Highway 417 Rapid Bridge Replacements Detailed Design and Class Environmental Assessment (GWP 4124-14-00)

Design and Construction Report

April 2026
Revised June 2026

Ministry of Transportation

Ontario

Public Record

This Design and Construction Report (DCR) is available for a 30-day public review period from April 1, 2026 to May 1, 2026, inclusive, on the Project website at www.417westbridges.ca. To obtain additional information, to provide comments on this DCR, or if you have any accessibility requirements in order to participate, please contact one of the following Project Team members:

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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.

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Executive Summary

The Ministry of Transportation (MTO) has retained Stantec (formerly Morrison Hershfield) and Jacobs Consultancy Canada Inc. (Jacobs) to deliver the Detail Design and Environmental Assessment (EA) for the rapid replacement of the Maitland Avenue (Ave) and Woodroffe Ave bridges along Highway 417 in the City of Ottawa (the Project).

This Detail Design phase builds upon a portion of the Preliminary Design and Class EA study that was previously completed to identify a Recommended Plan for the evolution of Highway 417 from west of Highway 416 to Anderson Road. The study process and the Preliminary Design were documented in the "Highway 417 (Ottawa Queensway) from West of Highway 416 Easterly to Anderson Road Preliminary Design and Environmental Assessment (GWP 663-93-00) Transportation Environmental Study Report" (TESR) in 2007. The TESR Recommended Plan provided recommendations for widening sections of the Highway 417 mainline, modifying interchanges, rehabilitating pavement, bridges and the illuminations system, enhancing drainage systems and Advanced Traffic Management Systems, landscaping and upgrading noise walls. Specific to the Highway 417 Maitland Ave and Woodroffe Ave bridges, the TESR recommended that the existing left turn lane on Maitland Ave be lengthened to accommodate projected traffic demands and that the Woodroffe Ave Bridge be widened on the east side to add a new northbound left turn lane. The purpose of this Detail Design study is to confirm and refine the Recommended Plan for the replacement of the Woodroffe Ave and Maitland Ave bridges along Highway 417, and to prepare for implementation.

Based on the Detail Design, the project includes the following scope:

- Rapid demolition of the existing bridges and replacement with widened structures;
- Repairs of deteriorated concrete on exposed surfaces of retained elements;
- Relocation or modification of Advanced Traffic Management System cameras and infrastructure;
- Installation of new bridge mounted light posts over the piers and underpass illumination;
- Adjustment of existing catch basins at the ends of approach slabs as required;
- Widening of the existing concrete toe walls at the abutments of the Maitland Ave Bridge;
- Removal of the existing concrete toe walls at the abutments of the Woodroffe Ave Bridge and replacement with new retaining walls that will be closer to the abutments;
- Replacement of three (3) existing overhead signs;
- New snow walls in the vicinity of the Clyde Avenue structure;
- Selective pavement rehabilitation on Highway 417 between Highway 416 and Maitland Ave.

The work will be completed within the MTO right-of-way. However, the use of a small parcel of City of Ottawa property in the southwest quadrant of the Maitland Ave Study Area will be required and a Temporary Limited Interest agreement will be secured prior to construction. Road closures, lane reductions, and ramp closures will be required to complete the work, during which time traffic will be detoured. Utility infrastructure within the Study Areas will be required to be relocated or protected during construction.

This Design and Construction Report (DCR) documents the Detail Design and Class EA process for the Project which was completed in accordance with the requirements for Group B projects under MTO's Class Environmental Assessment for Provincial Transportation Facilities, 2000 (MTO Class EA). A review of the

TESR is also documented in this DCR as required by the MTO Class EA (2000) and considered any changes to the Project since the submission of the TESR, including new conditions in the project area, government policies or regulations, engineering standards, or technologies for mitigation.

During this Detail Design study, consultation was undertaken to share information and gather feedback from stakeholders, Indigenous Communities and the public regarding the Project and the Recommended Plan. Meetings were held with stakeholders including the City of Ottawa, a Municipal Technical Advisory Group and local councillors to primarily discuss active transportation and detour routes. Indigenous communities were sent notification letters at key milestones during the study. Consultation activities with the public included publication of Ontario Government Notices in local newspaper, a project website and a virtual Public Information Centre held on the project website. Comments received from the public were generally regarding the desire for safe, connected cycling and pedestrian infrastructure.

The Project is anticipated to have limited potential for impacts to the natural environment. Designated natural areas were not identified with the Study Areas, and no significant wildlife habitat will be directly impacted by construction. However, due to vegetation clearing, direct and indirect impacts may occur to wildlife and bird nesting habitat. In terms of the aquatic environment, fish habitat was not identified within the Study Areas.

No significant impacts are anticipated to the social and cultural environments. The Study Areas do not exhibit archaeological potential. No built heritage resources or cultural heritage landscapes were identified within the Study Areas and the bridges do not contain cultural heritage value or interest.

Mitigation measures have been recommended for implementation during construction to minimize or mitigate any potential negative impacts to the environment and are primarily related to:

- Protection of wildlife and wildlife habitat
- Erosion and sediment control
- Management of waste/debris and excess materials
- Traffic operations
- Noise and air quality

With the implementation of the recommend mitigation measures, the Project is not anticipated to have significant or long-term negative effects on the surrounding environment.

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
Ave	Avenue
ATMS	Advanced Traffic Management Systems
DCR	Design and Construction Report
EA	Environmental Assessment
ELC	Ecological Land Classification
END	Endangered
ESA	Ontario *Endangered Species Act*
m	Metre(s)
MH	Morrison Hershfield (now Stantec)
MCM	Ministry of Citizenship and Multiculturalism
MBR	Migratory Birds Regulations
MECP	Ministry of the Environment, Conservation and Parks
MNRF	Ministry of Natural Resources and Forestry
MTAC	Municipal Technical Advisory Committee
MTO	Ministry of Transportation
MTO Class EA	*Class Environmental Assessment for Provincial Transportation Facilities*
NCC	National Capital Commission
OBA	Ontario Butterfly Atlas
OBBA	Ontario Breeding Bird Atlas
OPSS	Ontario Provincial Standard Specifications
ORAA	Ontario Reptile and Amphibian Atlas
O. Reg.	Ontario Regulation
PIC	Public Information Centre
Rd	Road
ROW	Right-of-way
SAR	Species at Risk
SC	Special Concern
TESR	Transportation Environmental Assessment Report
TH	Threatened

Acronym or Abbreviation	Definition
The Project	Highway 417 Rapid Bridge Replacements at Maitland Avenue and Woodroffe Avenue
The Study	Highway 417 Rapid Bridge Replacements at Maitland Avenue and Woodroffe Avenue Class Environmental Assessment Study
TLI	Temporary Limited Interest

1. Project Overview

The Ministry of Transportation (MTO) has retained Stantec (formerly Morrison Hershfield) and Jacobs Consultancy Canada Inc. (Jacobs) to deliver the Detail Design and Environmental Assessment (EA) for the rapid replacement of five bridges at four sites along Highway 417 in the City of Ottawa. The assignment consists of the following two separate contracts:

- Contract 1 (GWP 4124-14-00) – Highway 417 Maitland Avenue (Ave) and Woodroffe Ave Rapid Bridge Replacements
- Contract 2 (GWP 4069-19-00) – Highway 417 Pinecrest Road (Rd) and Richmond Rd Rapid Bridge Replacements

The locations of the bridge sites are shown in **Figure 1-1**.

Separate Design and Construction Reports (DCRs) are being prepared to document the detail design development and EA study process for each contract.

1.1 Background

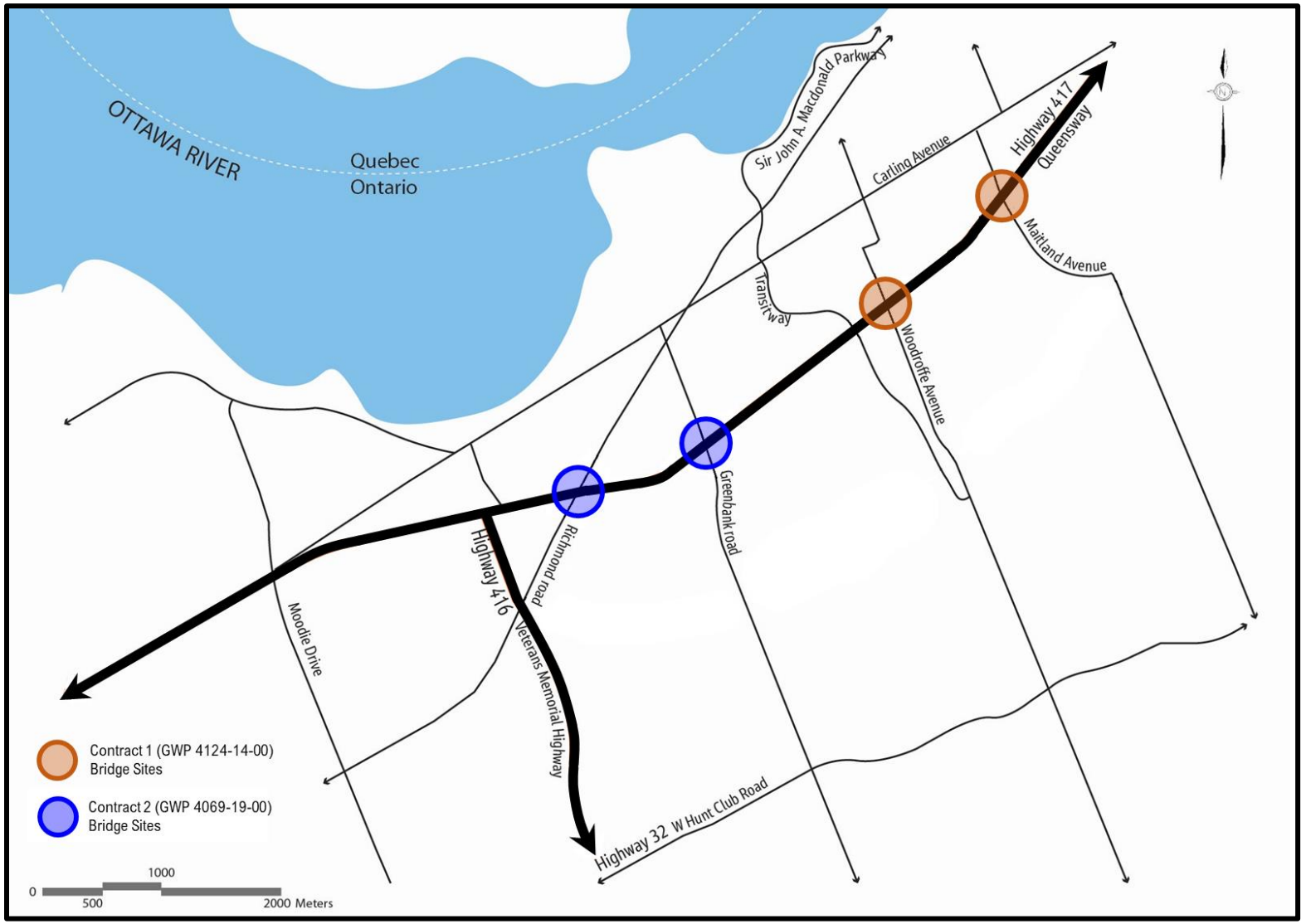
Highway 417 is a 400-series highway in Ontario that extends east-west from the Quebec border to Arnprior. The highway crosses through the City of Ottawa where it is referred to as "the Queensway". The Queensway was built between 1957 and 1966, and later reconstructed to its present form throughout the 1980s.

In response to growing traffic volumes, MTO initiated an EA study for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road to guide the evolution of the Queensway over the following 20 years. The assessment followed the approved planning process for Group B undertakings in accordance with MTO's Class Environmental Assessment for Provincial Transportation Facilities ("MTO Class EA"), 2000. The study process and the preliminary design were documented in a Transportation Environmental Study Report (TESR) in 2007. The TESR Recommended Plan provided recommendations for widening sections of the Highway 417 mainline, modifying interchanges, rehabilitating pavement, bridges and the illuminations system, enhancing drainage systems and Advanced Traffic Management Systems (ATMS), landscaping and upgrading noise walls.

In 2011, a Context Sensitive Design Report was prepared in collaboration with various stakeholders including the City of Ottawa and the National Capital Commission (NCC). The report provides an overall design vision for the Queensway corridor to promote an entry experience consistent with the roadway's status within Canada's Capital. Design concepts and recommendations are outlined in the report to serve as a starting point for the development of standard details and specifications for a range of aesthetic improvements, including landscaping and bridge treatments, to be used in a context sensitive manner throughout the corridor.

In 2022, MTO initiated this current Detail Design assignment to confirm the Recommended Plan for the replacement of the Woodroffe Ave, Maitland Ave, Richmond Rd and Pinecrest Rd bridges along Highway 417, and to prepare for implementation. Contract 1 is progressing ahead of Contract 2 and is the subject of this DCR. A separate DCR will be prepared for Contract 2.

Figure 1-1. Bridge Sites



1.2 Summary Description of the Undertaking

This DCR has been prepared for the rapid replacement of the Contract 1 bridges at Maitland Ave and Woodroffe Ave along Highway 417 (the Project). The work includes rapid demolition and replacement of the two underpass structures (i.e., bridges), repairs of deteriorated concrete on exposed surfaces of retained elements, including rehabilitation of the bridge abutments, replacement or rehabilitation of support facilities and features including grading, drainage, stormwater management, illumination, signage, the relocation and protection of ATMS, as required, paving at various locations from Highway 416 to Maitland Avenue, and snow barriers at Clyde Avenue.

1.3 Environmental Assessment Process

The purpose of the Ontario *Environmental Assessment Act* is to protect, conserve, and manage the environment by ensuring that projects subject to the Act follow a planning process that results in environmentally sound decision making. Under the *Environmental Assessment Act*, proponents are to consider the possible environmental impacts (or effects) of a project throughout the planning process and to develop an alternative that achieves the project objectives with the fewest potential impacts.

The MTO Class EA is a planning document approved under the *Environmental Assessment Act* that outlines the environmental assessment process to be followed for specific groups of provincial transportation projects. The MTO Class EA provides a streamlined process that undertakings (i.e., projects or activities) within a defined "class" must follow.

The Preliminary Design Class EA Study followed the processes and requirements set out in the MTO Class EA, as amended in 2000. In December 2023, a new amendment to the MTO Class EA was approved and then a subsequent version was approved in early 2024 to include reference to Municipal Expressways. The 2023 and 2024 amended documents state that Group B projects with a Detail Design Class EA process initiated before the 2023 amendment came into effect are not eligible for transition to the newly amended Class EA. Thus, this Detail Design Class EA study for the Project (the Study) is following the process and requirements for Group B undertakings in accordance with the MTO Class EA, as amended in 2000.

The MTO Class EA (2000) specifies that a review of the TESR must be carried out if a project has not been constructed and a DCR has not been prepared within five years of the Notice of Submission for the TESR. If significant changes are identified, a TESR Addendum is required. This DCR includes a review of the 2007 TESR (refer to Section **4** of this DCR).

1.4 Design and Construction Report Purpose

This DCR has been prepared in accordance with the MTO Class EA (2000) requirements for Group B undertakings. The purpose of a DCR is to document the development of the Recommended Plan for Contract 1. This DCR provides a description of consultation carried out during the Study, the design details for the Recommended Plan, the anticipated environmental impacts and mitigation measures to be implemented during construction. This DCR also documents the TESR Five-Year Review per the requirements of the Class EA, as amended in 2000. The Five-Year Review considers any changes to the project since the submission of the TESR, including changes to design, conditions in the study area(s), government policies or regulations, engineering standards, or technologies for mitigation.

A Notice of Submission has been published to announce the commencement of the 30-day public review period of the DCR. Comments received during the review period will be reviewed by the Project Team and addressed, as appropriate.

2. Consultation Process

At commencement of the Project, a Consultation Plan was prepared to outline the methods to be used during the Study to address the Class EA consultation requirements. The Consultation Plan built upon the MTO Class EA consultation principles, including early, ongoing and timely notification; a proactive and constructive approach to issues identification and resolution; and an emphasis on consultation with the most directly impacted stakeholders. The Plan identified key stakeholders to be engaged throughout the Study; identified methods of notification; and detailed the proposed frequency and timing of consultation.

Consultation activities for the Study were identified to ensure that stakeholders, members of the public and Indigenous Communities were provided with adequate opportunity to receive information regarding the Project and to contribute to decision-making. Consultation activities undertaken during the Study included:

- Ontario Government Notices (OGNs)
- A bilingual project website
- An online Public Information Centre (PIC)
- Letter notification to local elected representatives, external agencies and Indigenous Communities
- Municipal Technical Advisory Committee meetings
- Meetings with local councillors
- Filing of the DCR for a 30-day public review and comment period

2.1 Study Contact List

At study commencement, a Contact List of potentially affected groups and individuals was developed. Throughout the duration of the Study the list was updated as additional stakeholders become known by recommendation or self-identification, or as parties indicated they were no longer interested in the Study. **Table 2-1** provides a list of the parties included in the Contact List.

Table 2-1. Contact List Parties

Interest	Agency / Organization / Party
External Agencies (Federal and Provincial)	• NCC • Ministry of the Environment, Conservation and Parks (MECP) • Ministry of Citizenship and Multiculturalism (MCM) • Ministry of Indigenous Affairs • Ministry of Natural Resources and Forestry (MNRF)
Local Elected Representatives	• MPP – Nepean • MPP – Ottawa Centre • City of Ottawa Mayor • City of Ottawa Councillor – Ward 7 (Bay) • City of Ottawa Councillor – Ward 8 (College) • City of Ottawa Chair of Transportation Committee of Council
Indigenous Communities	• Algonquins of Ontario • Algonquins of Pikwàkanagàn First Nation • Métis Nation of Ontario

Interest	Agency / Organization / Party
Local Municipality (City of Ottawa)	• Infrastructure and Economic Development Department • Emergency and Protective Services • Environmental Services • Public Works Department • Transit Services Department • Traffic Services • Transportation Planning
Emergency Services	• Ontario Provincial Police • Ottawa Police • Ottawa Paramedic Services • Ottawa Fire Services
Utilities	• Cogeco • Rogers • Telus • Bell Canada • Enbridge Gas • Hydro Ottawa
School Boards	• Ottawa-Carleton District School Board • Ottawa Catholic School Board • Conseil des écoles publiques de l'Est de l'Ontario
Local Businesses and Interest Groups	• Various interest groups and local businesses within the vicinity of the Study Areas

2.2 Notifications

2.2.1 Ontario Government Notices

Three OGNs were published in local newspapers during the Study. **Table 2-2** lists the notices, where they were published and on what dates. Copies of the notices are provided in **Appendix A**.

Table 2-2. Ontario Government Notices

Notice	Newspaper of Publication	Publication Date
Notice of Study Commencement (English)	Ottawa Citizen	March 2, 2023
Notice of Study Commencement (French)	Le Droit	March 3, 2023
Notice of PIC (English)	Ottawa Citizen	May 21, 2024
Notice of PIC (French)	Le Droit	May 21, 2024
Notice of Submission (English)	Ottawa Citizen	April 1, 2026
Notice of Submission (French)	Le Droit	April 1, 2026

2.2.2 Notification Letters

Notification letters advising of study commencement were sent via email to local elected representatives on March 1, 2023 and to Indigenous Communities on March 2, 2023. Study commencement notification letters were distributed via email and posted mail to the remaining representatives on the Contact List on March 2, 2023. The letters provided an overview of the project and the EA process (for both Contracts 1 and 2), and provided information on where to submit any comments or questions.

Prior to the online PIC for Contract 1, a PIC notification letter was sent to the local MPP via email on May 14, 2024. Indigenous communities were provided initial PIC notification letters via email on May 5, 2024, with revised versions on May 15, 2024. The remaining representatives on the Project Contact List, including external agencies, interest groups and local businesses, were sent notification letters on May 15, 2024. The purpose of the letters was to advise recipients that PIC material, specific to Contract 1, would be available for review and comment on the project website.

Notification letters were also sent via mail and email to each representative on the Contact List at submission of the DCR. The letter provided information on where the document is available for review, the length of the public comment period and where to submit comments.

Appendix A provides a copy of the notification letters, as well as all comments received in response to the notification letters.

2.3 Project Website

A bilingual project website (417westbridges.ca) was implemented at study commencement to provide information about the Project to the public and interested parties. The website also provides opportunity for the public to submit comment, questions and concerns to the Project Team throughout the Study. Website content includes the following project information and materials:

- Project overview and background
- Project updates
- Timeline
- Documents (such as, the 2007 TESR and the Context Sensitive Design Report)
- Frequently asked questions and responses
- Public notices (including the Notice of Study Commencement, Notice of PIC and Notice of Submission)

The project website was also used for the Public Information Centre (PIC) and posting of this DCR.

2.4 Public Information Centre

On May 22, 2024, PIC display materials were posted on the Project Website for public review and provided information on the following topics:

- Project background;
- Current Detail Design study;
- Environmental Assessment process;

- Existing conditions within the Study Areas;
- Recommended design details;
- Proposed construction staging, road closures and detour plans;
- Anticipated environmental impacts and mitigations measures.

A copy of the material is provided in **Appendix A**. The material also provided direction for interested parties to provide comments via the website "Contact Us" function or by contacting one of the designated Project Team members from May 22, 2024 through to June 5, 2024. During the two-week comment period, the Project Website hade 438 visitors. A total of 50 comments were received via the website and via email. Comments were primarily related to cycling infrastructure and cyclist/pedestrian safety concerns. Comments received and the corresponding Project Team responses are provided in **Appendix A**.

2.5 Stakeholder Meetings

2.5.1 City of Ottawa

Meetings were held throughout the Study with the City of Ottawa to discuss active transportation facility design and to ensure consistency with the City's future network connectivity plans.

2.5.2 Municipal Technical Advisory Committee

A Municipal Technical Advisory Committee (MTAC) was formed at Study Commencement to facilitate streamlined consultation with parties of municipal interest in the City of Ottawa.

An initial MTAC meeting was held virtually on March 29, 2023 to introduce the Project, share progress to-date, and to gather input from the participants on any known challenges or areas of interest.

A second MTAC meeting was held on November 23, 2023 to provide an up-date on project progress. Key topics of discussion included active transportation, detour routes and municipal road impacts, and utility impacts.

A third MTAC meeting was held on October 15, 2025 to provide an up-date on project progress. Key topics of discussion included traffic staging, detours, and associated impacts.

2.5.3 Local Councillors

A virtual meeting was held on February 2, 2023 with the City of Ottawa Bay Ward Councillor and College Ward Councillor to provide an overview of the Project and to discuss areas of interest.

2.5.4 Traffic and Incident Management Committee

A virtual meeting was held on January 8, 2026, with the City of Ottawa Traffic and Incident Management Group to discuss the project and provide an outline of the traffic management requirements and impacts to local roads.

2.6 Consultation with Indigenous Communities

Potentially impacted or interested Indigenous Communities were consulted during the Study. Communities that were consulted include:

- Algonquins of Ontario
- Algonquins of Pikwàkanagàn First Nation
- Métis Nation of Ontario

Community representatives were sent notification letters at study commencement, prior to the PIC and at filing of the DCR. The letters provided general project information and updates, as well as additional information on topics of interest including Species at Risk and archaeological existing conditions, impacts and mitigation measures. Each letter also offered the opportunity to meet with the Project Team to discuss the Project.

2.7 Summary of Comments Received

A total of 65 written comments were received over the course of the Study. **Table 2-3** provides the key comment themes and the corresponding Project Team Responses. All comments received and corresponding project team responses are included in **Appendix A**. In accordance with the *Freedom of Information and Protection of Privacy Act*, all personal information has been removed.

Table 2-3. Key Comment Themes

Comment Theme	Project Team Response
Desire for safe and separated cycling and pedestrian infrastructure.	The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road.
Concerns about slip lanes and cyclist crossing at ramp intersections.	Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the city streets and bridge approaches.
Concerns about the connection of cycle lanes beyond the bridges.	The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the city streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities.
Discouragement of car lane expansion and left turn lane on Maitland Avenue.	The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards.

3. Detailed Description of the Recommended Plan

3.1 Structures

3.1.1 Maitland Avenue Bridge

The existing bridge is a two-span, concrete slab-on-steel I-girder structure constructed in 1960. The bridge length is 70.2 metres (m), comprised of two 35.1 m continuous spans. The bridge deck is 18.2 m wide, comprised of a two-lane 7.5 m wide northbound roadway, a two-lane 7.5 m wide southbound roadway, two 1.5 m wide sidewalks, and two 0.5 m wide concrete barriers with railings.

The replacement bridge will maintain the same span arrangement and length as the existing bridge. The recommended width of the replacement bridge deck is 29 m. The recommended cross-section of Maitland Ave at the bridge accommodates future Active Transportation connections to be completed by the City of Ottawa; maintains existing lane configuration and ramp connections; and allows for future tie-ins to accommodate future widening of Highway 417 approved under a previous Environmental Assessment (GWP 663-93-00). The recommended cross-section is illustrated in **Figure 3-1** and includes:

- 0.4 m east and west parapet walls and fascia
- 2 m east and west sidewalks
- 2 m east and west cycle tracks
- 0.9 m east and west buffers
- 0.5 m east and west shoulders
- Two 3.5 m northbound traffic lanes
- A 3.5 m southbound turn lane
- Two 3.5 m southbound traffic lanes

Based on a comparison of superstructure types, a concrete deck on haunched steel I-girder structure is recommended. The existing concrete toe walls at the abutments will be widened to accommodate the bridge widening.

Snow barrier installation will also occur at all four quadrants of the structure.

3.1.2 Woodroffe Avenue Bridge

The existing bridge is a two-span, concrete slab-on-steel I-girder structure constructed in 1960. The bridge length is 64 m, comprised of two 32 m continuous spans. The bridge deck is 24.1 m wide and is comprised of a two-lane 7.6 m wide northbound roadway, a three-lane 11.3 m wide southbound roadway, a1.2 m wide median curb, two 1.5 m wide sidewalks, and two 0.5 m wide concrete barriers with railings.

The recommended width of the replacement Woodroffe Ave Bridge deck is 30.5 m. The recommended cross-section of Woodroffe Ave over Highway 417 accommodates future AT connections to be completed by the City of Ottawa; maintains existing lane configuration and ramp connections; and allows for future tie-ins to accommodate future widening of Highway 417 approved under a previous Environmental Assessment (GWP 663-93-00), including new ramp configuration. The recommended cross-section is illustrated in **Figure 3-2** and includes:

- 0.4 m east and west parapet walls and fascia
- 2 m east and west sidewalks

- 2 m east and west cycle tracks
- 0.9 m east and west buffers
- 0.5 m east and west shoulders
- Three 3.5 m northbound traffic lanes
- 1.5 m median
- Two 3.5 m southbound traffic lanes

Based on a comparison of superstructure types, a concrete deck on haunched steel I-girder structure is recommended. The existing concrete toe walls at the abutments will be removed and replaced with new concrete faced soldier pile retaining walls which will be closer to the abutments to accommodate the future expansion of Highway 417.

Paving of Highway 417 will also occur as part of the Project, including paving of the eastbound lane (outside lane) from Highway 416 to Woodroffe, the eastbound mainline (inside lane) from Woodroffe Ave to Maitland Ave, the eastbound Woodroffe Ave off-ramp and straight on-ramp, and the westbound Woodroffe Ave on-ramp, Woodroffe Ave loop off-ramp and Woodroffe Ave straight off-ramp. The cross-section of Highway 417 at Woodroffe Ave will remain unchanged from existing conditions.

General Arrangement drawings for the bridges at both sites are included in **Appendix B**.

Figure 3-1. Recommended Maitland Ave Cross-section

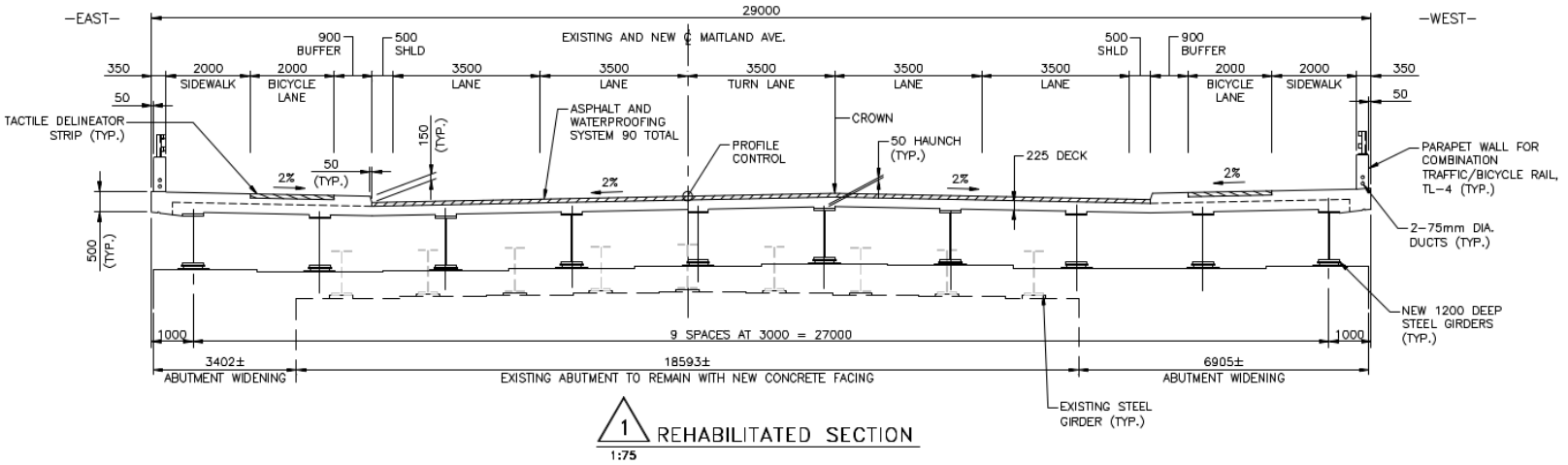
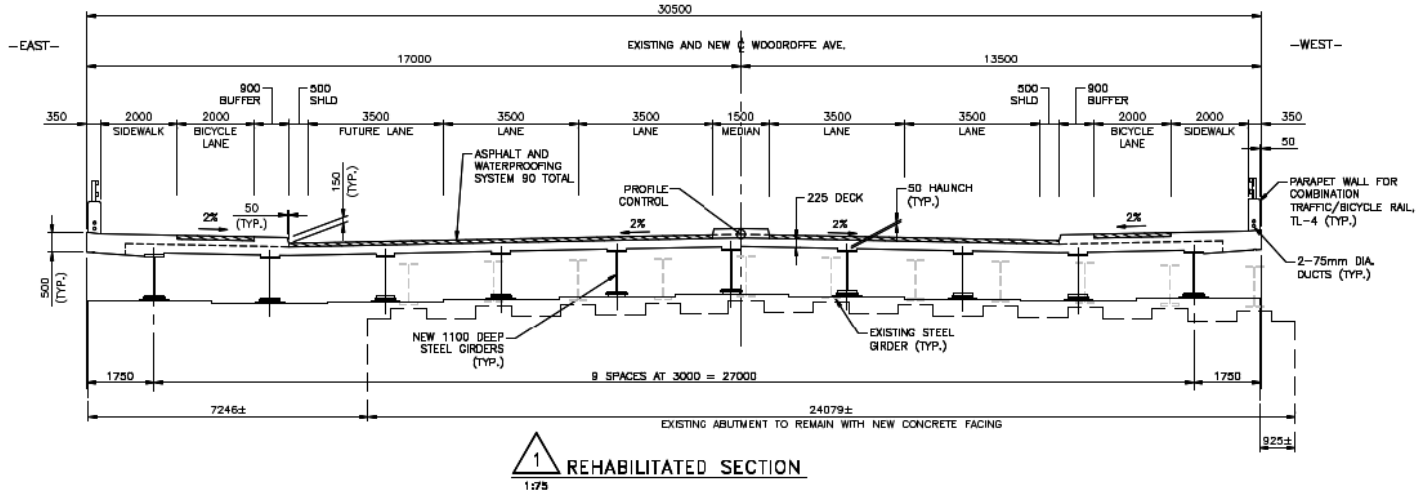


Figure 3-2. Recommended Woodroffe Ave Cross-section



3.2 Highway Paving

Paving of Highway 417 will also occur as part of the Project, including paving of the eastbound lane (outside lane) from Highway 416 to Woodroffe, the eastbound mainline (inside lane) from Woodroffe Ave to Maitland Ave, the eastbound Woodroffe Ave off-ramp and straight on-ramp, and the westbound Woodroffe Ave on-ramp, loop off-ramp and straight off-ramp. The cross-section of Highway 417 at Woodroffe Ave and Maitland Ave will remain unchanged from existing conditions.

3.3 Snow Wall

A new snow wall will be constructed on all four quadrants of the existing Clyde Avenue overpass structure to mitigate snowdrift impacts on private properties as a result of plowing operations.

3.4 Active Transportation

The existing bridges have raised sidewalks on both sides of the bridges. No designated or separated cycling facilities exist on either bridge.

The new bridges will have 2 m unidirectional cycle tracks and 2 m sidewalks, separated by approximately 300 mm wide tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road.

Cycle lanes will be provided only on the bridge structures as part of this Project. Future cycling connection on city roads will be completed by the City of Ottawa at a later date.

3.5 Overhead Signs

As a result of the construction works, and based on the existing age and condition, three (3) overhead signs on Highway 417 will be replaced during the construction work.

3.6 Construction Staging

Based on a comparison of staging alternatives, it is recommended that the existing bridges be demolished in place (requiring a 48-hour full closure of Highway 417) and new bridges, constructed offsite in the construction staging areas (refer to **Figure 3-3** and **Figure 3-4**), be installed using rapid replacement techniques (requiring a 72-hour full closure of Highway 417). Both full and partial closure of Maitland Ave and Woodroffe Ave will be required in the period leading up to and after the rapid replacement operation. It is anticipated that at each site the ramps will be closed for 6 to 8 weeks. For municipal roads, Maitland Ave will be closed for 7 weeks and Woodroffe Ave will be closed for 6 weeks.

A summary of the recommended construction staging sequence for the replacement of the bridge at each site is as follows:

1. Shift Highway 417 traffic, complete site preparatory work and preparatory works at the existing bridge abutments.
2. Shift Highway 417 traffic and complete preparatory work at the existing median piers and construct bridges in the staging areas.

3. Implement full extended weekend closure of Highway 417 and full closure of municipal road, and rapidly demolish the existing bridge in place. Following rapid demolition operation, reopen Highway 417, but keep municipal road closed for a 6 to 7-week period.
4. Keep municipal road closed, and complete pier and abutment preparation works.
5. Implement full extended weekend closure of Highway 417, keep municipal road closed, and install the replacement bridge using rapid replacement technology and complete tie-in and regrading.
6. Reopen Highway 417, keep municipal road closed, and complete municipal road works. Reopen municipal road following completion of works.
7. Complete remaining works on Highway 417, followed by site restoration and demobilization.

Figure 3-3. Maitland Ave Bridge Replacement Staging Area

Figure 3-4. Woodroffe Ave Bridge Replacement Staging Area

3.7 Construction Traffic Management

As stated above, for each bridge replacement, to facilitate rapid demolition of the existing bridge, a full extended weekend closure of Highway 417 and the municipal road will be required. A second full extended weekend closure of Highway 417 and the municipal road will be required to facilitate the rapid replacement with the new bridge and to complete tie in and regrading. Full closure of municipal roads in the period leading up to and after the rapid replacement operation will also be required to complete the work. The recommended detour routes for the anticipated road closures are described in this Section.

3.7.1 Highway 417 Closure at Maitland Ave

The recommended detour route during the closure of Highway 417 at Maitland Ave is shown in **Figure 3-5**. Highway 417 eastbound detour will exit the highway at Woodroffe Ave and head south to Baseline Rd, then use Maitland Ave to access the highway via the south-east ramp. Highway 417 westbound traffic will exit the highway at Carling Ave and turn left onto Woodroffe Ave to access the highway.

3.7.2 Maitland Ave Closure

The recommended detour route during the closure of Maitland Ave at the bridge is shown in **Figure 3-6**. Local traffic will cross Highway 417 using Clyde Ave. Clyde Ave can be accessed via Carling Ave to the north and Woodward Drive to the south. Pedestrians and cyclists will be detoured via the same route.

3.7.3 Highway 417 Closure at Woodroffe Ave

The recommended detour route during the closure of Highway 417 at Woodroffe Ave is shown in **Figure 3-7**. Highway 417 eastbound traffic will exit the highway at the existing eastbound off-ramp and then get back on the highway using the eastbound on-ramp ("ramp surfing"). Highway 417 westbound traffic will

use the existing westbound off-ramp and then get back on the highway using the westbound on-ramp ("ramp-surfing").

3.7.4 Woodroffe Ave Closure

The recommended detour route during the closure of Woodroffe Ave at the bridge is shown in **Figure 3-8**. Access to the 417 will be via Pinecrest Rd (north) or Greenbank Rd (south) and Maitland Ave. The pedestrian and cyclist detour will use Iris Street, the Pinecrest Creek Path along the Transitway and Georgina Drive, as shown in **Figure 3-9**.

