

DESIGN AND CONSTRUCTION REPORT ADDENDUM

Detail Design and Class Environmental Assessment Study for Highway 148 (Pembroke to Greenwood Road) County of Renfrew

GWP 214-00-00

THE PUBLIC RECORD

This Design and Construction Report (DCR) addendum has been prepared under the Ministry of Transportation (MTO) Class Environmental Assessment for Provincial Transportation Facilities (2000). The preliminary design for this project was approved following the filing of the Transportation and Environmental Study Report (TESR) for the "Preliminary Design and Class Environmental Assessment Highway 148 (Pembroke to Greenwood Road) County of Renfrew G.W.P. 214-00-00" (June, 2018).

This DCR Addendum is available for a 30-day agency and public comment period commencing **September 25**, **2025** and ending **October 25**, **2025** online at www.hwy148.ca (www.autoroute148.ca) and at the following inperson locations during normal business hours:

Township of Laurentian Valley	County of Renfrew	Pembroke Public Library
460 Witt Road, Clerk's Office	9 International Drive, Clerk's Office	237 Victoria Street
Pembroke, Ontario, K8A 6W5	Pembroke, Ontario, K8A 6W5	Pembroke, Ontario, K8A 4K5

Should you wish to submit comments regarding this Project or DCR Addendum, or to be added to the study mailing list, please contact any one of the following project team members:

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In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require 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 contact information and full name.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements. This will ensure that the Ministry is able to efficiently review the request.

The request should be sent in writing or by email to:

Minster of the Environment, Conservation and Parks

Ministry of Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, ON, M7A 2J3

Email: minister.mecp@ontario.ca

Director, Environmental Assessment Branch

Ministry of Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, ON, M4V 1P5

Email: <u>EABDirector@ontario.ca</u>

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

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act*. Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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.

Ce document hautement spécialisé n'est disponsible qu'en anglais en virtue du réglement 411/97, qui en exampte l'application de la Loi sur les services en français. Pour de l'aide en français, veuillez communiquer avec le l'équipe du projet par courriel, à l'adresse <u>information@hwy148.ca</u> ou en composant le 613-366-8149 (<u>Mathew.Theiner@parsons.com</u>, Parsons).

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ACRONYMS AND ABBREVIATIONS

ASI Archaeological Services Inc

BH Borehole

BMP Best Management Practices

CSP Corrugated Steel Pipe

DCR Design and Construction Report

DFO Department of Fisheries and Oceans Canada

EA Environmental Assessment

EAA Environmental Assessment Act

ESA Endangered Species Act

ESC Erosion and Sediment Control

GWP General Work Program

HADD Harmful Alteration, Disruption and Destruction

HCMM Highway Corridor Management Manual

HDPE High Density Polyethylene Pipe

MECP Ministry of Environment, Conservation and Parks

MHSTCI Ministry of Heritage, Sport, Tourism and Culture Industries

MTO Ontario Ministry of Transportation

MNR Ministry of Natural Resources

OPSS Ontario Provincial Standard Specification

PAH Polycyclic Aromatic Hydrocarbon

PHC Petroleum Hydrocarbon

PIC Public Information Centre

PTTW Permit to Take Water

PSW Provincially Significant Wetland

SAR Species at Risk

SoCC Species of Conservation Concern

SWH Significant Wildlife Habitat

TESR Transportation and Environmental Study Report

VOC Volatile Organic Compound

Executive Summary

Parsons Inc. (Parsons) was retained by the Ontario Ministry of Transportation (MTO) to undertake the Detail Design and Class Environmental Assessment (EA) study for improvements to Highway 148 from approximately 200 m west of Angus Campbell Drive in the City of Pembroke to approximately 300 m east of the Greenwood Road Intersection in the Township of Laurentian Valley, County of Renfrew. The details for the Highway 148 improvements were documented in the Design and Construction Report filed for public comment October 2024. Through discussions with the Township of Laurentian Valley, it was determined that the MTO project would include the additional construction of a sanitary pumping station at 127 Drive-In Road. Key elements of the sanitary pumping station include elements to be installed now and in the future:

- An entrance from Drive-in Road.
- Parking stalls for maintenance access.
- Raised concrete slab with a 1.8m diameter covered maintenance access, for the 8m deep maintenance chamber. Control panel, and venting pipe will also be on this concrete slab.
- Landscape screening to enhance visual appeal.
- Emergency alarm system to prevent overflow and ensure safety.
- Concrete pad to accommodate the future aboveground propane tanks (2 120 gallon) and backup generator.
- Keyed access to restrict access to all equipment.

The purpose of this DCR Addendum is to document the proposed sanitary pumping station at 127 Drive-In Road, including a brief needs assessment, the alternatives considered, assessment of potential impacts, mitigation measures and consultation completed, in order to fulfill the requirements of the 2023 Municipal Class Environmental Assessment (MCEA). Advanced notification for the filing of this DCR Addendum, including the distribution of an informational brochure has been issued on behalf of the MTO and the Township of Laurentian Valley.

Through Environmental Impact Studies for the assignment, the property where the sanitary pumping station will be constructed has a low risk to result in environmental impacts. The property has been cleared of archaeological concerns. There are no sensitive natural features or watercourses. Potential impacts through site preparation will be managed through best management practices and construction timing to avoid sensitive periods for birds where vegetation removal is required. The contractor will implement best management practices and avoid night works to protect against potential impacts resulting from construction activities. Erosion and sediment control measures and site restoration will minimize potential impacts to adjacent lands from sediment transport from disturbed areas at the project site.

1 Overview

1.1 Introduction

Parsons Inc. (Parsons) was retained by the Ontario Ministry of Transportation (MTO) to undertake the Detail Design and Class Environmental Assessment (EA) study for improvements to Highway 148 from approximately 200 m west of Angus Campbell Drive in the City of Pembroke to approximately 300 m east of the Greenwood Road Intersection in the Township of Laurentian Valley, County of Renfrew (the "Project"), as depicted in **Figure 1.**

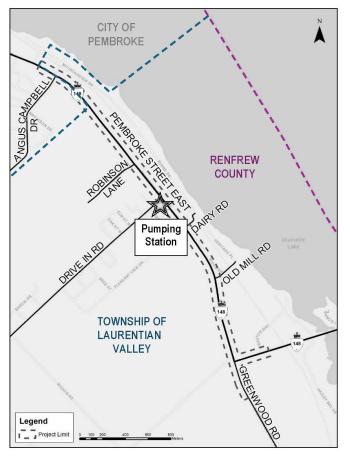


FIGURE 1 - PROJECT STUDY AREA

Highway 148 is a two-lane provincial highway that connects the Project Area with the Ontario-Quebec provincial border at the Ottawa River. This Detail Design and Class Environmental Assessment (EA) Study is being conducted to address poor pavement performance as well as intersection and operational improvements, pedestrian and cycling safety improvements, highway drainage improvements, access management, and municipal infrastructure (sanitary sewer and watermain).

In June 2018, A Transportation and Environmental Study Report (TESR) was prepared by IBI Group for the "Preliminary Design and Class Environmental Assessment Highway 148 (Pembroke to Greenwood Road) County of Renfrew and included a description of the project and the purpose; existing conditions; need and justification for improvements; development and evaluation of alternatives; and the consultation process followed. It also documents the recommended plan; anticipated environmental effects and proposed mitigation measures; and commitments to future work and monitoring.

1.2 Environmental Assessment Process

The Ontario *Environmental* Assessment Act (EAA) lays the groundwork for the Class Environmental Assessment (EA) process, a planning and decision-making process that ensures all technical and environmental factors of a project are considered. A Class EA is a pre-approved and specific process for a defined group of projects that are similar in nature. Projects included in the scope of a Class EA can be implemented with no further approval under the EA Act, given that the specific Class EA process was followed.

The Class EA process for this detail design study has been undertaken as a Group 'B' project under the Ontario Ministry of Transportation (MTO) Class Environmental Assessment for Provincial Transportation Facilities (2000), which represents major improvements to existing provincial transportation facilities. The process for undertaking this detail design study is presented in **Figure 2**.

Preliminary Design Transportation Environmental Study Report June 2018 **Detailed Design** Notice of Study commencement Conduct Field Investigations and Consult with Stakeholers Develop Detail Design Plan Transportation Environmental Study Report Addendum Public Review Period (30-days) **Public Information Centre** Finalize Detail Design Plan Based on Public Feedback and Obtain Permits and Approvals Design and Construction Report Public Comment Period (30-days) Design and Construction Report Addendum Comment Period (30-Days) Finalize Contract Drawings and Tender Specifications Tender for Construction Construction

FIGURE 2 - STUDY PROCESS

1.3 Purpose of this Design and Construction Report Addendum

In accordance with the Ministry of Transportation's (MTO) requirements, municipalities are required to confirm that obligations under the Municipal Class Environmental Assessment (MCEA, 2023) are met for the proposed municipal infrastructure to be constructed as part of the Highway 148 contract. The Township of Laurentian Valley (TLV) municipal infrastructure, specifically watermains, sanitary sewers and sidewalks are exempt from the requirements of the MCEA. However, since a proposed sanitary pumping station at the intersection of Highway 148 and Drive-In Road (127 Drive-In Road) as shown **Appendix B** will now be included in the contract since the time of the DCR, work is required to fulfill the requirements of an MCEA Schedule B project. In agreement with the TLV, this facility is not considered within a road allowance, it is therefore not exempt from the MCEA.

As noted in the 2023 MCEA: "In some cases, an undertaking within the class of undertakings in the MCEA may also include an undertaking or result in an undertaking that is within the class of undertakings in another Class EA. Should this occur, proponents should seek to coordinate with the proponent of the undertaking that would proceed under the other Class EA requirements such as notices, consultation and impact assessment work. Each proponent should identify what their undertaking consists of, what their Class EA requirements are, and how those requirements will be met. Each proponent must ensure that the requirements with respect to their particular undertaking are met,"

The Highway 148 construction project has advanced as a Group B undertaking in accordance with the MTO Class Environmental Assessment for Provincial Transportation Facilities (2000). Therefore, in accordance with the above reference from the 2023 MCEA, the purpose of this DCR addendum will be to conclude the required notices, consultation and impact assessment requirements between the two EA classes for the pumping station.

2 Project Summary

2.1 General Description of the Recommended Plan from 2024 DCR

The proposed improvements to Highway 148 documented in the 2024 DCR generally include the following work.

Highway 148 between Angus Campbell Drive and Drive-In Road:

- Widen to provide a continuous Two-Way Left-Turn Lane;
- Urbanize the cross-section including installation of a barrier curb with gutter and storm sewer upgrades;
- Install Traffic Signals at the Highway 148/ Drive-In Road intersection including the addition of turning lanes;
- Potential for sidewalk installation between the City of Pembroke limits and Angus Campbell Drive subject to construction and operational funding agreements with the City of Pembroke; and
- Potential for sidewalk installation between Angus Campbell Drive and Drive-In Road subject to construction and operational funding agreements with the Township of Laurentian Valley and City of Pembroke.

Highway 148 between Drive-In Road and Greenwood Road:

- Maintain a two-lane rural cross-section. Rehabilitate the existing pavement and provide 2.5 m wide paved shoulders.
- Revise the Greenwood Road intersection by modifying the westbound right-turn channel and extending the merge lane;
- Add an additional southbound lane to bypass left turning vehicles onto Old Mill Road; and

Modifications to existing access points.

Greenwood Road:

 Rehabilitation and repaving of Greenwood Road from Highway 148 to approximately 1 km south of Highway 148 subject to construction and funding agreements with the County of Renfrew.

2.2 General Description of the Changes to the 2024 DCR

The following changes to the 2024 DCR are proposed due to the proposed sanitary pumping station.

DCR Section 3.1: Major Features of the Proposed Work

The Ministry developed a sanitary sewer design on Highway 148 from Robinson Lane to Dairy Road. The initial intent was to provide a gravity sewer that connects to the existing sanitary maintenance chamber at Robinson Lane. However, after investigating the existing elevation of the road, house basements, and existing sanitary sewer pipe, it was deemed impossible to construct a gravity sanitary sewer from Dairy Road to Robinson Lane.

A pumping station is therefore required, with an ideal location at the intersection of Drive-in Road and Highway 148. The proposed pumping station will be capable of servicing multiple existing houses and future developments. The 400-meter sanitary force main which flows under the eastbound lane of Highway 148 will discharge into the gravity sanitary sewer at the Robinson Lane intersection. The current design for the pumping station provides servicing for the currently planned sanitary sewer requirements handling flows from Robinson Lane to Drive-in Road (pumping station). Existing houses on both sides of the highway will connect to the new sanitary sewer, which will be installed as part of the Highway 148 improvement work. Future needs and sanitary sewer needs will be determined by the Township of Laurentian Valley and County of Renfrew, where applicable. Modifications and upgrades required to meet those needs will be developed and carried out in accordance with the MCEA by the Township, County development proponent, and subject to availability of capital funding.

The proposed pumping station will be located at 127 Drive-in Road, which is located at the intersection of Highway 148 and Drive-in Road. At ground elevation, the site will feature the following elements as part of this phase of construction:

- An entrance from Drive-in Road.
- Parking stalls for maintenance access.
- Raised concrete slab with a 1.8m diameter covered maintenance access, for the 8m deep maintenance chamber. Control panel, and venting pipe will also be on this concrete slab.
- Landscape screening to enhance visual appeal.
- Emergency alarm system to prevent overflow and ensure safety.
- Concrete pad to accommodate the future aboveground propane tanks (2 120 gallon) and backup generator.
- Keyed access to restrict access to all equipment.

The pumping station will also be equipped with an emergency alarm system in case of malfunction and to prevent overflow. The backup generator will only be used in case of power failure. A representative example of what can be expected for the site, showing the maintenance access and control panel, is shown in **Figure 3**. **Figure 4** shows a typical underground layout of a pumping station.

Figure 5 shows an example of the size of a generator and twin propane tanks, which may be installed at a later date by the Township. This image also shows an example of the underlying concrete pads that will be installed at this time, which are intended to provide a stable base for these elements if required.



