

# Design and Construction Report (DCR)

# Highway 400/North Canal Overpass Structure Replacements Town of Bradford West Gwillimbury, County of Simcoe (G.W.P. 2005-11-00)

Detail Design and Class Environmental Assessment for Provincial Transportation Facilities (2000), Group 'B' Project

**Ontario Ministry of Transportation** 

Project Delivery, York West/Simcoe Transportation Infrastructure Management Division

#### Prepared for:

Ministry of Transportation
Program Delivery Central, York West/
Simcoe
Transportation Infrastructure
Management Division

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#### Prepared by:

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December 2024

## HIGHWAY 400/NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS TOWN OF BRADFORD WEST GWILLIMBURY, COUNTY OF SIMCOE

## DETAIL DESIGN CLASS ENVIRONMENTAL ASSESSMENT (GROUP 'B') G.W.P. 2005-11-00 DESIGN AND CONSTRUCTION REPORT

Prepared for the Ministry of Transportation by Stantec Consulting Ltd.

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## Ontario Ministry of Transportation HIGHWAY 400/NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS DESIGN AND CONSTRUCTION REPORT

G.W.P. 2005-11-00

The Design and Construction Report (DCR) documents the detail design and associated environmental protection measures associated with the reconstruction of the Highway 400/North Canal Overpass Structure Replacements on Highway 400.

The DCR is available for a 30-day public comment period beginning **December 19, 2024 and ending on January 21, 2025** at the following locations:

Project website: www.hwy400ncanalbridges.ca

Interested persons may provide written comments to the following project team members by **January 21, 2025**:

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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 for the ministry.

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 in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

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

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

#### and

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

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

Ce document hautement spécialisé n'est disponible qu'en anglais en vertue du règlement 411/97, qui en exempte l'application de la Loi sur les services en français. Pour de l'aide en français, veuillez communiquer avec le ministère des Transports, Bureau des services en français au (905) 704-2045 ou (905) 704-2046.

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## **Executive Summary**

This Design and Construction Report (DCR) has been prepared to document Detail Design. The purpose of the project is to replace the existing Highway 400 bridges over the North Canal, which are approaching the end of their design life.

In compliance with the MTO Class Environmental Assessment (Class EA) for Provincial Transportation Facilities, 2000, a Transportation Environmental Study Report (TESR) was completed in November 2003 for the Highway 400 Planning and Preliminary Design Study from the South Canal Bridge to 1.0 km South of Highway 89 (G.W.P. 40-00-00). The TESR documented the process that led to the recommended Preliminary Design to address necessary improvements to traffic operations on the 18.4 km section of Highway 400.

The current project is being carried out in accordance with the approved planning process for Group 'B' projects MTO Class EA (2000). As per the Class EA, a review was initiated given that over five years have passed since the 2003 TESR. Detail Design has updated and refined the 2003 plan and no significant design changes were identified compared to the proposed improvements put forth in the Preliminary Design TESR.

Key features of the Recommended Design include the following:

- Replacement of the Highway 400 bridges over the North Canal
- Realignment and profile adjustment of Highway 400 for 1.37 km to accommodate the new bridge alignment and increase vertical clearance over Canal Road
- Rehabilitation of Highway 400 pavement for 1.33 km within the project
- Interim lowering of Canal Road to accommodate the proposed south bridge abutment and increase vertical clearance
- Realignment of Davis Road and Wist Road to accommodate the proposed Highway 400 embankment realignment and ditches
- Retained Soil System (RSS) between the realigned Highway 400 embankments and Davis and Wist Roads
- Permanent closure of the Highway 400 access ramps at Davis Road and Wist Road
- Lining the Holland (Schomberg) River culvert

Upon completion the highway will retain the current six-lane configuration with three lanes in the northbound and southbound directions separated by a wide grass median (except at bridges) that transitions to a narrow median north of the bridges. The design has considered the ultimate 10-lane cross-section of Highway 400.



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The proposed improvements have been designed to accommodate the future realignment of the North Canal to the north within the MTO right-of-way.

This Design and Construction Report (DCR) is available for public review and documents the project process, details of the design, consultation undertaken throughout, and a summary of potential environmental effects and mitigation measures. Standard mitigation measures will be used during the implementation of the proposed improvements.

The Project Team is available to discuss the project and can be contacted as follows:

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For environmental issues of broader concern, reference should be made to the November 2003 TESR that was completed by URS Canada Inc.

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## 1.0 Project Overview

## 1.1 Background

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. (Stantec) to complete the Detail Design and Class Environmental Assessment (EA) study for the Highway 400 North Canal Bridges. The Highway 400 bridges over the North Canal are located approximately 2.9 km north of Highway 9 in the Town of Bradford West Gwillimbury, County of Simcoe. The study area is shown on the key plan.

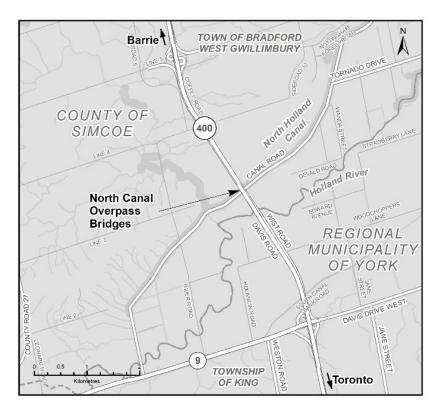


Exhibit 1: Key Plan

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The Ontario Ministry of Transportation (MTO) completed a Transportation Environmental Study Report (TESR) (2003) under G.W.P. 40-00-00 for the Highway 400 Planning and Preliminary Design Study from the South Canal Bridge to 1.0 km South of Highway 89. The 2003 TESR documented the interim Highway 400 widening to eight lanes with provision to widen to 10 lanes extending from the South Canal Bridge northerly 18.4 km to 1 km south of Highway 89.

In 2021, necessary structural repairs were completed at the bridges to maintain the North Canal Bridges until they are replaced.

The existing configuration includes overpass bridges over the North Canal. Wist Road and Davis Road run parallel to Highway 400 and connect to Canal Road which passes under the bridges, as illustrated in **Exhibit 2**.



**Exhibit 2:** Site Configuration

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## 1.2 Summary Description of the Undertaking

Key features of the Recommended Design include the following components:

- Replacement of the Highway 400 bridges over the North Canal
- Realignment and profile adjustment of Highway 400 for 1.37 km to accommodate the new bridge alignment and increase vertical clearance over Canal Road
- Rehabilitation of Highway 400 pavement for 1.33 km within the project
- Interim lowering of Canal Road to accommodate the proposed south bridge abutment and increase vertical clearance
- Realignment of Davis Road and Wist Road to accommodate the proposed Highway 400 embankment realignment and ditches
- Retained Soil System (RSS) between the realigned Highway 400 embankments and Davis and Wist Roads
- Permanent closure of the Highway 400 access ramps at Davis Road and Wist Road
- Lining the Holland (Schomberg) River culvert

Upon completion, the highway will retain the current six-lane configuration with three lanes in the northbound and southbound directions separated by a wide grass median (except at bridges) that transitions to a narrow median north of the bridges. The design has considered the ultimate 10-lane cross-section of Highway 400.

The proposed improvements have been designed to accommodate the future realignment of the North Canal within the MTO right-of-way.

## 1.3 Environmental Assessment Background and Requirements

The planning and design of transportation projects must be carried out in accordance with the applicable environmental statutes, supporting regulations and formal government policies and procedures.

#### 1.3.1 Ontario Environmental Assessment Act

The *Ontario Environmental Assessment Act* (EAA) governs the conduct of Planning, Preliminary Design and Detail Design studies in the province of Ontario. The purpose of the EAA is to ensure that:

A reasonable and traceable planning process is followed



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- The need for the project is demonstrated
- The public has the opportunity to provide input into the process and investigations
- The study includes a review of a range of alternatives
- The selected alternatives minimize any environmental impacts and provide mitigation strategies

The Ontario Ministry of Transportation's *Class Environmental Assessment (Class EA)* for Provincial Transportation Facilities (2000) was approved under the EAA in 1997 and was amended in 2000. This planning document defines groups of projects and activities, and the environmental assessment processes that the Ontario Ministry of Transportation (MTO) has committed to follow for these projects. Provided this streamlined process is followed, projects and activities included under the *Class EA* do not require formal review and approval under the Ontario EA Act.

This project is following the Class EA process for a Group 'B' project, which generally includes major improvements to existing transportation facilities. Other aspects of the EA process applicable to Group 'B' projects are contained in the *Class EA*. Readers interested in these matters are encouraged to refer to that document.

In compliance with the MTO Class EA for Provincial Transportation Facilities, 2000, a Transportation Environmental Study Report (TESR) was completed in November 2003 for the Highway 400 Planning and Preliminary Design Study from the South Canal Bridge to 1.0 km South of Highway 89 (G.W.P. 40-00-00). The TESR documented the environmental aspects of the Planning and Preliminary Design process that led to the recommended plan for future improvements to address traffic operations on the 18.4 km section of Highway 400.

The 2003 Preliminary Design study formed the basis for proceeding to the current phase of the project (Detail Design) in which the transportation plan and Preliminary Design are developed to the implementation level of detail and construction tender documents are prepared.

As per the Class EA, a review was initiated given that over five years have passed since the 2003 TESR, and a DCR was not previously completed for the project. A TESR review was completed as part of Detail Design and is documented in **Section 4.0**.

Public consultation occurred as part of this Detail Design project, including a Notice of Study Commencement in 2014 and a Public Information Centre in 2016. The current DCR has updated and refined the 2003 plan to include replacement of the bridge rather than rehabilitation based on condition. No significant design changes were identified compared to the proposed improvements put forth in the Preliminary Design TESR.



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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 for the ministry.

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 in the request. This will ensure that the ministry is able to efficiently begin reviewing the request.

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

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

and

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

#### 1.3.2 Federal Environmental Assessment

On July 6, 2012, the Canadian Environmental Assessment Act (CEAA,2012) came into effect which focuses on assessment of "designated projects". Projects can be designated projects under CEAA (2012) if they meet the criteria for physical activities under the schedule, Sections 2 to 4. The replacement of the North Canal bridges is not considered a "designated project". Therefore, an assessment under CEAA was not required for this project.

The CEAA 2012 was repealed and replaced by the *Impact Assessment Act* (IAA) in August 2019. The IAA also included a regulation "Schedule of Physical Activities (Schedule 2)". The replacement of the North Canal bridges is not considered a "designated physical activity" and an assessment under the IAA is also not required.



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## 1.4 Purpose of the Design and Construction Report

The Class EA requires the preparation of additional documentation for the Detail Design phase of the undertaking in the form of a Design and Construction Report (DCR). The purpose of the Design and Construction Report (DCR) is to document the following:

- The transportation engineering and environmental issues that were encountered during Preliminary Design and how they were mitigated in Detail Design
- A full description of the project's Detail Design consultation program
- Identification of all project approvals, licenses, and permits that have been, or must be obtained
- An update on environmental conditions and details on how environmental impacts will be mitigated
- A description of how the commitments made at the end of Preliminary Design, as documented in the TESR (November 2003) are being fulfilled
- Contract-specific measures and provisions to avoid or mitigate adverse impacts

If after the 30-day comment period for the DCR, no significant concerns have been identified, construction may commence subject to funding and approvals.

## 2.0 Consultation Process

This section of the report documents the agency, municipal, Indigenous communities, and public consultation that has taken place. Consultation for this project included:

- Notice of Study Commencement
- Consultation with regulatory agencies
- Indigenous community engagement and consultation
- Communication with the general public and businesses in the study area, including Canada Post admail
- Communication with adjacent property owners where work proposed is likely to have an impact on their property
- Development and maintenance of a project website: <a href="www.hwy400ncanalbridges.ca">www.hwy400ncanalbridges.ca</a>
- Notice of Public Information Centre
- A Public Information Centre (PIC) held on March 30, 2016
- Notice of Completion of DCR



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A copy of the notices and related notification materials is provided in **Appendix B.** 

## 2.1 Public Notices

The Notice of Study Commencement was published in the *West Gwillimbury Times* and the *West Gwillimbury Topic* on Thursday, November 27, 2014. The notice provided a key map and described the study, including the proposed improvements and the *Class EA* process. Notice of Study Commencement letters were sent to federal, provincial, and municipal agencies, Indigenous communities and interest groups on Monday, November 24, 2014. The purpose of the agency contact was to request updated information on the environmental features in the study area (i.e., natural, social, or cultural), and to seek their input. The correspondence included a copy of the notice with additional information, and an agency comment form requesting input by Monday, December 22, 2014. Notification to the MPP for York Simcoe was provided on Wednesday, November 19, 2014.

During the week of November 24, 2014, property owners, local businesses, approximately 200 members of the Holland Marsh Growers' Association, and residents within the vicinity of the study area received a Notice of Study Commencement. In addition, a Canada Post Admail delivery was undertaken and resulted in the distribution of approximately 1,117 notices in the vicinity of the project, commencing on November 26, 2014.

A project website (<a href="www.hwy400ncanalbridges.ca">www.hwy400ncanalbridges.ca</a>) was also developed to effectively communicate project information, new developments, and provide a method by which individuals could submit comments or contact members of the project team. The website was made public on Monday, November 24, 2014 and was updated as the study progressed.

Public comments at the outset of the project noted that spring ice breakup can reduce flows on the North Canal, and that a clear span bridge would be preferred. The comments were received and were incorporated into the design which resulted in a clear span bridge being selected as the preferred type. Two other individuals asked to be added to the mailing list. All individuals providing comments were added to the project mailing list to receive information at study milestones.

Public comments from the Public Information Centre are described in **Section 2.7**.

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## 2.2 Mailing List

At the outset of this project, a mailing list was developed and maintained throughout the project which includes the following external agencies, stakeholder groups, and Indigenous communities:

**Municipalities:** County of Simcoe; Town of Bradford West Gwillimbury (BWG), Township of King, Regional Municipality of York

**Elected Officials:** Hon. Caroline Mulroney, MPP York Simcoe (formerly Julie Munro), Scot Davidson, MP York-Simcoe

**Provincial and Federal Agencies:** Infrastructure Ontario (IO); Ontario Ministry of Agriculture and Food, and Rural Affairs (OMAFRA); Ministry of the Environment, Conservation and Parks (MECP); Ministry of Natural Resources and Forestry (MNRF); Ministry of Citizenship and Multiculturalism (MCM), Transport Canada, Fisheries and Oceans Canada (DFO), Minister of Indigenous Relations and Reconciliation (formerly Ministry of Aboriginal Affairs) (MAA)

**Stakeholder Groups / Interest Groups**: Ontario Federation of Agriculture; Ontario Cycling Association; Simcoe County Federation of Agriculture, Holland Marsh Growers Association, Ontario Fruit and Vegetable Growers Association, Bradford and District Produce Ltd., Holland Marsh Drainage System Joint Municipal Services Board, Lake Simcoe Region Conservation Authority (LSRCA), K. Smart Associates Ltd., University of Guelph Office of Research, Poulos and Chung Ltd. (Traffic Consultants),

**School Boards / School Transportation:** Simcoe Muskoka District Catholic School Board; Simcoe County Student Transportation Consortium; Simcoe District School Board

**Emergency Services**: Ontario Provincial Police (OPP) – Nottawasaga and Aurora Detachments, South Simcoe Police; County of Simcoe Commander, Paramedic Operations and Departmental Support; Central Ambulance Communications Centre; Bradford West Gwillimbury Fire Department; County of Simcoe Emergency Planning

Indigenous Communities: Alderville First Nation, Beausoleil First Nation, Chippewas of Georgina Island First Nation, Chippewas of Rama First Nation, Coordinator for the Williams Treaties, Curve Lake First Nation, Hiawatha First Nation, Huron-Wendat Nation, Mississaugas of the Credit First Nation, Mississaugas of Scugog Island First Nation, Georgian Bay Métis Council, Métis Nation of Ontario - Métis Consultation Unit, Métis Nation of Ontario - Lands, Resources and Consultation Branch



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Letters along with the Notice of Study Commencement were mailed/emailed to external agencies, elected officials, municipal staff, Indigenous communities, and stakeholder groups on Monday, November 24, 2014. Letters were also sent March 14, 2016 in advance of the Public Information Centre. The mailing list is included in **Appendix B**. Correspondence received from external agencies and stakeholders is provided in **Appendix C**.

## 2.3 External Agencies and Municipalities

Study commencement letters and a copy of the Notice of Study Commencement were mailed/emailed to all agencies and municipalities November 24, 2014, along with a comment form to facilitate the receipt of initial comments.

The following feedback was received from external agencies and municipalities following the Notice of Study Commencement:

- The County of Simcoe questioned whether the study would close the Canal Road on and off ramps, and that this should be done as soon as the interchange at Highway 400 at 5<sup>th</sup> Line is operational since it will provide improved access to Bradford.
- OPP Detachment Aurora indicated that they had no concerns at the time of the notice.
- The Simcoe Muskoka Catholic District School Board noted interest in bus routes for schools in Bradford West Gwillimbury and New Tecumseth and expressed an interest in potential road closures and the construction timing. Contact information is provided in the contract to notify school boards of construction timing. A meeting was held in 2016 to discuss the project in more detail.
- Infrastructure Ontario provided a letter with general information regarding its role in Environmental Assessments, and potential triggers due to impacts to Infrastructure Ontario-managed property. The project activities do not impact any Infrastructure Ontario lands.
- The Ministry of Tourism, Culture and Sport (now Ministry of Citizenship and Multiculturalism) provided general information related to their Ministry's mandate, including general guidance information related to the assessment of Archaeological Resources and Built Heritage and Cultural Heritage Landscapes.

Meetings were held with the Town of Bradford West Gwillimbury and County of Simcoe December 7, 2014 and March 30, 2015 to introduce the project and to keep the Town and County informed.

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An invitation to attend an external agency meeting was sent to external agencies on the study mailing list on Monday, March 14, 2016. External agencies were invited to attend the PIC on March 30, 2016 from 3:00 PM to 4:00 PM, one hour in advance of the general public session.

External agencies and stakeholders that were represented at the PIC included:

- Ontario Federation of Agriculture
- Holland Marsh Drainage System Joint Municipal Services Board
- Ontario Provincial Police, Aurora Detachment
- Holland Marsh Growers' Association
- Town of Bradford West Gwillimbury
- · County of Simcoe

K. Smart Associates

A member of the Ontario Federation of Agriculture requested that the OGN and blank PIC comment sheets be made available at the Muck Growers Conference on April 12 and 13, 2016 where stakeholders, particularly farmers, would be present. Copies of the notice and comment sheet were sent via courier on April 1, 2016 to the organization. PIC comment sheets were received from local farmers and attendees and are included in **Appendix C**.

Drainage-related meetings were held between 2015-2017 with the Town of Bradford West Gwillimbury to discuss the Holland (Schomberg) River culvert liner, and the structural span requirements to accommodate the size of the future North Canal realignment beneath the new bridges.

A meeting was held with the Town of Bradford West Gwillimbury and County of Simcoe on November 20, 2024 to provide an overall update; review the scope and schedule; discuss the construction staging, closures, and related detours; as well as review next steps for upcoming coordination items. No concerns were raised about the temporary closures of Canal Road, Wist Road and Davis Road during periods of construction and some suggestions were provided for detour routes to be addressed in contract drawings. Construction staging is discussed in **Section 3.10**.

## 2.4 Indigenous Community Engagement

A letter introducing the project was sent on November 24, 2014 to Indigenous communities on the project mailing list. The communities were also notified in advance of the Public Information Centre with a letter sent on March 14, 2016.



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The following Indigenous communities and organizations:

- Alderville First Nation
- Beausoleil First Nation
- Curve Lake First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Coordinator for the Williams Treaties

- Georgian Bay Métis Council (MNO)
- Hiawatha First Nation
- Huron-Wendat Nation
- Métis Nation of Ontario (MNO)
- Mississaugas of Scugog Island First Nation
- Mississaugas of the Credit First Nation

Comments were received from the following Indigenous communities for this project:

- Curve Lake First Nation (December 11, 2014) letter: The project is located within
  their traditional territory, although the letter mentioned the community is not currently
  aware of any issues that would concern the Traditional, Aboriginal or Treaty Rights.
  The community identified that they have archaeological liaisons who may be
  available for archaeological assessment projects and fieldwork. The community
  requested inclusion of the Williams Treaty First Nation Claims Coordinator, who was
  included on the mailing list.
- Curve Lake First Nation (April 1, 2016) letter: The letter responded to the PIC letter by including the information noted above.
- Huron Wendat Nation (December 14, 2014) email: The community responded and noted they may have archaeological, cultural and heritage interests and rights in this project area. They asked to be kept informed and involved.

