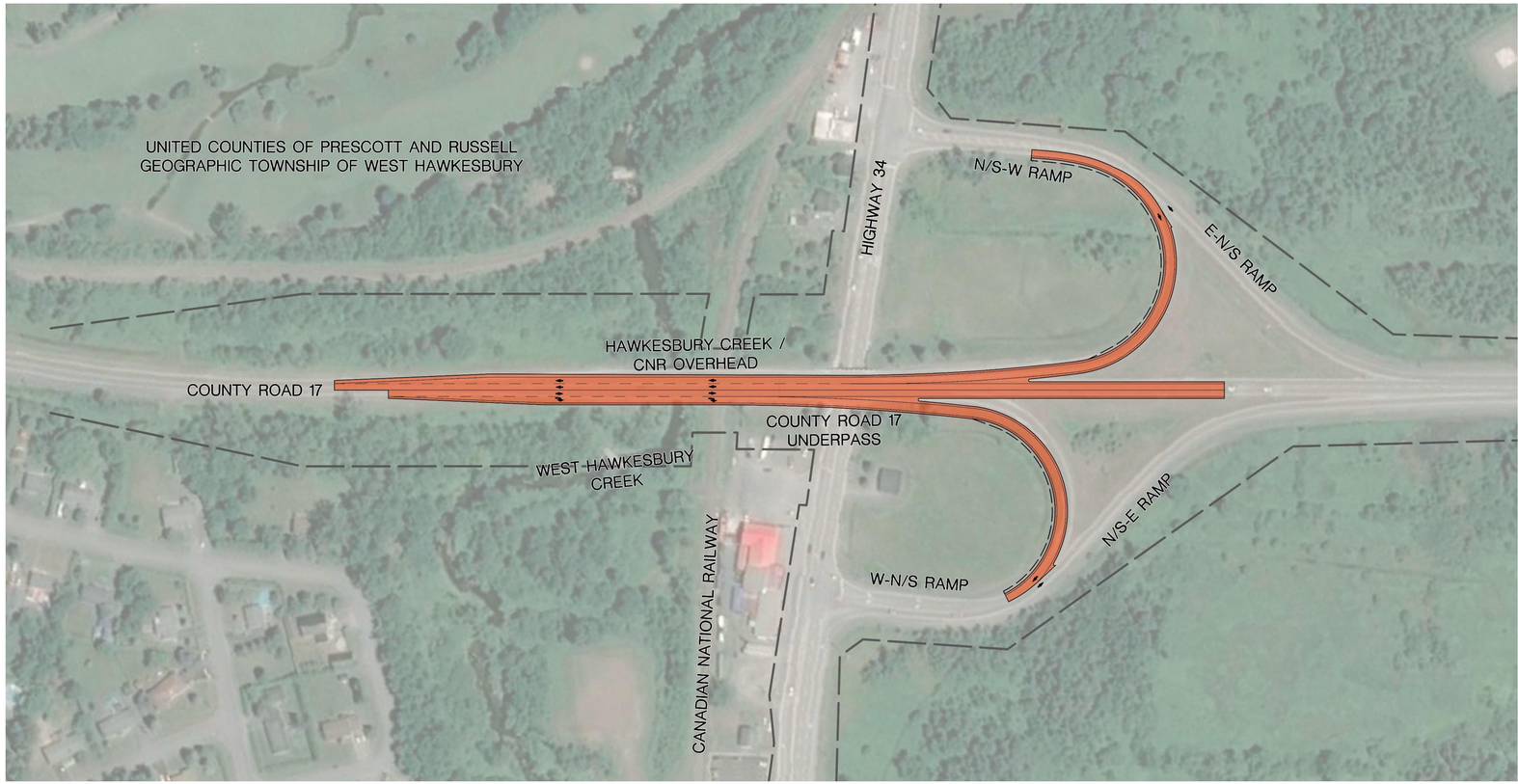
Summary Evaluation of Interchange Configuration Alternatives

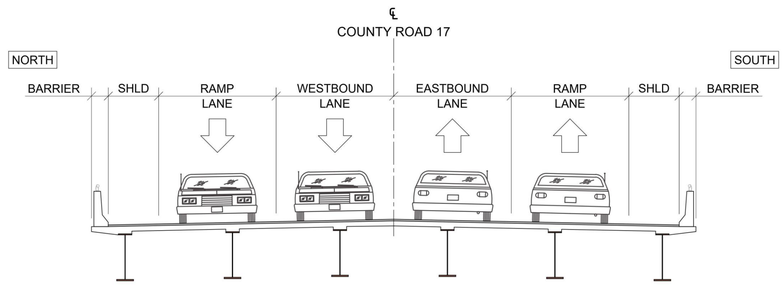
Impacts	Alternative 3 Free-flow access for N/S-W movement; deceleration lane and low-speed right turn for W-N/S movement.	Alternative 4 Like for like replacement of the existing interchange.
Social/Cultural Environment	• Operates at a similar level of service compared to existing conditions. ✓ • Free-flow movements are not warranted based on highway classification and observed traffic volumes. ✗ • Additional property is not required. ✓ • No impacts to archaeology and built heritage. ✓ • No change in noise impacts compared to existing conditions. = • Supported but not preferred by the public and Town/Township/County. ✓	• Operates at a similar level of service compared to existing conditions ✓ • Free-flow movements are not warranted based on highway classification and observed traffic volumes. ✗ • Additional property is not required. ✓ • No impacts to archaeology and built heritage. ✓ • No change in noise impacts compared to existing conditions. = • Preferred by the public and Town/Township/County. ✓
Natural Environment	• No anticipated impacts to Species at Risk (SAR) habitat. ✓	• No anticipated impacts to SAR habitat. ✓
Technical Considerations	• Not a standard interchange design in Ontario and is inconsistent with driver expectations. ✗ • Meets design criteria. ✓ • Potential for wrong way left turn movements from County Rd 17 onto the W-N/S ramp. ✗	• Is a standard interchange design in Ontario and is consistent with driver expectations. ✓ • W-N/S ramp does not meet current design standards. ✗ • No potential for wrong way left turn movements from County Rd 17 onto the W-N/S ramp. ✓
Technically Preferred Alternative	**Not Preferred**	**Preferred**

Ramp Configuration Alternative 4
Selected as the Technically Preferred Alternative

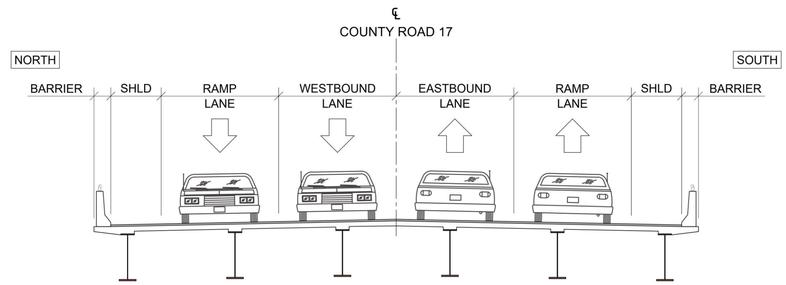
This alternative was selected for the following key reasons:

- Maintains free flow traffic for all ramps
- Does not impact private property
- Standard interchange configuration in Ontario
- Similar traffic capacity to the existing interchange configuration
- No opportunities for left-turn movements from County Road 17
- Interchange similar to the existing configuration
- There is limited history of incidents with the small radius W-N/S exit ramp.





Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

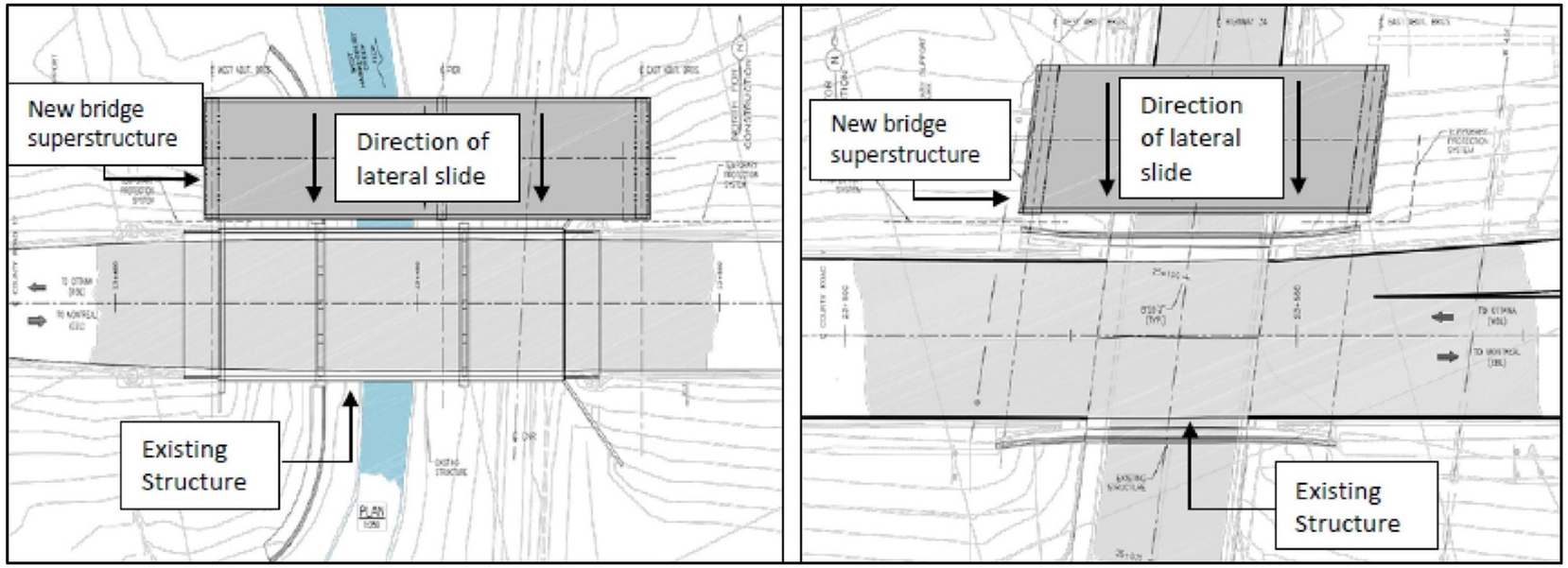
Summary Evaluation of Construction Staging Alternatives

Impacts	Alternative 1: Lateral Slide	Alternative 2a: Single-Lane Staged Construction	Alternative 2b: Two Lane Staged Construction
Social/Cultural Environment	• Requires full closure of CR 17 for 3-5 weeks. ✗ • Requires minimum 3 overnight closures of Highway 34 near the bridges. ✗ • No expected delays on CR 17. ✓ • Construction off-line increases safety for traffic and construction workers. ✓ • Shortest construction duration resulting in the fewest temporary noise impacts. ✓	• Requires 2 overnight closures or lane reductions of CR 17 and a 2-week closure. ✓ • Requires a minimum of 4 overnight closures of Highway 34. ✗ • Expected delays of 3-4 minutes on CR 17 during single lane phase. ✗ • Increased exposure to safety risks due to working adjacent to CR 17 traffic. ✗ • Longer construction duration than Alternative 1. ✗	• Requires 2 overnight closures or lane reductions of CR 17 and a 2-week closure. ✓ • Requires a minimum of 4 overnight closures of Highway 34. ✗ • No delays expected on CR 17. ✓ • Increased exposure to safety risk due to working adjacent to CR 17 traffic. ✗ • Longer construction duration than Alternative 1. ✗
Natural Environment	• Impacts potential SAR habitat for Black Ash, Butternut and bats. ✗	• Impacts potential SAR habitat for Black Ash, Butternut and bats. ✗	• Impacts potential SAR habitat for Black Ash, Butternut and bats. ✗
Technical Considerations	• Maintains existing configuration during winter shutdown. ✓ • Fewer contractors have experience with lateral slide. Increased constructability risks. ✗ • Temporary support of existing structure during construction is not required. ✓	• CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. ✗ • Construction industry has more experience with conventional construction. ✓ • Temporary support will be required at Hawkesbury Creek / CNR Overhead. ✗	• CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. ✗ • Construction industry has more experience with conventional construction. ✓ • Temporary support of existing structure during construction is not required. ✓
Technically Preferred Alternative	**Preferred**	**Not Preferred**	**Not Preferred**

Staging Alternative 1
Selected as the Technically Preferred Alternative

This staging method was selected for the following key reasons:

- Maintains acceleration and deceleration lanes during the winter shutdown period
- Maintains 3.5 m lanes and full shoulders during the winter shutdown period
- Has a shorter construction duration
- Maintains two lanes of traffic on County Road 17, except during full closures
- Does not require temporary support of the existing structure



<u>County Road 17 Closure</u>
To accommodate the rapid demolition and lateral slide, County Road 17 will be closed completely for 3 to 5 weeks.

<u>Highway 34 Closure</u>
A minimum of three overnight closures of Highway 34 are required for three weekends to erect the new girders, demolish the existing structure, and jack and slide the new structure into place.

Summary Evaluation of Detour Route Alternatives

Impacts	Option 1 Tupper Street/Main Street Detour Route	Option 2 Highway 34/McGill Street Detour Route
Social/Cultural Environment	• Anticipated 8 min out of way travel time. ✗	• Anticipated 7 min out of way travel time. ✓
Natural Environment	• No anticipated impacts to Species at Risk (SAR) habitat. ✓	• No anticipated impacts to SAR habitat. ✓
Technical Considerations	• Main Street East is impacted by the detour route. ✗ • Requires a portion of parking to be removed on Main Street East to accommodate trucks. ✗ • Requires temporary signals at Tupper Street/Main Street intersection and modifications to four existing intersections (only applicable to Lateral Slide construction staging alternative). ✗	• Main Street East is not impacted by the detour route. ✓ • No impacts to parking on Main Street East. ✓ • No additional roadway improvements required beyond existing municipal plans. ✓
Technically Preferred Alternative	**Not Preferred**	**Preferred**

Note:

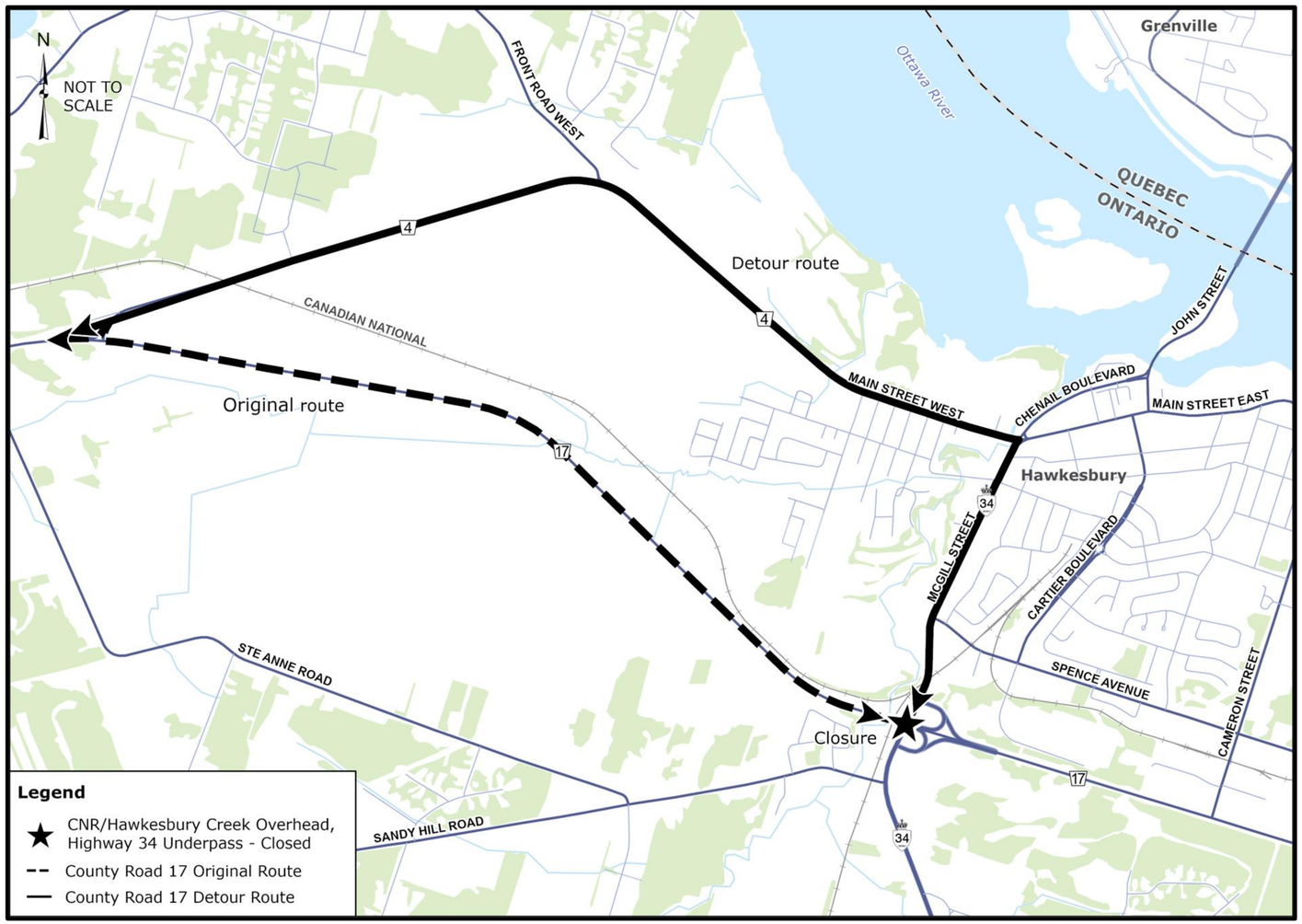
County Road 17 will require a detour of 3-5 weeks for the Lateral Slide construction staging alternative.

County Road 17 Detour Route Option 2

Selected as the Technically Preferred Alternative

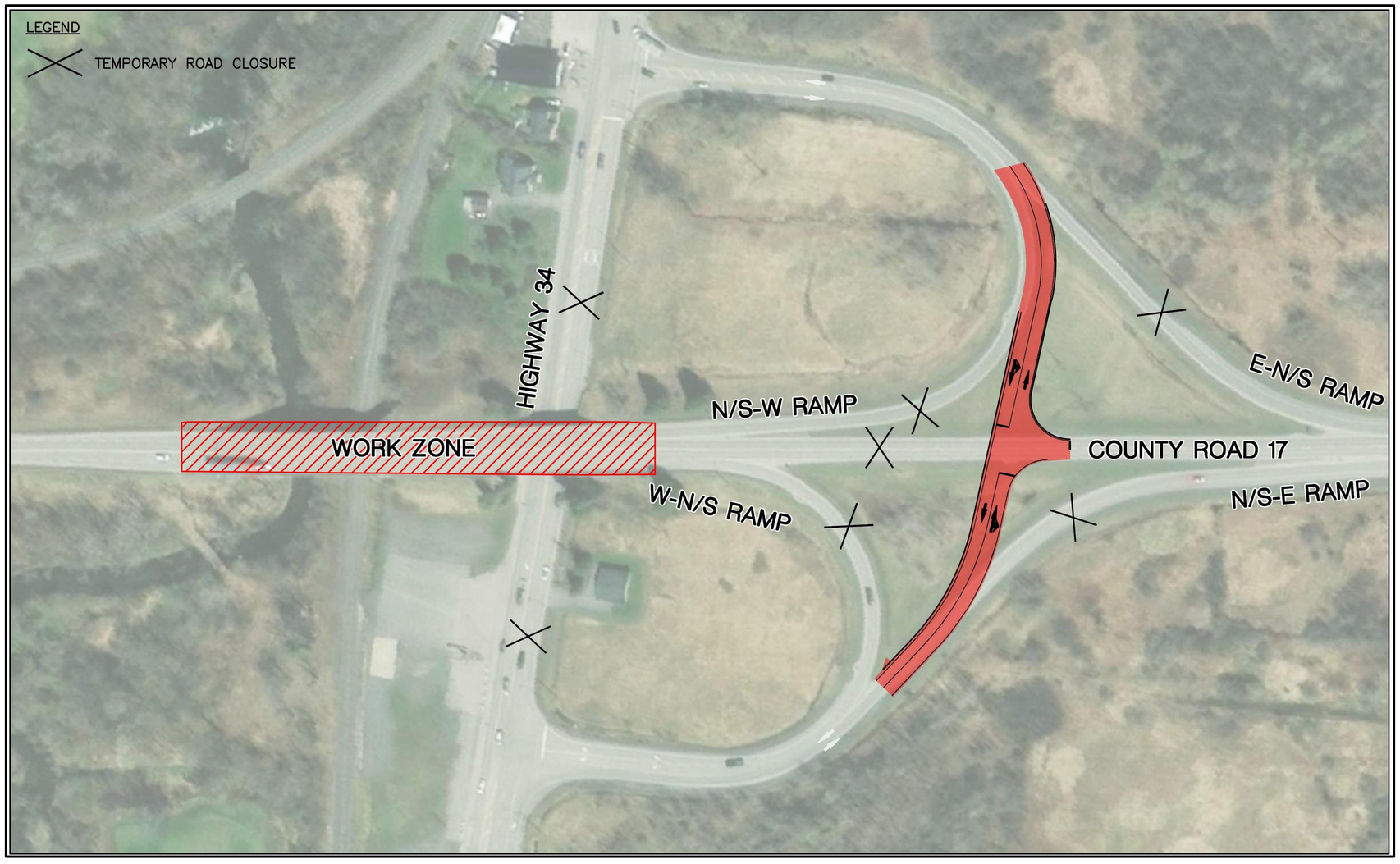
This detour was selected for the following key reasons:

- It has the shortest anticipated out of way travel time
- Does not impact Main Street East
- It does not impact parking on Main Street East
- No additional roadway improvements required beyond existing municipal plans



County Road 17 traffic will be detoured for 3-5 weeks along Main Street heading north-south along McGill Street.

Highway 34 Detour Route



Highway 34 traffic will be detoured via a temporary north-south bypass through the interchange. This detour is required for approximately three overnight closures while Highway 34 is closed.

Environmental Impacts and Mitigation

Environment/ Element	Potential Impacts	Change from the TESR Recommended Plan	Mitigated by Standard Mitigation Measures?
Vegetation and Wildlife	• Temporary loss and/or disruption to wildlife and/or wildlife habitat, including migratory birds and Species at Risk (SAR)	• Slight change in area of disturbed vegetation • Black Ash have potential to occur in the Study Area and have now been listed as a SAR	☑
Fish and Fish Habitat	• Mortality, entrapment or entrainment of fish • Contamination of the watercourse • Loss and/or disruption of aquatic habitat	• No change.	☑
Archaeology	• Potential to encounter previously undocumented archaeological resources during construction	• No change.	☑
Noise	• Temporary disturbance to nearby residents and businesses during construction	• No change.	☑
Traffic	• Lane and road closures will cause temporary disruptions to traffic	• Full closure of CR 17 for 3-5 weeks • Minimum of 3 overnight closures of Highway 34	☑

Next Steps

We welcome your feedback on the information provided.

Following this PIC, the Project Team will:

1. Review all comments received from stakeholders and the public.
2. Confirm the Recommended Plan based on comments received.
3. Prepare the TESR Addendum.
4. File the TESR Addendum on the project website (www.cr17bridges.ca) for a 30-day public review period.

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Bienvenue!

Séance d’information publique nº 2

Remplacement de ponts à Hawkesbury (GWP 4203-15-00)

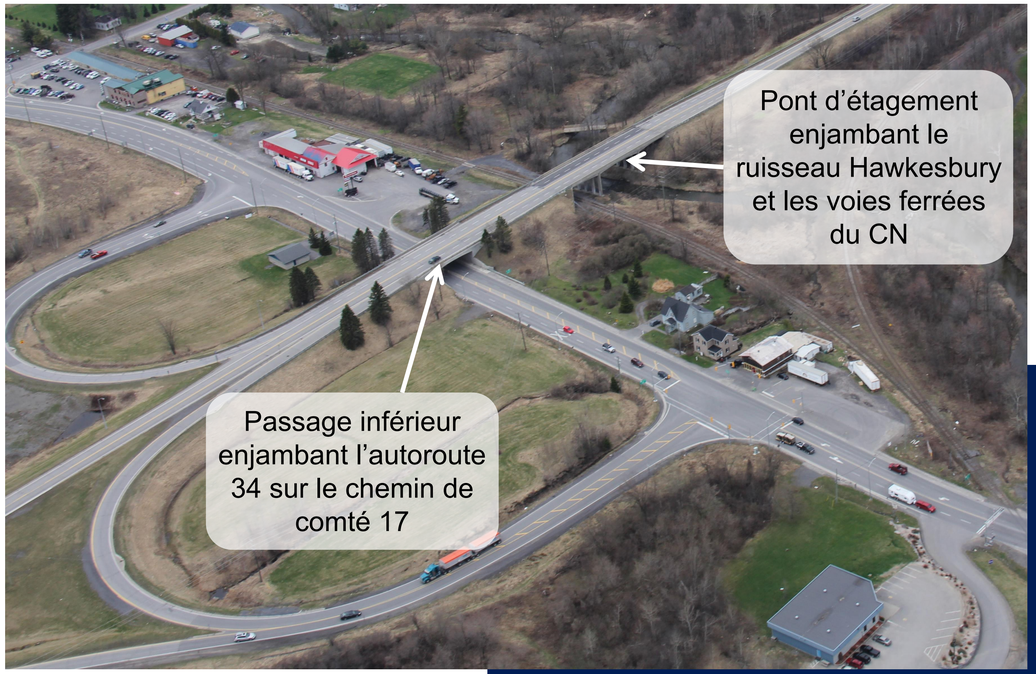
Examen du rapport d’étude environnementale sur les transports et addenda connexe

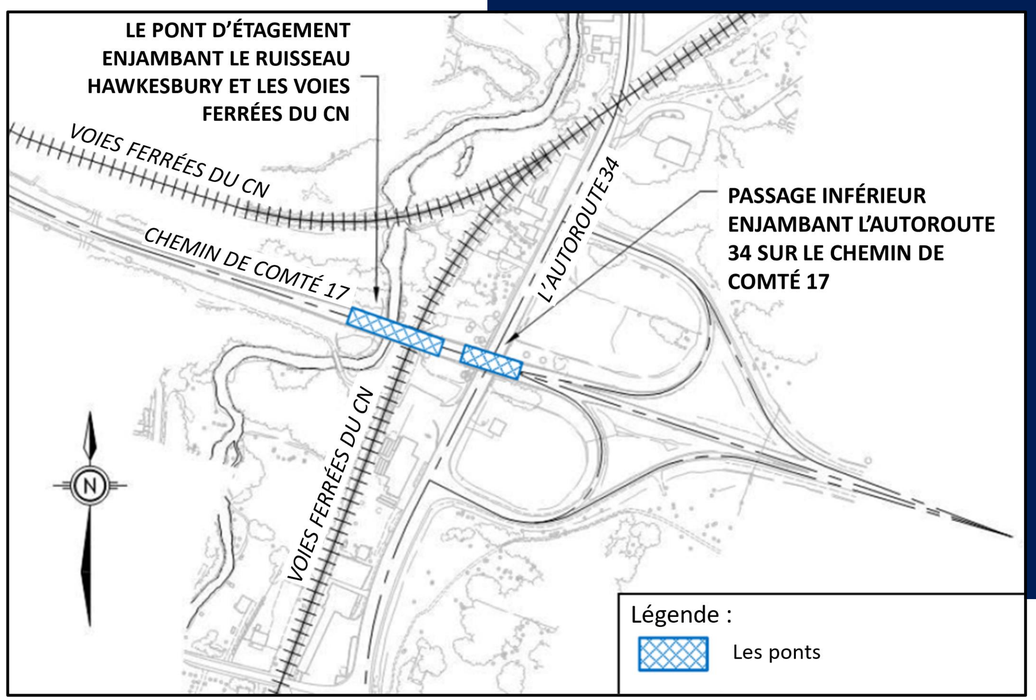
17 octobre 2024 (de 16 h à 19 h)

Ontario

DILLON CONSULTING

Jacobs





Description du projet

Le ministère des Transports de l'Ontario (MTO) a retenu les services de Dillon Consulting et de Jacobs pour réaliser le concept préliminaire et le rapport d'étude environnementale sur les transports (REET) pour le remplacement des deux ponts suivants :

- Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées du CN
- Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Les deux structures approchent de la fin de leur durée de vie utile et doivent être remplacées. Les principales composantes du projet sont les suivantes :

- Remplacement des deux ponts
- Modifications de la bretelle de sortie en direction de l'est et de la bretelle d'entrée en direction de l'ouest à l'échangeur du chemin de comté 17 et de l'autoroute 34
- Fermetures temporaires de l'autoroute 34 et du chemin de comté 17 pendant les travaux, au cours desquelles la circulation sera détournée

Les travaux de construction devraient débuter en 2027, sous réserve de leur approbation et de leur financement.

Contexte du projet



En novembre 2020, le REET de l'étude d'évaluation environnementale de portée générale sur le remplacement des ponts à Hawkesbury a été achevé.

La municipalité n'a pas approuvé la méthode alternative préférée pour le projet, décrite dans le REET.

Entre 2021 et 2023, d'autres consultations municipales et études de faisabilité ont été réalisées. Sur la base de ces travaux, il a été jugé nécessaire de procéder à un examen du REET et à y joindre un addenda.

2020

ACHÈVEMENT DU REET

Le REET ayant été achevé, un avis a été diffusé pour lancer la période d'examen public de 30 jours.

2021

CONSULTATION MUNICIPALE

La municipalité n'a pas donné son aval. La ville de Hawkesbury exige la mise en place d'un croisement à niveaux multiples.

2022

ÉTUDES DE FAISABILITÉ

À la suite de la rétroaction locale, des études de faisabilité ont été entreprises afin de cerner d'autres options de configuration et d'échelonnement des travaux.

2023

ÉTUDES DE FAISABILITÉ

De nouvelles options ont été cernées et il a été déterminé qu'un addenda au REET serait nécessaire pour réévaluer et confirmer l'option préférée.

2024

Examen du REET et addenda connexe

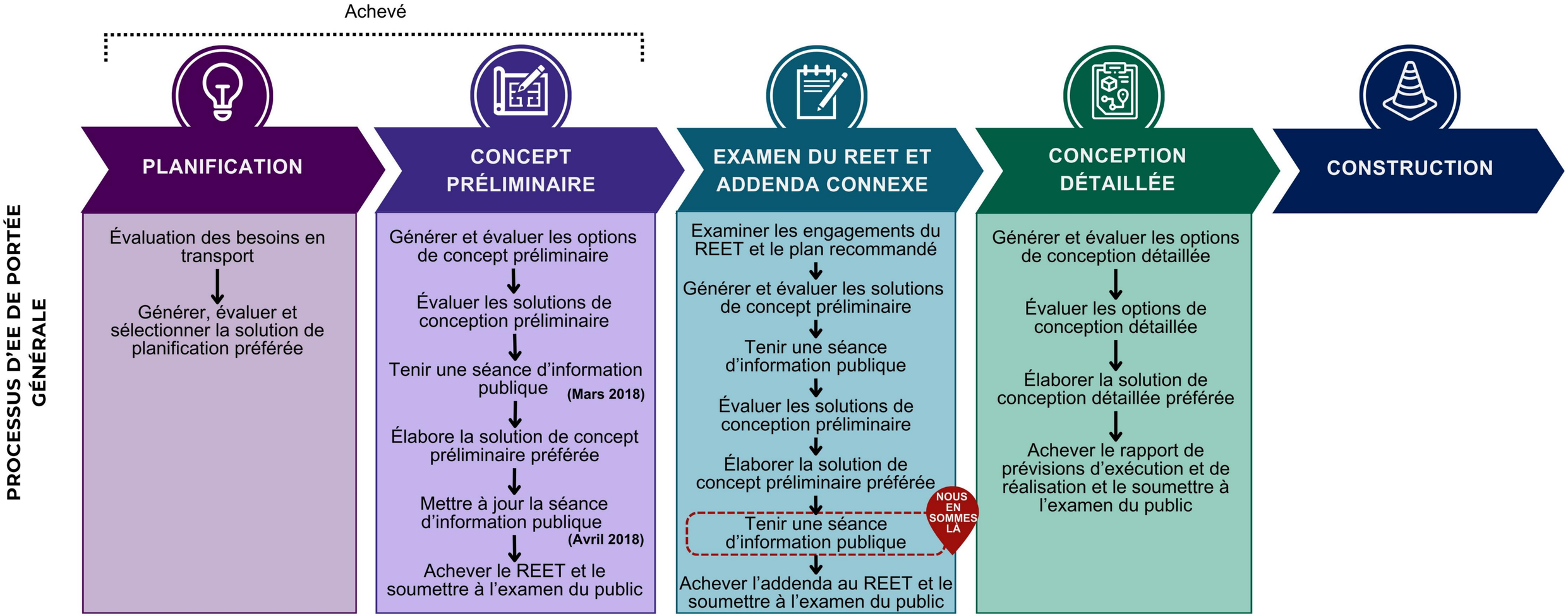
L'examen du REET a été entrepris.

Processus d'évaluation environnementale

Le projet suit le processus pour les entreprises du groupe B, conformément à l'évaluation environnementale de portée générale pour les routes provinciales, modifiée en 2000 (l'EE de portée générale).

En novembre 2020, l'EE de portée générale du projet a été achevée. Un rapport d'étude environnementale sur les transports (REET) a été diffusé aux fins d'examen public, étayant une méthode alternative préférée dans le cadre du projet.

Toute modification importante apportée au projet après l'achèvement du REET doit faire l'objet d'un examen et d'un addenda. Une fois achevé, l'addenda au REET sera publié sur le site Web du projet (www.cr17bridges.com).