Figure 3-5. Detour Route for Highway 417 Closure at Maitland Ave

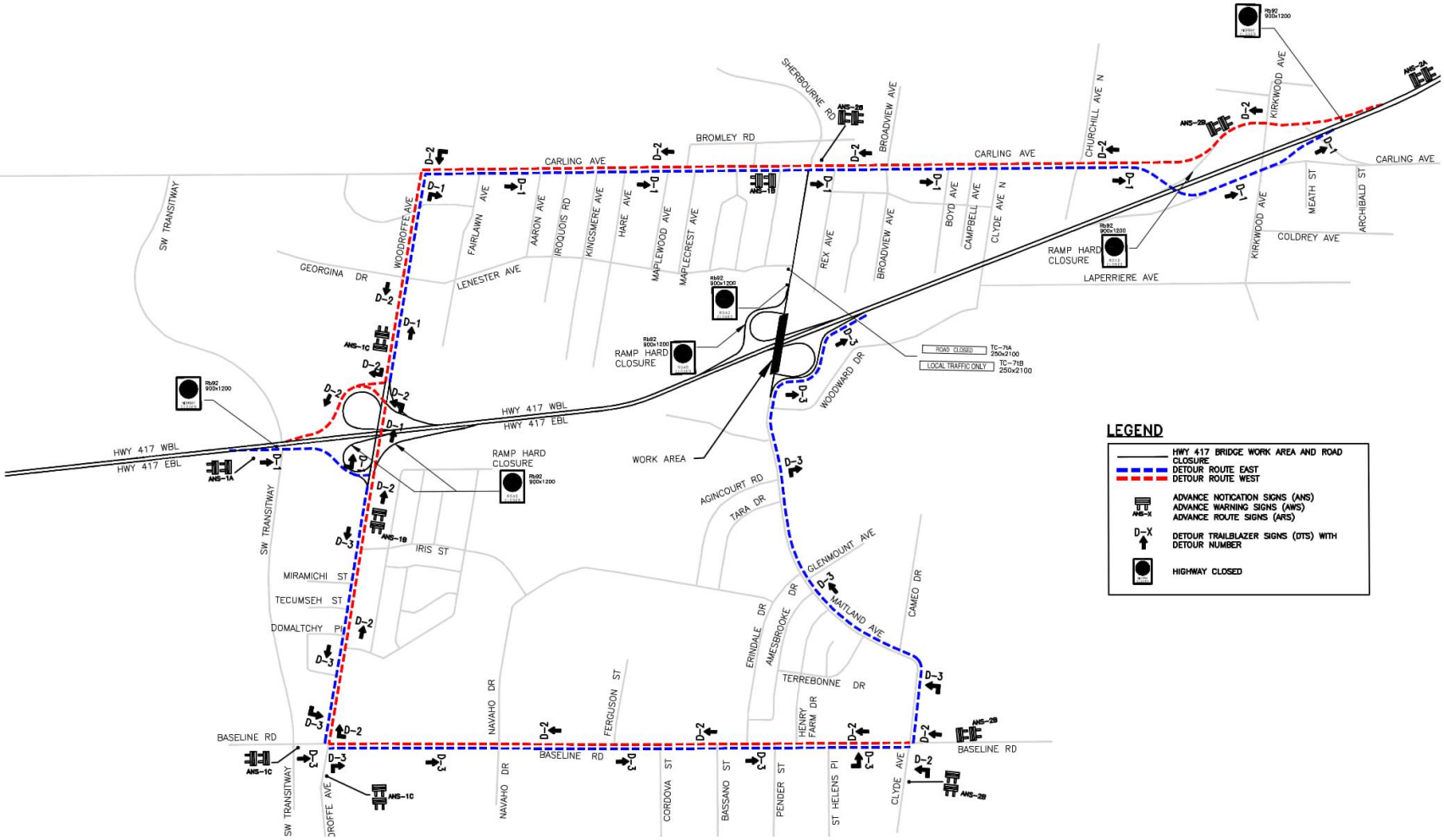


Figure 3-6. Detour Route for Maitland Ave Closure

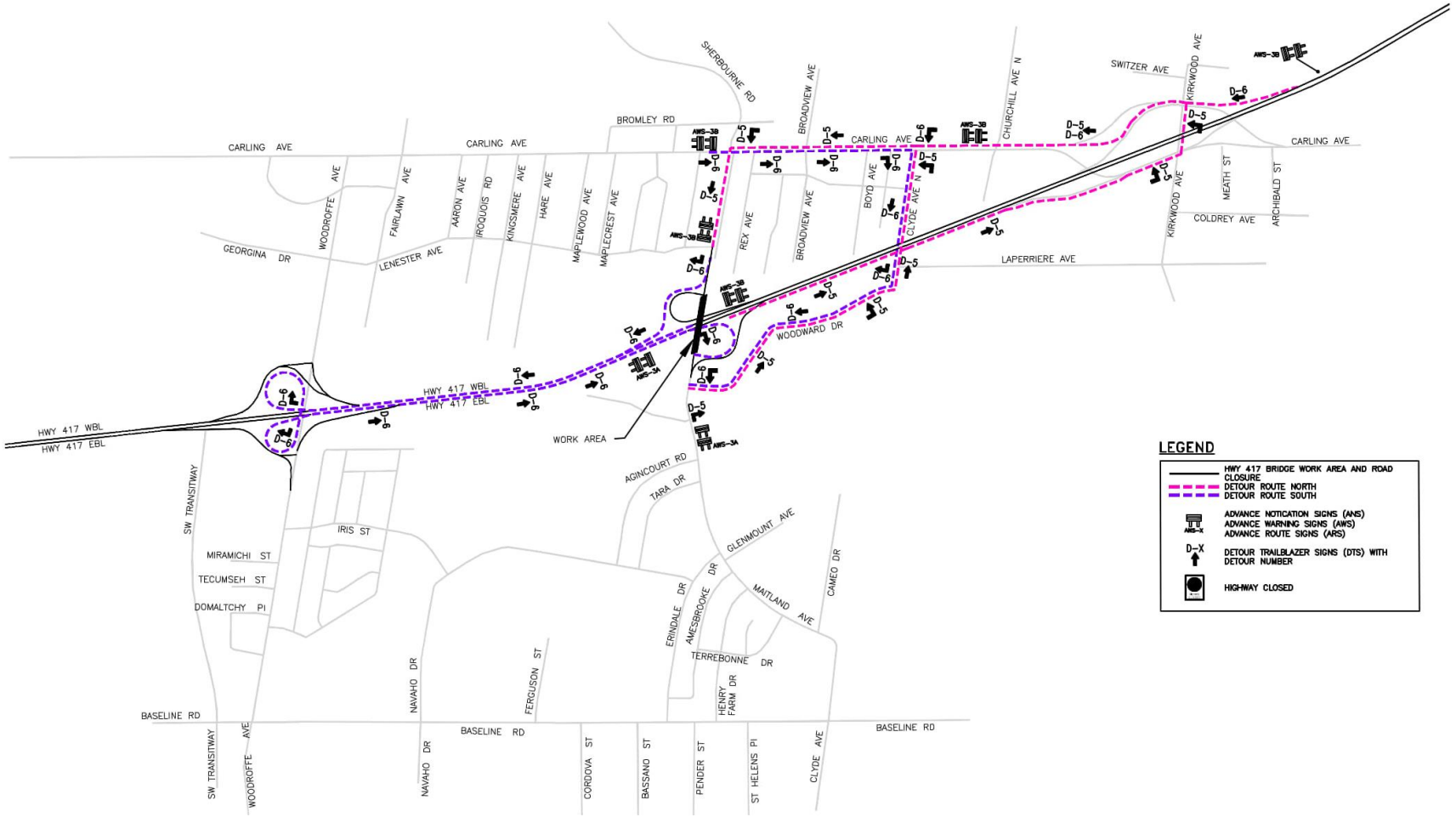


Figure 3-7. Detour Route for Highway 417 Closure at Woodroffe Ave

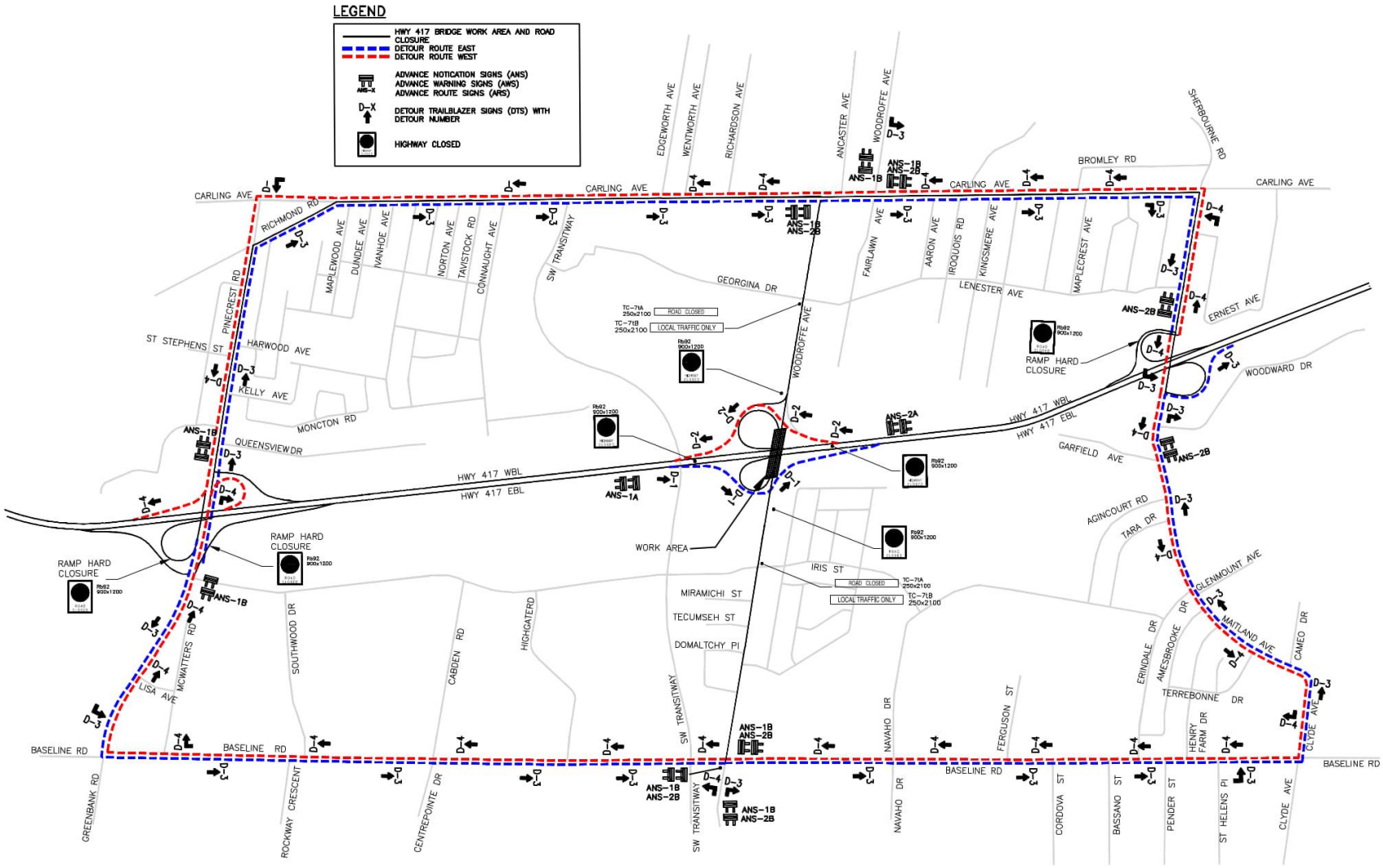


Figure 3-8. Detour Route for Woodroffe Ave Closure

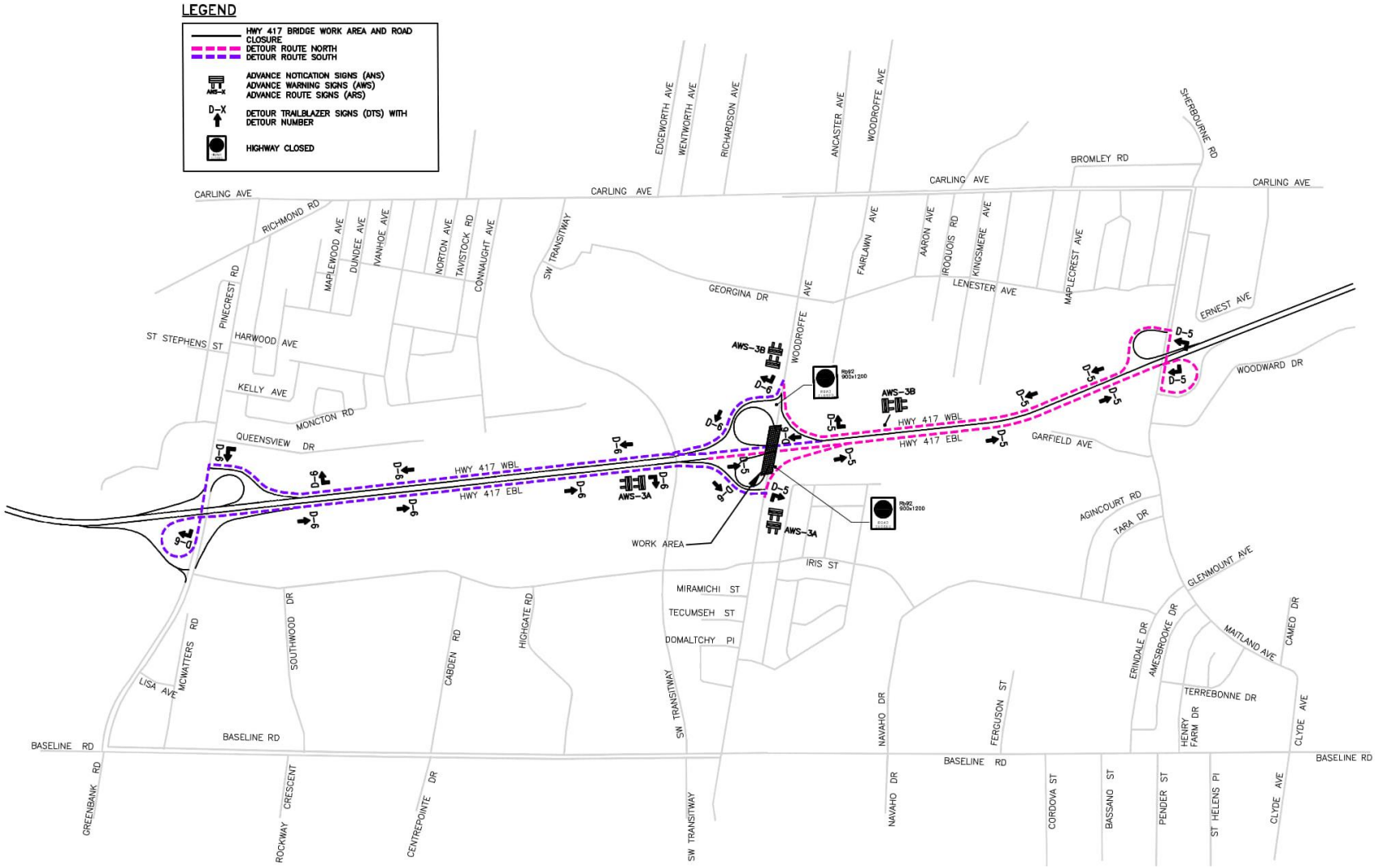
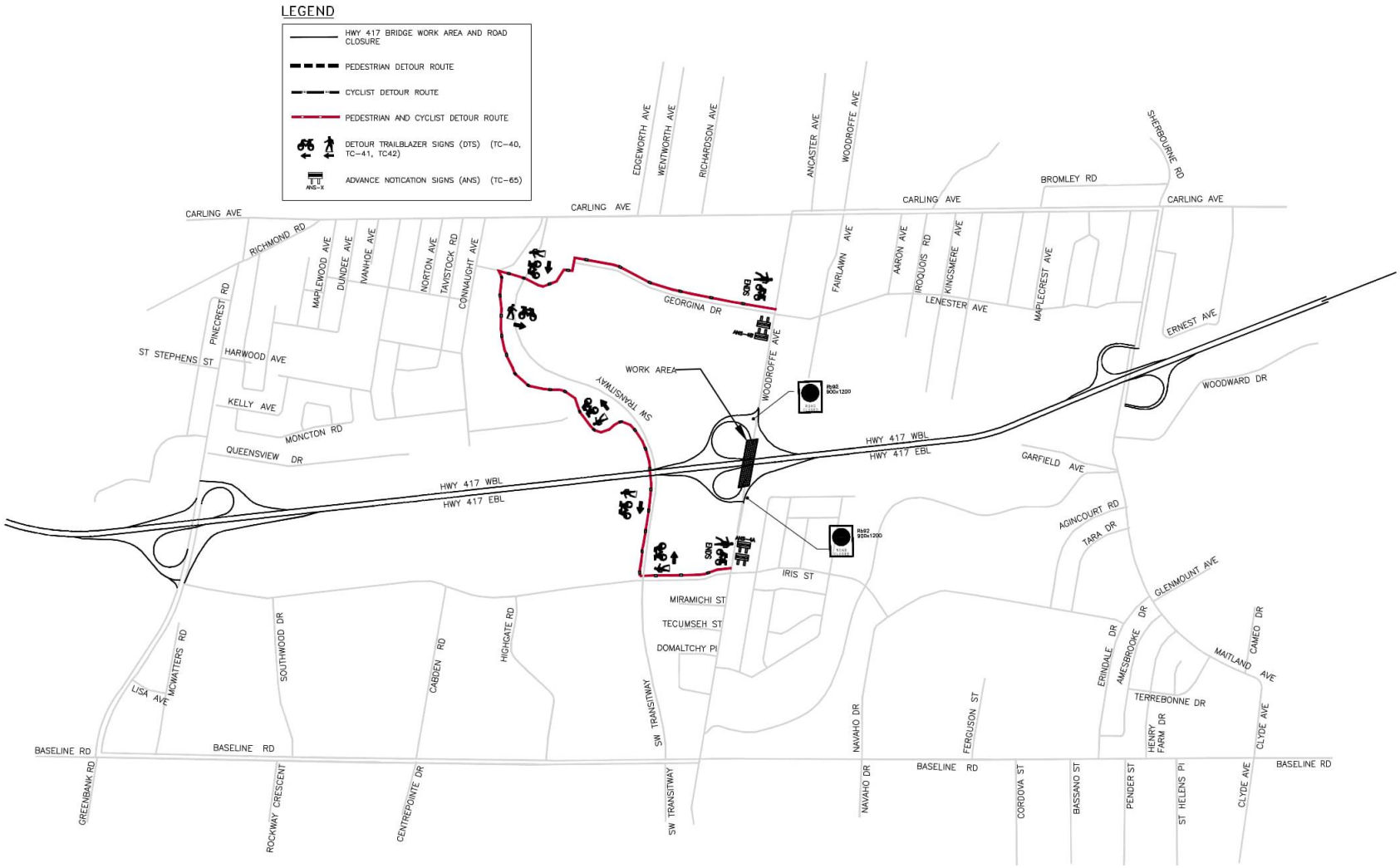


Figure 3-9. Pedestrian and Cyclist Detour for Woodroffe Ave Closure



3.8 Advance Traffic Management System

The recommended plan for the ATMS consists of relocating the existing camera facilities at each bridge. The relocations include a new camera, pole, and associated cabinet. The existing underground ATMS infrastructure impacted by the bridge replacements will also be relocated or modified to avoid conflicts and to provide connections to the new locations. Two temporary cameras will be provided at Maitland Ave during construction and will be removed when the permanent location is constructed.

3.9 Illumination

Surface mounted light fixtures are present on the existing pier caps and the bridge deck soffits. Street lighting on Woodroffe Ave and Maitland Ave at the bridges is provided by bridge mounted light posts.

New bridge mounted light posts over the piers will be installed and underpass illumination will be provided. Temporary street and underpass illumination will be provided during construction.

3.10 Drainage

Deck drains are not required on the bridges due to their relatively short length and location on a vertical crest curve. Existing catch basins at the ends of approach slabs will be adjusted (as required) and reinstated.

4. Transportation Environmental Study Report Five-Year Review

The MTO Class EA, 2000 specifies that a review of the TESR must be carried out if a project has not been constructed and a DCR has not been prepared within five years of the Notice of Submission for the TESR. The Five-Year Review considers any changes to the project since the submission of the TESR, including new conditions in the project area, government policies or regulations, engineering standards, or technologies for mitigation.

The "Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road Preliminary Design and Environmental Assessment" TESR was completed in 2007. A TESR review is required for the works relating to the bridges as this current Detail Design assignment commenced in 2023, sixteen years after the Notice of Submission was published for the TESR.

The details of the TESR review are provided below in Sections **4.1** to **4.3**. No significant changes were identified during the review of the 2007 TESR and therefore, a TESR addendum is not required.

4.1 Review of Existing Conditions

This section provides a summary review of the changes, if any, to the existing conditions within the Study Areas and the associated impact on the Project. A detailed description of updated conditions within the Study Areas and recommended mitigation measures are included in Section 5 of this DCR.

- **Fish and Fish Habitat**

  The closest watercourse to the Study Areas that was identified in the 2007 TESR was the Pinecrest Creek; however, it is located 0.4 km west of the Woodroffe Ave Bridge. It was confirmed during the 2023 field investigations that no fish or fish habitat is present within either Study Area.

- **Terrestrial Ecosystems**

  The 2007 TESR states that the terrestrial habitat present within the Study Areas is highly altered urban/residential. Wildlife species found in the Study Area include those that are well adapted to human activity and urban environments, such as racoons and groundhogs. This statement remains true, and presence of groundhog was confirmed during the 2023 field investigations.

- **Species at Risk**

  The schedules of Extirpated, Endangered, Threatened and Special Concern species in Ontario and nationally are amended regularly. Eight species currently designated as provincially Endangered or Threatened (Bobolink, Chimney Swift, Eastern Meadowlark, Butternut and bat species) were identified through background review in 2023. No Species at Risk (SAR) or preferred habitat were identified during the 2023 field investigations within the Study Areas; thus, there is no impact on the Project.

- **Source Water Protection**

  The *Clean Water Act,* which aims to protect municipal drinking water sources, received royal assent in 2006 and is thus not considered in the 2005 EA. Under the Act, regions in Ontario are required to develop Source Protection Plans that include policies to mitigate or eliminate threats to sources of municipal drinking water within vulnerable areas. These vulnerable areas include Wellhead Protection

Areas, Intake Protection Zones, Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas.

The Mississippi-Rideau Source Protection Plan was approved in 2014 and as such was not discussed in the 2007 TESR. The Study Areas occur within the Mississippi-Rideau Source Protection Region and are designated within an Intake Protection Zone. While project activities pose a low risk to local groundwater and surface water quality, a spills management plan should be developed to mitigate any potential source water contamination.

- **Land Use**

  The TESR states that most of the Queensway corridor was designated as General Urban Area in the City of Ottawa Official Plan (2003). The predominate land uses, as stated in the TESR, include residential, industrial/commercial, with some schools and churches and open space accommodating the Transitway and Pinecrest Creek in the Study Areas.

  In the current City of Ottawa Official Plan (2021), the Study Areas are within the Inner Urban Transect and Outer Urban Transect with the surrounding area predominately designated as Neighbourhood. The area to the southeast of the Maitland Ave bridge is designated as mixed industrial and west of the Woodroffe Ave bridge around the Transitway is designated as greenspace. The predominate land uses around the Study Areas continue to be residential, commercial and industrial. The Ottawa Adventist Church and the Charlotte-Lemieux Public Elementary School still exist to the northeast and southeast of the Woodroffe Ave bridge, respectively, and the St. Basil Church still exists northeast of the Maitland Ave bridge. A review of the City of Ottawa Development Applications Search tool revealed that there are currently no active development applications within and around the Study Areas. Overall, there are no significant changes to the land use within and around the Study Areas.

- **Archaeological Resources**

  Stage 1 and Stage 2 Archaeological Assessments were completed during the preliminary design study. No evidence of archaeological resources was found within the Highway 417 right-of-way. During this detailed design study, a Stage 1 Archaeological Assessment was completed at both the Maitland Ave and Woodroffe Ave bridge sites; no archaeological potential was found.

- **Built Heritage**

  No built heritage resources were identified with the Study Areas in the TESR. No additional built heritage resources have been identified in the Study Areas since completion of the TESR.

- **Noise and Air Quality**

  As noted in the TESR, traffic on Highway 417 and the crossroads along Highway 417 are a source of noise and air pollutants. Residences immediately adjacent to the Highway within and around the Study Area have been provided with noise attenuation walls. There are no significant changes to noise and air quality disturbances within the Study Areas.

4.2 Review of Applicable Regulatory Changes

Table 4-1 summarizes the changes to applicable regulations and their impact on the Project.

Table 4-1. Review of Applicable Regulatory Changes

Regulation	Summary of Change	Impact and Significance of Change
Class Environmental Assessment for Provincial Transportation Facilities (MTO Class EA)	In December 2023, a new amendment to the MTO Class EA was approved and then a subsequent version was approved in early 2024 to include reference to Municipal Expressways.	The 2023 and 2024 amended documents state that Group B projects with a Detail Design Class EA process initiated before the 2023 amendment came into effect are not eligible for transition to the amended Class EA. Thus, there is no impact on the Project and the Study is continuing to follow the MTO Class EA, as amended in 2000.
O. Reg. 406/19: On-Site and Excess Soil Management	Phase One of O. Reg 406/19 came into effect on January 1, 2021 and provides rules and requirements for the management of excess soil for when it is designated as waste; provides standards for appropriate reuse of excess soil; and defines new responsibilities and risks for those involved in soil excavation during construction. On January 1, 2022, the second phase came into effect and requires the filing of a notice by the Project owner in the Excess Soil Registry, as well as specific documentation and tracking measures for excess soil.	Any excess soil generated onsite during construction must be managed in accordance with this regulation.
Migratory Bird Regulations, 2022 (MBR)	On July 30, 2022, the MBR under the *Migratory Birds Convention Act* were updated. Notably, a change introduced by the regulation is the increased, now year-round, protection for the nests of eighteen species (now listed in Schedule 1 of the MBR) that are reused by migratory species. These nests remain protected until they have been abandoned. If the abandoned nest of a Schedule 1 species must be damaged, disturbed, destroyed, or removed, the MBR requires that the Environment and Climate Change Canada be notified via the new online Abandoned Nest Registry.	Pileated Woodpecker nesting cavities are listed in Schedule 1 of the MBR, 2022 and thus nests are always protected unless monitoring of the nesting cavity for 36 months (3 years) indicates the nest is unoccupied. There is potential for Pileated Woodpecker to utilize the forested community near Woodroffe Avenue for nesting, foraging or roosting purposes. No Pileated Woodpecker cavities were identified during the 2023 field investigations; thus, there is no impact on the Project.

Regulation	Summary of Change	Impact and Significance of Change
Endangered Species Act, 2007	The Ontario *Endangered Species Act,* 2007 (ESA) was passed into law in 2007 and came into force in June of 2008.	The 2007 TESR was completed in January of 2007, prior to implementation of the ESA. Works for the Project must adhere to the ESA and associated regulations and consider Species at Risk in Ontario. No provincially designated Endangered or Threatened SAR were observed during the 2023 field surveys, thus there is no direct impact on the Project. However, should any SAR be encountered at any time in the construction areas, work will stop, and the Contractor shall immediately notify the Contract Administrator.
O. Reg. 242/08: General *O. Reg. 829/21: Species Conservation Charges* *O. Reg.830/21: Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut*	In July 2013, O. Reg. 242/08 section 23.5 under the ESA came into effect, which allows individuals who are maintaining, repairing, modifying, replacing or demolishing a building or structure that provides Barn Swallow habitat to be provided with an exemption from sections 9 and 10 of the ESA to conduct their activity. However beneficial actions are required to be taken for the species if nests are to be removed, damaged or destroyed, or a nesting area will be lost from the building or structure. In December of 2021, O. Reg. 829/21 was passed under the ESA in December of 2021 and allows proponents undertaking authorized activities to opt to contribute to the *Species at Risk Conservation Fund* instead of completing beneficial actions for certain species that are impacted by their activities, including Barn Swallow. O. Reg. 830/21 was put into force under the ESA to contain the conditional exemptions for Barn Swallow, Bobolink/Eastern Meadowlark, and amended O. Reg. 242/08 to expand the availability of conditional exemptions for certain activities with common and routine mitigation actions.	The bridges have the potential to provide habitat for Barn Swallows. During the April 2023 field surveys, all bridges were surveyed for potential Barn Swallow nests. No nests or individuals were observed during the field surveys; thus, there is no impact on the Project.

Regulation	Summary of Change	Impact and Significance of Change
Species at Risk Act, 2002	The Species at Risk Act List and the schedules of Extirpated, Endangered, Threatened and Special Concern species have been, and continue to be, amended regularly to reflect the status of species in Canada. Species listed under the Act as Extirpated, Endangered, and Threatened are only protected on federal lands unless they are aquatic species or migratory birds listed in Schedule 1.	No federal land or aquatic habitat occur within the Study Areas; thus, there is no impact on the Project.

Notes:

ESA = *Endangered Species Act,* 2007
MBR = *Migratory Bird Regulations*, 2022
O. Reg. = Ontario Regulation

4.3 Review of the TESR Recommended Plan

A review of the TESR Recommended Plan was completed to determine the impact of proposed changes to the design on the Project. **Table 4-2** describes the changes made to the Recommended Plan for the Project since the submission of the 2007 TESR and the significance of the change(s).

Table 4-2. Summary of Changes to the TESR Recommended Plan

Element	Description	Impact and Significance of Change
Maitland Avenue Bridge Cross-Section	<u>2007 TESR Recommendation</u> The TESR recommended that the existing left turn lane on Maitland Ave be lengthened to accommodate projected traffic demands. This would require widening the bridge on the east side by 5.4 m. The TESR also recommended that Highway 417 from Highway 416 to Carling Ave be widened with one additional lane per direction, resulting in four mainline lanes in each direction, to be accommodated under the bridges. <u>Detail Design Recommended Plan</u> The cross-section of the replacement Maitland Ave Bridge deck will be 29 m, which is 10.1 m wider than the existing structure. This widening is 4.7 m more than the TESR recommendation. The widening will accommodate: • Extension of the southbound turning (left turn) lane • East and west cycle tracks • Widening of the east and west sidewalks • East and west buffer zones New requirements for active transportation facilities, including a 2 m wide pedestrian sidewalk, a 2 m wide raised cycle track and a 0.9 m wide buffer zone on both sides of the bridge, were added to the Project as a result of consultation with the City of Ottawa. There are no changes to Highway 417 as part of the Project.	The increased widening of the replacement bridge will allow for improved cycling and pedestrian access and safety across Highway 417 at Maitland Ave in line with recommendations from the City of Ottawa. The proposed cross-section allows for future cycling and pedestrian tie-ins along Maitland Ave subject to future work by the City of Ottawa. Widening of Highway 417 will happen in a future contract; thus, there is no impact on the TESR Recommended Plan.

Element	Description	Impact and Significance of Change
Woodroffe Avenue Bridge Cross-Section	<u>2007 TESR Recommendation</u> The TESR recommended that the Woodroffe Ave Bridge be widened by 4.3 m on the east side. This would be done to add a new northbound left turn lane to facilitate left turns and improve safety for northbound Woodroffe traffic. The TESR also recommended that bridge rehabilitations accommodate the recommended widening of Highway 417 from Highway 416 to Carling Ave of one additional lane per direction (resulting in four mainline lanes in each direction). <u>Detail Design Recommended Plan</u> The cross-section of the replacement Woodroffe Ave Bridge deck will be 30.5 m. This is 6.4 m wider than the existing structure and 1.1 m wider than the TESR recommendation. The widening will accommodate: • A new northbound traffic lane • East and west cycle tracks • Widening of the east and west sidewalks • East and west buffer zones New requirements for active transportation facilities, including a 2 m wide pedestrian sidewalk, a 2 m wide raised cycle tracks and a 0.9 m wide buffer zone on both sides of the bridge, were added to the Project as a result of consultation with the City of Ottawa. There are no changes to Highway 417 as part of the Project.	The increased widening of the replacement bridge will allow for improved cycling and pedestrian access and safety across Highway 417 at Woodroffe Ave in line with recommendations from the City of Ottawa. The proposed cross-section allows for future cycling and pedestrian tie-ins along Woodroffe Ave subject to future work by the City of Ottawa and/or MTO. Widening of Highway 417 will happen in a future contract; thus, there is no impact on the TESR Recommended Plan.

Element	Description	Impact and Significance of Change
Retaining Walls	2007 TESR Recommendation The TESR recommended that many of the existing retaining walls be rehabilitated/replaced. The locations and extent of this work is to be determined during the detail design phase. The TESR also recommended that bridge rehabilitations accommodate the recommended widening of Highway 417. Detail Design Recommended Plan *Maitland Avenue:* The existing concrete toe walls at the abutments will be widened to accommodate the bridge widening. *Woodroffe Avenue:* The existing concrete toe walls at the abutments will be removed and replaced with new retaining walls that will be closer to the abutments to accommodate the future expansion of Highway 417.	No change.
Construction Staging	2007 TESR Recommendation The TESR stated that the approach will be determined during detail design of bridge repairs in consultation with stakeholders. Detail Design Recommended Plan It is recommended that the bridges be demolished in place and new bridges, constructed offsite in the construction staging areas, be installed using rapid replacement techniques over multiple extended weekend closures of Highway 417.	This staging alternative allows for a shorter overall construction duration than conventional staged replacement alternatives, thereby reducing the duration of impacts to traffic on Highway 417, the interchange ramps, and along Maitland Ave and Woodroffe Ave during construction.

Element	Description	Impact and Significance of Change
Advanced Traffic Management	2007 TESR Recommendation The TESR does not provide any recommendations specific to ATMS facilities on the bridges. Detail Design Recommended Plan Existing ATMS facilities (i.e., cameras) will be protected or relocated as necessary.	No change.
Illumination	2007 TESR Recommendation The TESR recommended that the existing illumination system generally be retained and rehabilitated as required. Detail Design Recommended Plan Surface mounted light fixtures are present on the pier cap and the bridge deck soffit and street lighting is provided by bridge mounted light posts. New bridge mounted light posts over the piers will be installed and underpass illumination shall be provided.	New lighting will be installed that is similar to existing, therefore this change is not considered significant.
Drainage	2007 TESR Recommendation The TESR recommended that, in general, the existing drainage system be retained. Detail Design Recommended Plan Deck drains are not required on the structure due to its relatively short length and location on a vertical crest curve. Existing catch basins at the ends of approach slabs will be adjusted (as needed) and reinstated.	No change.

Element	Description	Impact and Significance of Change
Property Requirements	2007 TESR Recommendation The TESR does not identify any property requirements around the Maitland Ave and Woodroffe Ave bridges or interchanges. Detail Design Recommended Plan Property in the southwest quadrant of the Maitland Ave Study Area will be temporarily required during construction from the City of Ottawa.	This change is not significant for the following reasons: • The change only impacts one property owner; • The property requirement is temporary in nature; • A TLI agreement will be secured between MTO and the City of Ottawa to mitigate any potential impacts to the City of Ottawa; • Following construction, the property will be rehabilitated and returned to the City of Ottawa.

5. Environmental Issues and Commitments

This section presents a description of the existing environmental conditions in the study areas, the potential environmental impacts associated with design and construction of the Recommended Plan, and the mitigation measures that are recommended to avoid or minimize impacts. **Table 5-4** presents a summary of the potential impacts, mitigation measures and future commitments.

5.1 Terrestrial Ecosystems

Terrestrial Ecosystems encompass terrestrial habitat conditions, including for Species at Risk (SAR). During detailed design, Morrison Hershfield (MH) prepared the *Natural Sciences Existing Conditions and Impact Assessment Report: Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements (G.W.P 4124-14-00)* (2024). The report documents the terrestrial ecosystem existing conditions in the Study Areas, potential impacts of the project, and proposed mitigation measures. The findings and conclusions of that report are summarized in this Section. The Study Areas are shown in **Figure 5-1** and **Figure 5-2**.

5.1.1 Existing Conditions

Background research, field investigations and agency consultation were used to determine the terrestrial ecosystem existing conditions within the Study Areas. Field investigations were conducted by MH on April 24, 2023.

5.1.1.1 Vegetation and Vegetation Communities

Vegetation within the Study Ares consist of a mixture of natural and disturbed communities. Disturbed vegetation communities are indicative of disturbances due to previous construction and road maintenance activities along Highway 417, Maitland Ave, and Woodroffe Ave.

Seven total Ecological Land Classification (ELC) communities were identified within the Study Areas. **Figure 5-1** and **Figure 5-2** provide mapping of the ELC communities with the Study Areas and **Table 5-1** provides a description of each community. A description of the ELC communities and a list of all plant species observed within the study areas are provided in the existing conditions and impact assessment report referenced above.

Table 5-1. Description of ELC Communities

Community Name	Summary Description	Dominant Species
CVI Transportation and Utilities – Highway	Anthropomorphic area consisting of roads, highways, rights of way (ROW), towers, pipelines, airports, railways, marinas, etc.	Species observed include Common Dandelion (*Taraxaxum officinale*), Red Clover (*Trifoilium pratense*), Bird's-foot Trefoil (*Lotus corniculatus*), Sweet-clover Species (*Melilotus sp*), and Wild Carrot (*Daucus carota*).
CVR Residential	Consists of residential buildings and their surrounding maintained landscapes.	Vegetation includes mowed grass and planted ornamental trees, shrubs and herbaceous plants.

Community Name	Summary Description	Dominant Species
CVC Commercial and Institutional	Consists of commercial and businesses and the surrounding maintained landscapes. CVC areas also consist of abandon commercial or business structures.	Manicured lawn, ornamental vegetation, and quarry pits.
MAMM1-2 Cattail Graminoid Mineral Meadow Marsh	Shallow waters that contain water typically < 2 m in depth. MAM areas in the project limits include unnamed marsh and unnamed tributaries.	Species observed includes Broad-leaved Cattail (*Typha latifolia*), Reed Canary Grass (*Phalaris arundinacea*). Due to survey timing, in stream vegetation was not observed.
THDM2 Dry-Fresh Deciduous Shrub Thicket	Composed of over 75% deciduous shrub species and less than 25% of tree cover. Shrub cover may vary from continuous to scattered and patchy. Areas considered cultural in past or current use are dominated by more invasive shrub species.	Species observed include Tartarian Honeysuckle (*Lonicera tatarica*), Common Buckthorn (*Rhamnus cathartica*), and Common Lilac (*Syringa vulgaris*).
CUM1 Mineral Cultural Meadow	Vegetation in this community consists of grass-like and broadleaf species primarily. Tree and shrub cover does not exceed 25%. This community is open herbaceous and has cover that varies from scattered and patchy to continuous meadow.	Due to cultural use, a large portion of non-native species are present. Species includes Common Dandelion, grass species (*poa sp.*) Common Wintercress (Barbarea vulgaris), Smooth Bedstraw (*Galium mollugo*), Common Evening-primrose (*Oenothera biennis*), Garlic Mustard (*Alliaria petio*).
FOD4 Dry-Fresh Deciduous Forest	Comprised of greater than 75% deciduous canopy cover. Moisture regime is moderately dry to fresh.	Species observed include Manitoba Maple (*Acer negundo*), Red Maple (*Acer rubrum*), Trembling Aspen (*Populus tremuloides*) and White Spruce (*Pinus strobus*).

5.1.1.2 Rare Vegetation

National Heritage Information Centre (NHIC) background review and correspondence with the MNRF Kemptville District did not indicate any species identified within the Study Areas as rare within the province of Ontario. Rare vegetation species were not observed within the Study Areas during the field investigations.

Figure 5-1. Maitland Ave Bridge ELC Map

Figure 5-2. Woodroffe Ave Bridge ELC Map

5.1.1.3 Insects

According to the Ontario Butterfly Atlas (OBA), there were 72 records of butterflies within and around the Study Areas. The above referenced existing conditions and impact assessment report provides a complete list of invertebrates recorded by the OBA surrounding the Study Areas. No invertebrate species were observed within the Study Areas during the field investigations.

5.1.1.4 Herpetofauna

According to the Ontario Reptile and Amphibian Atlas (ORAA), 27 records of amphibians and reptiles occur within and around both Study Areas. The above referenced existing conditions and impact assessment report provides a complete list of herpetofauna recorded by the ORAA surrounding the Study Areas. The MNRF Kemptville District did not provide additional records of herpetofaunal species within the Study Areas. No herpetofaunal species were observed within the Study Areas during the field investigations.

5.1.1.5 Avifauna

According to the Ontario Breeding Bird Atlas (OBBA), 101 breeding bird species, including seven Species at Risk (SAR), were recorded within and around both Study Areas. During the field investigations, avian species observed within the Study Areas included:

- Common Grackle (*Quiscalus quiscula*)
- Red-winged Blackbird (*Cagelaius phoeniceus*)
- Song Sparrow (*Melospiza melodia*)
- Canada Goose (*Branta canadensis*)
- Mallard (*Anas platyrhynchos*)
- American Crow (*Corvus brachyrhynchos*)
- European Starling (*Sturnus vulgaris*)
- American Robin (*Turdus migratorius*)
- Common Raven (*Corvus corax*)

Additionally, there is potential for Pileated Woodpecker to utilize the forested community near Woodroffe Ave during its life cycle for nesting, foraging or roosting. Pileated Woodpecker nesting cavities are listed in Schedule 1 of the MBR nests, and thus are protected at all times unless monitoring of the nesting cavity for 36 months (3 years) indicates the nest is unoccupied. No Pileated Woodpecker cavities were identified during the field investigations.

The above referenced existing conditions and impact assessment report provides a complete list of avian species recorded by the OBBA within and around the Study Areas, as well as a list of observed and heard species within the Study Areas during field investigations.

5.1.1.6 Mammals

Background review sources revealed that the Study Areas are likely to support a variety of mammals including, Raccoon (*Procyon lotor*), Eastern Gray Squirrel (*Sciurus carolinensis*), Eastern Cottontail (*Sylvilagus floridanus*), Eastern Chipmunk (*Tamias striatus*) and Groundhog (*Marmota monax*). During the field investigations, the presence of Groundhog was confirmed through visual observation of one

individual and burrows within the Maitland Ave Study Area and burrows within the Woodroffe Ave Study Area.

5.1.1.7 Terrestrial Species at Risk

SAR likely to occur within the Study Areas, listed in **Table 5-2**, were identified based on a review of background data, existing conditions on site, and the known habitat preferences for SAR. No provincially designated Endangered or Threatened SAR were observed within the Study Areas during the field investigations.

Table 5-2. Summary of SAR Likely to Occur Within the Study Areas

Common Name	Scientific Name	ESA Designation	Suitable Habitat within Study Areas
Bald Eagle	*Haliaeetus leucocephalus*	SC	Suitable nesting habitat not identified. Primary overwintering habitat not identified.
Barn Swallow	*Hirundo rustica*	SC	Possible suitable nesting habitat within both Study Areas; no nests observed.
Bobolink	*Dolichonyx oryzivorus*	THR	Primary breeding and nesting habitat not identified.
Chimney Swift	*Chaetura pelagica*	THR	Possible foraging habitat within Maitland Ave Study Area. Suitable nesting habitat not identified.
Eastern Meadowlark	*Sturnella magna*	THR	Primary breeding and foraging habitat not identified.
Eastern Wood-pewee	*Contopus virens*	SC	Suitable nesting habitat may be present within Woodroffe Ave Study Area.
Peregrine Falcon	*Falco peregrinus*	SC	Suitable nesting habitat not identified.
Wood Thrush	*Hylocichla mustelina*	SC	Suitable breeding habitat may be present within Woodroffe Ave Study Area.
Eastern Musk Turtle	*Sternotherus odoratus*	SC	Suitable nesting, foraging or overwintering not identified.
Northern Map Turtle	*Graptemys geographica*	SC	Suitable nesting, foraging or overwintering not identified.
Snapping Turtle	*Chelydra serpentina*	SC	Suitable nesting, foraging or overwintering not identified.
Monarch	*Danaus plexippus*	SC	Foraging habitat may be present within both Study Areas; however, no milkweed species identified during field investigations.
Yellowbanded Bumble Bee	*Bombus terricola*	SC	Foraging and nesting habitat may be present within both Study Areas.
Bat Species	*Myotis and Perimyotis sp.*	END	Potential bat maternity roosting habitat; unlikely due to high noise levels along Highway 417.

Common Name	Scientific Name	ESA Designation	Suitable Habitat within Study Areas
Butternut	*Juglans cinerea*	END	Butternut individuals not identified during field investigations.

Notes:
ESA = *Endangered Species Act*
END = Endangered
THR = Threatened
SC = Special Concern

5.1.1.8 Designated Significant Natural Areas

According to background review sources, there are no Areas of Scientific Interest or Provincially Significant Wetlands within the Study Areas. MNRF identified an unevaluated wetland and potential Significant Woodlands situated southwest of the Woodroffe Ave Study Area; however, both natural features are unlikely to intersect with project works. Another Natural Area, Carlington Woods, is located 0.5 km from the Maitland Ave Study Area, but is also unlikely to intersect with project works.

5.1.1.9 Significant Wildlife Habitat

A Significant Wildlife Habitat (SWH) screening exercise was conducted using the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015) to determine the presence of Candidate SWH within the Study Areas. The Candidate SWH identified within the Study Areas are summarized in **Table 5-3**.

Table 5-3. Candidate SWH within the Study Areas

Significant Wildlife Habitat Category	Description
Seasonal Concentration Areas	Candidate Bat Maternity Colonies may be present in the FOD4: Dry to Fresh Deciduous Forest communities at the Woodroffe Ave Study Area. Due to the limited extent of the forested communities within the Study Area and the high noise levels along Highway 417, bat maternity habitat is unlikely.
Rare Vegetation Communities or Specialized Habitat for Wildlife	Candidate Amphibian Breeding Habitat (Wetland) may be found within the Cattail Graminoid Mineral Meadow Marsh (MAMM1-2) community at the Maitland Avenue Study Area.
Habitat for Species of Conservation Concern	Nine provincial Species of Concern have the potential to be present within the Study Areas and may use the habitats with the Study Areas (refer to **Table 5-1**).
Animal Movement Corridors	Candidate Amphibian Movement Corridor may be present within the Cattail Graminoid Mineral Meadow Marsh (MAMM1-2) community within the Maitland Ave Study Area as this habitat may be found in all ecosites associated with water.

5.1.2 Potential Impacts and Mitigation Measures

5.1.2.1 Vegetation Loss

Vegetation removals, including trees and shrubs from the cultural meadow and deciduous shrub thicket communities, will be required at both sites for construction staging and access. It is anticipate that 0.87 ha of land along Maitland Ave and 1.63 ha of land along Woodroffe Ave will require vegetation clearing. Removed vegetation will primarily include non-native species due to past anthropogenic disturbances. The following mitigation measures are recommended to minimize impacts to vegetation:

- All vegetation removals and tree clearing will be completed in accordance with Ontario Provincial Standard Specification (OPSS) 201: Construction Specification for Clearing, Close Cut Clearing, Grubbing, and Removal of Surface and Piled Boulders.
- Surplus material resulting from vegetation removal operations shall be managed according to OPSS 180: General Specification for the Management of Excess Materials.
- In the event of accidental damage to trees, or unexpected vegetation removal, vegetation shall be replaced or restored with native species according to Non-Standard Special Provision (NSSP) LAND0001: Requirements for Planting.
- Disturbed vegetation and soils within the impacted areas shall be re-established as soon as conditions permit to provide stabilization to exposed soils and minimize sedimentation according to OPSS 206: Construction Specification for Grading and OPSS 802: Construction Specification for Topsoil.
- Following completion of grading and topsoil application, disturbed areas will be re-seeded with a standard roadside seed mixture for the Highway 417, Maitland Ave and Woodroffe Ave ROWs, as specified in OPSS 803: Construction Specification for Vegetative Cover.
- During works, any tree roots greater than 25 mm in diameter shall be cut off cleanly according to OPSS 801: Construction Specification for the Protection of Trees.
- Vegetation removal shall be minimized, where possible, and shall be limited within the construction footprint.

5.1.2.2 Erosion and Sedimentation

Soil erosion during construction may occur from the removal of vegetation. Erosion and sedimentation can result in soil loss and disruption of natural areas or drainage systems. The following is recommended to mitigate such impacts:

- The Contractor shall prepare and implement an Erosion and Sediment Control Plan.
- Disturbed soils will be properly contained to prevent migration of materials and sediments beyond the work limits and into adjacent communities using OPSS 804: Construction Specification for Temporary Erosion Control, and NSSP 001A820: Operational Constraint – Erosion and Sedimentation Control.
- All vegetation not specified for removal should be preserved to minimize erosion and sedimentation.

- All exposed areas should be reinstated to existing, or better, conditions as soon as possible following construction.

5.1.2.3 Wildlife and Wildlife Habitat

Due to vegetation clearing, direct impacts may occur to wildlife and bird nesting habitat, including temporary and permanent loss of habitat. Indirect impacts to wildlife and migratory birds in the Study Areas may also occur due to construction noise, dust, and vibration. It is anticipated that most wildlife will move away from disturbance during construction. Nonetheless, as per NSSP 001A860: Prevention of Wildlife Harassment, no wildlife encountered during construction may be harassed or killed. Therefore, if any wildlife is encountered within the work limits that do not, or cannot, move away safely on their own, they should be moved to a similar, safe location outside of the work area by someone experienced in wildlife relocation.

To avoid impacts to migratory birds protected under the MBCA, the following mitigation measures are recommended:

- The Contractor is responsible for abiding by NSSP 001A870: Migratory Bird Protection – General and will not destroy active nests or eggs of protected migratory birds. As such, all vegetation removals and clearing should be completed outside of the active breeding bird season, from April 15 to August 31 of any given year.
- If nesting activity (nest building, carrying nesting material etc.) and/or nests or eggs/young are found during construction, all activity in the area should temporarily cease, until the Contractor retains an Avian Biologist to determine whether the nests/eggs/young belong to a migratory bird species. Any nests found belonging to migratory birds must be protected while they are active with a species appropriate buffer (determined by the Avian Biologist), within which no work can occur until such a time that the nest is no longer active.

5.1.2.4 Terrestrial Species at Risk

Potential suitable habitat was identified within the general vicinity of the Study Areas for eight Endangered or Threatened SAR protected under the ESA. While these species have the potential to occur surrounding the Study Areas, none were confirmed as present during field investigations and no habitat known to be preferred by these species was identified within the impact areas. Should the Contractor encounter a SAR within the construction limits that is likely to be impacted by the operations, the Contractor shall immediately notify the Contract Administrator and suspend operations within the area identified by the Contract Administrator, as per OPSS 100: MTO General Conditions of Contract. Work shall remain suspended within that area until otherwise directed by the Contract Administrator in writing.

5.1.2.5 Designated Significant Natural Areas

Significant natural areas were not identified within the Study Areas. It is anticipated that any potential indirect impacts (from noise, dust and vibration) to significant natural areas near the Study Areas will be negligible, as the proposed works will be limited to the existing right-of-way and existing road and bridge structures.

5.1.2.6 Significant Wildlife Habitat

Several candidate SWH features were identified within or adjacent to the Study Areas; however, based on the anthropogenic nature of the Study Areas and a review of the design plans, no SWH are anticipated to be directly impacted by construction.

5.2 Fish and Fish Habitat

Fisheries Existing Conditions and Impact Assessment Report: Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements (G.W.P 4124-14-00) (2024) was prepared by MH to document the existing fish and fish habitat conditions in the Study Areas. The findings and conclusions of that report are summarized in this Section.

5.2.1 Existing Conditions

Background data collection, field investigations and agency consultation were used to determine the fish and fish habitat conditions within the Study Areas. Spring fish and fish habitat field investigations were conducted by MH on April 27, 2023.

Through background data review, MH identified that there is likely no potential for supporting fish habitat within both Study Areas. MNRF Kemptville District also indicated they had no known fish habitat information or locations within the Study Areas. Spring fish and fish habitat field investigations confirmed that no fish or fish habitat was present at either of the Study Areas.

5.2.2 Potential Impacts and Mitigation Measures

Since fish habitat was not identified within the Study Areas, no impacts to fish or fish habitat are anticipated for the Project and mitigation measures are not required.

5.3 Waste, Contamination and Excess Materials

5.3.1 Existing Conditions

5.3.1.1 Designated Substances

A Designated Substance Survey for numerous structures, including the Maitland Ave and Woodroffe Ave bridges, was completed in 2015. The purpose of the survey was to identify the potential for, or location and quantity of, designated substances, as classified by the Ontario *Occupational Health and Safety Act*, at the bridge sites and to provide management recommendations. Review of background documents, visual site inspections and sample analyses were completed for the survey.

The relevant findings from the survey are as follows:

- At the Maitland Ave Bridge, analysis of a paint sample from the existing steel plate girder identified the paint to be lead-based.
- At the Woodroffe Ave Bridge, analysis of a paint sample from the existing steel plate girder identified the paint to be lead-containing.
- At the Maitland Avenue and Woodroffe Avenue bridges, epoxies and coatings on steel elements (guiderails, bracing, girders, diaphragms, beams, etc.) may contain lead, arsenic and mercury.

- At both bridges, arsenic may be present in pressure treated lumber in guiderail posts.
- At both bridges, silica is present in concrete and mortar.
- No potential for asbestos containing materials was identified at either bridge.

5.3.2 Potential Impacts and Mitigation Measures

As lead-containing paint has been confirmed on the existing bridge girders, lead will be encountered during construction and lead-containing waste will be generated from the demolition of the existing bridges. Lead has the potential to impact the surrounding environment and human health. The Designated Substance Survey recommends that the Contractor prepare and implement a lead abatement and management plan. The following mitigation measures are recommended to avoid impacts from Lead:

- The Contractor will be notified of the potential to encounter designated substances, as per SSP 101F21: Occupational Health, and Safety Act Compliance – List of Designated Substances.
- All activities that may disturb lead-containing paint shall comply with the applicable Occupational Health and Safety Act legislation.
- All lead containing waste shall be disposed of in accordance with OPSS 180: General Specification for the Management of Excess Material and NSSP ENVR0014: Amendment to OPSS 180 - Compliance with Ontario Regulation for On-Site and Excess Soil Management.

Construction waste and excess materials will be generated during construction. These materials, as well as spills and leaks have the potential to contaminate the surrounding environment if they are not properly managed. The following mitigation measures are recommended to prevent excess, waste and contaminated materials from contaminating the surrounding environment:

- Construction waste and excess materials generated during construction shall be managed in accordance with OPSS 180: Management of Excess Material and NSSP ENVR0014: Amendment to OPSS 180 - Compliance with Ontario Regulation for On-Site and Excess Soil Management.
- The Contractor must ensure that machinery arrives on site in a clean condition, and is maintained free of excess or leaking fuel, lubricants, coolant, or any other contaminants for the duration of construction.
- The Contractor must develop a Spill Response Plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance. The plan shall include the requirements for emergency spill kits to be kept on site (and in heavy machinery) in case of emergency.
- All spills shall be reported to the Ministry of Environment, Conservation and Parks (MECP) Spills Action Centre (1-800-268-6060), as well as to DFO and MNRF Kemptville District if there is potential for impacts to natural areas, fisheries, or wildlife resources.

5.4 Archaeological Resources

5.4.1 Existing Conditions

Both Study Areas are situated within an overall historic landscape that would have been appropriate for use by both Indigenous and EuroCanadian people.

During detailed design, a Stage 1 Archaeological Assessment was completed for each of the Study Areas

(PIF numbers P051-0262-2022 and P051-0265-2022) by LHC Heritage Planning & Archaeology (2023). Based on site inspections and a review of land use history and nearby features indicating archaeological potential, it was determined that both Study Areas are disturbed, due to the construction, maintenance, and alteration of Highway 417, and do not exhibit archaeological potential. No further archaeological assessment was recommended. The reports have been entered into the Ontario Public Register of Archaeological Reports.

5.4.2 Potential Impacts and Mitigation Measures

It is possible that archaeological materials or human remains are discovered during construction. If potential archaeological resources are discovered, the following mitigation measures will apply:

- 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, the proponent or person discovering the remains shall notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

5.5 Built Heritage Resources and Cultural Landscapes

Heritage screening completed for the Study Areas indicated that there is low potential for built heritage resources or cultural heritage landscapes within the Study Areas.

5.6 Land Use

5.6.1 Existing Conditions

The Study Areas are located in the west-central are of the City of Ottawa. At the bridges Ward 7 (Bay) is to the north of Highway 417 and Ward 8 (College) is to the south. The land use surrounding the Study Areas is predominately residential land use. Mixed-industrial use is located to the south-east of the Maitland Ave Study Area. Greenspace is located to the north-west of the Woodroffe Ave Study Area along the Transitway (Bus Rapid Transit network). The City of Ottawa Official Plan (2021) defines the areas to the north of the Study areas as inner urban and the area directly to the south as outer urban.

Maitland Ave is designated in the Ottawa Official Plan (2021) as a Minor Corridor. Woodroffe Ave is located east of Maitland Ave and is designated as a Mainstreet Corridor. Both roads convey traffic north-south over Highway 417. Pedestrian sidewalks exist along both sides of Woodroffe Ave and Maitland Ave. No cycling infrastructure currently exists on either municipal road at Highway 417.

Both Study Areas are designated within an Intake Protection Zone the City of Ottawa Official Plan (2021). An Intake Protection Zone is the area around a surface water intake where land uses have the potential to affect the water quality of source water for a municipal residential drinking water system. Certain activities and land uses that are identified as prescribed threats to the source water, as defined by the *Clean Water Act*, 2006, are subject to source water protection plans and policies. No activities directly related to project works are defined as a prescribed threat.

5.6.2 Potential Impacts and Mitigation Measures

No changes to the existing land use will occur as part of the Project.

Active transportation infrastructure on Maitland Ave and Woodroffe Ave over Highway 417 will be improved from existing conditions. The new bridges will include a widened pedestrian sidewalk, a raised cycle tracks and a buffer zone on both sides of the bridges. This will result in a positive impact on cycling and pedestrian use of the bridges across Highway 417.

5.7 Aesthetics and Landscaping

In 2011, a Context Sensitive Design Report was prepared to provide an overall design vision for the Queensway corridor. The intention of the report is to ensure that the Queensway corridor reflects a holistic aesthetic and vision that promotes an entry experience to Canada's Capital. The report outlines adaptable design recommendations to serve as a starting point for the development of standard details and specifications for a range of aesthetic improvements in the corridor.

5.7.1 Potential Impacts and Mitigation Measures

The Project will result in minor disturbance to the existing landscape and vegetation around the bridge replacement sites and within the construction staging areas. A Landscape Plan has been prepared and shall be implemented following construction to revegetate disturbed areas with native trees, shrubs, and seed mixes, as appropriate for the site conditions and in accordance with recommendations from the Context Sensitive Design Report.

Impacts to the aesthetics of the Queensway corridor will result from the replacement of the Maitland Ave and Woodroffe Ave bridges. The Maitland Ave and Woodroffe Ave bridge replacements will incorporate the applicable recommendations from the Context Sensitive Design Report and bridge treatments will be consistent with what has been implemented on other recent bridge replacement projects in the corridor to ensure a wholistic aesthetic of the Queensway corridor is maintained. Context sensitive bridge treatments will include:

- Street names on embedded plaques/ signs on the bridges when seen from the Queensway;
- Upward arching pilasters at the abutment corners and at all mid-piers with a maple leaf symbol in the façade; and
- Weathered steel beams or beams coloured to simulate weathered steel.