Indigenous communities will be sent a Notice of Completion letter at the conclusion of this project with a link to the DCR when it is made available for public review.

No other Indigenous comments were provided for this project. Indigenous comments are included in **Appendix C**.

## 2.5 Utilities

Utility engagement and relocation plans are discussed in **Section 3.11**.

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## 2.6 Impacted Property Owners

Project notices were sent to property owners in the study area, which included notices sent on November 24, 2014 and the Notice of Public Information Centre on March 30, 2016. The notices were also available on the project website and published in the newspapers, as described in earlier sections.

Property taking was required at two locations north of North Canal along the embankments. Directly impacted property owners were consulted during the study regarding property impacts and the property acquisition process. No other property requirements were identified.

## 2.7 Public Information Centre (PIC)

Notification letters providing information about the PIC, including the date and time for the meeting were sent to Indigenous communities, external agencies, stakeholders, and the general public on March 14, 2016. The notice was mailed to potentially affected property owners, and approximately 72 members of the Highway 400 Bradford and District Vegetable Growers' Association. The notice was also sent to Julia Munro, MPP York Simcoe on March 14, 2016.

The purpose of the PIC was to present and receive input on the proposed Highway 400 bridge replacements over the North Canal and the associated road improvements. The PIC also provided information on construction staging, potential environmental impacts, and proposed mitigation measures. The PIC Notice was published in the *Bradford West Gwillimbury Times*, and *Bradford West Gwillimbury Topic* on Thursday, March 17, 2016. The notice was also posted to the study website.

The PIC was held on Wednesday, March 30, 2016 at the BWG Leisure Centre located at 471 West Park Avenue, Bradford from 3:00 PM to 7:00 PM.

The PIC was organized as a drop-in format. Text panels and displays were available for review, and members of the project team were available to answer questions about the study. Comment sheets were made available, and attendees were encouraged to return them either in the comment box at the meeting, or by mail, fax, or e-mail prior to April 30, 2016. A copy of the PIC displays is included in **Appendix D**.

There were nine representatives from external agencies and approximately 58 members of the general public in attendance at the PIC. In total, 27 comment sheets and emails were received following the PIC. PIC comment sheets are included in **Appendix C**.



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An overview of key comments received following the PIC, is provided in **Table 1**. All names and addresses from the comment sheets and visitor register were added or updated on the study mailing list.

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Table 1: Summary of Public Information Centre Key Issues Raised

Issue		Issues Raised	Response/ Action
Highway 400 Ramp Closures	•	Ramps are needed for farmers to transport produce to market and should be kept open	The permanent closure of the Highway 400 Canal Road ramps was approved as part of the 2003 TESR. The configuration of the existing access to Canal Road cannot be maintained due to the
	•	Concern with travelling on Canal Road if ramps are closed, as Canal Road is not up to spec for heavy loads	increasing traffic volumes on Highway 400, particularly related to the difficulties associated with merging onto the highway, non-standard ramp design and the associated safety concerns.  Several alternatives were considered for re-configuration of the access, however all resulted in
<ul> <li>Closure will cause increased travel times and loss of revenue for farmers</li> <li>Ramps are used as alternate route for traffic overflow / detour route</li> </ul> Significant impacts to proper times are assistant further along Highway 400 (v2)	significant impacts to property, farmland, and residences.  Emergency service providers and student services will reorganize coverage area to adapt to the		
	Ramps are used as alternate route for traffic overflow / detour route when there are accidents further along Highway 400 (x2)		
	Leaving ramps open will minimize greenhouse gas pollution and commercial farm market.  We understand that the rammer commercial farm market.		
	•	Closure may affect EMS response time	transportation services and emergency services to determine appropriate mitigation measures for construction.
	•	Will cause traffic to increase on Highway 9, and existing traffic conditions make it dangerous to turn onto Highway 9 from side roads	TOT CONSTRUCTION.
	•	In support of closure of the ramps, as they have had many near-accidents	
	•	Ramp closure will affect Farmer's Market	
Canal Road during	•	Needs to be open during construction	An alternative/new access to Highway 400 was completed at the 5 <sup>th</sup> Line interchange. The Highway 400 Canal Road ramps will not be closed until construction of the North Canal Bridges
Construction	•	Concern over access for farmers and their equipment to pass under Highway 400 bridge – some own property on both sides and some equipment takes up both lanes of Canal Road	commences. The Highway 400 Canal Road access does not directly impact Canal Road which will continue to provide east-west access under Highway 400.
	•	Huge inconvenience to detour to 5th or South Canal Road to access the opposite side of Highway 400	The current Detail Design includes confirming project details and completing the construction staging and traffic management plan. It is anticipated that the project will be implemented over
	•	Project should conduct study on usage of North Canal Road	three construction seasons with construction timing subject to completion of Detail Design,
	•	Wist Road must remain open if Canal Road is closed, to allow farmers to access South Canal underpass and Highway 9 (Highway 9 also must not have closures)	property acquisition and available funding. Canal Road between Wist Road and Davis Road we need to be temporarily closed for construction operations, including approximately 1 month in season 1 and other shorter duration closures in each season. Full closures will be minimized eliminated during the planting season from April 1 to June 15 and the harvest season from September 15 to November 15. Short duration closures of Wist Road and Davis Road will also be required (in season 1 and 3) however, at no time will they both be closed concurrently, and
	•	Wist Road or Davis Road must remain open at all times, every day of the year	
	•	Both Highway 400 underpasses cannot be closed simultaneously	one will always remain open for access.



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Issue	Issues Raised	Response/ Action
	<ul> <li>Designated detour routes on Wist Road and Davis Road will require some improvements as they are narrow and rough</li> <li>Hope MTO will undertake the responsibility of maintenance of these roads for the duration of the project as this maintenance will further strain local and municipal road budgets</li> <li>Pleased that the new bridges will provide an additional foot of vertical height for farm vehicles travelling underneath on North Canal Road</li> </ul>	In addition, delays resulting from single-lane traffic will be unavoidable at various times throughout the project, as well as during short duration intersection tie-in work where single lane operation may not be feasible. The proposed closures and staging approach will ensure the safety of both the travelling public and workers, maximize construction efficiency, and minimize the duration of the work.
Wist Road Connection to 5 <sup>th</sup> Line	Extension of Wist Road across the canal to 5 <sup>th</sup> Line on ramp would keep Farmers Market running and allow for faster emergency access to Canal Road	We have noted your suggestion to construct a connection between Wist Road and the 5 <sup>th</sup> Line on-ramp to maintain public and emergency access. The type of connection you have detailed is currently outside of the scope of this project. The Project Team will continue to consult with emergency services to determine appropriate mitigation measures for the construction.  The construction of the 5 <sup>th</sup> Line/Highway 400 interchange does not fall within the scope of this study. Concerns regarding the construction of the interchange should be directed to the Town of Bradford West Gwillimbury Engineering Department.
Culvert	<ul> <li>Concern that the culvert under Highway 400 will flood farmer's fields if the closure is done</li> <li>Why is the possible removal of the Holland River culvert being considered?</li> <li>Water flow in the canal must be maintained as farmers use this for irrigation; closing culvert will cause flooding in farmers' fields</li> </ul>	We have noted your concern regarding the potential removal of the Holland (Schomberg) River culvert and can confirm that the culvert will be rehabilitated with a steel liner to provide an outlet from west to east.  The Holland (Schomberg) River culvert allows for water to pass under Highway 400. As part of the scope of this project, the culvert will be rehabilitated by installing a steel liner. The culvert will continue to maintain drainage throughout the marsh.  Various design alternatives including rehabilitation, replacement and removal were considered for improvements to the Holland River Culvert. The culvert under Highway 400 serves primarily as an equalization structure between the east and west zones of the marsh. Based on the final analysis, the culvert will be rehabilitated with a liner and will continue to connect the east and west zones of the marsh.
Access During Construction	<ul> <li>Concern over access and response times for EMS (police, ambulance, fire) - suggest adding gates to ramps that can be accessed during an emergency</li> <li>Closures may cause residents to be unable to evacuate for potential hurricanes or 100-year storm and will affect school bus times</li> <li>Dump trucks on Canal Road have caused house vibrations and clay in well water</li> </ul>	The Project Team will continue to consult with residents, businesses, farmers, student transportation services and emergency services to determine appropriate mitigation measures for construction. Emergency service providers and student services may reorganize coverage area to adapt to the Highway 400/5 <sup>th</sup> Line interchange and the Canal Road access closure.



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Issue		Issues Raised	Response/ Action
Alternate North Canal Crossings	•	Suggest that the current ramps be closed, but have a tunnel dug under Highway 400 to join the ramps, and allow access for farmers and their equipment	A tunnel under Highway 400 to accommodate farm equipment was not among the alternatives studied during Preliminary Design as it is deemed to be not feasible in this location. The permanent closure of the Highway 400 Canal Road ramps was approved as part of the 2003 TESR. An alternative/new access to Highway 400 is provided at the Highway 400/5 <sup>th</sup> Line interchange.
Maintenance Issues	• • •	Two dozen guard rail posts broken that need to be repaired MTO snowplows use the ramps as a place to turn around Move mailboxes to west side for residents who live west of Highway 400 When will Canal Road be repaved?	The existing steel beam guide rail within the project limits will be replaced to accommodate the proposed realignment of Highway 400 and realignment of the side roads.  It is not anticipated that the Canada Post mailboxes will need to be relocated during construction. If the need arises, Canada Post will be consulted to identify an alternate location during construction.  Snow removal on municipal roads is the responsibility of the Town of Bradford West Gwillimbury. It will be their decision to determine how and when snow removal will occur. Resurfacing of Canal Road within the construction area will occur as part of this project.
Traffic Lights	•	Place traffic lights at Highway 9 and Rupke Road, as most farm trucks will access Highway 400 from Highway 9, and need lights to make the turn off Rupke Road safely  Place traffic lights at Highway 9 and Jane Street so traffic can access Highway 9 safely	Traffic signals at the Jane Street (East Leg)/Highway 9 intersection have been installed by York Region. Traffic lights suggestions at the Highway 9 and Rupke Road intersection has been noted, but these are outside of the area of construction.  Local access for residents will be available for the duration of the construction project.
Agricultural Operations	•	Concern over closure from September – March, as delivery of produce occurs at this time (400 trips this winter)  Best to remain open after August during the Fall to accommodate shipping of produce  Closure of the North Canal Road for the entire length of the project continues to be a concern in the community. Consider the possibility of having limited openings during the fall harvest season	The current Detail Design includes confirming project details and completing the construction staging and traffic management plan. It is anticipated that the project will be implemented over three construction seasons with construction timing subject to completion of Detail Design, property acquisition and available funding. Canal Road between Wist Road and Davis Road will need to be temporarily closed for construction operations, including approximately 1 month in season 1 and other shorter duration closures in each season. Full closures will be minimized or eliminated during the planting season from April 1 to June 15 and the harvest season from September 15 to November 15. Short duration closures of Wist Road and Davis Road will also be required (in season 1 and 3) however, at no time will they both be closed concurrently, and one will always remain open for access.  Delays resulting from single-lane traffic will be unavoidable at various times throughout the project, as well as during short duration intersection tie-in work where single lane operation may not be feasible. The proposed closures and staging approach will ensure the safety of both the travelling public and workers, maximize construction efficiency, and minimize the duration of the work. The Project Team will continue to consult with residents, businesses, farmers, and emergency services to determine appropriate mitigation measures for construction.

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Issue	Issues Raised	Response/ Action
		Canal Road will be relocated approximately 3.0 m to the north of its current alignment and will be lowered beneath the structures to provide a minimum vertical clearance of 5.10 m and a new wider pavement width of two 4.25 m lanes. The interim vertical clearance during construction will be 4.5 m until such time as the canal is realigned by others after the Highway 400 bridge replacement.
Property Acquisition	Will farmers have to lose land to accommodate the widening of Highway 400?	For this project, property acquisition was required to accommodate the Highway 400 embankment realignment.



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## 3.0 Description of the Recommended Design

The following sections provide a description of the design details for the Recommended Design. A General Arrangement Drawing is provided in **Figure 1** showing the Recommended structural design.

The Design drawings can be referenced in **Appendix A**.

## 3.1 Replacement of North Canal Overpass Structures

## 3.1.1 Bridges

The existing North Canal bridges are divided by an open median and span over both Canal Road and the North Canal. The six-span continuous steel girder bridges were constructed in 1948. The Highway 400 corridor is a six-lane divided freeway within the project limits for G.W.P. 2005-11-00. A holding strategy for minor structural repairs was completed in 2021 as part of a separate contract.

The twin replacement bridges will be two-span (46 m - 46 m) integral abutment bridges supported by steel I-girders positioned on the outside of the existing and future relocated canal. The bridge will be skewed at  $6.5^{\circ}$  to match the alignment of the North Canal and Canal Road.

The 17.8 m wide cross-section of each deck accommodates three lanes of traffic plus shoulders with consideration of future bridge widening to an ultimate 10-lane cross-section having a total width of 26.3 m. Construction will include foundations and substructure components for the ultimate 10-lane structure.

## 3.1.2 Substructure and Foundation Design

The pier will consist of a concrete pier cap with columns and will be supported by steel H-piles. Integral abutments will be utilized. This project will include constructing part of the substructure to the ultimate 10-lane configuration of Highway 400.

A bracing system comprised of horizontal struts across the canal will be placed in Stage 1 to facilitate construction. De-icing equipment will be installed in the North Canal to prevent ice build-up where temporary sheet pile bracing is installed. A power supply will be required for connection of the canal de-icing equipment, which will be in place prior to Season 1 winter shutdown and remain in place until the future realignment of the North Canal.



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Existing piers along the north and south edge, and in the centre of the North Canal will be partially removed to accommodate the installation of the bridge girders. The remaining portion of these piers will remain in place until the North Canal is realigned.

## 3.1.3 Superstructure Design

The superstructure will consist of steel I-girders. The lowering of Canal Road will provide a minimum vertical clearance of 4.5 m beneath the new Highway 400 bridges. The proposed Highway 400 and Canal Road profiles will accommodate a maximum girder depth of 1.7 m. The 225 mm concrete deck will be protected with waterproofing and 90 mm of asphalt.

The General Arrangement Drawing for the North Canal bridges is provided in **Appendix A**.

## 3.2 Highway 400

The realignment and profile adjustment of Highway 400 for 1.37 km will accommodate the new bridge alignment and increase vertical clearance over Canal Road. Rehabilitation of Highway 400 pavement will extend for 1.33 km from the limits of realignment to the limits of the adjacent contracts to the north and south of this project. The Highway 400 profile will be raised approximately 0.4 m at the structure.

The Highway 400 access ramps at Davis Road and Wist Road will be permanently closed at the start of construction as part of this project.

## 3.2.1 Embankment Realignment

Existing highway embankments will be realigned for the approaches to the new bridges. Fill embankments, up to a maximum of 10 m high, are required to raise existing ground surface elevations, both adjacent to Wist Road and Davis Road, and north of the North Canal bridges. The highway realignment will also require an earth cut on the northbound and southbound sides of Highway 400 north of the bridges.

## 3.3 Wist Road and Davis Road

Wist Road and Davis Road will be realigned to accommodate the proposed embankment realignment on Highway 400. The alignments of the two local roads match into the existing road corridors approximately 230 m south of Canal Road.

The cross-section of Wist and Davis Roads will be rural with gravel shoulders. Each road will have 2 - 3.35 m lanes to match existing conditions.