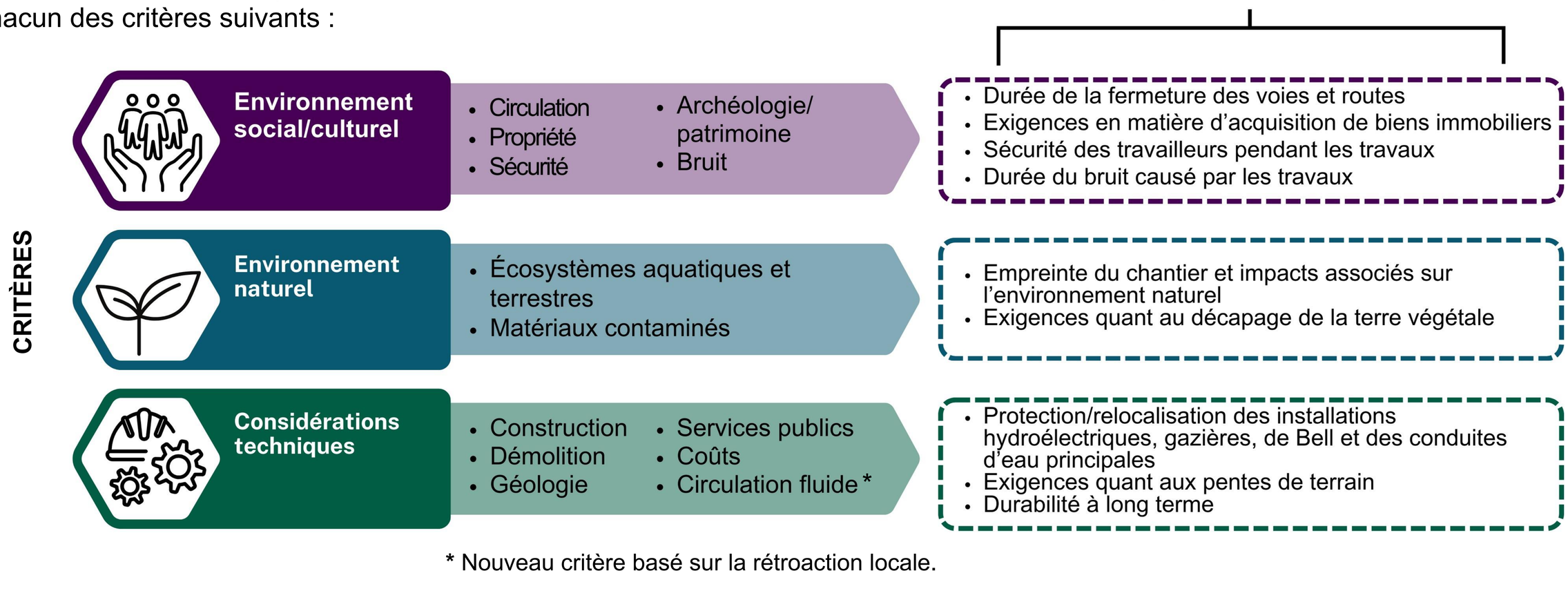
Caractéristiques du plan recommandé dans le REET 2020 — En cours d'examen

CARACTÉRISTIQUES DU PLAN RECOMMANDÉ DU REET	DISPOSITION DU PONT	ALIGNEMENTS HORIZONTAUX ET VERTICAUX	SECTION TRANSVERSALE	MODIFICATIONS DE L'ÉCHANGEUR	SERVICES PUBLICS	PROPRIÉTÉ	GESTION DE LA CIRCULATION LORS DES TRAVAUX
RÉSUMÉ DES RECOMMANDATIONS DU REET	• Le nouveau pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées du CN sera un pont à poutres en I en béton à deux travées, de 71 m de long et 13 m de large. • Le nouveau passage inférieur du CC 17 sera un pont à poutres en béton de 36 m de long et de 13 m de large, à une seule travée.	• Le tracé actuel du CC 17 sera maintenu. • Les ponts de remplacement seront surélevés afin d'assurer la hauteur libre minimale au-dessus des voies ferrées et de l'autoroute 34.	• Parapet nord : 0,5 m • Accotement : 2,5 m • Voies de circulation : Deux de 3,5 m • Accotement : 2,5 m • Parapet sud : 0,5 m • Largeur totale : 13 m	• Nouvelle intersection entre le CC 17 et les bretelles d'accès et de sortie de l'autoroute 34. • Bretelle de sortie avec virage à droite canalisé, y compris une voie de virage à droite. • Bretelle d'accès avec arrêt à l'intersection en T, sans voie d'accélération.	• Protection de la conduite de gaz d'Enbridge, des conduits souterrains d'Hydro One et de la conduite d'eau principale pendant les travaux. • Déplacement du conduit souterrain de Bell. • Retrait et remplacement temporaire du haubanage supportant le poteau électrique; rétablissement des conditions existantes après les travaux.	• Un accord standard de reconstruction d'un saut-de-mouton entre le CN et le MTO, conformément à la *Loi sur la sécurité ferroviaire*, est nécessaire pour remplacer le pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées.	• Fermeture du CC 17 pendant 2 à 4 semaines : Déviation de la circulation sur le CC 4 en direction de l'est et de l'ouest par la rue principale de Hawkesbury et en direction du nord et du sud par la rue Tupper. • Fermeture de l'autoroute 34 près du site pendant 2 à 3 fins de semaine : Circulation déviée vers une voie de contournement temporaire à l'est de l'autoroute 34 afin de maintenir les mouvements de circulation N-S le long de celle-ci.
L'ADDENDA AU REET A-T-IL UNE INCIDENCE SUR LE PLAN RECOMMANDÉ?	Options en cours d'examen et d'évaluation.	À confirmer selon l'évaluation des options.	Options en cours d'examen et d'évaluation.	Options en cours d'examen et d'évaluation.	À confirmer selon l'évaluation des options.	À confirmer selon l'évaluation des options.	Options en cours d'examen et d'évaluation.

Critères d'évaluation des options

Les options de configuration et **d'échelonnement des travaux** ont été évaluées afin de sélectionner une nouvelle solution préférée dans le cadre du projet. Dans un souci de cohérence, l'évaluation a été réalisée selon la même méthodologie et les mêmes critères que ceux appliqués dans le REET.

Un processus décisionnel raisonné a été établi pour cerner et déterminer la ou les solutions préférées en se basant sur les avantages, les inconvénients et les compromis associés à chacun des critères suivants :



* Nouveau critère basé sur la rétroaction locale.

Résumé de l'évaluation des options de configuration d'échangeur

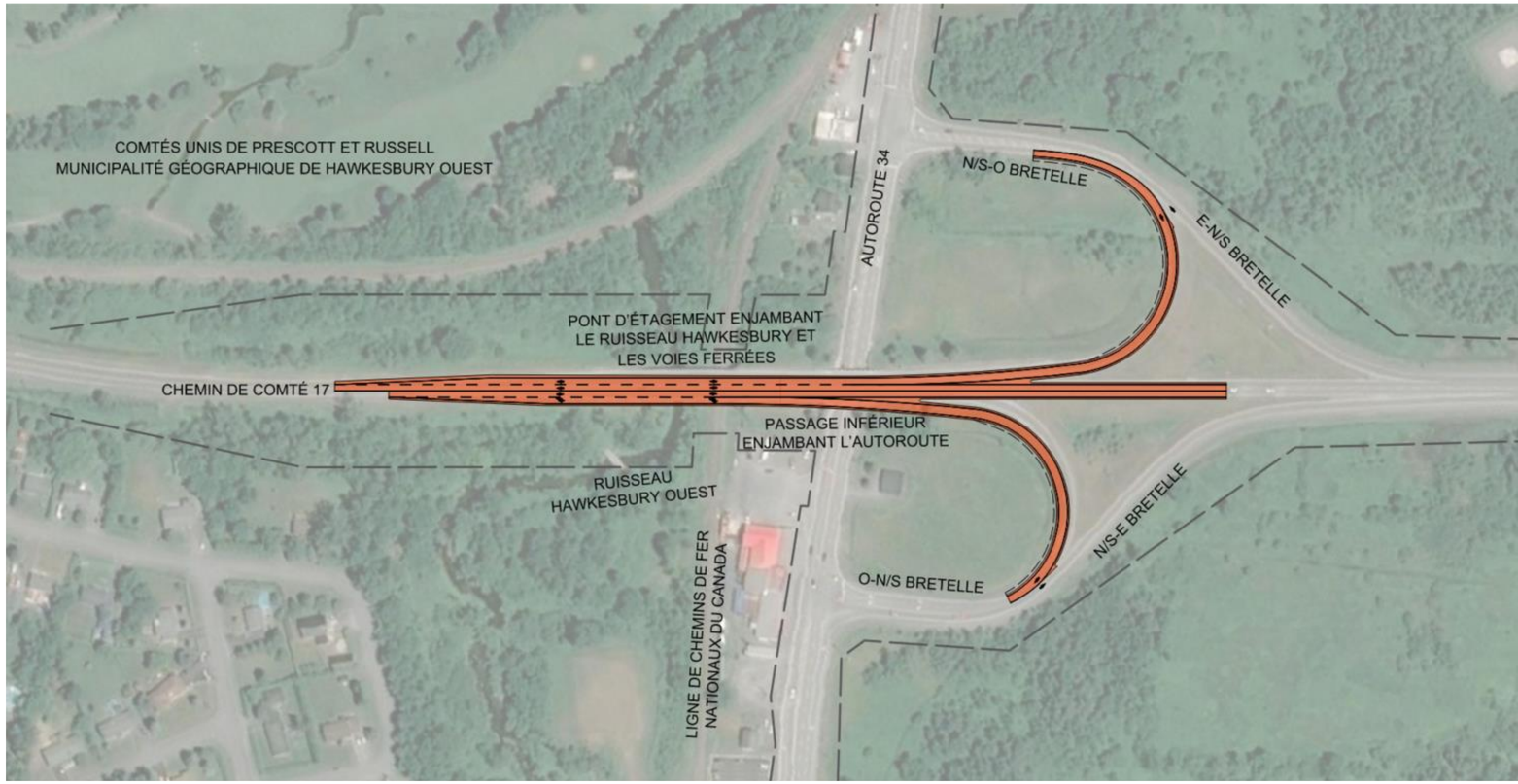
Impacts	Option 3 Accès continu pour les mouvements N/S/O; voie de décélération et virage à droite à faible vitesse pour les mouvements O/N/S	Option 4 Remplacement à l'identique de l'échangeur actuel
Environnement social/culturel	• Niveau de service similaire à celui des conditions actuelles ✓ • Circulation continue non justifiée compte tenu du type d'autoroute et de la circulation observée ✗ • Aucune propriété supplémentaire requise ✓ • Aucun impact sur les éléments archéologiques et le patrimoine bâti ✓ • Aucun impact sur la pollution sonore par rapport aux conditions actuelles = • Option favorable, mais non privilégiée par le public, la ville, le canton/comté ✓	• Niveau de service similaire à celui des conditions actuelles ✓ • Circulation continue non justifiée compte tenu du type d'autoroute et de la circulation observée ✗ • Aucune propriété supplémentaire requise ✓ • Aucun impact sur les éléments archéologiques et le patrimoine bâti ✓ • Aucun impact sur la pollution sonore par rapport aux conditions actuelles = • Option privilégiée par le public, la ville, le canton/comté ✓
Environnement naturel	• Aucune incidence prévue sur l'habitat des espèces en péril ✓	• Aucune incidence prévue sur l'habitat des espèces en péril ✓
Considérations techniques	• Conception non standard en Ontario et non conforme aux attentes des automobilistes ✗ • Répond aux critères de conception ✓ • Possibilité de tourner à gauche à contresens depuis le chemin de comté 17 sur la bretelle O-N/S ✗	• Conception standard en Ontario et conforme aux attentes des automobilistes ✓ • Bretelle O-N/S non conforme aux normes conceptuelles actuelles ✗ • Impossibilité de tourner à gauche à contresens depuis le chemin de comté 17 sur la bretelle O-N/S ✓
Option privilégiée sur le plan technique	**Non privilégiée**	**Privilégiée**

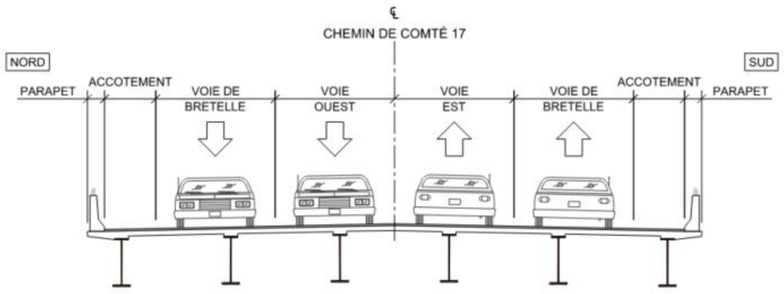
Configuration de bretelle – Option 4

Option choisie et privilégiée sur le plan technique

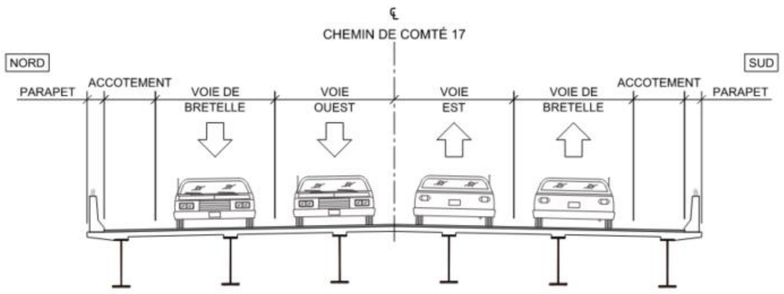
Option retenue pour les raisons suivantes :

- Maintien de la fluidité de la circulation à toutes les bretelles
- Aucun impact sur les propriétés privées
- Configuration d'échangeur standard en Ontario
- Capacité de circulation similaire à celle de la configuration actuelle
- Impossibilité de tourner à gauche depuis le chemin de comté 17
- Échangeur similaire à la configuration actuelle
- Peu d'incidents antérieurs sur la bretelle de sortie O-N/S à faible rayon





Pont d'étagement enjambant le ruisseau Hawkesbury et les voies ferrées



Passage inférieur enjambant l'autoroute 34 sur le chemin de comté 17

Résumé de l'évaluation des options pour les étapes de la construction

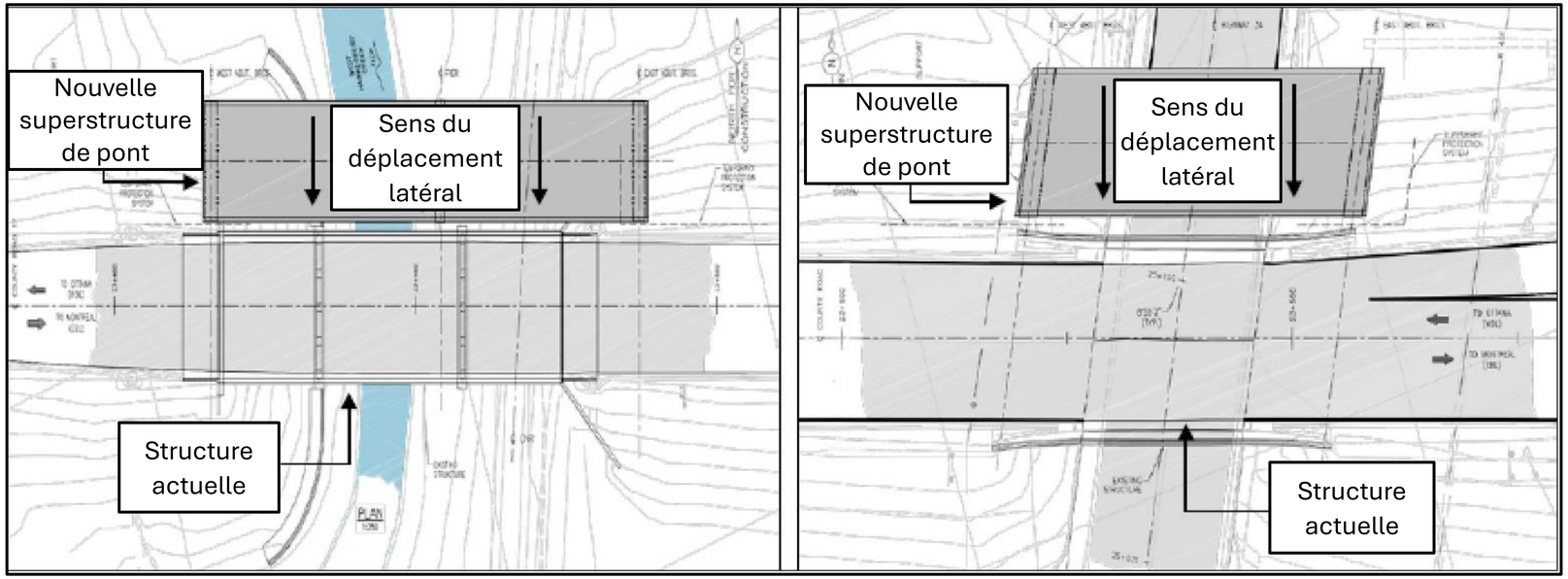
Impacts	Option 1 : Glissement latéral	Option 2a : Aménagement de voies individuelles par étapes	Option 2b : Aménagement de deux voies par étapes
Environnement social/culturel	• Nécessite la fermeture complète du CC 17 de 3 à 5 semaines ✗ • Nécessite au moins 3 fermetures de nuit de l'autoroute 34 près des ponts ✗ • Aucun retard prévu sur le CC 17 ✓ • Accroissement de la sécurité de la circulation et des travailleurs en raison de la construction en différé ✓ • Durée de construction la plus courte, entraînant le moins d'impacts sonores temporaires ✓	• Nécessite 2 fermetures de nuit ou réductions de voies sur le CC 17 et une fermeture de 2 semaines ✓ • Au moins 4 fermetures de nuit de l'autoroute 34 ✗ • Retards prévus de 3 à 4 minutes sur le CC 17 pendant la phase à voie unique ✗ • Exposition accrue aux risques de sécurité en raison des travaux à proximité de la circulation sur le CC 17 ✗ • Durée des travaux plus longue que pour l'option 1 ✗	• Nécessite 2 fermetures de nuit ou réductions de voies sur le CC 17 et une fermeture de 2 semaines ✓ • Nécessite au moins 4 fermetures de nuit de l'autoroute 34 ✗ • Aucun retard prévu sur le CC 17 ✓ • Exposition accrue aux risques de sécurité en raison des travaux à proximité de la circulation sur le CC 17 ✗ • Durée des travaux plus longue que pour l'option 1 ✗
Environnement naturel	• Impacts potentiels sur le frêne noir, le noyer cendré et les chauves-souris ✗	• Impacts potentiels sur le frêne noir, le noyer cendré et les chauves-souris ✗	• Impacts potentiels sur le frêne noir, le noyer cendré et les chauves-souris ✗
Considérations techniques	• Maintien de la configuration existante pendant la fermeture hivernale ✓ • Moins d'entrepreneurs expérimentés en glissement latéral et risques accrus en matière de constructibilité ✗ • Aucun soutien temporaire de la structure existante nécessaire pendant la construction ✓	• Accès au CC 17 par une intersection temporaire et réduction de la largeur de la chaussée pendant la fermeture hivernale ✗ • Industrie de la construction comptant plus d'expérience en matière de construction conventionnelle ✓ • Soutien temporaire nécessaire au ruisseau Hawkesbury et aux voies ferrées ✗	• Accès au CC 17 par une intersection temporaire et réduction de la largeur de la chaussée pendant la fermeture hivernale ✗ • Industrie de la construction comptant plus d'expérience en matière de construction conventionnelle ✓ • Aucun soutien temporaire de la structure existante nécessaire pendant la construction ✓
Option privilégiée sur le plan technique	**Privilégiée**	**Non privilégiée**	**Non privilégiée**

Option 1 pour les étapes de construction

Option choisie et privilégiée sur le plan technique

Option retenue pour les raisons suivantes :

- Maintien des voies d’accélération et de décélération pendant la fermeture hivernale
- Maintien de voies de 3,5 m et d’accotements complets pendant la fermeture hivernale
- Durée de construction plus courte
- Maintien de deux voies de circulation sur le chemin de comté 17, sauf pendant les fermetures complètes
- Aucun soutien temporaire nécessaire pour la structure existante



<u>Fermeture du chemin de comté 17</u>
La démolition accélérée des structures actuelles et le glissement latéral des nouvelles structures nécessiteront la fermeture complète du chemin de comté 17 pendant 3 à 5 semaines.

<u>Fermeture de l’autoroute 34</u>
L’autoroute 34 devra être fermée à trois reprises pendant la nuit pour ériger les nouvelles poutres, démolir la structure existante et mettre en place la nouvelle structure par glissement.

Évaluation sommaire des options de déviation

Impacts	Option 1 Déviation de la rue Tupper et de la rue principale	Option 2 Déviation de l'autoroute 34 et de la rue McGill
Environnement social/culturel	• Durée de déplacement prévue de 8 minutes en dehors de la voie de circulation ✗	• Durée de déplacement prévue de 7 minutes en dehors de la voie de circulation ✓
Environnement naturel	• Aucune incidence prévue sur l'habitat des espèces en péril ✓	• Aucune incidence prévue sur l'habitat des espèces en péril ✓
Considérations techniques	• La rue principale Est est touchée par l'itinéraire de déviation ✗ • Une partie du stationnement doit être supprimée sur la rue principale Est pour accueillir les camions ✗ • Nécessite des signaux temporaires à l'intersection de la rue Tupper et de la rue principale, ainsi que des modifications à quatre intersections existantes (s'applique uniquement à l'option de glissement latéral) ✗	• Rue principale (Est) non affectée par l'itinéraire de déviation ✓ • Aucun impact sur le stationnement dans la rue principale (Est) ✓ • Aucune amélioration de la voirie nécessaire au-delà des plans municipaux actuels ✓
Option privilégiée sur le plan technique	**Non privilégiée**	**Privilégiée**

Note :

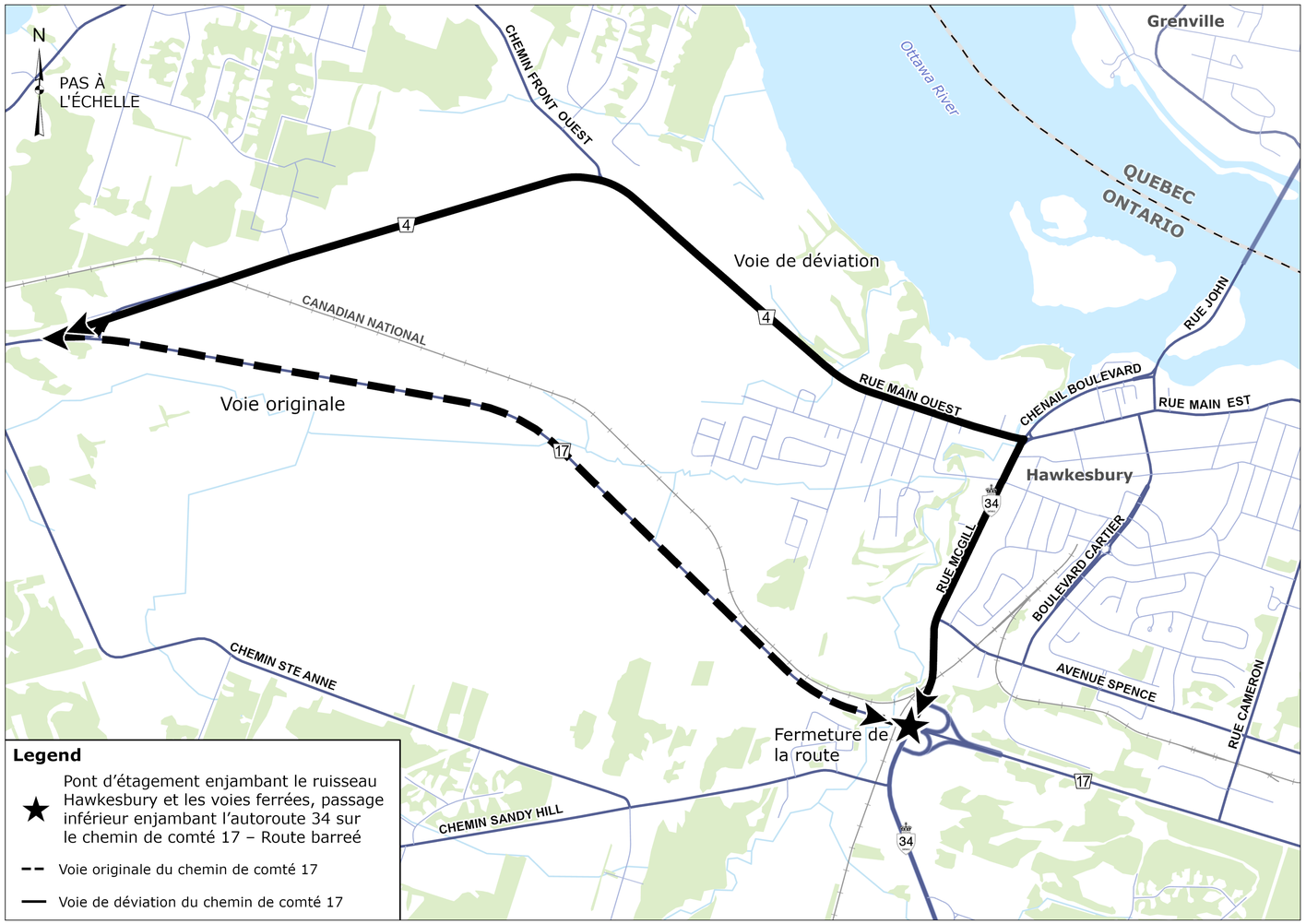
Déviation sur le chemin de comté 17 de 3 à 5 semaines pour les travaux de glissement latéral

Option 2 de l'itinéraire de déviation du chemin de comté 17

Option privilégiée sur le plan technique

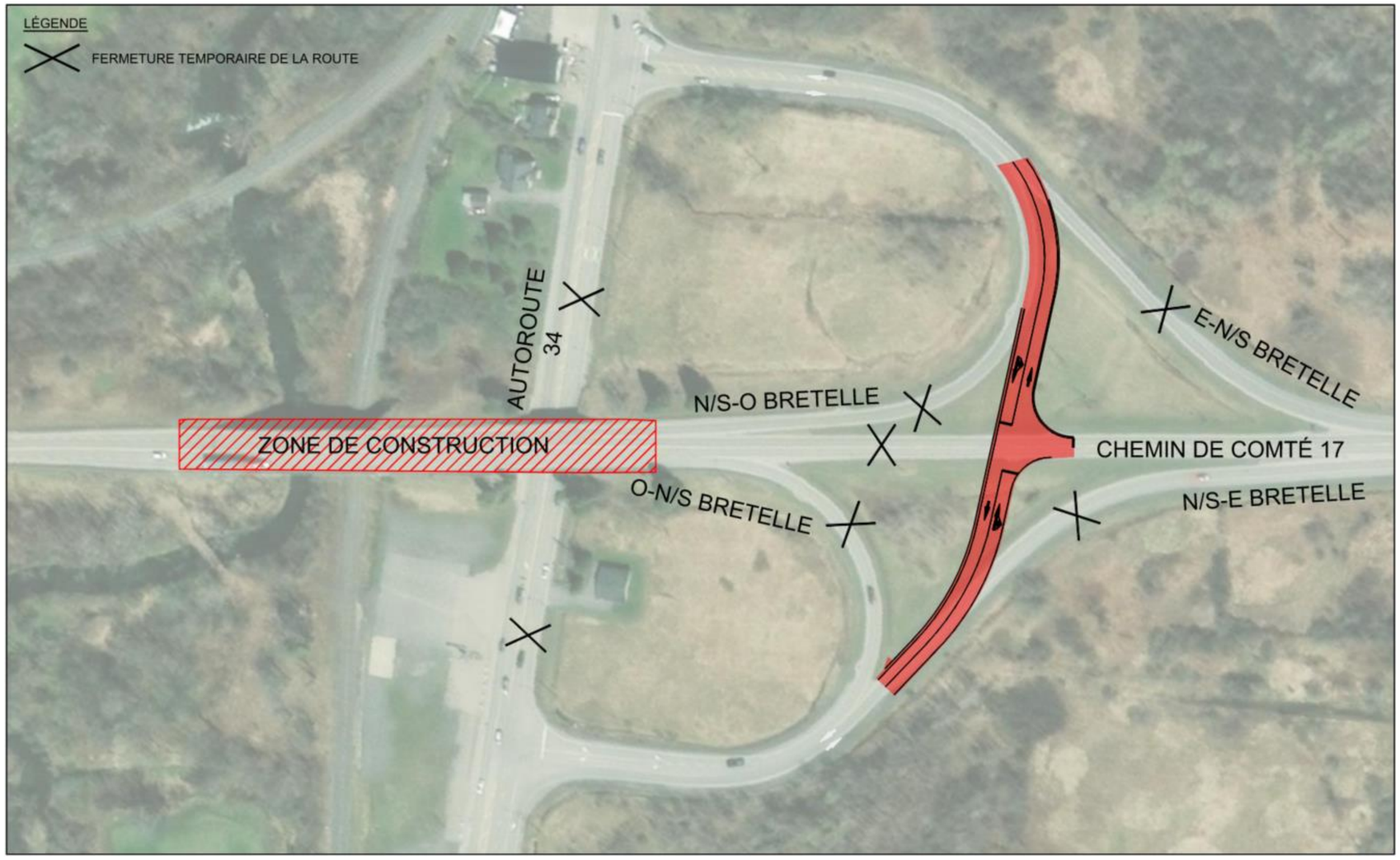
Option retenue pour les raisons suivantes :

- Option présentant le plus court temps de trajet anticipé hors route
- Aucun impact sur la rue principale (Est)
- Aucun impact sur le stationnement dans la rue principale (Est)
- Aucune amélioration de la voirie nécessaire au-delà des plans municipaux actuels



La circulation sur le chemin de comté 17 sera déviée pendant 3 à 5 semaines le long de la rue principale en direction nord-sud le long de la rue McGill.

Voie de déviation de l’autoroute 34



La circulation de l’autoroute 34 sera déviée par un contournement temporaire nord-sud par l’échangeur. Cette déviation est requise pour trois nuits environ pendant lesquelles l’autoroute 34 est fermée.

Impacts environnementaux et mesures d'atténuation

Environnement ou élément	Impacts possibles	Changement par rapport au plan recommandé par le REET	Atténuation au moyen de mesures standard?
Végétation et faune	• Perte ou perturbation temporaire de la faune et de l'habitat faunique, y compris les oiseaux migrateurs et les espèces en péril	• Léger changement dans la zone de végétation perturbée • Présence potentielle du frêne noir dans la zone d'étude figurant désormais sur la liste des espèces menacées	☑
Poisson et habitat aquatique	• Possibilité de mortalité, de piégeage ou d'entraînement (poisson) • Contamination du cours d'eau • Perte ou perturbation de l'habitat aquatique	• Aucun changement	☑
Archéologie	• Possibilité de rencontrer des ressources archéologiques non documentées au cours des travaux	• Aucun changement	☑
Bruit	• Perturbation temporaire des résidents/entreprises des environs pendant les travaux	• Aucun changement	☑
Circulation	• Perturbation temporaire de la circulation en raison des fermetures de voies et de routes	• Fermeture complète du CC 17 de 3 à 5 semaines • Au moins 3 fermetures de nuit de l'autoroute 34	☑

Prochaines étapes

Nous vous invitons à nous faire part de vos commentaires sur les renseignements fournis.

Au terme de cette SIP, l'équipe de projet :

1. Examinera tous les commentaires reçus des parties prenantes et du public
2. Confirmera le plan recommandé selon les commentaires reçus
3. Préparera l'addenda au REET
4. Publiera l'addenda au REET sur le site Web du projet (www.cr17bridges.com) pour une période d'examen public de 30 jours

Personnes-ressources du projet :

Brad Craig, ing.
Ingénieur-conseil de projet
Dillon Consulting Limited
130, avenue Dufferin, bureau 1210
London (Ontario) N6A 5R2
Tél. : 519 438-1288, poste 1318
Courriel : BCraig@dillon.ca

Joanna Zhang, ing.
Ingénieur de projet principal
Ministère des Transports de l'Ontario
1355, boulevard John Counter, CP 4000
Kingston (Ontario) K7L 5A3
Tél. : 613 449-7916
Courriel : Joanna.Zhang2@ontario.ca

Appendix D

Public Comments and Responses

Date Received	Agency	Method of Contact	Comment	Response Date	Response
16-May-24	Various	Verbally during PIC #1	• Questions about need for advanced green turning movement for south to west movements from Highway 34 to County Road 17. • The cement plant proposed west of the site has/will significantly increase truck volume. • The Tupper Street intersection with County Road 17 used to cause several collisions prior to signalization. • Traffic through Hawkesbury during the PIC seemed to be heavier than typical due to the upcoming long weekend. • Everyday there is significant traffic at 4:00 pm from Vankleek Hill to Hawkesbury. • Main Street East at Cameron/Champlain Street is a pinch point along one of the detours under it's current condition due to on street parking and narrow ROW, especially for trucks. • The connecting link funding will be used to upgrade signals along McGill Street. • We need to check contract documents for requirements for vibration monitoring of the high pressure concrete pipe watermain that runs N/S immediately east of the structures. • Recommendation to check the County/Municipality Council Meeting Minutes for details of the previous project presentation. • Festivals within Hawkesbury are the last weekend of June, the Labour Day long weekend, and sometime in August. • The detour ramp surfing needs to be revised as it is not necessary to close County Road 17 under all stages. • The horizontal curve south of the structures on Highway 34 causes some sight distance issues. • Significant industrial and commercial development is planned for around Tupper Street.	N/A	N/A
31-May	Public	Project Website	It was nice talking to you at the public meeting on May 16th, the session was very informative and one can appreciate that a lot of work as been done to bring this project where its at today. I also want to extend my personal appreciation to the Ministry is ruling out any plans to use part of my property to build this project. I'm not sure if this is the platform to provide my comments or vote the for the preferred option but I couldn't find any other place on this website to do so. As mentioned on May 16th, as a daily user of this ramp to get home and to work each day, I have to agreed and support Option 1 (being rebuilding the bridge with same current configuration) despite this being a more costly option. The bridge will be built with a lifespan of 50-75 years so this extra cost is minimal. Cost of enlarging the structure in the future must be considered and building it wider as option 1 is requiring will help with future widening. I support the two municipalities and the Counties in their wishes of keeping Option 1. I also read that going with Option 3 would reduce the speed on the bridge to 70km because of stop-go configuration, the speed reduction is not something I would favor at this location. I've been driving over this bridge for 35 years and I have not heard of any accidents so we should not change or fix what's not broken. My 2 cents for what its worth. Thanks for your kind consideration.	N/A	N/A

Date Received	Agency	Method of Contact	Comment	Response Date	Response
31-May-24	Ministry of Citizenship and Multiculturalism - Citizenship, Inclusion and Heritage Division	Email	Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of PIC#1 for the above-referenced project. Please find MCM's initial letter on this project attached. Do not hesitate to contact us if you have any questions or require further information.	N/A	N/A
17-Oct-24	Public	PIC No. 2 Comment Sheet	The first design that was brought up where both on & off ramps would come to a stop then traffic could proceed. The overpasses over Highway 34 on Hwy 17 would be brought down to 1 lane east & 1 lane west. The design of the road was good so why change something that isn't broken. It has worked very well for approx. 70 years, so if it not broken why fix it. The MTO guy and the fellow with him said that the design is going to stay the same, and the west bound ramp lane was going to made a little longer, which would be very good for truckers with heavy loads to give them a chance to pick up a bit more speed to move over in the real traffic lane. "The first design was going to be a death trap for truckers heading west bound."	N/A	N/A
17-Oct-24	Public	PIC No. 2 Comment Sheet	I think the new alternative is good, the 3 closures of Highway 34 will only impact minimally & a "flow" to traffic will be maintained. Local residents can help to alleviate traffic when the road (Hwy 34) will be closed & plan around said closures.	N/A	N/A
17-Oct-24	Various	Verbally during PIC #2	• Generally, in favour of the preferred interchange configuration. • Inquiries about timing of project implementation.	N/A	N/A

Date Received	Agency	Method of Contact	Comment	Response Date	Response
17-Nov-24	Various	Verbally during PIC #2	• Recommendation for an advanced green phase for left-turning vehicles at the north ramp terminal entering the N-W Ramp. • Questions regarding signal warrant at the south ramp terminal under existing conditions. • What are the signal requirements at CR 24 and CR 4 during the closure of CR 17?	29-Nov	Thank you for your inquiries to the Ministry of Transportation (MTO) regarding your request for traffic control signals at Highway 34 and County Road 17 eastbound ramp terminal as well as your request for an advanced left-turn phase for southbound motorists at Highway 34 and the County Road 17 westbound ramp terminal. The ministry has requirements that must be met before the installation of traffic control signals can be considered. These include the overall volume of traffic passing through a stop-controlled intersection, delays to the side road traffic and collision experience. The extent to which these requirements are met determines if the installation of traffic control signals are warranted. This approach is used by many North American road jurisdictions and found to be an effective method for determining the need for traffic control signals at an intersection and ensures that funding is applied where it is most needed on a provincial basis. Unwarranted traffic control signals can often increase the number of collisions at an intersection. A review of the Highway 34 and County Road 17 eastbound ramp terminal intersection collision history as well as a recent intersection traffic volume count indicates that traffic control signals are not warranted at this time. Staff have also reviewed the need for an advanced left-turn phase for southbound drivers at Highway 34 and County Road 17 westbound intersection and have determined that an advanced left-turn phase is not justified at this time. However, during the replacement of the County Road 17 bridge, while traffic is being detoured along Highway 34/McGill Street and Main Street West/County Road 4, a left-turn phase may be justified; if that's the case, a left-turn phase for southbound traffic will be installed and left in place after the construction work has been completed. Thank you again for taking the time to share your concerns.