5.8 Traffic Operations

5.8.1 Existing Conditions

Maitland Ave Bridge carries four lanes of traffic (two northbound and two southbound) over Highway 417. The Highway 417 eastbound off-ramp merges with the northbound Maitland Ave lane with little to no speed change lane, approximately 10 m south of the bridge. Highway 417 below the bridge carries 10 lanes of traffic (four eastbound through lanes, one eastbound exit lane, three westbound through lanes, and two westbound exit lanes).

The Woodroffe Ave Bridge carries five lanes of traffic (two northbound and three southbound) over Highway 417. The third southbound lane acts as a shared speed change lane for the on and off ramps. Highway 417 below the bridge carries 8 lanes of traffic (three eastbound through lanes, one eastbound on-ramp lane, three westbound through lanes, and one westbound exit lane).

5.8.2 Potential Impacts and Mitigation Measures

During construction, full closures and lane reductions of Highway 417, interchange ramps and municipal roads will be required to complete the work. Local and commuter vehicle traffic, emergency vehicle access, bus routes and schedules, pedestrian traffic and cycling traffic are anticipated to be impacted during closures. Traffic impacts will be temporary in nature and traffic flow will be fully reinstated following construction.

Mitigation measures recommended to reduce impacts to traffic during construction includes:

- Lane reductions and road closures will be kept to the minimum required to complete the work.
- The Contract shall prepare and implement a Traffic Management Plan to minimize impacts from closures and a Communications Plan to provide the public and relevant agencies of planned closures and detours.
- The Contractor will notify emergency services, OC Transpo, school boards, and other relevant agencies of the construction schedule two weeks in advance of the start of construction and will provide notice in advance of any anticipated changes to traffic flow.
- Advance signage will be provided prior to lane and ramp closures.
- Signed detours will be implemented during Highway 417 full closures, ramp closures and municipal road closures.

5.9 Noise, Vibration and Air Quality

Existing noise within the Study Area occurs due to vehicle traffic on Highway 417 and the municipal roads. Existing noise walls are located along Highway 417 to reduce the impacts of noise from the highway on surrounding sensitive receptors (such as residences). A short section of noise wall in the southwest quadrant of the Maitland Ave Study Area is required to be replaced during construction.

5.9.1 Potential Impacts and Mitigation Measures

The majority of the existing noise walls along Highway 417 will not be modified as part of the Project and will continue to provide noise attenuation to adjacent residential areas. The duration of noise exposure from the short section of noise wall that requires replacement will be kept to the minimum required to complete the replacement work. It is anticipated that there will be a temporary increase in noise and vibration levels in the Study Areas during construction. Post construction, noise is anticipated to remain the same as current conditions. The following mitigation measures will be implemented to reduce any impacts from construction noise:

- Construction equipment shall be kept in good operating condition with effective muffling devices.
- Idling of equipment shall be restricted to the minimum necessary to perform the work.
- Minimize the number of vehicles and engines operating at any one time.

Air quality nuisances from construction equipment exhaust and from dust, especially during bridge demolition, may occur during construction and will be temporary in nature. The following is recommended to mitigate impacts from dust and exhaust:

- Idling of equipment shall be restricted to the minimum necessary to perform the work to minimize exhaust emissions.

- Standard dust control or suppression measures shall be implemented to minimize airborne dust.
- The construction site and access roads will be cleaned regularly to remove debris and dust caused by construction.

5.10 Property

The use of City of Ottawa property in the southwest quadrant of the Maitland Ave Study Area will be required to complete the work. To mitigate any impacts, a Temporary Limited Interest (TLI) agreement will be secured by MTO prior to construction.

5.11 Utilities

5.11.1 Existing Conditions

The following public-owned and private-owned utilities exist within the Study Areas:

- City of Ottawa (sanitary sewers, watermains, street lighting, traffic signal wiring)
- MTO (storm sewers)
- Hydro Ottawa
- Enbridge Gas
- Bell Canada
- Rogers Communications

5.11.2 Potential Impacts and Mitigation Measures

Th following utilities require relocation to facilitate the bridge replacements:

- Existing Hydro lines that run within the existing bridges;
- Existing Rogers cables that are in the ducts under the Woodroffe Ave Bridge.

The existing City of Ottawa sanitary sewers and watermains, will be protected during construction to avoid damage. Existing streetlighting and traffic signal cables that are embedded within the existing bridges will be replaced with the new bridge structures.

The recommended measures to mitigate impacts to utilities include:

- Utility relocations will be coordinated with the appropriate agencies in advance of construction.
- Customers impacted by any temporary service outages required to facilitate relocation works will be notified by the appropriate service provider in advance.
- City of Ottawa sanitary sewers and watermains will be protected and monitored during construction.

5.12 Summary of Environmental Effects, Mitigations, and Commitments

Table 5-4 provides a summary of the anticipated environmental effects, proposed mitigation measures and commitments to further work for the Project. Mitigation measures and commitments will be carried forward through construction of the Project.

Table 5-4. Summary of Environmental Effects, Proposed Mitigations and Commitments to Future Work

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
1.0 Vegetation			
1.1	It is anticipated that vegetation removals, including trees and shrubs, are required at both sites for construction staging and site access. Vegetation removals may result in temporary and permanent loss of habitat.	MTO MECP	• All vegetation removals and tree clearing will be completed in accordance with OPSS 201: Construction Specification for Clearing, Close Cut Clearing, Grubbing, and Removal of Surface and Piled Boulders. • Surplus material resulting from vegetation removal operations shall be managed according to OPSS 180: General Specification for the Management of Excess Materials. • In the event of accidental damage to trees, or unexpected vegetation removal, vegetation shall be replaced or restored with native species according to NSSP LAND000: Requirements for Planting. • Disturbed vegetation and soils within the impacted areas shall be re-established as soon as conditions permit to provide stabilization to exposed soils and minimize sedimentation according to OPSS 206: Construction Specification for Grading and OPSS 802: Construction Specification for Topsoil. • Following completion of grading and topsoil application, disturbed areas will be re-seeded with a standard roadside seed mixture for the Highway 417, Maitland Ave and Woodroffe Ave ROWs, as specified in OPSS 803: Construction Specification for Vegetative Cover. • During works, any tree roots greater than 25 mm in diameter shall be cut off cleanly according to OPSS 801: Construction Specification for the Protection of Trees. • Vegetation removal shall be minimized, where possible, and shall be limited within the construction footprint.
1.2	Erosion and sedimentation from vegetation removal has the potential to result in soil loss and disruptions to natural areas or drainage systems.	MTO MECP	• The Contractor shall prepare and implement an Erosion and Sediment Control Plan. • Disturbed soils will be properly contained to prevent migration of materials and sediments beyond the work limits and into adjacent communities using OPSS 804: Construction Specification for Temporary Erosion Control and NSSP 001A820: Operational Constraint – Erosion and Sedimentation Control. • All vegetation not specified for removal should be preserved to minimize erosion and sedimentation. • All exposed areas should be reinstated to existing, or better, conditions as soon as possible following construction.

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
2.0 Wildlife and Species at Risk			
2.1	There is potential for Migratory Birds protected under the MBCA to be impacted by construction.	MTO MECP	• The Contractor is responsible for abiding by NSSP 001A870: Migratory Bird Protection – General and will not destroy active nests or eggs of protected migratory birds. As such, all vegetation removals and clearing should be completed outside of the active breeding bird season, from April 15 to August 31 of any given year. • If nesting activity (nest building, carrying nesting material etc.) and/or nests or eggs/young are found during construction, all activity in the area should temporarily cease, until the Contractor retains an Avian Biologist to determine whether the nests/eggs/young belong to a migratory bird species. Any nests found belonging to migratory birds must be protected while they are active with a species appropriate buffer (determined by the Avian Biologist), within which no work can occur until such a time that the nest is no longer active.
2.2	There is potential for wildlife to be encountered in the construction area.	MTO MECP MNRF	• In accordance with NSSP 001A860: Prevention of Wildlife Harassment, no wildlife encountered during construction may be harassed or killed. If any wildlife is encountered within the construction area that do not, or cannot, move away safely on their own, they should be moved to a similar, safe location outside of the work area by someone experienced in wildlife relocation.
2.3	There is potential for SAR to be encountered in the construction area.	MTO MECP MNRF	If the Contractor encounters a SAR within the construction area at any time that is likely to be impacted by the operations: • The Contractor shall immediately notify the Contract Administrator and suspend operations within the area identified by the Contract Administrator, as per OPSS 100: MTO General Conditions of Contract. Work shall remain suspended within that area until otherwise directed by the Contract Administrator in writing.
3.0 Fish and Fish Habitat			
3.1	Fish habitat was not identified within the Study Areas.	MTO MECP DFO	N/A

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
3.0 Designated Significant Natural Areas			
3.1	Significant natural areas were not identified within the Study Areas.	MTO MECP MNRF	N/A
4.0 Significant Wildlife Habitat			
4.1	No SWH are anticipated to be directly impacted by construction.	MTO MECP MNRF	N/A
5.0 Waste, Contamination and Excess Materials			
5.1	Waste and excess materials generated from the Project have the potential to contaminate the surrounding environment.	MTO MECP	• Construction waste and excess materials generated during construction shall be managed in accordance with OPSS 180: Management of Excess Material and NSSP ENVR0014: Amendment to OPSS 180 - Compliance with Ontario Regulation for On-Site and Excess Soil Management.
5.2	There is potential for spills to occur during construction which could contaminate the surrounding environment.	MTO MECP MNRF DFO	• The Contractor must ensure that machinery arrives on site in a clean condition, and is maintained free of excess or leaking fuel, lubricants, coolant, or any other contaminants for the duration of construction. • The Contractor must develop a Spill Response Plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance. • Spill kits are required to be kept on site (and in heavy machinery) in case of emergency. • All spills shall be reported to the Ministry of Environment, Conservation and Parks (MECP) Spills Action Centre (1-800-268-6060), as well as to DFO and MNRF Kemptville District if there is potential for impacts to natural areas, fisheries, or wildlife resources.

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
5.3	Designated substances under the Ontario *Occupational Health and Safety Act* will be encountered during construction and have the potential to impact the surrounding environment and human health if not properly managed.	MTO	• The Contractor will be notified of the potential to encounter designated substances, as per SSP 101F21: Occupational Health, and Safety Act Compliance – List of Designated Substances. • All activities that may disturb designated substances shall comply with the applicable Occupational Health and Safety Act legislation. • The disposal of designated substances shall comply with O. Reg. 347: General Waste Management. • Standard dust control measures will be implemented where practical to control airborne dusts and minimize exposure to silica during construction activities.
6.0 Archeological Resources			
6.1	There is potential for previously undocumented archaeological resources to be discovered during construction.	MTO MCM Indigenous Communities	• 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.
7.0 Built Heritage Resources			
7.1	No built heritage resources occur within the Study Areas.	MTO MCM City of Ottawa	N/A
8.0 Land Use			
8.1	There are no anticipated impacts to existing land uses.	MTO City of Ottawa	N/A

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
9.0 Aesthetics and Landscaping			
9.1	The replacement bridge structures may impact the overall aesthetics of the Queensway corridor.	MTO City of Ottawa NCC	• Implement applicable context sensitive design concepts from the 2011 Context Sensitive Design Report as shown in the Contract Drawings.
9.2	Construction activities will result in minor disturbance to the existing landscape and vegetation around the bridge replacement sites and within the construction staging areas.	MTO City of Ottawa NCC	• A Landscape Plan has been prepared and shall be implemented following construction to revegetate disturbed areas with native trees, shrubs, and seed mixes, as appropriate for the site conditions and in accordance with recommendations from the Context Sensitive Design Report.
10.0 Traffic Operations			
10.1	Highway 417 full closures, lane reductions, ramp closures and municipal road closures will be required during construction and may result in temporarily traffic queues and delays.	MTO City of Ottawa	• Lane reductions and road closures will be kept to the minimum required to complete the work. • The Contract shall prepare and implement a Traffic Management Plan to minimize impacts from closures. • The Contractor shall prepare and implement a Communications Plan to provide the public and relevant agencies advance notice of planned closures and detours. • Advance signage will be provided prior to Highway 417 lane and ramp closures. • Signed detours will be implemented during Highway 417 full closures, ramp closures and municipal road closures. • Temporary disruption to traffic shall conform to the access, lane closures, ramp closures, and various restrictions set out in SSP 199F01 - Temporary Roadway Closures.
10.2	It is anticipated that pedestrian traffic will be impacted on the municipal roads across Highway 417 during replacement of the bridges.	MTO City of Ottawa Local Residents	• During temporary municipal road closures, advance signage will be put in place to notify pedestrians of the closure and provide detour route directions.

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
10.3	Highway 417 full closures, lane reductions and ramp closures may impact emergency service access during emergencies and may impact daily OC Transpo and school bus schedules.	MTO City of Ottawa OC Transpo Emergency Services School boards	• The Contractor will notify emergency services, OC Transpo, school boards, and other relevant agencies of the construction schedule two weeks in advance of the start of construction and will provide notice in advance of any anticipated changes to traffic flow.
11.0 Noise, Vibration and Air Quality			
11.1	Noise from construction may cause temporary impacts to the surrounding residents.	MTO City of Ottawa Local Residents	• Equipment shall be maintained in an operating condition that prevents unnecessary noise, including but not limited to non-defective muffler systems, properly secured components, and the lubrication of moving parts, as per SSP 199F33: Construction Noise Constraints. • Idling of equipment shall be restricted to the minimum necessary to perform the specified work, as per SSP 199F33: Construction Noise Constraints. • Minimize the number of vehicles and engines operating at any one time.
11.2	Air quality nuisances from construction, including dust and exhaust emissions, may temporarily impact the surrounding residents.	MTO City of Ottawa Local Residents	• Idling of equipment shall be restricted to the minimum necessary to perform the work. • Standard dust control or suppression measures shall be implemented to minimize airborne dust, as per OPSS 100: MTO General Conditions of Contract. • The construction site and access roads will be cleaned regularly to remove debris and dust caused by construction.
8.0 Property			
8.1	A small portion of City of Ottawa property in the southwest quadrant of the Maitland Ave Study Area will be required to complete the work.	MTO City of Ottawa	• A TLI agreement between the City of Ottawa and MTO will be secured prior to construction.

ID #	Issue/ Concern/ Potential Effect	Concerned Agency	Proposed Mitigation/ Protection/ Monitoring/ Commitment
9.0 Utilities			
9.1	Existing utilities may conflict with construction activities.	MTO Utility Providers City of Ottawa	• Utility relocations will be coordinated with the appropriate agencies in advance of construction. • Customers impacted by any temporary service outages required to facilitate relocation works will be notified by the appropriate service provider in advance. • City of Ottawa sanitary sewers and watermains will be protected and monitored during construction.

6. Monitoring

Monitoring will occur throughout construction to confirm compliance with design details, mitigation measures and environmental commitments. During construction, an on-site Contract Administrator (retained by MTO) will ensure that key design features and mitigation measures are implemented in accordance with contract requirements. The effectiveness of mitigation measures will also to be monitored to ensure that:

- Individual mitigation measures are providing the expected control and/or protection;
- Composite control and/or protection provided by the mitigation measures is adequate to address environmental impacts;
- Mitigation measures are maintained and quickly repaired, as required;
- Additional mitigation measures are implemented, as required, for any unanticipated environmental issues that may develop or be identified during construction.

The Contract Administer will ensure that MTO and appropriate agencies are notified should issues arise during construction.

7. References

City of Ottawa (2021). City of Ottawa Official Plan, Office Consolidation.

LHC Heritage Planning & Archaeology. 2023a. Stage 1 Archaeological Assessment, Maitland Ave Bridge Replacement, Hwy 417, Part Lot 29, Concession 2 Ottawa Front, Geographic Township of Nepean, Carleton, now City of Ottawa, ON.

LHC Heritage Planning & Archaeology. 2023b. Stage 1 Archaeological Assessment, Woodroffe Ave Bridge Replacement, Part Lots 25 and 26, Concession 2 Ottawa Front, Geographic Township of Nepean, Carleton, now City of Ottawa, ON.

MMM Group Limited. 2015. Designated Substances Survey, Mega 6 Bridge Rehabilitations; 23 Bridge Structures on Highway 417, 416 and 34 in Ottawa and Hawkesbury, Ontario. Prepared for the Ministry of Transportation.

Morrison Hershfield (Stantec). 2024a. Natural Sciences Existing Conditions and Impact Assessment Report; Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements (G.W.P 4124-14-00). Prepared for the Ministry of Transportation.

Morrison Hershfield (Stantec). 2024b. Fisheries Existing Conditions & Impact Assessment Report; Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements (G.W.P 4124-14-00). Prepared for the Ministry of Transportation.

Ministry of Transportation and Stantec. 2011. Context Sensitive Design Concepts for the Queensway - Highway 417; Highway 417 Queensway from Highway 416 to Walkley Road, City of Ottawa, Ontario.

TSH Engineers, Architects, Planners. 2007. Highway 417 (Ottawa Queensway) from West of Highway 416 Easterly to Anderson Road Preliminary Design and Environmental Assessment (GWP 663-93-00) Transportation Environmental Study Report. Prepared for the Ministry of Transportation.

Appendix A. Consultation Material

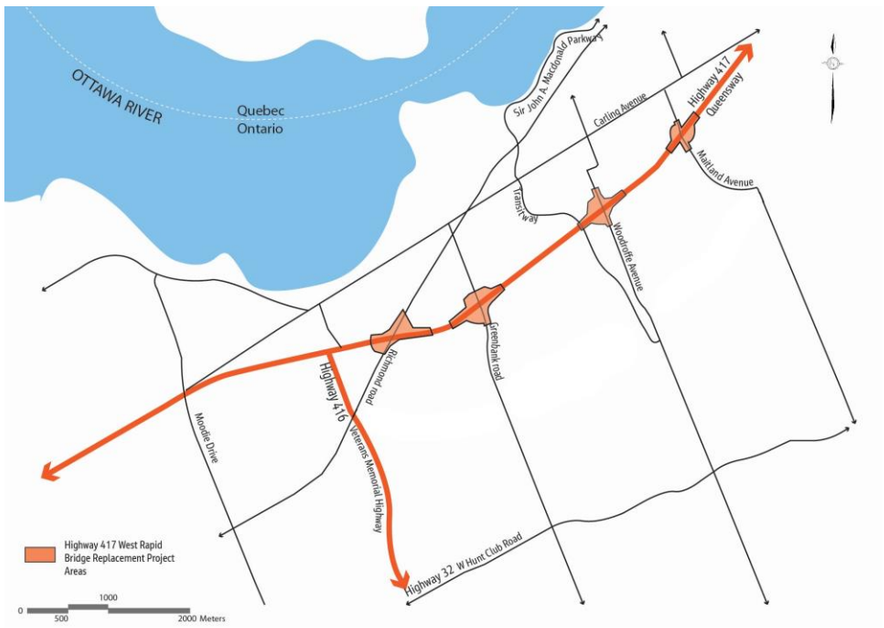
A-1. Notice of Study Commencement

NOTICE OF STUDY COMMENCEMENT

Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)

THE PROJECT

In 2007, the **Ministry of Transportation (MTO)** completed an Environmental Assessment (EA) for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road. This process resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years and was documented in a Transportation Environmental Study Report (TESR). The Recommended Plan includes, but is not limited to, the replacement of 5 bridges at 4 sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road in the City of Ottawa.



In 2022, the province initiated this detail design assignment to confirm and refine the EA Recommended Plan specific to the 5 bridge replacements and prepare for implementation. **Morrison Hershfield** and **Jacobs Consultancy Canada** have been retained to support the delivery of the Detail Design and to deliver the Class Environmental Assessment for these bridge replacements. The project consists of two separate contracts:

- GWP 4124-14-00 – Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements
- GWP 4069-19-00 – Highway 417 Pinecrest Rd. and Richmond Rd. (bridges 1 & 2) Rapid Bridge Replacements

Implementation of the project will involve:

- Rapid demolition and replacement of the 5 overpass structures (bridges);
- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, sewage and stormwater management, illumination, signage, noise barrier walls, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

THE PROCESS

The project is following the approved environmental planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. Two virtual Public Information Centres (PICs), one for each contract, will be held on the project website (www.417WestBridges.ca) to present and facilitate feedback on the proposed detail design(s). Notices will be published in local newspapers to advertise the time and date of the virtual PICs. A Design and Construction Reports (DCR) will be prepared for each contract to document the detail design and EA study process – one for Maitland Avenue and Woodroffe Avenue (GWP 4124-14-00) and one for Pinecrest Road and Richmond Road (1 and 2) (GWP 4069-19-00). Both DCRs (including a 5-year review of the TESR) will be available for a 30-day public review period. Additional notices will be published in local newspapers at that time to advertise where the documents are available for review.

COMMENTS

To find out more about the project, please visit the project website at www.417WestBridges.ca. 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 website or contact one of the following project team members:

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Morrison Hershfield
Tel: 613-739-2910 ext. 1022279
Email: lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Senior Project Engineer
Ministry of Transportation – Eastern Region
Tel: 613-453-4843
Email: Ben.Munroe@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.

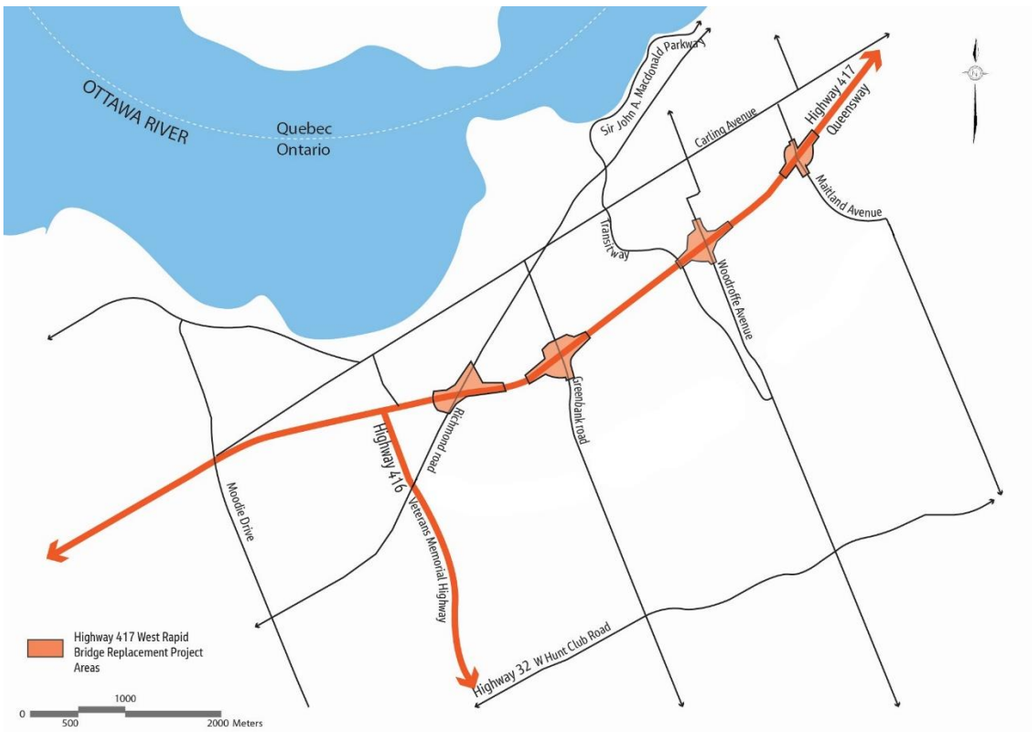
Notice Issued on March 2, 2023.

AVIS DE DÉBUT D'ÉTUDE

Conception détaillée et évaluation environnementale pour le remplacement rapide des ponts de l'autoroute 417 (GWP 4124-14-00 et GWP 4069-19-00)

LE PROJET

En 2007, le **ministère des Transports (MTO)** a réalisé une évaluation environnementale (EE) pour la conception préliminaire de l'autoroute 417 (autoroute Queensway d'Ottawa), de l'autoroute 416 au chemin Anderson. Ce processus a donné lieu à la recommandation d'un plan pour orienter l'évolution de l'autoroute Queensway au cours des 20 prochaines années et a été documenté dans un rapport d'étude environnementale sur les transports (REET). Le plan recommandé comprend, sans s'y limiter, le remplacement de cinq ponts à quatre endroits de l'autoroute 417 situés à l'avenue Maitland, à l'avenue Woodroffe, au chemin Pinecrest et au chemin Richmond, dans la ville d'Ottawa.



En 2022, la province a lancé ce projet de conception détaillée afin de confirmer et d'affiner le plan recommandé par l'EE spécifique aux 5 remplacements de ponts et d'en préparer la mise en œuvre. Les services de **Morrison Hershfield** et de **Jacobs Consultancy Canada** ont été retenus pour appuyer la réalisation de la conception détaillée et de l'évaluation environnementale de portée générale pour le remplacement de ces ponts. Le projet consiste en deux contrats distincts :

- GWP 4124-14-00 – Remplacement rapide des ponts de l'autoroute 417, avenue Maitland et avenue Woodroffe
- GWP 4069-19-00 – Remplacement rapide des ponts de l'autoroute 417, chemin Pinecrest et chemin Richmond (ponts 1 et 2)

La mise en œuvre du projet comprendra ce qui suit :

- Démolition rapide et remplacement des 5 structures de passage supérieur (ponts) ;
- Réparation du béton détérioré sur les surfaces exposées de tout élément conservé, y compris la rénovation des culées des ponts ;
- Remplacement ou rénovation des installations et des éléments de soutien, notamment le nivellement, le drainage, la gestion des eaux usées et des eaux pluviales, l'éclairage, la signalisation, les murs antibruit, ainsi que le déplacement et la protection temporaires des systèmes avancés de gestion de la circulation (SAGC), selon les besoins.

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 pour les routes provinciales (2000). Le public aura l'occasion de donner son avis au cours de l'étude. Deux séances d'information publique (SIP) virtuelle sera organisée, une pour chaque contrat, sur le site Web du projet (www.417WestBridges.ca) afin de présenter le ou les conceptions détaillées proposées et de recueillir des commentaires à leur sujet. Des avis seront publiés dans les journaux locaux pour annoncer l'heure et la date de la SIP virtuelle. U rapport de conception et de construction (RCC) sera préparé afin de documenter la conception détaillée et le processus d'étude de l'EE – un pour l'avenue Maitland et l'avenue Woodroffe (GWP 4124-14-00) et un pour les chemins Pinecrest et Richmond (1 et 2) (GWP 4069-19-00). Les deux RCC (y compris l'examen quinquennal du REET) seront disponibles pour une période d'examen public de 30 jours. D'autres avis seront publiés dans les journaux locaux à ce moment pour indiquer où les documents pourront être consultés.

COMMENTAIRES

Pour de plus amples renseignements au sujet du projet, veuillez consulter le site Web du projet à www.417WestBridges.ca. Si vous souhaitez formuler des commentaires ou poser des questions à ce stade, ou si vous souhaitez être ajouté à la liste d'envoi du projet pour recevoir des avis futurs, veuillez utiliser la fonction « Contactez-nous » sur le site Web ou contacter l'un des membres suivants de l'équipe de projet :

Lincoln MacDonald, P. Eng., PMP
Ingénieur-conseil de projet
Morrison Hershfield
Tél. : 613 739-2910 poste 1022279
Courriel : lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Ingénieur de projet principal
Ministère des Transports – région de l'Est
Tél. : 613 453-4843
Courriel : Ben.Munroe@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 dont le nom figure ci-dessus.

Avis émis le 4 mars 2023.

Local Elected Representatives

Ontario

Ministry of Transportation
Eastern Region
1355 John Counter Blvd
Kingston, ON K7L 5A3
T 613 545 4723

Thursday, March 2, 2023

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

Subject: Notice of Study Commencement – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)

Eastern Region – Ottawa, Ontario

Dear «Name»,

In 2007, the **Ministry of Transportation (MTO)** completed an Environmental Assessment (EA) for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road. This process resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years and was documented in a Transportation Environmental Study Report (TESR). The Recommended Plan includes, but is not limited to, the replacement of 5 bridges at 4 sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road in the City of Ottawa.

In 2022, the province initiated this detail design assignment to confirm and refine the EA Recommended Plan specific to the 5 bridge replacements and prepare the project for implementation. **Morrison Hershfield** and **Jacobs Consultancy Canada** have been retained to support the delivery of the Detail Design and to deliver the Class Environmental Assessment for the bridge replacements. The project consists of two separate contracts:

- GWP 4124-14-00 – Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements
- GWP 4069-19-00 – Highway 417 Pinecrest Rd. and Richmond Rd. (bridges 1 & 2) Rapid Bridge Replacements

Implementation of the project will involve:

- Rapid demolition and replacement of the 5 overpass structures (bridges);
- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, sewage and stormwater management, illumination, signage, noise barrier walls, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

The project is following the approved planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. Two virtual Public Information Centres (PICs), one for each contract, will be held on the project website (web address) to present and facilitate feedback on the proposed detail design(s). Notices will be published in local newspapers to advertise the time and date of the virtual PICs.

A Design and Construction Report (DCR) will be prepared for each contract to document the detail design and EA study process – one for Maitland Avenue and Woodroffe Avenue (GWP 4124-14-00) and one for Pinecrest Road and Richmond Road (1 and 2) (GWP 4069-19-00). Both DCRs (including a 5-year review of the TESR) will be available for a 30-day public review period. Additional notices will be published in local newspapers (Ottawa Citizen and Le Droit) at that time to advertise where the documents are available for review.

The purpose of this notice is to inform you that the Group B Class EA and Detail Design has commenced for the project and to solicit any questions, comments, or concerns that you may have.

To find out more about the project, please visit the project website at www.417WestBridges.ca. If you have any comments or questions, please contact:

Ben Munroe, P. Eng.
Senior Project Engineer
Ministry of Transportation
Tel: 613-453-4843
Email: Ben.Munroe@ontario.ca

Yours Truly,

_____

Ben Munroe
MTO Senior Project Engineer

Indigenous Communities

Ministry of Transportation

East Operations Branch
1355 John Counter Boulevard
Postal Box 4000
Kingston, Ontario K7L 5A3
Tel.: 1-613-545-4600

Ministère des Transports

Direction des opérations de l'Est
1355, boulevard John Counter
Case postale 4000
Kingston, Ontario K7L 5A3
Tél.: 1-613-545-4600

Ontario

Thursday, March 2, 2023

«Name»
«Position»
«Community/Organization»
«Address»

Subject: Notice of Study Commencement – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)
Eastern Region – Ottawa, Ontario

Dear «Name»,

The purpose of this notice is to inform you that the Ministry of Transportation is initiating the Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00). Morrison Hershfield and Jacobs Consultancy Canada have been retained to support the delivery of the Detail Design and to deliver the Class Environmental Assessment for the bridge replacements. The project consists of two separate contracts:

- GWP 4124-14-00 – Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements
- GWP 4069-19-00 – Highway 417 Pinecrest Rd. and Richmond Rd. (bridges 1 & 2) Rapid Bridge Replacements

Implementation of the project will involve:

- Rapid demolition and replacement of the 5 overpass structures (bridges);
- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, sewage and stormwater management, illumination, signage, noise barrier walls, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

The project is following the approved planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. Two virtual Public Information Centres (PICs), one for each contract, will be held on the project website (www.417westbridges.ca) to present and facilitate feedback on the proposed detail design(s). Notices will be published in local newspapers to advertise the date and time of the virtual PICs.

A Design and Construction Report (DCR) will be prepared for each contract to document the detail design and EA study process – one for Maitland Avenue and Woodroffe Avenue (GWP 4124-14-00) and one for Pinecrest Road and Richmond Road (1 and 2) (GWP 4069-19-00). Both DCRs (including a 5-year review of the TESR) will be available for a 30-day public review period. Additional notices will be published in local newspapers (Ottawa Citizen and Le Droit) at that time to advertise where the documents are available for review. To find out more about the project, please visit the project website at www.417westbridges.ca .

For additional context, in 2007, the Ministry of Transportation (MTO) completed an Environmental Assessment (EA) for the Preliminary Design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road. This process resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years and was documented in a Transportation Environmental Study Report (TESR).

The Recommended Plan includes, but is not limited to, the replacement of 5 bridges at 4 sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road in the City of Ottawa.

During the Preliminary Design and Environmental Assessment of Highway 417 from Highway 416 to Anderson Road, Stage 1 and Stage 2 archeological assessments were undertaken and documented in the TESR (2007). The investigations found no evidence of archeological resources within the Highway 417 right-of-way along the corridor. During the detail design phase, additional environmental investigations will be completed to confirm the presence of sensitive species and their habitat, and to develop mitigation measures as required. The results of these investigations will be documented in the Design and Construction Report (DCR) for each contract. In 2022, the province initiated this detail design assignment to confirm and refine the EA Recommended Plan specific to the 5 bridge replacements and prepare the project for implementation.

If you have any questions or comments on the Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00), please contact me by email at **Peter.A.Copping@ontario.ca** or by phone at **613-539-3148**. The MTO will continue to engage with you as this project progresses.

Sincerely,

Peter Copping
Indigenous Liaison Specialist
Regional Services and Relationships, East Region Operations Branch
Ministry of Transportation
1355 John Counter Boulevard, Kingston ON, K7L 5A3
Email: Peter.A.Copping@Ontario.ca
Phone: 613-539-3148

Cc: Amanda Two-Axe Kohoko, Consultation Coordinator - Algonquins of Pikwàkanagàn First Nation
Don Bilodeau, Consultation Consultant - Algonquins of Pikwàkanagàn First Nation

Study Area Key Map
Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)

External Agencies

Thursday, March 2, 2023

Subject: Notice of Study Commencement – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)

Dear Sir/Madam,

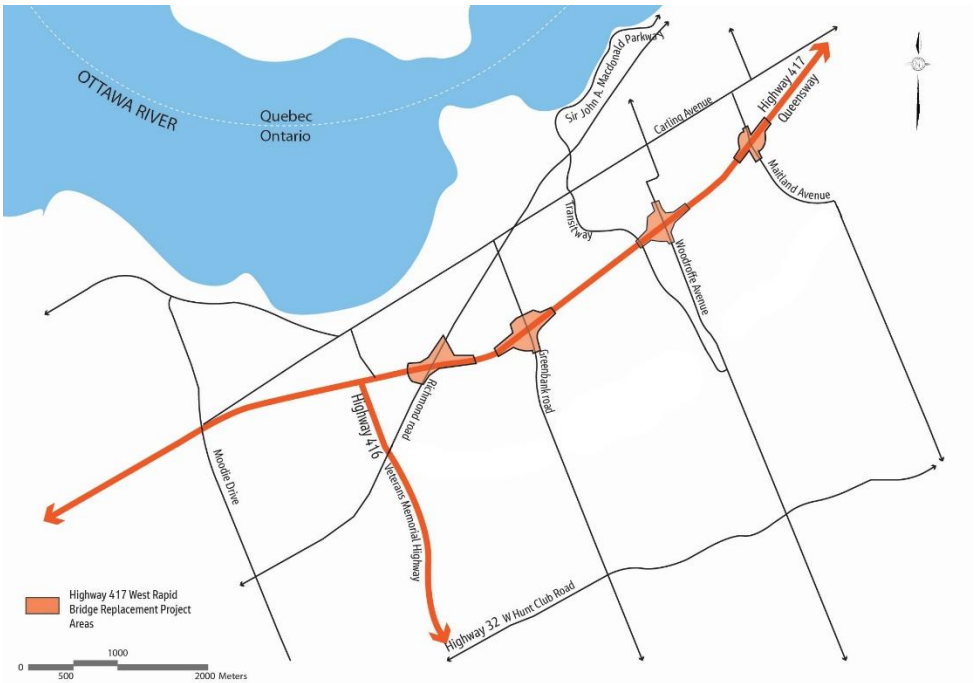
In 2007, the **Ministry of Transportation (MTO)** completed an Environmental Assessment (EA) for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road. This process resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years and was documented in a Transportation Environmental Study Report (TESR). The Recommended Plan includes, but is not limited to, the replacement of 5 bridges at 4 sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road in the City of Ottawa.

In 2022, the province initiated this detail design assignment to confirm and refine the EA Recommended Plan specific to the 5 bridge replacements and prepare the project for implementation. **Morrison Hershfield** and **Jacobs Consultancy Canada** have been retained to support the delivery of the Detail Design and to deliver the Class Environmental Assessment for the bridge replacements. The project consists of two separate contracts:

- GWP 4124-14-00 – Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements
- GWP 4069-19-00 – Highway 417 Pinecrest Rd. and Richmond Rd. (bridges 1 and 2) Rapid Bridge Replacements

Implementation of the project will involve:

- Rapid demolition and replacement of the 5 overpass structures (bridges);
- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, sewage and stormwater management, illumination, signage, noise barrier walls, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.



The project is following the approved planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. Two virtual Public Information Centres (PICs), one for each

contract, will be hosted on the project website (www.417WestBridges.ca) to present and facilitate feedback on the proposed detail design(s) for each contract. Notices will be published in local newspapers to advertise the time and date of the virtual PICs.

A Design and Construction Report (DCR) will be prepared for each contract to document the detail design and EA study process – one for Maitland Avenue and Woodroffe Avenue (GWP 4124-14-00) and one for Pinecrest Road and Richmond Road (1 and 2) (GWP 4069-19-00). Both DCRs (including a 5-year review of the TESR) will be available for a 30-day public review period. Additional notices will be published in local newspapers (Ottawa Citizen and Le Droit) at that time to advertise where the documents are available for review.

The purpose of this notice is to inform you that the Group B Class EA and Detail Design has commenced for the project and to solicit any questions, comments or concerns that you may have.

To find out more about the project, please visit the project website at www.417WestBridges.ca. If you have any comments or questions at this time, please use the "Contact Us" function on the website or contact one of the following project team members:

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Morrison Hershfield
Tel: 613-739-2910 ext. 1022279
Email: lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Senior Project Engineer
Ministry of Transportation – Eastern Region
Tel: 613-453-4843
Email: Ben.Munroe@ontario.ca

Yours Truly,

_____

Lincoln MacDonald
Consultant Project Manager

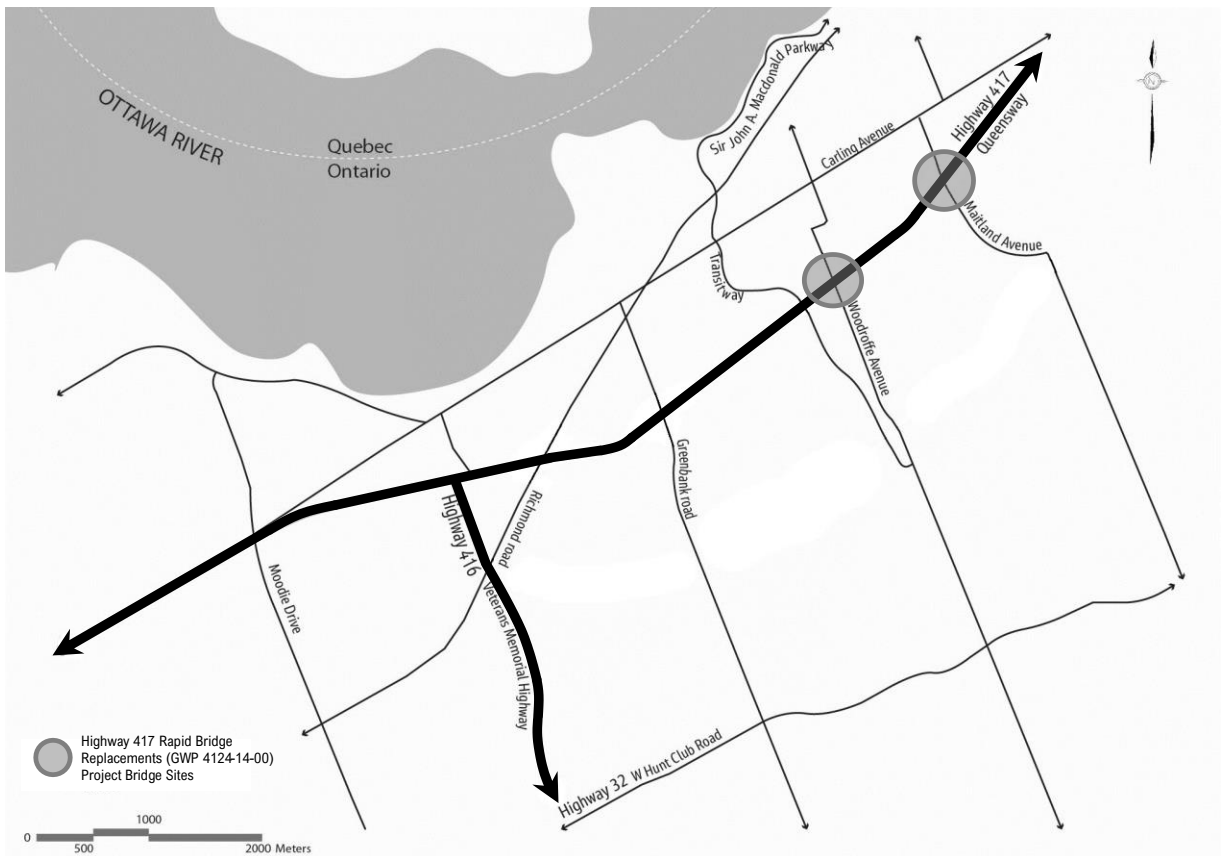
A-2. Notice of Public Information Centre

NOTICE OF PUBLIC INFORMATION CENTRE

Highway 417 Rapid Bridge Replacements (GWP 4124-14-00)
Detail Design and Environmental Assessment Study

THE PROJECT

The Ministry of Transportation Ontario (MTO) has retained Morrison Hershfield and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of 2 bridges on Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa.



The project includes the following components:

- Rapid demolition and replacement of the 2 underpass structures (bridges);
- Provisions for Active Transportation (AT) facilities across the structures;
- Repair of deteriorated concrete on any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including drainage, stormwater management, illumination, signage, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

THE PROCESS

The project is following the approved environmental planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities, 2000*, with the opportunity for public provided throughout the project. A virtual Public Information Centre (PIC) will be hosted on the project website (www.417WestBridges.ca) to present and facilitate feedback on the proposed detailed design. Notices will be published in local newspapers to advertise the time and date of the virtual PIC. A Design and Construction Report (DCR) will also be prepared to document the detail design and EA study process. The DCR (including a 5-year review of the Transportation Environmental Study Report) will be available for a 30-day public review period. Additional notices will be published in local newspapers at that time to advertise where the document is available for review.

PUBLIC CONSULTATION

The purpose of this notice is to advise that the virtual PIC for the Maitland Avenue and Woodroffe Avenue bridges will be hosted from **May 22, 2024** to **June 5, 2024** on the project website at www.417WestBridges.ca. Information posted for review will provide an overview of the Project and the EA process; a description of existing conditions; design details for the two bridges, proposed road closure and detour plans, and anticipated impacts and mitigations measures. Opportunity will be provided to submit feedback until **June 5, 2024.**

FURTHER 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 or contact one of the following Project Team members:

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Morrison Hershfield
Tel: 613-739-2910 ext. 1022279
Email: lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Senior Project Engineer
Ministry of Transportation
Tel: 613-453-4843
Email: Ben.Munroe@ontario.ca

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

Cet avis est disponible en français sur demande.

Notice issued on May 21, 2024.

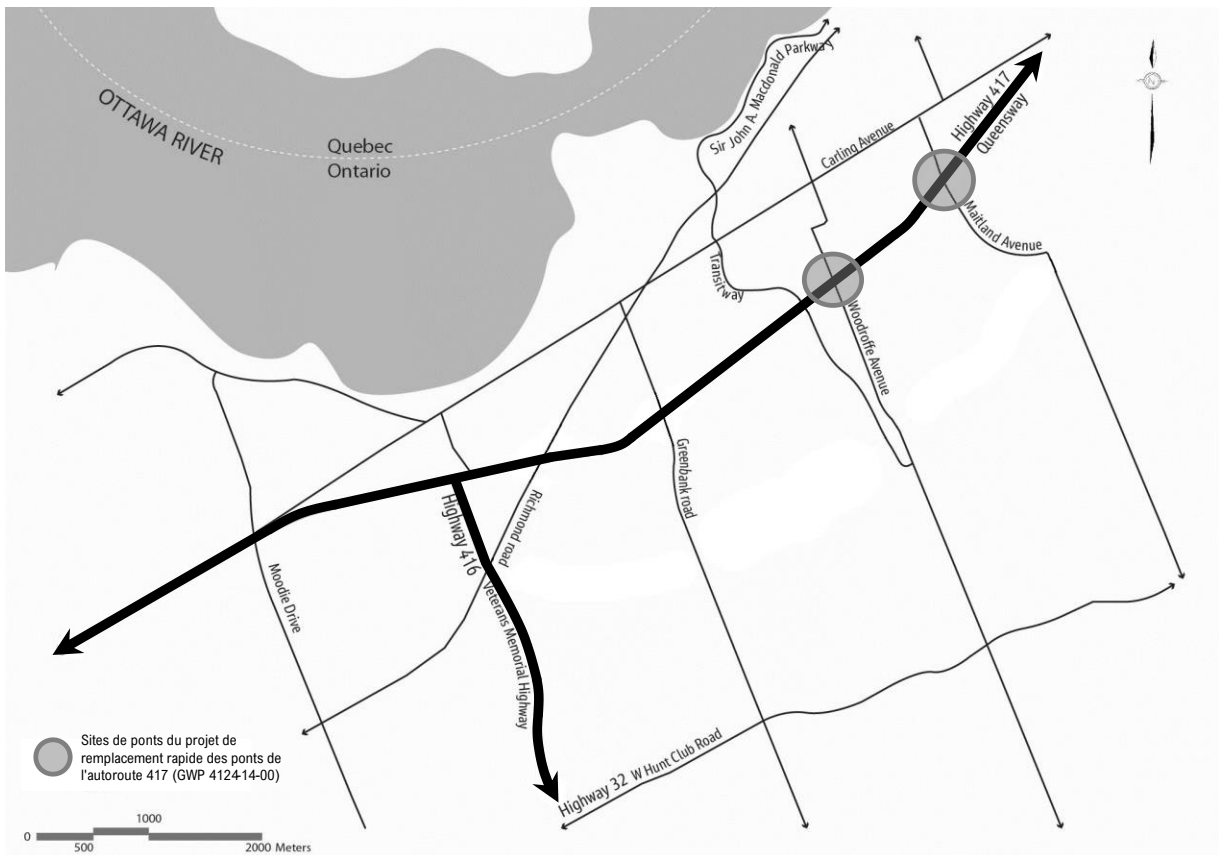
Ontario

Avis sur la séance d’information publique

Conception détaillée et évaluation environnementale pour le remplacement rapide de ponts sur l’autoroute 417 (GWP 4124-14-00)

LE PROJET

Le Ministère des Transports a retenu les services de Morrison Hershfield et Jacobs Consultancy Canada pour réaliser la conception détaillée et l'évaluation environnementale de portée générale pour le remplacement de 2 ponts sur l'autoroute 417 situés à l'avenue Maitland et à l'avenue Woodroffe, dans la ville d'Ottawa.



La mise en œuvre du projet comprendra ce qui suit :

- Démolition rapide et remplacement des 2 ponts ;
- Infrastructure de transport actif (TA) sur les ponts ;
- Réparation du béton détérioré sur les surfaces exposées de tout élément conservé, y compris la rénovation des culées des ponts ;
- Remplacement ou rénovation des installations et des éléments de soutien, notamment le nivellement, le drainage, la gestion des eaux pluviales, l’éclairage, la signalisation, les murs antibruit, ainsi que le déplacement et la protection temporaires des systèmes avancés de gestion de la circulation (SAGC), selon les besoins.