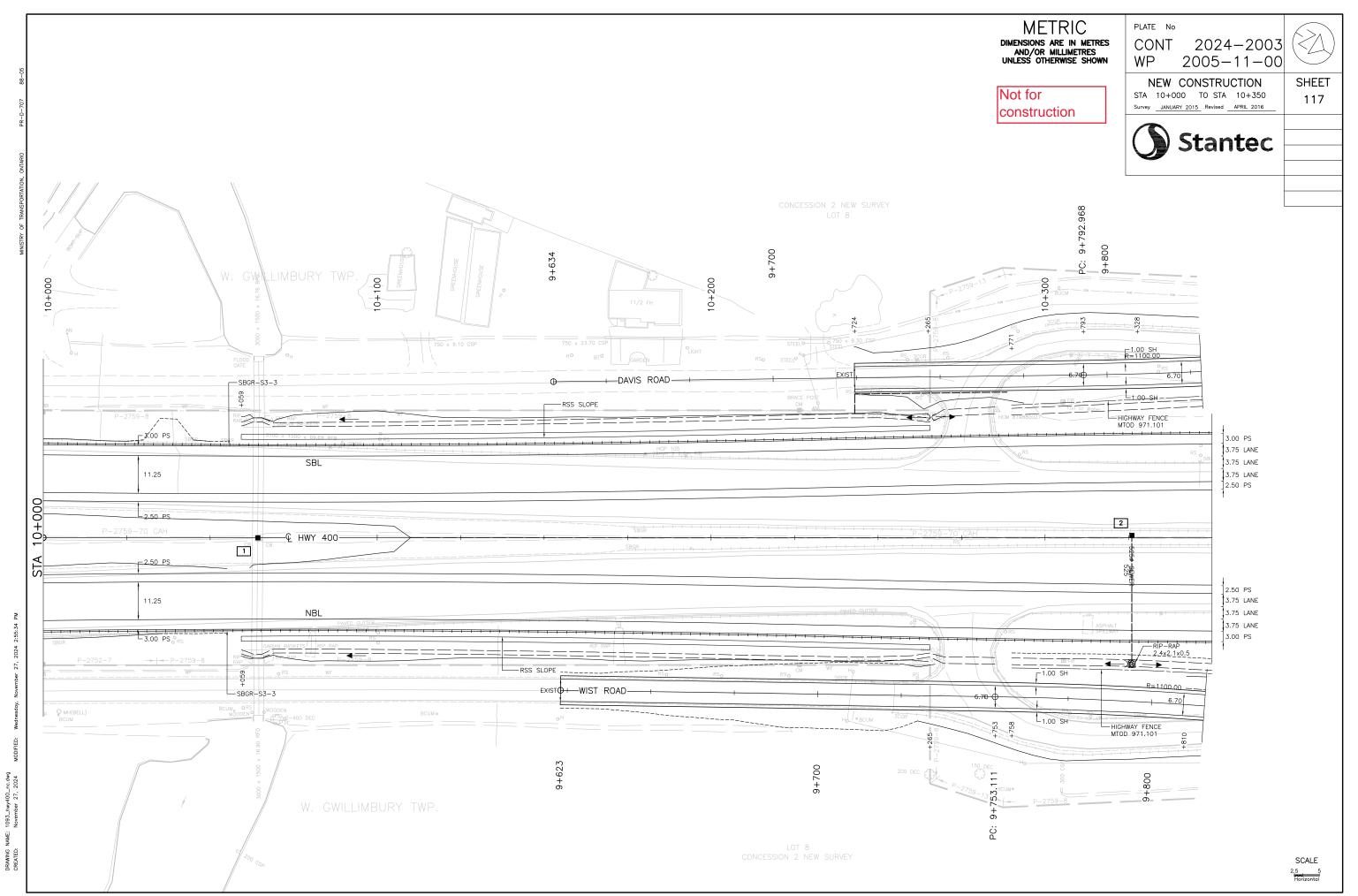


Figure 1a

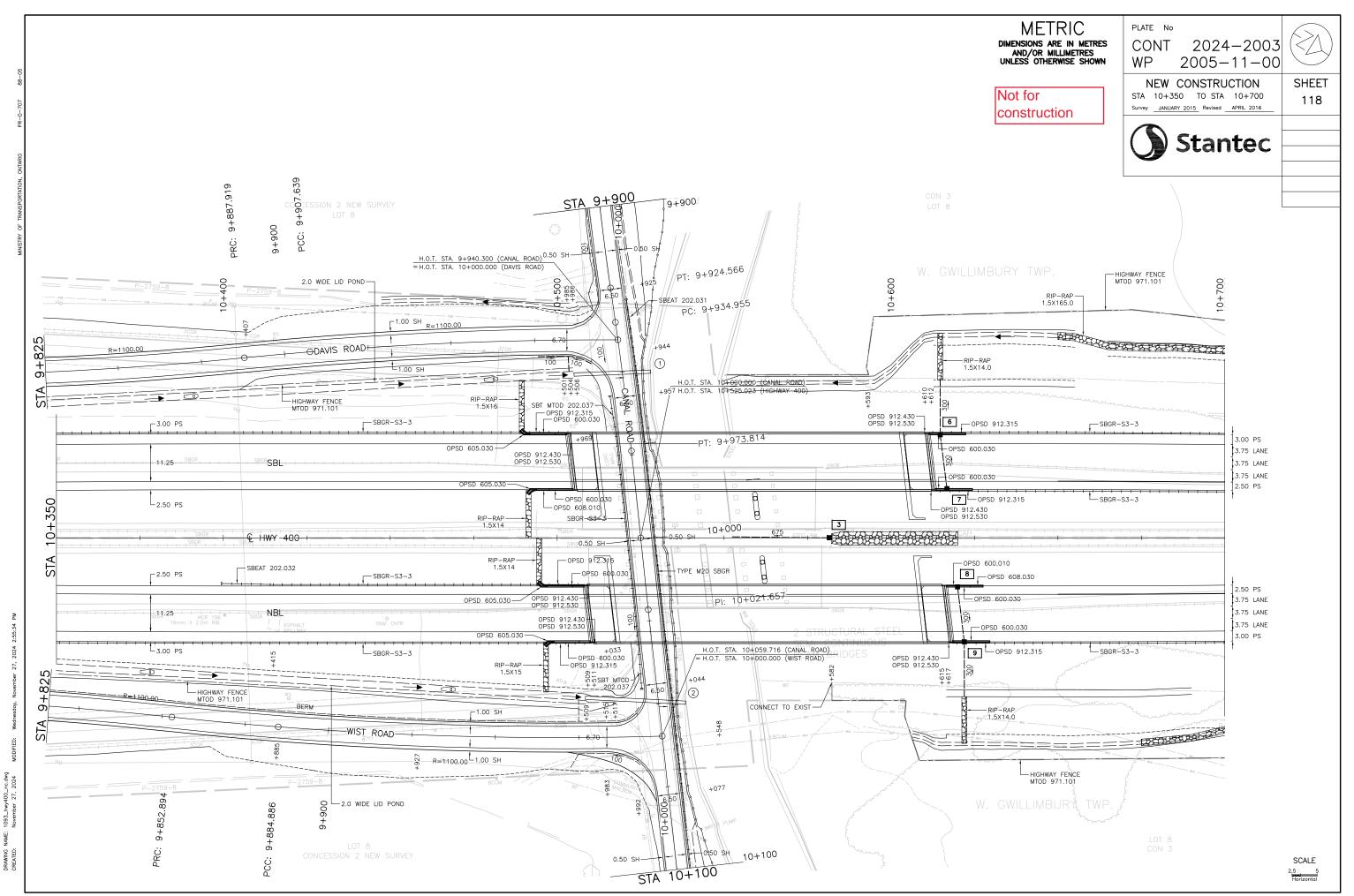


Figure 1b

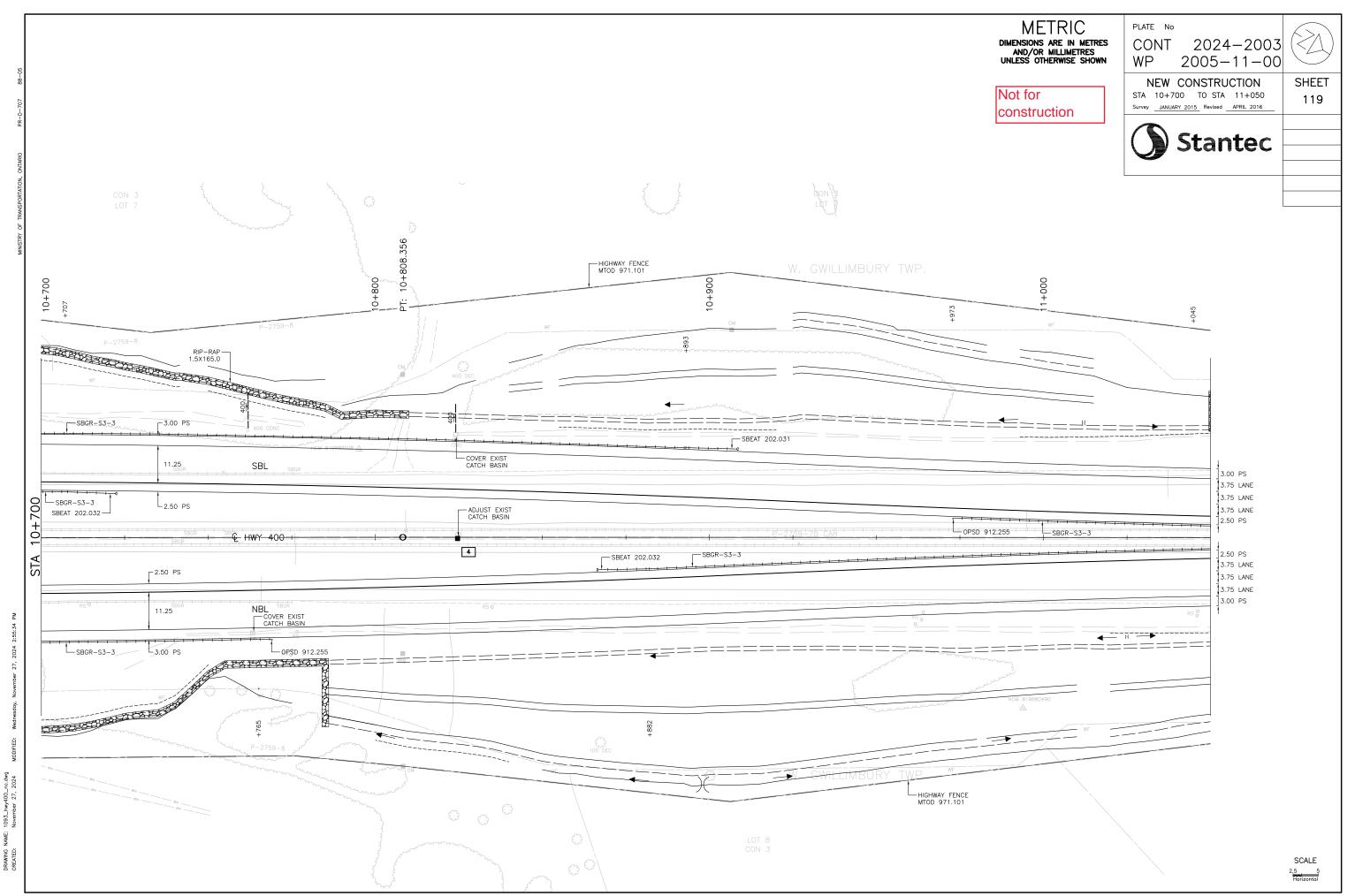
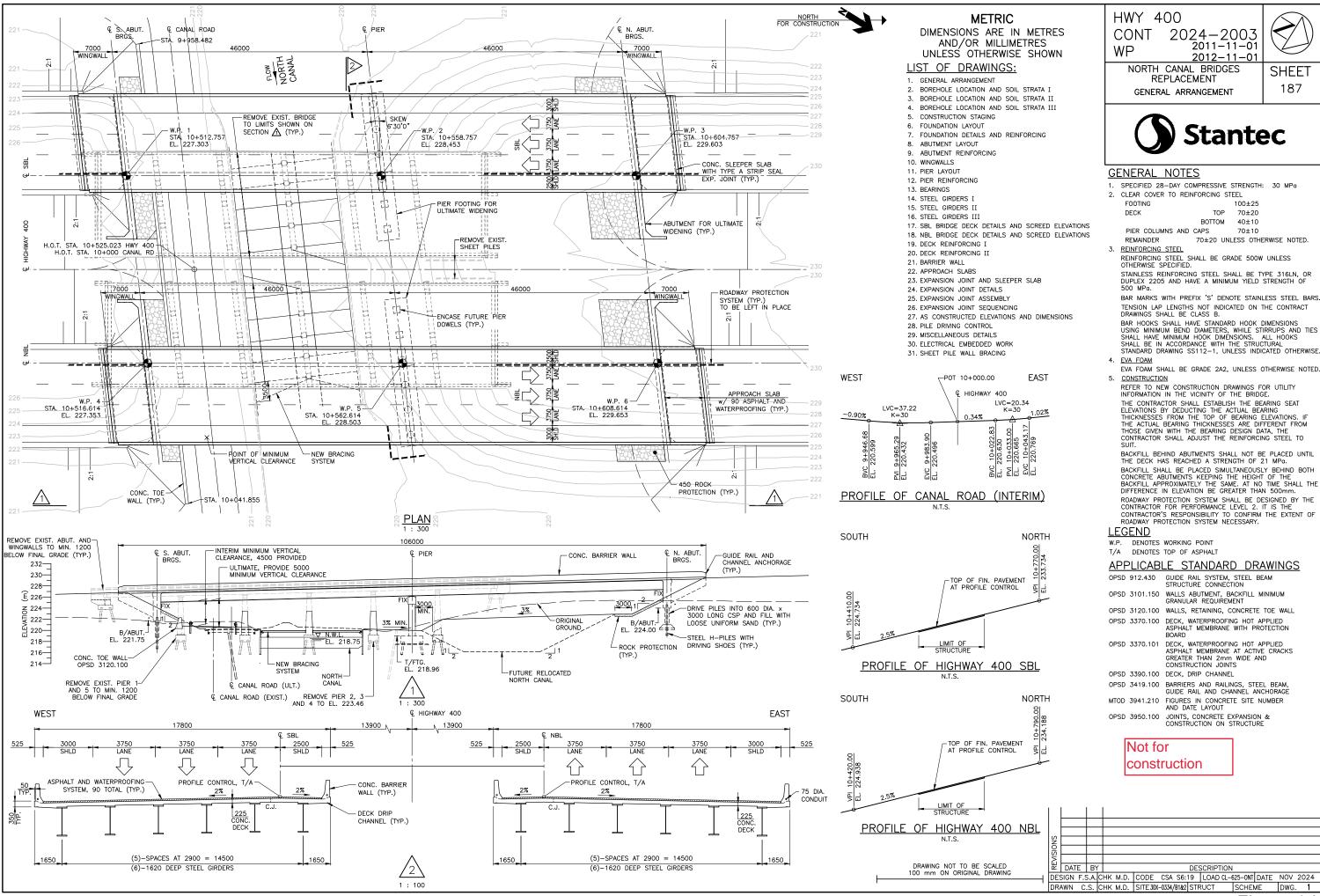


Figure 1c



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## 3.4 Canal Road

To accommodate the new Highway 400 bridges, Canal Road is being lowered to provide a minimum of 4.5 m of clearance to the bridge soffit.

Canal Road, between Wist and Davis Roads, will match the existing cross section which consists of 3.25 m lanes and 0.5 m gravel shoulders.

The existing intersections with Davis Road and Wist Road will tie into the lowered Canal Road.

## 3.5 Holland (Schomberg) River Culvert

The existing Holland (Schomberg) River culvert (Site 30-564/C) consists of a reinforced concrete rigid frame box culvert built in 1950 with a span of 3.1 m, height of 1.5 m, and length of about 70 m. The culvert is orientated perpendicular to the direction of Highway 400 (no skew). There is approximately 3.5 m fill over the top slab. Double median catch basin outlets are constructed at the top slab within the Highway 400 median. Given its estimated age and condition, the culvert is nearing the end of its life and, therefore, requires rehabilitation.

There are municipal culverts of a similar size and design situated immediately to the east (Wist Road) and west (Davis Road) of the Highway 400 culvert. There is a gap of about 1.2 m between the culverts.

A corrugated steel culvert arch, with dimensions of 2740 mm x 1180 mm will be used to line the sides and top of the box culvert. The annular space will be filled with non-shrink grout. Concrete footings will be installed prior to installation of the arch liner, and the liner will be placed on top of the footing. It is estimated that the design life for this alternative would be 75 years. The culvert liner option will require minimal maintenance over its life span.

The gabion retaining walls will be removed. An RSS slope will be installed at the culvert location to prevent encroachment of Highway 400 embankments onto Wist and Davis Roads.

This culvert is an equalization culvert and receives minimal flows and is a barrier to fish passage, and as such, change in velocity or change to fish passage is not expected. Based on the work required, the work be carried out during dry periods. The Town requested that the arch liner be installed between June 15 and October 1. The contractor will be responsible for temporary flow passage system design; however, the contractor may make use of the existing sluice gate and will coordinate the work with the municipality. The short open areas (i.e., not enclosed in a culvert) between



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Highway 400 and the municipal culverts under Davis Road and Wist Road will not be enclosed by the liner.

The following work is proposed for the rehabilitation of the Holland River culvert:

- Remove deteriorated concrete from culvert barrel and end portions of the top slab to facilitate liner installation
- Construct concrete footings
- Install arch liner
- Fill annular space with non-shrink grout
- Remove gabion retaining walls
- Install RSS steep slope at both ends of the culvert

The General Arrangement Drawing for the Holland (Schomberg) River culvert is provided in **Appendix A**.

## 3.6 Drainage and Hydrology

The 2003 TESR proposed drainage improvements including a Stormwater Management (SWM) Pond adjacent to Wist Road to accommodate Highway 400 widening. Given the relatively small size of the contributing drainage areas from the ultimate highway improvements relative to the North Canal, significant increases in peak flows (i.e., water quantity) from the proposed modifications are not anticipated. Consequently, peak flow control using an end-of pipe SWM facility is not warranted for flows draining to the North Canal.

Water quality control will be provided using Low-Impact Development strategies. Median drainage is proposed to drain via storm sewer to the south end of the east swale. This follows the slope of the road and maximizes the flow path in the enhanced grass swale. Flat bottom Low Impact Development (LID) ditches along Highway 400 will drain storm water flow to the North Canal through culverts under Canal Road. Canal Road will drain towards the polder between Wist and Davis Road under ultimate conditions.

## 3.7 Roadside Safety

The existing steel beam guide rail will be replaced to accommodate the proposed realignment of Highway 400 and Wist and Davis Roads.



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The existing steel beam guide rail on Canal Road will be replaced following the interim grade lowering of Canal Road.

Existing steel beam guide rail in the Highway 400 median within the limits of the pavement rehabilitation will be adjusted to accommodate the pavement grade raise.

## 3.8 Signage

The replacement, relocation and/or removal of existing signage will be based on current Ministry signing policies. It is anticipated that all existing signs impacted by construction will be replaced.

## 3.9 Illumination

Temporary illumination will be required for staging and construction access as necessary.

## 3.10 Construction Staging

## 3.10.1 Highway 400

Construction will be completed over three construction seasons and is described as Season 1, Season 2 and Season 3. Construction staging for Highway 400 will maintain three lanes of traffic in each direction during peak hours. Nightly lane closures will be required on Highway 400 to strengthen shoulders, set up temporary concrete barrier, and complete the crown shift. Nightly closures will also be utilized to resurface existing lanes, complete tie-in work, and apply pavement markings.

Season 1 will consist of sub-excavation, backfill and placing pre-load material at all four quadrants of the bridge approaches. Inside shoulder strengthening is also being completed for Highway 400 northbound and southbound. Season 2 will consist of removing the outside portions of the existing northbound and southbound north canal bridges and construct the new outside portions including the embankment approaches. Season 3 will consist of finishing the outside embankment widening at all four quadrants of the bridge approaches. Remove the inside portions of the existing northbound and southbound north canal bridges and construct the new inside portions including the embankment approaches. Complete pavement rehabilitation of the existing Highway 400 lanes.



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#### 3.10.2 Canal Road

The Highway 400 access ramps at Davis Road and Wist Road will be permanently closed at the start of construction as part of this project in Season 1.

Canal Road under Highway 400 will be temporarily closed in Season 1 for approximately one month to facilitate lowering. Temporary closures of Canal Road will be required during bridge removal and bridge girder installation (approximately five nights in each of Season 2 and Season 3).

Season 1 will consist of constructing a temporary profile to lower the grade prior to constructing the new north canal bridges. Construct the Canal Road intersection tie-ins at Davis Road and Wist Road. Season 2 will consist of removing the outside portions of the existing northbound and southbound north canal bridges and construct the new outside portions. Season 3 will consist of removing the inside portions of the existing northbound and southbound north canal bridges and construct the new inside portions. Detours are provided in the contract drawings during various closure conditions. The detours will direct motorists to the next available Highway 400 access at the Highway 400/Line 5 interchange to the north, or the Highway 400/Highway 9 interchange to the south. Local traffic may also use the South Canal Road under Highway 400.

Staging drawings are provided in Appendix A.

#### 3.10.3 Wist and Davis Roads

Wist Road and Davis Road will require temporary closures to facilitate reconstruction (approximately 12 calendar days in Season 1 and 20 calendar days in Season 3 for each road). Only one of Wist Road or Davis Road will be closed at any given time. A short-term closure of the intersections of Davis Road with Canal Road and Wist Road with Canal Road will be required to accommodate the final tie-in work with the lowered Canal Road profile (one non-holiday weekend per intersection).

Season 1 will consist of constructing the Canal Road intersection tie-ins at Wist and Davis Roads. Construct the realignment of Wist and Davis Roads with temporary profile at tie-ins. Season 2 will consist of constructing the new pipe liner at the Holland River culvert. Season 3 complete construction of the Wist and Davis Roads realignment.

A meeting was held with the Town of Bradford West Gwillimbury and County of Simcoe on November 20, 2024 to present the closure and detour plan and there were no concerns raised about the temporary closures.

Impacts and mitigation for Traffic and Emergency Services are described in **Section 5.3.5**.



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## 3.11 Utilities

Utilities were provided with the Notice of Study Commencement and the Notice of PIC. The following utilities were engaged:

- Bell Canada
- Enbridge Gas
- TransCanada c/o Lehman & Associates
- Rogers Communications
- Hydro One Central
- TELUS
- TransCanada Pipelines
- Cogeco

Utility letters were sent to utilities impacted by the project, and to arrange utility relocations, where required.

Utility relocations were required to accommodate the proposed work. Bell underground cables located along the south side of Canal Road were lowered in 2019 to accommodate the lowering of Canal Road from the west side of the intersection of Davis Road with Canal Road to the east side of the intersection of Wist Road with Canal Road.

To accommodate the future realignment of the North Canal within the MTO right-of-way, it is anticipated that the Bell underground fibre optic cables running parallel to Highway 400 on the east side, will need to be lowered underneath the canal in advance of construction.

Wooden poles supporting aerial Hydro One cables along the west side of Davis Road and the east side of Wist Road and the aerial Hydro One cables crossing Highway 400 were relocated. The Highway 400 crossing was relocated to the south away from the proposed bridge construction. These relocations were completed in 2019. The pole anchors will require adjustments following completion of the proposed grading.

# 3.12 Property

Approximately 0.31 hectares (ha) of private property was required to accommodate the Highway 400 realignment within the project limits. New right-of-way fencing will be



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installed where property has been acquired. It is understood that this property was acquired in 2019.

Property requirements for the future realignment of the North Canal are not included as part of the current project and, as such, will be confirmed prior to the canal relocation which is anticipated to be led by the Holland Marsh Drainage System Joint Municipal Board (HMDSJMB).

# 3.13 Navigation

The North Canal and the Holland (Schomberg) River are not listed in the schedule of navigable waters in the *Canadian Navigable Waters Act* (CNWA, 2019). Transport Canada, Marine (July 19, 2004) correspondence to K. Smart Associates advised that that Holland Marsh Drain is considered non-navigable at this location.

There is no requirement for an application pursuant to the *Canadian Navigable Waters Act* since the area under the bridges is not navigable. No in-water work is proposed, and the existing piers within the water will be left in place until such time as the North Canal is realigned at a future date by others.