Ministry of Citizenship and Multiculturalism

Heritage Planning Unit
Heritage Branch
Citizenship, Inclusion and Heritage Division
5th Flr, 400 University Ave
Tel.: 416-305-0757

Ministère des Affaires civiques et du Multiculturalisme

Unité de la planification relative au patrimoine
Direction du patrimoine
Division des affaires civiques, de l'inclusion et du patrimoine
Tél.: 416-305-0757

Ontario

May 31, 2024 EMAIL ONLY

Brad Craig
Consultant Project Manager
Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
BCraig@dillion.ca

MCM File	**:**	**0006824**
Your File	**:**	**GWP 4203-15-00**
Proponent	**:**	**Ministry of Transportation**
Subject	**:**	**Class Environmental Assessment for Provincial Transportation Facilities and Municipal Expressways – Group B - Notice of Public Information Centre No. 1**
Project	**:**	**Hawkesbury Bridge Replacements TESR Review and Addendum**
Location	**:**	**Town of Hawkesbury and Township of Champlain, United Counties of Prescott and Russell**

Dear Brad Craig:

Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of Public Information Centre No. 1 for the above referenced project.

MCM's interest in this environmental assessment (EA) process relates to its mandate of conserving cultural heritage, which includes:

- archaeological resources, including land and marine;
- built heritage resources, including bridges and monuments; and
- cultural heritage landscapes.

Project Summary
The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Review and Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. County Road 17 forms the boundary between the Town of Hawkesbury and Champlain Township. Both bridges have reached the end of their useful service life and require replacement.

In November 2020, a Class Environmental Assessment Study was completed for the Hawkesbury Bridge Replacements Project. A TESR was posted for public review documenting a Preferred Design for the Project, including anticipated environmental impacts, road closures, and proposed mitigation measures.

Between 2021 and 2023, additional interchange configurations (and associated bridge design and construction staging alternatives) for the Project were identified. As a result, it has been determined that a TESR Review and Addendum is required to reassess and confirm the Preferred Design for the Project.

We note that the Notice of Study Commencement indicates that TESR Review and Addendum will following the approved process for Group "B" undertakings in accordance with MTO's *Class Environmental Assessment for Provincial Transportation Facilities* (1999, as amended in 2000). Please note that this Class EA was recently amended in February 2024 as the *Class Environmental Assessment for Provincial Transportation Facilities and Municipal Expressways*.

Identifying Cultural Heritage Resources
While some cultural heritage resources may have already been formally identified, others may be identified through assessment.

Provincial Heritage Properties
Please note that the *Standards and Guidelines for Conservation of Provincial Heritage Properties* (S&G), prepared pursuant to Section 25.2 of the *Ontario Heritage Act* (*OHA*), came into effect on July 1, 2010. All Ontario government ministries and public bodies that are prescribed under Ontario Regulation 157/10 must comply with the S&Gs. They apply to property that is owned or controlled by the Crown in right of Ontario or by a prescribed public body.

Potential Study Area
For the purposes of investigating the potential impacts of the project on cultural heritage resources, the study area is defined as all lands to be impacted/disturbed by proposed bridge replacement construction within the existing and proposed highway right-of-way, plus any access roads, detours, staging and storage areas, and areas of other works and activities associated with the construction, operation and maintenance of the highway.

Archaeological Resources
Our records indicate that a Stage 1 Archaeological Assessment (AA) was completed for the study area in August 2017 under Project Information Form (PIF) #P340-0055-2017. The Stage 1 report recommended Stage 2 AA for part of the study area determined to have archaeological potential. Stage 2 AA was completed in April 2018 under PIF# P340-0083-2018. The Stage 2 report determined that no further archaeological assessments are recommended for the study area. Both the Stage 1 and Stage 2 reports have been entered into the Ontario Public Register of Archaeological Repots.

If any part of the current study area, including any temporary roads, detours or work areas associated with the project, has not been previously screened or assessed, the Ministry's *Criteria for Evaluating Archaeological Potential* and *Criteria for Evaluating Marine Archaeological Potential* (if shoreline or in-water works are proposed) can assist you to determine if an archaeological assessment is needed. If it is determined that the project area exhibits archaeological potential, then an archaeological assessment (AA) will be undertaken during the planning phase. If further AA(s) are recommended, then MCM recommends that further stages of AA be completed as early as possible during the detailed design phase and prior to any ground disturbing activities.

Built Heritage Resources and Cultural Heritage Landscapes
The *Hawkesbury Bridge Replacement Final Transportation Environmental Study Report* (TESR, prepared by Dillion Consulting, dated November 4, 2020) indicates that a Cultural Heritage Evaluation Report (CHER) was completed for the County Road 17 Underpass and surrounding area. The CHER determined that the site does not have cultural heritage value or interest, and therefore no further technical cultural heritage studies were recommended. The TESR also noted that the Hawkesbury Creek/CNR Overhead was previously evaluated and found not to have cultural heritage value. If you could please provide MCM with the CHER for the County Road 17 Underpass for our records, it would be appreciated.

EA Documentation
All technical cultural heritage studies (e.g., archaeological assessment reports, cultural heritage evaluation report, heritage impact assessment) and their recommendations are to be addressed and incorporated into EA projects. Please advise MCM whether any further technical cultural heritage studies will be completed for this EA project and provide them to MCM before issuing a notice of completion. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed screening checklists and supporting documentation in the EA report or file (or share this documentation with MCM during the notice of completion).

Please note that the responsibility for administration of the *Ontario Heritage Act* and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) to the Ministry of Citizenship and Multiculturalism (MCM). Individual staff roles and contact information remain unchanged. Please continue to send any notices, report and/or documentation to both Karla Barboza and myself.

- Karla Barboza, Team Lead - Heritage | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-660-1027 | karla.barboza@ontario.ca
- Erika Leclerc, Heritage Planner | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-305-0757 | Erika.Leclerc@ontario.ca

Thank you for consulting MCM on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, please do not hesitate to contact thme.

Best regards,

Liam Smythe

On behalf of:

Erika Leclerc
Heritage Planner
Heritage Planning Unit
Erika.Leclerc@ontario.ca

Copied to: Dan Brandao, MTO
Anna Fawcett, Jacobs
Karla Barboza, MCM

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. The Ministry of Citizenship and Multiculturalism (MCM) makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MCM be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33* requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with *Ontario Regulation 30/11* the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Comment Sheet

Hawkesbury Bridge Replacements
TESR Review and Addendum (GWP 4203-15-00)
Public Information Centre #2
October 17, 2024

Name: [redacted] Phone Number: [redacted]

Email Address: — Postal Code: [redacted]

Please provide your comments on any of the material presented at this Public Information Centre:

The first design that was brought up where both on & off ramps would come to a stop then traffic could ~~procede~~ proceed. The overpasses over Hwy 34 On Hwy 17 would be brought down to 1 lane east & 1 lane west. The design of the road was good so why change something that isn't broken. It has worked very well for approx. 70 years, so if it is not broken why fix it. The MTO guy and the fellow with him said that the design is going to stay the same, and the west bound ramp lane was going to made a little longer, which would be very good for truckers with heavy loads to give them a chance to pick up a bit more speed to move over in the real traffic lane. "The first design was going to be a death trap for truckers heading west bound."

Please complete your comment sheet and place it in the comments box or send the completed sheet to:

Brad Craig, P.Eng.
Consultant Project Manger
Dillon Consulting Limited
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

Would you like to be added to the Project Contact list to receive future notices? Please check one:

YES ☑ NO ☐

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

Comment Sheet

Hawkesbury Bridge Replacements
TESR Review and Addendum (GWP 4203-15-00)
Public Information Centre #2
October 17, 2024

Name: [redacted] Phone Number: [redacted]

Email Address: [redacted] Postal Code: [redacted]

Please provide your comments on any of the material presented at this Public Information Centre:

I think the new alternative is great. The 3 closures of Hwy 34 will only impact minimally & a "flow" will be maintained to traffic.

Local residents can help to alleviate traffic when the road (Hwy 34) will be closed & plan around road closures.

Thank You!

Please complete your comment sheet and place it in the comments box or send the completed sheet to:

Brad Craig, P.Eng.
Consultant Project Manger
Dillon Consulting Limited
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer
Ministry of Transportation Ontario
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca

Would you like to be added to the Project Contact list to receive future notices? Please check one:

YES ☐ NO ☐

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

From: Zhang, Joanna (MTO) <Joanna.Zhang2@ontario.ca>
Sent: Friday, November 29, 2024 1:40 PM
To: ypaquette@hawkesbury.ca; ralefebvre@hawkesbury.ca; jcharlebois@hawkesbury.ca
Cc: Garlough, Chris (MTO) <Chris.Garlough@Ontario.ca>
Subject: GWP 4203-15-00 Hawkesbury Bridge PIC 2 traffic inquiry

Hi Yves, Robert, and Jeanne,

Thank you for your inquiries to the Ministry of Transportation (MTO) regarding your request for traffic control signals at Highway 34 and County Road 17 eastbound ramp terminal as well as your request for an advanced left-turn phase for southbound motorists at Highway 34 and the County Road 17 westbound ramp terminal

The ministry has requirements that must be met before the installation of traffic control signals can be considered. These include the overall volume of traffic passing through a stop-controlled intersection, delays to the side road traffic and collision experience. The extent to which these requirements are met determines if the installation of traffic control signals are warranted. This approach is used by many North American road jurisdictions and found to be an effective method for determining the need for traffic control signals at an intersection and ensures that funding is applied where it is most needed on a provincial basis. Unwarranted traffic control signals can often increase the number of collisions at an intersection. A review of the Highway 34 and County Road 17 eastbound ramp terminal intersection collision history as well as a recent intersection traffic volume count indicates that traffic control signals are not warranted at this time.

Staff have also reviewed the need for an advanced left-turn phase for southbound drivers at Highway 34 and County Road 17 westbound intersection and have determined that an advanced left-turn phase is not justified at this time. However, during the replacement of the County Road 17 bridge, while traffic is being detoured along Highway 34/McGill Street and Main Street West/County Road 4, a left-turn phase may be justified; if that's the case, a left-turn phase for southbound traffic will be installed and left in place after the construction work has been completed.

Thank you again for taking the time to share your concerns.

Thanks,

Joanna Zhang, P. Eng

Upcoming time off Dec 17, 2024 - Dec 26, 2024

Senior Project Engineer

Transportation Infrastructure Management Division

Ministry of Transportation – Project Delivery

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Kingston, ON K7K 0E5

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Appendix E

MTAC Meeting Notes

Meeting Minutes

Subject: Hawkesbury Bridge Replacements – MTAC Meeting 1

Date: March 26, 2024, 11:00 a.m.

Location: Teleconference/Video Conference

Our File: 17-5180

Distribution: Attendees, Frank Vanderlaan (MTO), Marc Hemmerick (OPP), Matthew McFadden (Jacobs), Hans Kim (Jacobs)

Attendees

Dan Brandao	Ministry of Transportation (MTO)
Chris Garlough	MTO
Nathan Ellis	MTO
Brad Craig	Dillon Consulting Limited (Dillon)
Jordan Broad	Dillon
Doug Green	Dillon
Julien Boisvenue	Hawkesbury Fire Department
Jérémie Bouchard	United Counties of Prescott and Russell
Christian Boudreau	United Counties of Prescott and Russell Fire Department
Jonathan Wilson	Town of Hawkesbury
Sebastien Levesque	Champlain Township
Jocelyn Lessard	OPP

Notes

Item **Discussion** **Action by**

1. **Meeting Agenda**

The general objective of the meeting was to provide pre-consultation with the Municipal Technical Advisory Committee (MTAC) and Emergency Medical Services (EMS) stakeholders. The agenda items included the following:

- Introductions
- Provide a project description with background information
- Review alternatives
- Discuss construction staging and traffic impacts
- Discuss municipal Impacts and Next Steps

The presentation material provided at the meeting is enclosed with these minutes.

2. **Project Overview**

- The project involves the replacement of the two bridges located on County Road 17 in the Town of Hawkesbury. The two bridges include the CNR/Hawkesbury Creek Overhead Bridge, a three-span bridge carrying two lanes of traffic and two speed change lanes (for the interchange ramps) over Hawkesbury Creek and the CN rail line and the Highway 34 Underpass, located approximately 50 m to the east of the CN rail line

Item	Discussion	Action by
	which also carries two lanes of traffic and two speed change lanes over Highway 34. The project also includes improvements to the interchange ramps. In November 2020, A Class EA Study was completed and a Transportation Environmental Study Report (TESR) was prepared. • A construction contract was prepared in 2020 with tender planned for Fall 2021 and construction start in 2022. The Town of Hawkesbury did not provide endorsement of the detour plan through the Town but also did not support the recommended plan due to the lack of free flow movements of the N/S-W ramp movement. • Between 2021 and 2023, additional feasibility studies and municipal consultation was completed that identified additional interchange configuration alternatives and associated construction staging alternatives. Based on this work, it has been determined that a TESR Review and EA Addendum is required to reassess and confirm the Preferred Alternative Method for the Project.	
3.	**Alternatives** • Alternative 1 (previously developed design) has been screened out from further evaluation because the N/S-W ramp does not provide free flow access. • Alternative 2 (previously developed design with free flow N/S-W ramp) has been screened out of further evaluation because it impacts private property identified for development. • Alternatives 3 & 4 both provide free flow conditions and will be carried forward for further evaluation. • The speed limit reduction from 90 km/h to 70 km/h for Alternatives 1 and 2 is not required for Alternatives 3 and 4. The posted speed can remain at 90 km/h which was supported by the United Counties of Prescott and Russell. • The United Counties of Prescott and Russell were supportive of both new alternatives (Alternatives 3 & 4) but identified that 'wrong way' westbound lefts on to the W-N/S ramp in Alternative 3 may be a concern as they have observed this occurring at similar layouts in the County.	
4.	**Construction Staging and Detours** • Construction staging alternative approaches and traffic detours were highlighted and discussed. • If County Road 17 was closed and non-accelerated construction techniques were used construction would take approximately 1.5 to 2 years. • The United Counties of Prescott and Russell preferred the lateral slide staging over the single-lane option while the Town of Hawkesbury generally preferred the stagged construction. • The Town of Hawkesbury noted that three summer festivals (early July, early-mid August, early September) are planned which will close	Town of Hawkesbury

Item	Discussion	Action by
	Main Street east of McGill Street. The Town will provide follow-up and confirm dates. • The Town identified concerns with detouring trucks using Main Street East/County Road 4. Portions of the roadway are narrow and will require the removal of on-street parking to accommodate opposing truck traffic. • The Town has recently upgraded the intersection of McGill Street and Main Street with increased left turn storage capacity for vehicles turning westbound from McGill Street. There are plans to upgrade the traffic controllers at that intersection to allow additional phases. Previously these were restrictions in using Highway 34 as the detour route. • It is the Town's preference to utilize Highway 34/McGill Street for the detour rather than Tupper Street. Dillon to further review this alternative approach. • During a recent culvert replacement on County Road 17, the intersection of Tupper Street and Main Street operated poorly. A temporary traffic signal is planned at this intersection during the 2-4 week closure for the lateral slide construction staging alternative.	Dillon

5.	**Upcoming Construction**
	• The Town of Hawkesbury have the following projects planned:
	  ○ Reconstruction of Main Street from Nelson Street to Highway 34
	  ○ Bridge replacement on Main Street west of McGill Street
	• The United Counties of Prescott and Russell have the following projects planned:
	  ○ Cold in place reconstruction of County Road 17 east of Highway 34 in 2024
	  ○ Potential site plan for development in Champlain
	  ○ Potential future intersection on County Road 17 between Highway 34 and Cameron Street.
	• These construction projects are planned to occur before the replacement of the structures.
	Future Consultation
	• A Public Information Centre (PIC) is planned for mid May in Hawkesbury
	• City and County staff will brief council prior to the PIC.	

Errors and/or Omissions

These minutes were prepared by Garrett Witjes who should be notified of any errors and/or omissions.

Meeting Minutes

Subject: Hawkesbury Bridge Replacements – MTAC Meeting 2

Date: August 15, 2024, 2:00 p.m.

Location: Teleconference/Video Conference

Our File: 17-5180

Distribution: Attendees, Chris Garlough (MTO), Marc Hemmerick (OPP), Christian Boudreau (UCPR), Louis Rathier (UCPR), Samuel Cardarelli (Hawkesbury), Normand Beauchamp (Hawkesbury), Matthew McFadden (Jacobs), Hans Kim (Jacobs)

Attendees

Dan Brandao	Ministry of Transportation (MTO)
Joanna Zhang	MTO
Frank Vanderlaan	MTO
Nathan Ellis	MTO
Kaurie Casista	MTO
Brad Craig	Dillon Consulting Limited (Dillon)
Jordan Broad	Dillon
Doug Green	Dillon
Garrett Witjes	Dillon
Julien Boisvenue	Hawkesbury Fire Department
Jérémie Bouchard	United Counties of Prescott and Russell (UCPR)
Jonathan Wilson	Town of Hawkesbury
Sebastien Levesque	Champlain Township

Notes

Item **Discussion** **Action by**

1. **Meeting Agenda**

The general objective of the meeting was to provide pre-consultation with the Municipal Technical Advisory Committee (MTAC) and Emergency Medical Services (EMS) stakeholders. The agenda items included the following:

- Introductions
- Provide a project description with background information
- Review Technically Preferred Alternative
- Discuss construction staging and traffic impacts
- Discuss municipal impacts and next steps

The presentation material provided at the meeting is enclosed with these minutes.

2. **Project Overview**

- The project involves the replacement of the two bridges located on County Road 17 in the Town of Hawkesbury. The two bridges include the CNR/Hawkesbury Creek Overhead Bridge, a three-span bridge carrying two lanes of traffic and two speed change lanes (for the interchange

Item	Discussion	Action by

ramps) over Hawkesbury Creek and the CN rail line and the Highway 34 Underpass, located approximately 50 m to the east of the CN rail line which also carries two lanes of traffic and two speed change lanes over Highway 34. The project also includes improvements to the interchange ramps.

In November 2020, A Class EA Study was completed and a Transportation Environmental Study Report (TESR) was prepared.

- A construction contract was prepared in 2020 with tender planned for Fall 2021 and construction start in 2022. The Town of Hawkesbury did not provide endorsement of the detour plan through the Town but also did not support the recommended plan due to the lack of free flow movements of the N/S-W ramp movement.
- Between 2021 and 2023, additional feasibility studies and municipal consultation was completed that identified additional interchange configuration alternatives and associated construction staging alternatives. Based on this work, it has been determined that a TESR Review and EA Addendum is required to reassess and confirm the Preferred Alternative Method for the Project.

3. **Alternatives**

- Alternatives 3 & 4, which provide free flow conditions, were carried forward for further evaluation which is summarized in the appended presentation material.
- Based on the evaluation, Alternative 4 was selected as the Technically Preferred Alternative.
- Alternative 4 was the MTAC's preferred alternative at the first meeting and it was confirmed that is still the case during this meeting.

4. **Construction Staging and Detours**

- Construction staging alternative approaches and traffic detours were highlighted and discussed. A summary of the evaluation for both construction staging alternatives and detour alternatives is provided in the appended presentation material.
- County Road 17 will require a detour of 3-5 weeks for the lateral slide staging option and a 2-week detour for the stage construction options.
- A temporary ramp and lane configuration will be in place during the winter of the staged construction option. This removes the acceleration and deceleration lanes on the structure. Similarly, due to the revised lane configuration, additional consideration for winter maintenance must be taken.
- Based on the evaluation, the Lateral Slide alternative and the Highway 34/McGill Street Detour Route are the preferred alternatives.
- The timeline for the lateral slide is currently flexible and restrictions and adjustments to the construction start could be put in place to mitigate County Road 17 closure impacts.
- Consideration for additional emergency service vehicles and detours were discussed to mitigate closure impacts. UCPR noted that this is — UCPR

Item	Discussion	Action by
	commonly done and will follow up with emergency services to discuss the impacts and let the project team know the results of the discussion. ***Post meeting note: UCPR provided email correspondence with emergency services from August 16, 2024, which notes that the proposed alternative is acceptable for their operations.***	
	• Lateral Slide and the Highway 34/McGill Street Detour Route are the MTAC's preferred alternatives as the operational impacts are limited to a shorter duration.	
	• CN railway traffic does not need to be stopped for the lateral slide alternative and they have previously worked on a design for this alternative. CN will be contacted again following selection of the alternatives.	
	• The MTAC can provide any additional input, including timing of closures to the project team. Additional comments should be provided by Friday August 23, 2024.	
	Next Steps	
	• Dillon will review all comments received by the MTAC.	Dillon
	• Dillon will confirm the Recommended Plan based on comments received.	Dillon
	• A second Public Information Centre (PIC) is planned for this fall in Hawkesbury.	

Errors and/or Omissions

These minutes were prepared by Garrett Witjes who should be notified of any errors and/or omissions.

Appendix F

Terrestrial and Aquatic Existing Conditions and Impact Assessment Update Memo

Memo

To: Joanna Zhang, Ministry of Transportation Ontario (MTO)

From: Ashley Smith, Dillon Consulting Limited (Dillon)

cc: Avid Banihashemi, Dillon
Tanya Cross, Dillon

Date: December 9, 2024

Subject: County Road 17 Bridge Replacements (GWP 4023-15-00) Natural Heritage Existing Conditions Update Memo 2024

Our File: 17-5180

1.0 Introduction

The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting Limited and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) Addendum for the replacement of the CNR/Hawkesbury Creek Overhead and the County Road (CR) 17 Underpass at Highway 34 in the United Counties of Prescott and Russell. Both bridges have reached the end of their useful service life and require replacement. This Natural Heritage Update Memo has been prepared as an Addendum to the previously completed TESR and Natural Heritage Existing Conditions Update Memo (Dillon, 2020), and to advise on the recommended plan for detail design phase of the Project. This memo has been prepared through a desktop evaluation of existing reports and field investigation results and did not include confirmatory on-site assessments or evaluations in 2024.

This memo has been prepared through review of reports previously completed to support the December 2020 Executive Review Submission to advise on any updates on vegetation communities, natural heritage features and Species at Risk (SAR) in the Project Study Area (the Study Area) since 2020, of which include:

- Butternut Health Assessment (Dillon, 2017);
- Terrestrial Ecosystem Impact Assessment Report (TEIAR) (Dillon, 2019);
- Fish and Fish Habitat Impact Assessment Report (FFHIAR) (Dillon, 2019);
- Natural Heritage Existing Conditions Update Memo (Dillon, 2020a), Appendix A; and
- Addendum Memo to Fish and Fish Habitat Impact Assessment Report (Dillon, 2020b), Appendix B.

1.1 Project Description

The Project includes the replacement of two structures on County Road 17 in the Town of Hawkesbury, Hawkesbury Creek/CNR Overhead (Site No. 27-50) and Highway 34 Underpass at County Road 17 (Site No. 27-51), and ramp re-alignment. The Project involved two phases: Phase 1 (Preliminary Design) and Phase 2 (Detailed Design).

Phase 1 was completed in 2017 and involved an environmental assessment; Phase 2 began in January 2018. Following an Executive Review Presentation in 2020, the Ministry advised the project team that an update to the design, which would accommodate a free flow North/Southwest (N/S-W) ramp and modify the Northeast/South (N-E S) ramp was required. In August 2022, the Ministry advised the Project team that a TESR Addendum was required to re-evaluate the interchange configuration options and construction staging alternatives. Dillon was retained in 2023 to complete a Feasibility Study, purposed for identifying and evaluating alternatives not part of the initial TESR. The TESR review and Addendum process was initiated in early 2024 to select and document new preferred alternatives.

In 2020, a revised Project Study Area of investigation was proposed to encompass lands east of the original Project location following Executive Review, which resulted in a larger Study Area. This change resulted in the publication of the Natural Heritage Existing Conditions Update Memo (Dillon, 2020a), and Addendum Memo to Fish and Fish Habitat Impact Assessment Report (Dillon, 2020b) which are referenced throughout this update memo, and are provided in Appendix A and Appendix B, respectively.

This update memo has been prepared using the 2020 revised Natural Heritage Study Area (the Study Area) included in the Dillon (2020a) and (2020b) memos, which includes an approximately 60 m radius surrounding the proposed road alignment where field investigations were completed, as shown in Figure 1.

2.0 Background Review

In addition to the previously published documents pertaining to the project, a desktop review of online available sources was conducted in June 2024 to identify changes to provincial or municipal policies, SAR regulation and status changes, or other potential updates that may have occurred since the Dillon (2020a) and (2020b) update memos.

Additional background resources referenced to support this update memo include:

- Ministry of Natural Resource and Forestry (MNRF) Natural Heritage Information Centre (NHIC) online database (accessed May 26, 2024);
- MNRF's Land Information Ontario (LIO) Database (MNRF; accessed May 26, 2024);
- Fisheries and Oceans Canada (DFO) Aquatic SAR Online Mapping Tool (DFO; accessed May 26, 2024); and
- Various wildlife atlases, including:
  - Ontario Breeding Bird Atlas (Bird Studies Canada, 2024);
  - Ontario Butterfly Atlas (MNRF, 2024);
  - Ontario Herpetofaunal Atlas (ORAA, 2024);
  - Ontario Odonata Atlas (MNRF, 2024); and
  - Atlas of the Mammals of Ontario (MNRF, 2024).

Since the publication of the Dillon (2020) memos, changes to SAR statuses under the provincial *Endangered Species Act, 2007* (ESA) have occurred. Further, the United Counties of Prescott and Russell Official Plan (UCOPROP, 2022) was updated in January 2022. Applicable updates to the change in species' provincial status, as well as municipal planning documents are detailed in the subsections below as they relate to the Study Area since the issuance of the Dillon (2020) memos.

2.1 Natural Heritage Features

2.1.1 Woodlands

The Schedule B (Natural Heritage Features) layer from the United Counties of Prescott and Russell (UCPROP, 2022) online mapping tool was reviewed to identify the presence of mapped significant woodlands within the Study Area[1]; Schedule B of the UCPROP can be found in Appendix C. The province delegates the responsibility of defining the evaluation criteria for significant woodlands to the local planning authority; however, the UPCROP does not identify evaluation criteria for significant woodlands.

[1] Boundaries of the significant woodlands identified in Schedule 2 of the UCOPROP (2022) have not been ground verified by the Municipality, as stated in Section 5.5.6 of the UCPROP (2022).

Evaluation criteria utilized for the evaluation of woodlands by Dillon in 2020 was based on the guidelines of the Natural Heritage Reference Manual (NHRM) (i.e., woodland size, ecological functions, uncommon characteristics, and economic and social functions).

Dillon ground-verified the presence and boundaries of woodlands in the Study Area in 2020. These woodlands were assessed based on the definition of significant woodlands in the NHRM to determine whether they meet the criteria of significance.

2.1.2 Wetlands

The Schedule A2 (Wetland Policy Area) layer from the UCPROP (2022) online mapping tool was reviewed to identify the presence of mapped significant wetlands within the Study Area; Schedule A2 of the UCPROP can be found in Appendix C.

According to the UCPROP, development within 120 metres (m) of a designated wetland may be permitted if it can be demonstrated that no negative impacts on the wetland's natural features or ecological and hydrological functions may occur through the completion of an environmental assessment (i.e., an Environmental Impact Study).

2.2 Significant Wildlife Habitat

Criteria for the determination of significant wildlife habitat (SWH) by the MNRF remains current since the completion of the Dillon (2020a) memo. As part of preparing this memo, Dillon completed a review of current aerial imagery to assess potential changes in vegetation cover, and ultimately, changes in previously identified and delineated vegetation communities that were identified using Ecological Land Classification (ELC). Changes in ELC communities for the Project Study Area may result in changes to the SWH identified in 2020.

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle, and areas that are important to migratory and non-migratory species (MNR, 2000). To assist planning authorities, the MNRF developed the Significant Wildlife Habitat Technical Guide (MNR, 2000) that provides information on the identification, description, and prioritization of SWH in Ontario. To account for the ecological diversity across the province, MNRF developed the SWH Ecoregional Criteria Schedules to support the SWH Technical Guide. These schedules are specific to each geographic area of each ecoregion. The Study Area is located in Ecoregion 6E (Lake Simcoe – Rideau), Ecodistrict 6E-12 (Kemptville) (Henson and Brodribb, 2005); under the Criteria Schedule for Ecoregion 6E (MNRF, 2015), SWH has been divided into four broad categories consisting of:

1. Seasonal concentration areas: sites that support large numbers of a species to gather together at one time of the year, or where several species congregate;
2. Rare vegetation communities or specialized habitats for wildlife: rare vegetation communities are those that are considered rare (S-Ranks of S1 to S3; Extremely Rare to Rare-Uncommon, respectively) in the province. S-Ranks are rarity rankings applied to species at the provincial level.

Generally, S-Ranks of S1 to S3, as defined by the NHIC, would qualify. Specialized habitats are microhabitats that are critical to some wildlife species;

3. Animal movement corridors: elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another and are typically identified by MNRF and/or planning authorities; and
4. Habitats of species of conservation concern (SCC) excluding the habitats of endangered and threatened species: The SWH Technical Guide (MNR, 2000) defines SCC as globally, nationally, provincially, regionally, or locally rare (S-Rank of S1, S2 or S3) but does not include SAR (species listed as Threatened or Endangered). SCC include the following:
   - 4.1. Species that are assigned a conservation rank (S-Rank) of S1-S3 by the NHIC;
   - 4.2. Species that are listed as Special Concern on the Species at Risk in Ontario (SARO) list;
   - 4.3. Species that are listed as Special Concern, Threatened, or Endangered on Schedule 1 of SARA; and/or
   - 4.4. Species that are classified as Special Concern, Threatened, or Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) but have not yet been added to Schedule 1 of SARA.

2.2.1 Species of Conservation Concern

An updated desktop review of available information sources was completed in May 2024 to identify SCC with the potential to occur in and/or adjacent to the Study Area. Based on a desktop review of the current available habitat within and adjacent to the Study Area, potential species to occur in the vicinity of the Study Area are shown in Table 1, below.

Table 1: Potential SCC with Records in and/or Adjacent to the Study Area

Scientific Name	Common Name	SARA Status[1]	ESA Status[2]	S-Rank[3]
Chelydra serpentina	Snapping Turtle	SC	SC	S3
Thamnophis sauritus	Eastern Ribbonsnake	SC	SC	S4
Coccothraustes vespertinus	Evening Grosbeak	SC	SC	S4
Haliaeetus leucocephalus	Bald Eagle	---	SC	S2N, S4B
Hylocichla mustelina	Wood Thrush	THR	SC	S4B
Contopus virens	Eastern Wood-pewee	SC	SC	S4B
Hirundo rustica	Barn Swallow	THR	SC	S4B
Ichthyomyzon unicuspis pop. *1*	Silver Lamprey (Great Lakes – Upper St. Lawrence populations)	SC	SC	S3
Moxostoma carinatum	River Redhorse	SC	SC	S2

1. Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; where SC = Special Concern, THR = Threatened, and --- = no status.
2. SAR in Ontario List under the provincial ESA, 2007; where SC = Special Concern, THR = Threatened, and --- = no status.
3. Ontario Srank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperiled; S1 = critically imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario.

2.3 Species at Risk

An updated desktop review of available information sources was completed in May 2024 to identify SAR listed as Endangered or Threatened under the *ESA, 2007* with historical occurrences in the general vicinity of the Project Study Area. Based on the habitat requirements specific to each of the potential SAR identified during the desktop review, SAR and/or their habitat were identified to potentially occur within the Study Area. These SAR are outlined in Table 2.

Table 2: Potential SAR with Records in and/or Adjacent to the Study Area

Scientific Name	Common Name	SARA Status[1]	ESA Status[2]	S-Rank[3]
Dolichonyx oryzivorus	Bobolink	THR	THR	S4B
Sturnella magna	Eastern Meadowlark	THR	THR	S4B
Emydoidea blandingii	Blanding's Turtle	THR	THR	S3
Myotis leibii	Eastern Small-footed Myotis	---	END	S2S3
Myotis lucifugus	Little Brown Myotis	END	END	S4
Myotis septentrionalis	Northern Myotis	END	END	S3
Pipistrellus subflavus	Tri-colored Bat	END	END	S3?
Fraxinus nigra	Black Ash	---	END	S4
Juglans cinerea	Butternut	END	END	S2?

1. Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; where SC = Special Concern, END = Endangered, THR = Threatened, and --- = no status.
2. SAR in Ontario List under the provincial ESA, 2007; where SC = Special Concern, END = Endangered, THR = Threatened, and --- = no status
3. Ontario Srank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperiled; S1 = critically imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario;

Of the species listed above, one species (Black Ash), was not identified in the Dillon (2020) memo. At the time of conducting the 2020 field program, Black Ash was not listed in the Species at Risk in Ontario (SARO) list, under *Ontario Regulation* (*O. Reg) 230/08*. As such, this species was not afforded species and habitat protection under the *ESA*. Black Ash was uplisted to an Endangered species in January 2022, and in January 2024, was afforded species and habitat protection.

One SAR previously included in the Dillon (2020a) memo has been removed from the SARO list since 2022. Barn Swallow (*Hirundo rustica*) has had a change in status under SARO and has been down-listed from a provincial status of Threatened to Special Concern. This species and its habitat are no longer afforded protection under the *ESA*, 2007.

For the purpose of this memo, 'SAR bats' will refer to Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat.

2.4 Surface Water Features and Fish Habitat

Dillon identified three water features which were identified in the 2020 memos within the Project Study Area, Hawkesbury Creek, and a tributary of Hawkesbury Creek (Tributary #1) (Figure 2) which are mapped by the MNRF, and one additional tributary of Hawkesbury Creek (Tributary #2) (Figure 3), which were identified and documented in the Dillon (2020) memos. These features were assessed to support the Dillon (2020b) memo to determine whether the project has potential to result in the harm or death of fish, and/or Harmful Alteration, Disturbance or Destruction (HADD) of fish habitat.

The results of this updated background review were compared to the results documented in the Dillon (2020b) memo to identify changes to the existing conditions of the Study Area, including updated online MNRF watercourse mapping, fish community data, thermal regime, and aquatic SAR.

A review of MNRF LIO ARA data was conducted to confirm no additional watercourse features were added to online mapping.

One provincially listed Special Concern species (Silver Lamprey) not previously identified in the Dillon (2020a) report is currently mapped by the DFO Aquatic SAR Online Mapping Tool as having potential to occur in Hawkesbury Creek, and the tributaries of Hawkesbury Creek within the Study Area. This species is included as an SCC, as discussed above in Section 2.2.1.

3.0 Results

3.1 Natural Heritage Features

Based on review of available online resources and aerial imagery (ESRI World Imagery, released May 2024), no updates or changes were identified for the presence of natural features and/or MNRF mapped wetlands, woodlands, or watercourses in comparison from the results documented in the Dillon (2020) memos.