FIGURE 3 - REPRESENTATIVE EXAMPLE OF SANITARY PUMPING STATION







FIGURE 5 - EXAMPLE OF CONCRETE PADS WITH FUTURE PROPANE TANKS AND GENERATOR

DCR Section 3.3.2: Municipal Infrastructure - Township of Laurentian Valley

The project initially explored the option of installing a gravity sanitary sewer, stretching 750 meters with minimal pipe cover and slope, from Dairy Road to the existing sanitary sewer at Robinson Lane. However, the surface elevation of Highway 148 at Dairy Road is significantly low, resulting in the proposed gravity sewer invert being approximately 4.5 meters lower than the existing sewer invert at Robinson Lane. Given the width of Highway 148 and the extensive excavation required to install the sewer at such a depth, this alternative was deemed impractical for establishing a functional sanitary sewer system. Additionally, it would also be necessary to lower the existing sanitary sewer originating from the Pembroke Pollution Control Center along Mountainview Drive.

DCR Section 4.6: Noise and Vibration

The improvements to Highway 148 are not expected to impact existing noise levels in the future since there will not be new widening or significant improvements to the existing Highway 148 footprint. Adverse noise impacts during construction will be temporary and will be associated with equipment and vehicles used during construction. There may be potential for some construction noise impacts in the proximity to residential dwellings abutting Highway 148, including those in proximity to Drive-In Road and in the south limit of the project where there is a higher concentration of residential properties.

Night work is proposed for select construction activities for Highway 148 improvements where continuous operations are required at intersections, which may result in the emission of noise from heavy machinery and equipment. Best management practices are to be implemented. However, for the installation of the pumping station, timing for the work will be scheduled to exclude night time work.

The pumping station is not anticipated to generate noise or create vibration during operation. The above ground backup generator, which is planned as a future addition to the pumping station, may generate noise

when in operation. The Town will consider the noise potentially generated when the backup generator operates, to ensure compliance with noise by-laws.

Section 4.7: Archaeology

A Stage 1 and 2 Archaeological Assessment was conducted for the 127 Drive In Road Property by The Central Archaeology Group Inc in 2015 titled "Stage 1 and Stage 2 Archaeological Assessment at 127 Drive In Road in the City of Pembroke Part of Lot 18, Concession 2 Geographic Township of Pembroke, Renfrew County", PIF P248-0241-2015, CAE Project No. CAGI-2015-LM34. The Stage 2 archaeological assessment "did not recover any material culture during survey activities. Consequently, significant pre-contact and historic First Nations or historic Euro-Canadian archaeological sites are unlikely to be found in any undisturbed ground within the project area. Therefore, there are no significant archaeological concerns associated with the remainder of this project and it is recommended that the property be cleared of archaeological concerns".

Section 4.9: Land Use

The project is situated within the suburban area between the City of Pembroke and the Township of Laurentian Valley with mixed low density residential and commercial-industrial uses. The property for the sewage pumping station is located in a residential area at the east side of the City. A residential dwelling formerly occupied this property lot, which has been demolished in 2021. The parcel is not in use for residential purposes as it is vacant. The property will be maintained and in good condition to reflect a utility services parcel within a residential setting. Visually, the property will be similar to surrounding residential properties with the proposed landscape hedges and regular maintenance.

A summary of environmental issues and commitments specific to the sanitary pumping station is summarized in Section 4.2 of this DCR Addendum.

3 Overview of Consultation

Consultation is an integral component of the Class EA process. Section 3.1 summarizes the consultation undertaken during preliminary design and Section 3.2 summarizes consultation efforts during detail design.

3.1 Consultation During Preliminary Design

The preliminary design for Highway 148 was documented in the Transportation and Environmental Study Report (TESR) for the "Preliminary Design and Class Environmental Assessment Highway 148 (Pembroke to Greenwood Road) County of Renfrew G.W.P. 214-00-00" (June, 2018). The preliminary design stage included the following consultation with members of the public, agencies, stakeholders, Indigenous communities, and property owners:

- Notice of Study Commencement
- Consultation with external agencies;
- Municipal Advisory Committee;
- Public Advisory Committee;
- Meetings with Municipal staff and Council (City of Pembroke, Township of Laurentian Valley, and County of Renfrew);
- Communication with adjacent property owners;
- Two Public Information Centres (PIC); and
- Notice of Study Completion.

The first Public Information Centre (PIC) during preliminary design was held on July 14, 2015 to introduce the project and discussed the issues to be addressed by the Environmental Assessment study. The PIC was jointly

held for two sections of Highway 148: from west of Angus Campbell Drive to Greenwood Road, inclusive of the Greenwood Road intersection (GWP 214-00-00) and from Greenwood Road to the Québec Border (GWP 239-00-00). The PIC was a drop-in format where members of the project team were available to answer questions and address concerns. Approximately 44 individuals attended the first PIC. The second PIC on July 6, 2017 provided the public and interest groups an opportunity to review and comment on the results of the evaluation of alternatives and presented the preferred alternative. Approximately 60 individuals attended the second PIC.

3.2 Consultation During Detail Design

At the onset of detail design, a contact list was prepared for the study, identifying potentially interested public stakeholders who had expressed interest in the preliminary design phase of the project, municipal contacts, technical agencies and Indigenous Communities. A summary of consultation activities undertaken during detail design is outlined in the following sections and **Appendix A.**

3.2.1 DEDICATED PROJECT WEBSITE

A project website was developed and maintained during detail design to function as an interactive tool for the project team and interested parties to review information on the project. The project website provided study updates and allowed interested parties an opportunity to submit comments during design and ability to review materials for the PIC. The content included a home page with relevant links for the project, including but not limited to the following:

- Project Overview;
- Project Timelines (as available);
- MTO Class EA Process;
- Project Notices and Consultation Materials
- TESR Addendum
- Reference Documents including the Transportation and Environmental Study Report (TESR);
- Project Team Contact Information; and
- Frequently Asked Questions.

Information on the project website is available in both English and French at www.hwy148.ca and www.hwy148.ca and www.autoroute148.ca.

3.2.2 NOTICE OF STUDY COMMENCEMENT

The Notice of Study Commencement is the first point of contact for providing details regarding the project background, study area and the Class EA process to be followed. The notice is intended to solicit input from interested and affected parties, request members of the public to identify themselves if they wish to be added to the project mailing lists and provides the contact information for both the MTO and Parsons Project Managers.

The Notice of Study Commencement was advertised in *The Pembroke Observer and News* in English and French on June 4, 2020 and posted on the Project Website on May 29, 2020. The Notice was distributed via Canada Post Neighbourhood Mail to local residents and businesses in the project area on May 29, 2020. The Notice was sent via regular mail and e-mail to members of the public, property owners, businesses and technical agencies on the project Contact List on May 29, 2020.

Notice of Study Commencement letters were sent to the Algonquins of Ontario, Algonquins of Pikwakanagan First Nation, Hiawatha First Nation, Curve Lake First Nation, Alderville First Nation, Beausoleil First Nation, Mississaugas of Scugog Island First Nation, Chippewas of Georgina Island, Chippewas of Rama First Nation, Williams Treaty First Nations Process Coordination and Metis Nation of Ontario by MTO on May 29, 2021.

Local members of Provincial and Federal Parliament were sent the Notice of Study Commencement by MTO on May 29, 2021.

Copies of the Notice of Study Commencement materials are provided in **Appendix A.** Feedback received is discussed in the following sections.

3.2.3 TESR ADDENDUM

An addendum to the Transportation Environmental Study Report (TESR) for the Preliminary Design and Class Environmental Assessment for Highway 148 from Pembroke to Greenwood Road, County of Renfrew, GWP 214-00-00, June 2018, was prepared and posted on the project website to document changes to the Preliminary Design such as additional property requirements and limited night work. The TESR Addendum was made available for a 30-day public comment period from October 7, 2022 to November 7, 2022. The Notice of TESR Addendum was mailed to area property owners, circulated to agencies and posted in the Pembroke Observer and News on October 6, 2022. Copies of the Notice of TESR Addendum materials are provided in Appendix A.

3.2.4 PUBLIC INFORMATION CENTRE (PIC)

The Public Information Centre (PIC) for Highway 148 was held at the Best Western Pembroke Inn & Conference Centre on November 3, 2022 to present an overview of the design progress, seek public input and describe the next steps. The public and interested stakeholders were informed of the PIC through newspaper publications, via email and through regular mail. The PIC presented the MTO Class EA process being followed, recommended plan, municipal infrastructure being impacted by the widening, potential new municipal infrastructure, construction impacts and mitigation measures. A total of 59 stakeholders representing the general public and local municipalities attended the PIC. 17 comments were provided through comment sheets and 5 e-mail comments were received. The comments received from members of the public included comments or concerns regarding the recommended plan or construction impacts, additional items requested to be addressed and other general comments. General comments received included requests for traffic signals or a roundabout at the intersection of Highway 148 and Greenwood Road. Participants were pleased that the project will be commencing soon and provided feedback on the recommended plan and construction details, such as project notices, access to driveways and sidewalks. Additional feedback received requested the installation of additional active transportation facilities and requests for water and services to be installed as part of the project. PIC materials are provided in Appendix A. The municipal infrastructure, specifically the pumping station, was included on the PIC boards at the Highway 148 PIC held in Nov 2022. An excerpt of these displays are appended to this DCR Addendum as part of the consultation record.

3.2.5 PUBLIC COMMENTS

This section provides a summary of public comments received outside of the Public Information Centre comment period. Following the Notice of Study Commencement, several comments were received from members of the public as follows:

Concerns:

- Access modifications along the highway and property acquisition requirements.
- Intersection safety and posted speed limits along the highway.
- Proposed installation of traffic signals
- Delays in travel time.

Requests:

Traffic signals at the intersection of Highway 148 and Drive-In Road.

- Traffic signals at the intersection of Highway 148 and Greenwood Road.
- Turn lane at the intersection of Highway 148 and Old Mill Road.
- Extend the proposed two-way left turn lane further south along the highway.
- Incorporate active transportation facilities and improve adjacent trails.
- Improve pedestrian safety along the highway.
- Information on historical traffic incidents along the Highway.
- Installation of noise mitigation measures.

Consultation with affected owners will continue through design and construction for staging of the work and driveway impacts during construction.

3.2.6 EXTERNAL AGENCIES AND MUNICIPALITIES

At the onset of the study, the project team compiled a list of technical agencies and utilities that may have an interest in the study. These agencies were engaged on the project when the Notice of Study Commencement letters were sent to them. A summary of key interactions, decisions and concerns with external agencies and municipalities are provided below.

3.2.6.1 Key Interactions

- Correspondence with the City of Pembroke in July 2020 to clarify intersection design work and AODA compliance.
- Coordination meetings were held with utilities within the project limits to discuss relocation requirements in Spring and Summer 2021 including distribution of utility letters.
- Meetings were held with utilities in 2023 and 2024 to discuss relocation timelines and status.
- Meetings were held on June 22, 2021 and July 26, 2022 with the County of Renfrew, City of Pembroke
 and Township of Laurentian Valley to discuss the project status, streetlighting, storm sewers, watermains,
 sanitary sewers, property, construction staging and sidewalks along the corridor.
- Presentations were made to the Township of Laurentian Valley Council on April 20, 2020, April 20, 2021, August 26, 2022 and December 5 2023 to provide a project update, overview of proposed improvements, technical studies, design elements, watermain and sanitary sewer infrastructure, sidewalks, and next steps in the project.
- Information was provided to the Township of Laurentian Valley on March 5, 2024 for responses to Council
 inquires regarding project timelines, traffic signal warrants, public engagement, existing highway condition
 and French drains.

3.2.6.2 Key Decisions

- Meetings were held with the Township of Laurentian Valley on March 2, 2021 and March 8, 2021 to discuss design concepts for watermain and sanitary sewer infrastructure extensions within the project limits.
- A municipal update meeting was held on May 13, 2024 with representatives of the Country of Renfrew,
 City of Pembroke and Township of Laurentian Valley to present a general project update, traffic operations analysis, what to expect during construction, night work and recommendations for sidewalk buffers.

3.2.6.3 Key Concerns

- Request for cycling facilities along Highway 148 between Angus Campbell Drive and Drive-In Road from Discovery Routes Trails Organization.
- Requests for additional cycling facilities from Ottawa Valey Cycling and Active Transportation Alliance.

- The Township of Laurentian Valley requested MTO install traffic signals at Drive in Rd as soon as possible and potentially before the start of the main Highway 148 improvement work. MTO has agreed to install the temporary signals either in advance of the contract or first thing in the contract. MTO is waiting on the property acquisition and has started the expropriation process to secure the lands need to install the temporary signals.
- The Township of Laurentian Valley also requested MTO install traffic signals at the Greenwood Road intersection. These traffic signals are currently not warranted and will not be installed at this time. The ministry has agreed to monitor the intersection and will install traffic signals when they are warranted and when funding is available based on a prioritized review of other warranted traffic signals.

3.2.7 INDIGENOUS COMMUNITIES

Following the Notice of Study Commencement, the Project Team engaged with Curve Lake First Nation to incorporate the Michi Saagiig Oral History into the Stage 2 Archaeological Assessment. Additionally, a copy of the draft Stage 2 Archaeological Assessment was shared with Indigenous Communities in November 2020 prior to filing with MHSTCI, including Hiawatha First Nation who requested review of the report due to the project's proximity to the Ottawa River. Indigenous Communities who received a copy of the draft Stage 2 Archaeological Assessment included Curve Lake First Nation, Hiawatha First Nation, Algonquins of Pikwàkanagàn First Nation, Chippewas of Rama First Nation, Mississaugas of Scugog Island First Nation, Algonquins of Ontario, Beausoliel First Nation, Chippewas of Georgina Island First Nation and Alderville First Nation.