# 3.14 Project Implementation

The current project includes the replacement of the Highway 400 Bridges over the North Canal. The bridges over the North Canal will be a clear span bridge and have been developed to accommodate the footprint of the future re-aligned North Canal below the structures by others.

At a future date after the replacement bridges have been constructed, the Holland Marsh Drainage System Joint Municipal Board (HMDSJMB) is anticipated to be able to complete their canal realignment project as proposed in the *Holland Marsh Drainage System Canal Improvement Project* under the *Drainage Act*. At the time of this DCR, it is understood that the drainage board has completed its realignment of the North Canal in other areas of the Holland Marsh with the exception of the portion within the MTO Highway 400 North Canal right-of-way.

The relocation of the North Canal is not part of the MTO bridge project. Following the bridge replacement project, HMDSJMB is expected to complete their canal realignment.

Final alignment and lowering of Canal Road will be completed by MTO following the future realignment of the North Canal.

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# 4.0 Transportation Environmental Study Report Five Year Review

The following section describes the TESR Five Year Review, which includes a description and reason for change/impact as well as significance of change.

Table 2: Comparison of TESR Approved Plan and Recommended Design

Design Element	TESR Approved Plan	Detail Design Recommendations		
Horizontal Alignment	Project limits from the South Canal Bridge to 1.0 km south of Highway 89.	Project limits are within original study area. Minor additional property requirements identified to accommodate grading north of Highway 400 due to the change from rehabilitation to replacement of the structures.  There are no significant impacts as a result of this change.		
Vertical Alignment	No change in vertical alignment.	Minor profile change to Highway 400 at bridge.  There are no significant impacts as a result of this change.		
Highway Drainage	Stormwater Management (SWM) Pond adjacent to Wist Road.	No SWM Pond - Low Impact Development (LID) ditches with sediment control features.  There are no significant impacts as a result of this change.		
Holland (Schomberg) River Culvert	Rehabilitate or replace the Holland (Schomberg) River culvert under Highway 400.	Steel arch lining of the Holland River Culvert was selected as the preferred rehabilitation strategy. No Change.		



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Design Element	TESR Approved Plan	Detail Design Recommendations
Canal Road Access Ramps	Closure of the Canal Road access from Highway 400.	Closure of the Canal Road access from Highway 400.  No Change.
Wist Road and Davis Road	Concepts for realignment and profile changes to Wist Road and Davis Road	Realignment of Wist Road and Davis Road to accommodate realignment of the Highway 400 embankment. No change to property requirements.  There are no significant impacts as a result of this change.
Bridge	Rehabilitate and widen existing Highway 400 bridges over Canal Road and North Canal	Replace and widen the existing Highway 400 bridges over Canal Road and North Canal.  Change based on updated structural condition since 2003. The bridge will be constructed to accommodate a future 10 lane configuration of Highway 400. No new live lanes will be added by this project.  There are no significant impacts as a result of this change.
Canal Road	No change or impact to Canal Road	Canal Road will be realigned and lowered after the North Canal is realigned to the north (separate project by others).  There are no significant impacts as a result of this change.

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Design Element	TESR Approved Plan	Detail Design Recommendations
North Canal	No changes to North Canal alignment within the MTO right-of-way were identified	The new bridge provides space to allow the North Canal realignment to be completed by others in the future. The future realignment is not part of this bridge replacement project.  There are no significant impacts as
		a result of this change.

Following the review, there are no significant impacts as a result of the changes identified.

# 5.0 Environmental Issues and Commitments

Environmental investigations related to the natural and socio-economic environments were undertaken to confirm environmental conditions. A summary is provided in the following sections. In general, effects to the natural, socio-economic, and cultural environment were minimized during the study by following three principles:

- Avoidance:
- Identification of roadway design elements to minimize environmental impacts; and
- Development of site-specific and generic environmental protection plan guidelines for consideration during and following construction.

The design, construction and operation / maintenance phases of this project involve typical activities for which potential environmental impacts are predictable and known environmental protection measures are applied.

Details on how environmental impacts will be mitigated, either through the use of environmental design or through environmental constraints to be included in the construction contract package, are summarized in **Table 6** at the end of this report.



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## 5.1 Natural Environment

## 5.1.1 Fish and Fish Habitat

A Fish and Fish Habitat Existing Conditions and Impact Assessment Report – Highway 400 North Canal Overpass Structure Replacements (G.W.P. 2005-11-00) (Stantec 2019) was previously submitted on May 1, 2019, and provided supporting documentation for the project and described fish communities and fish habitat in watercourses potentially affected by the project. The report was completed in accordance with the MTO/DFO/MNRF Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings (MTO 2016) and the Environmental Guide for Fish and Fish Habitat (MTO 2009). The bridge replacements did not occur in 2019 and the replacements were deferred. A holding strategy occurred in 2021 for necessary repairs which did not require in-water work, however it is now MTO's intention to complete the full replacement of the bridges.

A Fish and Fish Habitat Existing Conditions and Impact Assessment Report Addendum (Stantec, 2024) was completed to provide an update to the Fish and Fish Habitat and Impact Assessment Report (Stantec 2019). It included a review of the previously completed report and fisheries data to capture current Species at Risk (SAR) background information.

Because the MTO Protocol has been updated since the report was prepared, the tables have been updated herein (Attachment B). The Addendum was completed in accordance with the MTO/DFO/MNRF Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings (the Protocol) (MTO 2020a) and the Interim Environmental Guide for Fisheries (MTO 2020b).

Field investigations were conducted on October 2, 2014 and July 5, 2018, for the fish and fish habitat survey. Due to the availability of background data, fisheries community sampling was not conducted. No new investigations were required as part of the 2024 fisheries memo since there are no changes to the previously assessed structural replacement approach.

## **North Canal Existing Conditions**

The North Canal was previously classified as a Type B drain in the 2019 report, but it has been recently updated to a Type E drain. The classification as Type E Drain indicates that it supports sensitive fish species that spawn in the spring (DFO 2014).

No Significant Fish Habitat is present within the Study Area. This is a change from the Stantec 2019 report where American Eel had been identified. American Eel (*Anguilla rostrata*) was identified by the MNRF as being present in the canal, west of

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Highway 400 (west of Sideroad 5). Background information from MNRF and DFO reviewed in 2024 does not identify this species within the Study Area. MTO Template D2a) and Fish Community Data Table (MTO Template D2b) have been updated to reflect the available information.

Stantec's 2014 and 2018 field investigations documented habitat in the North Canal within the vicinity of Highway 400 as 'flat' morphology and a bankfull width of approximately 31 m. Bottom substrate was silt, clay and muck and water was not visibly flowing at the time of the field visits. In the center of the channel, water depth ranged from 2.1 m to 2.4 m during the 2018 field investigation. Submergent and floating aquatic vegetation (Eurasian Water-Milfoil, Richardson's Pondweed, Lesser Duckweed, filamentous green algae) were present upstream and downstream of the bridges and riparian vegetation consisted of reed canary grass and forbs. Beneath the bridges, both banks have been reinforced with sheet piling. Habitat diversity beneath the bridges was low, with homogeneous 'flat' morphology and a lack of instream cover.

Although specific habitat use is not known, the North Canal likely provides general feeding and migratory habitat for various life stages of resident fish species.

## **Holland (Schomberg) River Existing Conditions**

The Holland (Schomberg) River is isolated from the Holland Canal (i.e. there is no natural outlet to the surrounding canal system). Within the Holland Marsh and Holland River, water levels are managed through a series of pumping stations that are connected to the canal system. Since there is no surface water connection between the Holland River and the Holland Canal. fish cannot move between these water bodies.

The Holland (Schomberg) River provides warmwater fish habitat for a variety of species and is a Type E Drain (MNRF 2018c). Type E Drains have permanent flow and support sensitive fish species that spawn in the spring. Fish community data were provided by the MNRF (2015) from tributaries of the Holland (Schomberg) River located approximately 9 km northeast of Highway 400. The data were collected in 2006 and the following species were documented: Brook Stickleback, Brown Bullhead, Largemouth Bass, Pumpkinseed, Creek Chub, Bluntnose Minnow, White Sucker.

Stantec's 2014 field survey documented habitat in the Holland River within the vicinity of Highway 400 as 'pool' morphology. Beyond the Canal Road right-of-way, morphology was 'flat' bankfull width was approximately 31 m (depth was approximately 0.6 m). The water was stagnant with dense growth of duckweed, obscuring visibility. Riparian vegetation consisted of a large willow tree on the east side of Highway 400 and grasses and forbs on both sides. Bottom substrate was not clearly visible at the time of the survey but was estimated as silt, clay and muck based on the substrates that adhered to the sensor used to determine water temperature and dissolved oxygen. The existing



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concrete box culvert does not allow fish passage under Highway 400 due to the presence of a sluice gate at this location.

The October 2014 field survey indicated that habitat quality in the Holland River near Highway 400 is poor due to the presence of stagnant water and extremely low dissolved oxygen (0.4 mg/L) observed in October 2014. Although some fish species can tolerate low dissolved oxygen levels, the Provincial Water Quality Objective for the protection of aquatic life is 4 mg/L. MNRF did not provide a habitat sensitivity ranking for the Holland (Schomberg) River.

## **Potential Impacts**

In consultation with DFO, MTO has developed *the Best Management Practices Manual for Fisheries* (MTO 2020c) and a table of Routine MTO Works for activities within the MTO right-of-way that are not within a waterbody (Table 2 of the Protocol).

Updated information regarding the Fisheries protocol regarding the 2020 manual is provided in the 2024 Fish and Fish Habitat Existing Conditions and Impact Assessment Report Addendum.

The proposed bridges will span the North Canal such that there are no new in-water piers. The existing in-water piers will be partially removed above the water, as part of this project (i.e., no in-water work in the North Canal).

The *Clear Span Bridges BMP* can be used for replacement of the Highway 400 North Canal Overpass Structure replacements; however, a Fisheries Assessment was conducted for the use of de-icing pumps to determine the likelihood that the project may result in a harmful alteration, disruption or destruction (HADD) of fish habitat to fish or fish habitat (Step 4 of the Protocol).

The realignment of the North Canal was completed under the Holland Marsh Drainage System Canal Improvement Project, except for the section of the North Canal within and immediately adjacent to the MTO's right-of-way under the North Canal bridges. The bridge replacements will be constructed to accommodate the future northerly realignment of this section of the North Canal, to be completed by others at a future date after the MTO bridge replacement contract.

Pathways of Effects (POEs) applicable to the use of a de-icing system in the North Canal and the Holland (Schomberg) River and these are described in the Addendum.

Given its estimated age and condition, the Holland (Schomberg) culvert is nearing the end of its life and, therefore, requires rehabilitation. Installation of a corrugated steel culvert liner arch on concrete footings was selected as the preferred rehabilitation option. The works are described in **Section 3.5**.



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This culvert is an equalization culvert and receives minimal flows and is a barrier to fish passage, and as such, change in velocity or change to fish passage is not expected. The Town requested that the arch liner be installed between June 15 and October 1; however, the in-water timing window to protect fish and fish habitat must also be followed. The Contractor will be responsible for temporary flow passage system design; however, the Contractor will make use of the existing sluice gate and will coordinate the work with the municipality.

The short open areas (i.e., not enclosed in a culvert) between Highway 400 and the municipal culverts under Davis Road and Wist Road will not be enclosed by the liner.

## **Determination of HADD**

Mitigation measures applicable to the bridge replacement project are provided in the *Clear Span Bridges BMP*. Harmful Alteration, Disruption or Destruction (HADD) to fish and fish habitat is unlikely to occur because in-water work is not required for removal of the existing bridge.

The use of de-icing pumps was assessed, and the residual effects are unlikely to cause a HADD to fish and fish habitat. The plan for the pumps reduces the risk of sediment resuspension by suspending them in the water column (at least 30 cm off the bottom of the canal) and fish can migrate through the area due to the placement of the bubblers on alternating sides of the canal. Within the approximately 46 m long section of the North Canal within which the de-icers will be located, dissolved oxygen concentrations may increase due to the increased water circulation resulting from the operation of de-icing pumps. An increase in dissolved oxygen is unlikely to cause a HADD to fish.

With the implementation of mitigation measures, replacement of the Highway 400 bridges at the North Canal is unlikely to result in a HADD to fish and fish habitat. The MTO Project Notification Form can be completed from Step 5 of the Protocol (MTO 2020a) and is kept on file with MTO.

Based on the need for lining of the Highway 400 Holland (Schomberg) culvert, there is no applicable BMP; therefore, a Fisheries Assessment was conducted to determine the likelihood that the project may result in a HADD to fish or fish habitat (Step 4 of the Protocol).

The loss of 44.8 m<sup>2</sup> of culvert bottom that will change from a concrete bottom to a concrete ledge along the culvert sides cannot be mitigated (permanent effect) but will still be available for use by fish in the Holland (Schomberg) River). The structure is an equalization culvert and is a barrier to fish passage. This is due to the series of pump stations with no natural outlet to the surrounding canal system and there is no surface water connection between the Holland River and the Holland Canal so fish cannot move



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between these water bodies. As a result, fish passage will not be affected by the addition of a liner to the culvert (i.e., water velocity is not relevant to fish passage at this location).

With the implementation of mitigation measures identified in OPSS.PROV 182 (General Specification for Environmental Protection for Construction in Waterbodies and on Waterbody Banks), the addition of the liner to the Highway 400 culvert is unlikely to result in a HADD to fish and fish habitat. The MTO Project Notification Form can be completed from Step 5 of the Protocol (MTO 2020a).

## **Mitigation Measures**

In-water work for the culvert lining is permitted from July 16 to March 14 inclusive (inwater work is not permitted from March 15 to July 15), as provided by the Midhurst District MNRF.

No in-water work is required for the North Canal as the piers will remain in place.

Ontario Provincial Standard Specifications (OPSS) are applicable and are included in **Table 6**.

## 5.1.2 Terrestrial Ecosystems

Background information and habitat characteristics were summarized in the *Terrestrial Ecosystems Existing Conditions and Impact Assessment Report* (Stantec, 2019). An addendum was completed in 2024 to review and assess the design updates since 2019 of the preferred alignment, as well as a review of terrestrial data to capture any recent policy updates and current Species at Risk (SAR) background information. This addendum was completed using the guidance provided in the *Environmental Reference for Highway Design* (ERHD) (MTO 2013).

Field investigations were conducted for the Study Area (i.e., an area encompassing 120 m around the ROW) on October 2, 2014, July 26, 2016, and July 5, 2018. Data was collected using guidance from the *Environmental Reference for Highway Design* (MTO 2013). Natural heritage features examined included Ecological Land Classification (ELC) vegetation communities, potential species at risk (SAR) habitat and areas of candidate Significant Wildlife Habitat (SWH). Additional fieldwork to investigate potential Species at Risk (SAR) bat habitat was conducted in May 2018 by Dillon Consulting, as part of an MTO retainer assignment. No new field work was included based on the availability of information from the past field studies in 2014, 2016 and 2018.

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## 5.1.2.1 Vegetation

## **Existing Conditions**

The study area is located in a rural environment within Ecoregion 6E (Lake Simcoe-Rideau Ecoregion). The Study Area is also located within the Huron-Ontario section of the Great Lakes – St. Lawrence Forest Region. The study area is predominantly a mix of swamp and open agriculture communities, along with constructed areas such as Highway 400. Designated natural areas found within the study area include the Greenbelt, the Holland Marsh Lowlands Environmentally Sensitive Area and Significant Wildlife Habitats for Deer and candidate habitat for turtles.

Vegetation Ecological Land Classification (ELC) mapping was completed as part of the 2019 Terrestrial Report (Stantec 2019). Vegetation communities within 120 m of the North Canal bridges consists of the following:

- South of North Canal: MEMM3 Dry Fresh Mixed Meadow
- North of the North Canal: MAMM 1-3 Reed-canary Grass Graminoid and MASM1-1 – Cattail Mineral Shallow Marsh Type

Surveys in 2018 confirmed that there were no changes to vegetation community classification compared to 2014. No Butternut trees were observed during field investigations and the species is absent from the study area. A structural investigation on May 19, 2021 identified little to no vegetation (bare ground) at the fore slope abutments in the study area.

## **Phragmites**

There were patches of Common Reed (*Phragmites australis*) within the Cattail marshes east and west of Highway 400 on the north side of the canal, and within the Dry-fresh Mixed Meadow along the northbound and southbound shoulders of Highway 400 south of the canal. The natural sections of the study area consist mainly of mixed Silver Maple swamp communities with meadow communities scattered throughout. The Holland River waterway is a shallow aquatic feature with floating duckweed concentrated at the culvert heads.

### **Designated Areas**

The Study Area is predominantly a mix of swamp and open agriculture communities, along with constructed areas such as Highway 400. Designated natural areas found within the Study Area include the Greenbelt, the Holland Marsh Lowlands Environmentally Sensitive Area and Significant Wildlife Habitats for Deer and candidate habitat for turtles.



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The Holland Marsh is identified as a "specialty crop area" and included within the Protected Countryside of the Greenbelt Plan (2017). Specialty crop areas carry specific land use policies related to activities such as site alteration and development, although the Plan recognizes that major infrastructure serving national, provincial and interregional needs traverse the Greenbelt and that new and/or expanded facilities will be needed to serve the substantial growth projected in the Greater Golden Horseshoe area. Degradation of the feature is not anticipated, and no long-term effects are anticipated.

## **Impact Assessment**

The project includes replacement of the existing Highway 400 North Canal bridges, and modifications to accommodate the new bridges and close the Wist and Davis Road access.

The proposed works will require some removal of treed vegetation cover and terrestrial habitat to accommodate construction. Direct impacts on these communities include cut/fill and permanent vegetation removal to accommodate the bridge replacements and roadworks. Potential impacts associated with the proposed work include soil compaction, siltation of onsite natural communities and water bodies, vegetation disturbance, spills of deleterious substances into natural communities, noise disturbance and encounters with wildlife. These impacts are considered to be short term, localized to the construction area during construction activities, and will be mitigated through the application of appropriate construction techniques and mitigation measures.

## **Mitigation Measures**

Standard environmental protection for Sediment and Erosion Control, vegetation protection and edge management, and protection of migratory birds are applicable. These measures are provided in **Table 6**.

Site-specific measures are recommended for reptiles and migratory birds in **Section 5.1.3** as they might be encountered during the overall project works or the preferred Highway 400 alignment.

## 5.1.3 Wildlife and Wildlife Habitat

## **Existing Conditions**

### Migratory Birds

The Highway 400 North Canal Bridges have a history of Barn Swallow nesting on the structures as described in the previous section. A July 2018 nest survey observed



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8 active Barn Swallow nests, 66 old nests (55 Barn Swallow, 7 Cliff Swallow, 4 American Robin), and 42 nest scars (39 Barn Swallow, 3 Cliff Swallow) on the existing North Canal Bridges. There was also an old swallow nest, possibly Barn Swallow, in a nearby culvert under Davis Road.

Barn Swallow, Cliff Swallow, and American Robin receive protection under the *Migratory Birds Convention Act, 1994* (MBCA), which protects nests of migratory birds from damage while they are active, including nests in vegetation and on structures. For Barn Swallow, the core nesting period is from May 1 – August 31. For all other migratory birds, the core nesting period is identified as April 1 – August 31.

## Significant Wildlife Habitat

Significant Wildlife Habitat (SWH) includes habitat for the following: seasonal concentration areas, rare or specialized habitat, habitat for Species of Conservation Concern (SOCC), or animal movement corridors.

- Seasonal Concentration Areas: A known deer wintering area is located north of Canal Road at the North Canal bridges. Candidate turtle wintering habitat is present in the Holland (Schomberg) River and North Canal.
- Rare or Specialized Habitat: Some potential nesting habitat for Snapping Turtle and Northern Map Turtle is present along the shorelines of the North Canal in the form of gravel or exposed loose soil, however roadside habitat is limited to a narrow soft sand/gravel shoulder.
- Habitat of SOCC: Nesting habitat is present for Barn Swallow where 8 active nests
  were observed in 2018 under the North Canal bridges. Potential habitat is also
  present for Snapping Turtle and Northern Map Turtle where overwintering in the
  North Canal and Holland (Schomberg) River may occur. Potential nesting habitat is
  also present along the North Canal shorelines and in gravel and loose material
  under the bridges adjacent to the roadside and canal.
- Animal Movement Corridors: The land north of Canal Road has been classified as a
  Deer Wintering Area by the MNRF. Therefore, this area can be considered a
  candidate Deer Movement Corridor where deer travel throughout the community of
  the Silver Maple Organic Deciduous Swamp (SWDO2-2) and/or along vegetated
  corridors along the North Canal and Holland (Schomberg) River.