Designated natural features are shown on Figure 2 of this memo. Significant woodlands and significant wetlands, as outlined in the UCCPROP are discussed below.

3.1.1 Woodlands

According to Schedule B2 of the UCPROP, significant woodlands are present within the Study Area, as shown in Appendix C. Dillon completed a woodland staking in 2020, as detailed in the Dillon (2020a) memo. Changes to the woodland boundaries in the updated UCPROP (2022) were identified.

3.1.2 Wetlands

MNRF unevaluated wetlands were identified during background review within the Project Study Area, as shown on Figure 2. Dillon completed wetland staking in 2020, as detailed in the Dillon (2022a) memo. According to Schedule A2 of the UCPROP, no significant wetlands are located within the Study Area.

3.2 Significant Wildlife Habitat

Based on review of available online resources and aerial imagery (ESRI World Imagery, released May 2024), no changes in the ELC classifications from the Dillon (2020a) memo were anticipated. Based on these ELC classifications for significant wildlife habitat as defined under the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015),* candidate and confirmed SWH with potential to exist in the Project Study Area include:

- Seasonal Concentration Areas of Animals:
  - Candidate Bat Maternity Colonies.
- Rare Vegetation Communities or Specialized Habitat for Wildlife:
  - Candidate Amphibian Breeding Habitat (Wetland);
  - Candidate Amphibian Breeding Habitat (Woodland); and
  - Candidate Turtle Nesting Areas.

- Habitat for Species of Conservation Concern:
  - Candidate Special Concern and Rare Wildlife Species (Snapping Turtle, Eastern Ribbonsnake, Eastern Wood-pewee, Wood Thrush, and Silver Lamprey [Great Lakes – Upper St. Lawrence Populations]); and
  - Confirmed Special Concern and Rare Wildlife Species (Barn Swallow).

Habitat criteria and description of candidate and confirmed SWH in the Project Study Area are further discussed in Table 3.

Table 3: Potential SWH in the Study Area

Significant Wildlife Habitat	Species	Habitat Criteria/Description
Seasonal Concentration Areas		
Bat Maternity Colonies (Candidate)	Big Brown Bat Silver-haired Bat	Supported by mixed and deciduous forests and swamps with large diameter dead or dying trees with cavities. Areas that have the potential to support bat maternity habitat include treed communities in the Study Area and Project footprint (i.e., all FOD, SWM, SWD communities).
Turtle Wintering Areas (Candidate)	Midland Painted Turtle Snapping Turtle	Occur in permanent waterbodies and large wetlands with sufficient dissolved oxygen. Areas that have the potential to support turtle wintering in the Project footprint include drains, watercourses, and Open Aquatic (OAO) areas where the depth of water during the overwintering period is such that it will not freeze. Preliminary criteria have identified all large open wetlands, watercourses, and waterbodies in the Study Area to provide candidate habitat.
Rare Vegetation Communities or Specialized Habitat for Wildlife		
Amphibian Breeding Habitat (Woodland) (Candidate)	All amphibian species	Suitable specialized habitat type includes wetlands, ponds or areas that are likely to support vernal (seasonal) pooling that are within or adjacent to a woodland. Areas in the Study Area that have the potential to support amphibian breeding habitat include all FOD and WOD communities.
Amphibian Breeding Habitat (Wetland) (Candidate)	All amphibian species	Suitable habitat types include swamps, marshes, fens, and bogs which support high species diversity and contain presence of shrubs and logs to support structure for calling, foraging and concealment. Areas may contain permanent water bodies with abundant emergent vegetation.

Significant Wildlife Habitat	Species	Habitat Criteria/Description
Turtle Nesting Areas (Candidate)	Midland Painted Turtle Snapping Turtle (SC)	May be found where exposed mineral soil (sand or gravel) is found adjacent (less than 100 m) or within ELC communities such as shallow marshes (MAS) as documented within the Study Area. Best nesting habitat is close to water and away from roads and sites less prone to loss of eggs by predation. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not considered to be SWH.
Habitats of SCC Excluding the Habitats of Endangered and Threatened Species		
Special Concern and Rare Wildlife Species (Candidate)	All Special Concern and Provincially Rare species (S1-S3, SH). List of these species are tracked by the NHIC. Preliminary list of species based on background review identified five SCC with potential habitat features in the Study Area.	Potentially suitable SWH for SCC species includes the FODM8-1 for Wood Thrush and Eastern-wood Pewee, and Tributaries #1 and #2 of Hawkesbury Creek for Silver Lamprey, as shown on Figure 4.
Special Concern and Rare Wildlife Species (Confirmed)	All Special Concern and Provincially Rare species (S1-S3, SH) identified in the Study Area during field investigations (Barn Swallow).	Barn Swallow were observed nesting under the culvert, as shown on Figure 4.

The findings in the Dillon (2020a) memo are generally consistent with the 2024 findings outlined in this memo. SCC and SWH are further discussed in Section 3.2.1.

Based on updated review of the provincial rankings provided by the NHIC and Dillon ELC results, none of the vegetation communities documented in the Study Area are considered rare in Ontario. ELC classifications are shown on Figure 3, and candidate SWH features are shown on Figure 4.

3.2.1 Species of Conservation Concern

Based on review of the Dillon (2020a) Memo and an updated background review of available online resources, six SCC have potential to occur in the Study Area:

- Barn Swallow;
- Eastern Wood-Pewee;
- Wood Thrush;
- Silver Lamprey;
- Eastern Ribbonsnake; and
- Snapping Turtle.

Of these species, four were previously identified in the TEIAR (2019) including Eastern Wood-Pewee, Wood Thrush, Snapping Turtle, and Eastern Ribbonsnake. One species identified in the TEIAR (2019), Northern Map Turtle (*Graptemys geographica*), has been removed from this updated memo due to lack of suitable habitat in the Study Area, as this species typically inhabits large rivers and lakes, which are not present within the Study Area. One federal and provincially listed Special Concern species identified in the Dillon (2020b) update memo, River Redhorse (*Moxostoma carinatum*), has also been removed from this list due to it no longer being mapped by the DFO Aquatic SAR Mapping Tool or NHIC in the Project Study Area.

Two additional species have been included based on the 2024 updated background review, including Silver Lamprey, and Barn Swallow. Barn Swallow was identified as a SAR in the 2020a memo, however, has since been provincially downlisted to SC on the SARO list.

3.3 Species at Risk

Based on review of the Dillon (2020a) memo and an updated background review of available online resources, the following SAR have potential to occur in the Study Area:

- SAR bats;
- Black Ash; and
- Butternut.

Although Blanding's Turtle, Bobolink and Eastern Meadowlark were identified as having potential to occur in the vicinity of the Project Location during background review (i.e., open-marsh wetlands for Blanding's Turtle; hayfields, grasslands and pastures for Bobolink and Eastern Meadowlark), suitable habitat features for these three species were not identified within the Study Area.

Potential for SAR bats and their habitat were identified in the Dillon (2020a) memo. Habitat for these individuals may occur within the woodland communities identified within the Study Area due to the presence of suitable large trees with cracks and cavities present. Potentially suitable habitat for SAR bats is shown on Figure 5.

The Dillon (2019) report identified Black Ash in the FOD7-1 and SWD/THDM5, FOD8-1, and FOD5 ELC communities. Black Ash was not listed under the ESA at the time of Dillon's field investigations in 2019 and 2020, and as such targeted surveys for Black Ash were not conducted. Tree inventories have not been completed as part of this retainer. The exact locations of Black Ash within each respective ELC community have not been documented. The ELC communities with documented Black Ash presence, and associated habitat in the Study Area are shown on Figure 5.

Butternut individuals were identified in the Dillon (2017) Butternut assessment report, as well as in the Dillon (2020a) memo and were documented on site within the deciduous forest communities (FOD7-1, FOD5-2, FOD3-1, and FODM3-1). During the 2017 Butternut assessment, a qualified Butternut Health Assessor identified and assessed eight Butternuts. One Butternut individual was field verified as a hybrid (and as such, not afforded protection), and of the seven remaining four were either dead or in poor condition and three were assessed as non-retainable specimens (Category 1).

During the 2020 assessment, one additional individual observed in the revised Project Study Area was observed as a sapling in excellent condition. This individual did not undergo a formal Butternut health evaluation, and as such, has the potential to be categorized as a Category 2 (Retainable) or Category 3 (Archivable) tree. Two previously identified Butternuts from the 2019 TEIAR were uprooted and as such were not counted. The known locations of Butternut in the Study Area are shown on Figure 5. Potential for Butternut saplings within the Project Study Area may occur, as regeneration for Butternut has a likelihood since the completion of the 2017 Butternut assessment survey and report.

3.4 Surface Water Features and Fish Habitat

The existing conditions within Hawkesbury Creek and Tributary of Hawkesbury Creek within the Study Area are assumed to be unchanged since the Dillon (2020b) memo based on interpretation of aerial imagery and review of available online sources. Hawkesbury Creek and two tributaries of Hawkesbury Creek (Tributary #1 and #2) are documented as containing fish. While the thermal regime of Hawkesbury Creek is characterized as being warm water, Tributaries #1 and #2 of Hawkesbury Creek is characterized as containing a coldwater thermal regime due to the presence of Watercress (*Nasturtium officinale*).

During the updated 2024 background review, Silver Lamprey (SC) was identified as having potential to occur in Hawkesbury Creek and the tributaries to Hawkesbury Creek through review of the DFO Aquatic SAR Online Mapping Tool (DFO, 2024). Silver Lamprey occur in tributaries and creeks that feed into the Great Lakes and the Ottawa River; this species prefers streams with stable flow regimes and low turbidity waters.

4.0 Potential Impacts and Mitigation Measures

Areas of impact within natural and sensitive features in the Study Area are shown in Figure 6. A list of potential impacts to these features, as well as proposed mitigation measures can be found in Appendix D. A summary of overall potential impacts can be found in the section below.

4.1 Potential Impacts

This section summarizes the potential impacts to wildlife and vegetation that could result if mitigation measures are not implemented. Construction activities will be completed within the MTO ROW.

In general, the works associated with the replacement of the Hawkesbury Creek and CNR overhead and the Highway 34 underpass has the potential to:

- Increase erosion and sedimentation of lands adjacent to the construction area;
- Result in deleterious materials entering adjacent watercourses, including potential habitat for Silver Lamprey;
- Disruption of approximately 23 m^2 of indirect fish habitat within the high-water mark due to the installation of rock protection at the new bridge footing and sections of eroded shoreline adjacent to Hawkesbury Creek;
- Potential indirect affects to potentially non-retainable (Category 2 and Category 3) Butternut trees located outside of the vegetation removal area for trees not assessed by a qualified BHA in 2020;
- Potential direct and indirect affects to potentially non-retainable (Category 2 and Category 3) Black Ash trees, which have not yet been identified and require further assessment;
- Potential removal and disturbance of woodland, meadow and of wetland habitat ;
- Increase vulnerability of areas cleared of vegetation to invasion by non-native species;
- Result in a loss and/or disruption to wildlife and/or wildlife habitat. Potential examples include:
    - Temporary decrease in potential marginal migratory bird nesting habitat in areas cleared of woodland and meadow vegetation within the Study Area;
    - Potential destruction of migratory bird nests, eggs or young in vegetated areas prior to and during construction (e.g., site preparation);
    - Temporary disruption to wildlife movement and wildlife avoidance of habitat areas adjacent to Hawkesbury Creek and its tributaries during replacement due to disturbance associated with construction activity;
    - Harm or temporary harassment of herptiles, which include SCC that could move along riparian habitat or in-water through the Study Area during construction (e.g., Snapping Turtle and Eastern Ribbonsnake);
    - Potential removal or impacts to SAR vegetation, including Butternut and Black Ash; and
    - Harm or temporary harassment of Barn Swallow, Eastern Wood-Pewee, Wood Thrush, and their nests.

Potential impacts to wildlife species that incidentally occur in the Study Area can be minimized or avoided using standard erosion and sediment control measures, wildlife exclusionary fencing, and consideration of timing windows for vegetation removals to avoid sensitive wildlife periods, among others. Overall, impacts to wildlife and natural features are expected to be minimal and temporary in duration if mitigation measures are implemented. As applicable, these measures are recommended for inclusion in the construction contract to mitigate potential impacts to the terrestrial ecosystem.

5.0 Recommended Next Steps

As a result of this desktop review, there have been updates to the SAR and SCC present within the Study Area that may require further on-site investigation.

SCC with potential to occur within the Study Area include:

- Barn Swallow;
- Wood Thrush;
- Eastern Wood-Pewee;
- Snapping Turtle;
- Eastern Ribbonsnake; and
- Silver Lamprey.

Barn Swallow (SC) nests have also been observed within the Study Area. Barn Swallow and their active nests are afforded protection under the Migratory Birds Convention Act (MVCA). Preventative exclusionary netting should be applied if the culvert superstructure removal activities are planned to occur after May 1st. If active Barn Swallow and other MVCA protected bird nest removals can be avoided, permitting under the MVCA is not required.

Potential SWH is assumed to occur within the Study Area, as additional confirmatory studies are not anticipated. Potential SWH mitigation measured discussed in Section 4.1. should be applied.

SAR with potential to occur within the Study Area include:

- SAR Bats;
- Black Ash; and
- Butternut.

Black Ash and Butternut have been previously documented within the Study Area. An updated site reconnaissance and tree inventory is recommended occur within 50 m of the area of impact. If either species is observed, they will require assessment by a qualified Health Assessor to determine whether the individuals will require additional authorizations (permitting) prior to encroachment of their defined habitat and/or removal. Following assessment by a qualified Health Assessor, Black Ash and Butternut removals may be permitted through registration under *O. Reg 242/08*, *section 23.18 Threats to health and safety, not imminent*, and an ESA permit may not be required.

Targeted surveys for SAR bats were not completed, however suitable habitat may potentially occur within the woodland communities in the Study Area and as such, potential presence is assumed. If mitigation measures are followed, impacts to SAR bats can be avoided. Mitigation measures for SAR bats are further discussed in Appendix D.

Minor works below the high-water mark is proposed; however, HADD to fish and fish habitat are not anticipated, and as such, a formal review through DFO is not required.

6.0 Summary

The MTO retained Dillon to complete an updated desktop review and Natural Heritage Update Memo to confirm the conditions documented in several previously completed reports and update memos between 2017 and 2020. As a result of this desktop review, there have been updates to the SAR, SCC, and natural features present within the Study Area that may require further on-site investigation.

Based on the results of the memo, the following additional field studies are recommended:

- Tree inventory within the area of impact, specifically targeting SAR (Black Ash and Butternut).

If applicable, a Butternut Health Assessment and/or Black Ash Health Assessment, respectively, may be required. Based on the potential impacts of the project, the following mitigation measures shall be followed:

- Erosion and sediment control (ESC) measures to be placed surrounding all watercourses, significant woodlands, and wetlands, which may also act as wildlife exclusion fencing, which will be erected before the turtle active season (April 1-October 30);
- A 25 m buffer will be applied to Category 2 and Category 3 Butternut trees;
- A 30 m buffer will be applied to Category 2 and Category 3 Black Ash trees;
- No in-water works or work below the high-water mark to occur between October 16-March 15 of any given year to protect hibernating turtles;
- No in-water works or work below the high-water mark to occur in Hawkesbury Creek or its tributaries between March 15-July 15 of any given year for considerations of spawning fish species;
- Tree and vegetation removals to occur outside of the active window for breeding birds (April 1 – August 31) and active window for bats (April 1-September 30):
  - If tree removals are required within this window, a bird nest sweep and/or bat exit survey, respectively, will be conducted.
- Exclusionary netting for Barn Swallows should be erected under culverts and bridges proposed for removal before April 1 to avoid nest establishment if bridge superstructures cannot be removed prior to this date.

If removals are required and netting is not erected, a nest search can be conducted. Permitting requirements:

- Impacts to SAR protected under the ESA may be eligible for registration under O. Reg 242/08 S.23.18:
  - A SAR Mitigation Plan will be prepared to support the submission.
- An updated Project Notification Form will be drafted and reviewed by MTO, as a DFO Request for Review (RFR) is not anticipated to be required for the Project. However, this will be confirmed at the detailed design phase of the Project. Quantification of impacts to habitat features can be made following the completion of the additional field studies, and finalization of area of impact drawings to further support future permitting.

References

Birds Canada. 2024. Ontario Breeding Birds Atlas Online Portal

Dillon Consulting Limited. 2017. Butternut Health Assessment Report

Dillon Consulting Limited. 2019. Fish and Fish Habitat Impact Assessment Memo

Dillon Consulting Limited. 2019. Terrestrial Environment Impact Assessment Memo

Dillon Consulting Limited. 2020. Fish and Fish Habitat Impact Assessment Report Addendum Memo

Dillon Consulting Limited. 2020. Natural Heritage Existing Conditions Update Memo

Environment Canada. Species at Risk Public Registry. Retrieved form: http://www.sararegistry.gc.ca

Fisheries and Oceans Canada. 2024. DFO Aquatic Online SAR Mapping Tool

Ministry of Natural Resources and Forestry. The Species at Risk in Ontario (SARO) List. Retrieved from: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_080230_e.htm.

Ministry of Natural Resources and Forestry. 2024. Natural Heritage Information Centre Online Database

Ministry of Natural Resources and Forestry. 2024. Land Information Ontario Aquatic Resource Area database

Ministry of Natural Resources and Forestry. 2005. Natural Heritage Reference Manual.

NatureServe. 2007. Mammals of the Western Hemisphere.

Ontario Herptile Atlas. 2024. Ontario Reptile and Amphibian Atlas Online Mapping Tool

Ontario Nature. 2017. Dragonfly and Damselfly (Odonata) Guide

Toronto Entomologists Association. 2022. Ontario Butterfly Atlas Online. Retrieved from: https://www.ontarioinsects.org/atlas/

United Counties of Prescott and Russell. 2022. Official Plan.

Figures



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

STUDY AREA

FIGURE 1

- Project Study Area
- Road
- Watercourse
- Railway



0 10 20 40 m

SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: ZJB MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180

STATUS: FINAL

DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 1 Study Area.mxd



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

NATURAL HERITAGE FEATURES

FIGURE 2

- Project Study Area
- Road
- Railway
- Watercourse
- MNRF Approximate Wetlands (LIO, 2024)
- MNRF approximate Woodlands (LIO, 2024)

0 10 20 40 m SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: ZJB MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180

STATUS: FINAL

DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 2 Natural Heritage Features.mxd

Ontario

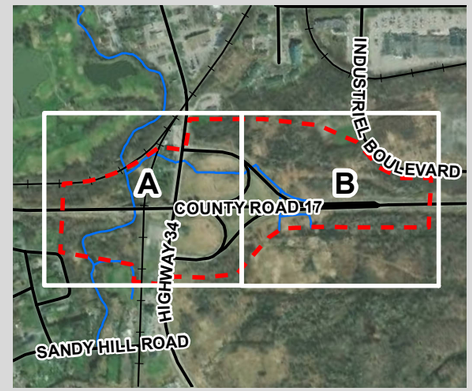
MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

NATURAL ENVIRONMENT SITE INVESTIGATION RESULTS

FIGURE 3A

- Project Study Area
- Ecological Land Classification
- Direction of Flow
- Road
- Railway
- Watercourse



0 10 20 40 SCALE 1:1,500

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: PH MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180

STATUS: FINAL

DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 3 Natural Environment Site Investigation Results.mxd

Ontario

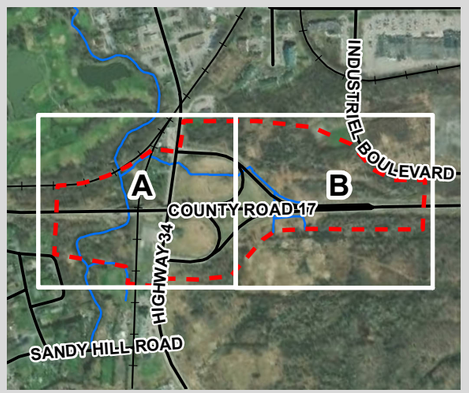
MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

NATURAL ENVIRONMENT SITE INVESTIGATION RESULTS

FIGURE 3B





0 10 20 40 SCALE 1:1,500

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: PH MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180

STATUS: FINAL

DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 3 Natural Environment Site Investigation Results.mxd



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

SIGNIFICANT WILDLIFE HABITAT

FIGURE 4

- Project Study Area
- Direction of Flow
- Road
- Railway
- Watercourse
- Dillon Delineated approximate Wetlands
- Dillon Delineated approximate Woodlands
- Dillon Delineated approximate Open Water

Candidate Significant Wildlife Habitat

Seasonal Concentration Areas of Animals

- Bat Maternity Colonies

Rare Vegetation or Specialized Habitat for Wildlife

- Amphibian Breeding Habitat (Wetland)
- Amphibian Breeding Habitat (Woodland)
- Turtle Nesting Areas

Habitat for Species of Conservation Concern

- Special Concern and Rare Wildlife Species (Eastern Wood-Pewee, Wood Thrush, Silver Lamprey)

Confirmed Significant Wildlife Habitat

- Barn Swallow Nest

0 10 20 40 m SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: ZJB MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

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PROJECT: 17-5180
STATUS: FINAL
DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 4 Significant Wildlife Habitat.mxd



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

SPECIES AT RISK

FIGURE 5

- Project Study Area
- Direction of Flow
- Road
- Railway
- Watercourse
- Dillon Delineated approximate Wetlands
- Dillon Delineated approximate Woodlands
- Dillon Delineated approximate Open Water

Potential SAR Habitat

- Confirmed Butternut Locations
- Butternut 25m Buffer
- Potential SAR Bat Habitat
- Confirmed Black Ash Habitat
- Black Ash Habitat 25m Buffer

0 10 20 40 m SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: ZJB MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180

STATUS: FINAL

DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 5 Species at Risk.mxd

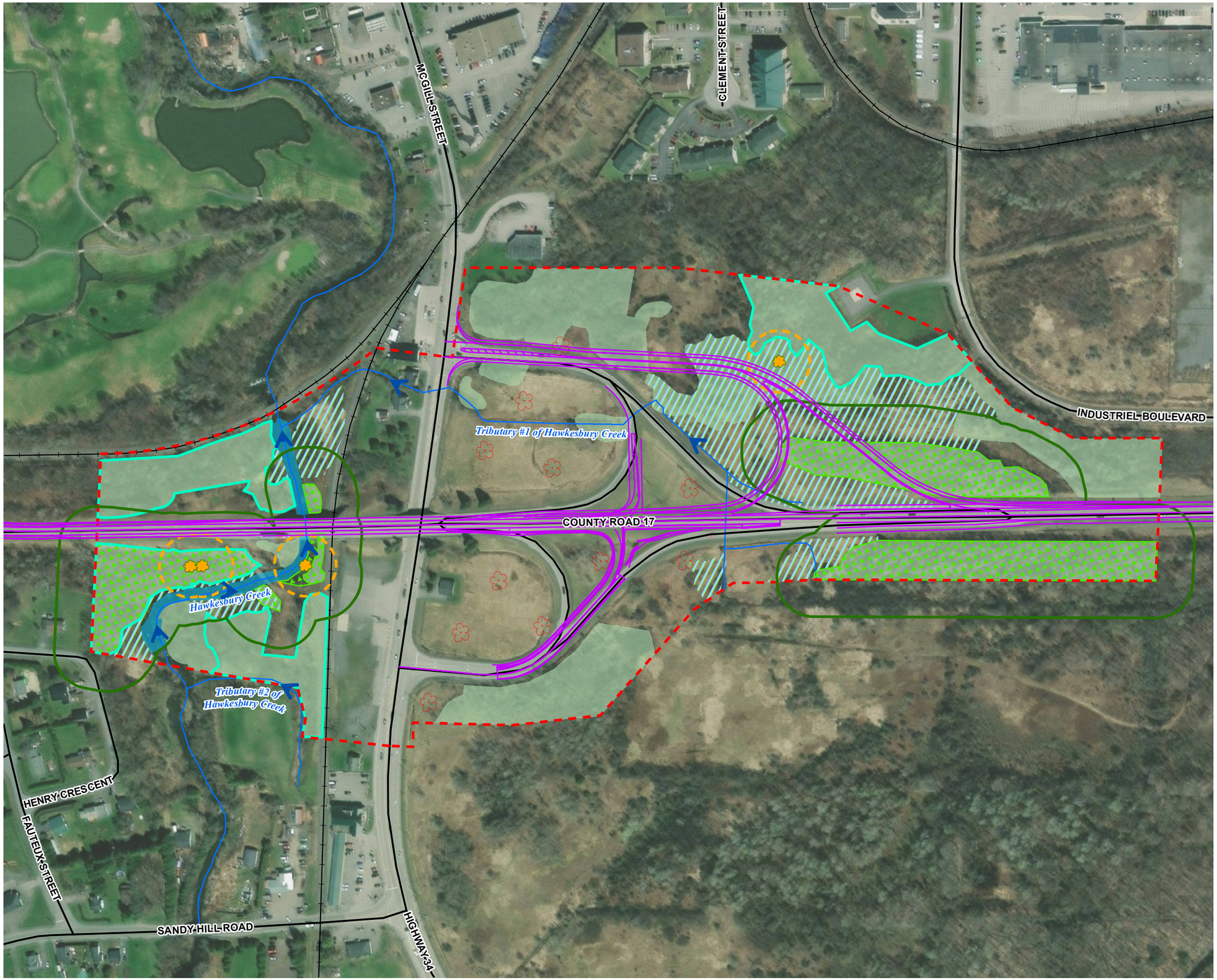
Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

PROPOSED IMPROVEMENTS

FIGURE 6



- Project Study Area
- Proposed_Road_Alignment
- Direction of Flow
- Road
- Railway
- Watercourse
- Dillon Delineated approximate Open Water
- Dillon Delineated approximate Wetlands
- Dillon Delineated approximate Woodlands
- Wild Parsnip

Potential SAR Habitat

- Butternut Locations
- Butternut 25m Buffer
- Potential SAR Bat Habitat
- Confirmed Black Ash Habitat
- Potential Black Ash Occurrence

0 10 20 40 m SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: ZJB MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

DILLON CONSULTING

PROJECT: 17-5180
STATUS: FINAL
DATE: 2024-12-09

FILE LOCATION: K:\Pre_2020\2017\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 6 Proposed Improvements.mxd

Appendix A

Final Natural Heritage Existing Conditions

Update Memo – July 14, 2020

MEMO

TO:	Brian Utigard, P.Eng, Ministry of Transportation, Ontario (MTO)
FROM:	Connor Edington, Dillon Consulting Limited (Dillon)
cc:	John Hanna, MTO Frank Vanderlaan, MTO Matthew McFadden, Jacobs Adele Mochrie, B.Sc., Dillon Dayna LeClair, Dillon Tanya Cross, P.Eng., Dillon Brendan Peterson, Dillon
DATE:	July 14, 2020
SUBJECT:	County Road 17 Bridge Replacements (GWP 4023-15-00) Natural Heritage Existing Conditions Update Memo
OUR FILE:	17-5180

Introduction

Project Description

The Ministry of Transportation, Ontario (MTO) retained Dillon Consulting Limited (Dillon) to complete a series of structural rehabilitations and replacements under Retainer in Eastern Ontario. The assignments are being completed following MTO's Class Environmental Assessment (EA) for Provincial Transportation Facilities (2000) and include both preliminary and detail design projects.

This project is being completed under the Retainer and includes the replacement of two structures on County Road 17 in the Town of Hawkesbury, namely, Hawkesbury Creek/CNR Overhead (Site No. 27-50) and Highway 34 Underpass at County Road 17 (Site No. 27-51) (Attachment 1, Figure 1) under GWP 4023-15-00.

In 2019, Dillon completed a Terrestrial Ecosystem Impact Assessment Report (TEIAR; March 2019) and a Fish and Fish Habitat Impact Assessment Report (February 2019) for the project. On April 22, 2020 the MTO requested the team undertake a functional design of an alternative configuration for the N/S-W interchange ramp with a free flow ramp design located further east from its existing position to accommodate a speed change lane terminating at approximatly STA. 23+562. This would avoid the need for widening the replacement County Road 17 Underpass (Site No. 27X-0051/B0) and replacement of Hawkesbury Creek Bridge and CNR Overhead (Site No. 27X-0050/B0). In order to do so, the E-

N/S ramp will also need to be realigned. The shift of the E-N/S and N/S-E ramps further east results in additional impacts beyond the original Study Area. Based on the revised areas of impact, an extension of the original Study Area has been proposed to encompass addition lands east forming a revised area of investigation (Revised Study Area) as shown in (Attachment 1, Figure 1).

As such, to complete our natural environmental feasibility assessment, our team conducted a desktop study of the vegetation communities, the Tributary to Hawksbury Creek and Species at Risk (SAR) screening for the new additional lands to the east as well as the existing TEIAR Study Area, along with a field investigation visit to ground truth our findings and to further update the existing conditions information for the Revised Study Area. This Natural Heritage Existing Conditions Update Memo (Memo) summarizes existing natural heritage features observed within the Revised Study Area.

Natural Environment Background Information Review

Background information was collected utilizing Dillon's SAR Generator which gathers the most up-to-date data from a variety of natural heritage resources databases such as the Ontario Ministry of Natural Resources and Forestry (MNRF), Natural Heritage Information Centre (NHIC), Environment Canada's Species at Risk (SAR) database, MNRF's NHIC Biodiversity Explorer database and various wildlife atlases. Applicable local Official Plans and available data from various aquatic resources databases were also reviewed to identify the potential for additional natural environment resources that may occur in the Revised Study Area. A review of the original TEIAR (Dillon, 2019), the Fish and Fish Habitat Impact Assessment Report (Dillon, 2019) and the Terrestrial Ecosystem Existing Conditions Report (MMM Group, 2017) was also undertaken to identify any available background information regarding potential SAR in the area.

The Revised Study Area required to accommodate the alternative ramp alignments consists of meadow within and adjacent to the interchange, with forest and wetland communities further northeast and southeast. Both the TEIAR and Revised Study Areas contain woodlands, wetlands, thicket and meadow. Hawkesbury Creek and a tributary of Hawkesbury Creek (Tributary #1 of Hawkesbury Creek) previously identified in the 2019 TEIAR (2019) also occur within the western portion of the TEIAR Study Area.

A determination of the significance of natural heritage features identified in the Revised Study Area is provided in this section. Wherever possible, an evaluation has been undertaken for features not previously evaluated including, the determination of significance for wildlife habitat and the presence of actual or potential SAR habitat observed in the Revised Study Area.

Significant Woodlands

The province delegates the responsibility of defining the evaluation criteria for significant woodlands to the local planning authority. Hawkesbury Official Plan does not identify evaluation criteria for determining significant woodlands. Additionally, the United Counties of Prescott and Russell Official Plan

(UCPROP) indicates that Significant Woodland mapped on Schedule B was based on information from a number of sources, including the MNRF (Section 5.2, UCPROP).

The potential for significant woodlands was identified by the Kemptville MNRF in a response to the information request completed for the 2017 Existing Conditions Report, received August 2015 and appended in the Dillon 2019 TEIAR. As such, the evaluation criteria utilized for the evaluation of woodlands within the TEIAR Study Area was generally based on the guidelines of the Natural Heritage Reference Manual (NHRM) (i.e., woodland size, ecological functions, uncommon characteristics and economic and social functional values). Based on woodland significance criteria defined by NHRM, woodlands associated with Hawkesbury Creek in the TEIAR Study Area and the woodland within the southeast portion of the Revised Study Area would be considered significant based on water protection criteria and woodland size criteria respectively.

Significant Wetlands

Provincially Significant Wetlands (PSWs) are identified by the MNRF, where they have been evaluated. The MNRF LIO database was reviewed to identify wetland occurrences within the Revised Study Area, and when possible, visual interpretation during the field investigation. Based on the background review, unevaluated wetlands occur within the Revised Study Area, however no PSWs occur within or adjacent to the Revised Study Area. Unevaluated wetlands identified by the MNRF LIO database are shown on Figure 2 in Attachment 1.

Significant Wildlife Habitat

The MNRF has developed guidelines to assist in the determination of significant wildlife habitat within the ecoregions of Ontario. There are four categories of significant wildlife habitat, with schedules to assist in the determination of significance. Using the ELC classifications and the guidelines for identifying significant wildlife habitat in the NHRM (MNR, 2010), the Significant Wildlife Habitat Technical Guide (MNR, 2000) and the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015), a preliminary evaluation of the Revised Study Area has been completed.

Species at Risk

A desktop review of available information sources was used to identify SAR listed as Endangered or Threatened under the ESA, 2007 with the potential to occur in and/or adjacent to the Revised Study Area based the habitat requirements defined by the Ministry of Environment, Conservation and Parks (MECP). Based on a desktop review of the current available habitat within and adjacent to the Revised Study Area, there is potential for the following species to occur:

- Barn Swallow (Hirundo rustica);
- Bobolink (Dolichonyx oryzivorus);
- Blanding's Turtle (Emydoidea blandingii);
- Butternut (Juglans cinerea);

- Eastern Meadowlark (Sturnella magna);
- Eastern Small-footed Myotis (Myotis leibii);
- Little Brown Myotis (Myotis lucifugus);
- Northern Myotis (Myotis septentrionalis); and,
- Tri-colored Bat (Pipistrellus subflavus).

Field Investigations and Findings

A Dillon terrestrial biologist completed field investigations on June 12, 2020, when weather conditions and timing were deemed suitable based on the survey protocols being implemented and in general accordance with Section 3.2.3 of the MTO Environmental Reference for Highway Design (ERD) (2013).

Field investigations for natural heritage features included the following:

- Identification of vegetation communities using Ecological Land Classification (ELC) for Southern Ontario; second approximation (Lee et al. 1998)
- A single Breeding Bird Survey (BBS) following the Ontario Breeding Bird Atlas protocol (BSC, 2001) and a migratory bird nest search of structures (i.e., utility buildings, box culverts, bridge structures) and vegetated areas within the Revised Study Area, if applicable;
- Documentation of sensitive/rare species, SAR, and/or associated habitat encountered in the field;
- Identification of watercourses with the potential to provide fish habitat; and,
- Documentation of incidental wildlife and wildlife habitat encountered in the field.

Refer to Attachment 2 for representative site photos.

Ecological Land Classification

Detailed vegetation community mapping was completed using ELC for the Revised Study Area based on interpretation of aerial photography and field observations. In addition, verification and updates (where applicable) of ELC communities previously reported within the TEIAR Study Area was undertaken. A total of 35 ELC communities were identified within the Revised Study Area, five of which are considered cultural (i.e., Business Sector (CVC_1), Rural Property (CVR_4)) and 30 which are considered natural vegetation communities. Based on the provincial rankings provided by the NHIC, none of the vegetation communities documented in the Revised Study Area are considered rare in Ontario.

ELC surveys included searches for SAR plant species identified in the background review, subject to seasonal identification constraints, along with habitat that may be considered SAR habitat based on habitat requirements defined MECP or significant wildlife habitat as defined under the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015). Natural features accessible from the MTO ROW were surveyed to confirm dominant species and the absence/presence of SAR trees (i.e. Butternut). Butternut observations are discussed in the SAR section below.

ELC communities in the TEIAR Study Area previously identified in the 2019 TEIAR (Dillon) remained largely the same with minor changes such as the gravel lot now occurs as a Golden Forb Meadow (23. MEFM1-1), a small isolated Fresh-Moist Poplar Deciduous Forest (10. FODM8-1) along Highway 34 now occurs as a Dry-Fresh Manitoba Maple Deciduous Forest (12. FODM4-5) and the Dry-Fresh Sugar Maple-Beech Deciduous Forest (8. FOD5-2) now contains a Fresh-Moist Manitoba Maple Lowland Deciduous Forest (14. FODM7-7) with frontage to Hawkesbury Creek.