3.2.8 WELL WATER SURVEY PROGRAM

A water well survey and testing program was conducted to evaluate potential impacts/interferences to water wells within the 500 m step-out of the section of Highway 148 where construction dewatering may be required. The water well survey was completed by mail followed by property visits to willing well owners to complete baseline testing that consisted of a pumping test to estimate well yield, followed by the collection of groundwater samples for laboratory analysis. Two property owners participated in the Well Water Survey program. Construction dewatering activities associated with the Highway 148 improvements are not expected to impact these wells since dewatering is primarily expected at the southern extent of the Study Area at Culvert C5, as discussed in the 2024 DCR.

3.2.9 NOTICE OF DESIGN AND CONSTRUCTION REPORT SUBMISSION

The Design and Construction Report (DCR) was made available for a 30-day public comment period from October 10, 2024 to November 10, 2024. The Notice of DCR was sent via regular mail and e-mail to members of the public, property owners, businesses and technical agencies on the project Contact List the week of October 7, 2024.

Letters were sent to the Algonquins of Ontario, Algonquins of Pikwakanagan First Nation, Hiawatha First Nation, Curve Lake First Nation, Alderville First Nation, Mississaugas of Scugog Island First Nation, Williams Treaty First Nations Process Coordinator and Metis Nation of Ontario by MTO the week of September 30, 2024.

The Notice of DCR was published in the Pembroke Observer and News on October 10, 2024. Copies of the Notice of DCR Submission materials are provided in **Appendix A.**

3.2.10 NOTICE OF DESIGN AND CONSTRUCTION REPORT ADDENDUM

The DCR Addendum is to be available for a 30-day public comment period from September 25, 2025 to October 25, 2025. The Notice of DCR Addendum was distributed via regular mail and e-mail to members of the project Contact List, along with a brochure distributed by the Town, the week of September 15, 2025.

Letters were sent to the Algonquins of Ontario, Algonquins of Pikwàkanagàn First Nation, Hiawatha First Nation, Curve Lake First Nation, Alderville First Nation, Mississaugas of Scugog Island First Nation, Williams Treaty First Nations Process Coordinator and Metis Nation of Ontario by MTO the week of September 15, 2025.

The Notice of DCR was published in the Pembroke Observer and News on September 18, 2025. Copies of the Notice of DCR Addendum materials are provided in **Appendix A.**

4 Detailed Description of the Recommended Design

4.1 Major Features of the Proposed Work

The construction of the new sanitary sewer and forcemain from Robinson Lane to Drive-In Road was added to the original Highway 148 improvement project as requested by the Township of Laurentian Valley to provide services to additional properties located along Highway 148 south-east of Robinson Lane. The properties located along the Highway are zoned "commercial" according to the Township Official Plan, Schedule A-3. Due to the roadway profile of the Highway, this new Township sewer will flow towards the proposed pumping station to be constructed on the corner of Highway 148 and Drive-In Road (127 Drive-In Road). A forcemain will be installed under the Highway from Drive-In Road to Robinson Lane to transport wastewater from the proposed pumping station to the gravity sanitary sewer at Robinson Lane. As noted in Section 2.2, The sizing of the forcemain and pumping station considers a possible future extension of the sanitary sewer to Dairy Road and the connection of existing and future residential properties located along Drive-In Road, south of the Highway. The construction of the new sanitary sewer from Robinson Lane to Drive-In Road, which covers the current phase of potential sanitary sewer servicing is included as part of the Highway 148 improvement project. The pumping station is to be installed at 127 Drive-In Road and will include the following elements to be installed now and in the future::

- An entrance from Drive-in Road.
- Parking stalls for maintenance access.
- Raised concrete slab with a 1.8m diameter covered maintenance access, for the 8m deep maintenance chamber. Control panel, and venting pipe will also be on this concrete slab.
- Landscape screening to enhance visual appeal.
- Emergency alarm system to prevent overflow and ensure safety.
- Concrete pad to accommodate the future aboveground propane tanks (2 120 gallon) and backup generator.
- Keyed access to restrict access to all equipment.

The pumping station design for the site is included in **Appendix B**. The proposed pumping station was designed in accordance with the standards and guidelines outlined in the *Ministry of Environment Design Guidelines for Sewage Works* and in the *Ottawa Sewer Design Guidelines*. These guidelines include protection and reliability elements to manage unplanned emergency responses, potential impacts to customers, and general safety and public health.

For maintenance and reliability, the proposed system is a dual pump setup with one pump on standby, alternating after each start. A check valve will be installed to prevent the forcemain from draining back into the wet well. The model and pumping station specifications will be selected by the contractor and be in accordance with the design specification requirements.

The pump station size and associated pumps will accommodate the expected flows from the sanitary sewer extension, provide minimum velocity in the forcemain when the pump is activated, and the cycle time for pumping meets the Ministry or City of Ottawa guidelines. It is anticipated that the pump will activate up to 12

times per hour, to ensure that the maximum detention time is less than 30 minutes. The need for future adjustments or upgrades to the pumping station will be determined at a later date as required, based on associated changes or expansions to the sanitary sewer servicing.

In the case of station failure, the freeboard above the two pumps and the storage within the gravity sewers would allow for approximately 55 minutes of response time for field staff during peak flow under the currently planned peak flow conditions. As a standard precaution, the pumping station will be equipped with an emergency alarm system in case of malfunction and to prevent overflow, to notify the Township of an issue and allow actions to be taken, where appropriate. The backup generator will only be used in case of power failure. In the case of a rare emergency, pumper trucks may be used to keep the system functioning until normal operation is restored.

Where required, additional phases for the expansion or upgrades to the municipal sanitary sewer system and pumping station will be determined and carried out by the Township of Laurentian Valley or Renfrew County, and may involve commitments by land development proponents where appropriate. The environmental assessment process applicable for these works will be determined at that time and carried out in accordance with the Municipal Class Environmental Assessment Process.

4.2 Environmental Issues and Commitments

The property where the pumping station will be installed is 127 Drive-In Road, which formerly had a residence that has been previously removed. The closest property to the southeast is 1214 Pembroke Street East which is expected to be approximately 12 m away from the pumping station. To minimize potential impacts to natural, socio-economic, and cultural environments, and adjacent properties, the following mitigation measures are to be implemented as part of the construction and operation of the pumping station:

Operational Commitments:

Install a cedar hedge as a visual screen between the station and 1214 Pembroke Street East,
 Pembroke Street East and partially on Drive-in Road, while still maintaining access and in consideration for setbacks from pumping station components.

Construction Commitments:

- Apply best management practices for dust to suppress fugitive dust during construction.
- Timing for the work shall be in consideration of municipal noise by-laws.
- BMPs for noise and vibration as noted in the 2024 DCR shall include:
 - The Contractor will keep idling of construction equipment to a minimum and to maintain equipment in good working order to reduce noise from construction activities.
 - All equipment should be in good working condition and maintained to keep noise emissions low and comply with MECP Publication NPC-115 Construction Equipment.
 - If complaints regarding construction noise arise during construction, they will be investigated according to the provisions of the MTO Environmental Guide for Noise and dealt with by the Contractor.
- Construction activities including staging shall be restricted to work areas.
- To minimize impacts during construction where soils and materials may be transported off-site from
 disturbed areas, the contractor will implement appropriate sediment and erosion control (ESC)
 measures in accordance with OPSS and provincial standards. These measures are to be monitored
 for effectiveness and damage, making repairs and replacements in a timely manner. ESC measures
 are to be removed once the site has been stabilized and restored in accordance with seeding,
 planting and site plan requirements.

- It is anticipated that excess soil will not be generated during construction. However, if excess soils are generated during construction they shall first be reused on-site. Where that is not feasible, the excess soil is to be tested and based on those results may be transported to a suitable reuse site or disposed of in accordance with O.Reg. 406/19.
- The property has no watercourses, nor any significant, or sensitive vegetation and wildlife habitat.
 However, where existing vegetation removal is required to prepare the site and construct the facility, this should occur outside of the nesting window for Migratory Birds and bats.
- A Stage 1 and 2 archaeological assessment (AA) noted that are no significant archaeological concerns associated with the remainder of this project and it is recommended that the property be cleared of archaeological concerns. Notwithstanding the results and recommendations presented in Stage 1-2 AA, that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. Therefore, in the event that archaeological remains are found during subsequent construction and development activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified.

4.3 Summary of Environmental Effects, Proposed Mitigation and Commitments to Further Work

A summary of the environmental mitigation measures and commitments carried forward from the DCR are provided for reference in **Appendix C**. Site specific or activity specific commitments outlined for the pumping station works in 4.2 are provided in **Table 1**. The commitments from the DCR and those in this DCR addendum will be consolidated as the overall commitments to the contractor.

TABLE 1 - SUMMARY OF ENVIRONMENTAL MITIGATION MEASURES AND COMMITMENTS FOR THE PUMPING STATION

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
1	Terrestrial Ecosystems – Habitat Loss, Disturbance and Alteration	MECP; MNR	1.1.	Where feasible, vegetation removal should occur during winter months outside of the nesting window for Migratory Birds and outside of the active period for other reptiles, birds, and bats.
			1.2.	Construction activities should be limited to the work area, and if necessary, sensitive features should be demarcated if they are located immediately adjacent to the work zone.
			1.3.	Where necessary, surface protection measures should be implemented to minimize soil compaction.
			1.4.	Vehicles and construction equipment should be cleaned before going on site to minimize risk of introducing invasive species to the project. The Clean Equipment Protocol for Industry (Halloran et al., 2013) should be implemented throughout the duration of construction.
			1.5.	Dust control measures should be implemented for the suppression of fugitive dust.
			1.6.	Standard Best Management Practices for erosion and sediment control should be implemented.
			1.7.	An emergency and response management plan should be implemented to address the potential for spills.
			1.8	Consideration will be made to remove invasive phragmites in adjacent areas as part of the Highway 148 construction works, through implementation of a cutting or spraying program.
2	Terrestrial Ecosystems – Habitat Disturbance/ Avoidance and Changes in Behaviour	MECP; MNR	2.1.	Where feasible, the extent and duration of construction noise and lighting should be minimized during sensitive seasons (between April 1 and October 31) near natural areas such as wetlands and woodlands.
			2.2.	Construction activities including staging should be restricted to work areas.
			2.3.	Idling should be avoided and construction vehicles and machinery should be kept in good repair.
3	Terrestrial Ecosystems – Incidental Take and Injury	ake and Injury MNR 3.2 3.3	3.1.	If feasible, vegetation removal or other activities that could cause adverse impacts to a species or habitat should be completed during winter months (November – March) which is outside of the active period for reptiles, birds, and bats. If vegetation or tree removal cannot avoid the breeding bird and bat active periods, a biologist or specialist should conduct a pre-construction nest sweep to determine if active bird nests are present.
			3.2.	If feasible, storing stockpiles of soil or vegetation on site should be avoided as wildlife may be attracted to these areas. If not feasible, stockpiles should be covered to avoid providing wildlife habitat.
			3.3.	Visual inspections for wildlife should be conducted prior to the start of construction each day and regularly throughout the day during the active season. This will include a thorough walk-through of the work area and searching of brush piles, logs, or rock piles and equipment. Inspections shall be completed by Contractor staff trained in wildlife occurrences.
			3.4.	During the morning, vehicle circle checks (or any time a vehicle has been parked for longer than one hour) should be conducted and operators should check for wildlife under equipment and trucks.
			3.5.	If an active bird nest is found within the work area, at any time (including times outside of the typical nesting season), construction in the vicinity must cease until the young have fledged or the nest is otherwise abandoned. A setback from the nest should be identified with the Contract Administrator and the area demarcated to ensure work does not occur within the setback limits.

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
			3.6.	If SAR bird nests are observed at any of the culverts or other SAR are observed where work has the potential to impact the species, the Contract Administrator will be contacted, and a permit under the ESA or registration under Ontario Regulation 242/08 may be required.
			3.7	Any SAR observed should be reported to the Contract Administrator within 24 hours. Species should not be handled unless by a Biologist or specialist. Species should only be relocated when they are in harm's way and handling should be completed in accordance with the MNR (2015b) Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders.
			3.8	Wildlife protocols should be developed to educate workers of potential wildlife occurrences and measures to take in the event of potential encounters. SAR training should be provided to contractors and species information sheets should be provided to assist with identification and measures to take if encountered. SAR fact sheets for Blanding's Turtle, Bobolink and Eastern Meadowlark will be provided to the Contractor.
4	Groundwater	MECP	4.1	Best Management Practices and a spill contingency plan should be developed in relation to fuel handling and equipment maintenance during construction improvements to mitigate the risk of impacts to groundwater from such activities.
5	Waste and Excess Soils Management	MECP	5.1.	Soil testing to fulfill 0. Reg. 406/09
			5.2.	Include excess material generated from this work as part of the overall Excess Soil Destination Report and tracking of excess material.
6	Noise and Vibration	MECP; Township of LV	6.1.	The Contractor will keep idling of construction equipment to a minimum and to maintain equipment in good working order to reduce noise from construction activities.
		Renfrew County	6.2	All equipment should be in good working condition and maintained to keep noise emissions low and comply with MECP Publication NPC-115 Construction Equipment.
			6.3	If complaints regarding construction noise arise during construction, they will be investigated according to the provisions of the MTO Environmental Guide for Noise and dealt with by the Contractor.
7	Archaeology and Cultural Heritage	MHSTCI	7.1.	Construction activities and staging will avoid impacts to built and cultural heritage resources since work is primarily constrained to the MTO Right of Way and any landscaping alterations will be minor in nature and to restore the adjacent MTO Right of Way to reflect pre-construction conditions.
			7.2	In the event that archaeological remains are found during subsequent construction and development activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified.
8	Land Use	MHSTCI	8.1	Land use characteristics will remain mostly unchanged through the Highway 148 project with affected lands along the Highway 148 Right of Way restored to similar condition.
9	Construction Notifications	Township of LV Renfrew County	9.1	The Contractor will be required to adhere to a communication plan during construction and provide notification of construction activities to agencies, properties and businesses within the impacted area of construction
10	Erosion and Sediment Control	MECP; MNR	10.1	To minimize environmental impact during construction, it is important to limit soil exposure and stabilize it with vegetation as soon as possible. Existing vegetation should be preserved, slope grades and lengths should be limited,

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
				and sheet flow should be encouraged. Best Management Practices (BMPs) should be used and maintained until disturbed areas have stabilized.
11	Contaminant and Emergency Spill Response	MECP	11.1	Ensure all on-site hazardous materials are properly stored and located at least 30 m away from watercourses and other sensitive natural features, such as wetlands, including all handling and refueling activities.
			11.2	All on-site materials should be self-contained, maintained according to manufacturer's instructions and disposed of appropriately.
			11.3	Develop and implement an emergency response management and monitoring plan that includes measures for preventing and addressing potential spills and monitoring activities.
			11.4	Spill kits should be kept on-site and accessible at all times.
		11.6	All waste resulting from construction should be removed from the site and disposed of at an appropriate facility. This includes packaging (bags, wraps, boxes, ties, etc.), waste materials (excess fill, cement, grout, asphalt, or other substances), and ESC structures (silt fencing, flow checks, etc.) once permanent vegetation has established and ESC measures are no longer required.	