## **Species at Risk and Species of Conservation Concern**

Based on the 2019, 2021, and updated 2024 desktop review, 18 species had occurrence records that overlapped the Study Area. They were identified as either SAR or Species of Conservation Concern (SOCC), which includes Special Concern or provincially rare (S1-S3) species. As of the 2024 review, three additional SAR/SOCC



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have been included as potentially occurring with the Study Area (Black Ash, Wood Thrush, and Brainerd's Hawthorn). Eastern Milksnake has been removed from the list as this species has been downlisted to Not at Risk in Ontario and is an S4 species.

The following species are identified as SAR protected by the *Endangered Species Act*, 2007 (ESA):

 Butternut (endangered), Black Ash (endangered), Bank Swallow (threatened), Bobolink (threatened), Eastern Meadowlark (threatened), Little Brown Myotis (endangered), Northern Myotis (endangered), and Tri-colored Bat (endangered)

The following species are identified as SOCC and are not protected by the ESA:

 Barn Swallow (special concern), Monarch (special concern), Snapping Turtle (snapping turtle), Northern Map Turtle (special concern), Eastern Ribbonsnake (special concern), Common Nighthawk (special concern), Wood Thrush (special concern), Eastern Wood-Pewee (special concern), Grasshopper Sparrow (special concern), Canada Warbler (special concern), Brainerd's Hawthorn (S2)

Habitat descriptions and a suitability assessment for potential SAR/SOCC in the Study Area was included in Table 3-3 of the *Terrestrial Ecosystems and Impact Assessment:* Detail Design and Class Environmental Assessment – Highway 400 North Canal Overpass Replacement Study (GWP 2005-11-00) (Stantec 2019). Suitable habitat was present for the following species:

### SAR

- Bat SAR: Two potential bat maternity roost trees were identified north of the canal and east of Highway 400 (outside of the proposed work area).
- Black Ash: Is a newly listed species (as of January 2024) and is afforded individual
  and habitat protection under the ESA. Based on review of ELC and vascular plant
  lists previously completed for the Study Area, this species was not present within 30
  m of the Study Area. There is potential for the Silver Maple Organic Deciduous
  Swamp (SWDO2-2) north of North Canal to have occurrences of Black Ash,
  however this vegetation community is greater than 30 m from the proposed works
  and will not be impacted.

## SOCC

- Barn Swallow: Nests were present on the bridges over the North Canal (July 2018 nest search).
- Snapping Turtle and Northern Map Turtle: Potential turtle nesting habitat is present along the shorelines of the North Canal in the form of gravel and exposed loose soil.



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Nesting habitat is also present under the North Canal bridges, adjacent to the roadside and North Canal. The Holland (Schomberg) River and North Canal may provide suitable overwintering habitat.

## **Potential Impacts**

Potential impacts were to potential reptile species (Snapping Turtle and Northern Map Turtle) as well as Migratory birds based on their potential presence within the study area.

## **Mitigation Measures**

The following site-specific protection measures are recommended for reptiles and migratory birds because they might be encountered during the overall project works or the preferred Highway 400 alignment.

## Reptile Protection (including Snapping Turtle and Northern Map Turtle)

Direct impacts to nesting turtles will be mitigated during construction using barrier sediment fencing to exclude turtles from work areas near potential turtle nesting areas listed under SOCC above. Barrier fencing will be installed before May 15 or after September 15 (i.e., outside of turtle nesting season). Fencing materials with plastic mesh will not be used due to risk of entanglement of reptiles. Further specifications for reptile exclusion fencing should follow Best Practices Technical Note – Reptile and Amphibian Exclusion Fencing (MNR 2013) and Best Management Practices for Mitigating the Effects of Road Mortality on Amphibian and Reptile Species at Risk in Ontario (MNRF 2016). The exclusion fencing is to be maintained around the work area for the duration of the turtle nesting activity period.

If construction is initiated during the turtle nesting season, a qualified biologist will visually inspect the site for turtle nests and adult turtles and direct installation of barrier fencing whereby all nests are avoided. If not possible, work will be delayed until it is determined that the nest no longer includes viable eggs (young of fledged, or eggs were predated).

A thorough visual search will occur before work commences each day by construction contractors to avoid interaction with turtles. Visual searches should include inspection of machinery and equipment for snakes, prior to starting equipment, particularly during the peak activity period from April 15 to November 1.

If reptiles are encountered during construction, work at that location will stop until the reptiles are no longer present. It is also recommended that disturbance during ditching and grading activities be limited as much as possible and piling dirt in fallow vegetation should be avoided.



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## **Migratory Birds**

Vegetation clearing during nesting periods in migratory bird breeding habitat can destroy active nests and contravene the MBCA. Vegetation clearing is recommended to occur outside the core nesting period to eliminate the need for migratory bird nest searches. If work must take place during the core nesting period and the area is small enough to be effectively searched for nesting birds, then a breeding bird survey can be completed by a Qualified Biologist. The area where vegetation is to be removed must be searched within five days prior to the work commencing. If breeding pairs are located with active nests of eggs or young, then they will be protected with a buffer until the nest is no longer active.

If an active nest is observed during construction, a designated buffer will be delineated within which no activity will be allowed to occur while the nest is active (i.e., with eggs or young). The radius of the buffer will be determined by a Qualified Professional. Once the nest is determined to be inactive (e.g., the young have fledged the nest), clearing and other activities in the area may proceed.

Barn Swallow nests were present at the northbound and southbound bridges, and they have an active nesting period of May 1 – August 31. Due to the history of nesting on North Canal Bridges, it is recommended for construction work under the bridges to be scheduled after August 31 or before April 1 to avoid potential impacts to nesting birds including Barn Swallow. If construction at the bridges cannot avoid the active nesting season for migratory birds (April 1-August 31), then exclusion or deterrence must be used to dissuade birds from establishing nests in the structures (MNRF 2017). An old swallow nest was also found at a municipal culvert west of Davis Road, but no work is proposed for that location.

### 5.1.4 Erosion and Sediment Control

Mitigation measures for sedimentation, erosion, and dust control are recommended to prevent sediment and dust from entering sensitive natural areas (i.e., watercourse and wetlands). The primary principles associated with sedimentation and erosion protection measures are to: (1) reduce the duration of soil exposure; (2) retain existing vegetation, where feasible; (3) encourage re-vegetation; (4) divert runoff away from exposed soils; (5) keep runoff velocities low; and to (6) trap sediment as close to the source as possible. To address these principles, the following mitigation measures are recommended:

 Install sediment fencing and/or barriers along work zones where there is potential for sedimentation of watercourses or wetlands, or inadvertent encroachment of construction vehicles into trees or natural areas



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- Stabilize exposed soil areas and re-vegetate through the placement of seed and
  mulching (native seed mixes; sourced locally if possible) or seed and an erosion
  control blanket, promptly upon completion of construction activities. All disturbed
  substrates are recommended to be re-vegetated using seed mixes of species that
  are native to the site and suitable for site conditions. Introduce seed to disturbed
  substrates as soon as feasible following construction, and sediment fencing is
  recommended to remain in place until vegetation cover is re-established
- Re-fuel equipment 30 m away from the watercourses and the wetland to reduce potential impacts in the event of an accidental spill
- In addition to any specified requirements, make additional sediment fence available on site, prior to grading operations, to provide a contingency supply in the event of an emergency
- Monitor sediment and erosion controls daily and properly maintain as required.
   Remove controls only after the soils of the construction area have been stabilized and adequately protected or until cover is reestablished
- Monitor limits of construction adjacent to natural features during construction (along with sediment and erosion control measures) to maintain limits with respect to vehicular traffic and soil or equipment stockpiling
- Restore disturbed natural areas to pre-construction conditions

## 5.1.5 Groundwater and Source Water Protection

#### 5.1.5.1 Source Water Protection

The primary objective of the Source Protection Plan, as provided for in the *Clean Water Act*, is to protect existing and future drinking water sources. The Study Area is located within the South Georgian Bay Lake Simcoe Source Protection Region, as documented in the *South Georgian Bay Lake Simcoe Source Protection Plan* (2015), amended July 2024.

Lake Simcoe Region Conservation Authority (LSRCA) Regulated Areas are present within the study area for this project associated with watercourses and the Holland Marsh.

There are no Intake Protection Zones (IPZ) or Significant Groundwater Recharge Areas (SGRA) present in the study area. There are no municipal wells or Highly Vulnerable Aquifers (HVA) are present within the study area.

The entire study area is within the Wellhead Protection Area -Q2 which is a broad area covering much of the Town of Bradford West Gwillimbury and is associated with



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groundwater recharge. Sensitive groundwater resource information can be found on the *Town of Bradford West Gwillimbury Official Plan*, Schedule D3, the *County of Simcoe Official Plan* Schedule 5.2.4 to 5.2.6 and LSRCA interactive mapping and is being considered in water taking requirements.

## 5.1.5.2 Construction Dewatering

A *Hydrogeologic and Hydrologic Assessment* (2018) was prepared for the project which documented groundwater investigations associated with this interchange. Details from that report are discussed below. The groundwater level is higher than the elevation of the proposed foundations for the bridge piers, abutments, and retaining walls.

A review of Ministry of the Environment, Conservation and Parks (MECP) Water Well Records (WWR) (2018) indicated 19 water well records located within 500 m of the Sites and of these 15 WWR were listed as water supply wells. Aerial mapping shows one building / residence and the MECP WWR show two wells located within 100 m (the approximate expected radius of influence during the maximum pumping rate) of the bridge replacements. Two wells exist to the west of the site. One is used for domestic water supply purposes and the other is abandoned.

Aerial mapping shows one building and the MECP WWR show no wells within 50 m (the approximate expected radius of influence during the maximum pumping rate) of the retaining wall. Based on the distance and depth of the private wells and the limited extent of pumping influence, well impacts are not anticipated.

A review of the MECP WWR database indicates there are no municipal wells located within 500 m of the project area. The proposed construction activities for the bridge replacements project are not anticipated to result in adverse interference to municipal water supply systems.

The design of dewatering and unwatering systems are the responsibility of the contractor.

The construction of the new North Canal bridge will require temporary groundwater dewatering. Under Ontario Regulation (O. Reg.) 64/16 and O. Reg. 63/16, the MECP requires a Permit to Take Water (PTTW) for dewatering in excess of 400,000 L/day, and an Environmental Activity and Sector Registry (EASR) for construction dewatering between 50,000 and 400,000 L/day. A draft Category 3 PTTW application is underway in 2024 at the time of DCR preparation) and will be submitted to MECP as a draft that the Contractor will need to finalize based on complete groundwater dewatering takings and returns.

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Standard spills management and erosion and sediment control mitigation have been included to protect groundwater. Mitigation measures associated with groundwater management are provided in **Table 6**.

## 5.1.6 Drainage

Runoff from the North Canal bridge ultimately drains to the North Canal, and northeasterly to Cooks Bay (Lake Simcoe). The increase in pavement area resulting from the proposed bridge replacements will increase the drainage area to North Canal by 0.1 %, as the drainage area is approximately 10,000 ha. It is therefore anticipated that the construction work will not have adverse impacts to the existing hydrology.

Stormwater and Drainage plans have been prepared and are included in the contract package. The MTO Highway Drainage Design standards have been met.

Previous hydrologic work and a stormwater management strategy for the site is documented in the Holland Marsh Drainage System Modifications – Highway 400 – Revised Hydraulic Assessment (Stantec, 2015), the Revised Highway 400 Stormwater Management Strategy – North Canal (Stantec, 2016), and the Highway 400 Final Drainage Design – North Canal (Stantec, 2019) on file with MTO.

The project does not include realignment of the North Canal, which will be completed by others following the MTO bridge replacement project. The bridge project and drainage has been designed to not preclude the future realignment work proposed under the Holland Marsh Drainage System improvements.

## 5.1.7 Landscaping

Tree removal must occur outside of the applicable migratory bird nesting timing window. Trees not designated for removal will be protected. Graded areas will be covered with topsoil, seed and mulch where applicable. Revegetation of disturbed areas, and watercourse realignment site-specific vegetation for slope stability will be provided on Contract drawings.

## 5.1.8 Soil Management and Excess Materials

Stantec completed a Contamination Overview Study (COS) in May 2016 for the area of land along and in the immediate vicinity of Highway 400, from 150 m southeast of the Holland River to approximately 550 m northwest of Canal Road. The study included a review of existing reports, spills data, and historical records, as well as a site reconnaissance visit on October 17, 2014.



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The report identified the following properties or features as Potential Sources of Contamination (PSOCs):

- PSOC 1 In 2008, approximately 75 L of diesel spilled on the shoulder of Highway 400. Based on the information available, it is interpreted that the spill location was the right shoulder of the southbound lanes approximately 25 m to 30 m northwest of North Canal. The potential for concern associated with this spill is interpreted to be moderate.
- PSOC 2 In 1990, approximately 400 L of diesel spilled on the road along Highway 400. Based on the information available, the exact location of the spill is uncertain as it may have occurred approximately 200 to 250 m southeast of the site. Given the uncertainty of the exact location of the spill, the potential for concern associated with this spill is variable and is interpreted to be low if it occurred offsite and moderate if it occurred at the Canal Road overpass.
- PSOC 3 The Highway 400 Canal Road overpass and Highway 400 through Holland Marsh were likely constructed with fill materials imported to the site. The environmental quality of the fill is unknown and represents a PSOC in these areas.
- PSOC 4 Given that the Site includes Highway 400 and roadways, it is possible that road de-icing materials may have impacted the soil and groundwater quality. Although it is understood that salt-related parameters may not be considered to be contaminants in a road alignment when de-icing salt has been used for winter road maintenance (O. Reg. 154/04 s. 48 (3); contaminants due to salt need to be considered if offsite disposal of material is considered.

Subsurface investigations were required on sites identified as having high potential for contamination (based on known historical and current land uses), which are impacted by the recommended improvements. An environmental soil sampling survey was completed on October 16, 2018 and documented in a summary of surface soil sampling results at the North Canal overpass (Stantec, 2018).

Stantec advanced nine (9) shallow test pits which were excavated to a maximum depth of 0.5 m below ground surface (BGS) with hand tools (e.g., stainless steel hand auger or shovel) in locations beside and under the north side of the North Canal Overpass (i.e., on the north bank of the Holland Canal), as well as nine (9) shallow test pits which were excavated to a maximum depth of 0.5 m BGS with hand tools in locations beside and under the south side of the North Canal Overpass (i.e., on the slope between Canal Road and the elevation of Highway 400).

Based on field observations, sample location, and the measured headspace vapour concentrations, five (5) soil samples were submitted for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX), and PHC fractions 1 to 4 (PHC F1 to F4). In



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addition, two (2) soil samples from the north side of the North Canal Overpass and one (1) soil sample from the south side of the North Canal Overpass were analyzed for metals and inorganic parameters. A duplicate sample was submitted from S1 (identified as QC-1) for quality assurance/quality control purposes (QA/QC).

The 2018 summary of soil sampling results memo and EMMP indicate that the concentrations of all parameters tested were below the Table 1 and 8 SCS, with the exceptions of sodium adsorption ratio (SAR) at the locations tested, antimony at S1 and PHC F4 at S2. The concentration of SAR at N9 was below the Table 8 SCS. The SAR, antimony and PHC F4 values in all of the samples submitted as part of the 2018 surface soil sampling program do not exceed the Table 2 SCS for an Industrial/Commercial/Community Property Use with coarse textured soils. Based on the results, the soil can be reused within the MTO right-of-way, however concentrations of SAR, antimony and PHC F4 indicate that it shouldn't be reused within 30 m of a water body.

## **5.1.8.1 Additional Soil Sampling Prior to Construction**

An additional soil sampling program and a revised Contamination Overview Study (now referred to as an Assessment of Past Uses (APU) report) is being undertaken prior to construction to address changes to excess soil regulations since 2019, which include O. Reg. 406/19, On-Site and Excess Soil Management.

A revised Excess Materials Management Plan (EMMP) will be prepared prior to construction to document results of the additional 2024 soil sampling program, as well as to integrate requirements for excess soil management into the project.

## 5.1.8.2 Potential Impacts and Mitigation

Soil excavated as part of the construction will need to be managed on Site and/or disposed off-Site as part of the work program. Opportunities for reducing, reusing, and recycling excess materials generated during construction on site will be considered to the extent possible.

All excess material generated during construction shall be managed in accordance with OPSS 180 and the recommendations in the EMMP. Soil management is also to be conducted in accordance with the Ammendment to OPSS 180 which includes adherence to O. Reg. 406/19, *On-Site and Excess Soil Management* regulations that is provided in the Contract documents. Standard mitigation for excess materials management can be found in **Table 6**.



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## 5.1.9 Designated Substances and Waste Management

Designated Substances and Hazardous Building Materials Assessments (2014) were conducted on the Highway 400 Holland River Culvert and on the North Canal bridges. The reports are on file with MTO, and findings are incorporated into the contract specifications (SSP 101 F21 - Occupational Health and Safety Act-List of Designated Substances).

Based on the visual assessment and laboratory analysis, designated substances and hazardous building materials were found to be present. **Table 3** below provides a summary of the materials identified and recommendations on their management.

Table 3: Designated Substances Summary of Findings

Building Materials	Comments
Arsenic	None identified.
Asbestos	North Canal Bridge (30X-0334/B1) – The calking material in the construction joint of the bridge abutments back face and in the construction joint between the south pier columns and the retaining wall is assumed to contain asbestos; it shall be assessed when the material is exposed.
	North Canal Bridge (30X-0334/B2) – The calking material in the construction joint of the bridge abutments back face and in the construction joint between the south pier columns and the retaining wall is assumed to contain asbestos; it shall be assessed when the material is exposed.

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Building Materials	Comments
Lead	Samples of two (2) paint applications were collected and submitted for lead content analysis. Two (2) of the results indicated that the tested material contained lead below the method detection limit (<90 ppm).
Silica	None identified. Silica may be present when working on concrete structures such as culverts and bridges.
Benzene	None identified.
Vinyl Chloride, Coke Oven Emissions, Ethylene Oxide, Acrylonitrile and Isocyanates	None identified.
Mercury	None identified

The following materials may be present at each of the sites: Lead, Silica, Mercury, Polychlorinated Biphenyls (PCBs), Acrylonitrile, Arsenic, Benzine, Isocyanates, Vinyl Chlorides.

Recommendations pertaining to the handling, removal, disposal, and management of identified designated substances and hazardous building materials are provided in the Designated Substances and Hazardous Building Materials Assessment report (Stantec, 2014), and the Contractor should read the table above in conjunction with the remainder of that report.

Standard mitigation for designated substances, excess materials management, and spills management can be found in **Table 6**.

## 5.2 Cultural Environment

## 5.2.1 Archaeological Resources

The Stage 1 Archaeological Assessment completed in 2000 during the Planning and Preliminary Design Study determined that the existing Highway 400 right-of-way is



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considered free of archaeological concern and no archaeological remains were encountered.

An archaeological assessment was carried out to assess the additional right-of-way required for this project. The study area comprised of the additional 0.6 ha area of land along either side of Highway 400 located on part of Lot 8, Concession 3, Geographic Township of West Gwillimbury, now Town of Bradford West Gwillimbury, Simcoe County, Ontario. The Stage 1 archaeological assessment determined that a portion of this area retained moderate to high potential for the identification and recovery of archaeological resources.

The Stage 2 test pit survey was conducted on November 1, 2016 and all areas were subjected to test pit survey at 5 m intervals. No archaeological sites were identified during the Stage 2 archaeological assessment.

The Stage 1-2 Archaeological Assessment Report was entered by the Ministry of Tourism, Culture and Sport (now Ministry of Citizenship and Multiculturalism) into the Ontario Public Register of Archaeological Reports on March 12, 2018. No further work is required for the study area. There is potential for deeply buried archaeological deposits to be discovered during construction. Notification requirements are included in the **Table 6** if archaeological materials are identified.