ELC communities identified within the additional lands to form the Revised Study Area contained both new (11) and previously reported natural vegetation communities from the 2019 TEIAR (Dillon). ELC surveys found the eastern portion of the Revised Study Area to contain primarily forest communities such as: Dry-Fresh Manitoba Maple Deciduous Forest (12. FODM4-5), Dry-Fresh Poplar Deciduous Forest (6. FOD3-1), Fresh-Moist Poplar Deciduous Forest (10. FODM8-1), Dry-Fresh Poplar-White Birch Deciduous Forest (11. FODM3), as well as various wetland communities including Graminoid Mineral Meadow Marsh (17. MAMM1), Common Reed Graminoid Mineral Meadow Marsh (18. MAMM1-12), Cattail Graminoid Mineral Meadow Marsh (19. MAMM1-2), Cattail Mineral Shallow Marsh (21. MASM1-1), Common Reed Mineral Shallow Marsh (22. MASM1-12), Mineral Deciduous Swamp (29. SWDM4), Poplar Mineral Deciduous Swamp (29. SWDM4-5), and Willow Mineral Deciduous Thicket Swamp (32. SWTM3). In addition, one Butternut was observed within the Mineral Deciduous Swamp (SWDM4) in the northeast portion of the Revised Study Area.

Wild Parsnip, a noxious plant, was observed along the roadsides and within select meadow communities of the Revised Study Area and presents a health and safety concern. Contact with the leaves and sap can cause severe skin irritation. Anyone conducting future work onsite should wear protective clothing, take the necessary precautions to avoid sap exposure to the skin and be aware of first aid treatments available.

The descriptions of new ELC natural vegetation communities observed as part of verification of the TEIAR Study Area and the Revised Study Area are outlined in Table 1 in Attachment 3 and the boundaries and locations of these communities are shown on Figure 3 in Attachment 1. The descriptions of previously identified ELC communities that were verified as part of the June 12 field investigation are available in the 2019 TEIAR (Dillon). The general locations of Wild Parsnip are shown on Figure 5 in Attachment 1.

Breeding Bird Survey and Migratory Bird Nest Search

One Breeding Bird Survey (BBS) was completed at nine point-count monitoring stations across the Revised Study Area. In total 18 species were observed. Birds observed during the BBS are considered Secure (SRank of S5), Apparently Secure (SRank of S4) or not a suitable target for conservation activities (SRank of SNA) in Ontario. The BBS results are provided in Table 2 in Attachment 3.

As part of the migratory bird nest search, Barn Swallow habitat was considered. A survey for migratory bird nests was completed at the Hawkesbury Creek CNR Overhead, the Highway 34 Underpass, the exterior of the existing building on site (i.e., utility building) and the vegetated areas within the ROW by a Dillon biologist during the 2020 field investigation. One Barn Swallow nest was observed along the eastern abutment to the Hawkesbury Creek CNR Overhead. No other migratory bird nests were observed during the field investigation.

Significant Wildlife Habitat

In accordance with the Ecoregion 6E Criteria Schedules (MNRF 2015), a review of background data suggests the potential for significant wildlife habitat to exist within and adjacent to the Revised Study Area based on the woodlands, wetlands, meadows and watercourses that occur.

Targeted field studies to confirm the significance of candidate significant wildlife habitat (CSWH) were not included in the scope of this assessment, and as such, it will be assumed that the candidate habitats identified below are significant and should be mitigated from potential impacts. Areas of candidate SWH are shown on Figure 4 of Attachment 1.

Based on the background review and observations made during the field investigation, CSWH within the Revised Study Area includes:

- **Seasonal Concentration Areas of Animals**
  - Bat Maternity Colonies. Bat maternity colonies may be present in the wooded areas identified within the Revised Study Area that were observed to contain suitable bat roosting trees and snags (≥ 25 centimetres diameter at breast-height (DBH)). Bat Maternity Colonies occur throughout the Revised Study Area.
- **Rare Vegetation Communities or Specialized Habitat for Wildlife**
  - Amphibian Breeding Habitat. Select wetlands in the form of marshes within the Revised Study Area were observed to contain shallow water habitat ideal for amphibian breeding.
  - *Area-sensitive Breeding Bird Habitat (Canada Warbler (Cardellina canadensis)).* The deciduous woodland within the southeast portion of the Revised Study Area is connected to a larger tract of woodland that meets size and interior habitat criteria for Canada Warbler.
  - *Turtle Nesting Areas (Snapping Turtle (Chelydra serpentina) and Northern Map Turtle* (Graptemys geographica)).
    The riparian area adjacent to Hawkesbury Creek in the Revised Study Area provides potential nesting habitat above the high water mark where vegetative cover is sparse and suitable nesting substrate was observed.
- **Habitat for Species of Conservation Concern**
  - Special Concern and Rare Wildlife Species (Eastern Wood-pewee (Contopus virens) (Provincial SC)) Habitat. Woodlands that contain ideal habitat for Eastern Wood-pewee occur throughout the Revised Study Area.

- Special Concern and Rare Wildlife Species (Wood Thrush (Hylocichla mustelina) (Provincial SC)) Habitat. Woodlands that contain ideal interior habitat and tree composition for Wood Thrush occur throughout the eastern portion of the Revised Study Area.

Species at Risk

During the field investigation, the Revised Study Area was reviewed for suitable habitat to support SAR. Based on their range, known occurrences, and/or the vegetation communities observed in the Revised Study Area, the following SAR were identified as having the potential to occur, based on the habitat observed within the Revised Study Area:

- Barn Swallow
  One Barn Swallow nest was observed along the top of the eastern abutment to the Hawkesbury Creek CNR Overhead.
- **Butternut**
  In total, seven Butternut trees were identified within the Revised Study Area, six of which were previously identified inside the TEIAR Study Area from the 2019 TEIAR (Dillon) and one occurs as a new observation. The new Butternut was observed as a sapling in excellent condition within the northeast potion of the Revised Study Area. Note: During field verification of Butternut occurrence, two Butternut trees previously observed as part of the 2019 TEIAR were not counted as part of the total as they were observed uprooted and now occur as deadfall. In addition, one new Butternut sapling in excellent condition was observed southwest and outside of the southwest border of the 2019 TEIAR Study Area nearby Hawkesbury Creek.
- SAR Bats
  Candidate SAR bat habitat was identified within select wooded communities within the Revised Study Area based on the observation of suitable bat roosting trees and snags (≥ 25 centimetres DBH).

Location of candidate and confirmed SAR habitat is shown on Figure 5 of Attachment 1.

Surface Water Features and Fish Habitat

The existing conditions within Hawkesbury Creek and its tributary (Tributary #1 of Hawkesbury Creek) are well understood within the TEIAR Study Area and are outlined in the Fish and Fish Habitat Existing Conditions Report by MMM Group (2017) which available as part of the Fish and Fish Habitat Impact Assessment Report (Dillon, 2019). Hawkesbury Creek and the previously identified tributary (Tributary #1 of Hawkesbury Creek) are both documented as containing fish. While the thermal regime of Hawkesbury Creek is characterized as being warm water, Tributary #1 of Hawkesbury Creek is characterized as containing a coldwater thermal regime due to the presence of Watercress (Nasturtium officinale).

Identification of watercourses with the potential to provide fish habitat was undertaken within the Revised Study Area. During field investigation the extents of Tributary #1 of Hawkesbury Creek were further surveyed within the east portion of the Revised Study Area and were observed to extend until the entrance to the westbound County Road 17 offramp where the tributary also crosses County Road 17 via a concrete box culvert and continues southwest. The presence of fish within Tributary #1 of Hawkesbury Creek was confirmed by visual observation within pooling habitat east of the inlet to the box culvert that crosses Highway 34. Watercress was observed within some portions of the tributary that occur within the new portion of the Revised Study Area further supporting the tributary's designation as a coldwater thermal regime.

During verification of ELC within the TEIAR Study Area, a second unnamed tributary to Hawkesbury Creek (Tributary #2 of Hawkesbury Creek) was identified within and adjacent to the southwest boundary of the TEIAR Study Area. Tributary #2 of Hawkesbury Creek was observed to have low flow with a substrate dominated by muck/organics and abundant emergent vegetation. Thermal regime information for this tributary was unavailable on the Ministry of Agriculture, Food and Rural Affairs' AgMaps online application. However, an abundance of chemotrophic iron-oxidizing bacteria film was observed throughout Tributary #2 of Hawkesbury Creek which can be an indicator of coldwater thermal regime.

The extents of both Tributary #1 and Tributary #2 of Hawkesbury Creek are shown on Figures 3 to 5 in Attachment 1.

Incidental Wildlife Observations

A general wildlife assessment was completed through incidental observations while on site. Incidental observations of wildlife were noted as well as other wildlife evidence such as dens, tracks, and scat. These observations also helped to determine potential ecological functions, linkages, etc. within and adjacent to the Revised Study Area.

Incidental wildlife species observed within and adjacent to the Revised Study Area are listed in below. Each of the species observed are considered common in the United Counties of Prescott and Russell area.

- Eastern Gray Squirrel (Sciurus carolinensis)
- Gray Catbird (Dumetella carolinensis)
- Mallard (Anas platyrhynchos)
- Northern Flicker (Colaptes auratus)
- Wild Turkey (Meleagris gallopavo)
- Woodchuck (Marmota monax)

Summary

The June 12, 2020, field investigations included ELC, BBS, a migratory bird nest search, documentation and search for SAR and sensitive/rare species as well as any potential associated habitat, a watercourse and tributary survey and documentation of incidental wildlife and wildlife habitat encountered in the field. The Hawkesbury Creek/CNR Overhead (Site No. 27-50) and Highway 34 Underpass at County Road 17 (Site No. 27-51) Revised Study Area contains meadow located predominately adjacent to the interchange as well as forest, wetland and thicket throughout the western and northeast and southeast extents.

Based on their range, known occurrences, and/or the vegetation communities observed within the Revised Study Area, the following SAR were observed or have the potential to occur within the Revised Study Area:

- Barn Swallow (nest observed)
- Butternut (seven trees observed)
- SAR Bats (candidate habitat)

Potential impacts to these species and their habitat should be reviewed once the detailed designs have been identified (Figure 6 in Attachment 1). Potential impacts to SAR as a result of infrastructure rehabilitation and replacement works proposed by MTO can likely be addressed through Notice of Activity registrations under s23.18 of the O. Reg. 242/08 "Threats to health and safety; not imminent". As a result, s23.18 of O. Reg. 242/08 should be reviewed as part of the impact assessment during the subsequent design phases. Footprint impacts within 25 m of the seven documented Butternut would require the preparation of Butternut Health Assessments to determine classification of these trees and confirm next steps. A tree inventory and tree removal plan would also be required.

In addition to the potential impacts to SAR and SAR habitat in the Revised Study Area, the following significant wildlife habitats have been identified within the Revised Study Area:

- Bat Maternity Colonies
- Special Concern and Rare Wildlife Species (i.e. Eastern Wood-pewee and Wood Thrush)
- Area-sensitive Breeding Bird Habitat (Canada Warbler)
- Turtle Nesting Area (Snapping Turtle and Northern Map Turtle)

Impacts to significant wildlife habitat should be assessed during detailed design and appropriate mitigation measures developed accordingly.

Wild Parsnip, a noxious plant, was observed within the Revised Study Area along the roadsides and within the meadow communities, and presents a health and safety concern. Contact with the leaves and sap can cause severe skin irritation. Anyone conducting future work onsite should wear protective

clothing, take the necessary precautions to avoid sap exposure to the skin, and should be aware of first aid treatments available.

Once detailed design details are known, terrestrial and aquatic impact assessments are recommended to evaluate the potential impacts on SAR and the natural features within the Revised Study Area. At that time, detailed mitigation measures can be developed for inclusion in the contract documentation.

References

Dobbyn, J. (1994). Atlas of the Mammals of Ontario. Toronto: Federation of Ontario Naturalists.

Government of Canada. (1994). Migratory Birds Convention Act. Migratory Birds Convention Act. Canada.

Government of Canada. (2002). Species at Risk Act. Species at Risk Act. Canada

Government of Ontario. (2007). Endangered Species Act. Endangered Species Act, 2007, S.O. 2007, c. 6. Ontario: e-laws.

Lee, H. T., W.D. Bakowsky, Riley, J., Bowles, J., Puddister, M., Uhlig, P., et al. (1998). Ecological Land Classification for Southwestern Ontario: First Approximation and its Application. Technical Manual ELC-005. Ontario Ministry of Natural Resources, South Central Region, Science Development and Transfer Branch.

Macnughton, A., Layberry, R., Jones, C., & Edwards, B. (2017, January). Ontario Butterfly Atlas Online. Retrieved 2020 from http://www.ontarioinsects.org/atlas_online.htm

Ministry of Transportation Ontario. 2013. Environmental Reference for Highway Design, Section 3.2: Terrestrial Ecosystems. Toronto, Ontario: Queens Printer for Province of Ontario.

Ontario Breeding Bird Atlas (OBBA). 2001. Guide for Participants. Atlas Management Board, Federation of Ontario Naturalists, Don Mills. Data obtained in 2020 from, http://www.birdsontario.org/atlas/download/obba_guide_en.pdf

Ontario Ministry of Environment, Conservation and Parks. 2019. Bobolink General Habitat Description.

Ontario Ministry of Environment, Conservation and Parks. 2019. General Habitat Description of the Eastern Meadowlark.

Ontario Ministry of Natural Resources. (2018). Wild parsnip. Retrieved December 5, 2018, from https://www.ontario.ca/page/wild-parsnip

Ontario Ministry of Natural Resources. (2010). Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement. (S. Weber, Ed.) Toronto: Queen's Printer for Ontario.

Ontario Ministry of Natural Resources. (2000). Significant Wildlife Habitat Technical Guide. Toronto: Queen's Printer for Ontario.

Ontario Ministry of Natural Resources and Forestry. (2015). Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. Peterborough.

Ontario Nature. (2010-2016). Ontario Nature Herp Atlas. Retrieved June 2020, from Ontario Nature: https://www.ontarionature.org/dynamic-maps/dynamic-maps/

Patterson, B. D. (2003). Digital Distribution Maps of the Mammals of the Western Hemisphere, version 3.0. Arlington, Virginia: NatureServe.

Queens Printer for Ontario. (2018). Natural Heritage Information Centre. Retrieved June 2020, from Make A Map: Natural Heritage Areas: http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

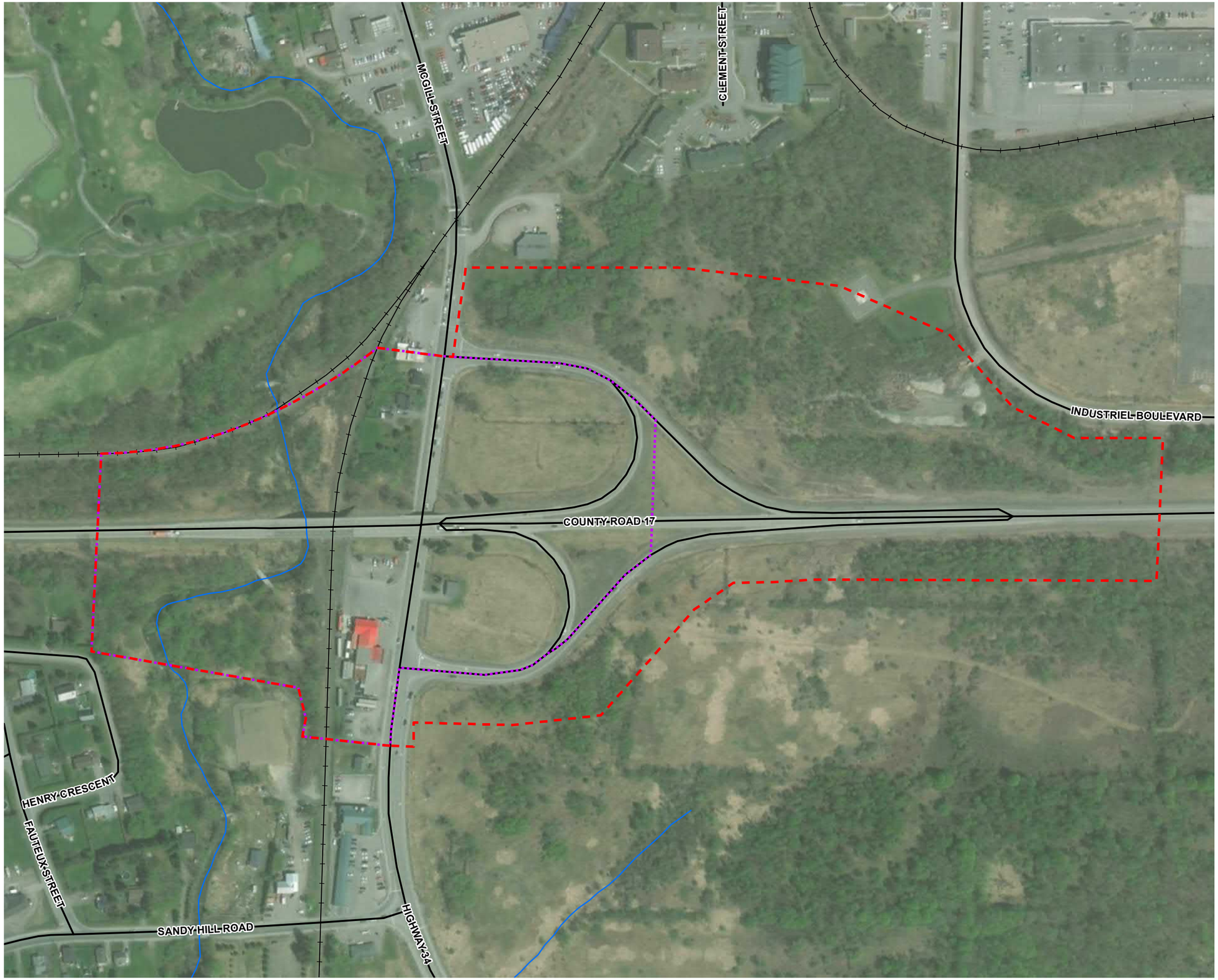
Town of Hawkesbury. 2010. Official Plan and Schedules.

Town of Hawkesbury. 2018. Zoning By-Law 20-2018. Zoning Maps.

United Counties of Prescott and Russell. 2018. Official Plan and Schedules.

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LONDON, ONTARIO

Attachment 1



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

STUDY AREA

FIGURE 1

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Road
- Railway
- Watercourse



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SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: PH MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

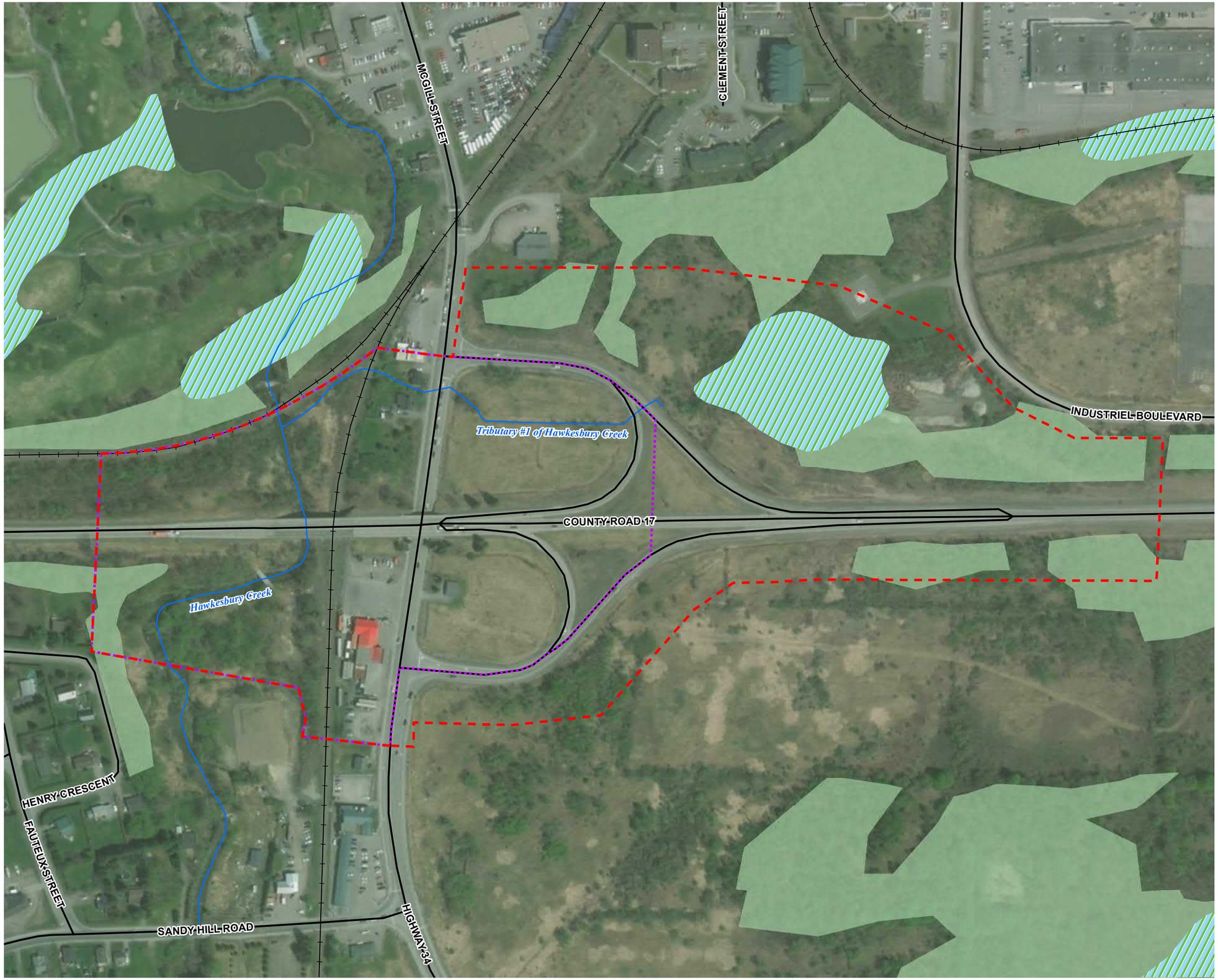
DILLON CONSULTING

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Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

NATURAL HERITAGE FEATURES

FIGURE 2

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Road
- Railway
- Watercourse
- MNRF approximate Wetlands (LIO, 2020)
- MNRF approximate Woodlands (LIO, 2020)

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SCALE 1:3,000

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF
MAP CREATED BY: PH MAP CHECKED BY: JW
MAP PROJECTION: NAD 1983 UTM Zone 18N

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Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNEMENT No. 14 - HAWKESBURY

NATURAL ENVIRONMENT SITE INVESTIGATION RESULTS

FIGURE 3

MCGILL STREET
CLEMENT STREET
INDUSTRIEL BOULEVARD
COUNTY ROAD 17
HENRY CRESCENT
FAUTEUX STREET
SANDY HILL ROAD
HIGHWAY 34
Tributary #1 of Hawkesbury Creek
Hawkesbury Creek
Tributary #2 of Hawkesbury Creek

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Road
- Railway
- Watercourse
- Direction of Flow

Ecological Land Classification

1. CGL: Greenlands
2. CVC_1: Business Sector
3. CVC_2: Light Industry
4. CVR_4: Rural Property
5. CVS_2: Hospital
6. FOD3-1: Dry-Fresh Poplar Deciduous Forest
7. FOD5: Dry-Fresh Sugar Maple Deciduous Forest
8. FOD5-2: Dry-Fresh Sugar Maple-Beech Deciduous Forest
9. FOD7-1: Fresh-Moist White Elm Lowland Deciduous Forest
10. FODM8-1: Fresh Moist Poplar Deciduous Forest
11. FODM3: Dry-Fresh Poplar-White Birch Deciduous Forest
12. FODM4-5: Dry-Fresh Manitoba Maple Deciduous Forest
14. FODM7-7: Fresh-Moist Manitoba Maple Lowland Deciduous Forest
15. MAM2-10: Mixed Forb Mineral Meadow Marsh
16. MAM2-2: Reed-Canary Grass Graminoid Mineral Meadow Marsh
17. MAMM1: Graminoid Mineral Meadow Marsh
18. MAMM1-12: Common Reed Graminoid Mineral Meadow Marsh
19. MAMM1-2: Cattail Graminoid Mineral Meadow Marsh
20. MAS3-1: Cattail Organic Shallow Marsh
21. MASM1-1: Cattail Mineral Shallow Marsh
22. MASM1-12: Common Reed Mineral Shallow Marsh
23. MEFM1-1: Golden Forb Meadow
24. MEGM4: Fresh-Moist Graminoid Meadow
25. MEM: Mixed Meadow
26. MEMM4: Fresh-Moist Mixed Meadow Ecosite
27. OAO: Open Aquatic
28. SWD: Deciduous Swamp
29. SWDM4: Mineral Deciduous Swamp
30. SWDM4-5: Poplar Mineral Deciduous Swamp
31. SWT3-1: Speckled Alder Organic Deciduous Thicket Swamp
32. SWTM3: Willow Mineral Deciduous Thicket Swamp
33. THD: Deciduous Thicket
34. THDM5: Fresh-Moist Deciduous Thicket
35. WOD: Deciduous Woodland

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SCALE 1:3,000

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DATA PROVIDED BY MNRF
MAP CREATED BY: PH MAP CHECKED BY: JW
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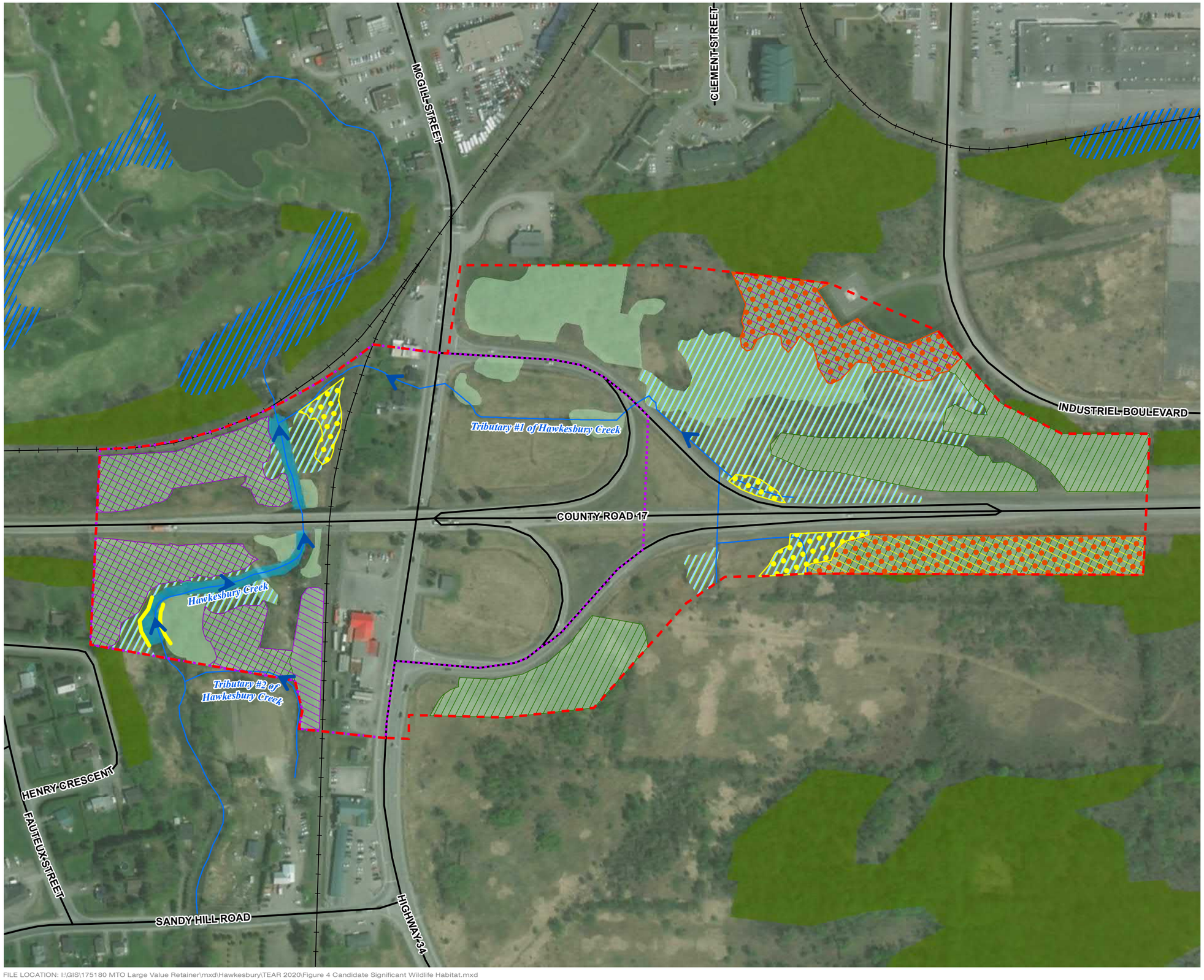
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STATUS: DRAFT

DATE: 2020-07-13

FILE LOCATION: I:\GIS\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 3 Natural Environment Site Investigation Results.mxd



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

CANDIDATE SIGNIFICANT WILDLIFE HABITAT

FIGURE 4

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Road
- Railway
- Watercourse
- Direction of Flow
- Dillon Delineated approximate Open Water
- Dillon Delineated approximate Wetlands
- MNRF approximate Wetlands (LIO, 2020)
- Dillon Delineated approximate Woodlands
- MNRF approximate Woodlands (LIO 2020)
- Candidate Significant Wildlife Habitat for Turtle Nesting Habitat
- Candidate Significant Wildlife Habitat for Amphibian Breeding Habitat
- Candidate Significant Wildlife Habitat for Special Concern and Rare Wildlife Species (Wood Thrush)
- Candidate Significant Wildlife Habitat for Bat Maternity Colonies
- Candidate Significant Wildlife Habitat for Area-Sensitive Breeding Bird Habitat (Canada Warbler)
- Candidate Significant Wildlife Habitat for Special Concern and Rare wildlife Species (Eastern Wood-Pewee)

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SCALE 1:3,000

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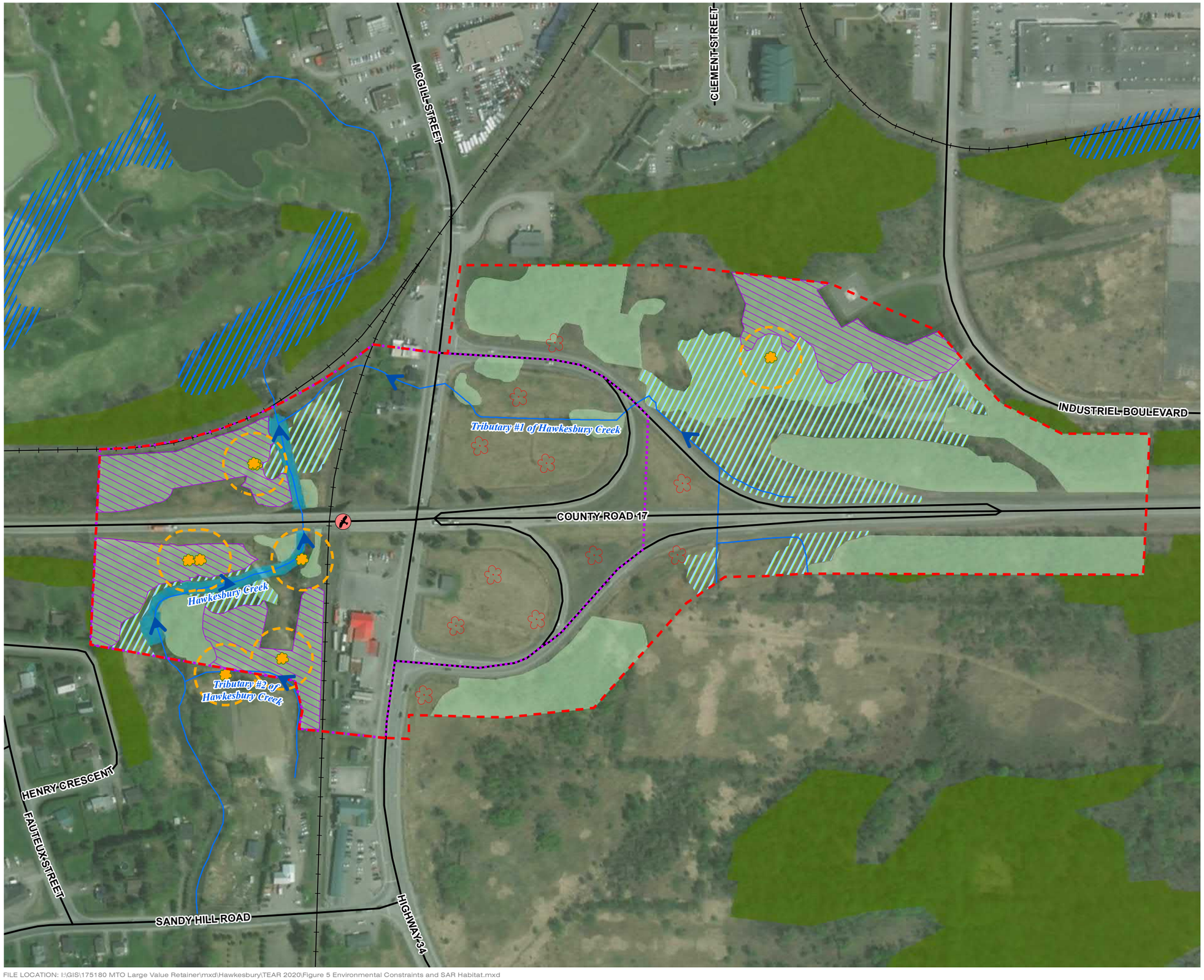
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PROJECT: 17-5180

STATUS: DRAFT

DATE: 7/11/2020

FILE LOCATION: I:\GIS\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR 2020\Figure 4 Candidate Significant Wildlife Habitat.mxd



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

ENVIRONMENTAL CONSTRAINTS AND SAR HABITAT

FIGURE 5

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Road
- Railway
- Watercourse
- Dillon Delineated approximate Open Water
- Direction of Flow
- Dillon Delineated approximate Wetlands
- MNRF approximate Wetlands (LIO 2020)
- Dillon Delineated approximate Woodlands
- MNRF approximate Woodlands (LIO 2020)
- Butternut Locations
- Butternut 25m Buffer
- Wild Parsnip
- Barn Swallow Nest
- Candidate SAR Bat Habitat