5 Permits and Approvals

5.1 Municipal

No municipal permitting is anticipated for this project. If night work is required during construction, the Contractor will be required to contact the Township of Laurentian Valley and provide advance notice to nearby properties.

5.2 Provincial

No Additional approvals are required for the sanitary pumping station. Within the overall project, the provincial approvals apply to select works as noted in the 2024 DCR.

5.3 Federal

No federal approvals or reviews were required for the sanitary pumping station. Within the overall project, the federal legislation apply to watercourses, which are subject to the Fisheries Act.

6 Monitoring

Environmental monitoring for the project will be completed by the Contract Administrator. They will confirm that the construction activities will be conducted in accordance with the DCR and DCR Addendum, the project environmental approvals and permits, as well as the contracting documents. Construction monitoring will occur during critical project work such removals, installation of new culverts and highway resurfacing operations. Monitoring measures for the overall project are described in the 2024 DCR. The following are specific to the pumping station:

- The inspection of implemented mitigation measures to verify that they were constructed or installed
 according to the approved specification. Where measures or designs are not in compliance with contract
 information, deficiencies will be noted and recommendations to fix them will be provided to the
 construction team.
- 2. The project area will be inspected to identify any locations where environmental impacts are evident as well as what preventative measures can be applied. These impacts may or may not have been identified prior to construction. The extent of these impacts should be noted and new recommendations on how to fix the issues will be provided to the construction team.
- 3. The further inspection of the implemented mitigation measures to see if they continue to be effective. If any problems or deficiencies in the operation of any mitigation measures are identified, they should be noted and brought forward to the construction team. Once brought forward, remedial measures or changes to the measures can be provided.
- 4. The project area and construction activities will be inspected for compliance with conditions of all permits, licenses and approvals granted from agencies for undertaking of the works.

Regular inspection of the work area is required to detect any wildlife that have entered the construction site. If wildlife is found in the area during construction, work in the vicinity will stop and the animal will be allowed to leave freely and harassment. Handling of animals to relocate them from the work area should only occur by a qualified individual if the animal will not voluntarily vacate the area, if it is not feasible to leave the animal in place, or if there is a risk of harm to the animal.

All SAR observations, including photographs and coordinates, should be reported to the MECP by email at SAROntario@ontario.ca.

APPENDIX A

Consultation Record

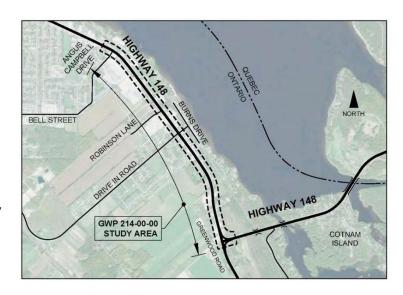


NOTICE OF STUDY COMMENCEMENT DETAILED DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT STUDY HIGHWAY 148 (PEMBROKE TO GREENWOOD ROAD), COUNTY OF RENFREW GWP-214-00-00

PROJECT OVERVIEW

The Ministry of Transportation (MTO) and their Consultant, Parsons Inc., have commenced the Detailed Design and Class Environmental (EA) Assessment Study for Highway 148 from approximately 200m west of Angus Campbell Drive in the City of Pembroke to approximately 300m east of the Greenwood Road Intersection.

This study carries forward the recommendations from the previously completed Transportation Environmental Study Report (TESR) published in June 2018. The recommendations from the study included pavement rehabilitation to address poor pavement performance as well as intersection and operational improvements, pedestrian and cycling safety improvements, highway drainage improvements and access management.



PROCESS

The study will follow the approved planning process for a Group B undertaking in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities* (2000), with the opportunity for public input throughout. One or more Design and Construction Reports (DCRs) will be prepared, with notices posted at that time to explain the review process and identify locations where the DCR(s) will be available for review. One (1) Public Information Centre (PIC) is anticipated for this study. The date, time and location of the PIC will be advertised in the Pembroke Observer & News and on the project website at www.hwy148.ca.

COMMENTS

External agency and public consultation will take place throughout the study. We are interested in receiving your input at any point during the study. If you wish to submit comments, or be added to the study mailing list, please contact any one of the project team members below:

Mr. Chris Belanger MTO Project Manager Ministry of Transportation 1355 John Counter Boulevard Postal Bag 4000 Kingston, Ontario, K7L 5A3 Telephone: 613-583-4573

Toll Free: 1-800-267-0295 Fax: 613-540-5106

E-Mail: chris.belanger@ontario.ca

Ms. Sonia Ahluwalia, PMC, C. Tech Consultant Project Manager Parsons Inc. 101-540 Bingemans Center Drive Kitchener, Ontario N2B 3X9

Telephone: 519-340-7401 Mobile: 647-962-2379

E-Mail: sonia.ahluwalia@parsons.com

Notice First Published: May 29, 2020

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act.* Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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.

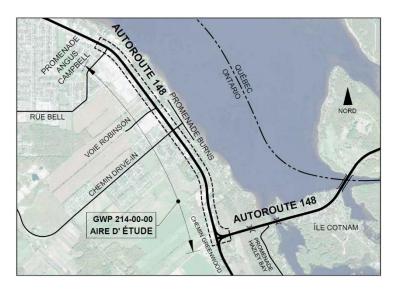


AVIS DE DÉBUT D'ÉTUDE CONCEPTION DÉTAILLÉE ET ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE ROUTE 148 (ENTRE PEMBROKE ET LE CHEMIN GREENWOOD), COMTÉ DE RENFREW GWP-214-00-00

VUE D'ENSEMBLE DU PROJET

Le ministère des Transports de l'Ontario (MTO) et son consultant, Parsons Inc., ont entamé la conception détaillée et l'étude d'évaluation environnementale (EE) de portée générale visant la route 148, et ce, à partir d'environ 200 mètres à l'ouest de la promenade Angus Campbell dans la Ville de Pembroke jusqu'à environ 300 mètres à l'est de l'intersection du chemin Greenwood.

Cette étude tient compte des recommandations du rapport d'étude environnementale sur les transports qui a été publié en juin 2018. Les recommandations de l'étude comprenaient la réhabilitation de la chaussée afin de remédier la mauvaise performance de la chaussée ainsi que des améliorations aux intersections et fonctions



opérationnelles de la route et de ses accès, des améliorations afin d'améliorer la sécurité pour les piétons et les cyclistes ainsi que des améliorations au système de drainage.

PROCESSUS

L'étude respectera le processus de planification approuvé pour les projets de groupe B, conformément au document Évaluation environnementale de portée générale pour les installations provinciales de transport (2000), qui permettra au public, de donner son avis pendant toute la durée du processus. Au moins un rapport de conception et de construction (RCC) sera préparé. Des avis seront publiés à ce moment-là pour expliquer le processus d'évaluation et indiquer les endroits où l'on pourra consulter le RCC. On prévoit organiser pour cette étude, une séance d'information publique (SIP) dont la date, l'heure et l'endroit seront annoncés dans le journal Pembroke Observer & News ainsi que sur le site Web du projet, à l'adresse www.autoroute148.ca.

COMMENTAIRES

Des consultations externes et publiques auront lieu à toutes les étapes du projet. Nous sommes intéressés à recevoir vos points de vue tout au long de l'étude. Si vous voulez formuler des commentaires ou si vous désirez faire ajouter votre nom à la liste d'envoi de l'étude, veuillez communiquer avec un des membres de l'équipe du projet ci-dessous :

M. Chris Bélanger Chargé de projets du MTO Ministère des Transports de l'Ontario 1355, boulevard John Counter Sac postal 4 000 Kingston (Ontario) K7L 5A3

Téléphone : 613 583-4573 Sans frais : 1 800 267-0295 Télécopieur : 613 540-5106

Courriel: chris.belanger@ontario.ca

Mme Sonia Ahluwalia, GPA, C Tech Chargée de projets de l'expert-conseil Parsons Inc.

101-540, promenade Bingemans Centre

Kitchener (Ontario) N2B 3X9 Téléphone : 519-340-7401 Cellulaire : 647-962-2379

Courriel: sonia.ahluwalia@parsons.com

Première date de parution de l'avis : 29 mai 2020



Les commentaires et les renseignements sont recueillis pour aider le MTO à répondre aux exigences de la Loi sur les évaluations environnementales de l'Ontario. Les renseignements seront recueillis conformément à la Loi sur l'accès à l'information et la protection de la vie privée. Exception faite des renseignements personnels, tous les commentaires seront versés au dossier public. Si vous avez des besoins en matière d'accessibilité pour participer à ce projet, veuillez communiquer avec l'un des membres de l'équipe du projet nommés ci-dessus.

NOTICE OF PROPOSED TRANSPORTATION ENVIRONMENTAL STUDY REPORT ADDENDUM FOR THE DETAILED DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT STUDY HIGHWAY 148 (PEMBROKE TO GREENWOOD ROAD), GWP-214-00-00

PROJECT OVERVIEW

The Ministry of Transportation (MTO) and their Consultant, Parsons Inc., are undertaking the Detailed Design and Class Environmental Assessment (EA) Study for Highway 148 from approximately 200m west of Angus Campbell Drive in the City of Pembroke to approximately 300m east of the Greenwood Road Intersection. The study is following the approved

BELL STREE

planning process for a Group B undertaking in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities* (2000), with the opportunity for public input throughout.

The Study includes pavement rehabilitation to address poor pavement performance as well as intersection and operational improvements, pedestrian and cycling safety improvements, highway drainage improvements, access management, and municipal infrastructure (sanitary sewer and watermain).

Additional information can be found on the project website at www.hwy148.ca.

TRANSPORTATION ENVIRONMENTAL STUDY REPORT ADDENDUM

An addendum to the Transportation Environmental Study Report (TESR) for the Preliminary Design and Class Environmental Assessment for Highway 148 from Pembroke to Greenwood Road, County of Renfrew, GWP 214-00-00, June 2018, has been prepared to document changes to the Preliminary Design such as additional property requirements and limited night work. A copy of the TESR Addendum will be available for a 30-day public comment period at www.hwy148.ca from October 7, 2022 to November 7, 2022. If you have any accessibility needs to review the TESR Addendum, please contact one of the project team members below.

GWP 214-00-00

STUDY AREA



Interested persons are encouraged to review the TESR Addendum and provide comments to the Project Team by November 7, 2022. To provide comments, or if you wish to be added to the study mailing list, visit the project website (www.hwy148.ca) or contact the following team members:

Mr. Chris Belanger MTO Project Manager Ministry of Transportation 1355 John Counter Boulevard Postal Bag 4000 Kingston, Ontario, K7L 5A3 Telephone: 613-583-4573 Toll Free: 1-800-267-0295

Fax: 613-540-5106

E-Mail: chris.belanger@ontario.ca

Ms. Sonia Ahluwalia, PMC, C.Tech Consultant Project Manager Parsons Inc. 100-1223 Michael Street North Ottawa, Ontario, K1J 7T2 Telephone: 519.340.7401

HIGHWAY 148

COTNAM ISLAND

E-Mail: sonia.ahluwalia@parsons.com

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require 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 contact information and full name.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements. This will ensure that the Ministry is able to efficiently review the request.

The request should be sent in writing or by email to:

Minster of the Environment, Conservation and Parks Ministry of Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, ON, M7A 2J3

Email: minister.mecp@ontario.ca

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

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

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act.* Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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 First Published: October 6, 2022



AVIS DE PROPOSITION D'ADDENDA AU RAPPORT D'ÉTUDE ENVIRONNEMENTALE SUR LES TRANSPORTS PORTANT SUR LA CONCEPTION DÉTAILLÉE ET L'ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE **AUTOROUTE 148 (DE PEMBROKE AU CHEMIN GREENWOOD), GWP-214-00-00**

APERÇU DU PROJET

Le ministère des Transports (MTO) et son consultant Parsons Inc. entreprennent la conception détaillée et l'étude d'évaluation environnementale (ÉE) de portée générale de l'autoroute 148 à partir d'environ 200 mètres à l'ouest de la promenade Angus Campbell dans la ville de Pembroke jusqu'à environ 300 mètres à l'est de l'intersection du chemin Greenwood. L'étude fait suite au processus de planification approuvé pour une entreprise du groupe B conformément à l'évaluation environnementale de portée générale pour les installations provinciales de transport (2000), qui comprend la possibilité de participation publique du début à la fin du projet.

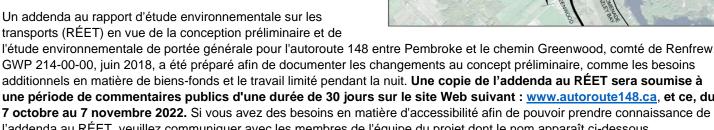
L'étude porte sur la réfection du revêtement pour régler le problème de faible rendement, ainsi que les améliorations au niveau de l'intersection et du fonctionnement, les améliorations au niveau de la sécurité des piétons et des cyclistes, les améliorations au niveau du drainage de l'autoroute, la gestion de l'accès, ainsi que les infrastructures municipales (égout sanitaire et conduite d'eau maîtresse).