## 5.2.2 Heritage Resources

Based on field investigations undertaken in September 2000 during the Planning and Preliminary Design Study, there were no built heritage features within the study area for the Highway 400 North Canal bridges project. The North Canal was identified as a cultural landscape feature (waterway) but has been realigned since the 2003 TESR. There are no impacts to the North Canal as part of this highway bridge replacement project.

The proposed works are not anticipated to directly or indirectly impact heritage features. Therefore, mitigation is not proposed. Should other cultural heritage values (archaeological or historical materials or features) be identified during operations, all activity in the vicinity of the discovery will be suspended and the MCM archaeologist contacted.

## 5.3 Socio-Economic Environment

The existing socio-economic environment conditions were outlined in the previous 2003 TESR during Preliminary Design. The sections below provide relevant details for the Detail Design phase, based on socio-economic conditions at the time of DCR preparation.



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## 5.3.1 Adjacent Land Use and Property

Land uses include residential, agriculture and commercial within the study area. The land surrounding the Canal Road bridges is primarily rural and used for agricultural production. The Holland Marsh is best known for its rich organic soil, primarily comprised of horticultural production (carrots, onions, lettuce, celery and other vegetables). There are many detached dwelling homes, some with barns, along Canal Road, both east and west of Highway 400. The Farm Market business on the south side of Canal Road east of Highway 400, was sold and is now operating as a non-farm related business. To the east of the bridges on Wist Road and Woodchopper Lane, an experimental research station (Bradford Muck Crops Research Station) is operated by the University of Guelph. Property requirements north of the existing North Canal were minor and consisted of a sloped area of meadow and marsh communities not under agricultural cultivation.

# 5.3.2 Consistency with the Provincial Policy Statement and Provincial Policies

The *Provincial Policy Statement* (PPS 2024) is issued under Section 3 of the *Planning Act*. Section 3 of the Act states decisions affecting planning matters "shall be consistent with" the PPS. The improvements are consistent with the PPS Chapter 3, Sections 3.1 and 3.2 3.3, and 3.5 and in the following ways:

- The improvements are consistent with the PPS goal for transportation systems since they are safe, energy efficient, facilitate the movement of people and goods and address projected needs
- The improvements make efficient use of existing and planned infrastructure, including the existing alignment of Highway 400 as outlined in the 2003 TESR
- MTO has integrated transportation and land use considerations in all stages of the planning process, as required by the PPS
- MTO is planning for and protecting the Highway 400 corridor and right-of-way (ROW) for the future, including building bridges to accommodate future widening

The PPS requires that MTO consider the significant resources protected by Chapter 4 of the PPS (Wise Use and Management of Resources), when planning for corridors and rights-of-way. Significant resources typically include agricultural lands, SWH, and archaeological resources. Investigations related to terrestrial ecosystems have been undertaken and are described in the DCR.

The Greenbelt Plan (2017) allows for projects approved under the *Environmental Assessment Act* and similar legislation that serve to provide the appropriate



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infrastructure connections among urban centres and between these centers and Ontario's borders. The current project is within the MTO ROW and does not require new property within the specialty crop area.

## 5.3.3 Construction Noise Assessment

## 5.3.3.1 Operational Noise

An environmental noise impact study was carried out by RWDI in February 2002, when the MTO proposed widening Highway 400 from six to ten lanes. Stantec completed a Noise Memorandum (Noise Memo) in October 2018 for the Project under the now-superseded 2006 version of the MTO Noise Guide. A 2024 Noise Memo was prepared to update the previous noise studies, specifically the road traffic noise assessment, to align with the requirements of the current version of the MTO *Environmental Guide for Noise*, February 2022 (MTO Noise Guide). No changes to the construction noise assessment are expected and the conclusion remains valid for construction noise.

The 2024 Noise Memo provides supporting documentation for the Project and has been completed in accordance with the MTO *Environmental Reference for Highway Design*, June 2013, and the current MTO Noise Guide.

The Study Area encompasses noise sensitive areas that may be impacted from the Project. In accordance with the MTO Noise Guide, the Study Area for noise impact is determined using a perpendicular distance of 600 m from the closest edge of the Project pavement and a 100 m distance from the ends of the Project pavement. Most of the land in the Study Area is zoned as a mix of agricultural and residential lands with some existing residential dwellings located near the overpass.

The assessment criteria and mitigation efforts required as per MTO's *Environmental Guide for Noise* (2022) are summarized below in **Table 4**.

Table 4: Mitigation Effort Required for the Projected Sound Level

Criteria	Mitigation Effort Required
Change in Sound Level: < 5 dB change	No mitigation effort is required for the project
and	
< 65 dBA	

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Criteria	Mitigation Effort Required
Change in Sound Level ≥ 5 dB	Investigate noise control measures within MTO right-of-way
<i>or</i> ≥ 65 dBA	Introduce noise control measures within right-of-way and mitigate to a Future No-Build noise level if technically, economically, and administratively feasible
	Noise control measures, where introduced, should achieve a minimum of 5 dB attenuation over first row receptors

Road traffic data for Highway 400 was used in this analysis. The traffic noise from Canal Road was not included in the analysis as the vehicle volume and resulting noise levels are negligible compared to Highway 400. Traffic data from the 2018 noise study was used (projected to year 2031), as there have been no traffic updates provided for this Project.

The MTO Environmental Guide for Noise recommends the use of the US FHWA Traffic Noise Model (FHWA TNM©). The MTO Noise Guide also refers to the MECP NPC-306 guideline (Ontario Ministry of the Environment, Conservation and Parks. 2020. Draft "Publication NPC-306 for Methods to Determine Sound Levels Due to Road and Rail Traffic") for assessing road traffic noise assessment. The MECP guideline "Methods to Determine Sound Levels Due to Road and Rail Traffic - NPC-306", dated February 2020 and currently in draft, recommends using ITNM or equivalent for road traffic noise modelling.

For the purposes of road traffic noise level predictions, US FHWA noise model TNM version 3.2 was used for this assessment.

Where a freeway or highway improvement is planned, Special Land Use NSAs are only considered if they are located next to a traditional NSA. There are no Special land Use NSAs within the study area for this project.

Four (4) representative receptors, those considered in the 2018 noise study and an additional second-row receptor, were selected from the NSA identified within the study area for the Project Road Traffic Noise Assessment. These receptors are OLAs associated with two-storey residential dwellings in the Study Area. As per the MTO Noise Guide, sound levels were assessed at a height of 1.5 m, 3 m from the centre of the building façade. Receptor 2 is located east of Highway 400, while the remaining properties are on the west side south of Canal Road.



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The projected sound levels (with and without the proposed improvements) at the potential receptors representing the most exposed side of the dwelling are summarized in **Table 5** below.

Table 5: Sound Levels at PORs Before and After Improvements

		elling sults	Assessment			
Receptor ID	Future "No Build" Sound Levels (dBA)	Future "Build" Sound Levels (dBA)	Increase in Sound Levels ("Build" – "No- Build") dB	Is Future "Build" Greater than or Equal to 5 dB Above Future "No Build"?	Is Future "Build" Sound Levels Greater or Equal to 65 dBA?	Consideration of Mitigation Required (Yes/No)
Receptor 1	68	69	1	No	Yes	Yes
Receptor 2 63  Receptor 3 73	63	63	0	No	No	No
	73	73	0	No	Yes	Yes
Receptor 4	66	66	0	No	Yes	Yes

A change in sound level of 1 dB is predicted at Receptor 1 resulting from the Project. However, the future sound levels with and without improvements are predicted to be above 65 dBA at Receptor 1. Noise control measures for these receptors were investigated.

In investigating noise control measures, the technical, economic and administrative feasibility of providing mitigation. Two noise barriers were investigated for noise mitigation for the Project. The noise barriers to a maximum height of 5 m per MTO were modelled within the Project right-of-way on the west side of Highway 400. Barrier 1 met

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both technical and administrative feasibility criteria, but Barrier 2 did not meet technical feasibility criteria and was not considered further.

Barrier 1 was assessed for economic feasibility which would result in a barrier 250 m long and 5 m high. Roadside noise barriers on overpasses that have been installed in similar highway improvement projects were priced at approximately \$650 per square metre for ground-mounted noise walls, and approximately double that amount for structure-mounted noise walls which meet crash testing requirements. The cost per benefiting receptor (\$1,631,500) exceeds a typical economic feasibility cost of \$125,000 per benefitting home. Therefore, Barrier 1 is not economically feasible. Noise barriers are not recommended for the Project.

## **Potential Impacts and Mitigation**

Receptors near the project will experience noise due to pile driving and nighttime construction operations. Temporary pile driving activities during construction will be noticeable at some of the receptor locations near the North Canal at Davis Road.

MECP Sound Emission Standards (MECP Publication NPC-115) provides sound emission standards for various types of construction equipment. Due to the temporary and unavoidable nature of construction, the guidelines stipulate limits on individual pieces of equipment instead of a cumulative limit at a POR. The contractor will adhere to the maximum noise emission levels for typical construction equipment per NPC-115.

Standard measures for mitigating noise emissions shall be implemented for construction. These measures will include, but will not be limited to:

- Where possible, major construction activities to be scheduled to take place during daytime hours (i.e., 7:00 a.m. to 7:00 p.m.) to avoid sensitive nighttime periods
- Noise mitigation measures (e.g., muffler systems) to be installed on construction equipment and equipment will be properly maintained
- Construction equipment to be turned off when not required (i.e., a no idling policy)

## 5.3.4 Air Quality

Construction activities associated with the project (i.e., storage, on-site movement and grading of earth material, culvert rehabilitation, and replacement of the North Canal overpass structures) will have the potential to generate dust. Dust control will adhere to standard MTO procedure and includes the use of MECP-approved dust suppressants to minimize emissions and prohibit visible emissions from escaping beyond the construction site.



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Impacts will be minimized by compliance with Contract General Conditions to minimize dust and other air quality impacts.

These include: minimizing operation and idling of gas-powered equipment and vehicles, minimizing vehicular traffic on exposed soils and stabilizing high traffic areas with suitable cover material, restoring disturbed areas as soon as possible to minimize the duration of soil exposure, and controlling dust emissions by the application of suitable dust suppressant materials.

## 5.3.5 Traffic and Emergency Services

## 5.3.5.1 Traffic Staging and Alternate Access

Advance signing of construction zones will be provided, and emergency service providers will be notified prior to construction start.

The 2003 TESR described that the technically preferred alternative for the Canal Road access will result in additional out-of-way travel for some emergency service vehicles, however based on discussions with emergency service representatives, this additional travel is within acceptable limits.

The Highway 400 Canal Road ramps will be closed at the commencement of construction of the North Canal bridges. The opening of the new Highway 400 /5<sup>th</sup> Line interchange in the fall of 2018 has provided an alternate access. Consultation also occurred with Emergency Management Services (EMS) for this project. Emergency service providers will be notified prior to construction and may reorganize coverage areas to adapt to the new Wist and Davis Road closures.

## 5.3.5.2 Agricultural Operations

Full closures of Canal Road will be minimized or eliminated during the planting season from April 1 to June 15 and the harvest season from September 15 to November 15.

As mentioned in **Section 3.1.3**, The interim lowering of Canal Road will provide a minimum vertical clearance of 4.5 m beneath the new Highway 400 bridges to provide some access for agricultural equipment. Larger agricultural equipment may need to utilize detours such as South Canal Road, but it is expected to be minimized with the implementation of the construction season restrictions above.

#### 5.3.5.3 Canada Post Mailboxes

Canada Post mailboxes are present in the southeast quadrant of the intersection of Canal Road and Wist Road. Access will be maintained during construction from Canal Road or Wist Road.



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## 5.3.6 Utilities

Utility relocations are described in **Section 3.11**.

The majority of the utility relocations have been undertaken in advance of construction. All other existing utilities will be protected as required to avoid conflicts or impacts during construction.

The Contractor will be required to obtain a Road Occupancy Permit from the Town of Bradford West Gwillimbury and County of Simcoe for work on municipal or County property.

## 5.3.7 Climate Change

The project included a review of drainage modelling for various storm and future rainfall scenarios which were applied to the project.

The project involves constructing a new bridge over Highway 400. The bridge will accommodate the future expansion of the highway to up to 10 lanes. Overall improvements on Highway 400 will seek to reduce congestion and delays on the highway, and provide the space required for future infrastructure which may include high occupancy vehicle lanes.

# 5.4 Permits and Approvals

- A Permit to Take Water Category 3 (Groundwater) is anticipated to be required for construction dewatering for this project.
- The future North Canal realignment below the replacement bridges is not part of this
  project. Additional permits will be required, including, but not limited to, a DFO
  Fisheries Act Authorization for the future realignment of the North Canal.

## 5.5 Monitoring

An Environmental Synopsis will be developed so that the Contract Administrator and the contractor are made aware of, and are prepared to deal with, environmental issues that may arise during construction. Specific environmental controls based on these mitigation measures will be included in the contract documents and drawings to address environmental concerns during the construction phase.

Monitoring will be conducted by on-site construction supervisory staff to make sure that environmental protection measures, as outlined in this report and in the contract package, are being implemented and are effective. This includes making sure that the implementation of mitigating measures and key design features is consistent with



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commitments made to external agencies prior to construction. If protective measures do not address concerns identified or if major problems develop, the appropriate agency will be contacted to provide additional input.

In the event that the impacts of construction are different than anticipated, or that the method of construction is such that there are greater than anticipated impacts, the contractor's method of operation will be modified to reduce those impacts. Any changes proposed by the contractor should be thoroughly evaluated to make sure that the intent of the mitigation measures and provisions is maintained.

# 5.6 Summary of Environmental Effects, proposed mitigation and commitments to future work

The proposed improvements can be completed without significant adverse effects to the natural, social and cultural environment in the study area. Potential impacts can be avoided or mitigated by the measures and provisions included in the construction contract.

**Table 6** summarizes the environmental concerns, proposed mitigation measures and commitments to future work for the Highway 400 North Canal Bridges Replacement Project.

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Table 6: Summary of Environmental Effects, Proposed Mitigation and Commitments to Future Work

LEGE MTO MNRF MECF CWS DFO MCM	Ontario Ministry of Trar Ministry of Natural Res	ources and Fo ment, Conservi ice Canada	ation & Pa	OPP Ontarion BWG Town of the control	o Provincial Police HMJMSB Holland Marsh of Bradford West Gwillimbury MGA Muck Growers	ation of Agriculture
ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
1.0	Vegetation (Section 5.1.2	2.1)				
1.1	Vegetation Disturbance and Removal  Heavy equipment could damage peripheral vegetation from contact, excavation and/or soil compaction.  Tree removal will be required in the interchange and to faciliate highway improvements.	MTO MNRF	1.1.1	Vegetation removal is required to accommodate the new overpasses and road alignment	<ul> <li>Minimize encroachment and vegetation disturbance necessary for construction, and implement standard measures to protect adjacent vegetation, including erosion and sediment control measures to protect adjacent habitats.</li> <li>Areas to be cleared of existing vegetation should be clearly marked to prevent unnecessary removal. Barriers for tree protection at project limits may be coincident with sediment fencing used to control erosion and sediment transport at the site in areas of grading.</li> <li>Edge management techniques should be employed along newly created edges of forest communities, including new edges along the Silver Maple Mineral Deciduous Swamp (SWDO2-2).</li> <li>Native soil and seed bank retention, including avoidance of root grubbing along disturbed edges, and other edge management recommendations should be implemented.</li> </ul>	Operational Constraint –     Migratory Bird Protection
1.2	Invasive Vegetation Management		1.2.1	There were patches of Common Reed ( <i>Phragmites australis</i> ) within the Cattail marshes east and west of Highway 400 on the north side of the canal, and	<ul> <li>Invasive Phragmites are present in patches within the study area, within the cattail marshes on the north side of the canal, and with the Dry-fresh mixed meadow (MEMM3 (Dry-Fresh Mixed Meadow) along the northbound and southbound shoulders, which will be included in contract drawings.</li> <li>Phragmites will be treated by spraying, cutting, or cutting and spraying.</li> </ul>	<ul> <li>Requirements for herbicide spraying and mechanical cutting</li> <li>Invasive and noxious vegetation species item</li> <li>Invasive and Noxious Vegetation Spraying item</li> </ul>

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ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
				within the Dry-fresh Mixed Meadow along the northbound and southbound shoulders of Highway 400 south of the canal.	<ul> <li>If work will occur in or near features with Phragmites, the following measures are required to control the spread of the species:         <ul> <li>Soil from areas impacted by Phragmites shall not be stockpiled for reuse. Debris including earth clods and Phragmites material attached to the outside of the equipment is prohibited from entering the Working Area.</li> <li>Equipment coming on site shall be inspected as close to the site entrance as possible for debris, and if present, debris shall be completely removed and shall be collected and managed as specified in the Contract Documents prior to the equipment proceeding to the Working Area.</li> <li>Equipment shall also be inspected for debris prior to leaving the Working Area. Any debris shall be removed and managed as specified in the Contract Documents, and in a manner that prevents equipment from coming into further contact with Phragmites.</li> </ul> </li> <li>Equipment may be inspected by the Contract Administrator upon entry to or exit from the Working Area for evidence of debris attached to the outside surfaces of the equipment.</li> </ul>	
2.0	Wildlife and Wildlife Hab	itat (Section	5.1.3)			
2.1	General Wildlife Protection  Wildlife may be disturbed by construction activities  Protection of reptiles (i.e. Snapping Turtle, Northern Map Turtle, Eastern Milksnake) is recommended to address potential	MECP MNRF	2.1.1	The North Canal bridge replacement and Holland (Schomberg) River culvert rehabilitation will require activities near potential turtle nesting or overwintering habitat for turtles	<ul> <li>A thorough visual search of work zones should be conducted by construction contractors before work commences each day.</li> <li>Visual searches should include inspection of machinery and equipment, prior to starting equipment, particularly during the peak activity period from April 15 to November 1.</li> <li>If reptiles are encountered during construction, they will be permitted reasonable time to flee the area.</li> <li>In addition to visual inspections, the following mitigation measures will be undertaken to protect reptiles:</li> </ul>	Operational Constraint Environmental – Wildlife Protection



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	interaction with candidate turtle overwintering and turtle nesting and other				<ul> <li>Disturbance to brush piles/logs will be avoided wherever possible. If a brush/log pile must be moved or disturbed, it will be inspected for reptiles and relocated within a few meters, to retain the habitat feature</li> </ul>	
	incidental encounters with turtles and snakes				<ul> <li>Removal of non-woody vegetation will be conducted between November 1 and March 30 when reptiles are hibernating, if possible</li> </ul>	
					<ul> <li>Reptiles basking on roadways will be avoided and individuals will not be handled, chased or harassed</li> </ul>	
2.2	Potential Interference with Bird Nests	MECP MNRF CWS	2.2.1	Migratory bird nests were found on the North Canal bridges	Vegetation clearing is recommended to occur outside the core nesting period to eliminate the need for migratory bird nest searches.	Operational Constraint     Environmental – Migratory Bird     Protection
	Destruction or disturbance of birds or active nests protected			Barn Swallow are no longer a listed SAR	If clearing and grubbing work is scheduled to occur outside the restricted period, then no mitigation will be required	Bird Nesting Preventative     Measures
	under the Migratory Birds Convention Act (MBCA) is not permitted			species	Clearing and removal of trees and shrubs shall not occur between April 1st and August 31st of any calendar year to avoid the usual nesting period for birds	
	Nests of protected species were observed on the existing bridge during site investigations, including nests of Barn Swallow, Cliff Swallow, Eastern Phoebe and American				<ul> <li>If work must take place during the core nesting period and the area is small enough to be effectively searched for nesting birds, then a breeding bird survey can be completed by a Qualified Biologist. The area where vegetation is to be removed must be searched within five days prior to the work commencing. If breeding pairs are located with active nests of eggs or young, then they will be protected with a buffer until the nest is no longer active.</li> </ul>	
	Robin.				If an active nest is observed during construction, a designated buffer will be delineated within which no activity will be allowed to occur while the nest is active (i.e., with eggs or young). The radius of the buffer will be determined by a Qualified Professional. Once the nest is determined to be inactive (e.g., the young have fledged the nest), clearing and other activities in the area may proceed.	