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SCALE 1:3,000

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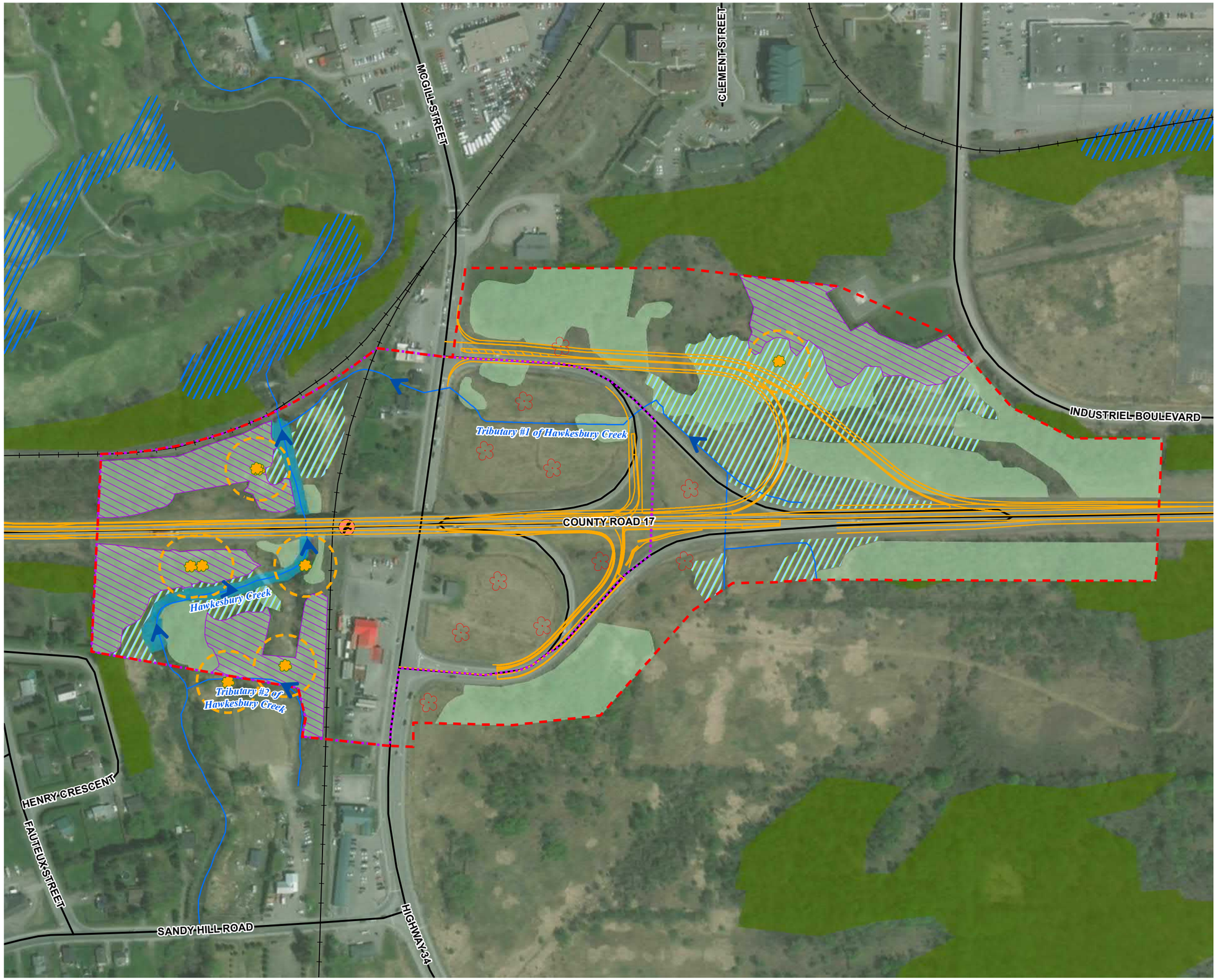
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DATE: 7/12/2020

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Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNMENT No. 14 - HAWKESBURY

PROPOSED IMPROVEMENTS

FIGURE 6

- Revised Study Area (2020)
- TEIAR Study Area (2019)
- Proposed Road Alignment
- Road
- Railway
- Watercourse
- Dillon Delineated approximate Open Water
- Direction of Flow
- Dillon Delineated approximate Wetlands
- MNRF approximate Wetlands (LIO 2020)
- Dillon Delineated approximate Woodlands
- MNRF approximate Woodlands (LIO 2020)
- Butternut Locations
- Butternut 25m Buffer
- Wild Parsnip
- Barn Swallow Nest
- Candidate SAR Bat Habitat

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SCALE 1:3,000

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PROJECT: 17-5180

STATUS: DRAFT

DATE: 7/12/2020

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Attachment 2

Attachment 2: Photo Inventory

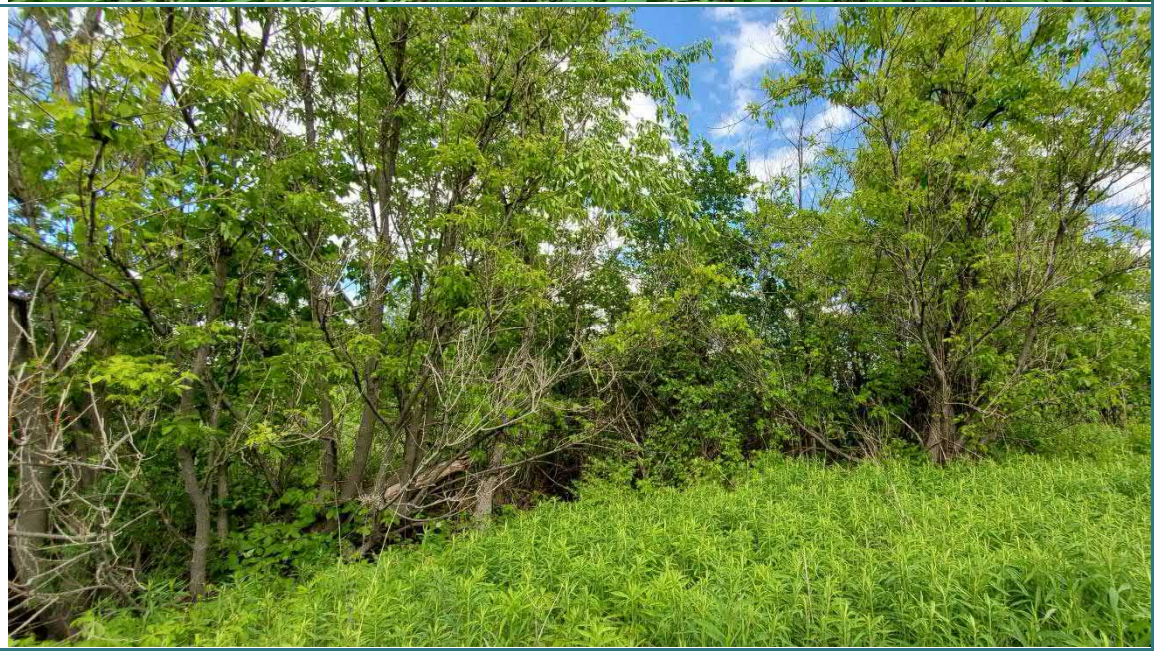
Photo Comments	Photo
Photo #1 June 12, 2020 Notes: CGL: Greenlands Facing east from eastern boundary of the Cattail Graminoid Mineral Meadow Marsh within the eastern portion of the Revised Study Area.	

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Photo #2 June 12, 2020 Notes: FOD3-1 Dry-Fresh Poplar Deciduous Forest Facing west from, interior of forest that occurs within the TEIAR Study Area.	
Photo #3 June 12, 2020 Notes: FOD5-2 Dry-Fresh Sugar Maple-Beech Deciduous Forest Facing south from interior of the forest.	

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Photo #4 June 12, 2020 Notes: FODM8-1 Fresh-Moist Poplar Deciduous Forest Facing south at forest from Common Reed Graminoid Mineral Meadow Marsh (MAMM1-12) within the hydro-electric corridor that occurs within the Revised Study Area.	
Photo #5 June 12, 2020 Notes: FODM3 Dry-Fresh Poplar-White Birch Deciduous Forest Facing east within the northwest boundary of the forest.	

Photo #6 June 12, 2020 Notes: FODM4-5 Dry-Fresh Manitoba Maple Deciduous Forest Facing east within the interior of the forest.	
Photo #7 June 12, 2020 Notes: FODM4-5 Dry-Fresh Manitoba Maple Deciduous Forest Facing northeast at forest from adjacent Mixed Meadow (MEM) north of County Road 17.	

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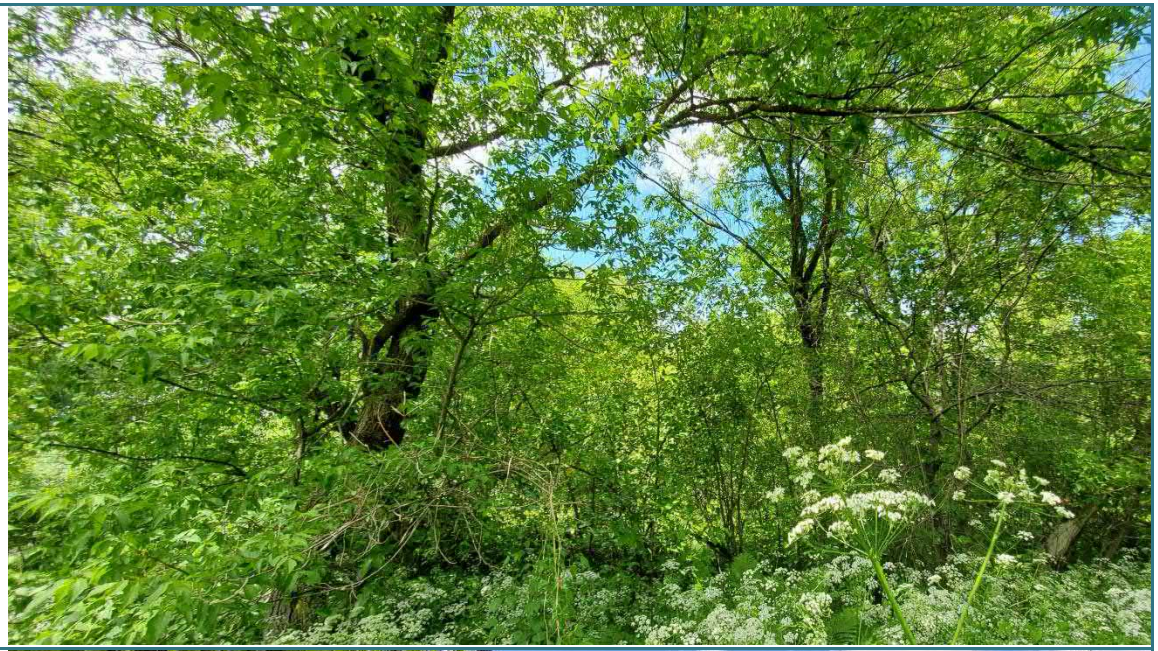
Photo #8 June 12, 2020 Notes: FODM7-7 Fresh-Moist Manitoba Maple Lowland Deciduous Forest Facing west from interior of the forest.	
Photo #9 June 12, 2020 Notes: MAM2-10: Mixed Forb Mineral Meadow Marsh Facing southwest from interior of the marsh from the southwest shore of Hawkesbury Creek.	

Photo #10 June 12, 2020 Notes: MAM2-2 Reed-Canary Grass Graminoid Mineral Meadow Marsh Facing northeast from western boundary of marsh.	
Photo #11 June 12, 2020 Notes: MAMM1 Graminoid Mineral Meadow Marsh Facing northeast from center of the marsh.	

Photo #12
June 12, 2020

Notes:

MAMM1-12
Common Reed Graminoid Mineral Meadow Marsh



Photo #13
June 12, 2020

Notes:

MAMM1-2
Cattail Graminoid Mineral Meadow Marsh

Facing north at marsh from north shoulder of County Road 17 westbound lane shoulder.



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Photo #14 June 12, 2020 Notes: MAS3-1 Cattail Organic Shallow Marsh Facing east from interior of the marsh.	
Photo #15 June 12, 2020 Notes: MASM1-1 Cattail Mineral Shallow Marsh Facing southeast at marsh from south shoulder of County Road 17 eastbound lane.	

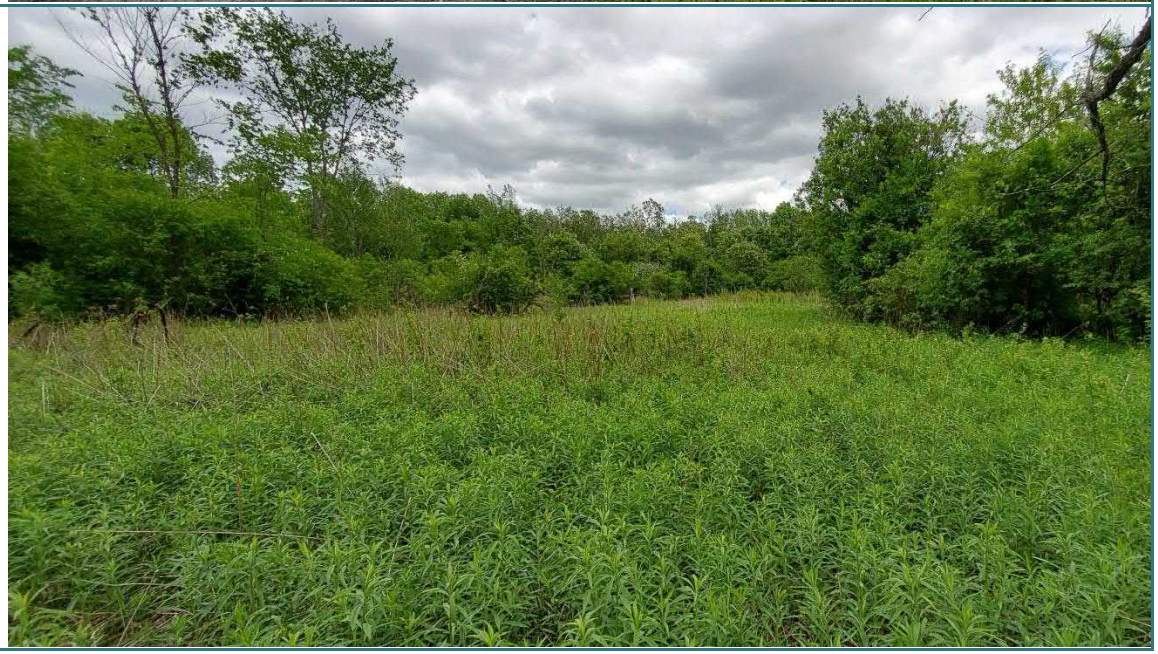
Photo #16 June 12, 2020 Notes: MASM1-12 Common Reed Mineral Shallow Marsh Facing northwest at marsh in the distance from north shoulder of the westbound lane of County Road 17.	
Photo #17 June 12, 2020 Notes: MEFM1-1 Golden Forb Meadow Facing northeast from interior of meadow within the northeast portion of the Revised Study Area.	

Photo #18 June 12, 2020 Notes: MEM Mixed Meadow Facing northeast from interior of the meadow located within County Road 17 westbound onramp loop.	
Photo #19 June 12, 2020 Notes: OAO Open Aquatic Facing east (downstream) at Hawkesbury Creek from the southeast shore in the Mixed Forb Mineral Meadow Marsh (MAM2-10).	

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Photo #20 June 12, 2020 Notes: SWDM4 Mineral Deciduous Swamp Facing northwest from interior of swamp.	
Photo #21 June 12, 2020 Notes: SWDM4-5 Poplar Mineral Deciduous Swamp Facing northwest within the interior of the forest.	

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Photo #22 June 12, 2020 Notes: SWT3-1 Speckled Alder Organic Deciduous Thicket Swamp Facing west along western boundary of the swamp.	
Photo #23 June 12, 2020 Notes: SWTM3 Willow Mineral Deciduous Thicket Swamp Facing east from interior of the swamp.	

Photo #24
June 12, 2020

Notes:

THD
Deciduous Thicket

Facing north from north side of County Road 17 near the CNR overhead.

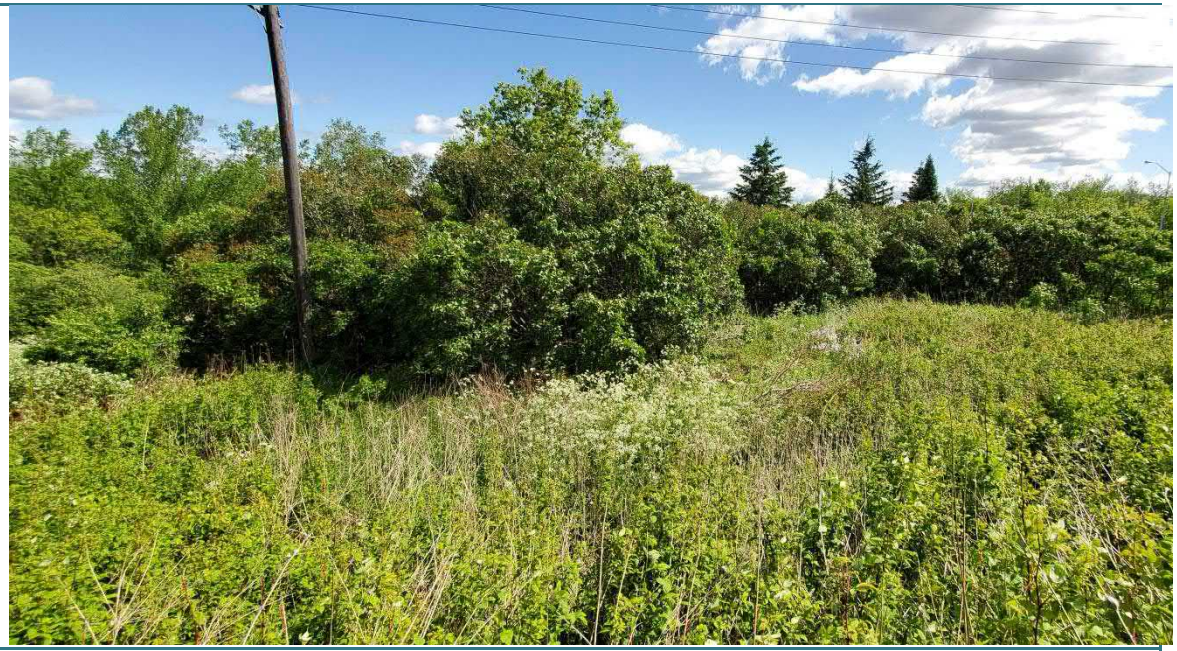
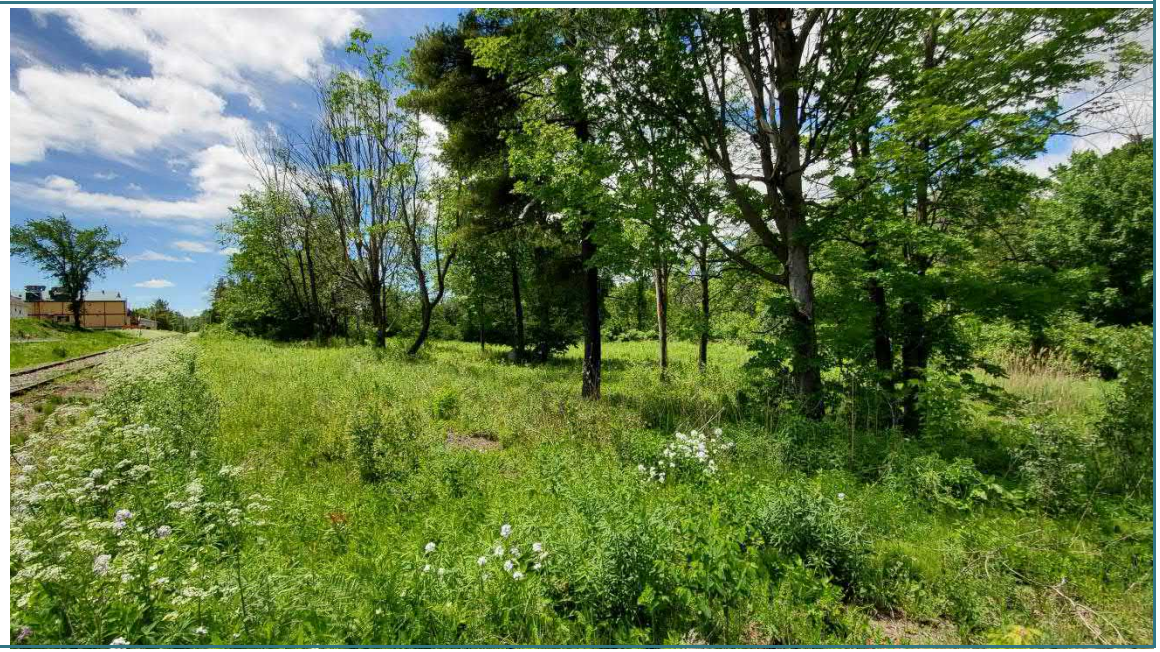


Photo #25
June 12, 2020

Notes:

WOD
Deciduous Woodland

Facing southwest from west side of the CNR railway within the TEIAR Study Area.



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Photo #26 June 12, 2020 Notes: Tributary #1 of Hawkesbury Creek Facing southeast (upstream) within Dry-Fresh Manitoba Maple Deciduous Forest east of Highway 34	
Photo #27 June 12, 2020 Notes: Tributary #1 of Hawkesbury Creek Facing southeast (upstream) along the segment of the tributary that runs parallel to the off ramp of westbound County Road 17.	

Photo #28 June 12, 2020 Notes: Tributary #1 of Hawkesbury Creek Facing northwest (downstream) along the segment of the tributary that runs parallel to the off ramp of westbound County Road 17.	
Photo #29 June 12, 2020 Notes: Tributary #1 of Hawkesbury Creek in the foreground and MAMM1: Graminoid Mineral Meadow Marsh and MEGM4: Fresh-Moist Graminoid Meadow in background Facing south from the County Road 17 eastbound lane south shoulder	

Photo #30 June 12, 2020 Notes: Tributary #2 of Hawkesbury Creek Facing east (upstream) of Tributary #2 from segment that occurs within and along the TEIAR Study Area.	
Photo #31 June 12, 2020 Notes: Tributary #2 of Hawkesbury Creek Facing west (downstream) at outlet of Tributary #2 where it discharges into Hawkesbury Creek.	

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Photo #32 June 12, 2020 Notes: Tributary #2 of Hawkesbury Creek Facing east (upstream) at iron-oxidizing bacteria film on surface water of Tributary #2.	
Photo #33 June 12, 2020 Notes: Hawkesbury Creek Facing northeast at CNR overhead in the distance, and Fresh-Moist Deciduous Thicket (THDM5) along the east shore from ATV bridge crossing.	

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Photo #34 June 12, 2020 Notes: Hawkesbury Creek/CNR Overhead Facing east at eastern abutment of the CNR overhead.	
Photo #35 June 12, 2020 Notes: Hawkesbury Creek/CNR Overhead Facing west at west abutment of the CNR overhead from east shore of Hawkesbury Creek.	

Photo #36
June 12, 2020

Notes:

Hawkesbury Creek/CNR Overhead

Facing east at Barn Swallow nest constructed against the east abutment to CNR Overhead



Photo #37
June 12, 2020

Notes:

Facing southeast at Highway 34 Underpass from the shoulder of the southbound lane.



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Photo #38 June 12, 2020 Notes: Facing west at Highway 34 Underpass from the shoulder of the southbound lane.	
Photo #39 June 12, 2020 Notes: Beaver Dam Tributary #1 of Hawkesbury Creek Facing northeast at active Beaver dam located within Tributary #1 of Hawkesbury Creek at outlet of culvert that crosses the westbound off ramp of County Road 17.	

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Attachment 3

Table 1: Descriptions of ELC Communities within the Revised Study Area

Polygon #	ELC Code	Classification	Vegetation	Photo Reference (Attachment 2)
11.	FODM3	Dry-Fresh Poplar-White Birch Deciduous Forest	This forest community canopy and sub-canopy was dominated by Paper Birch (Betula papyrifera) with occasional to rare Trembling Aspen (Populus tremuloides). The ground layer contained an occasional abundance of sapling Trembling Aspen, Sensitive Fern (Onoclea sensibilis), Hairy Goldenrod (Solidago hispida) and rare Common Buckthorn (Rhamnus cathartica). The forest was observed to be a young to mid-age community with little to no snags.	5
12.	FODM4-5	Dry-Fresh Manitoba Maple Deciduous Forest	This forest community canopy and sub-canopy contained mixture of abundant Manitoba Maple (Acer negundo) and Staghorn Sumac (Rhus hirta) with occasional occurrences of Trembling Aspen, Wild Black Cherry (Prunus serotina) and rare occurrences of Sugar Maple (Acer saccharum). The understory and ground layers contained occasional Virginia Creeper (Parthenocissus quinquefolia), Common Buckthorn, Wild Black Currant (Ribes americanum) and sapling Green Ash (Fraxinus pennsylvanica), Sugar Maple and Alternate-leaved Dogwood (Cornus alternifolia). Garbage and remnants of dumping were observed throughout. Evidence of Emerald Ash Borer (Agrilus planipennis) (EAB) throughout with very rare snags and an abundance of deadfall.	6, 7
13.	FODM7-7	Fresh-Moist Manitoba Maple Lowland Deciduous Forest	This forest community canopy is dominated by Manitoba Maple with a sub-canopy that contained occasional to rare Manitoba Maple and American Elm (Ulmus americana). The understory and ground layers are densely occupied by an abundant combination of Sensitive Fern, Common Buckthorn, Black Raspberry (Rubus occidentalis), Virginia Creeper (Parthenocissus quinquefolia) and Poison-hemlock (Conium maculatum).	8
17.	MAMM1	Graminoid Mineral Meadow Marsh	This marsh community was dominated by Lake-bank Sedge (Carex lacustris) with abundant Sensitive Fern and occasional to rare Purple Loosestrife (Lythrum salicaria) and Spotted Jewelweed (Impatiens capensis).	11
18.	MAMM1-12	Common Reed Graminoid Mineral Meadow Marsh	This marsh community was dominated by European Common Reed (Phragmites australis ssp. australis) with rare occurrences of Narrow-leaved Cattail.	12
19.	MAMM1-2	Cattail Graminoid Mineral Meadow Marsh	This marsh community was dominated by Narrow-leaved Cattail.	13
21.	MASM1-1	Cattail Mineral Shallow Marsh	This marsh community was dominated by Narrow-leaved Cattail. Very shallow standing water was observed within this community (<0.05m).	15

Polygon #	ELC Code	Classification	Vegetation	Photo Reference (Attachment 2)
22.	MASM1-12	Common Reed Mineral Shallow Marsh	This marsh community was dominated by European Common Reed. Very shallow standing water was observed within this community (<0.05m).	16
23.	MEFM1-1	Golden Forb Meadow	This meadow was dominated by Goldenrod species (Solidago sp.) with occasional Reed Canary Grass (Phalaris arundinacea) and Canada Anemone (Anemone canadensis).	17
24.	MEGM4	Fresh-Moist Graminoid Meadow	This meadow community was dominated by Grass species (Poaceae sp.) such as Reed Canary Grass, Common Timothy (Phleum pratense) and Fowl Mannagrass (Glyceria striata).	29
29.	SWDM4	Mineral Deciduous Swamp	This swamp community canopy was dominated by American Elm and Black Ash (Fraxinus nigra) with occasional Trembling Aspen. Ground layer contained occasional Sensitive Fern, Common Buckthorn and Canada Anemone and sapling Black Ash. Occasional Black Ash deadfall was observed on the ground layer. Evidence of EAB throughout.	20
30.	SWDM4-5	Poplar Mineral Deciduous Swamp	This swamp community canopy was dominated by Trembling Aspen with occasional to rare Balsam Poplar (Populus balsamifera) associates. Ground layer contained abundant Sensitive Fern and occasional Philadelphia fleabane (Erigeron philadelphicus).	21
32.	SWTM3	Willow Mineral Deciduous Thicket Swamp	This thicket was dominated by Peach-leaved Willow (Salix amygdaloides) with occasional Red-osier Dogwood (Cornus sericea ssp sericea) and Black Raspberry. The ground layer contained abundant Lake-bank Sedge with occasional Sensitive Fern and Purple Loosestrife.	23

Table 2: Breeding Bird Survey Results

Scientific Name	Common Name	SARA[1]	ESA[2]	SRANK[3]
Agelaius phoeniceus	Red-winged Blackbird	---	---	S4
Bombycilla cedrorum	Cedar Waxwing	---	---	S5B
Carduelis tristis	American Goldfinch	---	---	S5B
Catharus fuscescens	Veery	---	---	S4B
Corvus brachyrhynchos	American Crow	---	---	S5B
Cyanocitta cristata	Blue Jay	---	---	S5
Empidonax alnorum	Alder Flycatcher	---	---	S5B
Geothlypis trichas	Common Yellowthroat	---	---	S5B
Melospiza melodia	Song Sparrow	---	---	S5B
Mniotilta varia	Black-and-white Warbler	---	---	S5B
Poecile atricapillus	Black-capped Chickadee	---	---	S5
Setophaga magnolia	Magnolia Warbler	---	---	S5B
Setophaga petechia	Yellow Warbler	---	---	S5B
Setophaga ruticilla	American Redstart	---	---	S5B
Spizella passerina	Chipping Sparrow	---	---	S5B
Sturnus vulgaris	European Starling	---	---	SNA
Turdus migratorius	American Robin	---	---	S5B
Zonotrichia albicollis	White-throated Sparrow	---	---	S5B

[1]Federal Species at Risk Act, 2002; [2]Provincial Endangered Species Act, 2007; [3]Provincial Sub-national Rank (S4 – Apparently Secure, S5 – Secure, SNA = Not Applicable - a conservation status rank is not applicable because the species is not a suitable target for conservation activities; N = non-breeding population; B = breeding population; --- denotes no information or not applicable).

Appendix B

Hawkesbury Bridges at County Rd. 17
Fisheries Memo – May 11, 2020

Memo

To: Brian Utigard, Project Manager – Ministry of Transportation, Ontario (MTO)

From: Dylan Morse, Fisheries Assessment Specialist – Dillon Consulting Limited (Dillon)
Jessica Wright, Fisheries Assessment Specialist – Dillon

cc: John Hanna, Head Environmental Section – MTO
Tanya Cross, Project Manager – Dillon
Adele Mochrie, Environmental Planner – Dillon
Matthew McFadden, Structural Engineer – Jacobs
Douglas Raby, Structural Engineer – Jacobs

Date: May 11, 2020

Subject: Retainer #4016-E-0012 - Assignment #14 – Bridge Replacements
County Road 17, at Hawkesbury Creek/CNR Overhead and
Highway 34 Overpass at County Road 17
Addendum Memo to Fish and Fish Habitat Impact Assessment Report (GWP 4203-15-00)

Our File: 17-5180

The Ministry of Transportation, Ontario (MTO) retained Dillon Consulting Limited (Dillon) to complete a series of structural rehabilitations and replacements under Retainer #4016-E-0012 in Eastern Ontario. The assignments are being completed following MTO's Class Environmental Assessment (EA) for Provincial Transportation Facilities (2000) and include both preliminary and detail design projects.

This project includes the replacement of two structures on County Road 7, in the Town of Hawkesbury, namely Hawkesbury Creek/CNR Overhead (Site No. 27-50) and Highway 34 Overpass at County Road 17 (Site No. 27-51) (**Figure 1**).

Dillon completed a Fish and Fish Habitat Assessment Report (February 2019) for the replacement works of the two bridges. The report was prepared in accordance with the existing *Fisheries Act* at the time of writing, prior to new provisions coming into force on August 28, 2019. In addition, the report was prepared in accordance with MTO's *Environmental Guide for Fish and Fish Habitat* (the Guide; MTO 2009) and followed the MTO/Fisheries and Oceans Canada (DFO)/Ministry of Natural Resources and Forestry (MNRF) *Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings*; Version 3, 2016 (The Protocol).

On August 28, 2019, provisions of the new *Fisheries Act* came into force. Subsequently, in November 2019, MTO released an Operational Procedure: ENV19-01 Interim Direction for the use of the MTO/DFO/MNRF Protocol for Protecting Fish and Fish Habitat on Provincial Undertakings; to provide interim direction on the use of the Protocol following the 2019 *Fisheries Act* amendments. The purpose of this Addendum Memo to the Fish and Fish Habitat Existing Conditions Report (Dillon, 2019) is to reassess the project with consideration for the updated *Fisheries Act* and use of MTO's interim direction for assessment of projects under the *Fisheries Act.*

Methods

Dillon has reviewed the Fish and Fish Habitat Impact Assessment Report (Dillon 2019), including the project description, potential impacts and proposed mitigation measures. In addition, the Pathways of Effects (PoE) and Aquatic Effects Assessment Summary Table have been reviewed in the context of the updated *Fisheries Act* and MTO's interim direction for assessment of projects under the *Fisheries Act*. The Aquatic Effects Assessment Summary Table has been updated from Template 10.3, in the Fish and Fish Habitat Impact Assessment Report (Dillon, 2019), to reflect the current Template D3 and included in **Attachment 1**. With the understanding that the proposed project works remain the same as outlined in the Fish and Fish Habitat Impact Assessment Report (Dillon 2019), the potential impacts to fish and fish habitat also remain unchanged.

Project Likelihood of Causing Death of Fish or Harmful Alteration, Disruption of Destruction of Fish Habitat

As per the Fish and Fish Habitat Protection Policy Statement, August 2019 (Fisheries and Oceans Canada (DFO), 2019); "fish habitat" is defined in Subsection 2(1) of the *Fisheries Act* to include all waters frequented by fish and any other areas upon which fish depend directly or indirectly to carry out their life processes. The types of areas that can directly or indirectly support life processes include, but are not limited to: spawning grounds and nursery, rearing, food supply and migration areas. Furthermore, DFO interprets "harmful alteration, disruption or destruction" as any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish (DFO, 2019).

Works associated with the proposed bridge replacement activities will result in the following impacts:

- Disruption of approximately 23 m^2 of indirect fish habitat within the high water mark due to the installation of rock protection at the new bridge footing and sections of eroded shoreline adjacent to Hawkesbury Creek.

Application of the Protocol

As documented in the Fish and Fish Habitat Impact Assessment Report (Dillon 2019), as per Step 1 of the Protocol, based on the proposed replacement activities for the Hawkesbury Creek/CNR Overhead and proximity of works to Hawkesbury Creek and its tributary, the following are noted. The works are within 30 m of the high water mark of a permanently flowing, fish bearing watercourse and it was determined that the activities could cause death of fish or HADD of fish habitat. In accordance with Step 2 of the Protocol, through background review and agency consultation with the MNRF, it was determined that the site does not host any aquatic provincially or federally protected SAR but does provide habitat that supports a fishery and a potential species of Special Concern (River Redhorse). Following Step 3 of the Protocol, it was determined the project does not meet the conditions of any current BMP as outlined in the MTO *Best Management Practices Manual for Fisheries* (May 2018). Per Step 4, this Addendum



Ontario

MTO LARGE VALUE RETAINER - EAST REGION

ASSIGNEMENT No. 14 - HAWKESBURY

Project Location

FIGURE 1

- Project Location
- Railway
- Local Roads
- Arterial
- Highway
- Watercourse
- Waterbody

0 125 250 500 m

SCALE 1:15,015

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNRF

MAP CREATED BY: LK/SFG
MAP CHECKED BY: DL/MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

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PROJECT: 17-5180
STATUS: DRAFT
DATE: 5/8/2018

FILE LOCATION: G:\GIS\175180 MTO Large Value Retainer\mxd\Hawkesbury\TEAR\Figure 1 Study Area.mxd

Memo to the Fish and Fish Habitat Impact Assessment Report (Dillon 2019) documents the required fisheries assessment of works to determine the likelihood that the project may result in death of fish or HADD of fish habitat.

Based on the above, and the results of the Aquatic Effects Assessment (**Attachment 1**), the project is considered to be not likely to result in death of fish or HADD of fish habitat (Step 5). As such, an updated Project Notification Form has been completed and has been provided as **Attachment 2**.

Conclusion

Based on the proposed works, along with appropriate implementation of mitigation measures, it has been determined that the removal and bridge replacement works at the Hawkesbury Creek/CNR Overhead are not likely to result in death of fish or HADD of fish habitat. Based on the scope of work planned for the bridge replacement and the results of this Addendum Memo to the Fish and Fish Habitat Impact Assessment, a Project Notification Form has been prepared and attached for MTO review.