Vous trouverez des renseignements additionnels sur le site Web du projet à l'adresse suivante : www.autoroute148.ca.

ADDENDA AU RAPPORT D'ÉTUDE ENVIRONNEMENTALE **SUR LES TRANSPORTS**

transports (RÉET) en vue de la conception préliminaire et de

l'étude environnementale de portée générale pour l'autoroute 148 entre Pembroke et le chemin Greenwood, comté de Renfrew, GWP 214-00-00, juin 2018, a été préparé afin de documenter les changements au concept préliminaire, comme les besoins additionnels en matière de biens-fonds et le travail limité pendant la nuit. Une copie de l'addenda au RÉET sera soumise à une période de commentaires publics d'une durée de 30 jours sur le site Web suivant : www.autoroute148.ca, et ce, du 7 octobre au 7 novembre 2022. Si vous avez des besoins en matière d'accessibilité afin de pouvoir prendre connaissance de l'addenda au RÉET, veuillez communiquer avec les membres de l'équipe du projet dont le nom apparaît ci-dessous.



COMMENTAIRES

On encourage les personnes intéressées à parcourir l'addenda au RÉET et à transmettre leurs commentaires à l'équipe du projet d'ici le 7 novembre 2022. Pour nous faire part de vos commentaires ou vous inscrire à la liste d'envoi de l'étude, rendezvous sur le site Web du projet à l'adresse suivante : www.autoroute148.ca ou communiquez avec les membres suivants de notre équipe :

M. Chris Belanger Chef de projet au MTO Ministère des Transports 1355, boulevard John Counter Sac postal 4000 Kingston (Ontario) K7L 5A3

Téléphone : 613 583-4573 Sans frais : 1 800 267-0295 Télécopieur: 613 540-5106 Courriel: chris.belanger@ontario.ca M^{me} Sonia Ahluwalia, PMC, tech c Experte-conseil et gestionnaire de projet Parsons Inc. 100-1223, rue Michael Nord Ottawa (Ontario) K1J 7T2

GWP 214-00-00

AIRE D' ÉTUDE

AUTOROUTE 148

ÎLE COTNAM

Téléphone : 519 340-7401 Courriel: sonia.ahluwalia@parsons.com

Il est possible de demander au ministère de l'Environnement, de la Protection de la nature et des Parcs de prendre un arrêté afin que le projet soit étudié plus à fond (c'est-à-dire exiger l'approbation d'une ÉE individuelle/exhaustive avant sa mise en œuvre) ou d'imposer des conditions (c'est-à-dire exiger d'autres études) uniquement pour le motif que l'arrêté peut empêcher ou atténuer les incidences préjudiciables sur les droits ancestraux ou issus de traités protégés par la Constitution des peuples autochtones. Les demandes pour d'autres motifs ne seront pas prises en compte. Le nom complet et les coordonnées du demandeur doivent apparaître sur les demandes.

Il est important de préciser le genre d'arrêté demandé (demande de conditions additionnelles ou demande d'une évaluation environnementale individuelle/exhaustive), la manière dont un arrêté peut empêcher ou atténuer les incidences préjudiciables, ainsi que toute information permettant d'appuyer les exposés. On s'assurera ainsi que le ministère est en mesure d'examiner la demande de manière efficiente.

On recommande d'envoyer la demande par écrit ou par courriel au :

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, rue Bay, 5e étage Toronto ON M7A 2J3

Courriel: minister.mecp@ontario.ca

Directeur, Direction des évaluations environnementales

Ministère de l'Environnement, de la Protection de la nature et des Parcs

135, avenue St. Clair Ouest, rez-de-chaussée

Toronto ON M4V 1P5

Courriel: EABDirector@ontario.ca

On recommande d'envoyer également une copie de la demande aux membres de l'équipe (MTO et Parsons) par la poste ou par courriel en utilisant les coordonnées qui apparaissent ci-dessus.

Les commentaires et l'information recueillis ont pour but d'aider le MTO à répondre aux exigences de la Loi sur les évaluations environnementales de l'Ontario. La collecte d'information se déroulera conformément à la Loi sur l'accès à l'information et la protection de la vie privée et à la Loi sur l'accès à l'information. À l'exception des renseignements personnels, tous les commentaires feront partie du domaine public. Si vous avez des besoins en matière d'accessibilité afin de pouvoir participer à ce projet, veuillez communiquer avec les membres de l'équipe du projet dont le nom apparaît ci-dessus.

Date de la première publication de l'avis : Le 6 octobre 2022



NOTICE OF PUBLIC INFORMATION CENTRE FOR THE DETAILED DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT STUDY HIGHWAY 148 (PEMBROKE TO GREENWOOD ROAD), GWP-214-00-00

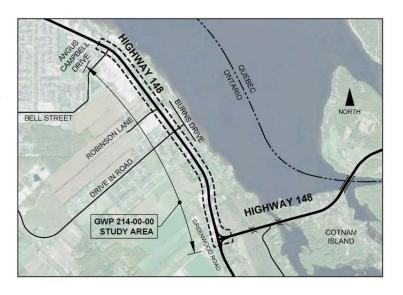
PROJECT OVERVIEW

The Ministry of Transportation (MTO) and their Consultant, Parsons Inc., are undertaking the Detailed Design and Class Environmental Assessment (EA) Study for Highway 148 from approximately 200m west of Angus Campbell Drive in the City of Pembroke to approximately 300m east of the Greenwood Road Intersection. The study is following the approved planning process for a Group B undertaking in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities* (2000), with the opportunity for public input throughout.

THE RECOMMENDED PLAN

This study builds upon the previously completed Transportation Environmental Study Report (TESR) published in June 2018. The Study includes pavement rehabilitation to address poor pavement performance as well as intersection and operational improvements, pedestrian and cycling safety improvements, highway drainage improvements, access management, and municipal infrastructure (sanitary sewer and watermain).

Additional information can be found on the project website at www.hwy148.ca.



PUBLIC INFORMATION CENTRE

One (1) Public Information Centre (PIC) is planned for this Study to provide an overview of the design progress, seek public input, and describe the next steps. The PIC will be held at the following location and time:

Date: November 3, 2022 **Time:** 4:00pm to 9:00pm

Location: Best Western Pembroke Inn & Conference Centre, 1 International Drive, Pembroke, ON, K8A 6W5

The PIC will consist of an informal drop-in centre with display boards. MTO staff and their consultant will be available to provide responses to any questions. Following the PIC, information and display boards will be posted on the project website at www.Hwy148.ca.

COMMENTS

We look forward to your input and feedback. To provide comments, or if you wish to be added to the Study mailing list, please visit the project website at www.hwy148.ca or contact the following team members:

Mr. Chris Belanger MTO Project Manager Ministry of Transportation 1355 John Counter Boulevard Postal Bag 4000 Kingston, Ontario, K7L 5A3

Telephone: 613-583-4573 Toll Free: 1-800-267-0295

Fax: 613-540-5106

E-Mail: chris.belanger@ontario.ca

Ms. Sonia Ahluwalia, PMC, C.Tech Consultant Project Manager Parsons Inc. 100-1223 Michael Street North Ottawa, Ontario, K1J 7T2

Telephone: 519.340.7401

E-Mail: sonia.ahluwalia@parsons.com

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act.* Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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 First Published: October 13, 2022



AVIS DE LA SÉANCE D'INFORMATION PUBLIQUE SUR LA CONCEPTION DÉTAILLÉE ET L'ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE

AUTOROUTE 148 (DE PEMBROKE AU CHEMIN GREENWOOD), GWP-214-00-00

APERÇU DU PROJET

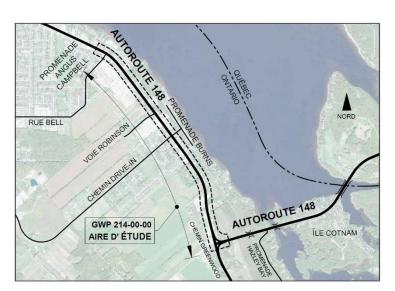
Le ministère des Transports (MTO) et son consultant Parsons Inc. entreprennent la conception détaillée et l'étude d'évaluation environnementale (ÉE) de portée générale de l'autoroute 148 à partir d'environ 200 mètres à l'ouest de la promenade Angus Campbell dans la ville de Pembroke jusqu'à environ 300 mètres à l'est de l'intersection du chemin Greenwood. L'étude fait suite au processus de planification approuvé pour une entreprise du groupe B conformément à l'évaluation environnementale de portée générale pour les installations provinciales de transport (2000), qui comprend la possibilité de participation publique du début à la fin du projet.

PLAN RECOMMANDÉ

Cette étude repose sur le rapport d'étude environnementale des transports (RÉET) publié en juin 2018. L'étude porte sur la réfection du revêtement pour régler le problème de faible rendement, ainsi que les améliorations au niveau de l'intersection et du fonctionnement, les améliorations au niveau de la sécurité des piétons et des cyclistes, les améliorations au niveau du drainage de l'autoroute, la gestion de l'accès, ainsi que les infrastructures municipales (égout sanitaire et conduite d'eau maîtresse).

Vous trouverez des renseignements additionnels sur le site Web du projet à l'adresse suivante :

www.autoroute148.ca.



SÉANCE D'INFORMATION PUBLIQUE

Une (1) séance d'information publique (SIP) est prévue dans le cadre de cette étude afin de donner un aperçu de l'évolution du processus de conception, recueillir les commentaires du public et décrire les prochaines étapes. La SIP aura lieu à l'endroit et au moment suivants :

Date: Le 3 novembre 2022 Heures: De 16 h à 21 h

Endroit: Best Western Pembroke Inn & Conference Centre, 1 International Drive, Pembroke, ON, K8A 6W5

La SIP sera une rencontre informelle au cours de laquelle les participants pourront prendre connaissance de divers panneaux d'affichage. Le personnel du MTO et le consultant du ministère se trouveront sur place afin de répondre à vos questions. Suivant la SIP, il sera possible de consulter les panneaux d'information et d'affichage sur le site Web du projet à l'adresse suivante : www.autoroute148.ca.

COMMENTAIRES

Nous sommes impatients de connaître vos commentaires et vos réactions. Pour nous faire part de vos commentaires ou vous inscrire à la liste d'envoi de l'étude, rendez-vous sur le site Web du projet à l'adresse www.autoroute148.ca ou communiquez avec les membres suivants de notre équipe :

M. Chris Belanger Chef de projet au MTO Ministère des Transports 1355, boulevard John Counter Sac postal 4000

Kingston (Ontario) K7L 5A3

Téléphone : 613 583-4573 Sans frais : 1 800 267-0295 Télécopieur : 613 540-5106

Courriel: chris.belanger@ontario.ca

M^{me} Sonia Ahluwalia, PMC, tech c Experte-conseil et gestionnaire de projet

Parsons Inc.

100-1223, rue Michael Nord Ottawa (Ontario) K1J 7T2 Téléphone : 519 340-7401

Courriel: sonia.ahluwalia@parsons.com

Les commentaires et l'information recueillis ont pour but d'aider le MTO à répondre aux exigences de la *Loi sur les* évaluations environnementales de l'Ontario. La collecte d'information se déroulera conformément à la *Loi sur l'accès à l'information et la protection de la vie privée* et à la *Loi sur l'accès à l'information*. À l'exception des renseignements personnels, tous les commentaires feront partie du domaine public. Si vous avez des besoins en matière d'accessibilité afin de pouvoir participer à ce projet, veuillez communiquer avec les membres de l'équipe du projet dont le nom apparaît ci-dessus.

Date de la première publication de l'avis : Le 13 octobre 2022



MINISTRY OF TRANSPORTATION

Highway 148 Detail Design and Class Environmental Assessment Study (GWP 214-00-00)