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 pour les routes provinciales (2000). Le public aura l’occasion de donner son avis au cours de l’étude. Une séance d’information publique (SIP) virtuelle sera organisée sur le site Web du projet (www.417WestBridges.ca) afin de présenter le ou les conceptions détaillées proposées et de recueillir des commentaires à leur sujet. Un rapport de conception et de construction (RCC) sera préparé afin de documenter la conception détaillée et le processus d’étude de l’EE. Le RCC (y compris l’examen quinquennal du REET) seront disponibles pour une période d’examen public de 30 jours. D’autres avis seront publiés dans les journaux locaux à ce moment pour indiquer où le document pourront être consultés**.**

CONSULTATION PUBLIQUE

Le présent avis a pour but de vous informer que la SIP virtuel pour les ponts de l'avenue Maitland et de l'avenue Woodroffe aura lieu du **22 mai 2024 au 5 juin 2024** sur le site Web du projet au www.417westbridges.ca. Les informations qui seront partagées comprennent un aperçu du projet et du processus d'ÉE ; une description des conditions existantes ; les détails de la conception des deux ponts, les plans de fermeture de route et de détour proposés, ainsi que les impacts prévus et les mesures d'atténuation. Les commentaires peuvent être soumis jusqu’au **5 juin 2024**.

RENSEIGNEMENTS SUPPLÉMENTAIRES

Si vous souhaitez formuler des commentaires ou poser des questions à ce stade, ou si vous souhaitez être ajouté à la liste d’envoi du projet pour recevoir des avis futurs, veuillez utiliser la fonction « Contactez-nous » sur le site Web ou contacter l’un des membres suivants de l’équipe de projet :

Lincoln MacDonald, P. Eng., PMP
Ingénieur-conseil de projet
Morrison Hershfield
Tél. : 613-739-2910 ext. 1022279
Courriel : lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Ingénieur de projet principal
Ministère des Transports
Tél. : 613-453-4843
Courriel : Ben.Munroe@ontario.ca

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 dont le nom figure 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.

This notice is available in English upon request.

Avis émis le 21 mai 2024.

Ontario

Notice of PIC Letter - 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

May 15, 2024

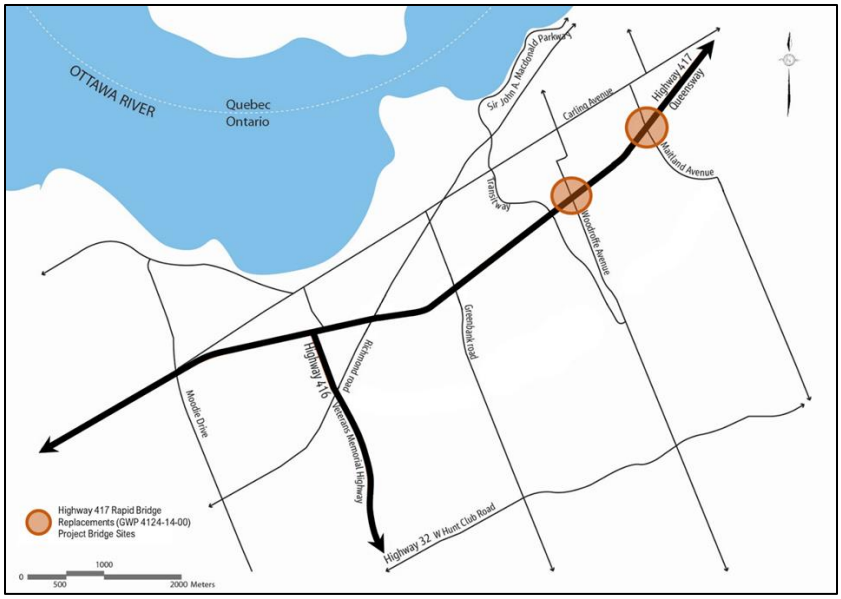
«Name»
«Position» «Community/Organization»
«Address»

Sent via email: «email_address»

Subject: Notice of Public Information Centre No. 1 – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00 and GWP 4069-19-00)

Dear «Name»,

The Ministry of Transportation Ontario (MTO) has retained Morrison Hershfield and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of 2 bridges on Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa.



Implementation of the project will involve:

- Rapid demolition and replacement of the 2 underpass structures (bridges);
- Provisions for Active Transportation (AT) facilities across the structures;

- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, stormwater management, illumination, signage, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

The project is following the approved planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. A virtual Public Information Centre (PIC) will be hosted on the project website (www.417WestBridges.ca) to present and facilitate feedback on the proposed detail design(s) for each contract. A Design and Construction Report (DCR) will also be prepared to document the detail design and EA study process. The DCR (including a 5-year review of the Transportation Environmental Study Report) will be available for a 30-day public review period. Additional notices will be published in local newspapers (Ottawa Citizen and Le Droit) at that time to advertise where the documents are available for review.

Since the Notice of Commencement letter, that was sent to you on March 2, 2023, a Stage 1 Archeological Assessments was completed for both the Maitland Avenue and Woodroffe Avenue sites. The assessments found that the study areas do not exhibit archaeological potential. Based on the results of the Stage 1 Archaeological Assessments, no further archaeological assessment is recommended; however, should deeply buried archaeological materials be encountered during construction, all work will cease, and a professionally licensed archaeologist will be consulted. Terrestrial and fisheries field investigations were also completed in April 2023 for the two sites. No provincially designated Endangered or Threatened SAR were observed during the field investigations.

An online Public Information Centre for the Maitland Ave. and Woodroffe Ave. bridges will be held from **May 22, 2024 to June 5, 2024** on the project website at www.417WestBridges.ca. Information posted for review will provide an overview of the Project and the EA process; a description of existing conditions; design details for the two bridges, proposed road closure and detour plans, and anticipated impacts and mitigations measures. Opportunity will be provided to submit feedback until **June 5, 2024**.

Information collected during this 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. Please contact me if you have accessibility requirements in order to participate in this project.

To learn more information about the project, please visit the project website at www.417WestBridges.ca. If you have any comments or questions or wish to schedule a virtual meeting with the Project Team, please feel free to contact me.

Sincerely,

Franca Sacchetti
Director, East Operations

Notice of PIC Letter - Local Elected Representatives

Ontario

May 14, 2024

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

Subject: Notice of Public Information Centre – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00)

Dear «Name»,

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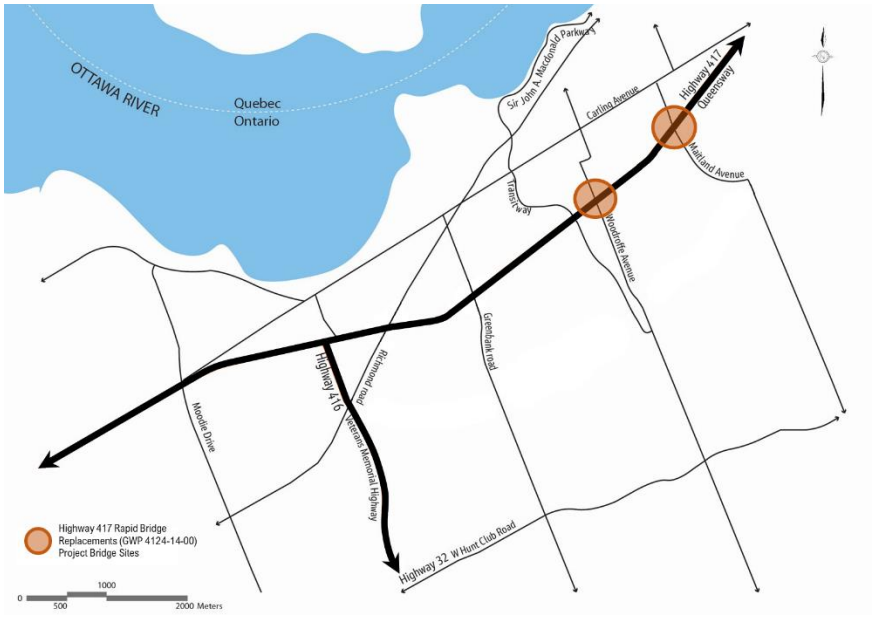

Implementation of the project will involve:

- Rapid demolition and replacement of the 2 underpass structures (bridges);
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The purpose of this letter is to inform you that the online Public Information Centre for the Maitland Ave. and Woodroffe Ave. bridges will be held from **May 22, 2024 to June 5, 2024** on the project website at www.417WestBridges.ca. Information posted for review will provide an overview of the Project and the EA process; a description of existing conditions; design details for the two bridges, proposed road closure and detour plans, and anticipated impacts and mitigations measures. Opportunity will be provided to submit feedback until **June 5, 2024**.

If you have any comments or questions at this time, please use the "Contact Us" function on the website or contact one of the following project team members:

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Morrison Hershfield
Tel: 613-739-2910 ext. 1022279
Email: lmacdonald@morrisonhershfield.com

Ben Munroe, P. Eng.
Senior Project Engineer
Ministry of Transportation
Tel: 613-453-4843
Email: Ben.Munroe@ontario.ca

Kind Regards,

_____

Ben Munroe, P. Eng.
MTO Senior Project Engineer

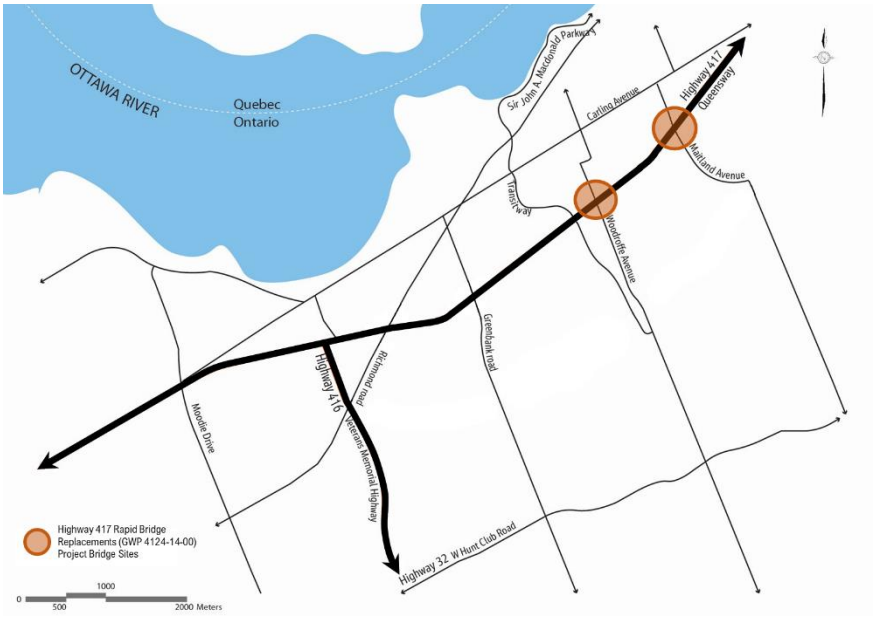
Notice of PIC Letter - External Agencies

May 15, 2024

Subject: Notice of Public Information Centre No. 1 – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements (GWP 4124-14-00)

Dear Sir/Madam,

The Ministry of Transportation Ontario (MTO) has retained Morrison Hershfield and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of 2 bridges on Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa.



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The project is following the approved planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities,* 2000 and opportunity for public input will be provided during the study. A virtual Public Information Centre (PIC) will be hosted on the project website (www.417WestBridges.ca) to present and facilitate feedback on the proposed detail design(s) for each contract. A Design and Construction Report (DCR) will also be prepared to document the detail design and EA study process. The DCR (including a 5-year review of the Transportation Environmental Study Report) will be available for a 30-day public review period. Additional notices will be published in local newspapers (Ottawa Citizen and Le Droit) at that time to advertise where the documents are available for review.

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Senior Project Engineer
Ministry of Transportation
Tel: 613-453-4843
Email: Ben.Munroe@ontario.ca

Kind Regards,

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager

A-3. Public Information Centre Material

Online Public Information Centre

Highway 417 Rapid Bridge Replacements
Detail Design and Environmental Assessment

Contract 1 (GWP 4124-14-00): Maitland Avenue and Woodroffe Avenue

May 22, 2024 to June 5, 2024

Jacobs

INTRODUCTION

The purpose of this online Public Information Centre (PIC) is to provide an overview of, and gather public feedback on:

- The current Detail Design study;
- The MTO Class Environmental Assessment (EA) process;
- Existing conditions within the study areas;
- Recommended design details for Contract 1 (Maitland and Woodroffe);
- Proposed construction staging, road closures and detour plans;
- Anticipated environmental impacts and mitigations measures.

We welcome your feedback on the material presented here. Please submit any questions or comments via the Contact Us page on the Project Website.

Project Overview

PROJECT BACKGROUND

- In **2007**, the Ministry of Transportation (MTO) completed an Environmental Assessment (EA) for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road in response to growing traffic volumes. This study resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years. In summary, the Recommended Plan provided recommendations for widening sections of the Highway 417 mainline, modifying interchanges, rehabilitating pavement, bridges and the illumination system, enhancing drainage systems and Advanced Traffic Management Systems, landscaping and upgrading noise walls. Included in the Recommended Plan is the replacement of five bridges at four sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road.
- In **2011**, a Context Sensitive Design Report was prepared in collaboration with various stakeholders including the City of Ottawa and the National Capital Commission. The report provides an overall design vision for the Highway 417 corridor. Design concepts and recommendations are outlined in the report to serve as a starting point for the development of standard details and specifications for a range of aesthetic improvements to be used throughout the corridor.
- In **2017**, various structure configuration alternatives and construction staging alternatives were evaluated for the replacement bridges to determine a technically preferred detail design alternative for the five bridge replacements at Woodroffe Avenue, Maitland Avenue, Richmond Road and Pinecrest Road.
- In **2022**, MTO initiated this current Detail Design assignment to confirm and refine the Recommended Plan for the five bridges and to prepare the project for implementation.

PROJECT DESCRIPTION

Morrison Hershfield and Jacobs Consultancy Canada have been retained by MTO to deliver the Detail Design and Class Environmental Assessment (EA) for the rapid replacement of five bridges at four sites on Highway 417 in the City of Ottawa. The project consists of two separate contracts:

- Contract 1 (GWP 4124-14-00) – Highway 417 Maitland Avenue and Woodroffe Avenue Rapid Bridge Replacements
- Contract 2 (GWP 4069-19-00) – Highway 417 Pinecrest Road and Richmond Road Rapid Bridge Replacements

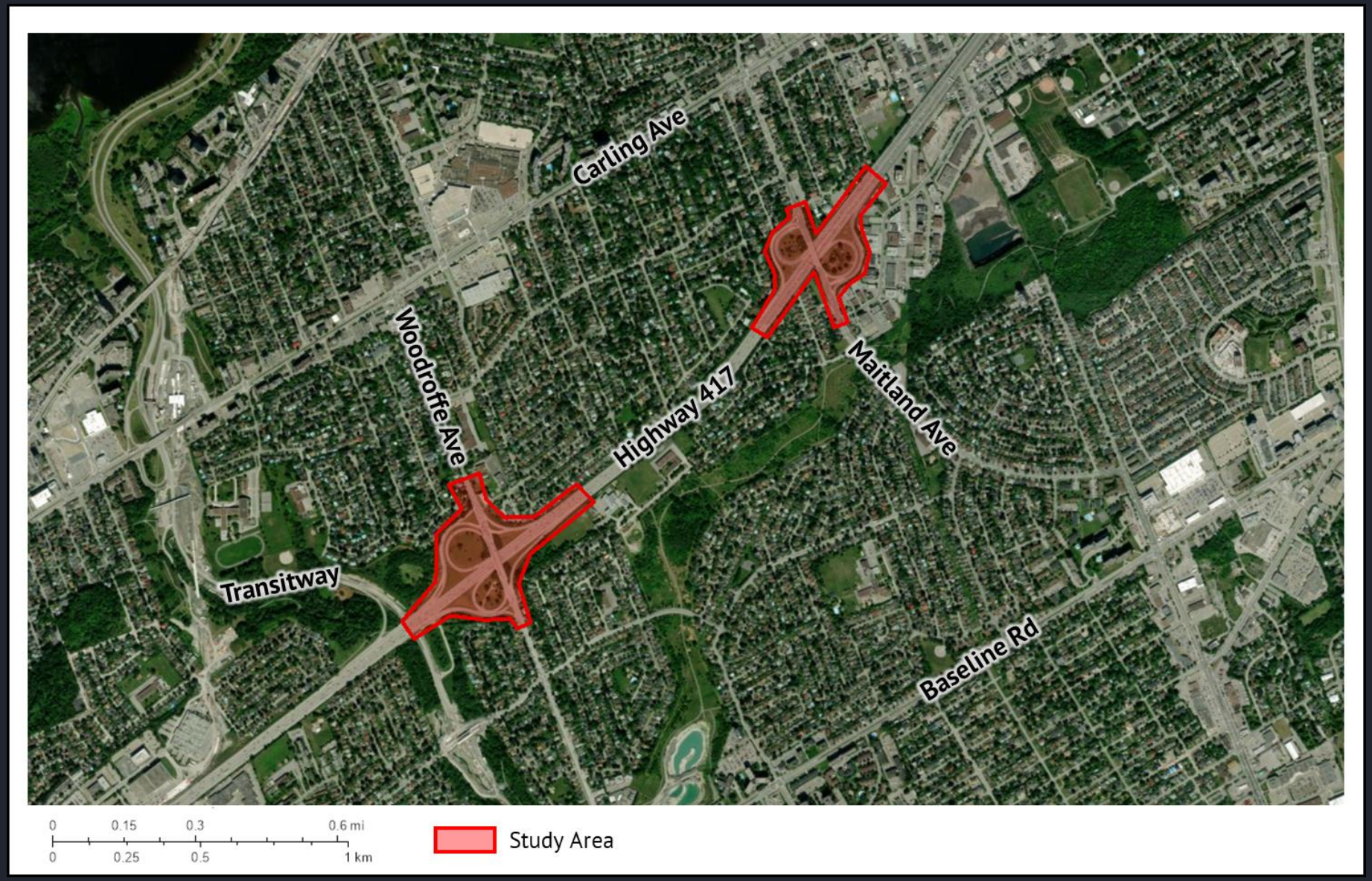
Implementation of the project will involve:

- Rapid demolition and replacement of the five bridges;
- Repairs to deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including drainage, stormwater management, illumination, signage, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

Design for Contract 1 is advancing ahead of Contract 2 and is the subject of this PIC.

A second PIC, specific to Contract 2, will be held as the design progresses further.

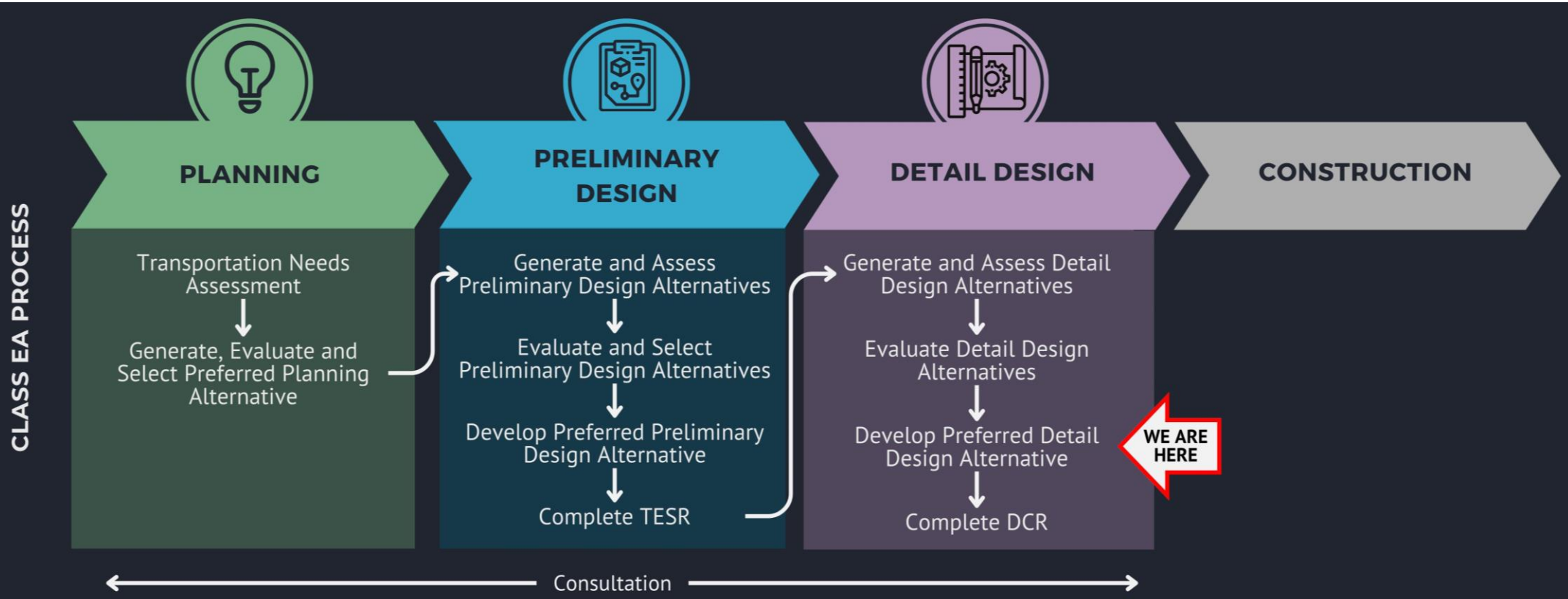
CONTRACT 1 STUDY AREA



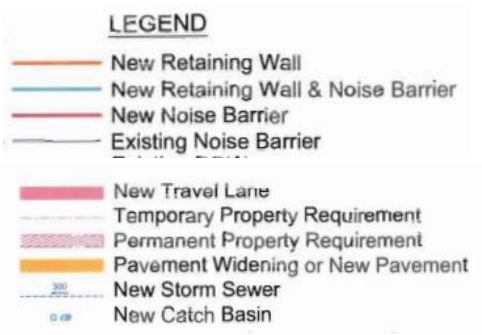
CLASS ENVIRONMENTAL ASSESSMENT PROCESS

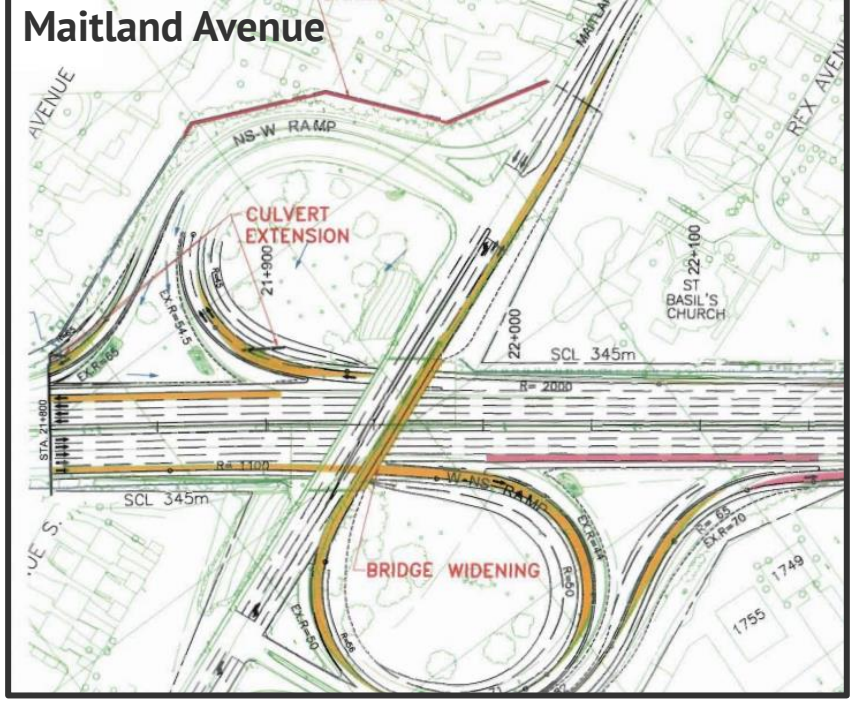
The preliminary design of Highway 417 from Highway 416 to Anderson Road followed the approved planning process for Group B undertakings in accordance with the Class Environmental Assessment for Provincial Transportation Facilities, 2000 (MTO Class EA) and was documented in a Transportation Environmental Study Report (TESR).

This detail design project is also following the process for Group B undertakings in accordance with MTO's Class EA. At completion of the study, a Design and Construction Report (DCR) will be prepared to document the EA process, the Recommended Detail Design Plan, a summary of consultation, and the anticipated environmental impacts and recommended mitigation measures. The DCR will be available on the project website for a 30-day public review period.

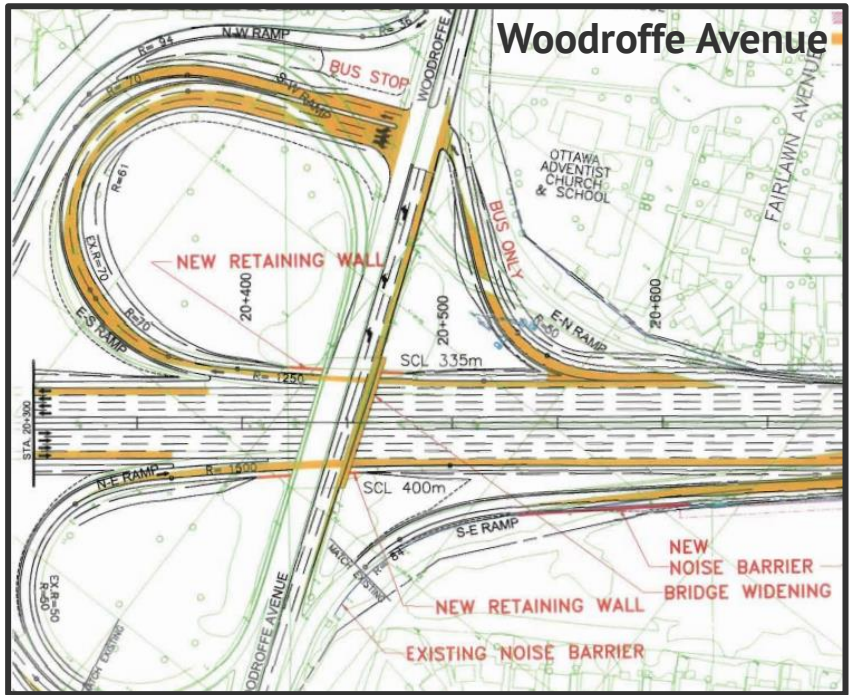


RECOMMENDATIONS FROM THE 2007 TESR





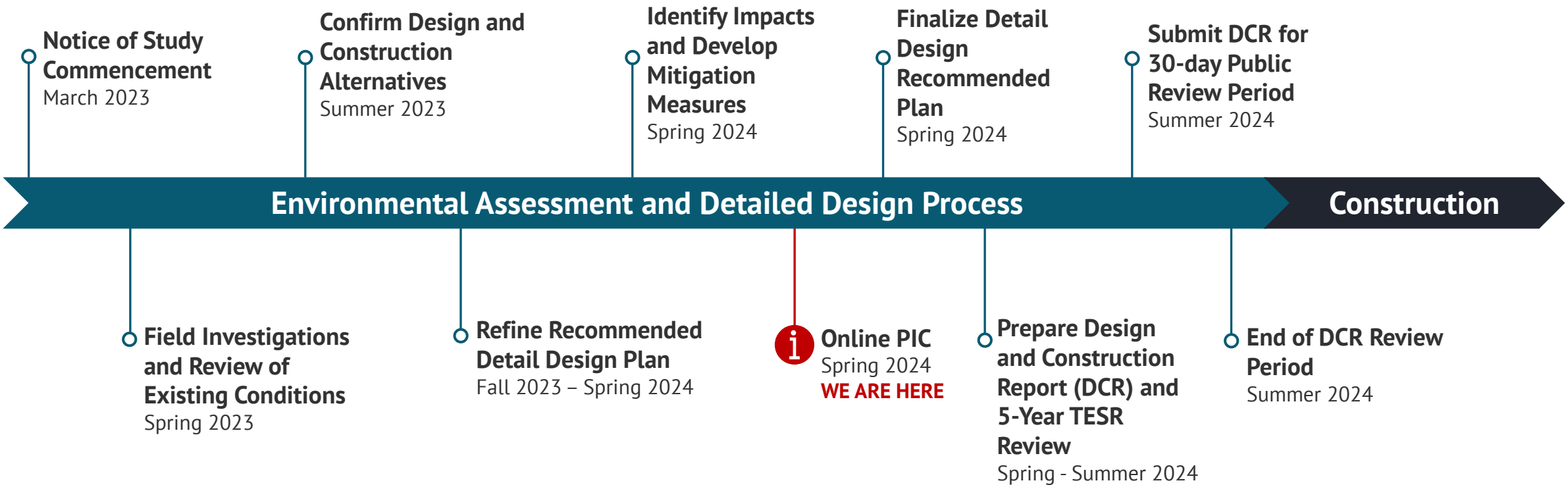
TSH Engineers Architects Planners, 2007



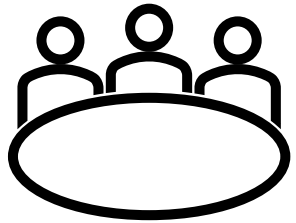
At Maitland Avenue and Woodroffe Avenue, the 2007 TESR recommended that:

- Existing bridges undergo some form of rehabilitation to maintain their functionality.
- The existing left turn lane on Maitland Avenue be lengthened to accommodate projected traffic demands. This would require widening the bridge on the east side by 5.4 metres.
- The Woodroffe Avenue bridge be widened by 4.3 metres on the east side. This would be done to add a new northbound left turn lane to facilitate left turns and improve safety for northbound Woodroffe traffic.
- Bridge rehabilitations accommodate the recommended widening of Highway 417 from Highway 416 to Carling Avenue (one additional lane per direction, resulting in four mainline lanes in each direction).

CONTRACT 1 SCHEDULE



CONSULTATION TO-DATE



Municipal Technical Advisory Committee (MTAC)

- Two MTAC meetings have been held to-date to facilitate streamlined consultation with parties of municipal interest in the City of Ottawa.
- An initial MTAC meeting was held to introduce the Project, and to gather input from the participants on any known challenges or areas of interest.
- A second MTAC meeting was held to provide an up-date on project progress and gather input on active transportation, detour routes and municipal road impacts, and utility impacts.

City Councillors

- A meeting was held with the City of Ottawa Bay Ward Councillor and College Ward Councillor to provide an overview of the Project.

Existing Conditions

EXISTING ENVIRONMENTAL CONDITIONS

Natural Environment

Vegetation within Maitland Avenue Study Area.

Groundhog burrows within Woodroffe Avenue Study Area.

Groundhog within Maitland Avenue Study Area.

Source: Morrison Hershfield 2023

Natural environment field investigation were completed in April 2023.

Vegetation

- The Study Areas consist of a mixture of natural and disturbed vegetation communities indicative of past disturbance due to previous construction and road maintenance activities along Highway 417, Maitland Avenue, and Woodroffe Avenue.
- Rare vegetation species were not observed during field investigations.

Wildlife and Species at Risk (SAR)

- Several avian species were observed including, Common Grackle, Red-winged Blackbird, Song Sparrow, Canada Goose, Mallard, American Crow, European Starling, American Robin and Common Raven.
- Barn Swallow individual and nest searches were completed beneath each bridge structure. None were observed.
- Groundhog and Groundhog burrows were observed within the Study Areas.
- No provincially designated Endangered or Threatened SAR were observed during field investigations.

Fish and Fish Habitat

- No fish or fish habitat is present within or around the Maitland Avenue or Woodroffe Avenue Study Areas.

EXISTING ENVIRONMENTAL CONDITIONS

Cultural and Social Environment

Archeology

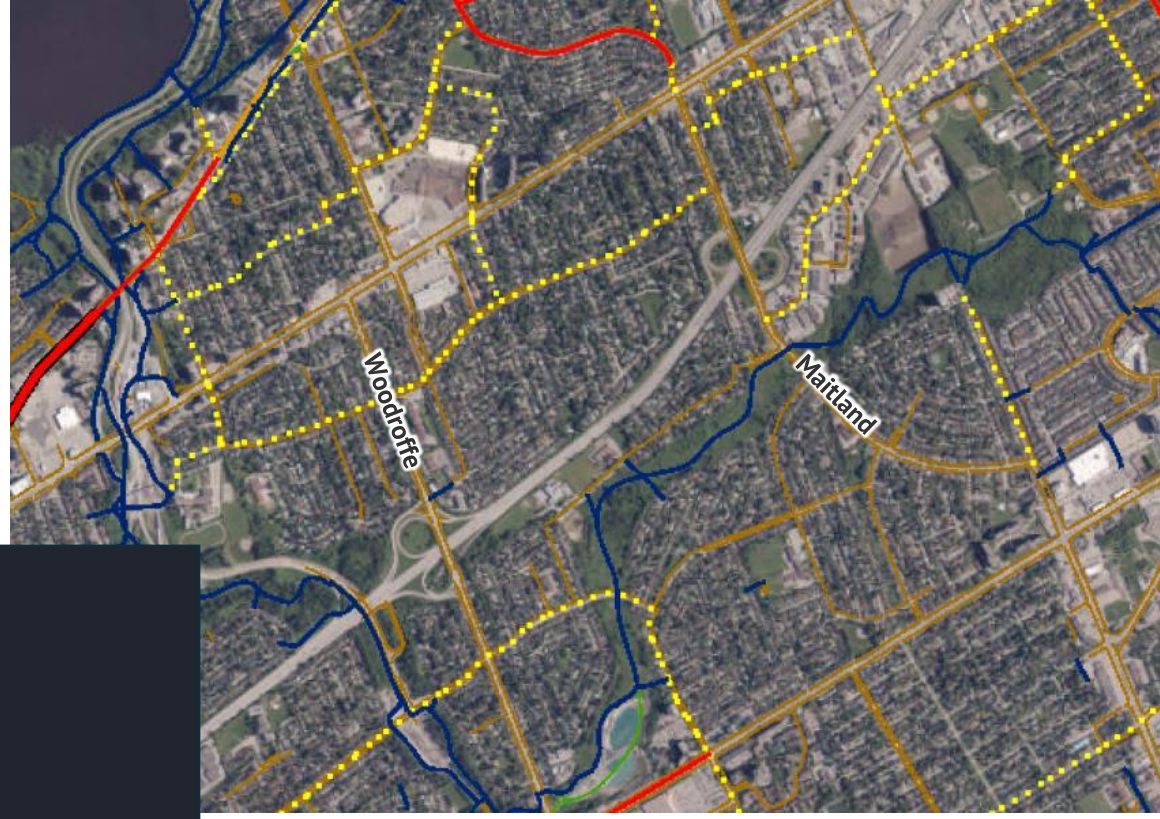
- A Stage 1 Archeological Assessment was completed for both Study Areas. The assessments found that the Study Areas are disturbed due to the construction, maintenance, and alteration of Highway 417, and do not exhibit archaeological potential.

Cultural Heritage

- The bridges do not contain any cultural heritage value or interest and no built heritage resources are located within the Study Areas.

Land Use

- Surrounding the Maitland Avenue Study Area, the lands are predominately residential, with mixed industrial lands directly adjacent to the Study Area to the East.
- The lands surrounding the Woodroffe Avenue Study Area are primarily residential, with greenspace to the West, which is transected by the Transitway (bus rapid transit network) as well as a multi-use pathway.
- Maitland Avenue is a Minor Corridor and Woodroffe Avenue is a Mainstreet Corridor.
- Pedestrian sidewalks exist along both sides of Woodroffe Avenue and Maitland Avenue.
- No cycling infrastructure currently exists on either crossing road at Highway 417.
- Both Study Areas are within an Intake Protection Zone.



Source: GeoOttawa

Existing Cycling Network

- Bike Lane
- Path
- Paved Shoulder
- Cycle Track
- Suggested Route

Existing Pedestrian Network

- Existing Sidewalks and Paths
- Existing Multi-Use Pathway

EXISTING STRUCTURAL BRIDGE CONDITIONS

Maitland Avenue Bridge

- Constructed in 1960
- Two-span, concrete slab-on-steel I-girder structure
- Total length of 70.2 m (two 35.1 m continuous spans)
- Structure width of 18.19 m, comprised of:
  - A two-lane 7.5 m wide northbound roadway
  - A two-lane 7.5 m wide southbound roadway
  - Two 1.5 m wide sidewalks
  - Two 0.455 m wide concrete barriers with railing

Woodroffe Avenue Bridge

- Constructed in 1960
- Two-span, concrete slab-on-steel I-girder structure
- Total length of 64.008 m (two 32.004 m continuous spans)
- Structure width of 24.1 m, comprised of:
  - A two-lane 7.62 m wide northbound roadway
  - A three-lane 11.28 m wide southbound roadway
  - A 1.22 m wide median curb
  - Two 1.53 m wide sidewalks
  - Two 0.46 m wide concrete barriers with railing

Recommended Plan

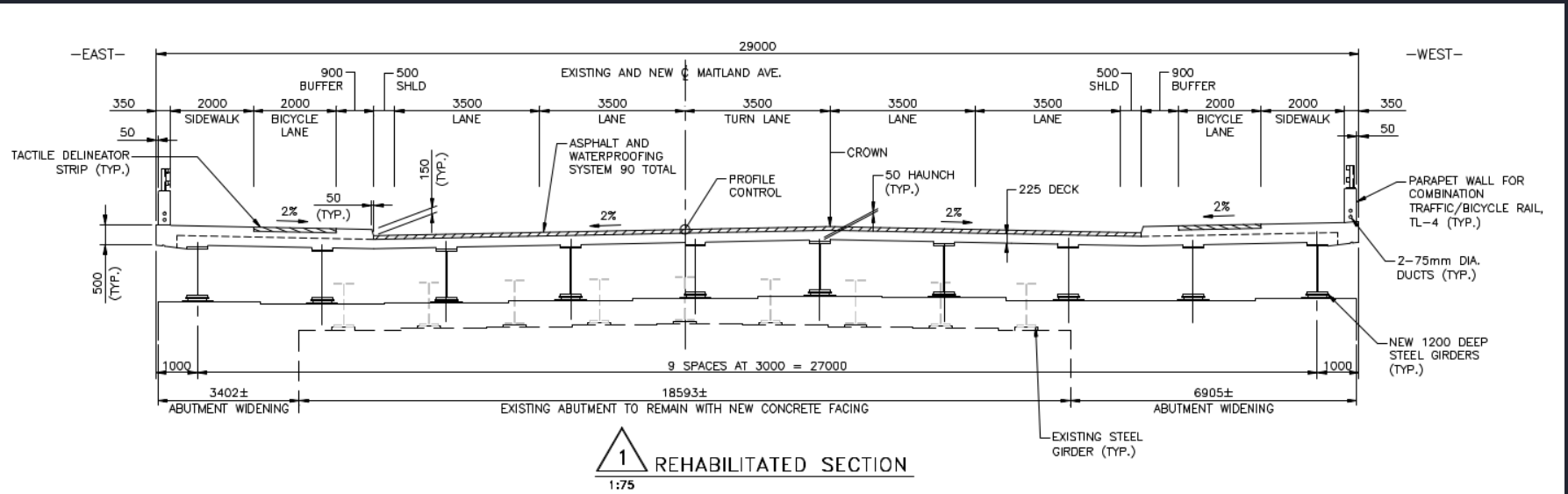
Recommended Plan - Bridge Design

Maitland Avenue

The recommended cross-section of the replacement Maitland Avenue bridge deck is 29 m, which is 10 m wider than the existing bridge. The widening will accommodate new features including:

- Four lanes of through-traffic
- Left turn lanes
- New 2 m sidewalks on both sides of the bridge
- New 2 m cycle tracks on both sides of the bridge

Maitland Avenue Cross-Section



Proposed cross- section:

- Accommodates future Active Transportation (AT) connections to be completed by the City of Ottawa.
- Maintains existing lane configuration and ramp connections.
- Allows for future tie-ins for widened Highway 417.

Note: The cross-section of Highway 417 will remain unchanged. Widening of Highway 417 will happen in a future contract.

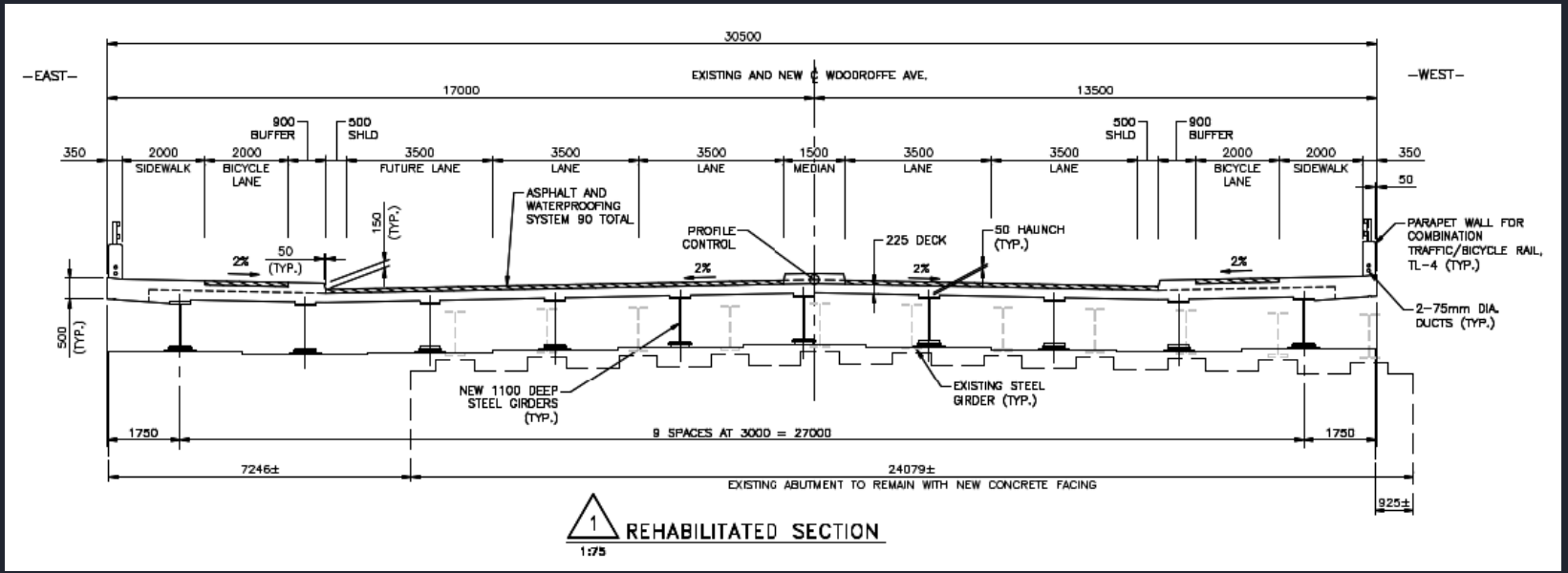
Recommended Plan - Bridge Design

Woodroffe Avenue

The recommended cross-section of the replacement Woodroffe Avenue bridge deck is 30.5 m, which is 6.4 m wider than the existing bridge. The widening will accommodate new features including:

- Four lanes of through-traffic
- A concrete median
- New 2 m sidewalks on both sides of the bridge
- New 2 m cycle tracks on both sides of the bridge

Woodroffe Avenue Cross-Section



Proposed cross- section:

- Accommodates future Active Transportation (AT) connections to be completed by the City of Ottawa.
- Maintains existing lane configuration and ramp connections.
- Allows for future tie-ins for widened Highway 417, including new ramp configuration.

Note: The cross-section of the proposed Highway 417 widening will match existing. Widening of Highway 417 will happen in a future contract.

Recommended Plan - Construction Staging Sequence

At each site, the bridges will be demolished in place and new bridges, constructed offsite in the construction staging areas, will be installed using rapid replacement techniques over multiple extended weekend closures (up to 48 hours each) of Highway 417. Advance work to facilitate each bridge replacement will be required prior to the rapid replacement operation. Both full and partial closure of Maitland Avenue and Woodroffe Avenue will be required in the period leading up to and after the rapid replacement operation. It is anticipated that at each site the ramps will be closed for 6 to 8 weeks and the crossing road will be closed for 4 to 5 weeks.

A summary of the Recommended Construction Staging Sequence is shown below:

Stage 1
Highway 417 traffic shifted to accommodate preparatory work at the existing bridge abutments.

Stage 2
Highway 417 traffic shifted to accommodate preparatory work at the existing median pier.

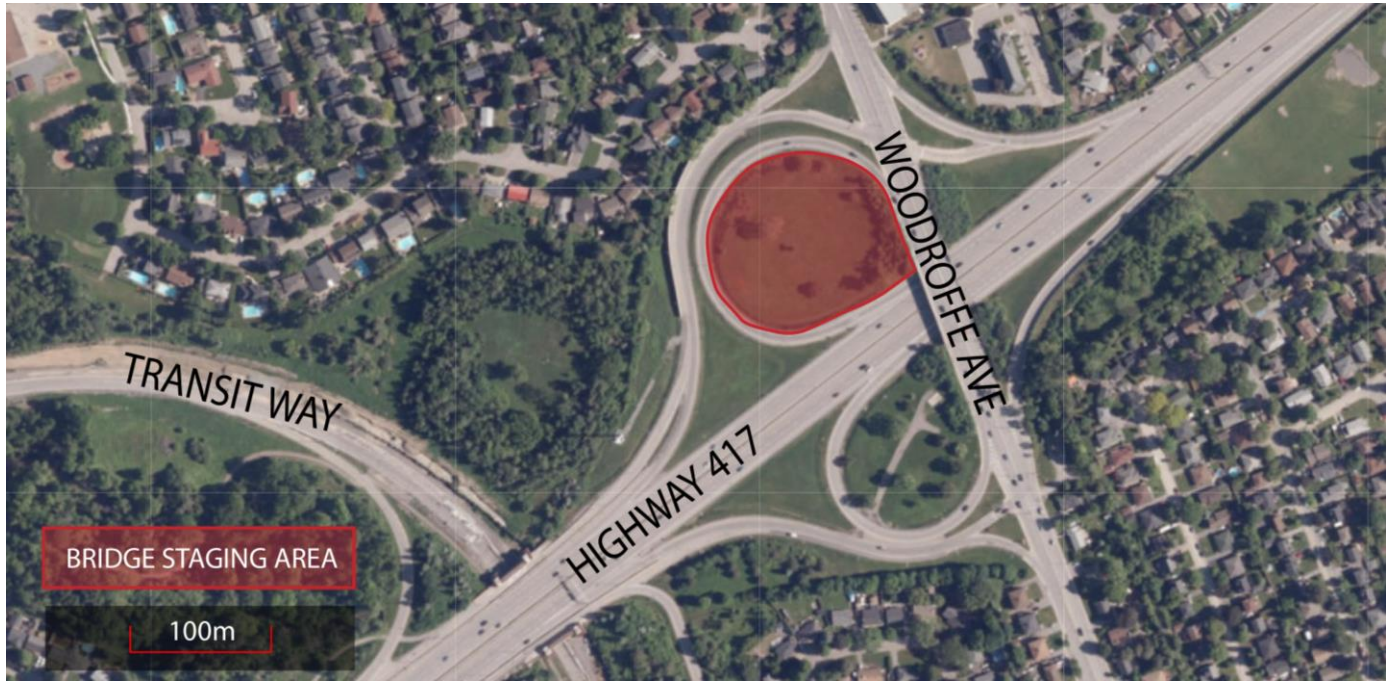
Stage 3
Full extended weekend closure of Highway 417 and crossing road for rapid demolition of bridge.

Stage 4
Reopen Highway 417, crossing road remains closed for construction activities prior to bridge placement.

Stage 5
Full extended weekend closure of Highway 417 for rapid replacement with new structure and completion of tie in and regrading.

Stage 6
Reopening of crossing road.