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		MECP MNRF CWS	2.2.2	Barn Swallow have been de-listed and are no longer a SAR species  Barn Swallow nests are present on nests under the bridge.  An old swallow nest was also found at a municipal culvert west of Davis Road, but no work is proposed for that location.	<ul> <li>The Contract Administrator shall be notified if active nests (nests with eggs or young birds) are encountered.</li> <li>If construction at the bridges cannot avoid the active nesting season for migratory birds (i.e., April 1 – August 31), then exclusion or deterrence must be used to dissuade birds from establishing nests on the structures.</li> <li>Barn Swallow nests were present at the northbound and southbound bridges.</li> <li>Due to the history of nesting on North Canal Bridges, it is recommended for construction work under the bridges to be scheduled after August 31 or before April 1 to avoid potential impacts to nesting birds including Barn Swallow.</li> <li>If construction at the bridges cannot avoid the active nesting season for migratory birds which includes Barn Swallow (i.e., April 1 – August 31), then exclusion or deterrence must be used to dissuade birds from establishing nests on the structures (MNRF 2017).</li> </ul>	<ul> <li>Operational Constraint         Environmental – Migratory Bird         Protection</li> <li>Bird Nesting Preventative         Measures</li> </ul>
2.3	Reptile Protection: Snapping Turtle and Northern Map Turtle  Potential for Snapping Turtle or Northern Map Turtle, nest and/or eggs encountered during construction at the North Canal or Holland (Schomberg) culvert. Potential nesting areas are found along the	MECP MNRF	2.3.1	n/a	<ul> <li>Direct impacts to nesting turtles will be mitigated during construction using barrier fencing to exclude turtles from work areas near potential turtle nesting areas.</li> <li>Barrier fencing will be installed before May 15 or after September 15 (i.e., outside of turtle nesting season). Fencing materials with plastic mesh will not be used due to risk of entanglement of reptiles.</li> <li>Further specifications for reptile exclusion fencing should follow Best Practices Technical Note – Reptile and Amphibian Exclusion Fencing (MNR 2013) and Best Management Practices</li> </ul>	<ul> <li>Contract Drawings</li> <li>Operational Constraint Environmental – Wildlife Protection</li> <li>Operational Constraint – Protection of Reptiles</li> </ul>



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	shorelines of the North Canal in the form of gravel and loose soil. Nesting habitat is also present under the North Canal bridges adjacent to the roadside and North Canal.  The Holland (Schomberg) River and North Canal may provide suitable overwintering habitat				<ul> <li>for Mitigating the Effects of Road Mortality on Amphibian and Reptile Species at Risk in Ontario (MNRF 2016).</li> <li>The exclusion fencing is to be maintained around the work area for the duration of the turtle nesting activity period.</li> <li>If construction is initiated during the turtle nesting season, a qualified biologist will visually inspect the site for turtle nests and adult turtles and direct installation of barrier fencing whereby all nests are avoided. If not possible, work will be delayed until it is determined that the nest no longer incudes viable eggs (i.e., young of fledged, or eggs were predated).</li> <li>A thorough visual search will occur before work commences each day by construction contractors to avoid interaction with turtles and snakes. Visual searches should include inspection of machinery and equipment for snakes, prior to starting equipment, particularly during the peak activity period from April 15 to November 1.</li> <li>If reptiles are encountered during construction, work at that location will stop until the reptiles are no longer present. It is also recommended that disturbance during ditching and grading activities be limited as much as possible and piling dirt in fallow vegetation should be avoided.</li> </ul>	
3.0	Fish and Fish Habitat (So	ection 5.1.1)	<u> </u>			I
3.1	Timing Windows for In- Water Work  The installation of the culvert liner will require in-water work	MTO MNRF DFO LSRCA	3.1.1	n/a	<ul> <li>Works adjacent to aquatic resources that provide fish habitat, or have the potential to support fish habitat, may present a risk of construction-related impacts to fish, and entry into those watercourses is to be avoided.</li> <li>In-water construction activities associated with lining the Holland (Schomberg) River culvert are permitted from July 16 to March 14 inclusive (in-water work is not permitted from March 15 to July 15),</li> <li>Fish and fish habitat protection measures are included in the OPSS that will be included in the construction contract:</li> </ul>	<ul> <li>OPSS.PROV 182 - General Specification for Environmental Protection for Construction in and Around Waterbodies and on Waterbody Banks</li> <li>Special Provision – Amendment to OPSS 182, April 2021 – Timing of In-Water Works</li> </ul>

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					<ul> <li>OPSS PROV 180 - General Specification for the Management of Excess Materials</li> <li>OPSS PROV 182 - General Specification for Environmental Protection for Construction in Waterbodies and on Waterbody Banks</li> <li>OPSS.PROV 517 - Construction Specification for Dewatering (if Holand (Schomberg) River not dry)</li> <li>OPSS.PROV 803 - Construction Specification for Vegetative Cover</li> <li>OPSS.PROV 804 - Construction Specification for Temporary Erosion Control</li> <li>OPSS.PROV 805 - Construction Specification for Temporary Sediment Control</li> </ul>	<ul> <li>OPSS PROV 180 - General Specification for the Management of Excess Materials</li> <li>OPSS.PROV 517 - Construction Specification for Dewatering (if Holand (Schomberg) River not dry)</li> <li>OPSS.PROV 803 - Construction Specification for Vegetative Cover</li> <li>OPSS.PROV 804 - Construction Specification for Temporary Erosion Control</li> <li>OPSS.PROV 805 - Construction Specification for Temporary Sediment Control</li> </ul>
3.2	Debris and other deleterious substances may enter the watercourses as a result of construction and in the event of spills	MTO MNRF DFO LSRCA	3.2.1	n/a	<ul> <li>During removal of Highway 400 North Canal Overpass structures an appropriate containment system will be designed by the Contractor and implemented during the removal of the structure to prevent entry of debris into the North Canal (refer to the Access to Work Area, Work Platform and Scaffolding specification).</li> <li>The system should accommodate large materials and fine particulates and monitored to remove and appropriately dispose of accumulated material.</li> <li>Materials that fall in the water will be carefully retrieved to minimize disturbance.</li> <li>Erosion and sediment control measures will be implemented for work within 30 m of the watercourses to reduce downstream sediment transport during construction.</li> </ul>	<ul> <li>Special Provision –         Amendment to OPSS 182,         April 2021 – Timing of In-Water         Works</li> <li>OPSS.PROV 805 -         Construction Specification for         Temporary Sediment Control         (issued in November 2020 to         replace the sediment control         components of former OPSS         805)</li> <li>Operational Constraint         Environmental – Erosion and         Sedimentation Control –         General</li> </ul>



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						Access To Work Area, Work Platform and Scaffolding
3.3	Change in habitat structure and cover beside the overpass structures  Disturbance to riparian vegetation	MTO MNRF DFO LSRCA	3.3.1	n/a	<ul> <li>Removal of riparian vegetation shall be kept to a minimum to help maintain the stability of waterbody banks, in accordance with OPSS 182 and OPSS 804.</li> <li>Minimize the removal of natural materials such as herbaceous plants, woody debris, and rocks from the banks or the shoreline of the waterbody and include vegetation plantings of native species, where possible.</li> <li>Stabilize and re-vegetate (or use other materials appropriate to the site conditions) all areas of disturbed / exposed soil – incorporate temporary measures (e.g. biodegradable materials, nurse-crop vegetation) to provide interim stabilization until vegetation is fully established, where possible.</li> </ul>	<ul> <li>OPSS 182 - General Specification for Environmental Protection for Construction in Waterbodies and on Waterbody Banks</li> <li>OPSS 804 - Construction Specification for Seed and Cover</li> <li>OPSS.PROV 804 - Construction Specification for Temporary Erosion Control (issued in April 2021 to replace the erosion control components of former OPSS 805)</li> <li>Operational Constraint Environmental – Erosion and Sedimentation Control – General</li> </ul>
3.4	Temporary bracing will be installed above the water between the existing sheet piles adjacent to the North Canal	MTO BWG	3.4.1	n/a	<ul> <li>De-icing equipment will be installed in the North Canal to prevent ice build-up where temporary sheet pile bracing is installed.</li> <li>Monitor air temperature and initiate operation of the de-icing pumps when temperature is predicted to remain below zero degrees Celsius.</li> <li>Cease operation of the de-icing pumps when there is no longer a risk of ice damage to cross bracing.</li> </ul> (Sections 5.1.8 and 5.1.9)	Contract Drawings and Tender
4.1	Soil Management - General	MTO MECP	4.1.1	No change	Excess material will be managed in accordance with the Ontario Provincial Standard Specifications (OPSS 180).	OPSS.PROV 180 - General Specification for the

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					<ul> <li>Should suspect soils (e.g., stained or odorous soil, or soil containing debris or slag, etc.) be encountered the construction administrator and/or MTO should be consulted to determine appropriate actions, in accordance with Ontario Provincial Standard Specification (OPSS) 180.</li> <li>It is expected that off-site removal of any suspect soils to an appropriately licensed facility would be required.</li> </ul>	Management of Excess Materials  • Amendment to OPSS.PROV 180 (O.Reg. 406/19)  • Operational Constraint Environmental – Management of Excess Earth with Salt Impacts
4.2	Water Management	MTO MECP	4.2.1	No change	If significant discharge of water for the Site is contemplated, water quality analyses should be conducted to determine appropriate management methods (as defined in O.Reg. 153/04, to maintain data quality, and provide appropriate assessment of water quality).	OPSS.PROV 517 -     Construction Specification for     Dewatering
4.3	Construction Waste Management	MTO MECP	4.3.1	No change	Should any construction materials need to be disposed during the construction of the project, the contractor should ensure that the materials go to an appropriately licensed facility or be reused in accordance with OPSS 180.	<ul> <li>OPSS.PROV 180 - General Specification for the Management of Excess Materials</li> <li>Amendment to OPSS.PROV</li> </ul>
						<ul> <li>Amendment to OP33.FROV 180 (O.Reg. 406/19)</li> <li>OPSS.PROV 182 - General Specification for Environmental Protection for Construction in and Around Waterbodies and on Waterbody Banks</li> </ul>
4.4	Designated Substances Management	MTO MECP	4.4.1	No change	Should any suspected designated substances, such as asbestos, silica, or lead based paint, be encountered during the construction of the project, the contractor should notify MTO so that an appropriately qualified contractor or consultant can be retained to assess and manage the designated substances prior to any disturbances, in accordance with SSP 101F21 - Occupational Health and Safety Act-List of Designated Substances and with Ontario Regulation 490/09 and 278/05	Notice to Contractor     Special Provision 101F21 -     Occupational Health and     Safety Act Compliance



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					(Ministry of Labour, 2010) under the <i>Occupational Health and</i> Safety Act.	
4.5	Effluent and Cleaning Materials Management	MTO MECP	4.5.1	No change	<ul> <li>Any effluent or cleaning materials generated during the work program will be considered waste and will need to be managed as such.</li> </ul>	Excess Materials Management Plan
					<ul> <li>Any effluent or cleaning materials should be contained in appropriate storage containers and sampled prior to off-Site disposal to determine the quality and consequently the appropriate location for disposal.</li> </ul>	
				Effluent and cleaning materials cannot be discharged overland or to surface water bodies, unless testing determines that they meet the Provincial Water Quality Objectives (MOEE, 1994).		
4.6	Potential to Encounter Contaminated Soils	MTO MECP	4.6.1	Environmental Soil Characterization samples were collected as part of Detail Design  Soil for which concentrations of parameters tested are greater than the Table 1 SCS but less than the Table 8 SCS  O.Reg. 406/19 provides additional requirements for management of excess materials.	<ul> <li>Soil excavated during construction should be reused to the greatest extent possible within the Site boundaries, if deemed to be geotechnically suitable, and following the soil management guidance presented in the <i>Excess Materials Management Plan</i> (EMMP). The EMMP provided general guidance on management of excess materials during construction and should be supplemented with testing of materials to be removed or managed, as appropriate.</li> <li>The Contractor should reference the following guidance during the project:         <ul> <li>Regulation (Reg.) 347, Waste, as amended by Ontario Regulation (O.Reg.) 408/19.</li> <li>Ontario Regulation (O.Reg.) 406/19, On-Site and Excess Soil Management.</li> <li>MECP 2022 document Rules for Soil Management and Excess Soil Quality Standards, (the "Soil Rules" referenced by O.Reg. 406/19).</li> <li>O.Reg. 153/04 Record of Site Condition.</li> </ul> </li> </ul>	<ul> <li>Excess Materials Management Plan</li> <li>OPSS PROV 180 - General Specification for the Management of Excess Materials</li> <li>Amendment to OPSS.PROV 180 (O.Reg. 406/19)</li> </ul>

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					<ul> <li>MTO 2006 document Contaminated Property and Excess Material Management.</li> </ul>	
					<ul> <li>Ontario Provincial Standard Specification (OPSS) 180,</li> <li>General Specification for the Management of Excess</li> <li>Materials.</li> </ul>	
					Several sets of soil quality standards are provided in the Soil Rules referenced by O.Reg. 406/19 that may be applicable to site soil when assessing reuse or disposal options. Testing to characterize soil quality in advance of construction is recommended, to better assess excess soil management options.	
					• The contractor can choose to sample soil in-place, or to temporarily stockpile the excavated/disturbed soils on-Site and collect soil characterization samples to determine potentially reuse options. This work shall be done in coordination with a Qualified Person for environmental site assessment (QPESA), as defined in O.Reg. 406/19 and O.Reg.153/04, to maintain data quality and provide appropriate assessment of the soils for potential on-site reuse, off-site re-use, or disposal. Samples should be collected at a frequency established in consideration of O.Reg. 406/19, at the discretion of the QPESA, and in consideration of requirements of the potential receiving site(s). It is noted that the timing of the work contract and construction may affect the sampling requirements, as outlined in O.Reg. 406/19.	
					At a minimum, soil samples should be analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), PHC F1 to F4, metals (including Hydride Forming Metals, Cyanide, Available Boron, Chromium Hexavalent, and Mercury), pH, EC, and SAR. If the excavated soils are temporarily stockpiled on-Site, appropriate environmental controls must be put in place to avoid adverse effects, as described in the Soil Rules document, including setback limits and volume restrictions.	
					During the course of excavation, should suspect soils (e.g., stained or odourous soil, or soil containing debris or slag, etc.) be	



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					encountered, the Contract Administrator (CA) on behalf of MTO, and a QPESA, shall be consulted to determine appropriate actions, in accordance with O.Reg. 406/19, O.Reg.153/04, and OPSS 180, including Table 3 of the Special Provision No. ENVR0014. It is expected that additional sampling and/or off-Site removal of suspect soils to an appropriately licensed facility would be required. If there are discrepancies between OPSS 180 and either O.Reg. 406/19, O.Reg.153/04, or Reg, 347, the requirements of O.Reg. 406/19, O.Reg.153/04, and Reg. 347 take precedence.	
					• It is anticipated that salt-related parameters (including, but not limited to, EC and SAR) related to de-icing activities along the highway would likely be present at concentrations that exceed the applicable soil quality standards at much of the Site. Under O.Reg. 406/19, soil with elevated concentrations of parameters that are attributable to road de-icing may be reused within the Site or elsewhere, subject to certain restrictions and considerations as described in the Soil Rules. If soil impacted by salt-related parameters is to be excavated and removed from the Site, it should be managed in accordance with MTO's Non-Standard Special Provision (NSSP) for the management of salt-impacted fill and the Soil Rules referenced by O.Reg. 406/19.	
					<ul> <li>Soil intended for re-use within the site boundaries should also be reviewed and assessed by a geotechnical engineer to determine if it is geotechnically suitable for re-use. The CA consultant (and its QPESA) retained by MTO should be retained as a third party to observe sampling and analytical methods, and to review the characterization data prior to reuse of soils excavated at the Site within the site boundaries.</li> </ul>	
		MTO MECP	4.6.2	Environmental Soil Characterization samples were collected as part of Detail Design	<ul> <li>Soil for which concentrations of parameters tested in soil at locations are greater than the Table 8 SCS but less than the Table 2 SCS were identified.</li> <li>The soil can be left in place at the site or right-of-way if it is greater than 30 m from a water body, or if excavated, can be reused at the site or right-of-way, provided it is greater than 30 m</li> </ul>	<ul> <li>Excess Materials Management Plan</li> <li>OPSS PROV 180 - General Specification for the</li> </ul>



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					<ul> <li>from a water body and meets required geotechnical standards for the project.</li> <li>If the soil requires excavation and cannot be re-used on-site or within the MTO right-of-way, it should be managed in accordance with the BMPs and O.Reg. 406/19.</li> </ul>	Management of Excess Materials  • Amendment to OPSS.PROV 180 (O.Reg. 406/19) •
5.0	Erosion and Sediment C	ontrol (Section	on 5.1.4)			
5.1	Exposed surfaces resulting from clearing and grading can lead to erosion  Sediment and dust may enter sensitive natural features	MTO MNRF	5.1.1	No change	<ul> <li>The limits of construction adjacent to natural features to be retained should be flagged and fenced prior to construction, and monitored during construction (along with sediment and erosion control measures).</li> <li>No equipment should be permitted to enter any natural areas beyond the silt fencing (site boundaries) during construction.</li> <li>All materials requiring stockpiling (fill, topsoil, etc.) should be stabilized and kept a safe distance (&gt; 30 m) from any sensitive natural features.</li> <li>Rock flow check dams should be installed in ditches to reduce water velocities to reduce scouring and erosion.</li> <li>All exposed soil areas should be stabilized and re-vegetated. Seed and mulching, or seed and an erosion control blanket should be applied to disturbed sites promptly upon completion of construction activities.</li> <li>Refueling of equipment should be carried out away from any sensitive natural features to avoid potential impacts, in the event that an accidental spill occurs.</li> <li>In addition to any specified requirements, additional silt fence should be available on site, prior to grading operations, to provide a contingency supply in the event of an emergency.</li> <li>All sediment and erosion controls should be monitored regularly and properly maintained, as required. Controls should be</li> </ul>	<ul> <li>OPSS.PROV 182 - General Specification for Environmental Protection for Construction in and Around Waterbodies and on Waterbody Banks</li> <li>OPSS.PROV 804 - Construction Specification for Temporary Erosion Control (issued in April 2021 to replace the erosion control components of former OPSS 805)</li> <li>OPSS.PROV 805 - Construction Specification for Temporary Sediment Control (issued in November 2020 to replace the sediment control components of former OPSS 805)</li> <li>Operational Constraint Environmental – Erosion and Sedimentation Control – General</li> </ul>



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					removed only after the soils of the construction area have been stabilized and vegetation cover is re-established.	
					<ul> <li>Any natural areas that are temporarily disturbed for access or construction should be restored to natural self-sustaining conditions.</li> </ul>	
					<ul> <li>Environmental controls should be monitored by an environmental inspector.</li> </ul>	
6.0	Noise (Section 5.3.3)					
6.1	Increased noise impacts	RES	6.1.1	A noise assessment	Noise sensitive areas will be designated in the contract.	Construction Noise Constraints
	are anticipated for nearby residents during construction	MECP		update was completed for this assignment	<ul> <li>The contractor will adhere to the maximum noise emission levels for typical construction equipment as per MECP Publication NPC-115.</li> </ul>	
					<ul> <li>If complaints regarding construction noise arise during construction, they will be investigated in accordance with the provisions of the existing MTO/ MECP Noise Protocol between MTO and MECP.</li> </ul>	
6.2	Night-time work will be required to minimize traffic impacts on	RES MECP	6.2.1	MTO is exempt from the requirement to obtain Noise By-Law	<ul> <li>Where possible, major construction activities to be scheduled to take place during daytime hours (i.e., 7:00 AM to 7:00 PM) to avoid sensitive nighttime periods.</li> </ul>	<ul><li>Notice to Contractor</li><li>Construction Noise Constraints</li></ul>
	Highway 400, Canal Road, Davis Road and Wist Road			exemptions.	<ul> <li>Construction equipment is to be in good repair, fitted with fully functioning mufflers and shall comply with the provincial noise emission standards.</li> </ul>	
					<ul> <li>Construction equipment will be turned off when not required (i.e. a no idling policy).</li> </ul>	
7.0	Cultural Heritage / Archa	eology (Secti	on 5.2.1	and 5.2.2)		
7.1	Potential for archaeological finds or remains to be discovered during construction	MCM INDG	7.1.1	Additional lands north of the north canal were subject to Stage 2 Assessment	<ul> <li>If deeply buried archaeological deposits are discovered during the contractor's operations, the MCM should be notified immediately and work near the discovery must be suspended immediately.</li> </ul>	General Conditions of the Contract