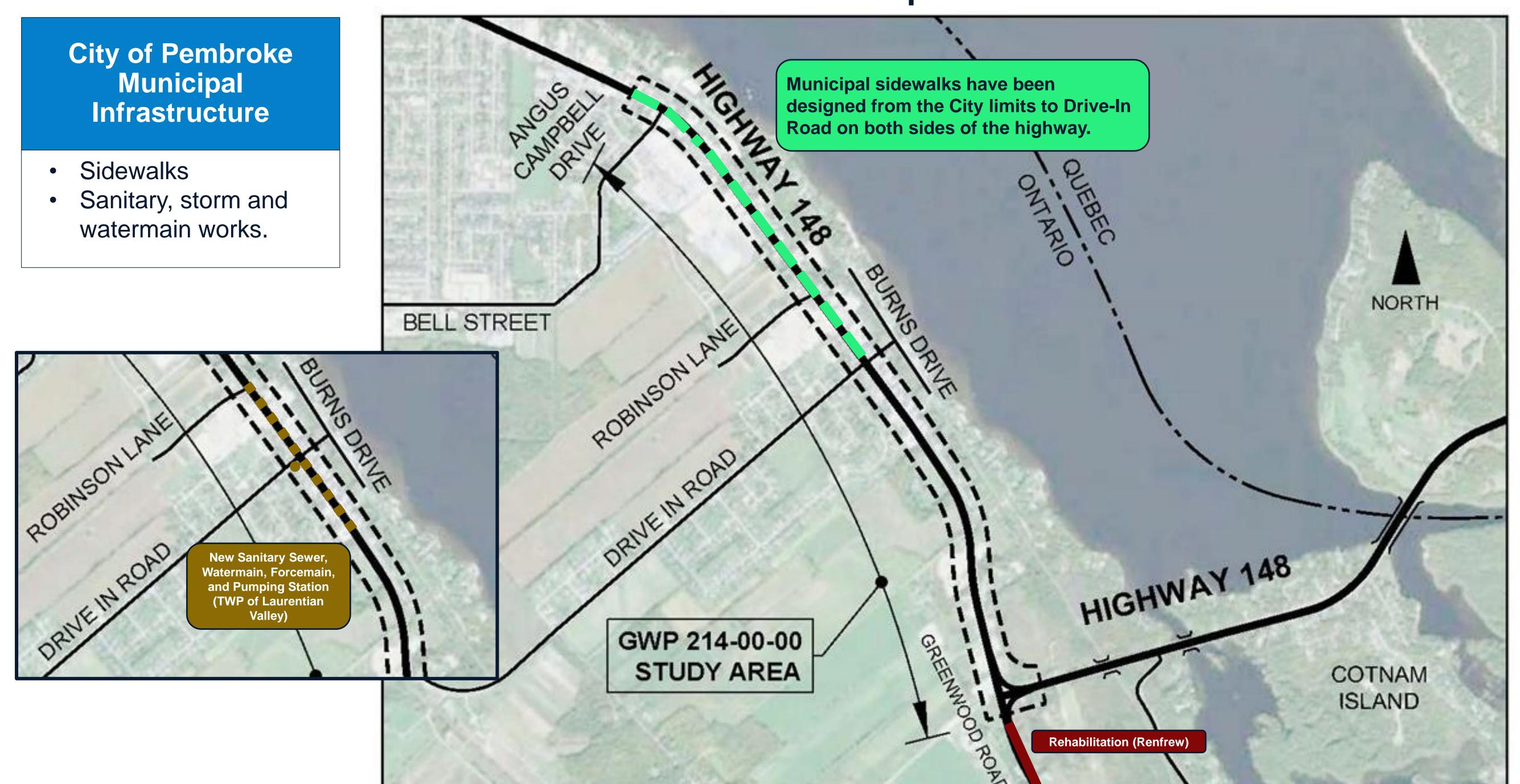


Public Information Centre November 3, 2022

MUNICIPAL INFRASTRUCTURE

- •The Ministry is working with the Township of Laurentian Valley, the City of Pembroke, and the County of Renfrew to collaborate on the installation of watermain, sanitary sewer, sidewalks, and additional pavement rehabilitation at various locations along the corridor.
- These works are being coordinated with the municipalities and are currently under review by the municipalities. The work is subject to the municipalities deciding to proceed with their work.

Overview of Municipal Infrastructure Works



Township of Laurentian Valley Municipal Infrastructure

- Sidewalks
- New Sanitary sewer, watermain, forcemain
- New pumping station at Vacant Property parcel at 127 Drive-In Road.

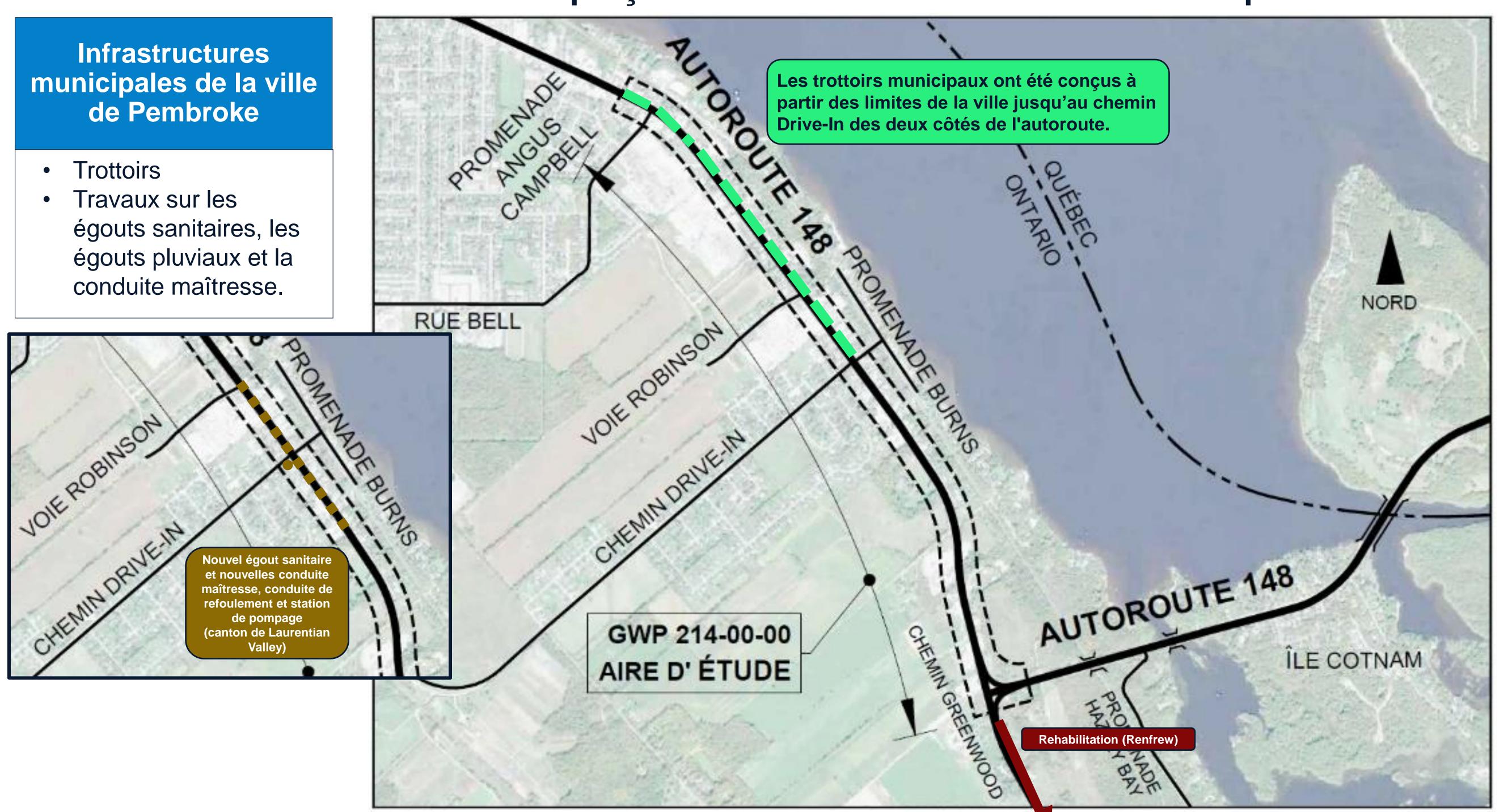
County of Renfrew Municipal Infrastructure

 Rehabilitation of Greenwood Road from Highway 148 to approximately 1 kilometre south of Highway 148.

INFRASTRUCTURES MUNICIPALES

- Le ministère travaille avec le canton de Laurentian Valley, la ville de Pembroke et le comté de Renfrew pour collaborer à l'installation d'une conduite maîtresse, d'un égout sanitaire et de trottoirs, ainsi qu'à la réalisation de travaux de réhabilitation supplémentaires de la chaussée à divers endroits le long du corridor.
- Ces travaux sont coordonnés avec les municipalités et sont actuellement étudiés par celles-ci. La réalisation des travaux dépendra de la décision des municipalités à cet égard.

Aperçu des travaux d'infrastructures municipales



Infrastructures municipales du Canton de Laurentian Valley

- Trottoirs
- Nouveau égout sanitaire et nouvelles conduite maîtresse conduite de refoulement
- Nouvelle station de pompage à la parcelle de terrain vacante située au 127 chemin Drive-In

Infrastructures municipales du comté de Renfrew

 Réfection du chemin Greenwood de la route 148 à environ 1 kilomètre au sud de la route 148.

Notice of Completion, Design and Construction Report

For the Detail Design and Class Environmental Assessment Study Highway 148 (Pembroke To Greenwood Road), GWP-214-00-00

PROJECT OVERVIEW

The Ministry of Transportation (MTO) and their Consultant, Parsons Inc., have completed the *Design and Construction Report* (DCR) for the Detail Design and Class Environmental Assessment (EA) Study for Highway 148 from approximately 200 m west of Angus Campbell Drive in the City of Pembroke to approximately 300 m east of the Greenwood Road Intersection.

The Recommended Plan includes pavement rehabilitation to address poor pavement performance as well as intersection and operational improvements, pedestrian and cycling safety improvements, highway drainage improvements, access management, and municipal infrastructure (sanitary sewer and watermain).

Additional information can be found on the project website at www.hwy148.ca.

ENVIRONMENTAL ASSESSMENT PROCESS

The Study followed the approved planning process for a Group B undertaking in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities* (2000), with the opportunity for public input throughout. The DCR outlines the environmental assessment process followed, consultation, impacts and mitigation measures, design details, and contract specifications for construction.

The purpose of this notice is to initiate the public comment period for the DCR. We are interested in hearing your comments regarding this Study and the DCR. A copy of the DCR will be available for a 30-day public comment period at www.hwy148.ca and at the following locations during normal business hours from October 10, 2024 to November 10, 2024.

Township of Laurentian Valley 460 Witt Road, Clerk's Office Pembroke, ON K8A 6W5 County of Renfrew 9 International Drive, Clerk's Office Pembroke, ON K8A 6W5 Pembroke Public Library 237 Victoria Street Pembroke, ON K8A 4K5

If you have any accessibility needs to review the DCR, please contact one of the project team members below.

COMMENTS

Interested persons are encouraged to review the DCR and provide comments to the Project Team by **November 10**, **2024**. To provide comments, or if you wish to be added to the study mailing list, visit the project website (www.hwy148.ca) or contact the following team members:

Mr. Chris Belanger
MTO Project Manager
Ministry of Transportation
1355 John Counter Boulevard,
Postal Bag 4000
Kingston, ON K7L 5A3
tel: 613-583-4573
e-mail: chris.belanger@ontario.ca

Ms. Sonia Ahluwalia, PMC, C.Tech Consultant Project Manager Parsons Inc. 100-1223 Michael Street North Ottawa, ON K1J 7T2 tel: 647-962-2379 e-mail: sonia.ahluwalia@parsons.com

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require 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 contact information and full name.



Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements. This will ensure that the Ministry is able to efficiently review the request.

The request should be sent in writing or by email to:

Minster of the Environment, Conservation and Parks Ministry of Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, ON M7A 2J3 e-mail: minister.mecp@ontario.ca

Director, Environmental Assessment BranchMinistry of Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor

Toronto, ON M4V 1P5

e-mail: EABDirector@ontario.ca

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

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act.* Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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 FIRST PUBLISHED: SEPTEMBER 30, 2024



Avis d'achèvement, rapport de conception et de construction

Sur la conception détaillée et l'étude d'évaluation environnementale de portée générale de l'autoroute 148 (de pembroke au chemin greenwood), GWP-214-00-00

APERÇU DU PROJET

Le ministère des Transports (MTO) et son consultant Parsons Inc. ont terminé la rédaction du rapport de conception et de construction (DCR, pour *Design and Construction Report*) pour la conception détaillée et l'étude d'évaluation environnementale (ÉE) de portée générale de l'autoroute 148 à partir d'environ 200 mètres à l'ouest de la promenade Angus Campbell dans la ville de Pembroke jusqu'à environ 300 mètres à l'est de l'intersection du chemin Greenwood.

Le plan recommandé comprend la réfection du pavage afin d'augmenter sa performance, l'amélioration des intersections et du fonctionnement général, une sécurité accrue pour les piétons et les cyclistes, des améliorations au niveau du drainage de l'autoroute, de la gestion des accès, ainsi que des infrastructures municipales (égout sanitaire et aqueduc).

Vous trouverez des renseignements additionnels sur le site Web du projet à l'adresse suivante : www.autoroute148.ca.

PROCESSUS D'ÉVALUATION ENVIRONNEMENTALE

L'étude a suivi le processus de planification approuvé pour un projet du groupe B conformément à l'évaluation environnementale de portée générale pour les routes provinciales (2000), qui prévoit la possibilité de participation publique du début à la fin du projet. Le DCR décrit le processus d'évaluation environnementale suivi, la consultation, les impacts et les mesures d'atténuation, les détails de conception et les spécifications contractuelles pour la construction.

Le but de cet avis est de lancer la période de commentaires publics sur le DCR. Nous souhaitons entendre vos commentaires concernant cette étude et le DCR. Une copie du DCR sera disponible pour une période de commentaires publics de 30 jours sur www.autoroute148.ca et aux endroits suivants aux heures d'ouverture habituelles du 10 octobre 2024 au 10 novembre 2024.

Canton de Laurentian Valley 460 route Witt.

460 route Witt, bureau du greffier, Pembroke (Ontario) K8A 6W5 Comté de Renfrew 9 route International, bureau du greffier, Pembroke (Ontario) K8A 6W5 Bibliothèque publique de Pembroke 237, rue Victoria Pembroke (Ontario) K8A 4K5

Si vous avez des besoins en matière d'accessibilité pour consulter le DCR, veuillez contacter l'un des responsables du projet ci-dessous.

COMMENTAIRES

Les personnes intéressées sont encouragées à consulter le DCR et à fournir des commentaires à l'équipe de projet avant le **10 novembre 2024**. Pour nous faire part de vos commentaires ou vous inscrire à la liste d'envoi de l'étude, rendez-vous sur le site Web du projet à l'adresse www.autoroute148.ca ou communiquez avec l'un des responsables du projet :

M. Chris Belanger

Chef de projet au MTO Ministère des Transports 1355, boulevard John Counter Sac postal 4000 Kingston (Ontario) K7L 5A3 tél.: 613 583-4573

courriel: chris.belanger@ontario.ca

Mme Sonia Ahluwalia, PMC, C. Tech

Experte-conseil et gestionnaire de projet Parsons Inc.

100-1223, rue Michael Nord Ottawa (Ontario) K1J 7T2

tél.: 647 962-2379

courriel: sonia.ahluwalia@parsons.com

De plus, une demande peut être présentée au ministère de l'Environnement, de la Protection de la nature et des Parcs pour obtenir une ordonnance exigeant un niveau d'étude plus élevé (c'est-à-dire exigeant une approbation d'évaluation environnementale individuelle ou complète avant de pouvoir procéder) ou l'imposition de conditions (p. ex. exiger des études plus approfondies), uniquement si l'ordonnance demandée peut prévenir, atténuer ou éliminer les impacts sur les droits ancestraux et issus de traités protégés par la Constitution. Les demandes pour d'autres motifs ne seront pas prises en compte. Les demandes doivent inclure les coordonnées du demandeur et son nom complet.