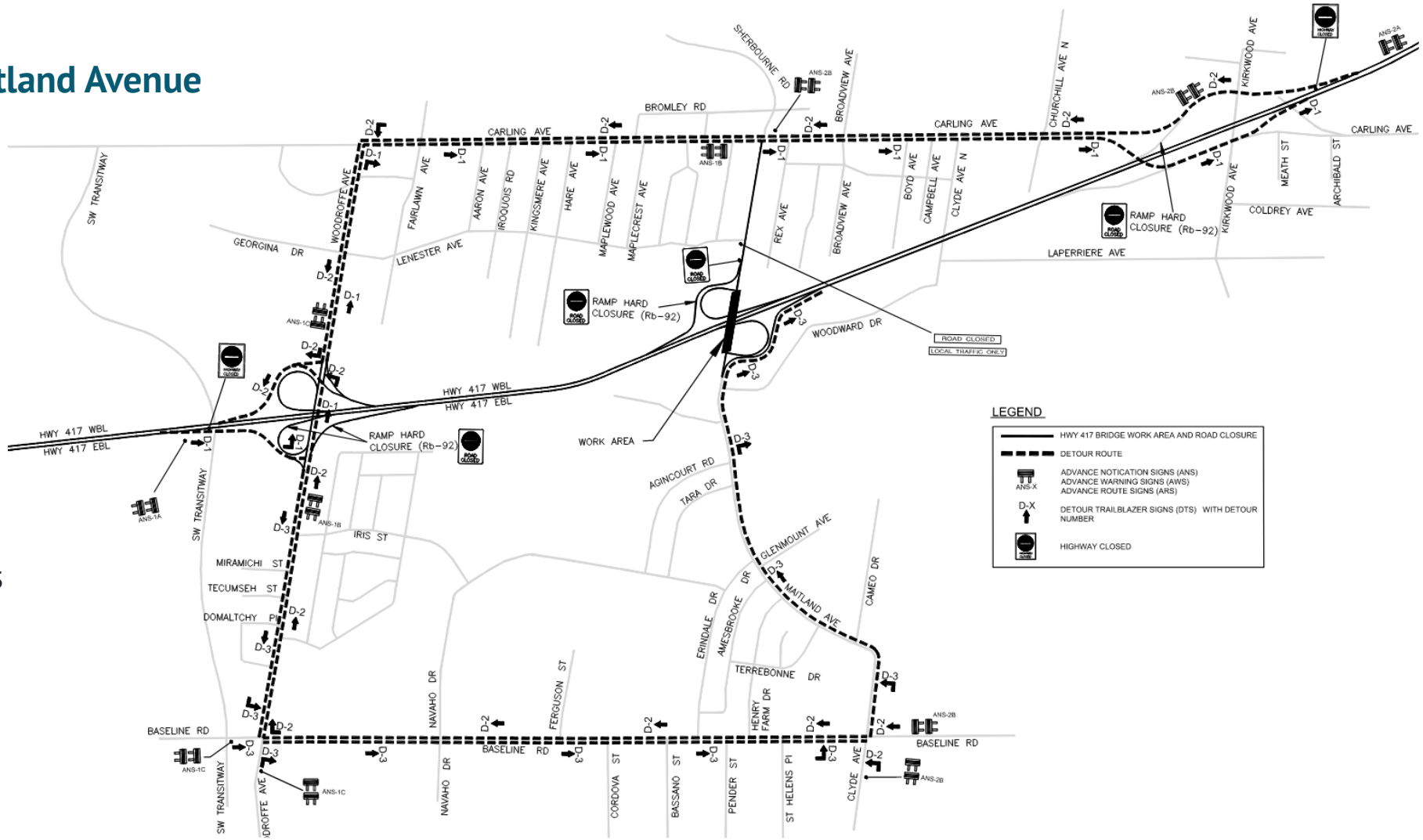
Recommended Plan - Construction Staging Areas



Recommended Plan - Detour Routes

Highway 417 Closure at Maitland Avenue

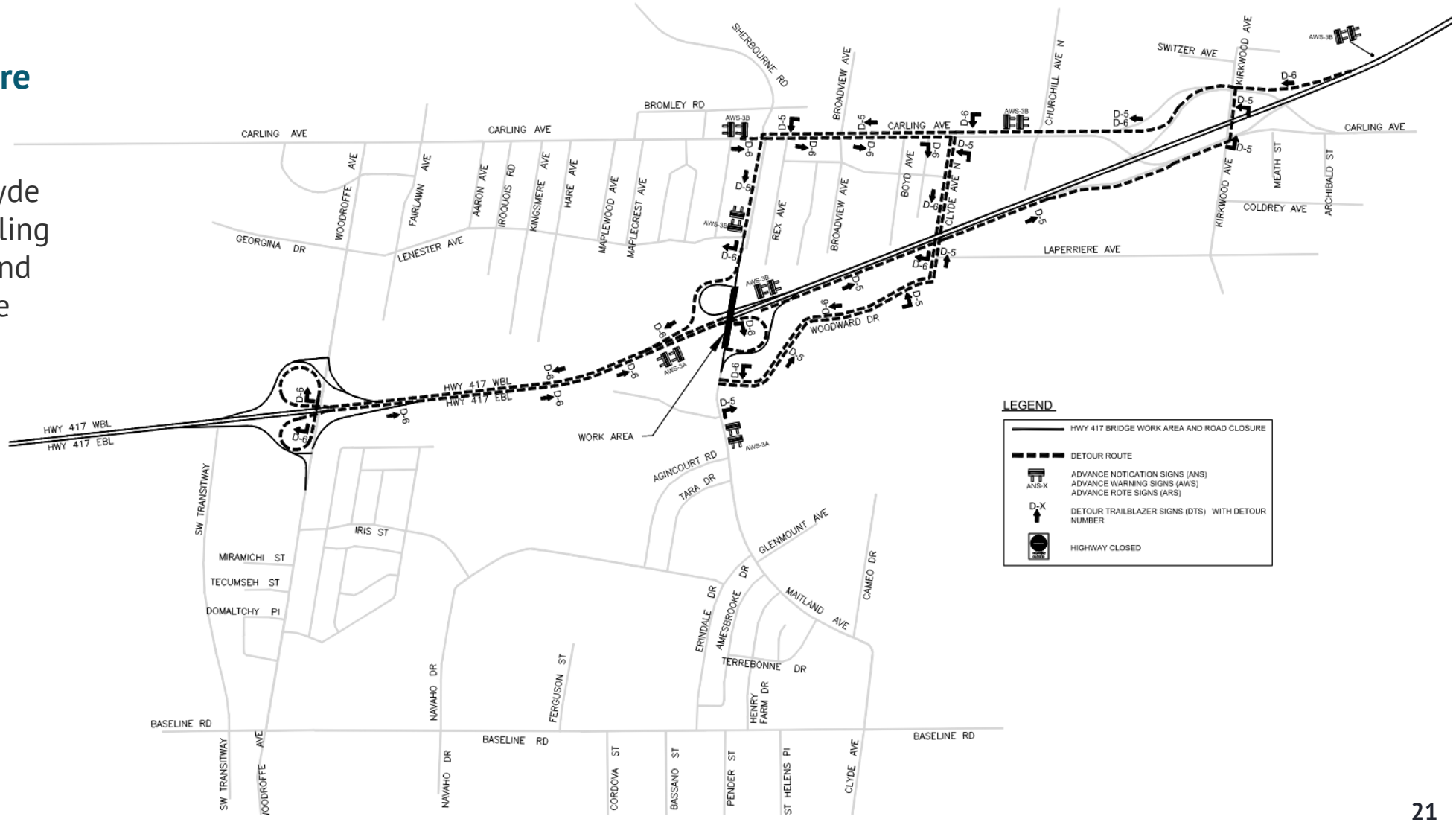
- Eastbound detour will exit the highway at Woodroffe Avenue and head South to Baseline Road, then use Maitland Avenue to access the highway via the South-East ramp.
- Westbound traffic will exit the highway at Carling Avenue and turn left onto Woodroffe Avenue and access the Highway.



Recommended Plan - Detour Routes

Maitland Avenue Closure

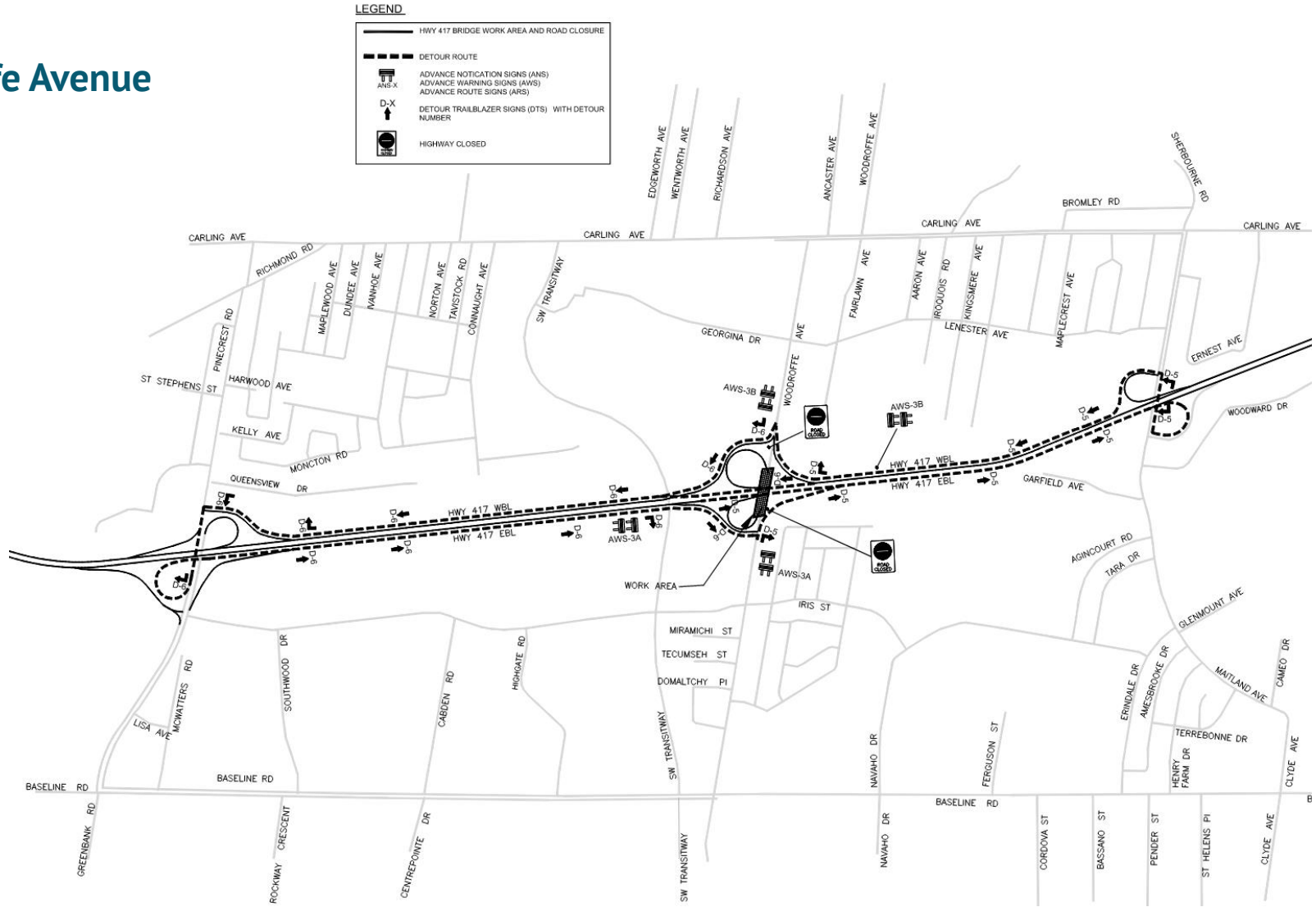
- Local traffic to cross Highway 417 using Clyde Avenue. Access via Carling Avenue to the North and Woodward Drive to the South.
- Pedestrian and cyclist detour to match.



Recommended Plan - Detour Routes

Highway 417 Closure at Woodroffe Avenue

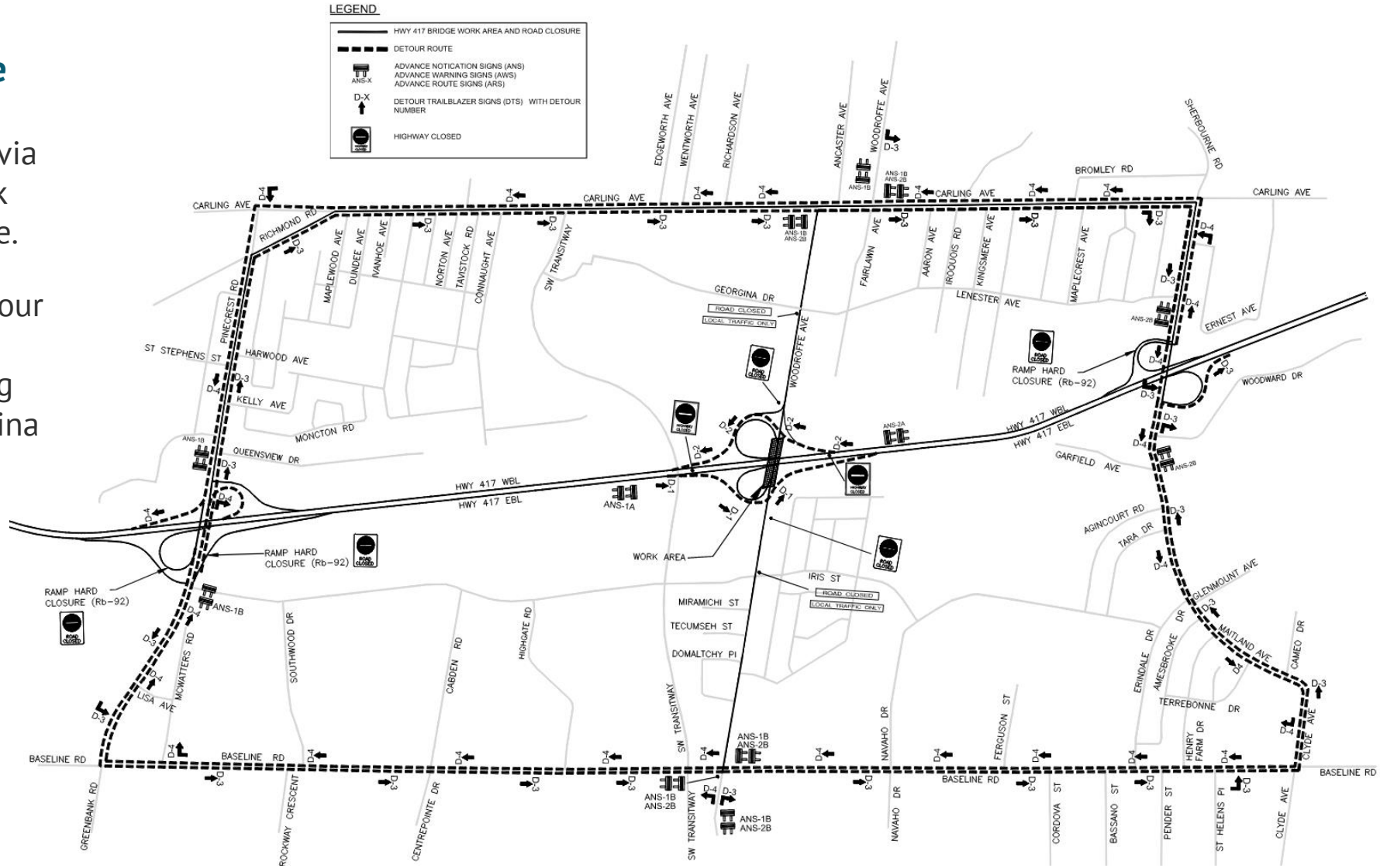
- Eastbound traffic will exit the highway at the existing eastbound off-ramp and then get back on the highway using the eastbound on-ramp ("ramp surfing")
- Westbound traffic will use the existing westbound off-ramp and then get back on the highway using the westbound on-ramp (“ramp-surfing”).



Recommended Plan - Detour Routes

Woodroffe Avenue Closure

- Access to the 401 will be via Pinecrest Road/Greenbank Road and Maitland Avenue.
- Pedestrian and cyclist detour will use Iris Street, the Pinecrest Creek path along the Transitway, and Georgina Drive.



Anticipated Environmental Impacts & Mitigation Measures

ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

Environment	Element	Anticipated Impacts	Proposed Mitigation Measures
Natural	Vegetation	Vegetation clearing/removals within staging areas.	• Restore exposed surfaces to existing conditions or better as soon as possible following construction.
Natural	Wildlife	Disturbance to urban tolerant wildlife and migratory birds during construction.	• Vegetation clearing shall be done outside of April 1st to August 31st to avoid impacts to nesting migratory birds. • Before operating heavy equipment, scan around the equipment to ensure wildlife are not within the vicinity.
Cultural	Archaeology	There is potential for deeply buried deposits to occur within the construction staging areas that could be uncovered during construction.	• Monitor areas during construction. • Should deeply buried archeological materials be encountered, all work shall stop, and a professionally licensed archeologist shall be consulted.
Social	Property	Temporary property impacts are required for construction.	• Temporary easements will be in place prior to construction.
Social	Noise and Air Quality	Noise and air quality nuisance from construction equipment and vehicles during construction.	• Maintain equipment in good operating condition. • Restrict idling of equipment to the minimum necessary to perform the work. • Implement dust suppression measures to contain dust.
Transportation	Traffic Operations	Lane reductions and road closures during construction, including full closures of Highway 417 and crossing roads during rapid demolition and rapid replacement of the bridges.	• Prepare and implement a Traffic Management Plan, including planned detour routes. • Implement temporary and advance signage and notifications to provide notice of upcoming closures and identify detour routes.

Next Steps

NEXT STEPS

Contract 1:

1. Submit feedback on the PIC material through the Contact Us function on the Project Website by **June 5, 2024.**
2. After reviewing comments received, the Project Team will finalize the Recommended Detail Design Plans.
3. Once the Detail Design Plans are finalized, the Project Team will complete the Design and Construction Report (DCR) and 5-Year TESR Review.
4. The DCR will be submitted for a 30-day public comment period in Summer 2024.

Contract 2:

- An online PIC will be held as the design progresses further.

THANK YOU!

Thank you for participating in this online PIC.

Please provide feedback on the PIC materials through the Contact Us function on the Project Website by **June 5, 2024.** Comments or questions regarding the project can be submitted via this link at any time throughout the study.

If you have any questions, please contact one of the following Project Team members:

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Information is being 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.

Ontario

Jacobs

Séance d'information publique virtuelle

Conception détaillée et évaluation environnementale pour le remplacement rapide des ponts de l'autoroute 417

Contrat 1 (GWP 4124-14-00) : Avenue Maitland et avenue Woodroffe

Du 22 mai au 5 juin 2024

Jacobs

INTRODUCTION

L'objectif de cette séance d'information publique (SIP) virtuelle est de présenter un aperçu du projet et de recueillir l'avis du public sur les éléments suivants :

- Étude actuelle de conception détaillée;
- Processus d'évaluation environnementale (ÉE) de portée générale du MTO;
- Conditions existantes dans les zones d'étude;
- Détails de l'aménagement recommandé pour le contrat 1 (Maitland et Woodroffe);
- Étapes de construction proposées, fermetures de routes et plans de déviation de la circulation;
- Impacts environnementaux envisagés et mesures d'atténuation connexes.

Nous vous invitons à nous faire part de vos commentaires sur les informations présentées ici. Pour toute question ou tout commentaire, veuillez vous rendre sur la page Contactez-nous du site Web du projet.

Aperçu du projet

CONTEXTE DU PROJET

- En **2007**, le ministère des Transports (MTO) a réalisé une évaluation environnementale (ÉE) pour la conception préliminaire de l'autoroute 417 (autoroute Queensway d'Ottawa), de l'autoroute 416 au chemin Anderson, en réponse à l'augmentation du volume de la circulation. Ce processus a donné lieu à la recommandation d'un plan pour orienter l'évolution de l'autoroute Queensway au cours des 20 prochaines années. En résumé, le plan recommandé contient des recommandations pour élargir des sections de la ligne principale de l'autoroute 417, modifier les échangeurs, remettre en état la chaussée, les ponts et le système d'éclairage et améliorer les réseaux d'évacuation et les systèmes avancés de gestion de la circulation, l'aménagement paysager et les murs antibruit. Le plan recommandé comprend le remplacement de cinq ponts à quatre endroits de l'autoroute 417 situés à l'avenue Maitland, à l'avenue Woodroffe, au chemin Pinecrest et au chemin Richmond.
- En **2011**, un rapport de conception en fonction du contexte a été préparé en collaboration avec divers intervenants, notamment la ville d'Ottawa et la Commission de la capitale nationale. Le rapport présente une vision globale de la conception du corridor de l'autoroute 417. Les conceptions et les recommandations de conception sont décrites dans le rapport afin de servir de point de départ à l'élaboration de spécifications et de détails normalisés pour une gamme d'améliorations esthétiques à mettre en œuvre dans tout le corridor.
- En **2017**, différentes options de configuration de structure et d'étapes de construction ont été évaluées afin de déterminer une option de conception détaillée préférée sur le plan technique pour les cinq remplacements de ponts situés à l'avenue Maitland, à l'avenue Woodroffe, au chemin Pinecrest et au chemin Richmond.
- En **2022**, le MTO a lancé le présent projet de conception détaillée afin de confirmer et d'affiner le plan recommandé par l'ÉE pour le remplacement des cinq ponts et d'en préparer la mise en œuvre.

DESCRIPTION DU PROJET

Le ministère des Transports (MTO) a retenu les services de Morrison Hershfield et de Jacobs Consultancy Canada pour réaliser la conception détaillée et l'évaluation environnementale (ÉE) de portée générale pour le remplacement rapide de cinq ponts à quatre endroits sur l'autoroute 417 dans la ville d'Ottawa. Le projet consiste en deux contrats distincts :

- Contrat 1 (GWP 4124-14-00) – Remplacement rapide des ponts de l'autoroute 417, avenue Maitland et avenue Woodroffe
- Contrat 2 (GWP 4069-19-00) – Remplacement rapide des ponts de l'autoroute 417, chemin Pinecrest et chemin Richmond

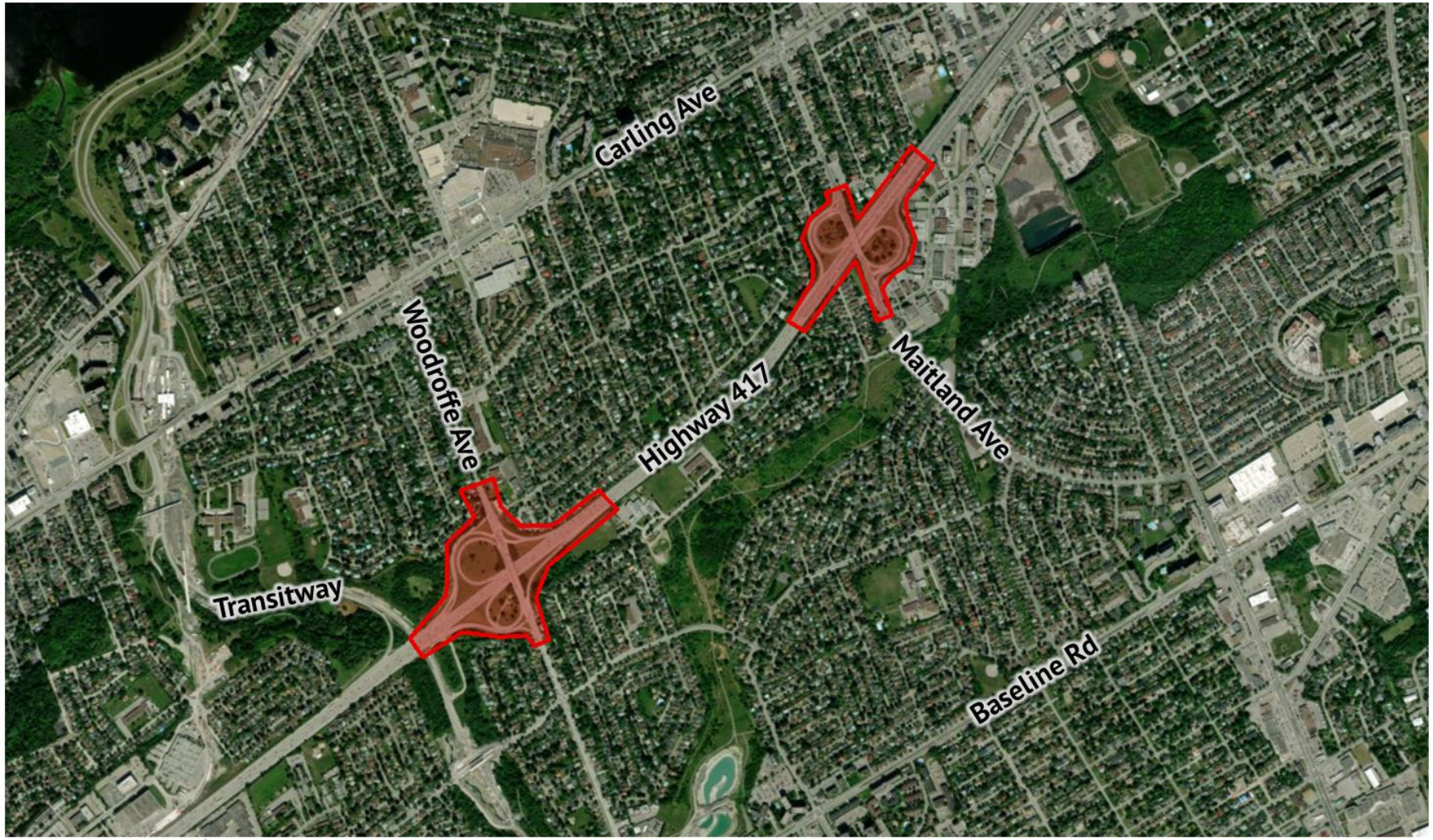
La mise en œuvre du projet comprendra ce qui suit :

- Démolition rapide et remplacement des cinq ponts;
- Réparation du béton détérioré sur les surfaces exposées de tout élément conservé, y compris la rénovation des culées des ponts;
- Remplacement ou rénovation des installations et des éléments de soutien, notamment le drainage, la gestion des eaux pluviales, l'éclairage, la signalisation, ainsi que le déplacement et la protection temporaires des systèmes avancés de gestion de la circulation (SAGC), selon les besoins.

Le concept du contrat 1 est plus avancé que celui du contrat 2 et fait l'objet de la présente SIP.

Une deuxième SIP, propre au contrat 2, sera organisée lorsque le concept sera plus avancé.

ZONE D'ÉTUDE DU CONTRAT 1

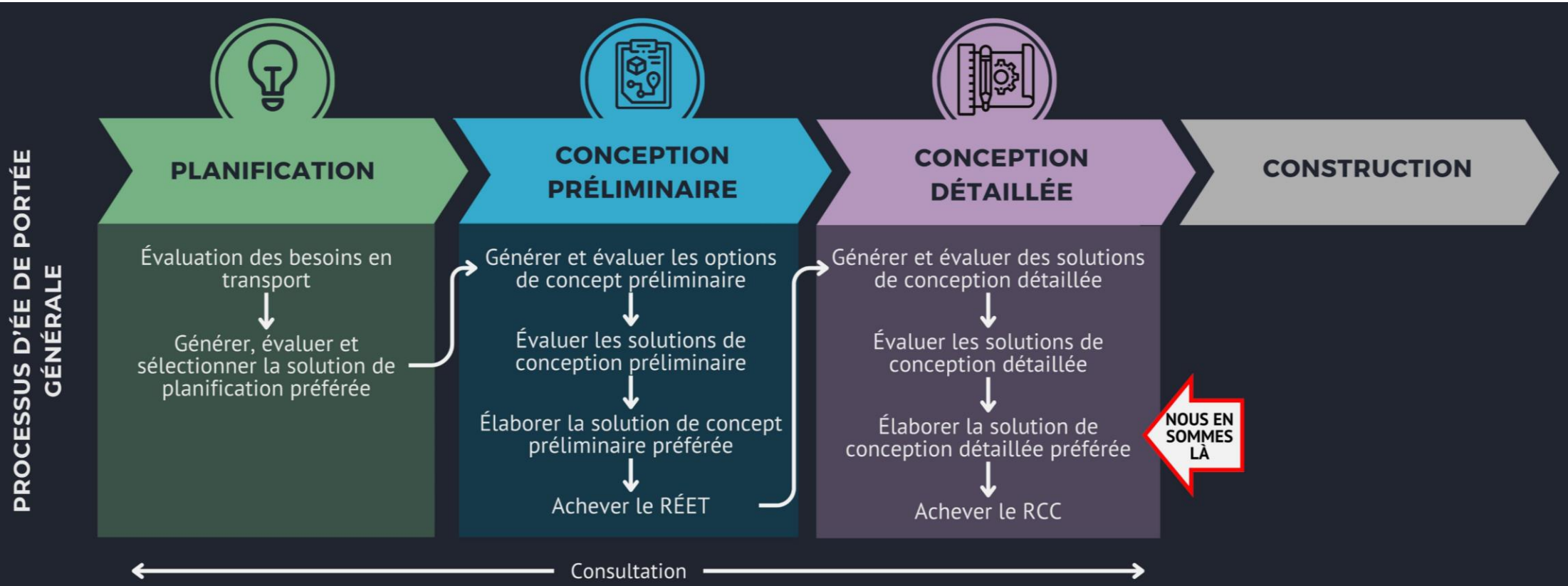


417westbridges.ca

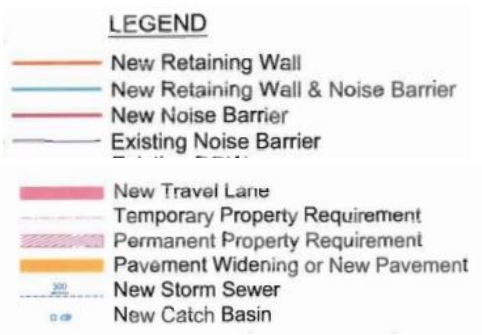
PROCESSUS D'ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE

Le concept préliminaire de l'autoroute 417, de l'autoroute 416 au chemin Anderson, a suivi le processus de planification approuvé pour les projets du groupe B aux termes de l'évaluation environnementale de portée générale pour les routes provinciales de 2000 (ÉE de portée générale du MTO) et a été documenté dans un rapport d'étude environnementale sur les transports (RÉET).

Ce projet de conception détaillée suit également le processus pour les projets du groupe B, conformément à l'ÉE de portée générale du MTO. Au terme de l'étude, un rapport de conception et de construction (RCC) sera préparé pour documenter le processus d'ÉE, le plan d'aménagement détaillé recommandé, un résumé des consultations, ainsi que les impacts environnementaux prévus et les mesures d'atténuation recommandées. Le RCC sera accessible sur le site Web du projet pour une période d'examen public de 30 jours.



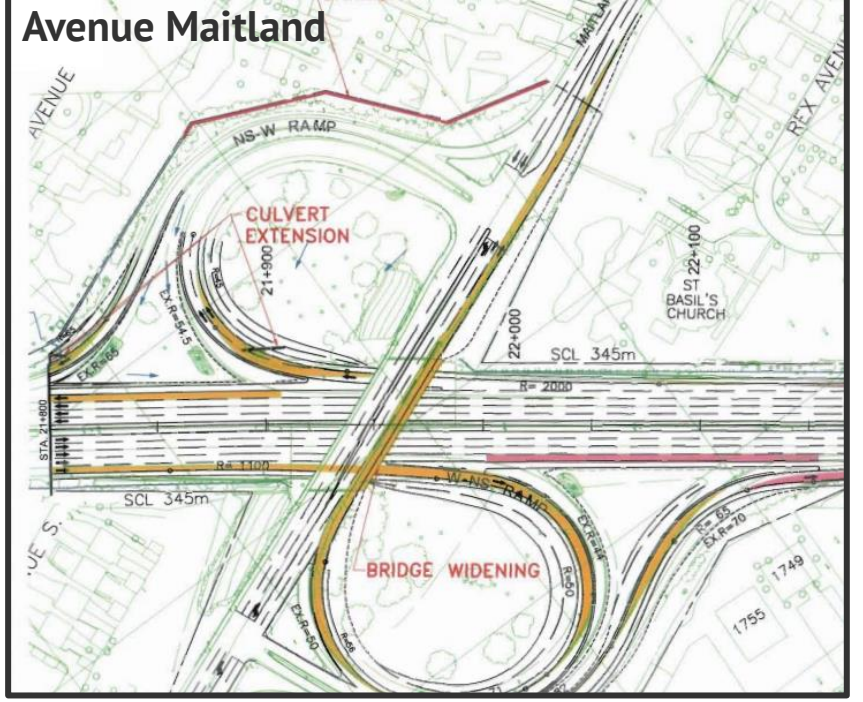
RECOMMENDATIONS DU RÉET DE 2007



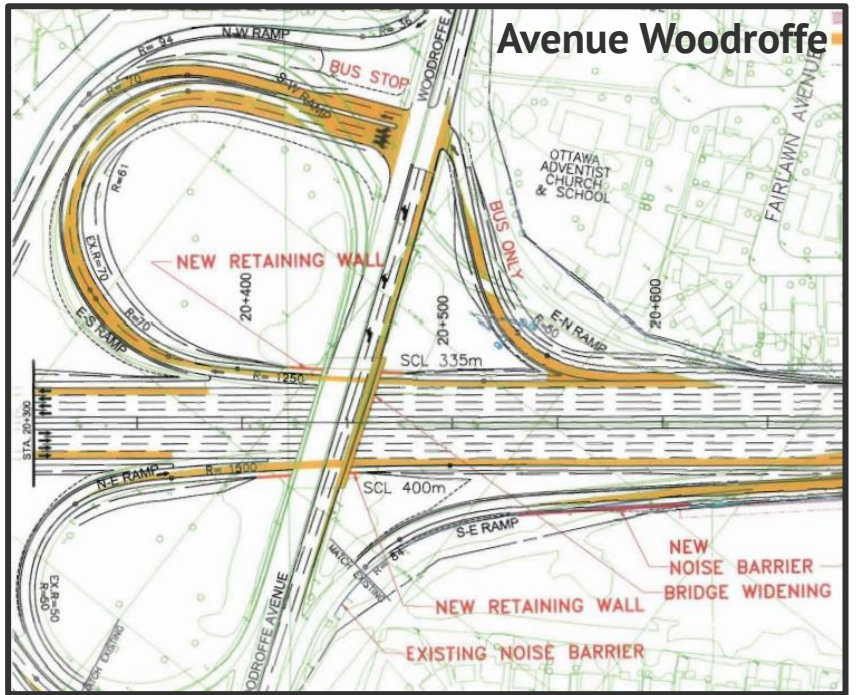
Comme le RÉET a été finalisé il y a plus de cinq ans, il fait actuellement l'objet d'une révision qui sera documentée dans le RCC afin d'identifier tout changement apporté à l'entreprise, comme l'exige l'ÉE de portée générale du MTO.

Aux avenues Maitland et Woodroffe, le RÉET de 2007 recommandait ce qui suit :

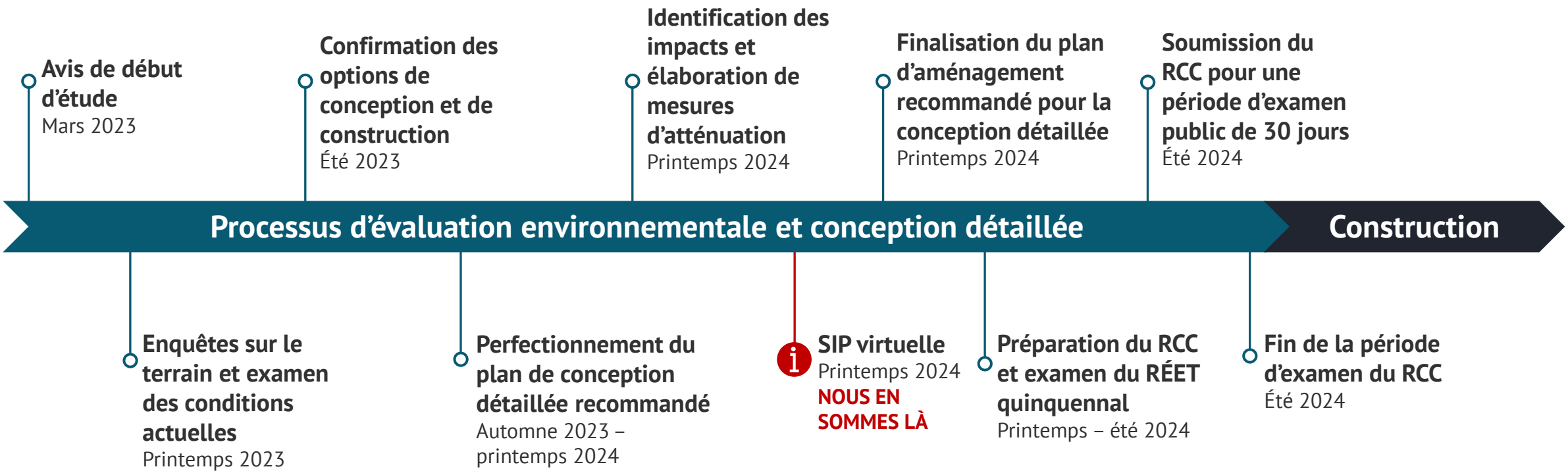
- Que les ponts existants fassent l'objet d'une certaine forme de rénovation afin d'en maintenir la fonctionnalité.
- Que la voie de virage à gauche existante sur l'avenue Maitland soit allongée pour répondre à la demande de circulation prévue. Cela nécessiterait d'élargir le pont du côté est de 5,4 mètres.
- Que le pont de l'avenue Woodroffe soit élargi de 4,3 mètres du côté est. Cela permettrait d'ajouter une nouvelle voie de virage à gauche en direction du nord afin de faciliter les virages à gauche et d'accroître la sécurité des véhicules circulant en direction nord sur l'avenue Woodroffe.
- Que les ponts rénovés tiennent compte de l'élargissement recommandé de l'autoroute 417 entre l'autoroute 416 et l'avenue Carling (une voie supplémentaire par direction, soit quatre voies principales dans chaque direction).



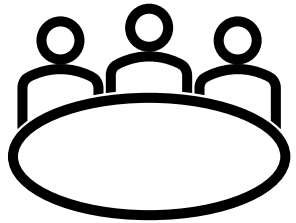
TSH Engineers Architects Planners, 2007



CALENDRIER DU CONTRAT 1



CONSULTATIONS À CE JOUR



Comité consultatif technique municipal (CCTM)

- Deux réunions du CCTM ont été organisées à ce jour pour simplifier la consultation des parties prenantes de la ville d'Ottawa.
- Une première réunion du CCTM a été organisée pour présenter le projet et recueillir l'avis des parties intéressées sur les problèmes connus ou les domaines d'intérêt.
- Une deuxième réunion du CCTM a été organisée pour faire le point sur l'avancement du projet et recueillir des avis sur le transport actif, les itinéraires de déviation et les incidences sur les routes municipales et les services publics.

Conseillers municipaux

- Une rencontre a été organisée avec les conseillers des quartiers Bay et College de la ville d'Ottawa afin de leur donner un aperçu du projet.

Conditions actuelles

Végétation dans la zone d'étude de l'avenue Maitland.

Terriers de marmottes dans la zone d'étude de l'avenue Woodroffe.

Marmotte dans la zone d'étude de l'avenue Maitland.

Source : Morrison Hershfield, 2023

CONDITIONS ENVIRONNEMENTALES ACTUELLES

Environnement naturel

L'enquête sur le terrain de l'environnement naturel a été achevée en avril 2023.

Végétation

- Les zones d'étude sont constituées d'un éventail de communautés végétales naturelles et détériorées témoignant de perturbations passées attribuables à des activités antérieures de construction et d'entretien routier le long de l'autoroute 417, de l'avenue Maitland et de l'avenue Woodroffe.
- Les enquêtes sur le terrain n'ont révélé aucune espèce végétale rare.

Faune et espèces en péril

- Plusieurs espèces aviaires ont été observées, notamment le quiscale bronzé, le carouge à épaulettes, le bruant chanteur, la bernache du Canada, le canard colvert, la corneille d'Amérique, l'étourneau sansonnet, le merle d'Amérique et le corbeau freux.
- Sous chaque structure de pont, des recherches d'individus et de nids d'hirondelles rustiques ont été effectuées. Ni l'un ni l'autre n'ont été observés.
- Des marmottes et des terriers de marmottes ont été observés dans les zones d'étude.
- Aucune espèce en voie de disparition ou menacée, selon les normes provinciales, n'a été observée au cours des enquêtes sur le terrain.

Poisson et habitat du poisson

- On ne trouve aucun poisson ou habitat du poisson à l'intérieur ou autour des zones d'étude de l'avenue Maitland et de l'avenue Woodroffe.

CONDITIONS ENVIRONNEMENTALES ACTUELLES

Environnement culturel et social

Archéologie

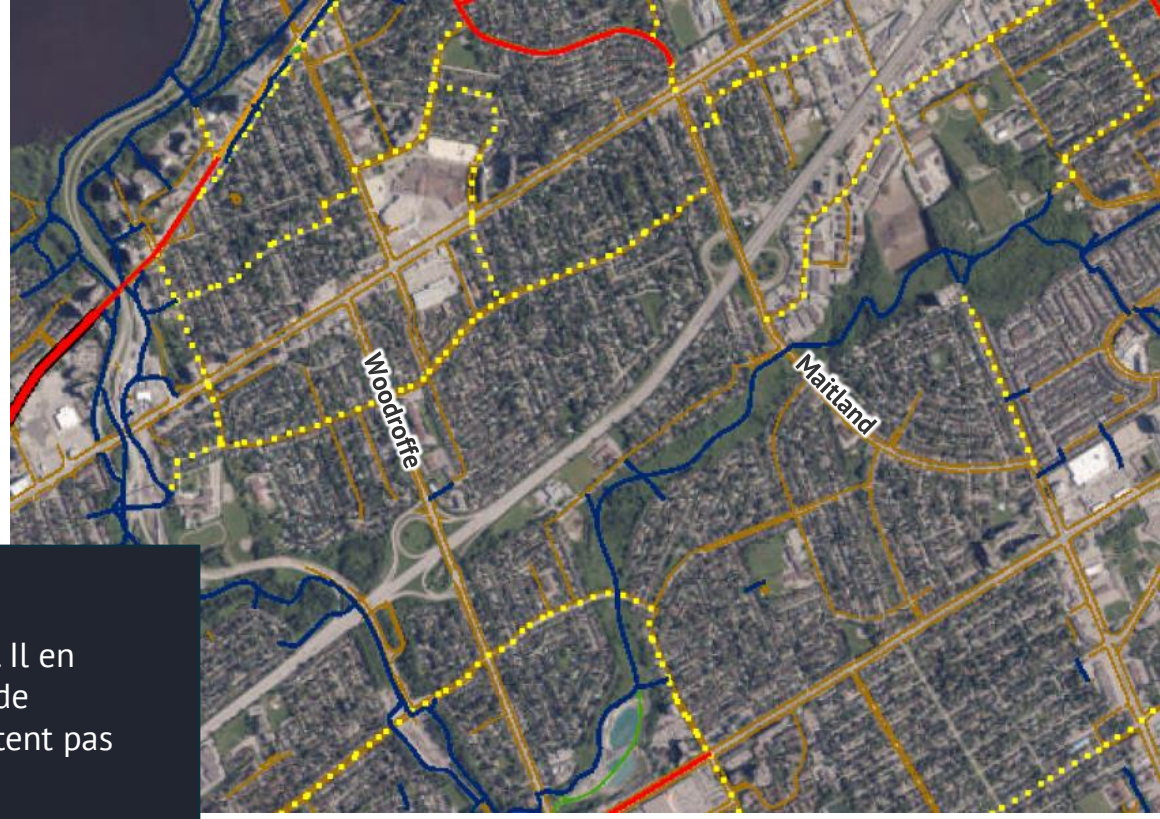
- Une évaluation archéologique de niveau 1 a été réalisée sur les deux zones d'étude. Il en ressort que les zones d'étude ont subi des perturbations attribuables à des travaux de construction, d'entretien et de modification de l'autoroute 417, et qu'elles ne présentent pas de potentiel archéologique.

Patrimoine culturel

- Les ponts ne présentent aucune valeur ou aucun intérêt sur le plan du patrimoine culturel et aucune ressource patrimoniale bâtie ne se trouve dans les zones d'étude.

Occupation du sol

- Autour de la zone d'étude de l'avenue Maitland, les terrains sont principalement résidentiels, avec des terrains industriels mixtes directement adjacents à la zone d'étude à l'est.
- Les terrains entourant la zone d'étude de l'avenue Woodroffe sont principalement résidentiels, avec un espace vert à l'ouest, qui est traversé par le Transitway (réseau de transport en commun rapide) ainsi que par un sentier polyvalent.
- L'avenue Maitland forme un corridor mineur et l'avenue Woodroffe un corridor principal.
- Il y a des trottoirs piétonniers des deux côtés de l'avenue Woodroffe et de l'avenue Maitland.
- Aucune infrastructure cyclable n'existe actuellement sur l'une ou l'autre des routes traversant l'autoroute 417.
- Les deux zones d'étude se trouvent dans une zone de protection des prises d'eau.



Source : GeoOttawa

Réseau cyclable (actuel)

- Voie cyclable
- Sentier
- Accotement asphalté
- Piste cyclable
- Circuit suggéré

Réseau piétonnier actuel

- Trottoirs et sentiers actuels
- Sentier polyvalent actuel

CONDITIONS STRUCTURELLES ACTUELLES DES PONTS

Pont de l'avenue Maitland

- Construit en 1960
- Structure en I à deux travées, en béton, sur poutres d'acier
- Longueur totale de 70,2 m (deux travées continues de 35,1 m)
- Largeur structurelle de 18,19 m, comprenant :
  - une chaussée à deux voies de 7,5 m de large en direction du nord
  - une chaussée à deux voies de 7,5 m de large en direction du sud
  - deux trottoirs de 1,5 m de large
  - deux barrières en béton de 0,455 m de large avec garde-corps

Pont de l'avenue Woodroffe

- Construit en 1960
- Structure en I à deux travées, en béton, sur poutres d'acier
- Longueur totale de 64,008 m (deux travées continues de 32,004 m)
- Largeur structurelle de 24,1 m, comprenant :
  - une chaussée à deux voies de 7,62 m de large en direction du nord
  - une chaussée à trois voies de 11,28 m de large en direction du sud
  - une bordure médiane de 1,22 m de large
  - deux trottoirs de 1,53 m de large deux barrières en béton de 0,46 m de large avec garde-corps

Plan recommandé

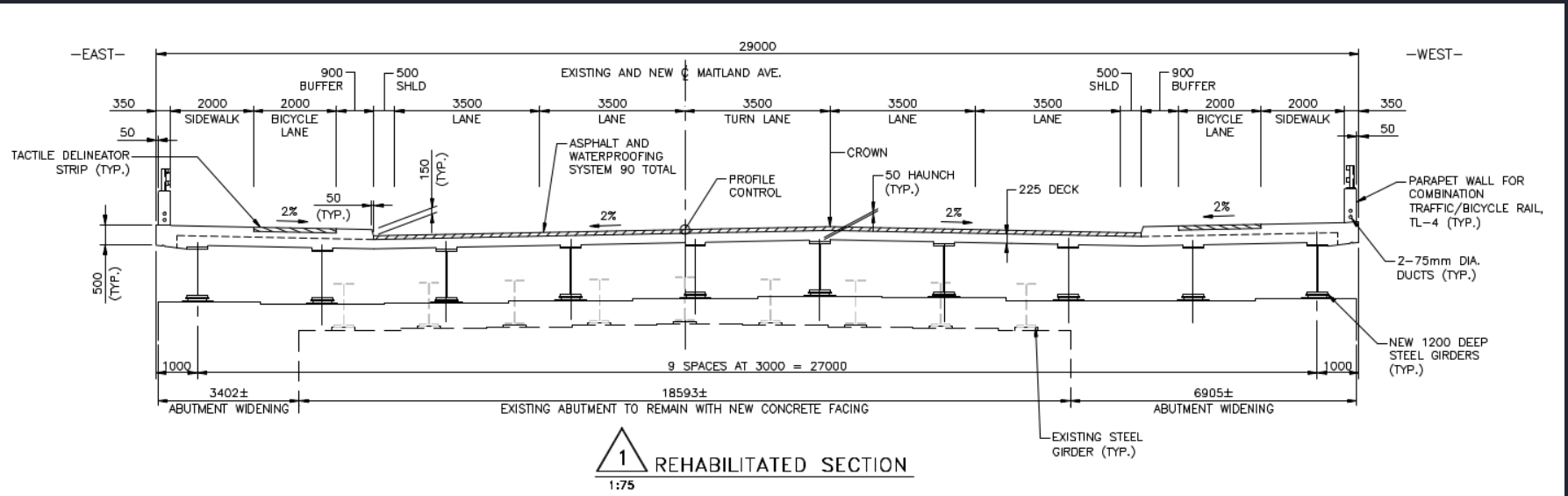
Plan recommandé — conception du pont

Avenue Maitland

La section transversale recommandée du tablier du pont de remplacement de l'avenue Maitland est de 29 m, soit 10 m de plus que le pont actuel. L'élargissement intégrera de nouvelles caractéristiques, notamment :

- Quatre voies de circulation de transit
- Des voies de virage à gauche
- De nouveaux trottoirs de 2 m de part et d'autre du pont
- De nouvelles pistes cyclables de 2 m de part et d'autre du pont

Section transversale de l'avenue Maitland



Section transversale proposée :

- Convient aux futures liaisons de transport actif (TA) devant être réalisées par la ville d'Ottawa.
- Maintient la configuration actuelle des voies et des bretelles d'accès.
- Prévoit des raccordements futurs pour l'élargissement de l'autoroute 417.