Attachment 1

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Template D3: Aquatic Effects Assessment Summary Table – Hawkesbury Bridge Replacements

AQUATIC EFFECTS ASSESSMENT TABLE				
Waterbody/ Watercrossing	**Pathway of Effect(s)**	**Stressor (Potential Impact)**	**Mitigation Measures**	**Residual Effects**
Hawkesbury Creek and Tributary	**Land-Based Activities**			
	Vegetation Clearing (L1) May be required along the banks adjacent to abutments	Alteration of riparian vegetation	Riparian vegetation is predominately grasses. Vegetation removal will be minimized where possible with proper clearing/grubbing techniques (as per OPSS 182). Area will be re-seeded post construction (OPSS 804)	None
		Bank stability and exposed soils	Erosion and sediment controls (ESC) will be designed and installed to contain or isolate the construction area, manage site drainage/runoff and prevent erosion of exposed soils and migration of sediment The site (including banks) will be stabilized (seeded and/or covered) prior to the removal of ESC (OPSS.PROV. 805 and 804)	None
	Grading (L2)	Use of industrial equipment	See "Use of Industrial Equipment" POE	---
		Vegetation clearing	See "Vegetation Clearing" POE	---
		Bank stability and exposed soils	Erosion and sediment controls will be designed and installed to contain or isolate the construction zone, manage site drainage/runoff and prevent erosion of exposed soils and migration of sediment	None

AQUATIC EFFECTS ASSESSMENT TABLE				
Waterbody/ Watercrossing	**Pathway of Effect(s)**	**Stressor (Potential Impact)**	**Mitigation Measures**	**Residual Effects**
			Disturbed areas on each side will be covered and stabilized upon completion	
		Increased erosion potential from change in slope.	Erosion and sediment controls will be designed and installed to contain or isolate the construction zone, manage site drainage/runoff and prevent erosion of exposed soils and migration of sediment	None
	Excavation (L3) Temporary disturbance within the areas of the existing footing and adjacent/east of existing footing for placement of new permanent footing and temporary pier	Use of industrial equipment	See "Use of Industrial Equipment" POE	---
		Change in channel stability	Channel stability is expected to be maintained	None
		Resuspension and entrainment of sediment	Sheet pile cofferdams will be used to isolate the work areas around the piers	None
		Vegetation clearing	See "Vegetation Clearing" POE	---
		Removal of topsoil	At the site of the temporary pier, top soil will be stripped and place up-bank from construction area for reuse upon removal. Top soil will be on level ground and surrounded by a silt fence No topsoil is anticipated present at site of new, permanent footing as are is protected with rock armouring and asphalt capping	None

AQUATIC EFFECTS ASSESSMENT TABLE				
Waterbody/ Watercrossing	**Pathway of Effect(s)**	**Stressor (Potential Impact)**	**Mitigation Measures**	**Residual Effects**
		Increased erosion potential	Erosion and sediment controls will be designed and installed to contain or isolate the construction zone, manage site drainage/runoff and prevent erosion of exposed soils and migration of sediment New slopes will be flattened where feasible and will be stabilized with rock protection upon completion	None
	Both Land and Water-Based Activities			
	Use of Industrial Equipment (B2) For constructing temporary access roads to work sites, grading, excavation of location for footings and pier, removal of temporary and existing structures, placement of rock armouring around footing and at select bank failure location at site, re-grading of site to like or better conditions on completion	Increased erosion potential	Erosion and sediment controls will be designed and installed to contain or isolate the construction zone, manage site drainage/runoff and prevent erosion of exposed soils and migration of sediment The site (including banks) will be stabilized (seeded and/or covered) prior to the removal of erosion and sediment controls (where applicable)	None
	Water-Based Activities			
	Placement of materials (W1) • While approximately 26 m^2 of creek bank will be affected by armouring, only approximately 50% may be within the high water mark. Therefore ~ 13m^2	Use of industrial equipment	See "Use of Industrial Equipment" POE	---
		Partial constriction of flow	Placement of the armouring around the footing shall be within the existing footprint of the current armouring and asphalt capping	Negligible

AQUATIC EFFECTS ASSESSMENT TABLE				
Waterbody/ Watercrossing	**Pathway of Effect(s)**	**Stressor (Potential Impact)**	**Mitigation Measures**	**Residual Effects**
	of indirect habitat may be disrupted until vegetation re-establishes • Along the shoreline at locations of failed armouring, there will be ~10 m^2 of rock protection added within the high water mark		Stone used along banks at areas of existing bank failure shall be placed to mimic existing bank slope and channel curvature. Rock shall not extend out into the creek	
		Input of contaminants	New armour stone shall be free of contaminants. No concrete rubble to be used as armouring	---
	Debris Management (W4) • Removal of the existing two footings, one temporary pier, and entire existing bridge deck over the creek valley • Removal of existing bridge structures will be in pieces directly out of creek valley and floodplain • Decking may be used to prevent sections of bridge deck from falling into creek	Use of industrial equipment	See "Use of Industrial Equipment" POE	---
		Input of contaminants	Temporary decking may be constructed to prevent debris falling directly into the creek Structures removed shall be directly out of the floodplain with no dragging Likewise, if accidental fall of material ends in the creek, the material shall be removed immediately and by direct lift (no dragging)	None

Attachment 2

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MTO PROJECT NOTIFICATION FORM

MTO Project Title: Hawkesbury Bridge Replacements	**MTO Project W.P. No.:** GWP 4203-15-00

PART 1: PROPONENT INFORMATION

Ministry of Transportation Office: Kingston		**MTO Region:** Eastern
Mailing Address: 1355 John Counter Blvd.		
City/Town: Kingston	**Province:** Ontario	**Postal Code:** K7L 5A3

MTO Service Provider: Dillon Consulting Limited/Jacobs	**MTO Project Manager:** Brian Utigard
Telephone #: (613) 667-1842	**Telephone #:** (613) 449-0753
Email: Tim.Dickinson@jacobs.com	**Email:** Brian.Utigard@ontario.ca

PART 2: PROJECT INFORMATION

Federal or Provincial aquatic species at risk (SAR) present within project limits: **YES ☐ NO☒** **List Species:**	**SAR Location:**

Summary of Fish and Fish Habitat Present at the Worksite, if applicable (i.e., species, substrate type, vegetation; refer to Template D2): Hawkesbury Creek flows in a northerly direction towards the Ottawa River with the confluence approximately 2.0 km downstream of the Hawkesbury Creek/CNR Overhead at County Road 17 (see Figure 1 and Figure 2 of Fish and Fish Habitat Impact Assessment). MNRF has indicated that Hawkesbury Creek is considered to have a moderate habitat sensitivity and is managed for a combined warmwater/coolwater fish community that includes "…Carps, Minnows, Northern Pike, Muskellunge, Smallmouth Bass, White Sucker, Sunfishes and Suckers" (see Appendix D of Fish and Fish Habitat Impact Assessment).

MMM Group biologists completed field work on June 8 and October 15, 2015 (see Appendix B of Fish and Fish Habitat Impact Assessment). Watercourse field record forms and habitat map forms were used to collect and document information including digital photographs to show existing conditions. Habitat assessments were completed over two broad reaches from 75 m upstream to 250 m downstream of the bridge. On May 31, 2017, a Dillon biologist attended the site to record photographs (see Appendix C of the Fish and Fish Habitat Impact Assessment). Upstream of the bridge crossing on Hawkesbury Creek, the average wetted width was approximately 10 m with an average depth of 1.0 m. The channel morphology of this reach was Run/Riffle (60/40%). Substrates, in order of dominance, consisted of a mixture of gravel, cobble and sand though cobble and some boulders (suspected to be from failed bank armouring upstream) were the dominant substrate in riffle sections. Available in-stream cover for fish was limited to undercut banks, boulders/cobble, emergent aquatic vegetation and some overhanging bank vegetation. Downstream of the bridge, the channel runs relatively straight through the area of investigation. The channel width and depth, substrate types, instream cover and riparian zones of this lower reach are similar to the upstream reach. Fish collection by MMM in 2015 resulted in the capture of two species of common baitfish: Longnose Dace and Common Shiner. The reach of the tributary that could be accessed upstream of

Highway 34 exhibited minimal flow and was choked with vegetation (Appendix B of Fish and Fish Habitat Impact Assessment). During the assessment of the tributary in 2015, unidentified young-of-the-year (YOY) baitfish were observed.

Location of Project: Interchange of Highway 34 and County Road 17	**Geographic Coordinates (Lat/Long):** Latitude: 45 deg. 35.775 N Longitude: 74 deg. 37.240 W
Name of Nearest Community: Hawkesbury, Ontario	**Name of Waterbody(ies):** Hawkesbury Creek and Tributary

Description of Works/Undertakings/Activities:

Two new bridges will be constructed with the finished location of the structures on the same basic alignment as the existing structures. The Hawkesbury Creek/CNR Overhead will be changed from a three-span to a two-span structure with a total span length increased from 57.0 m to 71.0 m. The location of the new columns and footing will be located slightly closer to Hawkesbury Creek than the current pier. The Highway 34 Overpass will be replaced with a similar structure to the current structure.

In general, the project work on both structures will be completed in the following stages:

- Installation of sediment and erosion measures isolating the work area from the floodplain and waterways
- Construction of temporary access roads to access footings and columns within floodplain (Hawkesbury Creek/CNR Overhead only)
- Construction of temporary and permanent bridge structures including: temporary piers and abutments, permanent new footing and columns (Hawkesbury Creek/CNR only)
- Lateral-slide of new structures from temporary location to permanent location
- Activation of traffic on new structures
- Removal of the existing, unused structures including currently existing structures and temporary structures (abutments, footings, columns, etc.)
- Deactivation of temporary access roads in floodplain (Hawkesbury Creek/CNR Overhead only)
- Stabilization of sites including grading and vegetative plantings.

Construction activities are anticipated to commence in January 2020 and be completed by the end of 2020. For the Hawkesbury Creek/CNR Overhead Bridge, there will be the addition of two piers; one temporary and one permanent with the permanent footing and columns being approximately 3.7 m closer to the creek than the existing. The temporary pier and new permanent footing are not within the high water mark but are likely within the active floodplain within 30 m of the creek. The replacement of armouring at the new footing and placement of rip-rap armouring along eroded sections of shoreline represents a combined total of 23 m^2 of disrupted indirect fish habitat.

Proposed Start and End Date of Works/ Undertakings/Activities: 2020/01/06 – 2020/12/31	**In-water Works Timing Window:** No in-water work March 15 to July 15 of any given year

Attached Documents and Photos (check all that apply

Site Map ☒ **Site Photos** ☐ **Drawings** ☐

Template D1 ☒ **Template D2** ☒ **Template D3** ☒ **Template D4** ☐

Other: A Site Map is included on Figure 1 of the Addendum Memo. Template D3 is included in Attachment A of the Addendum Memo.

PART 3: TYPE OF NOTIFICATION

☐ Step 3 – MTO Fisheries Best Management Practice(s) (COMPLETE PARTS 1-3 AND 5 ONLY)	☒ Step 4 - No likelihood of the Death of Fish or Harmful Alteration, Destruction or Destruction (HADD) of Fish Habitat (COMPLETE ALL PARTS)
Which BMP(s) are you following?	

Rationale (for applicability of BMP or No Death of Fish or HADD of Fish Habitat determination):
In summary, based on the proposed works, along with the implementation of mitigation measures, it has been determined that the project is not likely to result in the death of fish or HADD of fish habitat.

Minor disruption to indirect fish habitat may occur:

- There will be the addition of two piers; one temporary and one permanent with the permanent footing and columns being approximately 3.7 m closer to the creek than the existing. The temporary pier and new permanent footing are not within the high water mark but are likely within the active floodplain within 30 m of the creek. The total footprint of permanent structure to be installed above the high water mark is ~58.5 m^2 (4.5 wide x 13.0 long).
- The replacement of armouring at the new footing and placement of rip-rap armouring along eroded sections of shoreline represents a combined total of 23 m^2 of disrupted indirect fish habitat.

The above undertakings are not anticipated to result in a loss of wetted area available as direct fish habitat but will affect immediate indirect fish habitat along the banks within the high water mark.

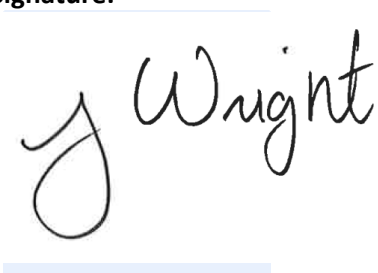
PART 4: MEASURES TO PROTECT FISH AND FISH HABITAT (CHECK APPLICABLE MEASURES TO BE INCLUDED IN CONTRACT)

Mitigation Measures	Applicable Contract Provisions
Timing Constraints: ☒ Temporary in-water will be completed during the in-water work timing window	☒ OPSS.PROV 182 ☒ SSP101F23 – Table A
Dewatering/Flow Control: ☒ All in-water work shall be completed in the dry by isolating and dewatering the work area or by temporary flow control around the work area	☒ OPSS.PROV 517 ☒ SSP 517F01
Erosion and Sediment Control: ☒ Vegetation removal shall be limited to only the extent required for the proposed works ☒ Use of effective sediment and erosion control measures shall be implemented and maintained to function as intended ☒ Sediment and erosion controls shall remain in place and maintained until such time as the vegetation has taken sufficiently to provide adequate protection for the watercourse	☒ OPSS.PROV 805 ☒ SSP 805F01 ☒ Operational Constraint – Erosion and Sediment Control
Culvert Installation: ☐ Culvert(s) shall be embedded a minimum of 10% ☐ Low flow channel shall be installed to ensure fish passage	☐ OPSS.PROV 182 ☐ OPSS.PROV 823
Protection of Fish:	☒ OPSS.PROV 182

☒ Safe fish passage shall be maintained/provided ☒ Any fish trapped in the isolated area during de-watering shall be captured and released as directed in the Licence to Collect Fish for Scientific Purposes ☒ Water intakes or outlet pipes shall have screens to prevent entrainment or impingement of fish	
Equipment and Machinery: ☒ All equipment shall be clean and in good working order (no leaks of fuel, grease or oils) and a spill management plan shall be kept on site ☒ Areas for refuelling and maintenance of machinery shall be 30m or as far away as practicable from any waterbody	☒ OPSS.PROV 100 ☒ OPSS.PROV 182
Materials Management: ☒ All construction debris, including removed sheet piling and litter shall be removed on a regular basis ☒ Stockpiles shall be located and isolated to ensure material will not enter any watercourse ☒ Excess materials shall be disposed of in accordance with the Contract Documents	☒ OPSS.PROV 100 ☒ OPSS.PROV 180 ☒ OPSS.PROV 182
Site Restoration: ☒ All disturbed areas shall be restored to original site conditions or better	☒ OPSS.PROV 182 ☐ OPSS 802 (Topsoil) ☐ OPSS.PROV 803 (Sodding) ☐ OPSS.PROV 804 (Seed and Cover)
Oversight: ☐ An MTO qualified fisheries contracts specialist shall monitor the site for compliance with the contract documents relating to the protection of fish and fish habitat and installation and maintenance of mitigation measures	☐ SSP101 F23 – Table B
Additional Mitigation Measures (list measures):	**Additional Contract Provisions (list relevant Special Provisions, Items, OPSSs, OPSDs, etc.):** ☐ SSP101 F23 – Table C

PART 5: SIGNATURE

I, the undersigned, have reviewed the fish and fish habitat information and the proposed mitigation measures. In accordance with the MTO/DFO/MNRF Fisheries Protocol, I have determined that the proposed works will not likely result in the death of fish or the harmful alteration, disruption or destruction of fish habitat.

Name: Jessica Wright	☒ **Qualified fisheries assessment specialist** *(check if applicable)*
Signature: 	**Date:** May 8, 2020

Ontario

Ministry of Transportation

TEMPLATE D1: LOCATION OF WORK TABLE

Waterbody	Highway	Municipality	Location of Stream (GPS Coordinates)
Hawkesbury Creek	Highway 34 overpass at County Road 17	Town of Hawkesbury	45.596240° -74.621885°
Tributary to Hawkesbury Creek	Highway 34 overpass at County Road 17	Town of Hawkesbury	45.597385° -74.621085°

NOTES:

- Complete this table if the Notification Form will address numerous waterbodies. Alternatively, a topographic map clearly depicting all applicable waterbodies could be used.
- Template 10.1 - Location of Work Table may be included in the Fish and Fish Habitat Existing Conditions Report.

Template D2: Existing Fish and Fish Habitat Conditions Summary Table

GWP	Waterbody[1]	Latitude Longitude	Date[1]	Flow[1]	Thermal Regime[1]	Fish Habitat[1]	Fish Species Present[1]	Substrate Type[1]	Vegetation[1]	Constraints and Opportunities	Specialized, Limiting, or Rare Fish Habitat Features	Species at Risk Present	In-water Works Timing Window[2]
GWP #	**Name of Waterbody and Crossing #/Station**	**Decimal Degrees**	**Date Sampling Occurred**	**Ephemeral, Intermittent, Permanent**	**Warm, Cool, Cold**	**Fish Habitat**	**Indicate if the information is from background secondary source data (indicate source) or if obtained through field investigation**	**e.g., Boulder, cobble, rubble, gravel, sand, muck, etc.**	**Riparian and In-stream species**	**e.g., Perched culvert, eroding bank, fish passage barrier, undersized CSP**	**e.g., Ground water upwelling, spawning areas, refugia, migratory routes**	**Indicate/describe the SAR and/or critical habitat present**	**Timing window for when in-water work can occur[9]**
GWP-4203-15-00	Hawkesbury Creek	45.596240° -74.621885°	June 8, 2015 & October 1, 2015	Permanent	Warm	Direct Fish Habitat	Longnose Dace, Common Shiner	Runs: Gravel, Cobble, Sand Riffles: Boulder, Cobble	Riparian: forest, grasses, sedges In-stream: filamentous algae, Water Plantain	None identified	None identified	None identified	July 16th to March 14th
GWP-4203-15-00	Tributary to Hawkesbury Creek	45.597385° -74.621085°	October 1, 2015	Permanent	Cold (due to watercress presence)	Upstream: Direct Fish Habitat Downstream: unknown	YOY Baitfish	Riffles: Sand, Muck, Clay	Riparian: cultural meadows, grasses, sedges In-stream: Watercress, cattail grasses	None identified	None identified	None identified	July 16th to March 14th

1=Data from Appendix B of the Fish and Fish Habitat Impact Assessment Report (Dillon, February 2019); 2=Data from Appendix F of the Fish and Fish Habitat Impact Assessment Report (Dillon, February 2019).

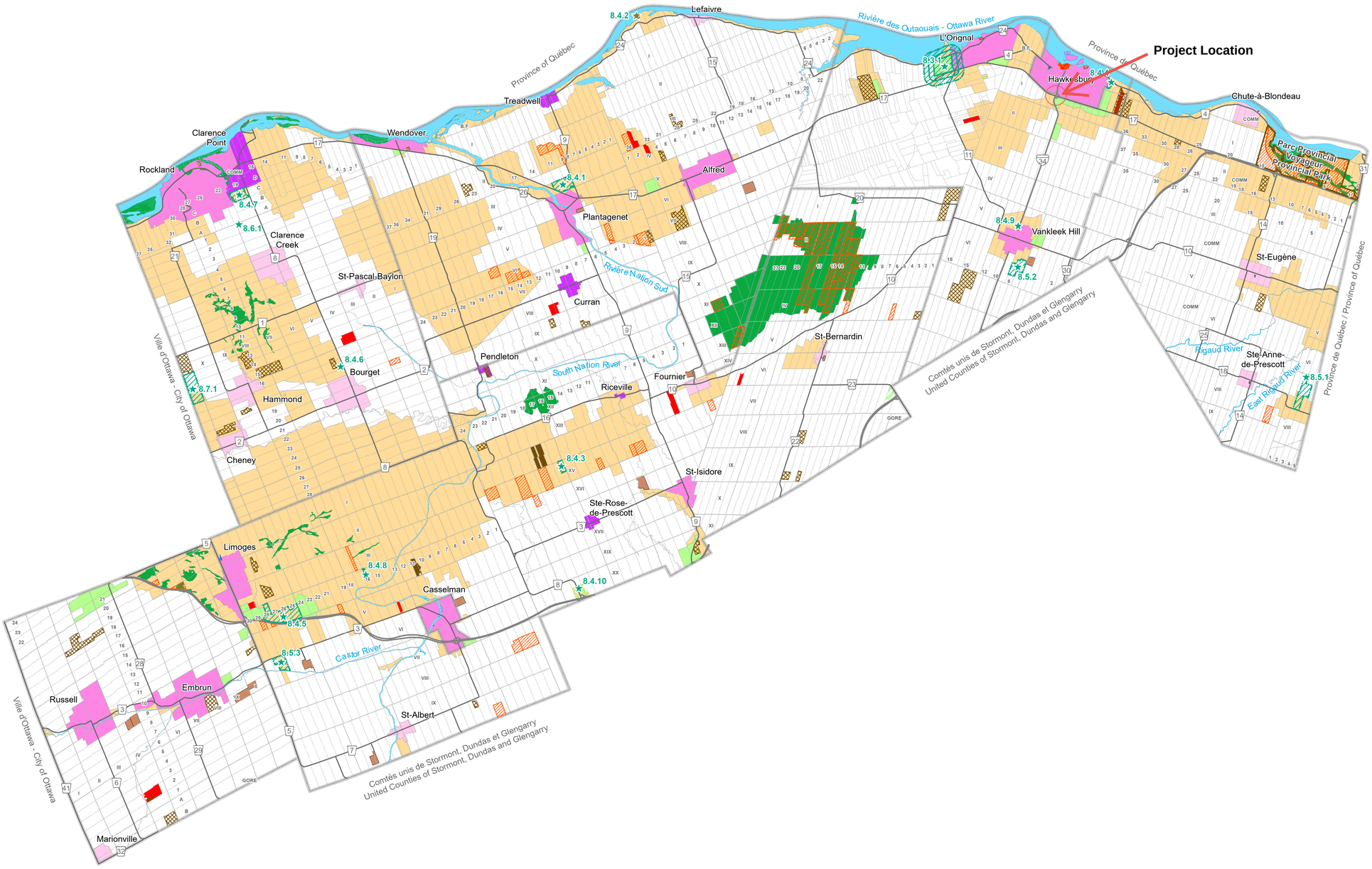
Appendix C

Official Plan Schedules

Prescott Russell

Schedule A2

Land Use Designation



Legend

Sustainable Communities

- Urban Policy Area
- Community Policy Area
- Hamlet Policy Area
- Rural Policy Area
- Trade and Industry Policy Area

Resources

- Agricultural Policy Area

Natural Heritage

- Provincially Significant Wetland

Infrastructure Policies

- Landfill Site
- Water Treatment Site
- Waste Water Treatment Site
- Septage Disposal Site

Overlay

- Crown Land
- Active Pit and Quarry
- Voyageur Provincial Park
- Trade and Industry Policy Area Land Reserve

Site Specific Exceptions

- 23.1.1 Reference Number to the Official Plan

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Scale: 1:120,000

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Kilometers

Notes

By-law 2022-26

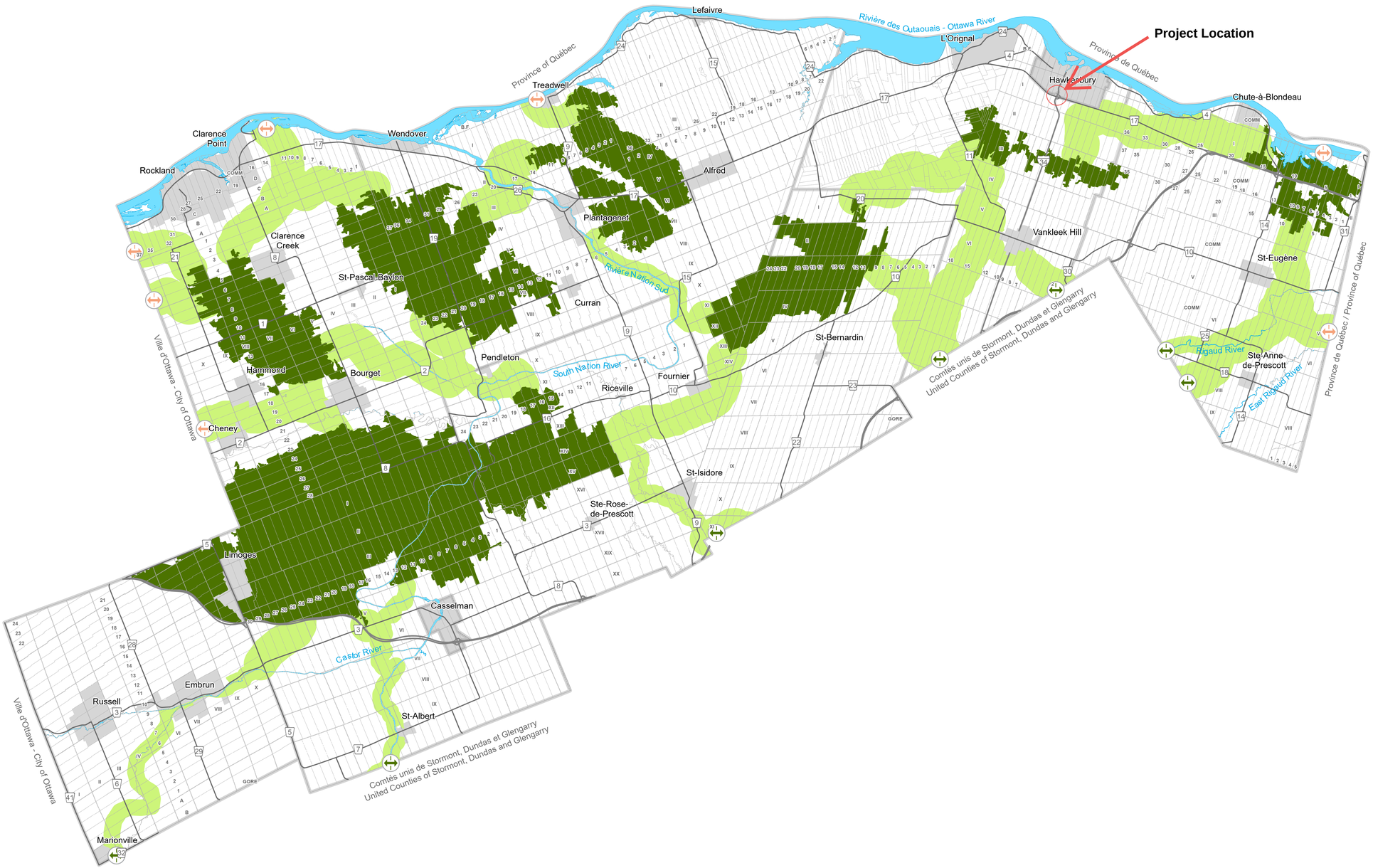
This schedule forms part of the Official Plan of the United Counties of Prescott and Russell and must be read in conjunction with the text. For more information about cartographic sources, please consult the appropriate section of the Official Plan.

Prepared by the Planning and Forestry Department, United Counties of Prescott and Russell.

Date: 2022-09-30

Schedule B1

Natural Heritage System



Legend

- Linkage Natural Area
- Regional Core Natural Area
- Linkage - Stormont, Dundas & Glengarry
- Linkage Cross Jurisdictional Boundaries

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NOTES

By-law 2022-26

This schedule forms part of the Official Plan of the United Counties of Prescott and Russell and must be read in conjunction with the text. For more information about cartographic sources, please consult the appropriate section of the Official Plan.

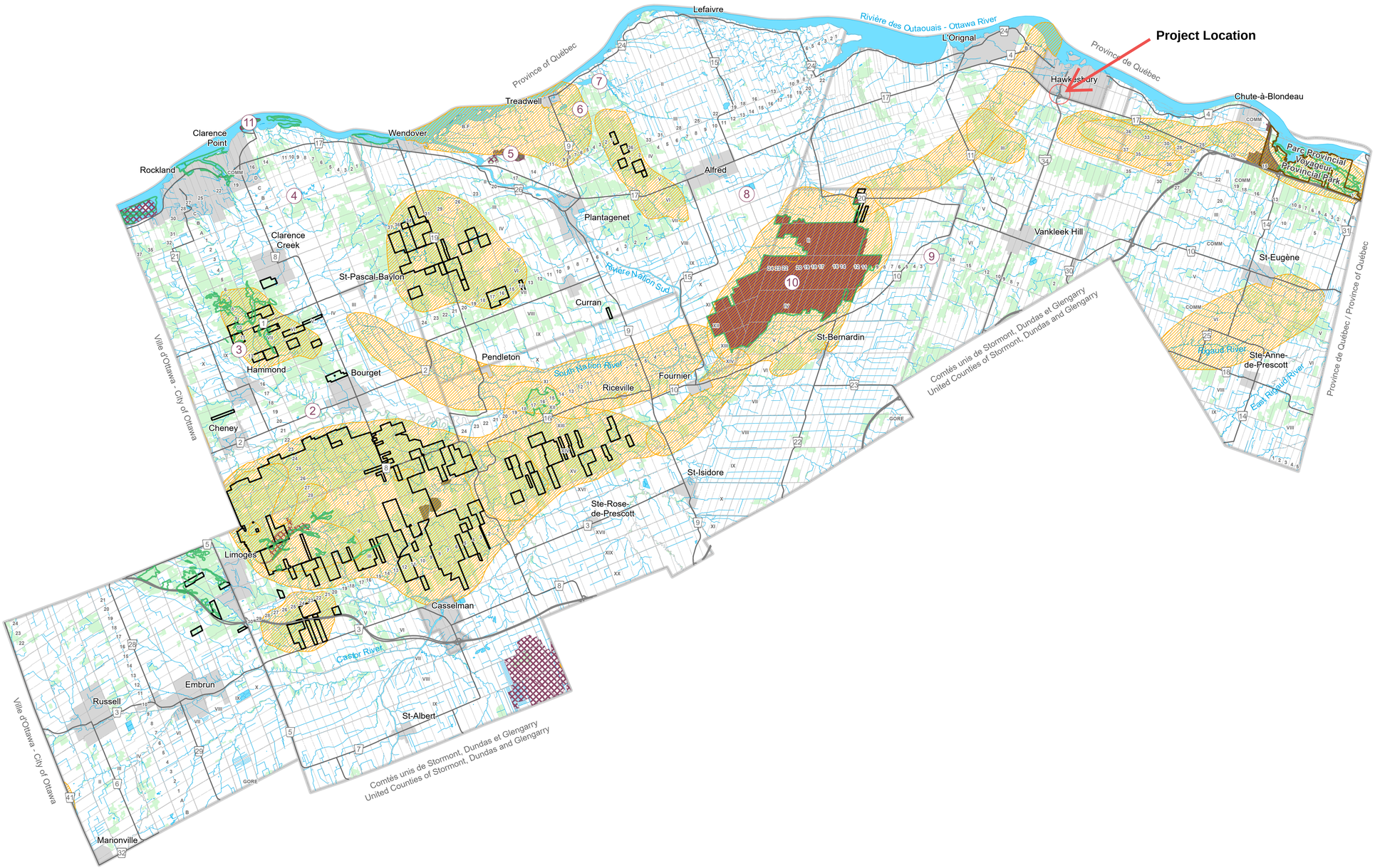
Prepared by the Planning and Forestry Department, United Counties of Prescott and Russell.

Date: 2022-09-20

Prescott Russell

Schedule B2

Natural Resources



Legend

Natural Features

- Provincially Significant Wetland
- Area of Natural and Scientific Interest (Life Science)
- Area of Natural and Scientific Interest (Earth Science)
- Area of Natural and Scientific Interest (Candidate)
- Wildlife Area
- Fish Habitat: Water Bodies, Water Streams and Municipal Drains
- Significant Woodland

Overlay

- Voyageur Provincial Park
- Larose Forest

Natural Sites of County Significance

- Larose Forest
- (2) Bourget Forest
- (3) Hammond Forest
- (4) Orient Hardwoods
- (5) Jessup's Falls Conservation Area
- (6) Lake George Forest
- (7) Lake George Outlet
- (8) Alfred Lagoon
- (9) McAlpine Woods
- (10) Alfred Bog
- (11) Clarence Island

N W E S

Scale: 1:120,000

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Kilometers

Notes

By-law 2022-26

This schedule forms part of the Official Plan of the United Counties of Prescott and Russell and must be read in conjunction with the text. For more information about cartographic sources, please consult the appropriate section of the Official Plan.

Prepared by the Planning and Forestry Department, United Counties of Prescott and Russell.