Les demandes doivent préciser le type d'ordonnance demandée (demande de conditions supplémentaires ou demande d'évaluation environnementale individuelle ou complète), la manière dont une ordonnance peut prévenir, atténuer ou éliminer les impacts négatifs potentiels, ainsi que toute information à l'appui de ces déclarations. Cela permettra au ministère d'examiner efficacement la demande.

La demande doit être adressée par écrit ou par courriel à :

Ministre de l'Environnement, de la Protection de la nature et des Parcs

Ministère de l'Environnement, de la Conservation et des Parcs

777, rue Bay, 5° étage Toronto (Ontario) M7A 2J3

courriel: minister.mecp@ontario.ca

Directeur, Direction de l'évaluation environnementale Ministère de l'Environnement, de la Protection de la nature et des Parcs

135, avenue St. Clair Ouest, 1er étage

Toronto (Ontario) M4V 1P5

courriel: EABDirector@ontario.ca

Une copie de la demande doit également être envoyée aux membres de l'équipe (MTO et Parsons) par courrier ou par courriel aux coordonnées fournies ci-dessus.

Les commentaires et l'information recueillis ont pour but d'aider le MTO à répondre aux exigences de la *Loi sur les évaluations environnementales de l'Ontario*. La collecte d'information se déroulera conformément à la *Loi sur l'accès à l'information et la protection de la vie privée* et à la *Loi sur l'accès à l'information*. À l'exception des renseignements personnels, tous les commentaires feront partie du domaine public. Si vous avez des besoins en matière d'accessibilité afin de pouvoir participer à ce projet, veuillez communiquer avec les membres de l'équipe du projet dont le nom apparaît ci-dessus.

DATE DE LA PREMIÈRE PUBLICATION DE L'AVIS : 30 SEPTEMBRE 2024



Notice of Completion, Design and Construction Report Addendum

For the Detail Design and Class Environmental Assessment Study Highway 148 (Pembroke to Greenwood Road) – Sanitary Pumping Station GWP-214-00-00

PROJECT OVERVIEW

The Ministry of Transportation (MTO) and their Consultant, Parsons Inc., have completed the Design and Construction Report (DCR) Addendum for the Detail Design and Class Environmental Assessment (EA) Study for Highway 148 from approximately 200 m west of Angus Campbell Drive in the City of Pembroke to approximately 300 m east of the Greenwood Road Intersection.

The Addendum addresses updates to the Recommended Plan, to include the addition of a new sanitary pumping station at 127 Drive-In Road, required to support municipal infrastructure improvements along Highway 148. This is a vital component of the previously planned Highway 148 improvements presented in the DCR filed for public comment October 10, 2024, which can be found on the project website at www.hwy148.ca.

ENVIRONMENTAL ASSESSMENT PROCESS

The Detail Design followed the approved planning process for a Group B undertaking in accordance with the *Class Environmental Assessment for Provincial Transportation Facilities* (2000), with the opportunity for public input throughout. The DCR Addendum outlines the environmental assessment process followed, consultation, impacts and mitigation measures, design details, and contract specifications for construction.

The purpose of this notice is to initiate the public comment period for the DCR Addendum. A copy of the DCR Addendum will be available for a 30-day public comment period at www.hwy148.ca and at the following locations during normal business hours from September 25, 2025 to October 25, 2025.

Township of Laurentian Valley
460 Witt Road,
Clerk's Office
Pembroke, ON K8A 6W5

County of Renfrew
9 International Drive,
Clerk's Office
Pembroke, ON K8A 6W5

Pembroke Public Library 237 Victoria Street Pembroke, ON K8A 4K5

If you have any accessibility needs to review the DCR Addendum, please contact one of the project team members.

COMMENTS

Interested persons are encouraged to review the DCR Addendum and provide comments to the Project Team by October 25, 2025. To provide comments, or if you wish to be added to the study mailing list, visit the project website (www.hwy148.ca) or contact the following team members:

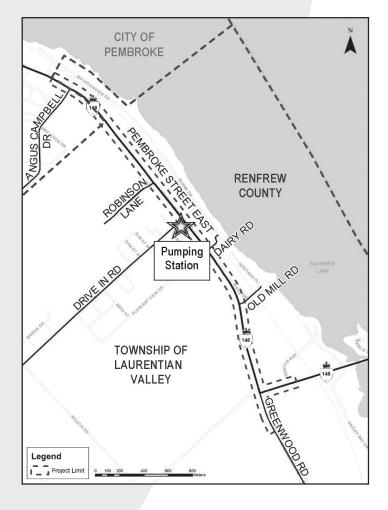
Brendan Bureau, P.Eng. MTO Project Manager Ministry of Transportation 1355 John Counter Boulevard, Postal Bag 4000 Kingston, ON K7L 5A3 tel: 613-449-2242

tel: 613-449-2242 e-mail: Brendan.Bureau@ontario.ca Jan Wieczorek, P.Eng.
Consultant Project Manager
Parsons Inc.
625 Cochrane Drive, Suite 300
Markham, ON L3R 9R9
tel: 905-917-3251
e-mail: Jan.Wieczorek@parsons.com

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require 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 contact information and full name.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements. This will ensure that the Ministry is able to efficiently review the request.

NOTICE FIRST PUBLISHED: SEPTEMBER 18, 2025



The request should be sent in writing or by email to:

Minister of the Environment, Conservation and Parks Ministry of Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, ON M7A 2J3 e-mail: minister.mecp@ontario.ca Director, Environmental Assessment Branch Ministry of Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, ON M4V 1P5 e-mail: EABDirector@ontario.ca

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

Comments and information are being collected to assist the MTO in meeting the requirements of the Ontario *Environmental Assessment Act.* Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Access to Information 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.



Avis de finalisation, addenda au rapport de conception et de construction

Pour la conception détaillée et l'étude d'évaluation environnementale de portée générale de l'autoroute 148 (de Pembroke au chemin Greenwood) - station de pompage sanitaire GWP-214-00-00

APERÇU DU PROJET

Le ministère des Transports (MTO) et son expert-conseil, Parsons Inc., ont terminé l'addenda au rapport de conception et de construction (RCC) pour la conception détaillée et l'étude d'évaluation environnementale (EE) de portée générale pour l'autoroute 148 à partir d'environ 200 mètres à l'ouest de la promenade Angus Campbell dans la Ville de Pembroke jusqu'à environ 300 mètres à l'est de l'intersection du chemin Greenwood.

L'addenda traite des mises à jour du plan recommandé, y compris l'ajout d'une nouvelle station de pompage sanitaire au 127, chemin Drive-In, nécessaire pour soutenir l'amélioration de l'infrastructure municipale le long de l'autoroute 148. Il s'agit d'un élément essentiel des améliorations précédemment prévues à l'autoroute 148 présentées dans le RCC déposé pour commentaires publics le 10 octobre 2024, qui peut être consulté sur le site Web du projet à www.hwy148.ca.

PROCESSUS D'ÉVALUATION ENVIRONNEMENTALE

La conception détaillée a suivi le processus de planification approuvé pour les projets de groupe « B », conformément à l'Évaluation environnementale de portée générale pour les routes provinciales (2000), avec la possibilité pour le public de fournir des commentaires. L'addenda au RCC décrit le processus d'évaluation environnementale suivi, la consultation, les impacts et les mesures d'atténuation, les détails de conception et les spécifications contractuelles pour la construction.

Le présent avis a pour but d'amorcer la période de commentaires du public sur l'addenda au RCC. Une copie de l'addenda au RCC sera mise à la disposition du public pour une période de commentaires de 30 jours à www.hwy148.ca et aux endroits suivants pendant les heures normales d'ouverture, du 25 septembre 2025 au 25 octobre 2025.

Canton de Laurentian Valley 460, chemin Witt, Bureau du greffier

Comté de Renfrew 9, promenade International, Bureau du greffier Pembroke (Ontario) K8A 6W5 Pembroke (Ontario) K8A 6W5 **Bibliothèque** publique de Pembroke 237, rue Victoria Pembroke (Ontario) K8A 4K5

Si vous avez des besoins en matière d'accessibilité pour consulter l'addenda au RCC, veuillez communiquer avec l'un des membres de l'équipe du projet.

COMMENTAIRES

Les personnes intéressées sont invitées à consulter le RCC et à fournir leurs commentaires au plus tard le 25 octobre 2025. Si vous souhaitez envoyer des commentaires ou être ajouté à la liste d'envoi de l'étude, visitez le site Web du projet (www.hwy148.ca) ou communiquez avec les membres suivants de l'équipe :

Brendan Bureau, ing.

Chef de projet du ministère des Transports Ministère des Transports 1355, boul. John Counter, sac postal 4000 Kingston (Ontario) K7L 5A3 téléphone: 613 449-2242 courriel: Brendan.Bureau@ontario.ca

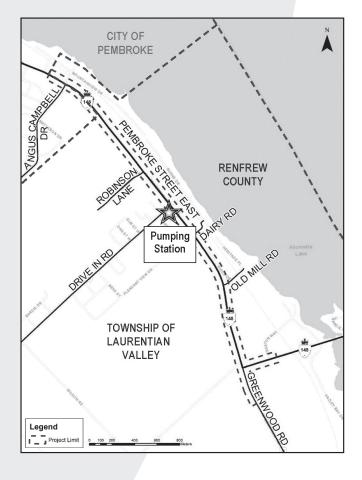
Jan Wieczorek, ing.

Chargé de projet de firme de conseils Parsons Inc. 625, route Cochrane, bureau 300 Markham (Ontario) L3R 9R9 téléphone: 905 917-3251 courriel: Jan.Wieczorek@parsons.com

En outre, il est possible de demander au ministère de l'Environnement, de la Protection de la nature et des Parcs un ordre exigeant un niveau d'étude plus élevé (c'est-à-dire exigeant l'approbation d'une évaluation environnementale individuelle ou complète avant de pouvoir aller de l'avant), ou l'imposition de conditions (p. ex., exiger des études supplémentaires), uniquement sur le motif que l'ordre demandé pourrait prévenir, atténuer ou corriger les effets néfastes sur les droits des Autochtones bénéficiant d'une protection constitutionnelle ou sur des droits conférés par traité. Par conséquent, les demandes présentées s'appuyant sur d'autres motifs ne seront pas prises en compte. Les demandes doivent comprendre les coordonnées et le nom complet du demandeur.

Les demandes doivent préciser le type d'ordre demandé (demande de conditions supplémentaires ou d'évaluation environnementale individuelle ou complète), la façon dont l'arrêté peut prévenir, atténuer ou corriger les effets néfastes possibles, et toute information à l'appui des déclarations. Ainsi, le ministère sera en mesure d'examiner la demande de façon efficace.

PREMIÈRE PUBLICATION DE L'AVIS: 18 SEPTEMBRE 2025



La demande devrait être envoyée par écrit ou par courriel à l'adresse suivante :

Ministre de l'Environnement, de la Protection de la nature et des Parcs

courriel: minister.mecp@ontario.ca

Ministère de l'Environnement, de la Protection de la nature et des Parcs 777, rue Bay, 5e étage Toronto (Ontario) M7A 2J3

Directeur, Division des évaluations environnementales

Ministère de l'Environnement, de la Protection de la nature et des Parcs 135, avenue St. Clair Ouest, 1er étage Toronto (Ontario) M4V 1P5 courriel: EABDirector@ontario.ca

Une copie de la demande doit également être envoyée aux membres de l'équipe (MTO et Parsons) par la poste ou par courriel aux coordonnées fournies ci-dessus.