Remarque : la section transversale de l'autoroute 417 demeurera inchangée. L'élargissement de l'autoroute 417 fera l'objet d'un contrat ultérieur.

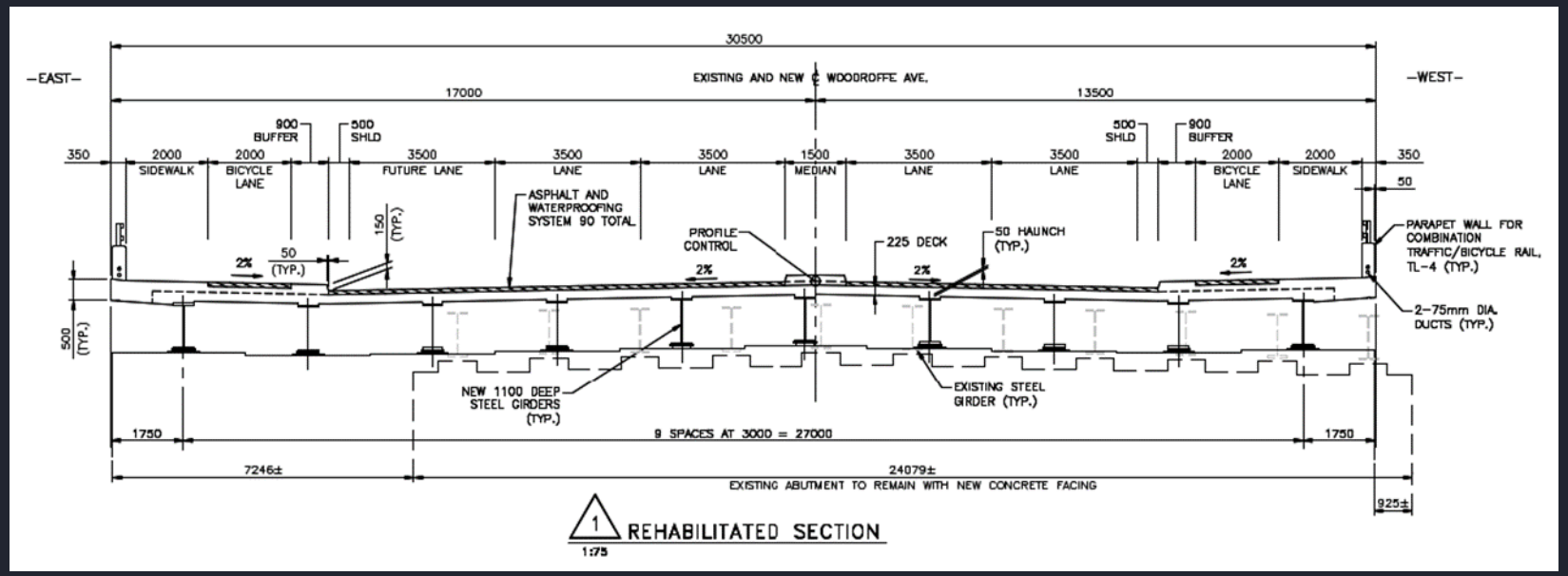
Plan recommandé — conception du pont

Avenue Woodroffe

La section transversale recommandée du tablier du pont de remplacement de l'avenue Woodroffe est de 30,5 m, soit 6,4 m de plus que le pont actuel. L'élargissement intégrera de nouvelles caractéristiques, notamment :

- Quatre voies de circulation de transit
- Un terre-plein en béton
- De nouveaux trottoirs de 2 m de part et d'autre du pont
- De nouvelles pistes cyclables de 2 m de part et d'autre du pont

Section transversale de l'avenue



Section transversale proposée :

- Convient aux futures liaisons de transport actif (TA) devant être réalisées par la ville d'Ottawa.
- Maintient la configuration actuelle des voies et des bretelles d'accès.
- Permet des raccordements futurs pour l'élargissement de l'autoroute 417, y compris une nouvelle configuration de la bretelle d'accès.

Remarque : la section transversale de l'autoroute 417 demeurera inchangée. L'élargissement de l'autoroute 417 fera l'objet d'un contrat ultérieur..

Plan recommandé – déroulement des travaux de construction

Sur chaque site, les ponts seront démolis sur place et de nouveaux ponts, construits hors site dans les zones de préparation des travaux, seront installés à l'aide de techniques de remplacement rapide au cours de plusieurs fermetures prolongées de l'autoroute 417 pendant les fins de semaine (jusqu'à 48 heures chacune). Des travaux préalables seront nécessaires pour faciliter le remplacement de chaque pont avant l'opération de remplacement rapide. Il sera nécessaire de fermer partiellement ou totalement l'avenue Maitland et l'avenue Woodroffe pendant la période précédant et suivant l'opération de remplacement rapide. Il est prévu que, sur chaque site, les bretelles soient fermées pendant 6 à 8 semaines et que la route transversale soit fermée pendant 4 à 5 semaines.

Voici un résumé des étapes de construction recommandées :

Étape 1

Déplacement de la circulation sur l'autoroute 417 pour permettre les travaux préparatoires sur les culées du pont existant.

Étape 2

Déplacement de la circulation sur l'autoroute 417 pour permettre les travaux préparatoires à la pile médiane actuelle.

Étape 3

Fermeture complète de l'autoroute 417 et de la route transversale pendant la fin de semaine afin de permettre la démolition rapide du pont.

Étape 4

Réouverture de l'autoroute 417, la route transversale restant fermée pour les activités de construction avant la mise en place du pont.

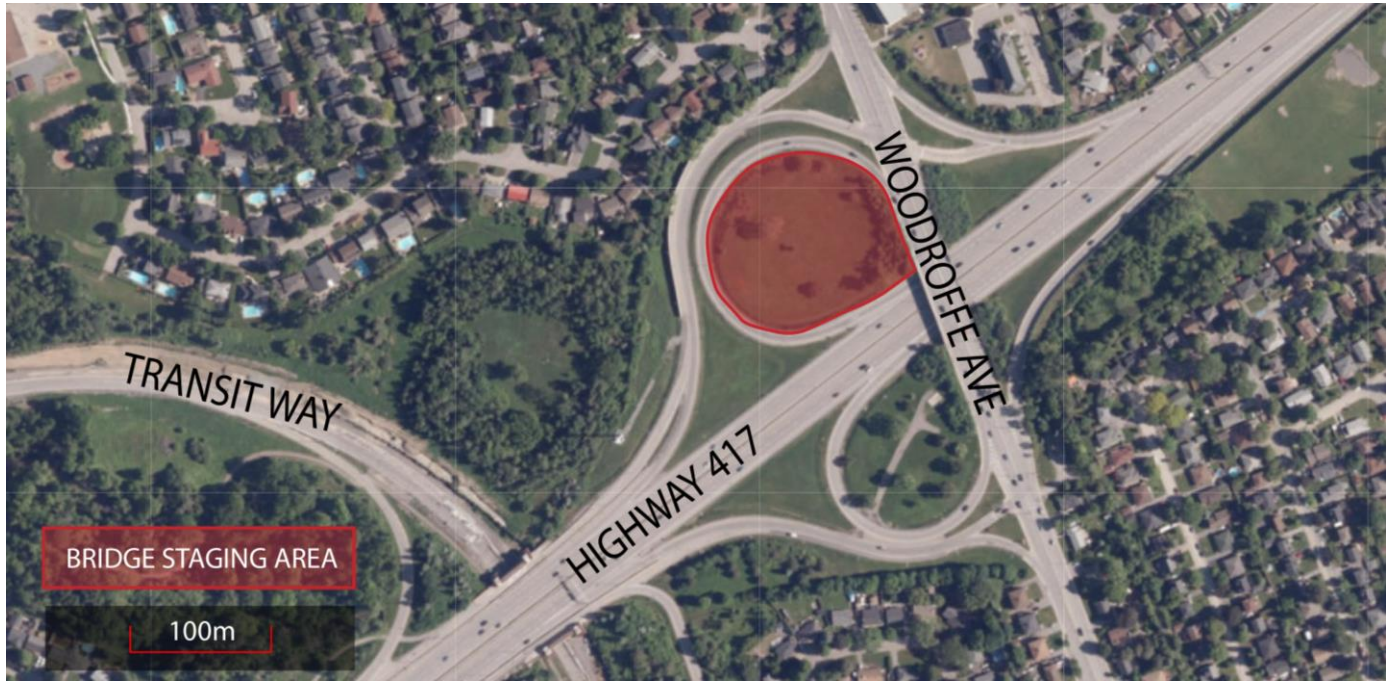
Étape 5

Fermeture complète de l'autoroute 417 pendant une fin de semaine pour le remplacement rapide de la nouvelle structure et l'achèvement des travaux de raccordement et de nivellement.

Étape 6

Réouverture de la route transversale.

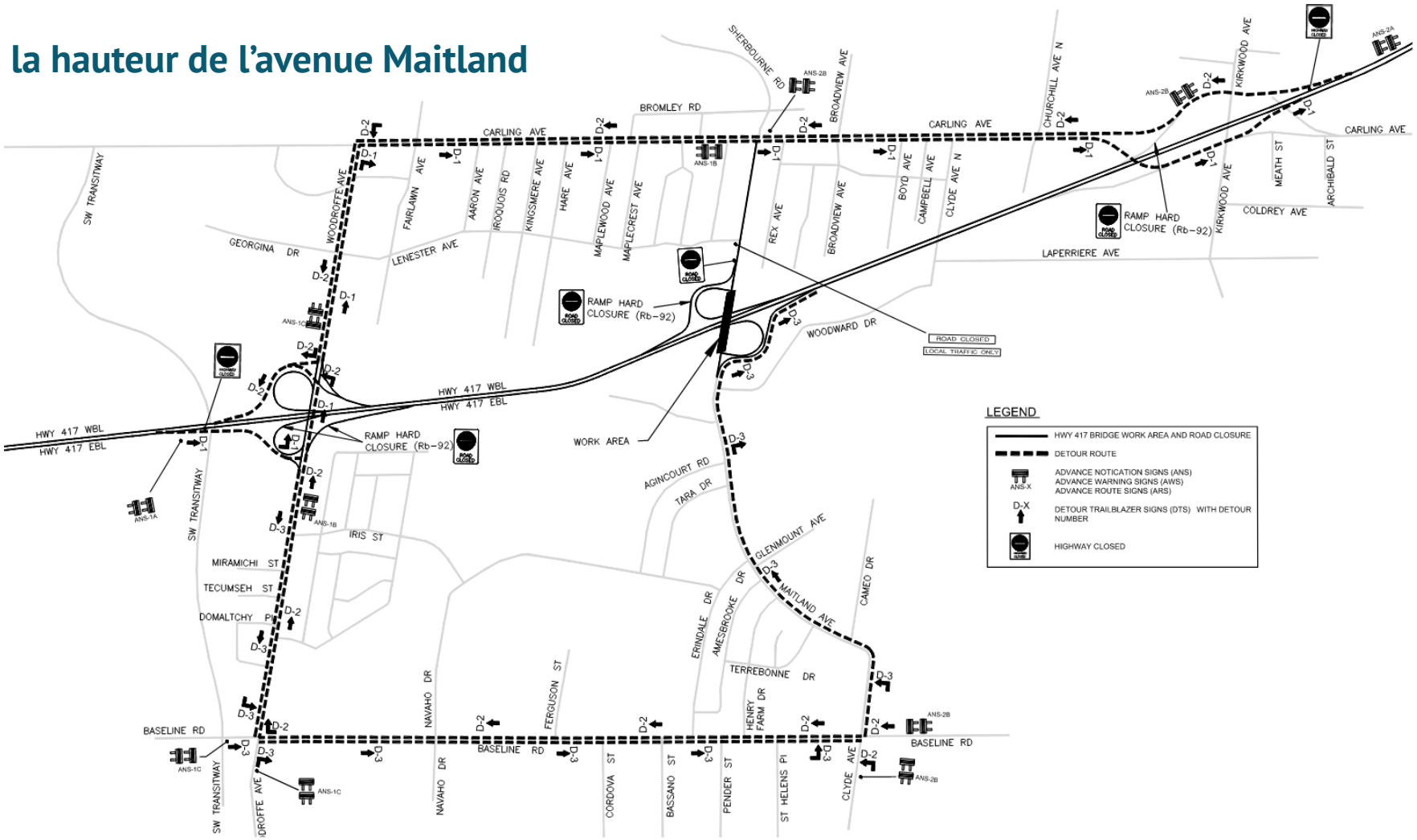
Plan recommandé – zones de préparation des travaux



Plan recommandé – voies de déviation

Fermeture de l'autoroute 417 à la hauteur de l'avenue Maitland

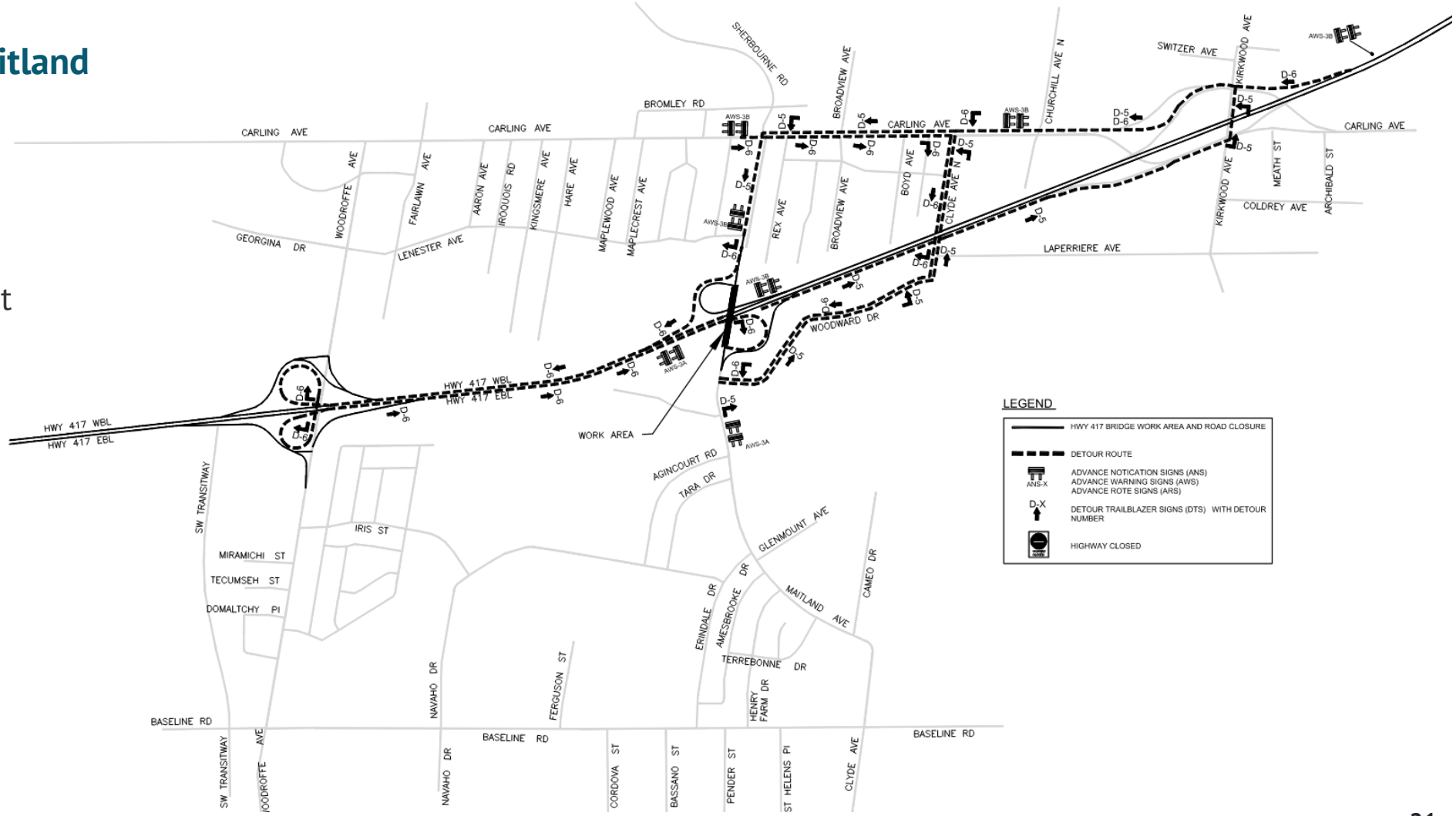
- La circulation en direction de l'est quittera l'autoroute à l'avenue Woodroffe et se dirigera vers le sud jusqu'au chemin Baseline, puis empruntera l'avenue Maitland pour réintégrer l'autoroute par la bretelle sud-est.
- La circulation en direction de l'ouest quittera l'autoroute à l'avenue Carling et tournera à gauche sur l'avenue Woodroffe pour réintégrer l'autoroute.



Plan recommandé – voies de déviation

Fermeture de l'avenue Maitland

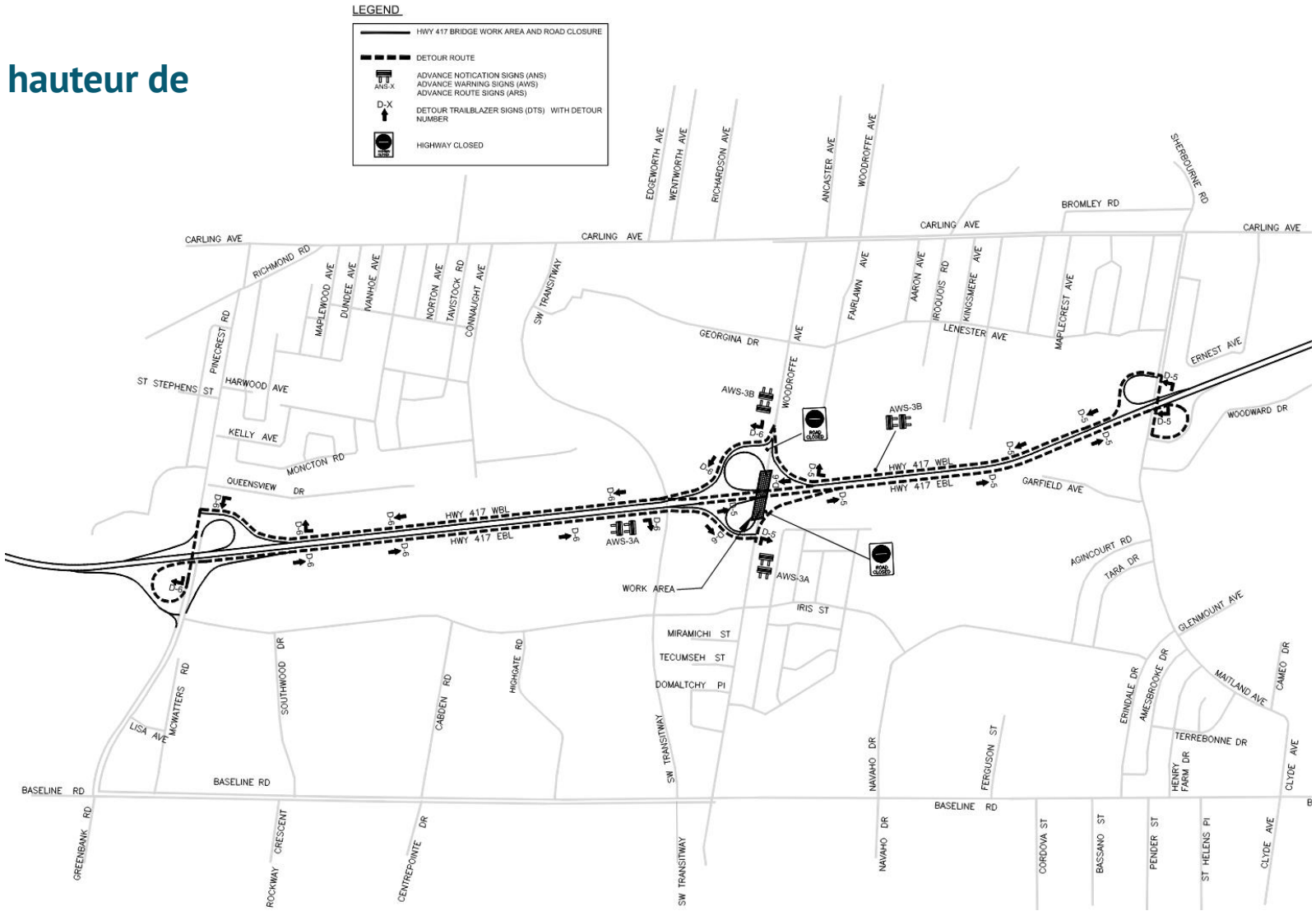
- La circulation locale traversera l'autoroute 417 en empruntant l'avenue Clyde. L'accès se fera par l'avenue Carling au nord et la promenade Woodward au sud.
- Déviation adaptée pour la circulation piétonne et cycliste.



Plan recommandé – voies de déviation

Fermeture de l'autoroute 417 à la hauteur de l'avenue Woodroffe

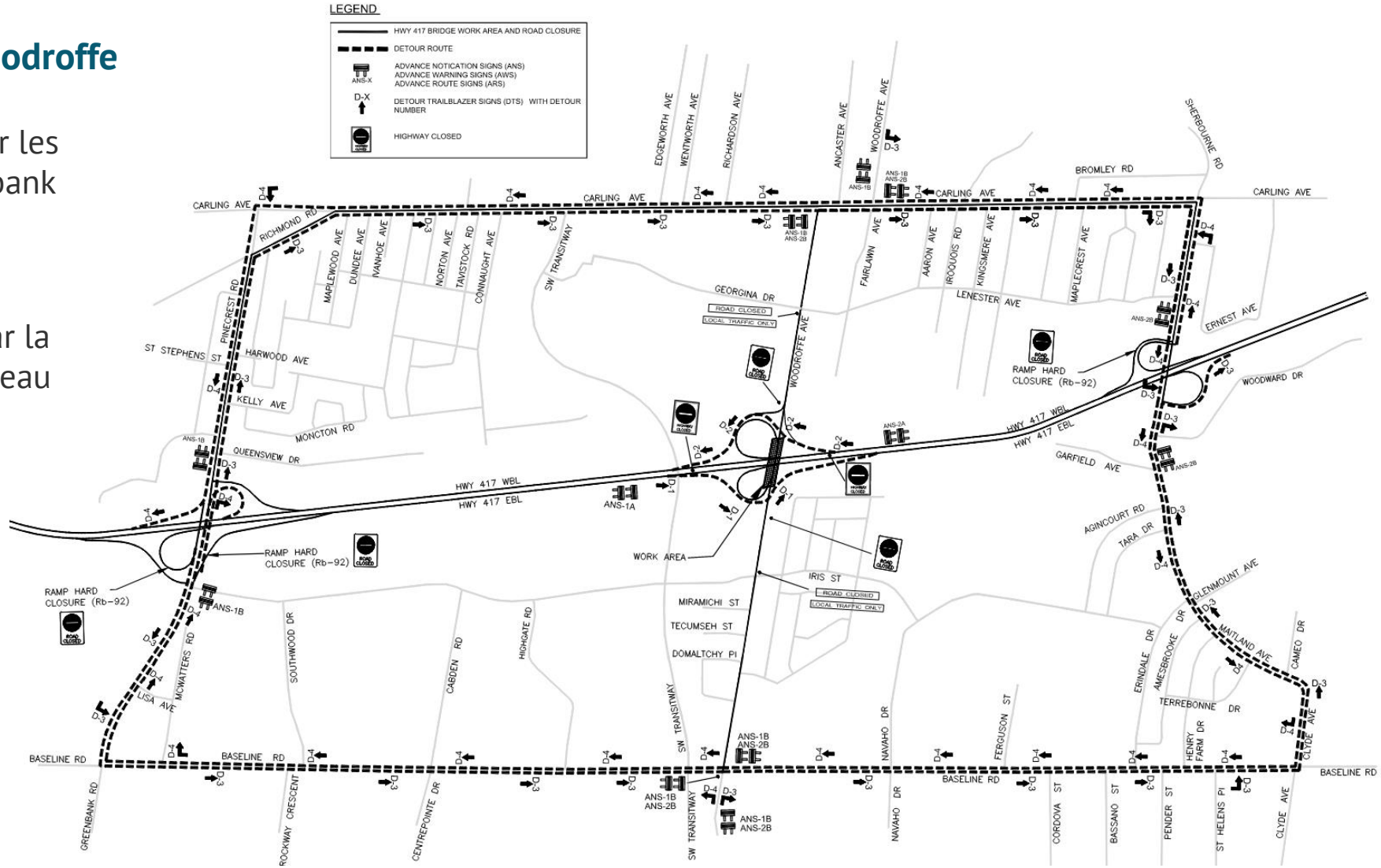
- La circulation en direction de l'est quittera l'autoroute par la bretelle de sortie existante en direction de l'est, puis réintégrera l'autoroute par la bretelle de sortie en direction de l'est.
- La circulation en direction de l'ouest empruntera la bretelle de sortie existante en direction de l'ouest, puis réintégrera l'autoroute en passant par la bretelle d'accès en direction de l'ouest.



Plan recommandé – voies de déviation

Fermeture de l’avenue Woodroffe

- L’accès à la 401 se fera par les chemins Pinecrest/Greenbank et l’avenue Maitland.
- La circulation piétonne et cycliste sera détournée par la rue Iris, le sentier du ruisseau Pinecrest, le long du Transitway, et de la promenade Georgina.



Impacts environnementaux prévus et mesures d’atténuation

IMPACTS ENVIRONNEMENTAUX PRÉVUS ET MESURES D'ATTÉNUATION

Environnement	Élément	Impacts prévus	Mesures d'atténuation proposées
Naturel	Végétation	Défrichement et élimination de la végétation dans les zones de préparation des travaux.	• Rétablir les surfaces exposées à leur état actuel ou à un état amélioré dès que possible après les travaux de construction.
Naturel	Faune	Perturbation de la faune adaptée aux zones urbaines et des oiseaux migrateurs pendant les travaux de construction.	• Le défrichement de la végétation doit être effectué en dehors de la période du 1er avril au 31 août afin d'éviter tout impact sur les oiseaux migrateurs en période de nidification. • Avant toute utilisation d'équipement lourd, vérifier les alentours pour s'assurer qu'il n'y a pas d'animaux sauvages à proximité.
Culturel	Archéologie	Il est possible que les travaux révèlent la présence de vestiges profondément enfouis dans les zones de préparation des travaux.	• Surveiller les zones pendant les travaux. • Interrompre les travaux en cas de découverte de vestiges archéologiques profondément enfouis et consulter un archéologue professionnel agréé.
Social	Propriétés	Des impacts temporaires sur les propriétés sont à prévoir durant les travaux de construction.	• Des servitudes temporaires seront mises en place avant les travaux.
Social	Bruit et qualité de l'air	Nuisances sonores et détérioration de la qualité de l'air causées par les engins et les véhicules de chantier pendant les travaux.	• Maintenir l'équipement en bon état de fonctionnement. • Limiter la marche au ralenti des équipements au minimum nécessaire à l'exécution des travaux. • Mettre en œuvre des mesures de dépoussiérage pour contenir les poussières.
Transports	Gestion de la circulation	Réduction du nombre de voies et fermeture de routes pendant les travaux, y compris la fermeture complète de l'autoroute 417 et des routes transversales pendant la démolition et le remplacement rapides des ponts.	• Préparer et mettre en œuvre un plan de gestion de la circulation, y compris les itinéraires de déviation prévus. • Mettre en place une signalisation et des notifications temporaires et préalables afin de faire connaître les fermetures à venir et les itinéraires de déviation.

Prochaines étapes

PROCHAINES ÉTAPES

Contrat 1 :

1. Soumettre tout commentaire sur le contenu de la SIP par le biais de la fonction Contactez-nous sur le site Web du projet d'ici le **5 juin 2024**.
2. Après avoir examiné les commentaires reçus, l'équipe de projet finalisera les plans de conception détaillée recommandés.
3. Une fois les plans de conception détaillée finalisés, l'équipe de projet préparera le rapport de conception et de construction (RCC) et l'examen quinquennal du RÉET.
4. Le RCC sera soumis à une période de consultation publique de 30 jours à l'été 2024.

Contrat 2 :

- Une SIP virtuelle sera organisée lorsque le concept sera plus avancé.

MERCI!

Merci d'avoir participé à cette SIP virtuelle.

Veuillez soumettre tout commentaire sur le contenu de la SIP par le biais de la fonction Contactez-nous sur le site Web du projet d'ici le **3 juin 2024**. Vous pouvez soumettre vos commentaires ou questions concernant le projet via ce lien à tout moment de l'étude.

Si vous avez des questions, veuillez communiquer avec l'un des membres suivants de l'équipe de projet :

Lincoln MacDonald, P. Eng, PMP
Ingénieur-conseil de projet
Morrison Hershfield
Tél. : 613 739-2910, poste 1022279
Courriel : lmacdonald@morrisonhershfield.com

Ben Munroe, P.Eng.
Ingénieur de projet principal
Ministère des Transports
Tél. : 613 453-4843
Courriel : Ben.Munroe@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.

A-4. Comments Received

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
1	3/3/2023	Email	Ministry of Citizenship and Multiculturalism (MCM)	Thanks for sending the Notice of Study Commencement for the above referenced project to the Ministry of Citizenship and Multiculturalism (MCM). Please note that the responsibility for administration of the Ontario Heritage Act and matters related to cultural heritage has 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. Heritage Planning Unit at MCM is the one window to provide comments on all environmental assessment related processes. So for this project please include the following contacts: • Karla Barboza, Team Lead - Heritage | Heritage Planning Unit (Citizenship and Multiculturalism) | 416-660-1027 | Karla.Barboza@ontario.ca • Joseph Harvey, Heritage Planner | Heritage Planning Unit (Citizenship and Multiculturalism) | 613-242-3743 | Joseph.Harvey@ontario.ca Any notices for future projects should be sent to my attention. You can remove Jessica Marr and others. We will provide a response to the notice. In the meantime we would appreciate if you can send the Project Information Form numbers of any archaeological assessments undertaken previously. Let us know if you have any questions.	Provided Project Information Form numbers for the archaeological assessments.	3/6/2023
2	3/3/2023	Email	Rogers	Thanks for reaching out to us on this potential project. We will be your contact in the future for any relocations.	No response required.	N/A
3	3/6/2023	Email	Public	I read the Notice that appeared in the Ottawa Citizen last week about the replacement of 5 bridges on Hwy 417 (GWP 4124-14-00 and 4069-19-000). These appear to be bridges over Hwy 417. I remember the Maitland Ave Bridge being rehabilitated about 20 yrs ago with stainless steel rebar in the deck. Is the stainless rebar performing well ? For the last 20+ years, I have been promoting and following the use of stainless rebar in a consulting capacity. So, I am aware that several bridges on Hwy 417 have stainless rebar in their decks (e.g., Clyde, Kent, Carling). Will the 5 new bridges over Hwy 417 require corrosion resistant rebar (e.g stainless rebar) ?	Corrosion resistant reinforcing (such as stainless steel) will be used in the deck and other various bridge components in accordance with MTO Policy. MTO's current policy stipulates the use of corrosion resistant reinforcing in the "splash zone" and elements exposed to deicing chemicals. With respect to the existing structure and the past rehabilitation, some select elements of the deck and structure included stainless steel reinforcement. There is no evidence that the existing stainless steel reinforcing is not performing as anticipated. The bridge replacements are being undertaken due to the structures nearing the end of their lifespan and the need to address sub-standard clearances over Highway 417 as well as to allow for the potential future widening of the highway.	

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
4	3/23/2023	Email	National Capital Commission (NCC)	I was forwarded the email below you had sent out regarding the EA for the 417 rapid bridge replacements (Richmond Rd. to Maitland Ave.), as I will be reviewing on behalf of the NCC. Unfortunately the letter and other documents were not attached. Would you be able to send these along so I can review?	Attached the Notice of Commencement letter.	3/23/2023
5	3/24/2023	Email	NCC	Thank you for sending the notice of commencement letter so quickly. As the project/detailed design moves forward, we would be interested in reviewing the designs and/or participating in any agency consultation group meetings.	No response required.	N/A
6	3/29/2023	Email	MCM	Please find attached our initial advice on the above referenced undertaking. 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. Please do not hesitate to contact me with any questions or concerns. Attachment: 2022-03-29_Hwy417_RapidBridgeReplacement-MCM-Ltr.pdf	No response required.	N/A
7	5/21/2024	Email	NCC	Would you please add my email to your distribution list? I will be following the EA along with my colleagues from the NCC's Transportation Planning team.	Added to the Contact List.	N/A
8	5/21/2024	Email	NCC	Thank you for providing information on the upcoming PIC for the Woodroffe and Pinecrest bridges; we appreciate the opportunity to review and provide feedback on the various materials. Can you advise if there is/was a TAC for this project and if anyone from the NCC participated?	Confirmed that a Municipal Technical Advisory Committee has been formed for the project and NCC has not participated to-date.	6/3/2024
9	5/21/2024	Email	City of Ottawa - Mayor's Office	Thank you for your correspondence. By way of this email, I am confirming the receipt of your correspondence. I have shared it with the Mayor and his staff for their attention. Thank you again for your time and, on behalf of the Mayor's office, I wish you all the best.	No response required.	N/A
10	5/24/2024	Project Website	Public	I'm writing to express my full support for the inclusion of cycling facilities on the 417 west overpass replacements. As part of the detailed design I urge the MTO to eliminate free flow ramps as much as possible. Whenever the cycling facilities cross on and off ramps, the facilities should be designed so that vehicle traffic yields to pedestrian and cycling traffic. Ramp terminals should be designed in as "urban" fashion as possible, with tight turn radii to slow down traffic and ensure pedestrian and cyclist safety.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
11	5/29/2024	Project Website	Public	Please add me to the mailing list for project updates. I cycle across the Mainland bridge on a regular basis and would like to review the detail design for raised cycle tracks. The powerpoint presentation did not adequately address this matter.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We have added you to the project contact list. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024
12	5/30/2024	Project Website	Public	With each new 417 overpass being built through Ottawa, implemented bike lanes need to be fully barrier protected, wide enough for riders to pass each other, and safe enough that you'd feel comfortable riding with your child. Slip lanes must not be built, as these are known to be deadly for people outside of cars. This is a once in a generation chance to get it right. Please don't mess this up.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Existing turn lanes will be maintained with increased storage lengths to meet current standards. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024
13	5/30/2024	Project Website	Public	I strongly urge that all future 417 overpass replacements are designed and constructed with provision for safe use by pedestrians, the disabled and cyclists. This requires the bridge's to provide bi-directional, physically segregated and protected, winter-maintained pathways. No user, adult or child, disabled or cyclist should be prevented from safely using these bridges to penetrate the barrier that is highway 417.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
14	5/30/2024	Project Website	Public	Can you please ensure that bridges crossing the 417 have separated bike lanes that are safe to use, and don't involve slip lanes where cyclists are sandwiched between lanes of vehicles over a highway? Thanks for all your work in increasing the safety of all who use your infrastructure!	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024
15	5/30/2024	Project Website	Public	Please ensure the cycle lanes are fully protected so children can use them safely. The slip lanes should be removed to ensure maximum safety for children	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
16	5/30/2024	Project Website	Public	Please ensure that all new bridge infrastructure provides the maximum safety for pedestrians and cyclists of all ages, through physical separation and other proven design solutions.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
17	5/30/2024	Project Website	Public	Cities must be safe enough for children to be able to be in, including bike lanes. Make that happen; only will is stopping you, nothing new needs to be invented.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
18	5/30/2024	Project Website	Public	Please ensure the bike lanes over the 4 bridges are fully protected and that extra turn lanes or slip lanes for cars are not used (where cyclists find themselves between two lanes of fast moving vehicles protected only by paint.) Please design the bike lanes so that they can be safely used by children without adult supervision.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
19	5/30/2024	Project Website	Public	Please make bike Lanes that are separated with a concrete barrier so that cars don't swerve into cyclists.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
20	5/30/2024	Project Website	Public	My input into this project is to ask that the bridges be designed and implemented with proper safe cycling in mind. This means more than painted lines on a narrow bike lane that is intersected by car lanes dangerously.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
21	5/30/2024	Project Website	Public	Please ensure safe passage for bicycles & pedestrians during &after 417 bridge replacements from Bronson to Main Street in Ottawa (many of us do not have cars and need access to critical services across the 417.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. Please note that the scope of this project only includes the Maitland Avenue, Woodroffe Avenue, Pinecrest Road and Richmond Road bridges over Highway 417. As part of this project, new raised, buffered cycling lanes and sidewalks will be provided on these bridges.	7/16/2024
22	5/31/2024	Project Website	Public	Please make sure that the bike lanes over the highway are fully protected and are not slip lanes. These slips lanes are not safe with cyclists wedged between two lanes of fast moving traffic protected only by paint. Design the lanes so that they can be used by people of all ages unsupervised and without killing them.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
23	5/31/2024	Project Website	Public	Could you please add me to the mailing list for the above noted activities / contracts / announcements / assessments etc, including changes to the current alignment, traffic impacts, timelines and construction schedule	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. You have been added to the Contact List for the project.	7/16/2024
24	5/31/2024	Project Website	Public	I hope you actually check out the designs with people who ride bikes. And that you construct something that's safe for children. Something fully protected that they can ride without adult supervision. I don't want to see any slip lanes for cars or bizarre paint or signage only routing for cyclists that looks like hopscotch.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
25	5/31/2024	Project Website	Public	Please ensure that the active transportation lanes on these bridges are separated from vehicles by barriers (I.e. more than just painted lines). There needs to be safe entries and exits from these AT lanes. Thank you.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
26	5/31/2024	Project Website	Public	Please ensure safe passage for bicycles & pedestrians during & after 417 bridge replacements from Bronson to Main Street in Ottawa. This includes keeping it safe for children to use bike lanes. Many of us do not have cars and need access to critical services across the 417 this means bike lanes are FULLY protected. Slip lanes are not used for cars. Otherwise bicycles can find themselves between two lanes of fast moving cars, separated only by paint. This is very dangerous.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
27	5/31/2024	Project Website	Public	Bike lanes on all 4 bridges need to be safe for cyclists of all age groups and abilities. "Sliplanes" increase the likelyhood of automobile collisions with cyclists & pedestrians, and should NOT be a feature of this infrastructure.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
28	5/31/2024	Project Website	Public	Please consider walking/cycling/mobility devices in the design. Please don't create any situations where fast-moving vehicles conflict with the flow of pedestrians/cyclists/etc. The goal should be MUPs that are safe enough for children to be used without a crossing guard or adult accompaniment.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
29	5/31/2024	Project Website	Public	Please ensure the bike lanes over the 4 bridges do not use slip lanes (where cars can easily turn into cyclists) and that they are safe enough that children could use them without adult supervision aa they are key links in the active transit network. Thank you.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
30	5/31/2024	Project Website	Public	Please ensure the bikes lanes over the 4 bridges are fully protected (separated by physical infrastructure ie. concrete barriers) and that slip lanes for cars are NOT used (where cyclists can find themselves between two lanes of fast moving vehicles protected only by paint). Paint is not acceptable as a safety measure. Please design the bike lanes with the mindset that they be safely used by children WITHOUT adult supervision. This is what we must build to to foster the next generations' utilization of active transportation.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
31	5/31/2024	Project Website	Public	Thank you for collaborating with the City of Ottawa to make space for protected bike lanes as part of the overpass renewal project. The 417 is a huge barrier for those outside of vehicles that are wanting/needing to travel north and south in our city. I would ask that the design of the bike lanes be done with the many children that need to travel over the highway to and from school in mind. The overpasses are the connections between neighbourhoods and should be safe for any and all of our residents. I would also like to ask that the design of the slip lanes for vehicles accessing and exiting the highway be closely overseen to ensure they do not impede cyclists and pedestrians or put anyone in harm's way. When vehicles exit the highway and get dumped into a residential area it is so important that speed is reduced to an appropriate level BEFORE they reach the street. Accidents will happen but lower speeds mean lower chances of serious injuries and fatalities. I am very excited about this project and look forward to seeing more detailed plans. Thank you.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
32	5/31/2024	Project Website	Public	Please ensure that the design across the 417 for cyclists does not involve slip lanes and are safe enough for children to bike across without supervision.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
33	5/31/2024	Project Website	Public	All of the replacement bridges should include physically protected bike lanes, designed so that slip lanes, etc., which would interfere with the use or safety of those protected lanes are not used, or, if possible, designed in such a way as to not affect active users. Bike lanes should be designed from the perspective as to what would be safe for children to use without adult supervision and which accommodate a range of active users.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
34	5/31/2024	Project Website	Public	I strongly support the inclusion of safe cycling and pedestrian infrastructure on all the bridges. The 417 is a major impediment to getting between communities. I also urge the city to commit to building safe infrastructure to encourage alternate forms of transportation in all future projects, and to work with MTO to do the same. If plans have already been made and it is too late for a proper redesign, find quick build options as temporary measures. It is essential if Ottawa and the province are to achieve climate and accessibility goals, and protect the lives of vulnerable residents.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
35	6/1/2024	Project Website	Public	Hello, thank you for preparing and sharing the plans through the PIC. I'm pleased to see the MTO taking an approach to accommodate walking and cycling. My feedback is follows: - while not legally required, a fence or barrier between the cycle track and the road will improve the comfort of the design for cycling and make it more appropriate for children. - please remove all free-flow ramp movements. These put the onus on pedestrians and cyclists to navigate a complex and dangerous crossing - children, seniors, and people with sight loss in particular will all struggle with this. There have been many tragic cases of pedestrians being killed while trying to cross freeflow ramps. - I do not support widening the mainline highway. It will not improve congestion or travel times in the long term.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. The scope of this project is limited to replacement of the structures. Widening of Highway 417 is not included in the scope. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
36	6/1/2024	Project Website	Public	Thank you for the opportunity to comment: Appreciate the evaluation of the initial plans. I recommend: - no slip lanes anymore, low speeds don't necessarily equate less flow - clear separation between modes of traffic with a serious 3-4 ft barrier between car traffic and AT like Pont de Portage - No expansion of car lanes, that has never been a solution, it just attracts more cars and encourages speed - think of kids and an aging population and non car owners when designing road infrastructure	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
37	6/1/2024	Project Website	Public	Please make all future 400 series overpasses safe for children to walk or bike on with their parents. In Ottawa, the main reasons for active transportation connectivity problems are 1) 400 series highways and 2) rivers. MTO has the power to fix the first. Why do we need active transportation? Health and equity. Active transportation has been shown to be significantly healthier than using a car for transportation - lowers the risk of cardiovascular disease, cancer and improves mental health. Cars are expensive and bikes are financially accessible to the vast majority of the population. Finally, we are living in the era of climate change. 2023 already blew past the Paris Agreement targets. Fossil fuel air pollution is responsible for 1 in 5 deaths globally. Ottawa has already seen the health effects of climate change - air quality during wildfire smoke events, deaths during heat waves and extreme wind events, property damage due to flooding events. If people feel safe using active transportation infrastructure, they will use it as demonstrated not only in this city, but also in Montreal, Paris, Amsterdam and other leading cities. We need the highway overpasses to be safe to increase active transportation use in Ottawa.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
38	6/1/2024	Project Website	Public	1) Please make a 4-way pedestrian crossing just North of the highway, and another just South of the highway. This primarily applies to the Pinecrest + 417 intersection, and could also apply to the others. 2) Please make the pedestrian/bike path wide enough for those on bikes with trailers for kids.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024
39	6/1/2024	Project Website	Public	As it stands, the bridges in Kanata and Nepean aren't suitable walking or biking across. The sidewalks are extremely narrow, dangerously close to traffic going 60+, and aren't connected to surrounding sidewalk networks. If a bike lane exists, there's naturally a large speed difference, no protection, and some have lanes that disappear for a few metres before rejoining existing networks (e.g Terry Fox Dr.). These bridges are used for accessing bus networks and connecting communities, so they should be accessible to people of all ages and ability levels. As they stand, I would not want my pre-teen to use these bridges to visit a friend.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. . If you have any further comments or questions, please do not hesitate to reach out.	7/16/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
40	6/1/2024	Project Website	Public	Please ensure the bike lanes over the four bridges are fully protected, and slip lanes for cars are not included (where cyclists find themselves Only protected by paint, so not protected, between two lanes of fast moving traffic). Please design and build cycle lanes that can be safely used by children (under 18 ir 20) even when they're not supervised by adults, as let's be real for a change, they're not really safe for adults either. Please pay attention to the number of cyclists constantly injured and killed in Ottawa. It's also long pastime for hot days to start.Acting like their actually the nation's capital and take a little bit of leadership. We have been overpoint five degrees above the historical average for fourteen months now.... We're likely crossing to this year. Isn't it about time we actually noticed climate change is not in the future, we've already sealed in a planet that leaves at least ten percent of the land where people now live completely uninhabitable (this will be the case even if we turn the northern hemisphere into a frozen wasteland land because our climate actions are also shutting down the AMOC). It is genuinely embarrassing living in a place that thinks of it as self as the nation's capital and operates as though it is in the middle of nowhere receiving no actual news, scientific information, or education.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
41	6/1/2024	Project Website	Public	Bike lanes across all bridges on the 417 must provide physical separation between vehicle lanes and bike lanes, and must not force cyclists to cross travel or merge lanes to access the crossing bike lanes.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
42	6/1/2024	Project Website	Public	Please consider make the bike lanes for all 4 bridges fully protected so kids are safe to ride on them even without adult supervision!	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road.	7/17/2024