Date: 2022-09-20

Appendix D

Potential Impacts and Mitigation Measures

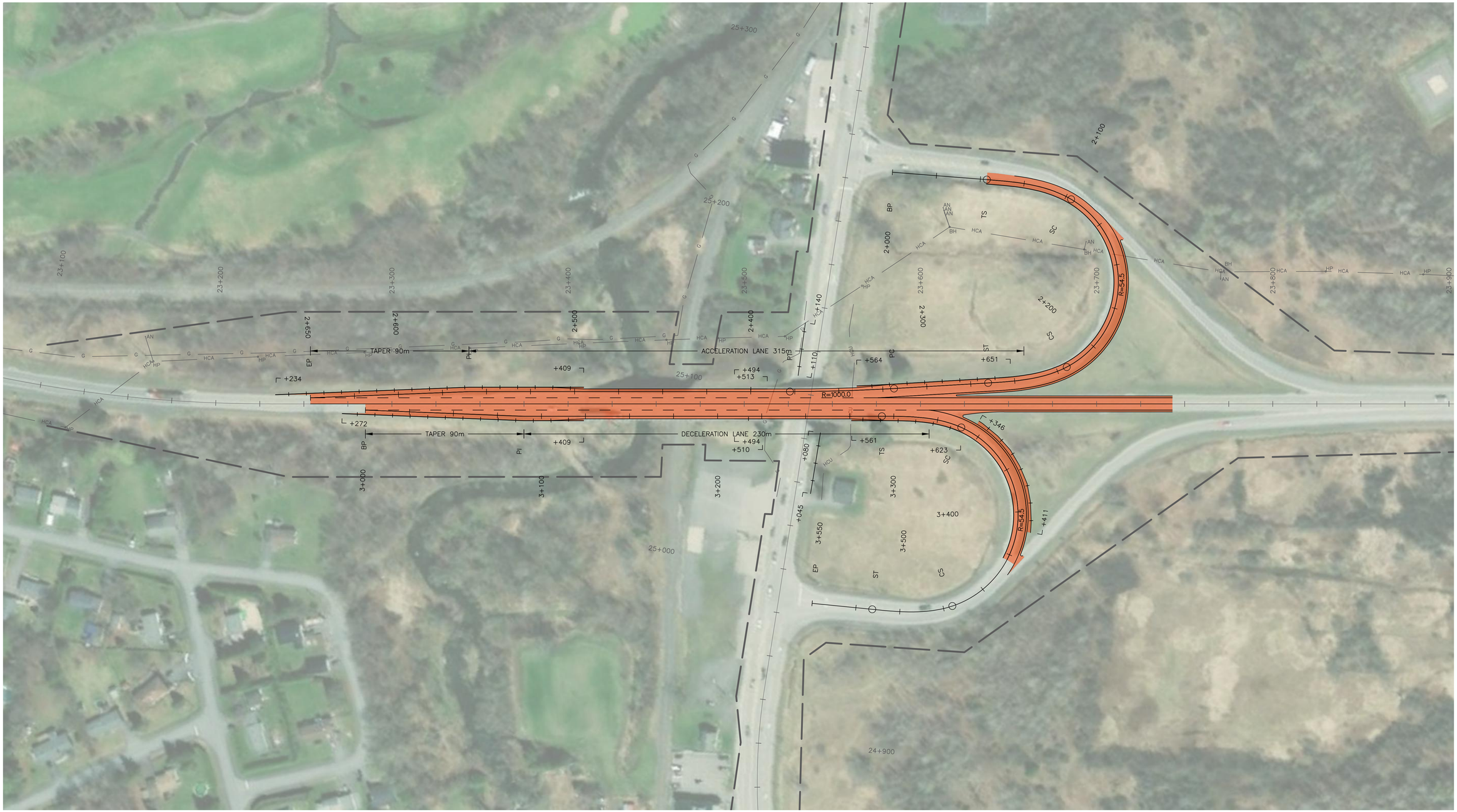
I.D. #	Potential Impacts/Concerns	Potentially Concerned Agencies/Stakeholders	Mitigation/Protection/Monitoring
1. Natural Features and Vegetation	• Increased erosion and sedimentation of lands adjacent to the construction area. • Removal woodland, meadow, and wetland habitat. • Increased vulnerability of the areas cleared of vegetation to invasion by non-native species.	MNRF, Municipality	Vegetation removal and/or trimming may be necessary to complete the two bridge replacements. No SAR or significant trees of concern will be impacted by the removals. Impacts to vegetation will be minimized by the following recommendations: • Minimize vegetation removal to the extent possible. • Follow tree felling and grubbing procedures as outlined in OPSS 201, Construction Specification for Clearing, Close Cut Clearing, Grubbing. • Areas temporarily cleared of vegetation to facilitate bridge construction should be stabilized (e.g., vegetated/seeded) prior to removal of erosion and sedimentation control measures. o Disturbed vegetated areas along Hawkesbury Creek should be re-vegetated to minimize invasion and colonization by non-native species and increase shade/cover for wildlife. o Develop and implement an erosion and sediment control (ESC) plan to mitigate impacts on riparian habitat. These measures should contain the construction area. o Minimize the disturbance of existing well-vegetated ditches and grassed slopes. o Protect undisturbed slopes and sensitive ditching with silt fence and temporary flow check dams. These measures should remain in place until exposed soils are stabilized. o Place erosion control blanket on 2:1 slopes where height warrants its use. o Place appropriately sized rip rap and geotextile at new and existing storm sewer outlets. o Erosion and sediment control measures shall be monitored regularly and/or after every 10 mm or greater rainfall event as they could require periodic cleaning, maintenance and/or re-construction. If deficiencies are found, they should be repaired and/or replaced promptly. o Grading, placement of topsoil and seeding specifications will be implemented to decrease erosion potential and promote suitable vegetation regeneration. o The site shall be stabilized prior to removal of erosion and sediment control measures. • A dewatering plan (if applicable) should be prepared in accordance with environmental best management practices.
2. SWH (Turtle Nesting, Amphibian Breeding, Bat Maternity Colonies)	• Temporary disruption to wildlife movement and wildlife avoidance of habitat areas adjacent to the Hawkesbury Creek and tributary of Hawkesbury Creek during replacement due to disturbance associated with construction activity. • Harm or temporarily harass herptiles that could move along riparian habitat or in-water through the Study Area during construction.	MNRF, Municipality	• It is recommended that exclusion fencing be installed in select areas immediately adjacent to the work area at Hawkesbury Creek. The fencing could be combined with erosion and sediment control measures. Further details are described below (see *Species of Conservation Concern*). • If wildlife is encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way. • The Hawkesbury Creek and CNR overhead is in proximity to wetland units and aquatic habitat. However, there is low likelihood of occurrence of a reptile or amphibian in the construction zone given the exclusion fencing proposed. If reptiles and amphibians are persistently found in the construction zone and allowing them to vacate in accordance with the wildlife encounter protocol described herein is found to delay construction activity, a Scientific Wildlife Collectors Permit under the *Fish and Wildlife Conservation Act*, 1997 could be sought by a qualified professional in order to complete wildlife salvages and transport these herptiles to an alternative habitat location. • If a turtle nest is encountered during construction, it is recommended that a qualified biologist extract the nest and transport the eggs to a suitable wildlife care facility such as a turtle trauma centre. • Potentially suitable habitat for bats exists within the Study Area. Tree removals should occur outside of the active window for bats (April 1 – September 30) of any given year. If tree removals are required in this window and appear to be potentially suitable maternity roost habitat (e.g., cracks and crevices, peeling bark), then a bat exit survey should occur prior to removal.
3. SWH for Species of Conservation Concern (Snapping Turtle, Wood Thrush, Eastern Wood-Pewee, Eastern Ribbonsnake)	• Harm or temporarily harass SCC herptiles that could move along riparian habitat or in-water through the Study Area during construction (e.g., Snapping Turtle and Eastern Ribbonsnake). • Potential harm or temporary harassment of Snapping Turtle, which was observed within the Study Area. • Potential harm or temporary harassment to SCC birds (Eastern Wood-Pewee, Evening Grosbeak and Wood Thrush) in woodland areas in the Study Area.	MNRF, Municipality	There is potential for seven SCC to be present within the Study Area and affected by the proposed project activities. To generally mitigate potential impacts on these species, a fact sheet and detection protocol for these species shall be provided to the contractor before project construction begins. To mitigate potential impacts on these species, the follow measures shall be implemented: • Confine work to the designated construction areas. • Workers should be vigilant and check work areas and machinery for the presence of reptiles prior to each day of construction. • Measures shall be put in place to prevent these species from entering construction areas. These measures shall include the installation of temporary fencing in proximity to the creek to exclude herptiles from the general construction area . The temporary fencing can be installed just prior to construction (in conjunction with installation of erosion control measures) and left in place during the turtle active season (April 15 – October 1). If construction begins after April 15, a wildlife sweep of the construction area is recommended prior to fence installation and construction to observe any herptile nests present in the area. • Exclusion fences shall be included on contract drawings and specifications. • It is recommended that the exclusion fencing installed for herptiles should follow guidelines set out on the MNRF's SAR Branch Best Practices Technical Note on Reptile and Amphibian Exclusion Fencing (MNRF 2013) in order to provide the most effective protective function and prevent mortality to herptiles.

I.D. #	Potential Impacts/Concerns	Potentially Concerned Agencies/Stakeholders	Mitigation/Protection/Monitoring
	• Potential harm or temporary harassment to SCC birds (Barn Swallow) which have previously confirmed nests under the eastern abutment to the Hawkesbury Creek CNR Overhead		• If these species are encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way. If the species persists in the work area, a person qualified to handle herptiles should be contacted to relocate the animal. • Follow mitigation measures for migratory nesting birds in #3 in this table above. Construction activities should be completed outside the breeding bird period (April 1 to August 31). Vegetation removal can occur during the restricted period if a qualified Avian Biologist conducts a nest search of the area prior to work commencing and determines that active nests are not observed in proximity to the work area. Should active nests be found, a buffer must be applied to the area around the nest until the young have left the nest. This could result in delays to the construction contract. If breeding birds and/or nests are encountered, works should not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest. • Preventative measures (e.g., netting) should be erected under the Hawkesbury Creek CNR Overhead prior to April 1 to mitigate Barn Swallow nesting from occurring.
4. Migratory Nesting Birds (Barn Swallow, all other MVCA protected bird species)	• Potential destruction of migratory bird nests, eggs or young in vegetated areas prior to and during construction (e.g., site preparation). • Temporary decrease in potential marginal migratory bird nesting habitat in areas cleared of woodland and meadow vegetation within the Study Area.	MNRF, Municipality, MVCA	Birds are protected under the *Migratory Bird Convention Act* (MBCA). To protect birds and comply with the MBCA, the following measures shall be incorporated into the construction Contract: • Construction activities, including site preparation and vegetation removals, will be completed outside the breeding bird period (April 1 to August 31). Bird nest prevention/deterrent measures (e.g., tarping) should be installed prior to April 1 to prevent nesting and allow construction to occur during the restricted bird breeding period. • Vegetation removal can occur during the restricted period if a qualified Avian Biologist conducts a nest search of the area prior to work commencing and determines that active nests are not observed in proximity to the work area. Should active nests be found, a buffer must be applied to the area around the nest until the young have left the nest. This could result in delays to the construction contract. • If breeding birds and/or nests are encountered, works should not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest.
4. Species at Risk (ESA) (SAR Bats, Butternut and Black Ash)	• Potential indirect affects to non-retainable Butternut trees located outside of the vegetation removal area.	MECP, Municipality	There is confirmed occurrence of two provincial SAR (Black Ash and Butternut) and potential occurrence of four SAR bats within the Study Area and have potential to be affected by the proposed project activities. To generally mitigate potential impacts on this species, a fact sheet and detection protocol for the species shall be provided to the contractor before project construction begins. An updated tree inventory should be completed to identify the locations of Black Ash and Butternut. Black Ash and Butternut identified within 30 m of the grading limit or workspace should be assessed by a qualified Health Assessor as per the guidance from the ESA. To mitigate potential impacts on the species, the follow measures shall be implemented: • Confine work to the designated construction areas. • Any SAR sightings should be reported to MNRF's NHIC. • Suitable Butternut and Black Ash trees are to be retained in the Study Area, and no earthworks are to occur within 30 m of the stem of healthy individuals. For SAR bats, removal of woodland areas identified as potentially suitable SAR bat habitat should be avoided. If tree removals are required, they should occur outside of the active bat window (April 1-September 30). If tree removals are requiring in potentially suitable habitat within his window, and the tree is identified as being potentially suitable (e.g., Maple or Oaks with peeling bark and crevices), a bat exit survey should be completed prior to removal.
5. SWH for Species of Conservation Concern (Snapping Turtle, Wood Thrush, Eastern Wood-Pewee, Eastern Ribbonsnake, Silver Lamprey)	• Harm or temporarily harass SCC herptiles that could move along riparian habitat or in-water through the Study Area during construction (e.g., Snapping Turtle and Eastern Ribbonsnake). • Potential harm or temporary harassment of Snapping Turtle, which was observed within the Study Area. • Potential harm or temporary harassment to SCC birds (Eastern Wood-Pewee, Evening Grosbeak and Wood Thrush) in woodland areas in the	MNRF, Municipality	There is potential for seven SCC to be present within the Study Area and affected by the proposed project activities. To generally mitigate potential impacts on these species, a fact sheet and detection protocol for these species shall be provided to the contractor before project construction begins. To mitigate potential impacts on these species, the follow measures shall be implemented: • Confine work to the designated construction areas. • Workers should be vigilant and check work areas and machinery for the presence of reptiles prior to each day of construction. • Measures shall be put in place to prevent these species from entering construction areas. These measures shall include the installation of temporary fencing in proximity to the creek to exclude herptiles from the general construction area . The temporary fencing can be installed just prior to construction (in conjunction with installation of erosion control measures) and left in place during the turtle active season (April 15 – October 1). If construction begins after April 15, a wildlife sweep of the construction area is recommended prior to fence installation and construction to observe any herptile nests present in the area. • Exclusion fences shall be included on contract drawings and specifications. • It is recommended that the exclusion fencing installed for herptiles should follow guidelines set out on the MNRF's SAR Branch Best Practices Technical Note on

I.D. #	Potential Impacts/Concerns	Potentially Concerned Agencies/Stakeholders	Mitigation/Protection/Monitoring
	Study Area. • Potential harm or temporary harassment to SCC birds (Barn Swallow) which have previously confirmed nests under the eastern abutment to the Hawkesbury Creek CNR Overhead.		Reptile and Amphibian Exclusion Fencing (MNRF 2013) in order to provide the most effective protective function and prevent mortality to herptiles. • If these species are encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way. If the species persists in the work area, a person qualified to handle herptiles should be contacted to relocate the animal. • Follow mitigation measures for migratory nesting birds in #3 in this table above. Construction activities should be completed outside the breeding bird period (April 1 to August 31). Vegetation removal can occur during the restricted period if a qualified Avian Biologist conducts a nest search of the area prior to work commencing and determines that active nests are not observed in proximity to the work area. Should active nests be found, a buffer must be applied to the area around the nest until the young have left the nest. This could result in delays to the construction contract. If breeding birds and/or nests are encountered, works should not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest. • Preventative measures (e.g., netting) should be erected under the Hawkesbury Creek CNR Overhead prior to April 1 to mitigate Barn Swallow nesting from occurring.
6. General Wildlife	• Harm or temporarily harass herptiles, birds and mammals that could move along riparian habitat or in-water through the Study Area during construction.	MNRF	There is potential for general wildlife (e.g., herptiles, birds and mammals) present within the Study Area and affected by the proposed project activities. To generally mitigate potential impacts on these species, a fact sheet and detection protocol for these species shall be provided to the contractor before project construction begins. To mitigate potential impacts on these species, the follow measures shall be implemented: • Confine work to the designated construction areas. • Workers should be vigilant and check work areas and machinery for the presence of reptiles prior to each day of construction. • Measures shall be put in place to prevent these species from entering construction areas. These measures shall include the installation of temporary fencing in proximity to the creek to exclude herptiles from the general construction area . The temporary fencing can be installed just prior to construction (in conjunction with installation of erosion control measures) and left in place during the turtle active season (April 15 – October 1). If construction begins after April 15, a wildlife sweep of the construction area is recommended prior to fence installation and construction to observe any herptile nests present in the area. • Exclusion fences shall be included on contract drawings and specifications. • It is recommended that the exclusion fencing installed for herptiles should follow guidelines set out on the MNRF's SAR Branch Best Practices Technical Note on Reptile and Amphibian Exclusion Fencing (MNRF 2013) in order to provide the most effective protective function and prevent mortality to herptiles. • If these species are encountered in the construction area, work should be temporarily suspended until the animal is out of harm's way. If the species persists in the work area, a person qualified to handle herptiles should be contacted to relocate the animal. • Follow mitigation measures for migratory nesting birds in #3 in this table above. Construction activities should be completed outside the breeding bird period (April 1 to August 31). Vegetation removal can occur during the restricted period if a qualified Avian Biologist conducts a nest search of the area prior to work commencing and determines that active nests are not observed in proximity to the work area. Should active nests be found, a buffer must be applied to the area around the nest until the young have left the nest. This could result in delays to the construction contract. If breeding birds and/or nests are encountered, works should not continue in the location of the nest until after August 31 or as soon as it has been determined that the young have fledged and left the nest.

Appendix G

Recommended Plan



MINISTRY OF TRANSPORTATION
HIGHWAY 34 & COUNTY ROAD 17, HAWKESBURY
PRELIMINARY DESIGN

Ontario

UTILITY LEGEND:

HCA — HYDRO ONE AERIAL

HCU — HYDRO ONE UNDERGROUND

G — ENBRIDGE GAS

THE DETAILS SHOWN ON THIS DRAWING ARE PRELIMINARY AND ARE PROVIDED FOR INFORMATION ONLY

10m 0 20m
Horizontal

CREATED BY:GEW
CHECKED BY:JSB

PROJECT No. 17-5180
DATE: Jan 2025

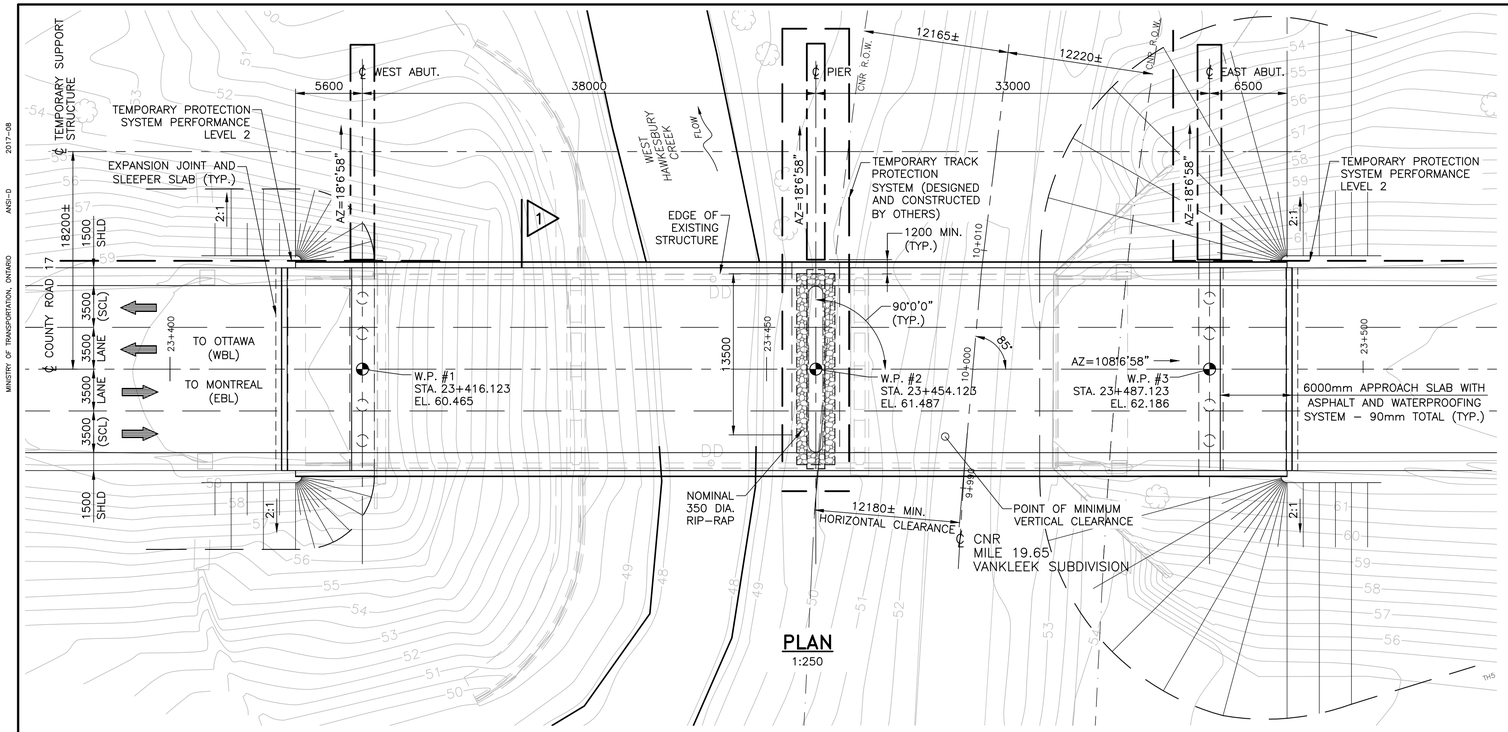
DILLON CONSULTING

RECOMMENDED PLAN
ALTERNATIVE 4 - PARCLO AB
WITH FOUR-LANE STRUCTURES

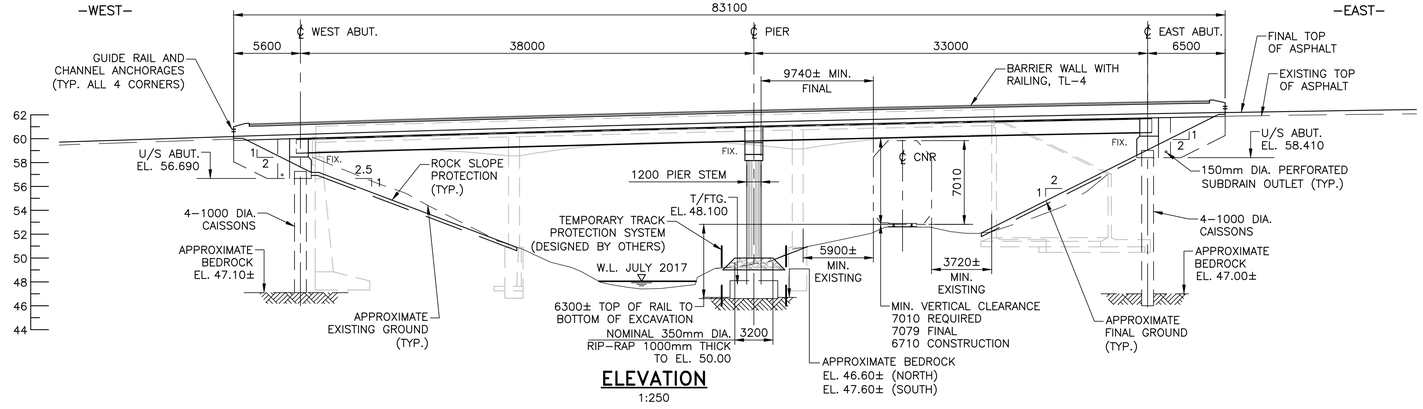
FIGURE 1

Appendix H

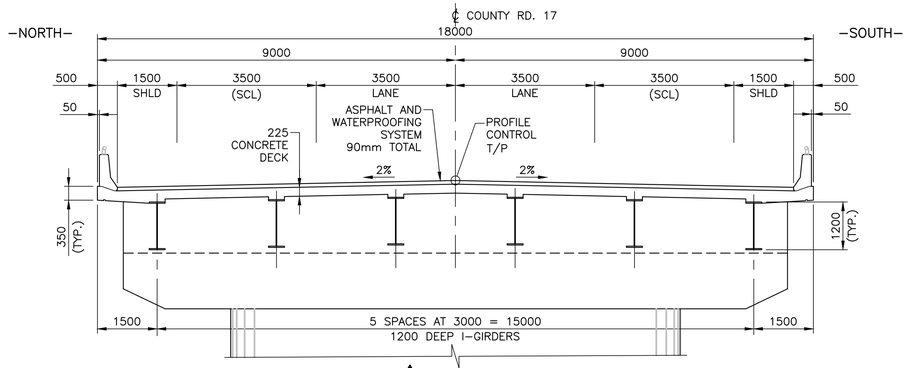
Updated General Arrangement Drawings



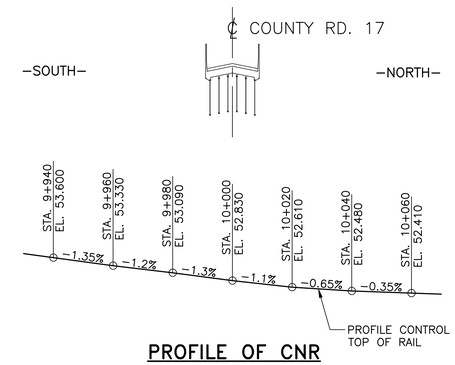
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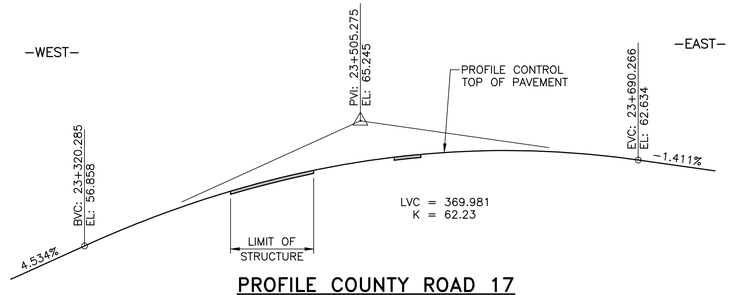
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1 SECTION
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PROFILE OF CNR
N.T.S.



PROFILE COUNTY ROAD 17
N.T.S.

BM EL. 59.971
HCP 101
0.019 x 2.0 RIB
STA. 23+415.120 CR17
8.553 LT.

PRELIMINARY

METRIC
DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN
DRAWING NOT TO BE SCALED
100mm ON ORIGINAL DRAWING

APPLICABLE STANDARD DRAWINGS

OPSD 3101.150	WALLS ABUTMENT, BACKFILL MINIMUM GRANULAR REQUIREMENT
OPSD 3102.100	WALLS ABUTMENT BACKFILL DRAIN
OPSD 3370.100	DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE WITH PROTECTION BOARD
OPSD 3419.100	BARRIERS AND RAILINGS, STEEL BEAM GUIDE RAIL AND CHANNEL ANCHORAGE

LIST OF ABBREVIATIONS

WP	WORK POINT
T/P	TOP OF PAVEMENT
T/FTG	TOP OF FOOTING
SHLD	SHOULDER
U/S	UNDERSIDE
N.T.S	NOT TO SCALE
CNR	CANADIAN NATIONAL RAILWAY

Ontario Ministry of Transportation

CONT –
WP –

HAWKESBURY BRIDGE REPLACEMENT
HAWKESBURY CREEK – CNR O/H AND COUNTY ROAD 17 U/P

HAWKESBURY CREEK – CNR O/H GENERAL ARRANGEMENT

SHEET –

Jacobs.

GENERAL NOTES

1. CLASS OF CONCRETE

CLASS OF CONCRETE SHALL BE 30 MPa

CLASS OF CONCRETE FOR PRECAST ELEMENTS IS SHOWN ON PRECAST ELEMENTS DRAWINGS.

2. CLEAR COVER TO REINFORCING STEEL

FOOTINGS & CAISSONS		100 ± 25
DECK	TOP	70 ± 20
	BOTTOM	40 ± 10
PIER CAPS		70 ± 10
REMAINDER – UNLESS OTHERWISE NOTED		70 ± 20

3. REINFORCING STEEL

REINFORCING STEEL SHALL BE GRADE 500W.

UNLESS SHOWN OTHERWISE, TENSION LAP SPLICES FOR REINFORCING STEEL BARS SHALL BE CLASS B.

STAINLESS REINFORCING STEEL SHALL BE TYPE 316LN OR DUPLEX 2205 AND HAVE A MINIMUM YIELD STRENGTH OF 500 MPa, UNLESS OTHERWISE SPECIFIED.

BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS.

BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS USING MINIMUM BEND DIAMETERS, WHILE STIRRUPS AND TIES SHALL HAVE MINIMUM HOOK DIMENSIONS. ALL HOOKS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL STANDARD DRAWING SS12–1, UNLESS INDICATED OTHERWISE.

MECHANICAL CONNECTORS SHALL BE SUPPLIED IN ACCORDANCE WITH MTO DESIGNATED SOURCES OF MATERIALS LIST DSM 9.65.58

HEADED DEFORMED BARS SHALL BE IN ACCORDANCE WITH ASTM A970/A970M.

4. STRUCTURAL STEEL

FOR STRUCTURAL DETAILS AND NOTES SEE STRUCTURAL STEEL DRAWINGS.

5. CONSTRUCTION NOTES

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS AND ELEVATIONS OF THE EXISTING STRUCTURE THAT ARE RELEVANT TO THE WORK SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR PRIOR TO PROCEEDING WITH THE WORK.

THE REPLACEMENT SUPERSTRUCTURE SHALL BE CONSTRUCTED TO THE NORTH OF THE EXISTING BRIDGE ON A TEMPORARY SUPPORT STRUCTURE. ONCE THE EXISTING BRIDGE IS DEMOLISHED AND THE NEW SUBSTRUCTURES ARE CONSTRUCTED, THE REPLACEMENT SUPERSTRUCTURE SHALL BE MOVED INTO FINAL POSITION USING LATERAL SLIDE TECHNIQUE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE EXISTING AND NEW BRIDGES THROUGHOUT ALL STAGES OF CONSTRUCTION.

FOR STAGING AND MAINTENANCE OF TRAFFIC SEE ROADWAY STAGING DRAWINGS AND SPECIFICATIONS.

BACKFILL SHALL NOT BE PLACED AGAINST ANY CONCRETE COMPONENT UNTIL CONCRETE HAS REACHED 75% OF ITS DESIGN STRENGTH.

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TEMPORARY TRACK PROTECTION SYSTEMS SHALL BE DESIGNED, CONSTRUCTED, MONITORED AND REMOVED BY OTHERS IN ACCORDANCE WITH CNR REQUIREMENTS.

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL LOCATES AND PROTECTION OF ALL UTILITIES DURING CONSTRUCTION.

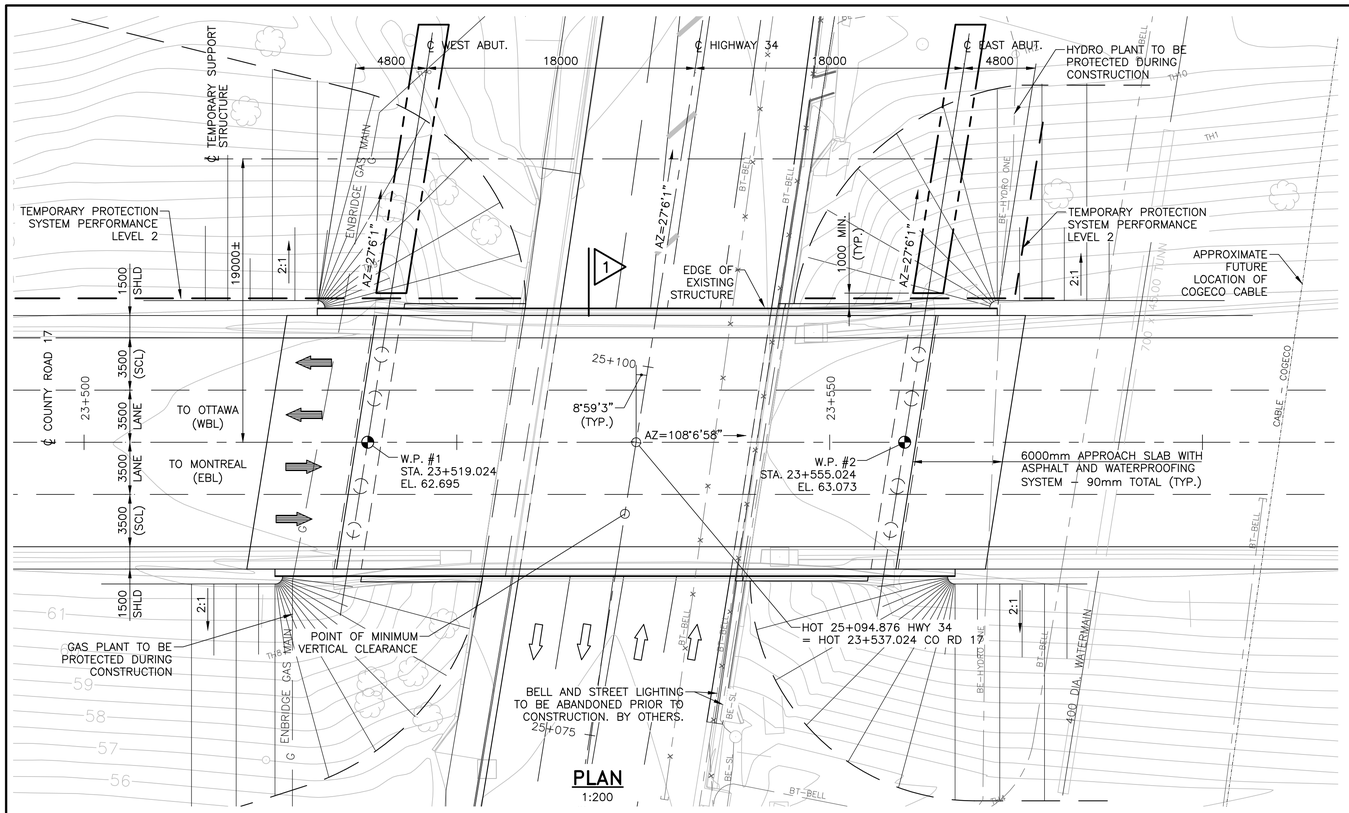
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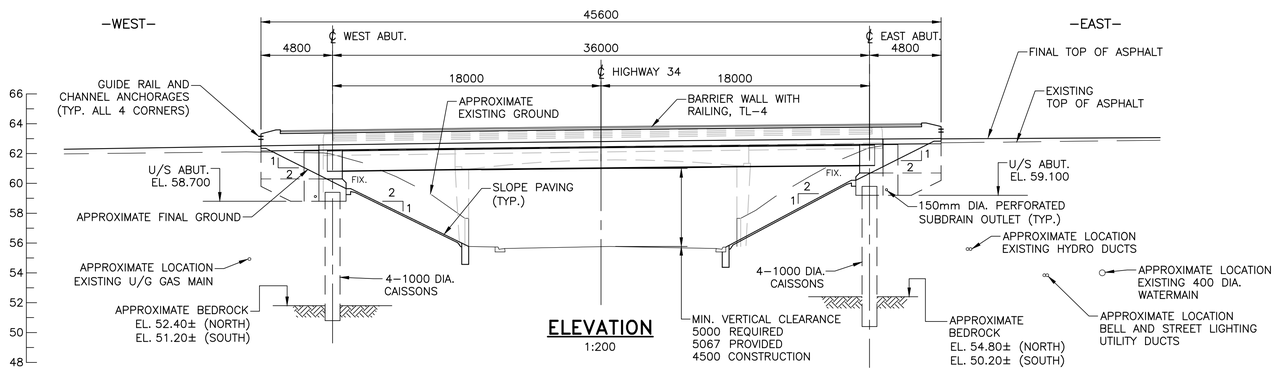
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MINISTRY OF TRANSPORTATION, ONTARIO ANSI–D 2017–08

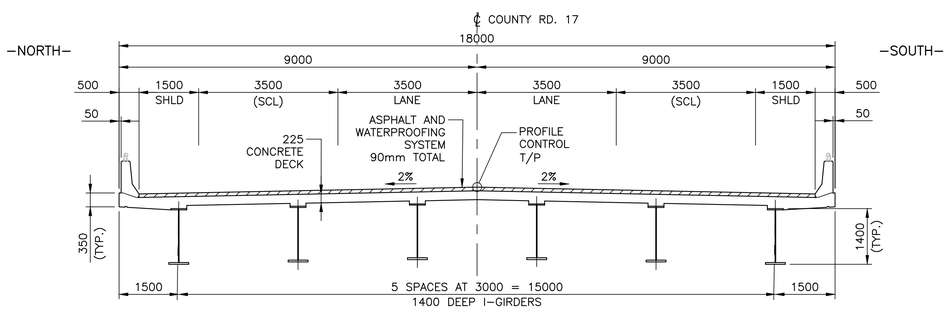
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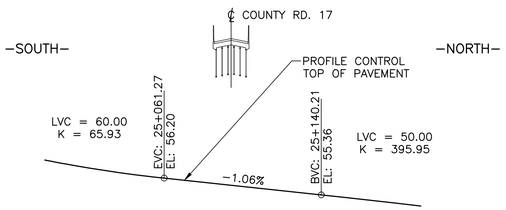
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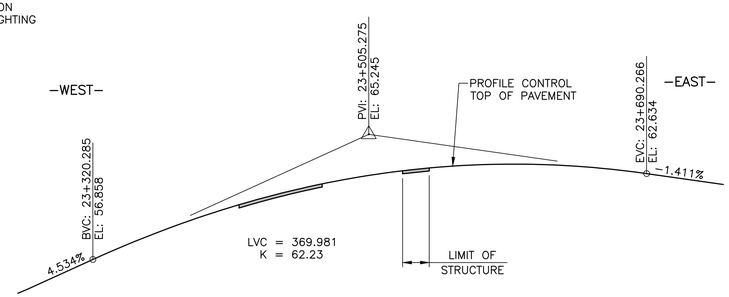
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1 SECTION
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PROFILE HIGHWAY 34
N.T.S.



PROFILE COUNTY ROAD 17
N.T.S.

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LIST OF ABBREVIATIONS

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SHLD	SHOULDER
U/S	UNDERSIDE
N.T.S	NOT TO SCALE
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Ontario Ministry of Transportation

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SHEET –

COUNTY ROAD 17 U/P
GENERAL ARRANGEMENT

Jacobs.

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REVISIONS	DATE	BY	DESCRIPTION

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