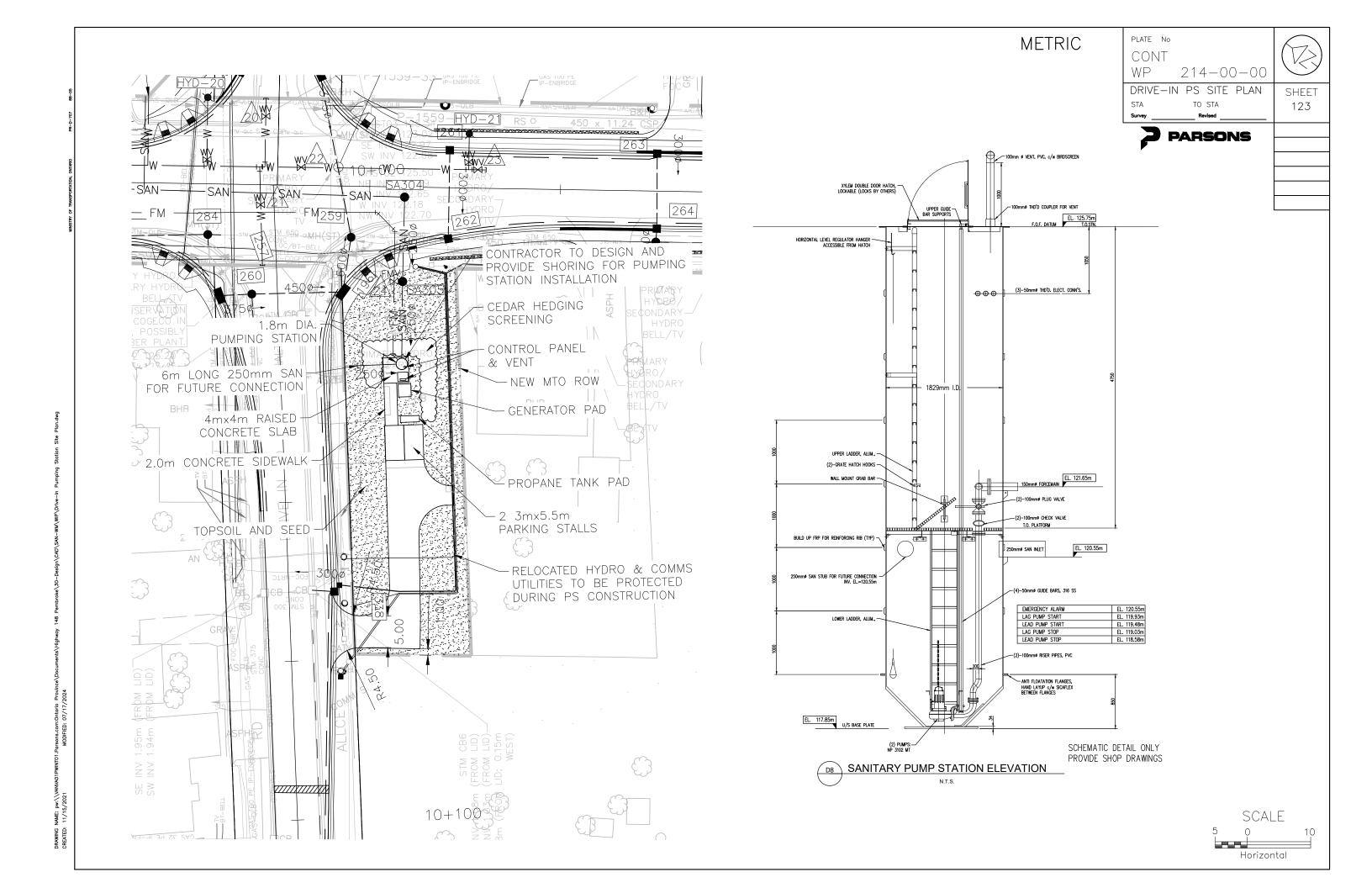
Nous recueillons les commentaires relatifs à ce projet pour aider le ministère des Transports à respecter les exigences de la Loi sur les évaluations environnementales. L'information sera recueillie conformément à la Loi sur l'accès à l'information et la protection de la vie privée et à la Loi sur l'accès à l'information. Tous les commentaires, à l'exception des renseignements personnels, feront partie du dossier public. Si vous avez des exigences en matière d'accessibilité pour participer à ce projet, veuillez prendre contact avec l'un des membres de l'équipe du projet nommés ci-dessus.



APPENDIX B

Recommended Design for Pumping Station at 127 Drive-In Road





APPENDIX C

Summary of Environmental Concerns and Commitments DCR (2024)



SUMMARY OF ENVIRONMENTAL MITIGATION MEASURES AND COMMITMENTS - DCR 2024

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
1	Terrestrial Ecosystems – Habitat Loss, Disturbance and Alteration	MECP; MNR	1.1.	Where feasible, vegetation removal should occur during winter months outside of the nesting window for Migratory Birds and outside of the active period for other reptiles, birds, and bats.
			1.2.	Construction activities should be limited to the work area, and if necessary, sensitive features should be demarcated if they are located immediately adjacent to the work zone.
			1.3.	Where necessary, surface protection measures should be implemented to minimize soil compaction.
			1.4.	Vehicles and construction equipment should be cleaned before going on site to minimize risk of introducing invasive species to the project. The Clean Equipment Protocol for Industry (Halloran et al., 2013) should be implemented throughout the duration of construction.
			1.5.	Dust control measures should be implemented for the suppression of fugitive dust.
			1.6.	Standard Best Management Practices for erosion and sediment control should be implemented.
			1.7.	An emergency and response management plan should be implemented to address the potential for spills.
			1.8	Consideration will be made to remove invasive phragmites in adjacent areas as part of the Highway 148 construction works, through implementation of a cutting or spraying program.
2	Terrestrial Ecosystems – Habitat Disturbance/ Avoidance and Changes in Behaviour	MECP; MNR	2.1.	Where feasible, the extent and duration of construction noise and lighting should be minimized during sensitive seasons (between April 1 and October 31) near natural areas such as wetlands and woodlands.
			2.2.	Construction activities including staging should be restricted to work areas.
			2.3.	Idling should be avoided and construction vehicles and machinery should be kept in good repair.
3	Terrestrial Ecosystems - Incidental Take and Injury	MNR 3	3.1.	If feasible, vegetation removal or other activities that could cause adverse impacts to a species or habitat should be completed during winter months (November – March) which is outside of the active period for reptiles, birds, and bats. If vegetation or tree removal cannot avoid the breeding bird and bat active periods, a biologist or specialist should conduct a pre-construction nest sweep to determine if active bird nests are present.
			3.2.	If feasible, storing stockpiles of soil or vegetation on site should be avoided as wildlife may be attracted to these areas. If not feasible, stockpiles should be covered to avoid providing wildlife habitat.
			3.3.	Visual inspections for wildlife should be conducted prior to the start of construction each day and regularly throughout the day during the active season. This will include a thorough walk-through of the work area and searching of brush piles, logs, or rock piles and equipment. Inspections shall be completed by Contractor staff trained in wildlife occurrences per mitigation measure 3.14.
			3.4.	During the morning, vehicle circle checks (or any time a vehicle has been parked for longer than one hour) should be conducted and operators should check for wildlife under equipment and trucks.
			3.5.	If an active bird nest is found within the work area, at any time (including times outside of the typical nesting season), construction in the vicinity must cease until the young have fledged or the nest is otherwise abandoned. A setback from the nest should be identified with the Contract Administrator and the area demarcated to ensure work does not occur within the setback limits.

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
			3.6.	If SAR bird nests are observed at any of the culverts or other SAR are observed where work has the potential to impact the species, the Contract Administrator will be contacted, and a permit under the ESA or registration under Ontario Regulation 242/08 may be required.
			3.7.	Temporary turtle exclusion through the use of silt fencing should be installed prior to construction in all construction areas near Culvert C5. Fencing placement should be completed in consultation with a Biologist or specialist to ensure that the fencing does not guide turtles into traffic and effectively excludes turtles from the work area.
			3.8.	If turtles or snakes are encountered during construction (including hibernacula), work should be temporarily suspended until the species is out of harm's way. If a hibernaculum is discovered, all work should cease and the Contract Administrator contacted to discuss mitigation options.
			3.9.	If turtle nest sites (i.e., areas of fresh digging in loose gravel or sandy material) are found within the work areas, all work in that area shall cease. The nests should be left undisturbed, flagged and a setback applied (to be determined in consultation with the Contract Administrator) to protect against construction activities.
			3.10.	Immediately upon observation of an actively nesting female turtle, personnel and vehicles should clear the area within the turtle's line of sight as much as possible to allow the female to finish laying. Startling a nesting female could lead to abandonment of the partially laid nest before the eggs are concealed. The Contract Administrator shall be notified to discuss mitigation options, including measures to take if relocation of hatchlings or egg salvage is needed.
			3.11.	If reptile hibernacula or an egg-laying site is discovered during construction, all work shall cease in that area. The Contract Administrator shall be contacted to discuss mitigation measures.
			3.12.	Any SAR observed should be reported to the Contract Administrator within 24 hours. Species should not be handled unless by a Biologist or specialist. Species should only be relocated when they are in harm's way and handling should be completed in accordance with the MNR (2015b) Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders.
			3.13.	Wildlife protocols should be developed to educate workers of potential wildlife occurrences and measures to take in the event of potential encounters. SAR training should be provided to contractors and species information sheets should be provided to assist with identification and measures to take if encountered. SAR fact sheets for Blanding's Turtle, Bobolink and Eastern Meadowlark will be provided to the Contractor.
4	Fish and Fish Habitat	MECP; MNR; DFO	4.1.	Due to the presence of coolwater fish communities, any required in-water works or work on channel banks will only be permitted between June 15 to September 30 on the following watercourses: C2 – Unnamed Tributary of the Ottawa River; C2a – Unnamed Tributary of the Ottawa River; C2b – Unnamed Tributary of the Ottawa River; C3 – Unnamed Tributary of the Ottawa River.
			4.2.	Due to the presence of warmwater fish communities, any required in-water works or work on channel banks will only be permitted between July 1 to March 31 on the following all watercourses: • C1 – Unnamed Tributary of the Ottawa River;
				C4 – Unnamed Tributary of the Ottawa River; and C5 – Unnamed Tributary of the Ottawa River.

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
			4.3.	In-water work shall be scheduled to avoid wet and rainy periods that may increase erosion and sedimentation and in-water works shall not interfere with fish passage.
			4.4.	In water works shall be contained with the use of a cofferdam as per OPSS PROV 182 and OPSS PROV 182 and designed and installed according to applicable drawings.
			4.5.	Minimize duration of in-water work and conduct instream work during periods of low flow to further reduce the risk to fish and their habitat and to allow work in water to be contained.
			4.6.	Only qualified contractor staff shall capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site, as directed in a License to Collect Fish for Scientific Purposes from MNR.
			4.7.	Restore channel, watercourse banks, bed substrate and instream cover to pre-existing or better condition and seed to establish vegetative cover.
			4.8.	Temporary flow diversions and Dewatering shall be conducted in accordance with OPSS PROV 182 and OPSS PROV 517.
			4.10.	Fish protection shall be conducted in accordance with OPSS PROV 182.
			4.11.	Use of equipment shall be in accordance with OPSS PROV 182.
			4.12.	Removal of riparian vegetation shall be in accordance with OPSS PROV 182.
			4.13.	The installation, monitoring, maintenance, and removal of temporary erosion and sediment control measures shall be according to OPSS PROV 182, OPSS PROV 804 and OPSS PROV 805.
			4.14.	Vegetation protection and rehabilitation shall be in accordance with OPSS PROV 182 and OPSS PROV 803.
			4.15.	All excess material shall be managed in accordance with OPSS PROV 180.
5	Groundwater	MECP	5.1.	Adherence to conditions granted through an Environmental Activity and Sector Registry (EASR) registration if utilized for both the C5 culvert excavation and the excavation to install sanitary sewer at the intersection of Drive-In Road, which would permit water taking up to the maximum allowed (400,000 L/day per source).
			5.2.	Best Management Practices and a spill contingency plan should be developed in relation to fuel handling and equipment maintenance during construction improvements to mitigate the risk of impacts to groundwater from such activities.
6	Surface Water and Drainage Systems	MECP	6.1	Impacts to surface water near Culvert C5 replacement can be mitigated by discharge sampling and assessment and, if required, treatment.
			6.2	Installation of Oil Grit Separators to treat discharge into municipal systems.
7	Waste and Excess Soils Management	MECP	7.1.	Soil testing to fulfill 0. Reg. 406/09
			7.2.	Establishment of an Excess Soil Destination Report and tracking of excess material.
8	Noise and Vibration	MECP; Township of LV City of Pembroke	8.1.	The Contractor will keep idling of construction equipment to a minimum and to maintain equipment in good working order to reduce noise from construction activities.
			8.2	All equipment should be in good working condition and maintained to keep noise emissions low and comply with MECP Publication NPC-115 Construction Equipment.

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
		Renfrew County	8.3	If complaints regarding construction noise arise during construction, they will be investigated according to the provisions of the MTO Environmental Guide for Noise and dealt with by the Contractor.
			8.4	Completion of a vibration monitoring plan by the contractor, including pre and post construction condition surveys.
9	Archaeology and Cultural Heritage	MHSTCI	9.1.	Construction activities and staging will avoid impacts to built and cultural heritage resources since work is primarily constrained to the MTO Right of Way and any landscaping alterations will be minor in nature and to restore the adjacent MTO Right of Way to reflect pre-construction conditions.
			9.2	The project limits within a 10 m investigative buffer of Pembroke Pentecostal Cemetery will be subject to construction monitoring. A licensed archaeologist will be present on site for the duration of the removal of topsoil or any additional impacts within the 10 m investigative buffer to monitor for the presence of burial shafts outside the know limits of the cemetery.
10	Land Use	MHSTCI	10.1	Land use characteristics will remain mostly unchanged through the Highway 148 project with affected lands along the Highway 148 Right of Way restored to similar condition.
11	Traffic Management	Township of LV City of Pembroke Renfrew County	11.1	Completion of some work during evenings and weekends when traffic volumes are lower, providing flag-person support upstream of intersections to improve traffic operations, adjusting signal timings during construction to improve traffic operations and providing signage within the contract limits indicating business remain open during construction.
12	Construction Notifications	Township of LV City of Pembroke Renfrew County	12.1	The Contractor will be required to adhere to a communication plan during construction and provide notification of construction activities to agencies, properties and businesses within the impacted area of the Highway 148 construction
13	Property	MECP	13.1	Mitigation measures such as feature restoration were considered in the design process. Limited consultation with affected owners will occur prior to construction to coordinate proposed driveway re-construction.
14	Erosion and Sediment Control	MECP; MNR	14.1	To minimize environmental impact during construction, it is important to limit soil exposure and stabilize it with vegetation as soon as possible. Existing vegetation should be preserved, slope grades and lengths should be limited, and sheet flow should be encouraged. Best Management Practices (BMPs) should be used and maintained until disturbed areas have stabilized.
15	Contaminant and Emergency Spill Response	MECP	15.1	Ensure all on-site hazardous materials are properly stored and located at least 30 m away from watercourses and other sensitive natural features, such as wetlands, including all handling and refueling activities.
			15.2	All on-site materials should be self-contained, maintained according to manufacturer's instructions and disposed of appropriately.
			15.3	Develop and implement an emergency response management and monitoring plan that includes measures for preventing and addressing potential spills and monitoring activities.
			15.4	Spill kits should be kept on-site and accessible at all times.
			15.6	All waste resulting from construction should be removed from the site and disposed of at an appropriate facility. This includes packaging (bags, wraps, boxes, ties, etc.), waste materials (excess fill, cement, grout, asphalt, or

Ref No.	Environmental Concern and Potential Impact	Concerned Agencies	ID No.	Mitigation/Commitment
				other substances), and ESC structures (silt fencing, flow checks, etc.) once permanent vegetation has established and ESC measures are no longer required.