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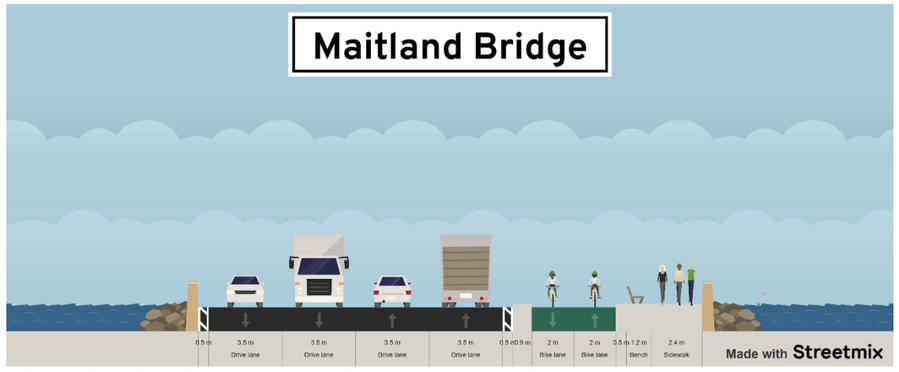
					If you have any further comments or questions, please do not hesitate to reach out.	
43	6/3/2024	Email	Public	I recently read the Online Public Information Centre document and I wanted to provide feedback. Having grown up in the area, I applaud the addition of bike lanes over the bridge. I used to cycle south on Maitland to get to the Experimental Farm Bike Path as a way of getting to a part time job, doctor's appointments, etc. This wasn't a very safe road to cycle on and still isn't today, even though it's a road that connects communities and currently leaves a gap in the active transportation infrastructure. I understand the left turning lane is also being extended and I have two concerns: 1) Currently, the speed limit is 50km/h and drivers gain speed as they come off the bridge because there's a descent. What's the likelihood that at that speed, drivers who are turning left will react in time when they see a cyclist coming towards them in the bike lane, especially with a longer left turning lane? Based on my personal experience as both a driver and a cyclist, this will be a conflict point and adding a longer left turning lane will only exacerbate this issue unless the speed limit is reduced. 2) Adding another lane to the bridge means taxpayer money going to out-dated ways of thinking. In a time when cities are working to become denser and lessen their environmental impact, I don't think a longer left turning lane is a good use of public funds. Thank you for reading my feedback.	Thank you for taking the time to review the Public Information Centre documents. We truly appreciate it when the public engages in these projects and provides comments / feedback. Having reviewed your comments, we provide the following responses. 1. The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. Acknowledging that this is a conflict point at the intersection (unavoidable at all intersections), it is recommended that at the ramp intersection locations cyclists dismount and walk across the intersection. To address a speed reduction please contact the City of Ottawa as that decision falls within their jurisdiction. 2. The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. Again, thank you for your comments. Should you have any further comments or questions please feel free to reach out.	7/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
44	6/3/2024	Project Website	Public	I very much appreciate the addition of cycling tracks. I remain concerned that there are many slip lane or angled ramps that promote high speed car movement that makes the cycle lane crossing dangerous and awkward. I much prefer those ramps that begin or end at 90 degree signalized intersection. Please design the cycle track / roadway crossings with as much "lead in" to a 90 degree crossing as possible, with the cycle track level [not sloping up nor down which makes starting and stopping difficult] not on a hill. The entire design must be designed on the assumption that the drivers are going too fast and are idiots. Ditto for the cyclists. Humans just won't use the facilities like engineers imagine...we are impact and make errors every day. Lastly, these elevated freeway bridges are very windy. The guardrailings should be more than metal rails. I'd prefer 36 inches or so of solid concrete railing with steel pipes above that. This design cuts down on wind and salt slush spray.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. In accordance with MTO standrads, 0.825 m high concrete parapet walls with railings will be provided on the bridges adjacent to the sidewalks. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
45	6/4/2024	Project Website	Public	How is increased bicycle/pedestrian safety being accounted for in these projects? We need safe bike routes for travelling over the 417 with small children and as a part of a safe commute. I'm interested in being added to the mailing lists for these projects.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
46	6/4/2024	Project Website	Public	In 2024, with sustainable transportation an absolutely necessity for both quality of life and the environment, cycling lanes on new infrastructure should be always be included as part of the initial design and build.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
47	6/4/2024	Project Website	Public	All new/rebuilt road infrastructure in Ottawa should adhere to the city's Protected Intersections Guidelines, even if legally these aren't city streets. https://ottawa.ca/en/planning-development-and-construction/community-design/design-and-planning-guidelines/completed-guidelines/protected-intersection-design-guide#section-1dc2a98c-da8d-4533-86f7-d9dea3f12d8c Please make sure that all 417 bridges prioritize the safety of people when they're not in their vehicles. Crossing the 417 should not require a car, so the province and the contractors need to ensure that the crossings are safe and not scary for pedestrians and cyclists. Existing federal and provincial regulations provide an immense level of safety for drivers and passengers inside a car, so it's up to the engineers for this and other projects to work their hardest to extend that level of safety and comfort to people when they're outside a car. Slip lanes will get cyclists killed, or they just won't even bother. Please follow the protected intersection guidelines to make this possible. Before you prioritize car movements above all, please bring someone you love and walk across an existing 417 bridge. Do it in the heat of summer, do it at night in the rain.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
48	6/4/2024	Project Website	Public	Could you please add me to the emailing list for project updates. Thank you.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. You have been added to the Contact List for the project.	7/17/2024
49	6/4/2024	Project Website	Public	Thank you for this detailed information. We appreciate the new cycling infrastructure. Hoping (expecting) that you will provide implementation details to our City Councillor to share with her constituents for ongoing status.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. Local Council will be provided with project updates throughout the duration of the project.	7/17/2024
50	6/4/2024	Project Website	Public	Happy to see bike lanes being added to Maitland and Woodroffe overpasses, I have travelled over these bridges many times on my bike and it is a scary endeavour. I would like to see the vehicle travel lane width reduced, to reduce speeds and improve safety, I would like to see the turning lane removed from the design to put the roadway on a diet. This city and the country has declared a climate emergency and have drafted plans to reduce emissions. Bridges being designed for the next 60 years should be built with that low carbon future in mind. Motor vehicles are the least efficient mode of transportation, produce a lot of greenhouse gas emissions and take a lot of space to move people. Roadway design should reflect those facts. In there designs they should promote more efficient, sustainable, and equitable forms of transportation like public transport and active transportation. Removing lanes and reducing the widths of motor vehicle lanes will have additional positive effects of reducing costs and reducing embodied carbon emissions. Thank you for your time I hope these changes can be implemented in the design.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. The left turn lane on Maitland Avenue is an existing lane but is required to be lengthened to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
51	6/5/2024	Email	Public	I'm happy to see proposed ped/bike crossings of the 417, but there's little to no material on how the bike lanes proposed for the rebuilt Maitland Bridge would connect to other bikeways. Further, the concept presented with (bike-protected) signalized intersections on either side of the Maitland Bridge maximizes the number of conflict points between road users, and adds a left-turn-storage lane to the bridge in anticipation of how much the signaled intersections will back-up vehicular traffic. Bike-protected signalized intersections should (however) be located at Maitland/Lenester and Maitland/Woodward, just beyond the interchange. I would like to propose roundabouts instead of signalised intersections, to allow for smoother vehicle flow while minimizing the number of conflict points between vehicle motions. Switching from signalised intersections to roundabouts on either side of Maitland Bridge would remove the need to add a left-turn-storage lane to the bridge, as there would be no red light cycles backing up traffic. Removing the left-turn-storage lane would reduce the width of the new bridge by 3.5m, significantly reducing the amount of material required to construct the bridge (as well as resulting embodied GHG emissions). Here's a rough mockup of what the Maitland/417 interchange might look like with roundabouts [higher res version attached]:  ^Apologies for submitting this on the deadline for feedback, but it's taken me 2 weeks to learn how to design roundabouts in Sketchup so I can visually present my ideas for feedback. With regards to the active transportation elements, the lack of separation between the bike lanes and sidewalks in the design presented is a HUGE liability risk and accessibility concern for people with limited or no vision. Unless you're actively seeking a human rights complaint from CNIB, or a wrongful death lawsuit from the family of a white cane user hit by a cyclist; you MUST buffer/delineate the bike lane from the sidewalk. Has the design team met with an Accessibility Advisory Committee? Does the City of Ottawa	Thank you for taking the time to review the Public Information Centre material and for providing comments. We truly appreciate your input and the effort and thought you put into your proposed design solution. We have reviewed your comments and have provided responses below. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. The left turn lane on Maitland Avenue is an existing lane but is required to be lengthened to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. The new bridges will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. We apologize for the difficulty in navigating the project materials and will take your comments into consideration for future online Public Information Centres. Please note that the project is not posted on the City of Ottawa's website as this is an Ontario Ministry of Transportation project. Please also note that a detailed description of the Recommended Plan will be included in the Design and Construction Report that will be made available on the project website for public review. Thank you again for your thoughtful comments. If you have any further comments or questions please do not hesitate to reach out.	7/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
				even have Accessibility Advisory Committees? If so, when are they consulted on infrastructure projects like this? There is no mention or consideration of accessibility anywhere (I can find) in the PIC slide deck. Shifting the sidewalk and bikeway to one side of the bridge could further reduce the width of the new bridge; a single 2.4m wide sidewalk could reasonably handle the volume of pedestrian traffic across the bridge. Emerging best practices for all-ages-and-abilities (AAA) pedestrian infrastructure includes predictable seating every ~50m so pedestrians with limited mobility can rest (as needed) and walk further distances. My Mom (cc'd) is a senior with arthritis who would like to walk more, but doesn't because rest opportunities are too unpredictable. She still raves about her daily stepcounts on the Jurassic Coast where seating is predictable. Below is a mockup for a 24m wide bridge design with a protected bi-directional bikeway, as well as a furnishing zone with seating to separate the sidewalk from the bikeway.  ^this took me less than 5 mins to make in Streetmix, and is easier to interpret than most engagement materials available for this project. Speaking of which, the engagement materials for this project were hard to find: • This project is not listed on the City of Ottawa's official engagement portal (engage.ottawa.ca) • The project engagement website (417westbridges.ca) is confusing to navigate and has no renders to visually communicate the proposed design o few engineering drawings are available [nested within long PDFs], but only accessible to people who know how to read them -- which is not most people • I've seen renders of the proposed design on other websites -- that appear to be made by community members, rather than project staff: o https://www.ontarioconstructionnews.com/ottawa-approves-5-4-million-in-funding-to-build-cycling-tracks-on-maitland-bridge/ o https://hansonthebike.com/2018/03/06/maitland-overpass-cycling-improvements/		

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
				If community members are preparing their own renders because none have been provided, then either ? there are overlooked gaps in the defined scope of work that should be addressed, or ? Morrison Hershfield and Jacobs Consultancy Canada are dropping the ball. I'm not pointing fingers, just speaking from experience that procurement is often a messy beast to navigate. We'll be stuck with the new bridge for a generation, so it's vital we design something that works for people of all-ages-and-abilities. I hope to see the Maitland/417 interchange redesigned for maximum accessibility and sustainability, not maximum body count		

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
52	6/5/2024	Email	Public	I am pleased that Maitland Avenue and the other Western 417 Rapid Bridge overpasses such as Woodroffe, Richmond and Greenbank will be getting new cycling facilities. I am especially pleased that city council signed a contract with the Ministry of Transportation to contribute $5.4 m to build protected bike lanes on Maitland Avenue. Maitland Avenue provides an important connection to the NCC Experimental Farm Multi-use Pathway and therefore is crucial for users of active transportation to have easy access to and from the MUP. I hope that when the protected bike lanes are built they will extend to as far North to Carling Avenue to connect to the bike lanes on Sherbourne Road and as far south to Elmdale Drive to connect to the bikes lanes on Navaho Drive. As the Experimental Farm MUP is not maintained during the Winter. However, I am dissapointed that the Maitland Avenue bridge will be getting an additional turn lane. Studies have shown that adding another lane does not ease congestion, but only attracts more drivers to take advantage of the additional lane. This will increase the car-centric design of the Maitland corridor, and will make any future road diet difficult to achieve without any reduction of the number of through lanes on the bridge. It will cause more pollution from cars and increase the carbon footprint on the overpass. I hope you will reconsider adding the additional turn lane on the Maitland Avenue overpass. Thank you for your conisideration to this matter.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. The scope of this project is limited to the bridge replacements, and the new bridges will include active transportation/bike lanes on the bridges; the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024
53	6/5/2024	Email	Public	I'm happy to see proposed ped/bike crossings of the 417, but there's little to no material on how the bike lanes proposed for the Maitland bridge rebuild would connect to other bikeways. Further, the concept presented with (bike-protected) signalized intersections on either side of the Maitland Bridge maximizes the number of conflict points between vehicle motions, and adds a left-turn-storage lane to the bridge in anticipation of how much the signaled intersections will back-up vehicular traffic. I would like to propose roundabouts instead of signaled intersections, to allow for smoother vehicle flow while minimizing the number of conflict points between vehicle motions. Switching from signaled intersections to roundabouts on either side of Maitland Bridge would remove the need to add a left-turn-storage lane.	N/A - refer to comment #51.	N/A
54	6/5/2024	Project Website	Public	Hello, I am very happy to see that these bridges will have cycling infrastructure and that the sidewalks will be widened. The only concern I have will be how the crossing on the on ramps and off ramps will be handled. I do not think that active transportation users should have to wait for a gap to cross, even if you have a gap and you begin to cross there is no guarantee that the next vehicle will stop. These crossing should be handled that vehicles need to stop for those waiting to cross. Once a vehicle has stopped then you should cross, removing the worry as to whether the vehicle is going to stop or not.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches.. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
55	6/5/2024	Project Website	Public	Woodroffe Avenue Public School, is attended by approximately 535 students, ranging from JK - Grade 8. On behalf of the School Council's Safe Travel Committee, this message is to convey the strong support for the proposed sidewalks and buffered bike lanes, depicted in the PIC cross sections. In addition to the buffer, parents of the committee encourage consideration for technologies which allow for the seasonal installation of vertical separation. Such technologies, where present may further help to delineate traffic enhancing the crossing experience for both pedestrians and cyclists. We encourage pedestrian-friendly geometry, signal timing, and lighting at all intersections, to help assure the safety and comfort of vulnerable road users. Thank you for your attention to the needs of vulnerable road users as you proceed with this project.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The new bridge will have 2 metre unidirectional cycle tracks and 2 metre sidewalks, separated by tactile delineation, on both sides of the roadway. The cycle tracks and the sidewalks will be raised and include a 0.9 metre buffer between the facility and the road. The raised facility will also be separated from vehicular lanes with a 0.5 metre shoulder on the road. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
56	6/5/2024	Project Website	Public	I would like to express my delight in learning that there are cycling/active transport lanes added to the bridges. This will be extremely valuable for the community and those trying to cross the highway. I have two design details I hope could be considered: 1. With the addition of cycling lanes over the bridge, the slip lanes to get onto the highway on-ramp should be removed. These are very dangerous for anyone outside of a car as drivers take the corner at speed. The slip lane signals to the driver that it is OK to turn without needing to slow down. When walking with my kids it is very stressful when crossing at that location. The addition of a cycling lane is the perfect time to close the dangerous slip lane and have this entrance part of the signalized intersection. With right-on-red the backup of cars will be minimal when there are no people crossing and will greatly increase the safety of the intersection and the likelihood that people of all ages can cross safely. 2. Could you share some more information about the projected future traffic that would necessitate the need for an additional full turn lane on the bridge? The city is trying to encourage people to use alternate forms of transit and spending a large amount of money on more road infrastructure seems to go against the city's recent master plan. I would urge a reconsideration of the need of this additional lane for cars. Thank you for taking my feedback! Again, I am very happy to see the addition of cycling lanes on the bridge and I look forward to being able to ride over it safely with my children (without the slip lanes!)	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. We have reviewed your comments and have provided responses below. Please note that this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but are subject to future work by MTO and the City of Ottawa. As part of this project, cycle lanes will be provided on the bridge structures; and the City of Ottawa is planning a future project for bike lanes on the City streets and bridge approaches. The lengthening of the left turn lane on Maitland Avenue is required to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. If you have any further comments or questions, please do not hesitate to reach out.	7/17/2024
57	6/5/2024	Project Website	Public	Very good to see cycle tracks and improved sidewalks on all bridges. These are definitely needed. Money should be saved by not adding more motor vehicle lanes--we have to cease encouraging this mode of travel. Especially distasteful is forcing the City of Ottawa to foot $5.4M toward cycling facilities on the Maitland Avenue structure when the province has just decided to give up over $225M by early cancellation of its Beer Store contract. Under the Maitland detour, there should be bike lanes added to Woodward Drive. With its curb-curb width of about 10.5m and more, this would permit two 3.5-m gen-use lanes and two bike lanes of 1.5m minimum (plus buffer, to take up any spare width where available). Similarly for Clyde Ave, add bike lanes and prohibit on-street parking.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We appreciate your input. The replacement bridges maintain the same vehicular lane configuration as the existing bridges; however, the left turn lane on Maitland Avenue is required to lengthened to address capacity and safety issues with left turning vehicles blocking the through lane. The lengthening of the left turn lane is also required to meet current geometric design standards. There are no plans for upgrades to other roads or changes in parking regulations as a result of the detours.	7/17/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
					If you have any further comments or questions, please do not hesitate to reach out.	
58	6/6/2024	Project Website	Public	Here's an updated version of my roundabout mockup with separated (but parallel) pedestrian and bike paths.  ^this configuration removes all conflict points between vehicular and non-vehicular road users from the interchange entirely, while improving AT connections to the surrounding neighbourhoods. An underpass between Riddell North and the AT paths inside the interchange should also be considered, but is not included in this mockup. The space proposed as a bridge staging area could be turning into park space after bridge construction is completed. Let me know what you think	Refer to comment #51.	

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
59	6/12/2024	Email	NCC	Thank you for the information from the recent Public Information Centre for the Highway 417 Rapid Bridge Replacements Detail Design and Environmental Assessment. In reviewing the slides, we have a few comments and questions that I hope that you can assist us with. 1. The Recommended Plan indicates that the proposed cross-sections 'Accommodate future Active Transportation connection to be completed by the City of Ottawa'. Can you clarify the scope of the MTO's work – namely, are the cycle tracks/bicycle lanes on the bridges being built by the MTO and the City completing off-bridge connections to AT facilities, or is the bridge widening not yet implementing the on-bridge AT facilities and leaving them for the City to construct at a later date? 2. In the Maitland Avenue bridge cross-section, there is a tactile delineator strip identified on the east side, between the bicycle lane and the sidewalk. Can you please: a. Clarify if this delineator strip extends parallel to the cycle track? If so, what is the width of the strip? b. Clarify if there is also a delineator strip on the west side of the Maitland Bridge, and on either side of the recommended Woodroffe cross-sections? One does not appear on the cross-sections and it's unclear whether that is an omission. 3. The Woodroffe staging area is in proximity to Pinecrest Creek on the NCC's lands. Has an Erosion & Sediment Control plan been prepared for the construction, or can you advise when one will be available for review? 4. For the recommended active transportation detour route south of 417, a possible option could include the use of the NCC's Pinecrest Creek Pathway between Iris and Maitland. 5. As the Project Background notes, in 2011 the MTO collaborated with the NCC, the City, and others on the preparation of the Context Sensitive Design Concepts Report. a. There is limited discussion in the PIC materials of the aesthetic/architectural treatments of the bridge elements. Have detailed design plans or 3D renderings been prepared? b. Are you able to share any details of how the design meets the recommendations of the Context Sensitive Design Concepts for the Queensway – Highway 417? 6. Can you share with us a copy of the 2017 technically preferred detailed design alternatives? 7. We'd like to receive a copy of the DCR when it is available, if you would kindly circulate it to us.	Thank you for your interest in the Highway 417 West Rapid Bridge Replacements project. We have reviewed your comments and have provided responses below. 1. As part of this project, the replacement bridge structures will have raised and buffered sidewalks and cycle tracks. The City of Ottawa is planning a future project for bike lanes on the city streets and bridge approaches in order to ensure appropriate connectivity with their existing and future cycling facilities. 2. Cycle lanes and sidewalks on both sides of the bridges will be separated by tactile delineation. The delineator tiles will be approximately 300mm wide and are intended to be the same as the tiles that have recently been installed by the City of Ottawa on the Mackenzie Bridge downtown. 3. The design team is preparing an Erosion and Sediment Control (ESC) Plan. Final details and implementation of the Plan will be the responsibility of the Contractor. Pinecrest Creek is located approximately 300 metres west of the Woodroffe staging area and no impacts to the Creek are anticipated. Standard ESC measures will be utilized. 4. The Project Team is still working to finalize the detour plans and will liaise with NCC for any potential use of this path or any required approvals. 5. Detail design is still in progress. The following bridge design treatments from the Context Sensitive Design Concepts report are anticipated to be incorporated into the design of the bridges: • Street names on embedded plaques/ signs on the bridges when seen from the Queensway; • Upward arching pilasters at the abutment corners and at all mid-piers with a maple leaf symbol in the façade; • Weathered steel beams or beams coloured to simulate weathered steel. A detailed description of the final Context Sensitive Design treatments will be included in the Design and Construction Report. 6. A copy of the Transportation Environmental Assessment Report (TESR) for the project can be found here: https://417westbridges.ca/wp-content/uploads/2023/02/transportation-env-study-report-wp-663-93-00-hwy-417-ottawa-queensway-from-hwy-416-easterly-to-anderson.pdf. A Design and Construction Report (DCR) is being prepared to document the Detail Design Recommended Plan. A TESR review will also be included in the DCR that considers any changes to the project since the submission of the TESR, including changes to the Recommended Plan, such as the inclusion of active transportation facilities as a result of consultation with the City of Ottawa. 7. We will ensure you receive a copy of the DCR for review. If you have any further comments or questions, please do not hesitate to reach out.	7/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
60	7/10/2024	Project Website	Public	I would like to be included on the mailing list for any up-to-date information on this very important project. Congratulations to the MTO on the bridge replacements in Ottawa to date! I hope that the MTO will proceed towards construction on these bridge replacements in 2025 and 2026; they are much needed, and they will do much to improve traffic safety on the 417 and on these arterial roads. Is there any information on the widening project for Highway 417 from Aviation Parkway south-easterly to Hunt Club Road?		
61	7/16/2024	Email	Public	Thank you for your answer, I am still concerned about the lack of protection at such a wide 5 lane bridge, inviting speeding. I hope the MTO can add at least rumble strips in the 50 cm shoulder. A curb alone is not going to stop the many trucks and SUVs in Ottawa. Given the 30 people who die or get seriously injured in Canada every single day, year after year, I would expect more protection for vulnerable road users. The Queensway is somewhat of a Berlin Wall in Ottawa, and crossing it is a challenge in many places.	We understand your concern about cyclist and pedestrian safety. The raised and buffered sidewalks and cycle tracks provide dedicated space for both pedestrians and cyclists while keeping motorists from easily entering the cycle track. The installation of rumble strips is not permitted on MTO structures as they reduce the amount of asphalt on the bridge that impacts the waterproofing which can lead to premature deterioration. Any speed control and traffic calming modifications will be discussed with the City of Ottawa for future consideration and implementation when the City completes their work on the municipal roads after completion of the bridge replacements. Again, feel free to reach out if you have any further comments or questions.	8/15/2024
62	7/16/2024	Email	Public	Would the construction of the new bridge coincide with updating the alignment and traffic lights of the approaches, given the changes in width of the difference components on the bridge? I don't see how it could make sense to do these 2 items separately. The approaches are currently very awkward for those walking & pulling a bike trailer with kids in it. The approaches should be straight, not the funny twists that they are now. The traffic lights should include pedestrian crossings in all 4 directions, for each of the south and the north ends of the bridge. I'm thinking of Pinecrest specifically, but it's possible that other ones also have these issues.	The scope of work at this stage is only for the bridge replacement. Any future intersection modifications and traffic signal upgrades will be done in conjunction with future MTO Highway expansion work and/or future City of Ottawa projects on the municipal roads. Again, feel free to reach out if you have any further comments or questions.	8/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
63	7/19/2024	Email	Public	Thank you for your message. I have a couple follow up questions: While all intersections are conflict points, it is possible to reduce the likelihood and the severity of a conflict. My understanding is this can be done by a design/infrastructure change or enforcing lower driving speeds. Would extending the left turning lane not be considered a design change that allows for faster speeds going into the left turn? I have no planning/engineering background but as a driver, I'd go into a turn faster if I had an extended lane to turn left compared to if I had to change lanes and then turn left, as drivers currently have to do. It seems that the changes to the bridge will actually increase the likelihood and severity of conflicts at that intersection if active transportation infrastructure is implemented. Given that drivers don't respect the speed limit along that stretch of road (there is a speedometer further north on that road and when it is working I frequently see it flashing red), and the Province doesn't have control over the speed limits, would you be willing to implement design features that slow the traffic? If the time and money (provincial and municipal) is being used to implement active transportation infrastructure, it should be done in a way that makes active road users feel safe. That's clearly not a priority if you are recommending cyclists to dismount and walk at the intersection. This should be a priority because fewer active commuters will use the infrastructure if they don't feel safe. Research has shown that even small disruptions in network continuity can drastically reduce adoption rates. Are there features that can be added to improve the safety of active road users and ensure the proposed brand new infrastructure is used to its fullest extent for all road users?	Thank you for your additional comments. Having reviewed your comments, we provide the following responses. The purpose of extending the left turn lane is to add additional storage to meet design standards so that left turning vehicles do not block the through-lane, reducing the risks of rear-end collisions or weaving. Any speed control and traffic calming modifications will be discussed with the City of Ottawa for future consideration and implementation when the City completes their work on the municipal roads, after MTO completes the bridge replacements. We understand your concern about cyclist and pedestrian safety and network connectivity. The scope of this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but will be done in conjunction with future MTO Highway 417 expansion work and/or future City of Ottawa projects on the municipal roads. The City of Ottawa is planning a future project for bike lanes on the city streets and bridge approaches in order to ensure appropriate connectivity. The Project Team is liaising with the City throughout the bridge design work and coordinating with them to ensure they are able to complete their proposed works following completion of the bridge replacements. Again, thank you for your comments. Should you have any further comments or questions please feel free to reach out.	8/28/2024
64	7/19/2024	Email	Public	Thank you for your update. I am very pleased to hear this. As follow-up questions, will these bridge cycle tracks then connect to cycle tracks after the bridge and will the interface with 417 on-ramps provide a safe route for people on bikes?	The scope of this project is limited to the bridge replacements only. Any modifications to ramp configurations and intersections are not within the scope of this current project but will be done in conjunction with future MTO Highway 417 expansion work and/or future City of Ottawa projects on the municipal roads. The City of Ottawa is planning a future project for bike lanes on the city streets and bridge approaches in order to ensure appropriate connectivity. Again, feel free to reach out if you have any further comments or questions.	8/15/2024

No.	Date	Method of Contact	Agency	Comment	Response	Response Date
65	11/13/2024	Email	Business Owner	I am reaching out to get information on the planned replacement of the Maitland Overpass along the 417 here in Ottawa. I own and operate the small business located at the Maitland off ramp, south of the 417. It would be extremely helpful for us to get an idea of timelines and what the impacts will be on traffic flow as our clinic is an essential service and we have patients from local hospitals who come directly to us after surgeries so planning is essential. Also, I understand the field adjacent to our property will be used for the majority of the proposed work and we need to understand how you will be accessing that land, as our property is currently the only way to access the lot.	Thank you for reaching out and providing your concerns with respect to the planned Maitland Avenue bridge replacement. Currently, it is anticipated that construction will commence in 2025 and be completed sometime in 2027. It is expected that the Contractor will need to utilize City properties to access the work area around the Maitland Avenue bridge. Currently, it is expected that access to the construction area will come directly from Maitland Avenue through the 1000 Maitland parcel as well as the City parcel that runs adjacent to Highway 417 from Riddell Avenue South to Maitland Avenue. This City parcels noted will be utilized to support work on adjacent MTO owned lands, such as building a new embankment for the bridge widening and associated retaining wall as well as reinstatement of the existing noise wall. There are no plans currently for MTO to seek access to the construction area utilizing private property.	11/26/2024

Ministry of Citizenship and Multiculturalism

Heritage Planning Unit
Heritage Branch
Citizenship, Inclusion and Heritage Division
5th Flr, 400 University Ave
Tel.: 613.242.3743

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.: 613.242.3743

March 29, 2023 Via Email Only

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Morrison Hershfield
lmacdonald@morrisonhershfield.com

MCM File	**:**	**0018681**
MTO Files	**:**	**GWP 4124-14-00 and GWP 4069-19-00**
Proponent	**:**	**Ministry of Transportation**
Subject	**:**	**Notice of Study Commencement – Detail Design and Environmental Assessment for Highway 417 Rapid Bridge Replacements**
Location	**:**	**City of Ottawa**

Dear Lincoln MacDonald:

Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of Commencement for the above project.

As part of the environmental assessment (EA) process, MCM has an interest in conserving cultural heritage resources.

Project Summary
In 2007, the Ministry of Transportation (MTO) completed an Environmental Assessment (EA) for the preliminary design of Highway 417 (Ottawa Queensway) from Highway 416 to Anderson Road. This process resulted in a Recommended Plan to guide the evolution of the Queensway over the next 20 years and was documented in a Transportation Environmental Study Report (TESR). The Recommended Plan includes, but is not limited to, the replacement of 5 bridges at 4 sites on Highway 417 located at Maitland Avenue, Woodroffe Avenue, Pinecrest Road, and Richmond Road in the City of Ottawa.

In 2022, the province initiated this detail design assignment to confirm and refine the EA Recommended Plan specific to the 5 bridge replacements and prepare the project for implementation. Morrison Hershfield and Jacobs Consultancy Canada have been retained to support the delivery of the Detail Design and to deliver the Class Environmental Assessment for the bridge replacements. The project consists of two separate contracts:

- GWP 4124-14-00 – Highway 417 Maitland Ave. and Woodroffe Ave. Rapid Bridge Replacements
- GWP 4069-19-00 – Highway 417 Pinecrest Rd. and Richmond Rd. (bridges 1 and 2) Rapid Bridge Replacements

Implementation of the project will involve:

- Rapid demolition and replacement of the 5 overpass structures (bridges);
- Repairs of deteriorated concrete on exposed surfaces of any retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including grading, drainage, sewage and stormwater management, illumination, signage, noise barrier walls, and the temporary relocation and protection of Advanced Traffic Management Systems (ATMS), as required.

The project is following the approved planning process for Group B undertakings in accordance with the Class Environmental Assessment for Provincial Transportation Facilities, 2000.

MCM is interested in remaining on the circulation list and being informed of the project as it proceeds through the EA process and has the following comments and observations:

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 rehabilitation 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.

Built Heritage Resources and Cultural Heritage Landscape
This EA project may impact built heritage resources and cultural heritage landscapes. Please confirm that the study area has been screened for potential for these resources and/or the subject of a cultural heritage resource assessment or cultural heritage evaluation.

To determine whether this project contains cultural heritage value, it should meet one of the following criteria, where a structure is:

- included on the Ontario Heritage Bridge List
- listed in MTO's *Heritage Bridges: Identification and Assessment Guide, Ontario 1945-1965*
- 40 years or older and not listed in the above Guide
- locally or regionally unusual

Additionally, to determine whether this undertaking may impact on (recognized or potential) heritage bridges, Section 3.0 of the Ontario Heritage Bridge Guidelines (MTO, Interim January 2008) is of assistance.

Culverts
If the proposed work involves a culvert, please note that the Ministry of Transportation (MTO) has developed the following reference materials, which should be consulted when dealing with culverts:

Heritage Assessment of Structural Culverts
Structural Culvert Heritage Screening Form
Heritage Screening Report for Structural Culverts

Should a structure meet any of the criteria, a cultural heritage evaluation report (CHER) will be undertaken by a qualified person. If the structure is found to be of cultural heritage value or interest and the structure may be impacted by the proposed undertaking, then a heritage impact assessment (HIA) will be undertaken by a qualified person. The HIA should follow the guidance in the Information Bulletin 3 - Heritage Impact Assessments for Provincial Heritage Properties (MHSTCI, 2017). The report(s) should be completed during the planning phase and sent to the Ministry of Tourism, Culture and Sport (Heritage Planning Unit).

The report(s) should also be forwarded to the planning staff at the local municipality for review and, if requested, to the municipal heritage committee or any local heritage organization that may have an interest in the project.

Archaeological Resources
We are aware that the following archaeological assessments are being undertaken for this project:

- Stage 1 archaeological assessment (AA) (Project Information Form – PIF- number P051-0265-2022) for the Maitland Ave Bridge replacement
- Stage 1 AA (PIF number P051-0264-2022) for Pinecrest Bridge replacement
- Stage 1 AA (PIF number P051-0263-2022) for Richmond Road Bridge replacement.
- Stage 1 AA (PIF number P051-0262-2022 for Woodroffe Bridge replacement.

However, it is not clear whether the study areas for the support facilities and features are being addressed in the above archaeological assessments. If not, we recommend completing the Ministry's *Criteria for Evaluating Archaeological Potential* to determine if an archaeological assessment is needed. Please note that archaeological concerns have not been addressed until reports have been entered into the Ontario Public Register of Archaeological Reports where those reports recommend that:

1. the archaeological assessment of the project area is complete and
2. all archaeological sites identified by the assessment are either of no further cultural heritage value or interest (as per Section 48(3) of the Ontario Heritage Act) or that mitigation of impacts has been accomplished through an avoidance and protection strategy.

EA Documentation
Technical cultural heritage studies (e.g. archaeological assessment reports, cultural heritage evaluation reports, heritage impact assessment reports) and their recommendations are part of the EA and should be included in the Design Construction Reports. Determinations that no cultural heritage resources are impacted and no technical studies are warranted should also be documented, summarized and incorporated in the final EA report. In this regard we recommend including the completed screening checklists as part of the EA report.

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
- Joseph Harvey, Heritage Planner | Heritage Planning Unit (Citizenship and Multiculturalism) | 613-242-3743 | joseph.harvey@ontario.ca

Thank you for circulating MCM on this project. Please do not hesitate to contact myself if you have any questions.

Best regards,

Sincerely,

Joseph Harvey
Heritage Planner
Heritage Planning Unit
joseph.harvey@Ontario.ca

copy: Ben Munroe, Senior Project Engineer, MTO
Nathan Elis, MTO
Anna Fawcett, Planner, Jacobs

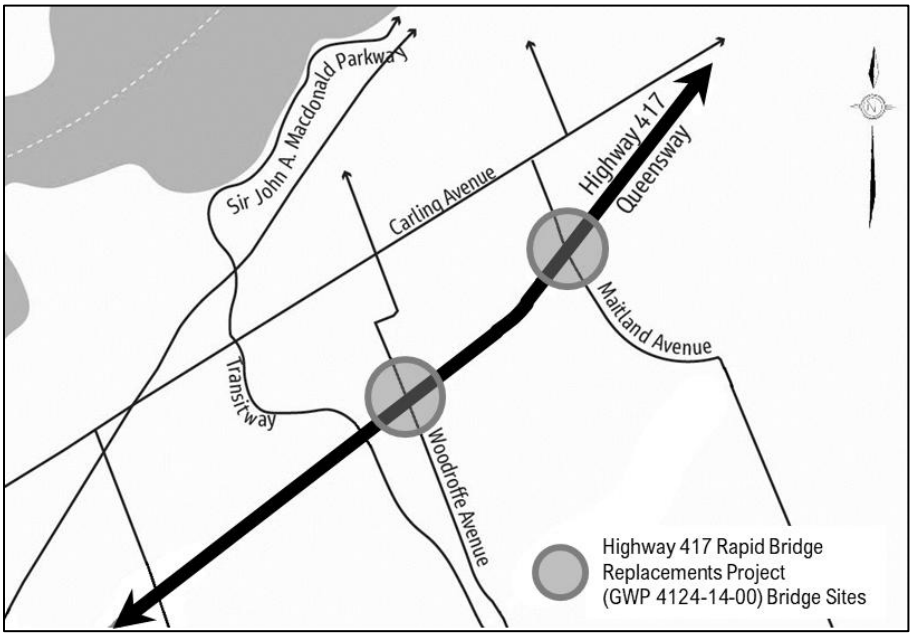
A-5. Notice of Submission

NOTICE OF DESIGN AND CONSTRUCTION REPORT SUBMISSION

Highway 417 Rapid Bridge Replacements (GWP 4124-14-00)
Detail Design and Environmental Assessment Study

THE PROJECT

The Ministry of Transportation Ontario (MTO) has retained Stantec (formerly Morrison Hershfield) and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of two bridges along Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa.



The project includes the following components:

- Rapid demolition and replacement of the two bridges;
- Provisions for Active Transportation facilities across the structures;
- Repair of deteriorated concrete on retained elements, including rehabilitation of the bridge abutments;
- Replacement or rehabilitation of support facilities and features including drainage, illumination, signage, and the relocation or modification of Advanced Traffic Management Systems (ATMS), as required;
- New snow walls in the vicinity of the Clyde Avenue structure;
- Selective pavement rehabilitation on Highway 417 between Highway 416 and Maitland Ave.

Several partial and full closures of Highway 417, Maitland Avenue and Woodroffe Avenue are required to complete the work. Details of the approximate time and duration of these closures are provided in a table on the project website listed below.

THE PROCESS

The project is following the approved environmental planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities, 2000*, with the opportunity for public input provided throughout the process. A Design and Construction Report (DCR) has been prepared to document the detail design and EA study process, including a 5-year review

of the Transportation Environmental Study Report. The purpose of this notice is to inform you that the DCR has been completed and is available on the project website (www.417westbridges.ca) for a 30-day public review and comment period beginning **April 1, 2026** and ending **May 1, 2026.**

COMMENTS

Interested persons are encouraged to review the DCR and provide comments to the Project Team by **May 1, 2026**. To submit comments or questions, use the "Contact Us" function on the project website (www.417westbridges.ca) or contact one of the following Project Team members:

Lincoln MacDonald, P. Eng., PMP
Consultant Project Manager
Stantec
2932 Baseline Road
Ottawa, ON K2H 1B1
Tel: 613-703-6058
Email: Lincoln.MacDonald@stantec.com

Ben Munroe, P. Eng.
MTO Lead Engineer, Projects
Ministry of Transportation
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Tel: 613-453-4843
Email: Ben.Munroe@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 **May 1, 2026**.

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 M4V 1P5
Email: EABDirector@ontario.ca

A copy of the request should also be sent to the Project Team members (Stantec and MTO) by mail or email 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 issued on April 1, 2026.

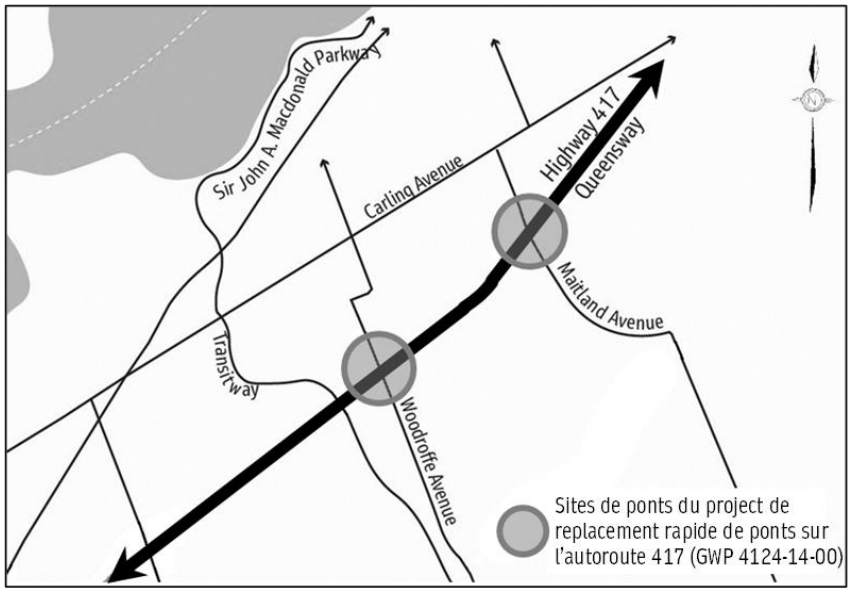
Ontario

Avis de dépôt d'un rapport de conception et de construction

Conception détaillée et évaluation environnementale pour le remplacement rapide de ponts sur l'autoroute 417 (GWP 4124-14-00)

LE PROJECT

Le Ministère des Transports a retenu les services de Stantec (anciennement Morrison Hershfield) et Jacobs Consultancy Canada pour réaliser la conception détaillée et l'évaluation environnementale de portée générale pour le remplacement de 2 ponts sur l'autoroute 417 situés à l'avenue Maitland et à l'avenue Woodroffe, dans la ville d'Ottawa.



La mise en œuvre du projet comprendra ce qui suit :

- Démolition rapide et remplacement des 2 ponts ;
- Infrastructure de transport actif (TA) sur les ponts ;
- Réparation du béton détérioré sur les surfaces exposées de tout élément conservé, y compris la rénovation des culées des ponts ;
- Remplacement ou rénovation des installations et des éléments de soutien, notamment le drainage, l'éclairage, la signalisation, et le déplacement et la protection temporaires des systèmes avancés de gestion de la circulation (SAGC), selon les besoins;
- Nouvelles barrières à neige près du pont de l'avenue Clyde;
- Réhabilitation sélective des chaussées sur l'autoroute 417, entre l'autoroute 416 et l'avenue Maitland.

Plusieurs fermetures partielles et complètes de l'autoroute 417, de l'avenue Maitland et de l'avenue Woodroffe sont nécessaires pour réaliser les travaux. Des détails sur l'heure et la durée approximatives de ces fermetures sont fournis dans un tableau sur le site Web du projet indiqué ci-dessous.

LE PROCESSUS

Le projet suit le processus de planification environnementale approuvé pour les entreprises du groupe B, conformément à l'évaluation environnementale (EE) de portée générale pour les routes provinciales (2000). Le public aura l'occasion de donner son avis au cours de l'étude. Un rapport de conception et de construction (RCC) a été préparé pour documenter la conception détaillée et le processus d'étude de l'EE, y compris un examen quinquennal du rapport d'étude environnementale sur les transports.

Le présent avis a pour but de vous informer que le RCC a été complété et est disponible sur le site Web du projet (www.417westbridges.ca) pour une période d'examen et de commentaires publics de 30 jours qui commence le **1 avril 2026** et termine le **1 mai 2026**.

LES COMMENTAIRES

Les personnes intéressées sont invitées à examiner le RCC et à faire part de leurs commentaires à l'équipe de projet avant le **1 mai 2026**. Si vous avez des commentaires ou des questions, veuillez utiliser la fonction « Contactez-nous » sur le site Web du projet (www.417westbridges.ca) ou contacter l'une des personnes suivantes de l'équipe de projet :

Lincoln MacDonald, P. Eng., PMP
Ingénieur-conseil de projet
Stantec
2932 chemin Baseline
Ottawa (Ontario) K2H 1B1
Tél. : 613-703-6058
Courriel : Lincoln.MacDonald@stantec.com

Ben Munroe, P. Eng.
Ingénieur principal
Ministère des Transports
1355, boul. John Counter, C.P. 4000
Kingston (Ontario) K7L 5A3
Tél. : 613 453-4843
Courriel: Ben.Munroe@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 **1 mai 2026**.

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 Stantec) 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 1 avril 2026.

Ontario

Local MPPs

Ministry of Transportation

Engineering Program Delivery East
Project Delivery East
1355 John Counter Boulevard
Postal Bag 4000
Kingston ON K7L 5A3
Tel: 613-328-2423

Ministère des Transports

Livraison du programme d'ingénierie dans l'Est
Zone d'exécution du projet de l'Est
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston ON K7L 5A3
Tél : 613-328-2423

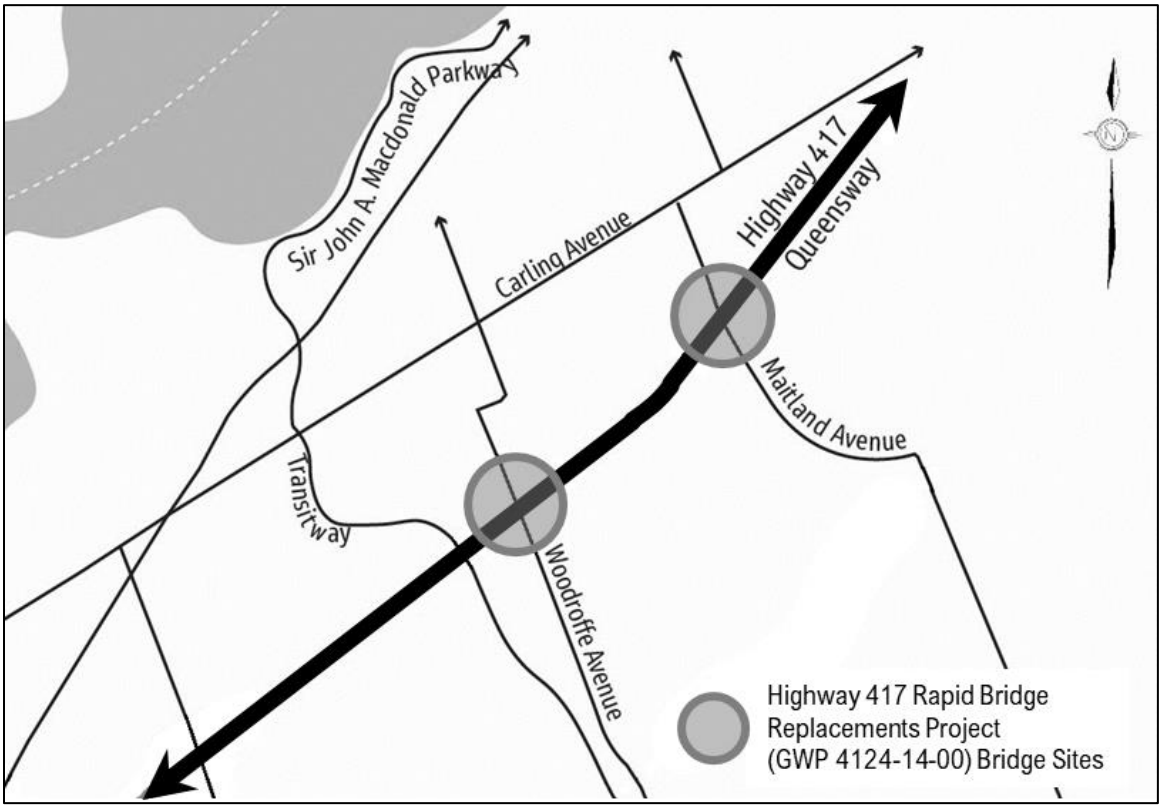
April 1, 2026

[Name]
[Position]
[Address]

RE: Notice of Design and Construction Report Submission – Highway 417 Rapid Bridge Replacements (GWP 4124-14-00) Detail Design and Environmental Assessment Study

Dear [Name],

The Ministry of Transportation Ontario (MTO) has retained Stantec (formerly Morrison Hershfield) and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of two bridges along Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa, as shown in the below figure.



The project includes the following components:

- Rapid demolition and replacement of the two bridges;
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Several partial and full closures of Highway 417, Maitland Avenue and Woodroffe Avenue are required to complete the work. Details of the approximate time and duration of these closures are provided in a table on the project website listed below.

The project is following the approved environmental planning process for Group B undertakings in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities, 2000*, with the opportunity for public input provided throughout the process. A Design and Construction Report (DCR) has been prepared to document the Detail Design and EA study process, including a 5-year review of the Transportation Environmental Study Report. The purpose of this notice is to inform you that the DCR has been completed and is available on the project website (www.417westbridges.ca) for a 30-day public review and comment period beginning **April 1, 2026** and ending **May 1, 2026**.

Interested persons are encouraged to review the DCR and provide comments to the Project Team by **May 1, 2026**. To submit comments or questions, use the “Contact Us” function on the project website (www.417westbridges.ca) or contact one of the following Project Team members:

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Consultant Project Manager
Stantec
2932 Baseline Road
Ottawa, ON K2H 1B1
Tel: 613-703-6058
Email: Lincoln.MacDonald@stantec.com

Ben Munroe, P. Eng.
MTO Lead Engineer, Projects
Ministry of Transportation
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Tel: 613-453-4843
Email: Ben.Munroe@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 **May 1, 2026**.

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Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4V 1P5
Email: EABDirector@ontario.ca

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

If you have any questions or comments, or if you require further information regarding this project, please feel free to contact me.

Sincerely,

Ben Munroe
MTO Lead Engineer, Projects

Attached: Ontario Government Notice (English) - Notice of Design and Construction Report Submission
Ontario Government Notice (French) - Notice of Design and Construction Report Submission

cc: Nathan Ellis, MTO Environmental Planner
Lincoln MacDonald, Consultant Project Manager, Stantec
Anna Fawcett, Consultant Environmental Planner, Jacobs

Indigenous Communities

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

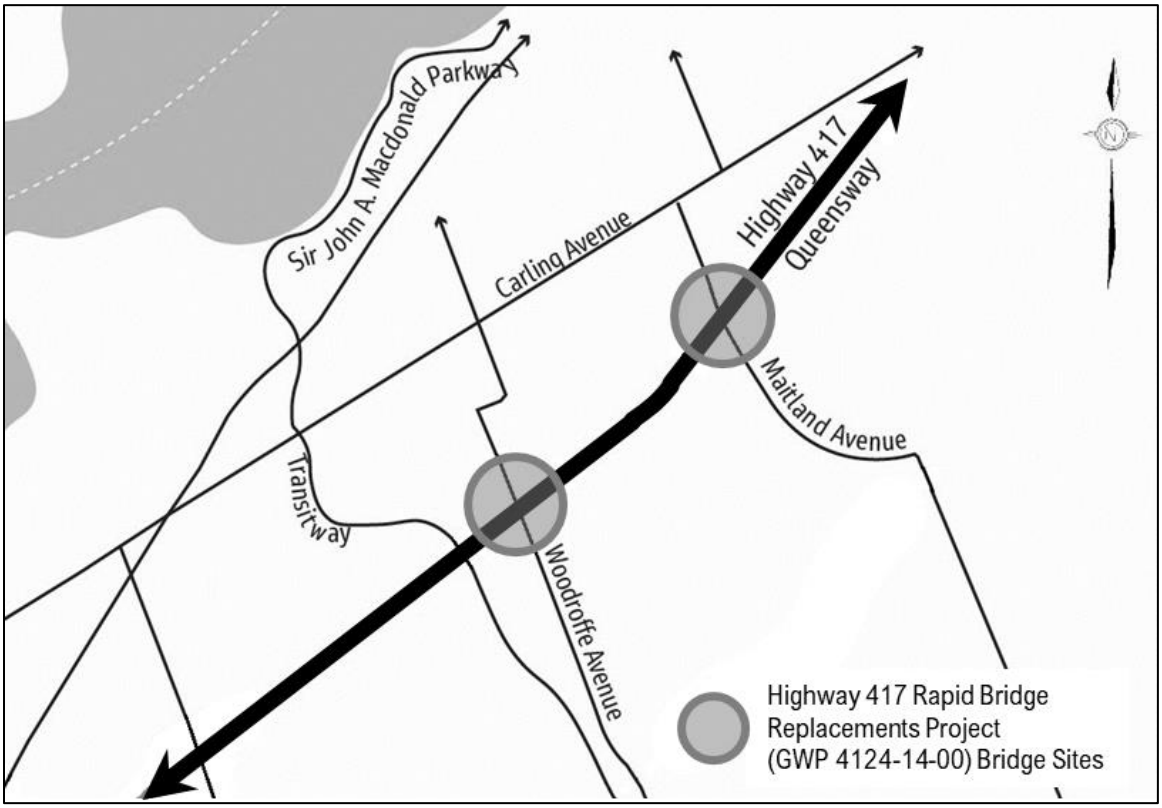
April 1, 2026

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

RE: Notice of Design and Construction Report Submission – Highway 417 Rapid Bridge Replacements (GWP 4124-14-00) Detail Design and Environmental Assessment Study

Dear «Name/Title»,

The Ministry of Transportation Ontario (MTO) has retained Stantec (formerly Morrison Hershfield) and Jacobs Consultancy Canada to complete the Detail Design and Class Environmental Assessment (EA) Study for the replacement of two bridges along Highway 417 located at Maitland Avenue and Woodroffe Avenue, in the City of Ottawa, as shown in the below figure.



The project includes the following components:

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Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4V 1P5
Email: EABDirector@ontario.ca

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

April 1, 2026

Subject: Notice of Design and Construction Report Submission – Highway 417 Rapid Bridge Replacements (GWP 4124-14-00) Detail Design and Environmental Assessment Study

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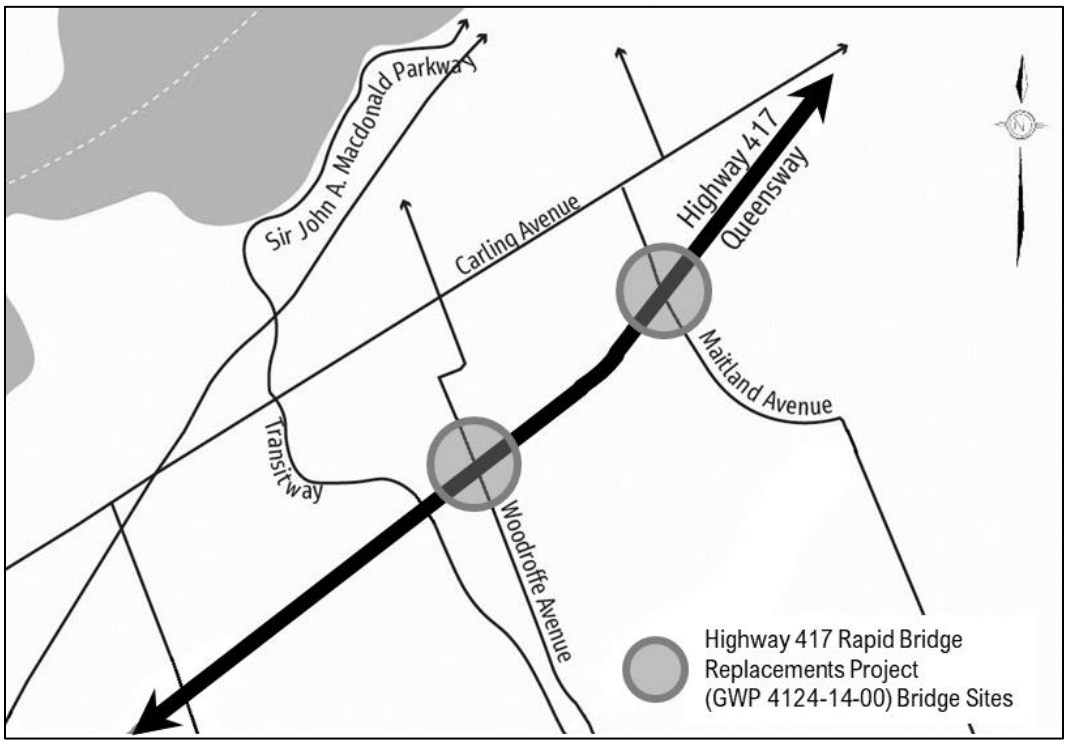

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Ministry of the Environment, Conservation and Parks
135 St. Clair Ave W, 1st Floor
Toronto, ON M4V 1P5
Email: EABDirector@ontario.ca

A copy of the request should also be sent to the Project Team members (Stantec and MTO) by mail or email 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.

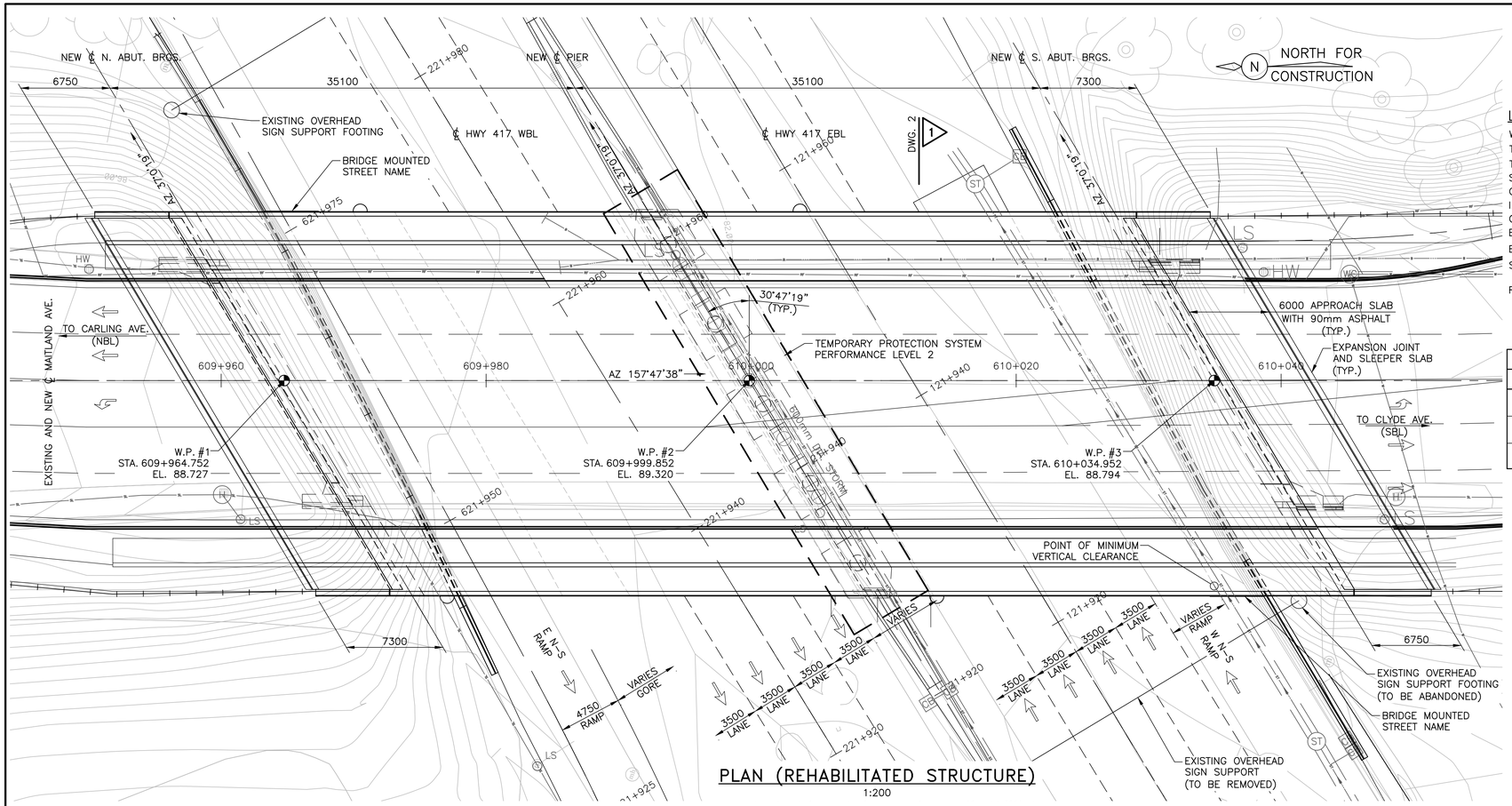
Sincerely,

_____

Lincoln MacDonald, **P.Eng, PMP**
Consultant Project Manager
Stantec

Cette lettre est disponible en français sur demande.

Appendix B. Detail Design Drawings



PLAN (REHABILITATED STRUCTURE)

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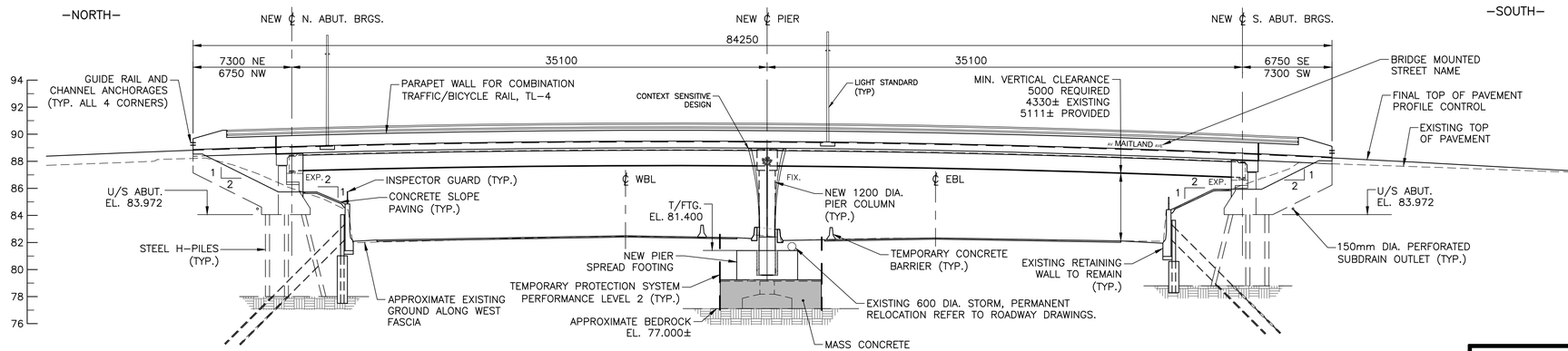
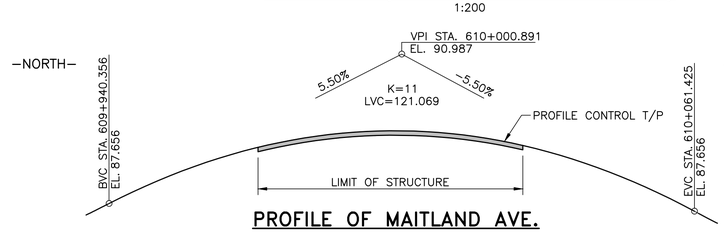


ELEVATION (REHABILITATED STRUCTURE)

1:200



PROFILE OF MAITLAND AVE.

N.T.S.

LIST OF ABBREVIATIONS

W.P.	WORKING POINT
T/P	TOP OF PAVEMENT
T/FTG	TOP OF FOOTING
SHLD	SHOULDER
CJ	CONSTRUCTION JOINT
I.F.	INSIDE FACE
O.F.	OUTSIDE FACE
E.F.	EACH FACE
EQ.SPCD.	EQUALLY SPACED
SPMT	SELF–PROPELLED MODULAR TRANSPORTER
RBR	RAPID BRIDGE REPLACEMENT

WORKING POINTS		
NO.	NORTHING	EASTING
1	5025912.232	363175.234
2	5025879.735	363188.500
3	5025847.239	363201.767

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 3370.101	DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE AT ACTIVE CRACKS GREATER THAN 2mm WIDE AND CONSTRUCTION JOINTS
OPSD 3419.100	BARRIERS AND RAILINGS, STEEL GUIDE RAIL AND CHANNEL ANCHORAGE
OPSD 3950.100	JOINTS CONCRETE EXPANSION AND CONSTRUCTION ON STRUCTURE

Ontario Ministry of Transportation

CONT –

WP 4124–14–01

HIGHWAY 417 RAPID BRIDGE REPLACEMENTS
MAITLAND AVENUE UNDERPASS

GENERAL ARRANGEMENT I

Jacobs.

SHEET –

METRIC
MILLIMETRES OR METRES
(UNLESS NOTED)

NOTE:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING 2 (GENERAL ARRANGEMENT II)

GENERAL NOTES

1. SPECIFIED 28–DAY COMPRESSIVE STRENGTH

30 MPa

2. CLEAR COVER TO REINFORCING STEEL

FOOTINGS		100 ± 25
DECK	TOP	70 ± 20
	BOTTOM	40 ± 10
PIER COLUMNS AND 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, DUPLEX 2205 OR DUPLEX 2304 AND HAVE A MINIMUM YIELD STRENGTH OF 520 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 SS112–1, UNLESS INDICATED OTHERWISE.

4. CONSTRUCTION NOTES

THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESSES FROM THE TOP OF BEARING ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT AND INFORM THE CONTRACT ADMINISTRATOR.

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 AND THE PROPOSED ADJUSTMENT OF THE WORK REQUIRED TO MATCH THE EXISTING STRUCTURE SHALL BE SUBMITTED FOR APPROVAL.

COMPACTED FILL, MAXIMUM GRAIN SIZE 50mm SHALL BE PLACED UP TO THE BOTTOM OF FOOTING ELEVATION PRIOR TO DRIVING PILES.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL TEMPORARY STRUCTURES, CONSTRUCTION PLATFORMS AND DEBRIS CONTAINMENT SYSTEMS ETC.

BACKFILL SHALL NOT BE PLACED AGAINST ANY CONCRETE COMPONENT UNTIL CONCRETE HAS REACHED 70% OF ITS DESIGN STRENGTH.

BACKFILL AGAINST THE SUPERSTRUCTURE SHALL BE PLACED SIMULTANEOUSLY AT BOTH ENDS OF THE STRUCTURE KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN HEIGHT OF BACKFILL BE GREATER THAN 500 mm. BACKFILL SHALL NOT BE PLACED AGAINST THE STRUCTURE UNTIL LATERAL RESTRAINT DEVICES ARE IN PLACE AT THE ABUTMENT BEARING LOCATIONS.

ALL ELEVATIONS ARE TO GEODETIC DATUM.

NOT FOR CONSTRUCTION

REVISIONS			
DATE	BY	DESCRIPTION	
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DRAWN TJN	CHK MRM	SITE 03X–0042/B0	DWG 1

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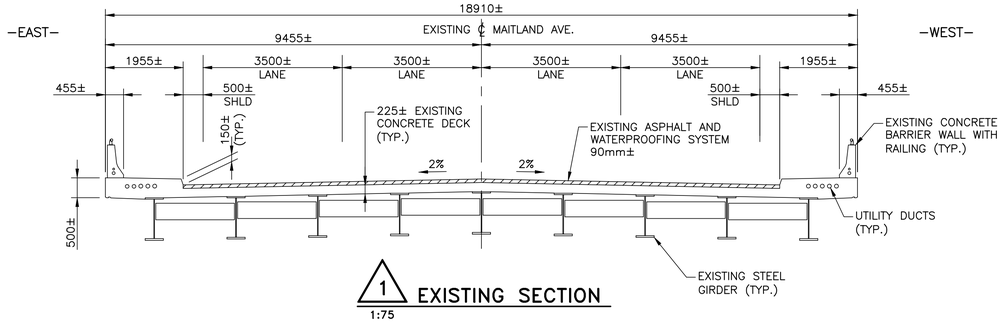

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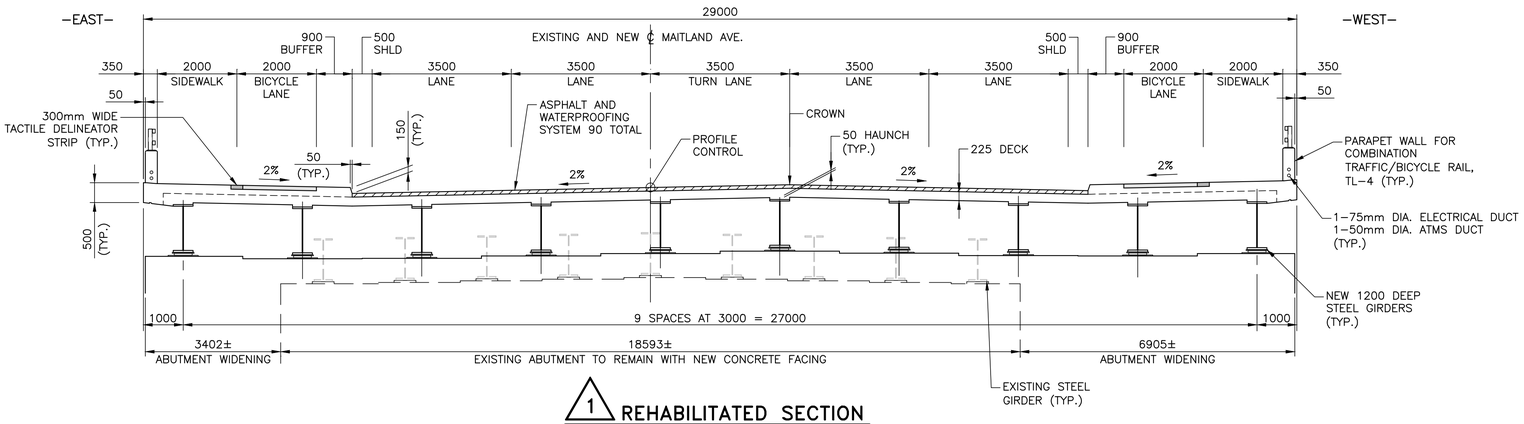


1 REHABILITATED SECTION
1:75

SCOPE OF WORK SUMMARY

THE FOLLOWING SCOPE OF WORK SHALL BE CARRIED OUT IN STAGES AS SPECIFIED ELSEWHERE. THE SEQUENCE OF ACTIVITIES GIVEN ON THE DRAWINGS IS NOT INTENDED TO REPRESENT THE CONSTRUCTION STAGING AND CONSTRAINTS SPECIFIED ELSEWHERE NOR ARE ALL WORK ITEMS INDICATED.

PRIOR TO RAPID DEMOLITION:

1. CONSTRUCT THE ABUTMENTS WIDENING, INCLUDING NEW WINGWALLS AND EMBANKMENT WIDENING.
2. REMOVE SLOPE PAVING AND CONSTRUCT EXISTING ABUTMENT REFACING.
3. REMOVE EXISTING RETAINING WALLS TO THE LIMITS SHOWN ON THE DRAWINGS.
4. CONSTRUCT THE NEW RETAINING WALLS.
5. PRE–CONSTRUCT THE NEW BRIDGE SUPERSTRUCTURE AND INTEGRAL PIER IN THE CONSTRUCTION STAGING AREA.
6. INSTALL TEMPORARY PROTECTION SYSTEM AROUND THE PERIMETER OF THE NEW PIER FOUNDATION FOOTPRINT.
7. EXCAVATE TO THE UNDERSIDE OF EXISTING FOOTINGS OR TOP OF BEDROCK ELEVATION (WHICHEVER IS HIGHER) WITHIN THE FOOTPRINT OF THE NEW PIER FOUNDATION.
8. INFILL THE EXCAVATION WITH MASS CONCRETE TO 100mm BELOW UNDERSIDE OF NEW PIER FOOTINGS.
9. PRE–ASSEMBLE INDIVIDUAL SPREAD FOOTING REBAR CAGES, COOLING PIPE SYSTEMS (IF NEEDED) AND FORMWORK FOR EACH PIER COLUMN SO THEY MAY BE LIFTED INTO PLACE AS INDIVIDUAL UNITS, READY TO RECEIVE CONCRETE.
10. REMOVAL OF STRUCTURE MOUNTED SIGNS, UTILITIES, APPURTENANCES AND EXPANSION JOINT SEALS.
11. VARIOUS ROADWAY AND HIGHWAY STAGING, TRAFFIC CONTROL, REMOVALS AND OTHER WORKS AS SPECIFIED ELSEWHERE IN THE CONTRACT.

DURING/AFTER RAPID DEMOLITION AND PRIOR TO HEAVY LIFT RAPID REPLACEMENT:

12. RAPIDLY DEMOLISH THE EXISTING STRUCTURE, INCLUDING THE EXISTING PIER COLUMNS TO THE ELEVATION NOTED ON THE PIER REMOVALS DRAWING.
13. CLEAN EXCAVATION AND POUR 100mm THICK SELF–CONSOLIDATING CONCRETE (TO THE UNDERSIDE OF NEW PIER FOOTINGS), CREATING A LEVEL SURFACE FOR PRE–ASSEMBLED REBAR CAGES AND FORMWORK.
14. CURE SELF–CONSOLIDATING CONCRETE.
15. LIFT THE PRE–ASSEMBLED SPREAD FOOTING REBAR CAGES AND FORMWORK INTO FINAL POSITION.
16. SURVEY TO ENSURE THEY ARE IN THE CORRECT POSITION TO RECEIVE THE PIER COLUMNS.
17. POUR CONCRETE FOR SPREAD FOOTINGS.
18. CURE CONCRETE UNTIL AT LEAST 70% OF SPECIFIED MINIMUM STRENGTH IS ACHIEVED.
19. COVER SOCKETS WITH STEEL PLATES UNTIL READY TO RECEIVE NEW COLUMNS.
20. RECONSTRUCT THE EXISTING ABUTMENTS ACCORDING TO THE DESIGN DRAWINGS, INCLUDING BEARING SEATS, BALLAST WALLS AND BEARING ASSEMBLIES.
21. SURVEY AND ADJUST ABUTMENT BEARING SEATS AS REQUIRED.

HEAVY LIFT RAPID REPLACEMENT:

22. RECEIVE THE PIER COLUMNS IN THE SOCKETS OF THE PRE–CONSTRUCTED INDIVIDUAL SPREAD FOOTINGS.
23. FILL THE ANNULAR SPACE AROUND THE CIRCUMFERENCE OF THE SOCKETS WITH SELF–CONSOLIDATING CONCRETE.
24. ALLOW CONCRETE TO REACH A MINIMUM 20 MPa COMPRESSIVE STRENGTH PRIOR TO REMOVING TEMPORARY BRACING AND SPMTs.
25. CLEAN UP SITE AND RESTORE TRAFFIC ON HIGHWAY 417. MAITLAND AVENUE TO REMAIN CLOSED FOR UP TO AN ADDITIONAL 2 WEEKS.
26. SPACES IN BETWEEN THE PRE–CONSTRUCTED INDIVIDUAL SPREAD FOOTINGS ARE TO BE FILLED IN WITH REGULAR BACKFILL OR U–FILL.

AFTER HEAVY LIFT RAPID REPLACEMENT

27. COMPLETE CROSSING ROADWAY APPROACH WORKS INCLUDING EXCAVATION, BACKFILL, GRADE RAISE MODIFICATIONS, SLEEPER SLABS, APPROACH SLABS, WATERPROOFING, PAVING, PAVEMENT MARKINGS AND SIGNAGE.
28. CLEAN UP SITE AND RESTORE TRAFFIC ON MAITLAND AVENUE AFTER APPROACH WORKS HAVE BEEN COMPLETED, WITHIN 2 WEEKS, FOLLOWING RBR MOVE.

LIST OF DRAWINGS

Ontario Ministry of Transportation

CONT –
WP 4124–14–01

HIGHWAY 417 RAPID BRIDGE REPLACEMENTS
MAITLAND AVENUE UNDERPASS

GENERAL ARRANGEMENT II

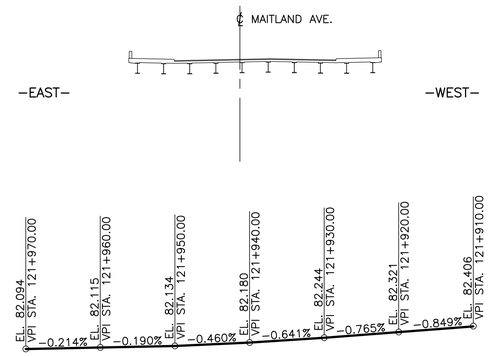
Jacobs.

SHEET –

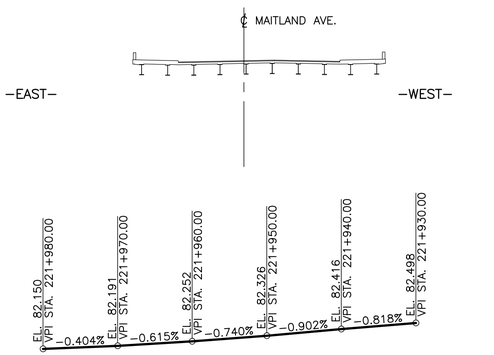
METRIC
MILLIMETRES OR METRES
(UNLESS NOTED)

NOTES:

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING 1 (GENERAL ARRANGEMENT I)



PROFILE OF HIGHWAY 417 EBL
N.T.S.



PROFILE OF HIGHWAY 417 WBL
N.T.S.

NOT FOR CONSTRUCTION

REVISIONS			
	DATE	BY	DESCRIPTION

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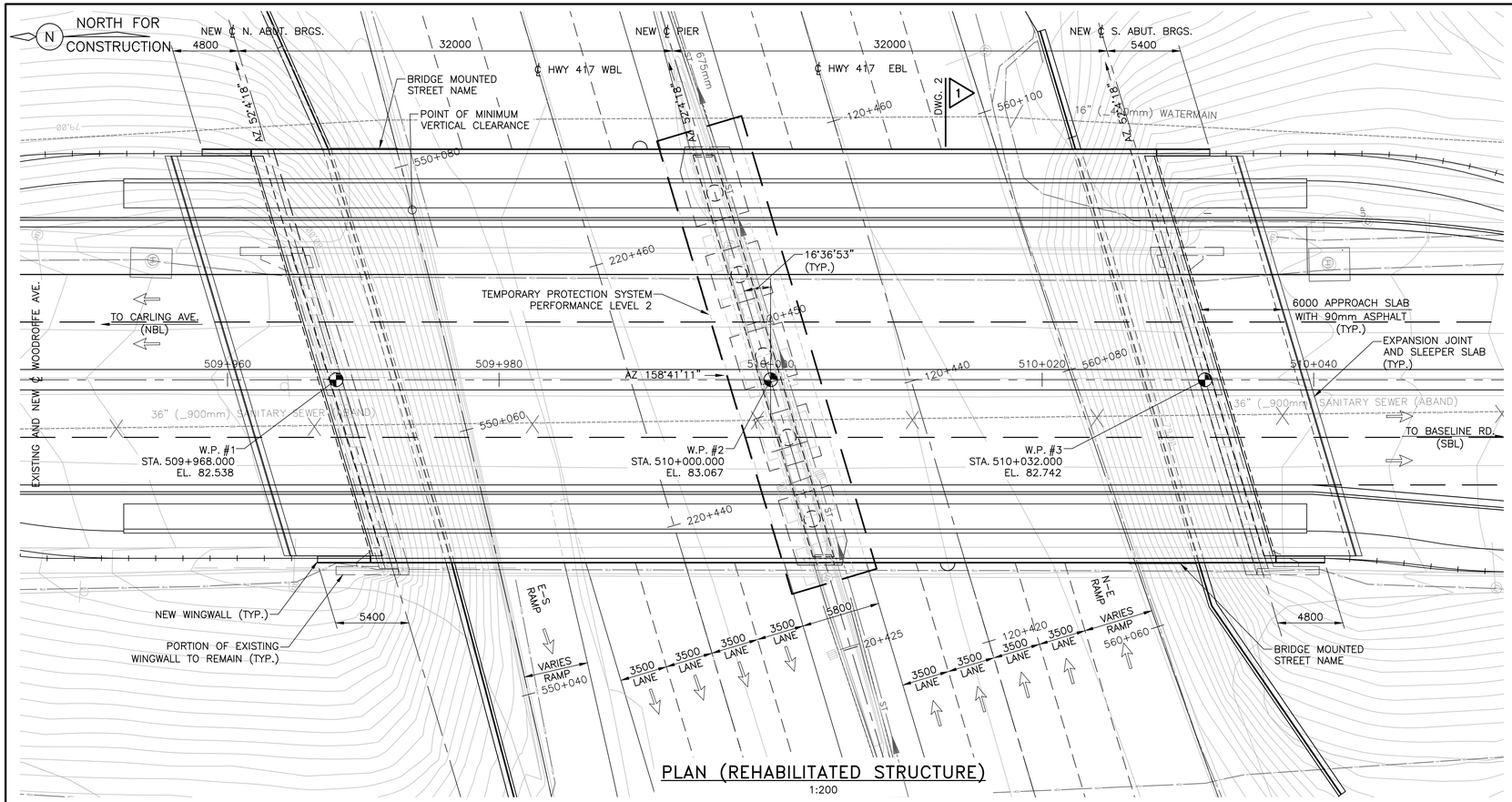
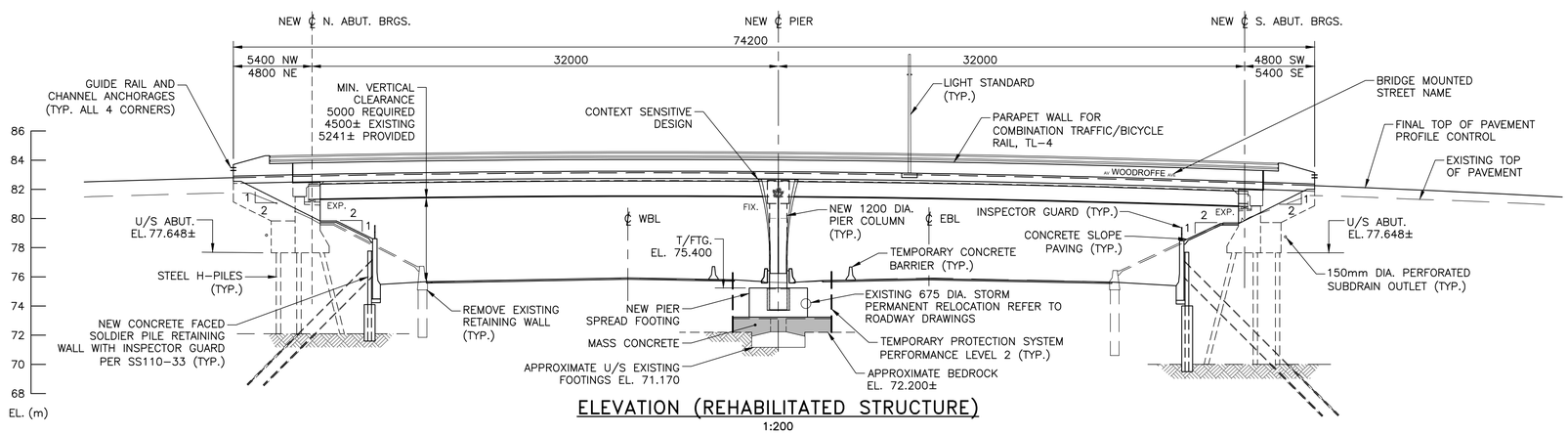


PLAN (REHABILITATED STRUCTURE)

1:200



ELEVATION (REHABILITATED STRUCTURE)

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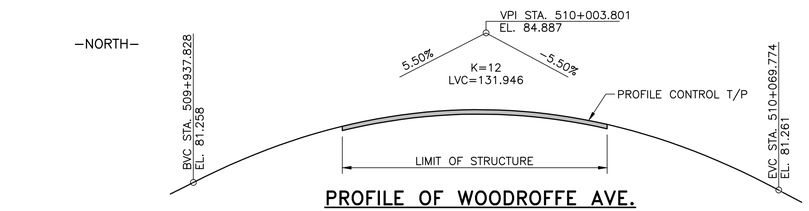

PROFILE OF WOODROFFE AVE.

N.T.S.

LIST OF ABBREVIATIONS

W.P.	WORKING POINT
T/P	TOP OF PAVEMENT
T/FTG	TOP OF FOOTING
SHLD	SHOULDER
CJ	CONSTRUCTION JOINT
I.F.	INSIDE FACE
O.F.	OUTSIDE FACE
E.F	EACH FACE
EQ.T.	EQUALLY SPACED
SPMT	SELF-PROPELLED MODULAR TRANSPORTER
RBR	RAPID BRIDGE REPLACEMENT

WORKING POINTS		
NO.	NORTHING	EASTING
1	5024868.045	362113.191
2	5024838.233	362124.822
3	5024808.422	362136.453

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 3370.101	DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE AT ACTIVE CRACKS GREATER THAN 2mm WIDE AND CONSTRUCTION JOINTS
OPSD 3419.100	BARRIERS AND RAILINGS, STEEL GUIDE RAIL AND CHANNEL ANCHORAGE
OPSD 3950.100	JOINTS. CONCRETE EXPANSION AND CONSTRUCTION ON STRUCTURE

NOT FOR CONSTRUCTION

Ontario Ministry of Transportation

CONT –

WP 4126-14-01

HIGHWAY 417 RAPID BRIDGE REPLACEMENTS
WOODROFFE AVENUE UNDERPASS

GENERAL ARRANGEMENT I

SHEET –

Jacobs.

METRIC
MILLIMETRES OR METRES (UNLESS NOTED)

NOTE:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING 2 (GENERAL ARRANGEMENT II)

GENERAL NOTES

1. SPECIFIED 28-DAY COMPRESSIVE STRENGTH

30 MPa

2. CLEAR COVER TO REINFORCING STEEL

FOOTINGS		100 ± 25
DECK	TOP	70 ± 20
	BOTTOM	40 ± 10
PIER COLUMNS AND 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, DUPLEX 2205 OR DUPLEX 2304 AND HAVE A MINIMUM YIELD STRENGTH OF 520 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 SS112-1, UNLESS INDICATED OTHERWISE.

4. CONSTRUCTION NOTES

THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESSES FROM THE TOP OF BEARING ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT AND INFORM THE CONTRACT ADMINISTRATOR.

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 AND THE PROPOSED ADJUSTMENT OF THE WORK REQUIRED TO MATCH THE EXISTING STRUCTURE SHALL BE SUBMITTED FOR APPROVAL.

COMPACTED FILL, MAXIMUM GRAIN SIZE 75mm SHALL BE PLACED UP TO THE BOTTOM OF FOOTING ELEVATION PRIOR TO DRIVING PILES.

ALL EXPOSED CONCRETE EDGES SHALL HAVE A CHAMFER 20mm x 20mm, UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL TEMPORARY STRUCTURES, CONSTRUCTION PLATFORMS AND DEBRIS CONTAINMENT SYSTEMS ETC.

BACKFILL SHALL NOT BE PLACED AGAINST ANY CONCRETE COMPONENT UNTIL CONCRETE HAS REACHED 70% OF ITS DESIGN STRENGTH.

BACKFILL AGAINST THE SUPERSTRUCTURE SHALL BE PLACED SIMULTANEOUSLY AT BOTH ENDS OF THE STRUCTURE KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN HEIGHT OF BACKFILL BE GREATER THAN 500 mm. BACKFILL SHALL NOT BE PLACED AGAINST THE STRUCTURE UNTIL LATERAL RESTRAINT DEVICES ARE IN PLACE AT THE ABUTMENT BEARING LOCATIONS.

ALL ELEVATIONS ARE TO GEODETIC DATUM.

REVISIONS		
DATE	BY	DESCRIPTION

DESIGN	MRM	CHK	CS	CODE	CSA S6-19	LOAD	CL-625-ONT
DRAWN	TJN	CHK	MRM	SITE	03X-0041/B0	DWG	1

DATE JAN 2026

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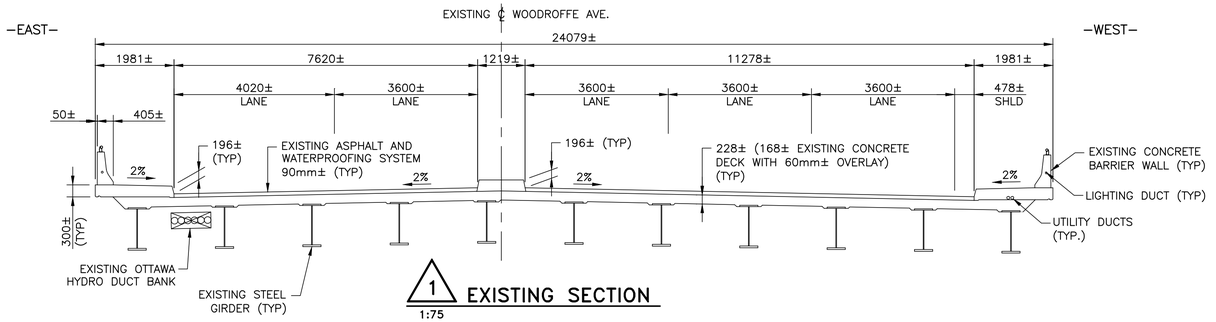

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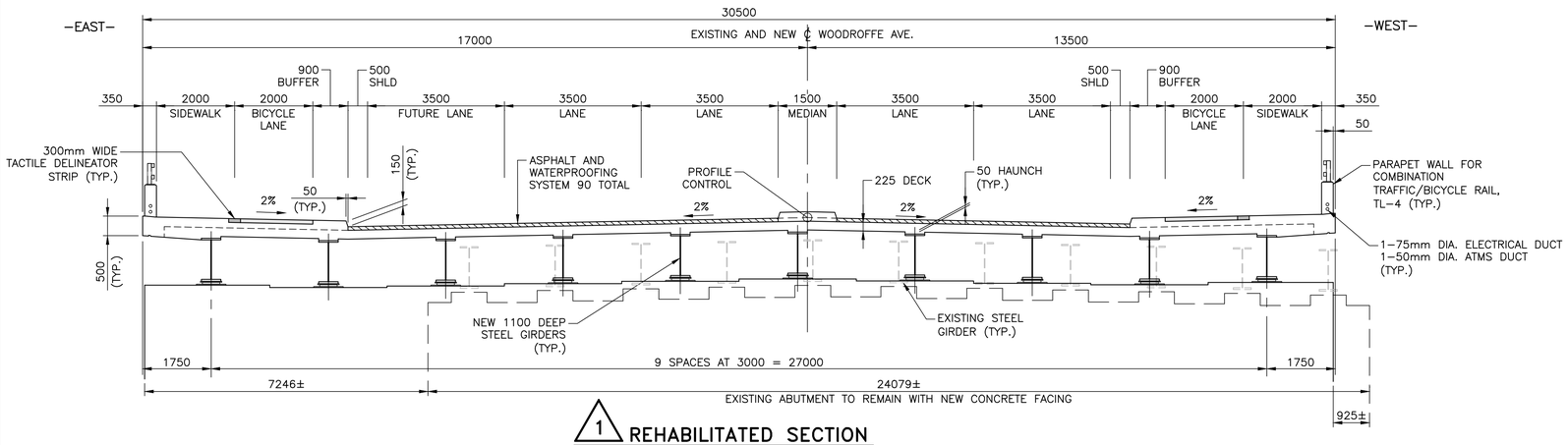

1 REHABILITATED SECTION
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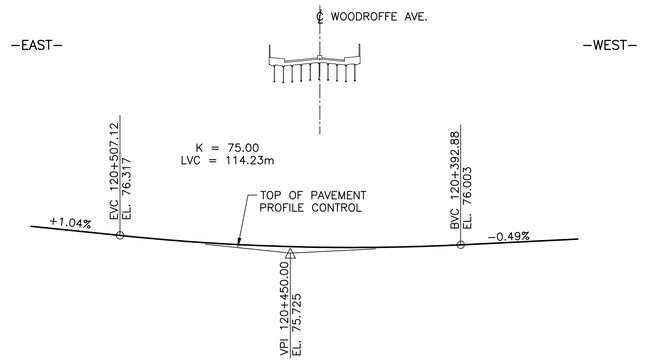
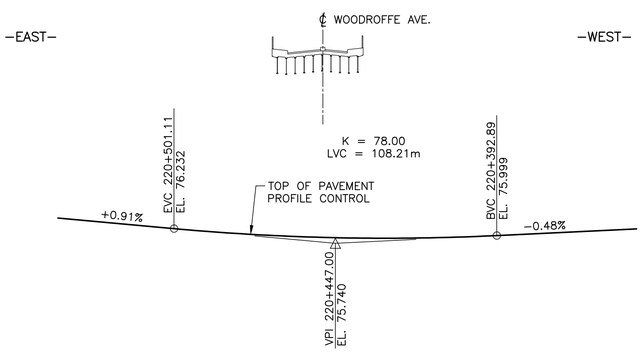


PROFILE OF HIGHWAY 417 EBL
N.T.S.



PROFILE OF HIGHWAY 417 WBL
N.T.S.

SCOPE OF WORK SUMMARY

THE FOLLOWING SCOPE OF WORK SHALL BE CARRIED OUT IN STAGES AS SPECIFIED ELSEWHERE. THE SEQUENCE OF ACTIVITIES GIVEN ON THE DRAWINGS IS NOT INTENDED TO REPRESENT THE CONSTRUCTION STAGING AND CONSTRAINTS SPECIFIED ELSEWHERE NOR ARE ALL WORK ITEMS INDICATED.

PRIOR TO RAPID DEMOLITION:

1. CONSTRUCT THE ABUTMENTS WIDENING, INCLUDING NEW WINGWALLS AND EMBANKMENT WIDENING.
2. REMOVE SLOPE PAVING AND CONSTRUCT EXISTING ABUTMENT REFACING.
3. REMOVE EXISTING RETAINING WALLS TO THE LIMITS SHOWN ON THE DRAWINGS.
4. CONSTRUCT THE NEW RETAINING WALLS.
5. PRE–CONSTRUCT THE NEW BRIDGE SUPERSTRUCTURE AND INTEGRAL PIER IN THE CONSTRUCTION STAGING AREA.
6. INSTALL TEMPORARY PROTECTION SYSTEM AROUND THE PERIMETER OF THE NEW PIER FOUNDATION FOOTPRINT.
7. EXCAVATE TO THE UNDERSIDE OF EXISTING FOOTINGS OR TOP OF BEDROCK ELEVATION (WHICHEVER IS HIGHER) WITHIN THE FOOTPRINT OF THE NEW PIER FOUNDATION.
8. INFILL THE EXCAVATION WITH MASS CONCRETE TO 100mm BELOW UNDERSIDE OF NEW PIER FOOTINGS.
9. PRE–ASSEMBLE INDIVIDUAL SPREAD FOOTING REBAR CAGES, COOLING PIPE SYSTEMS (IF NEEDED) AND FORMWORK FOR EACH PIER COLUMN SO THEY MAY BE LIFTED INTO PLACE AS INDIVIDUAL UNITS, READY TO RECEIVE CONCRETE.
10. REMOVAL OF STRUCTURE MOUNTED SIGNS, UTILITIES, APPURTENANCES AND EXPANSION JOINT SEALS.
11. VARIOUS ROADWAY AND HIGHWAY STAGING, TRAFFIC CONTROL, REMOVALS AND OTHER WORKS AS SPECIFIED ELSEWHERE IN THE CONTRACT.

DURING/AFTER RAPID DEMOLITION AND PRIOR TO HEAVY LIFT RAPID REPLACEMENT:

12. RAPIDLY DEMOLISH THE EXISTING STRUCTURE, INCLUDING THE EXISTING PIER COLUMNS TO THE ELEVATION NOTED ON THE PIER REMOVALS DRAWING.
13. CLEAN EXCAVATION AND POUR 100mm THICK SELF–CONSOLIDATING CONCRETE (TO THE UNDERSIDE OF NEW PIER FOOTINGS), CREATING A LEVEL SURFACE FOR PRE–ASSEMBLED REBAR CAGES AND FORMWORK.
14. CURE SELF–CONSOLIDATING CONCRETE.
15. LIFT THE PRE–ASSEMBLED SPREAD FOOTING REBAR CAGES AND FORMWORK INTO FINAL POSITION.
16. SURVEY TO ENSURE THEY ARE IN THE CORRECT POSITION TO RECEIVE THE PIER COLUMNS.
17. POUR CONCRETE FOR SPREAD FOOTINGS.
18. CURE CONCRETE UNTIL AT LEAST 70% OF SPECIFIED MINIMUM STRENGTH IS ACHIEVED.
19. COVER SOCKETS WITH STEEL PLATES UNTIL READY TO RECEIVE NEW COLUMNS.
20. RECONSTRUCT THE EXISTING ABUTMENTS ACCORDING TO THE DESIGN DRAWINGS. INCLUDING BEARING SEATS, BALLAST WALLS AND BEARING ASSEMBLIES.
21. SURVEY AND ADJUST ABUTMENT BEARING SEATS AS REQUIRED.

HEAVY LIFT RAPID REPLACEMENT:

22. RECEIVE THE PIER COLUMNS IN THE SOCKETS OF THE PRE–CONSTRUCTED INDIVIDUAL SPREAD FOOTINGS.
23. FILL THE ANNULAR SPACE AROUND THE CIRCUMFERENCE OF THE SOCKETS WITH SELF CONSOLIDATING CONCRETE.
24. ALLOW CONCRETE TO REACH A MINIMUM 20 MPa COMPRESSIVE STRENGTH PRIOR TO REMOVING TEMPORARY BRACING AND SPMTs.
25. CLEAN UP SITE AND RESTORE TRAFFIC ON HIGHWAY 417. WOODROFFE AVENUE TO REMAIN CLOSED FOR UP TO AN ADDITIONAL 2 WEEKS.
26. SPACES IN BETWEEN THE PRE–CONSTRUCTED INDIVIDUAL SPREAD FOOTINGS ARE FILLED IN WITH REGULAR BACKFILL OR U–FILL.

AFTER HEAVY LIFT RAPID REPLACEMENT

27. COMPLETE CROSSING ROADWAY APPROACH WORKS INCLUDING EXCAVATION, BACKFILL, GRADE RAISE MODIFICATIONS, SLEEPER SLABS, APPROACH SLABS, WATERPROOFING, PAVING, PAVEMENT MARKINGS AND SIGNAGE.
28. CLEAN UP SITE AND RESTORE TRAFFIC ON WOODROFFE AVENUE AFTER APPROACH WORKS HAVE BEEN COMPLETED WITHIN 2 WEEKS FOLLOWING RBR MOVE.

LIST OF DRAWINGS

Ontario Ministry of Transportation

CONT –
WP 4126–14–01

HIGHWAY 417 RAPID BRIDGE REPLACEMENTS
WOODROFFE AVENUE UNDERPASS

GENERAL ARRANGEMENT II

Jacobs.

SHEET –

METRIC
MILLIMETRES OR METRES
(UNLESS NOTED)

NOTES:

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING 1 (GENERAL ARRANGEMENT I)

NOT FOR CONSTRUCTION

REVISIONS	DATE	BY	DESCRIPTION

DESIGN	MRM	CHK	CS	CODE	CSA S6–19	LOAD	CL–625–ONT
DRAWN	TJN	CHK	MRM	SITE	03X–0041/B0	DWG	2

DATE JAN 2026

FILE NAME: C:\users\tn053547\appdata\local\bentley\projectwise\jacobs–americas–01\d0184700\CE853800–201_General–Arrangement.dwg
MODIFIED: 2026–01–23 15:00