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				- no archaeological artifacts were found		
			7.1.2	n/a	If unmarked human remains are encountered the provisions of the Funeral, Burial, and Cremation Services Act (2002) apply. Notification must be made to the Ontario Provincial Police, or local police, who will conduct a site investigation and contact the District Coroner. Notification to the MTO Environmental Planner will occur so that the MTO Regional Archaeologist can be informed. Notification to MCM and the Registrar of Cemeteries, Ministry of Government and Consumer Services shall also be undertaken.	General Conditions of the Contract
			7.1.3	n/a	Should other cultural heritage values (archaeological or historical materials or features) be identified during operations, all activity near the discovery will be suspended and the MCM archaeologist contacted.	General Conditions of the Contract
8.0	Traffic Operations and E	mergency Se	rvices (S	ection 5.3.5)		
8.1	Construction is anticipated to take place over 3 construction seasons  Potential for delays on Highway 400 due to construction activities	MTO GP BUS EMS OPP	8.1.1	n/a	<ul> <li>Highway 400 will maintain three lanes of traffic in each direction during peak hours.</li> <li>Nightly lane closures will be utilized on Highway 400 to strengthen shoulders, set up temporary concrete barrier, and complete the crown shift; resurface existing lanes, complete tie-in work, and apply pavement markings.</li> <li>Appropriate temporary and advanced signage will be used in all construction zones to ensure advanced warning of construction activities taking place and will provide notice of upcoming closures and detours, if required.</li> <li>A Traffic Management Plan and a Communications Plan will be implemented to minimize the impacts of closures and provide advance notification to the travelling public in advance of closures.</li> </ul>	Notice to Contractor -     Notification Requirements for     Emergency Service Providers



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

December 2024

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
8.2	Temporary delays or closures on local roads have the potential for out of the way travel	MTO PUB BUS EMS OPP BWG TK	8.2.1	Canal Road will be temporarily closed for approximately one month to facilitate temporary lowering  Temporary closures of Canal Road will be required during bridge girder installation  Wist Road and Davis Road will require temporary closures to facilitate reconstruction	<ul> <li>Access to residential and commercial properties within the study area will be maintained during construction.</li> <li>Only one of Wist Road or Davis Road will be closed at any given time. Signage to use alternate routes will be provided in advance of the temporary closures.</li> <li>Flagging will be used, as required.</li> </ul>	Notice to Contractor -     Notification Requirements for     Emergency Service Providers
8.3	Canada Post Mailbox Access	MTO RES BUS CP	8.3.1	n/a	<ul> <li>Access to Canada Post mailboxes will be maintained during construction</li> <li>Canada Post to be notified in advance of construction</li> </ul>	Operational Constraint –     Access to Canada Post     Mailboxes
8.4	Impact to Emergency Vehicles Access and out of way travel	MTO PUB RES BUS EMS	8.4.1	n/a	<ul> <li>Access for emergency services will be maintained for the duration of construction.</li> <li>Emergency services will have access to Highway 400 via the Highway 400 at 5<sup>th</sup> Line interchange.</li> <li>Notice of construction start, will be provided in writing two weeks in advance of construction to emergency service providers, including the Town of Bradford West Gwillimbury and the Township of King regarding the construction schedule.</li> </ul>	Notice to Contractor -     Notification Requirements for     Emergency Service Providers
8.5	Potential impact to farm equipment access and truck turning movements	MTO MGA OFA	8.5.1	The 2003 TESR did not include the	Full closures of Canal Road will be minimized or eliminated during the planting season from April 1 to June 15 and the harvest season from September 15 to November 15.	Notice to Contractor

HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
				structure replacements		
9.0	Landscaping (Section 5.	1.7)				
9.1	Impact to vegetation and landscaping in the study	MTO Public	9.1.1	n/a	Trees, shrubs, and other vegetation not specified for removal will be protected and preserved.	Contract drawings
	area				All exposed soil areas should be stabilized and re-vegetated.	
					Seed and mulching, or seed and an erosion control blanket should be applied to disturbed sites promptly upon completion of construction activities.	
10.0	Groundwater and Source	ewater Protec	tion (Sec	ction 5.1.4)		
10.1	Impact due to groundwater dewatering	MTO MECP MNRF	10.1.1	n/a	<ul> <li>Conduct dewatering activities in accordance with approved control procedures</li> <li>Erosion and Sediment Control (ESC) measures (e.g. silt fences, straw bales) will be implemented, as required, prior to, and maintained during the construction phases, to prevent erosion and sedimentation.</li> </ul>	OPSS.PROV 517 -     Construction Specification for     Dewatering
			10.1.2	n/a	<ul> <li>A Draft Category 3 Permit to Take Water (PTTW) Application is being prepared in 2024 and will be sent to MECP as a draft.</li> <li>Contractor will be responsible for obtaining final PTTW.</li> <li>Prior to discharge, the contractor must obtain all necessary associated permits as required.</li> </ul>	<ul> <li>OPSS.PROV 517 -         Construction Specification for         Dewatering</li> <li>OPSS.PROV 804 -         Construction Specification for         Temporary Erosion Control         (issued in April 2021 to replace         the erosion control components         of former OPSS 805)</li> <li>Operational Constraint         Environmental – Erosion and         Sedimentation Control –         General</li> </ul>



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

December 2024

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
						Environmental Exemptions and Permits
10.2	Potential for contamination of groundwater resources in the study area through construction or dewatering	RES MECP	10.2.1	n/a	The need for pre-, during- and post-construction well monitoring will be assessed as part of the dewatering application. Well monitoring (quality and quantity) may be undertaken to document groundwater conditions (subject to landowner approval) as part of the Contract Administration contract prior to construction.	OPSS.PROV 517 -     Construction Specification for     Dewatering
10.3	Discharge to Environment	MTO MECP DFO	10.3.1	n/a	Groundwater dewatering will be completed within the excavations on an as-required basis. The contractor is responsible for complying with the following discharge procedures:	OPSS.PROV 517 -     Construction Specification for     Dewatering
					<ul> <li>The inlet pump head is to be surrounded with clear stone, filter fabric or equivalent, if applicable.</li> </ul>	
					<ul> <li>All water will be discharged through a geotextile filter bag to a low lying, well-vegetated area at least 30 m from a surface water feature, or as far away as practicable to allow discharge water to re-infiltrate as per OPSS.PROV 517. In the event that the filter bag is overwhelmed by sediment or the quantity of water, a sediment removal basin will be constructed, which may consist of a temporary enclosure constructed with straw bales, silt fence, or both.</li> </ul>	
					Discharge may be directed to the ground surface provided there is no visible sheen or olfactory indicators of possible contamination, and onsite mitigation measures are taken.	
					<ul> <li>Discharge of water to the natural environment shall not be directed across pavement, sidewalks, or any other impervious surfaces.</li> </ul>	
					The sediment control is to be located within a vegetated area surrounded with silt fence or approved equal and located downstream of the construction activity within the proposed construction area, on MTO property, or where landowner	

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HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
					agreements are in place. The exact location of discharge will be determined by the contractor during construction.	
					<ul> <li>No equipment or materials are to be stored in vegetated discharge areas.</li> </ul>	
					<ul> <li>The contractor is to ensure sediment control run-off does not come into contact with exposed soils.</li> </ul>	
					<ul> <li>The contractor is to ensure that the sediment control is located such that flows are dispensed/directed through a vegetated area down gradient of the work area, and are not being directed toward a surface water feature.</li> </ul>	
					<ul> <li>Direct discharge to a surface water feature is not permitted.</li> </ul>	
					To prevent potential contamination or loss of equipment in the event of a significant precipitation event, no vehicles or equipment requiring fuel will be left within the excavations unattended (i.e., overnight).	
					<ul> <li>To minimize erosion and sediment transport within the construction area, the following general mitigation measures are proposed:</li> </ul>	
					<ul> <li>All excavated materials requiring stockpiling (fill, topsoil, etc.) should be stabilized and kept a safe distance from surface water features and natural areas. The perimeter of any stockpiles will be encircled with silt fencing</li> </ul>	
					<ul> <li>In addition to the specified requirements, additional silt fence, turbidity curtain, and filter bags should be maintained on-site throughout operations to provide a contingency supply in the case of an emergency</li> </ul>	
					<ul> <li>If the above discharge option is not feasible, some or all the discharge may be temporarily contained within holding tanks and/or trucked away off-site to a licensed facility with an MECP environmental compliance approval and permitted to receive this wastewater. Analysis and testing of the water would be completed in accordance with the receiving facility</li> </ul>	



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

December 2024

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
11.0	Utilities (Section 5.3.6)					
11.1	Potential for impacts to existing utilities	MTO UTIL	11.1.1	Utility relocations will be required to accommodate the Highway 400 realignment, realignment of side roads.  Additional Bell underground cables would need to be relocated prior to future realignment of the North Canal by others.	<ul> <li>Utility relocations will be undertaken in advance of construction, where feasible.</li> <li>All existing utilities will be protected as required to avoid conflicts or impacts during construction.</li> <li>Bell underground cables located along the south side of Canal Road were lowered in 2019 to accommodate the lowering of Canal Road from the west side of the intersection of Davis Road with Canal Road to the east side of the intersection of Wist Road with Canal Road.</li> <li>To accommodate the future realignment of the North Canal within the MTO right-of-way, it is anticipated that the Bell underground fibre optic cables running parallel to Highway 400 on the east side, will need to be lowered in the future underneath the canal in advance of construction. Canal relocation is not included in this bridge replacement project.</li> <li>Wooden poles supporting aerial Hydro One cables along the west side of Davis Road and the east side of Wist Road and the aerial Hydro One cables crossing Highway 400 were relocated. The Highway 400 crossing was relocated to the south away from the proposed bridge construction. These relocations were completed in 2019. The pole anchors will require adjustments following completion of the proposed grading.</li> </ul>	Operational Constraint –     Caution When Working Near     Existing Utilities
12.0	Drainage (Section 5.1.6)					
12.1	Potential for changes to drainage due to construction activities	MTO MNRF LSRCA	12.1.1	n/a	<ul> <li>The contractor shall be responsible for maintaining effective surface drainage within the project limits on Highway 400, all ramps, all municipal roads and all other work areas during all stages of the construction operations</li> <li>The contractor shall ensure that all existing drainage facilities remain operational and free of construction debris until removed or plugged by construction activities</li> </ul>	<ul> <li>Operational Constraint -         Drainage of the Working Area         During Construction</li> <li>Notice to Contractor</li> </ul>

HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
					The contractor shall contact the municipality to provide advance notice of any work on the Holland (Schomberg) River culvert	
13.0	Air Quality (Section 5.3.4	1)				
13.1	Potential for temporary reduction in air quality during construction	MTO MECP	13.1.1	• n/a	<ul> <li>Dust control should be completed using MECP-approved suppressants, and in accordance with MTO's general conditions</li> <li>Impacts minimized by compliance with Contract General Conditions to minimize dust and other air quality impacts</li> </ul>	General Conditions of the Contract
					Greenhouse gas reduction targets introduced into MTO concrete construction specifications	
14.0	Adjacent Land Use and	Property (Sec	tion 5.3.1	)		
14.1	Private property has been acquired accommodate the Highway 400 embankment realignment	MTO PROP	14.1.1	Approximately 0.30 hectares (ha) of private property was acquired	<ul> <li>New right-of-way fencing will be installed where property has been acquired</li> <li>Existing right-of-way fencing that is removed for construction activities will be replaced</li> </ul>	Contract Drawings
14.2	Property may be required to accommodate the future realignment of the North Canal	MTO HMJMSB BWG	14.2.1	n/a	Property requirements for the future realignment of the North Canal are not included as part of the current project and, as such, will be confirmed at a future time prior to the canal relocation at project moving forward.	• n/a
14.3	Construction activities may impede access to property	MTO PROP BUS	14.3.1	n/a	<ul> <li>The contractor shall maintain access to all properties at all times</li> <li>Work at or adjacent to an entrance shall be communicated to the property owner a minimum of 48 hours in advance, with a written copy of the correspondence provided to the Contract Administrator</li> </ul>	Operational Constraint –     Maintain Property Access



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

December 2024

ID#	Environmental Element/Concern and Potential Effects	Concerned Agencies	#	Changes Since the 2003 TESR	Mitigation / Protection / Monitoring	Mitigation/Protection/Monitoring in Contract Documents (Includes but not limited to the following)
14.4	Road Occupancy Permits may be required	MTO BWG TK	14.4.1	n/a	The contractor shall apply for and obtain all applicable permits from the County of Simcoe, Town of Bradford West Gwillimbury, and King Township for all work on property outside MTO jurisdiction or in a road allowance controlled by municipalities prior to any work undertaken	Notice to Contractor – Road Occupancy Permit
15.0	Climate Change (Section 5.3.7)					
15.1	Consideration of climate change impacts	MTO MECP	16.1.1		Stormwater management has been reviewed and features are designed based on a review of drainage modelling for various storm scenarios.	Contract Drawings
					The Contractor will install the stormwater management features to manage water within the project limits as indicated in the Contract documents.	



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

December 2024

## 6.0 Reference Documentation

#### PREVIOUS REPORTS AND STUDIES

The following project specific reference material was used in the preparation of the report:

 Transportation Environmental Study Report, Highway 400 Planning and Preliminary Design Study from the South Canal Bridge to 1.0 km South of Highway 89, November 2003, GWP 40-00-00

#### **ENVIRONMENTAL REPORTS**

The following environmental memoranda have been prepared in 2024 to address updates to the information found in the 2019 reports available under separate cover:

- Fish and Fish Habitat Existing Conditions and Impact Assessment Report Addendum, Highway 400, North Canal Overpass Structure Replacements (GWP 2005-11-00), Stantec Consulting Ltd. 2024
- Terrestrial Ecosystems Existing Conditions and Impact Assessment Report Addendum, Highway 400, Replacement of the North Canal Bridges, Town of Bradford West Gwillimbury, Design Updates (GWP 2005-11-00), Stantec Consulting Ltd. 2024
- Update to Highway 400 North Canal Overpass Replacement (GWP 2005-11-00) Noise Study, Stantec Consulting Ltd. 2024

The following environmental reports have been completed under this study and are available under separate cover.

- Terrestrial Ecosystems Existing Conditions and Impact Assessment Report, Replacement of the Highway 400 Bridges over the North Canal of the Holland Marsh, Bradford West Gwillimbury, County of Simcoe (GWP 2005-11-00), Stantec Consulting Ltd. February 2019
- Fish and Fish Habitat Existing Conditions and Impact Assessment Report, Highway 400 North Canal Overpass Structure Replacement (GWP 2005-11-00), Stantec Consulting Ltd. March 2019
- Contamination Overview Study, Highway 400/ North Canal Overpass Structure Replacement, Bradford West Gwillimbury, Ontario, Stantec Consulting Ltd. May 2016



HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENTS G.W.P. 2005-11-00

#### December 2024

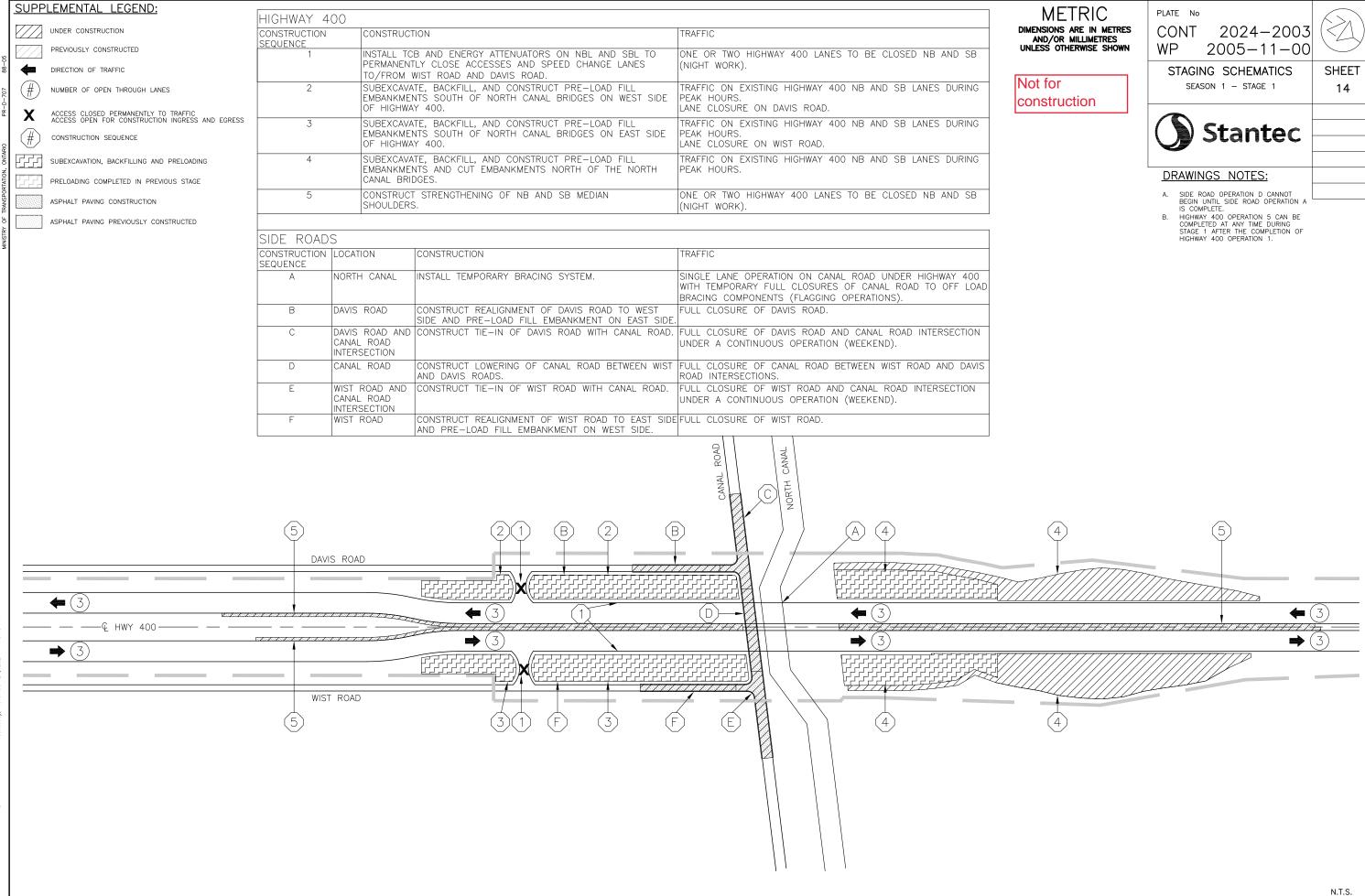
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- Designated Substances and Hazardous Building Materials Assessment, Highway 400 Holland River Culvert (30-504/C), Stantec Consulting Ltd. December 2014
- Designated Substances and Hazardous Building Materials Assessment, Northbound and Southbound Overpass Structures at North Canal Road, Stantec Consulting Ltd. December 2014
- Stage 1-2 Archaeological Assessment of Highway 400 North and North Canal Overpass Structure Replacement (GWP 2005-11-00), Stantec Consulting Ltd. February 2018.
- Noise Study Update Memorandum, Highway 400 North Canal Overpass Replacement (G.W.P. 2005-11-00), Stantec Consulting Ltd. October 31, 2018
- Excess Materials Management Plan for Highway 400/North Canal Overpass, Structure Replacement, (G.W.P. 2005-11-00), Stantec Consulting Ltd. February 2019
- Highway 400 Bridges over the North Canal, Bradford, Species at Risk Bat Habitat Survey Memorandum, Dillon Consulting Ltd., June 2018
- Highway 400 North Canal Overpass Replacement Study (G.W.P. 2005-11-00), Species at Risk Bat Habitat Survey Memorandum, Stantec Consulting Ltd., August 2018
- Highway 400 Final Drainage Design North Canal (Stantec, 2019)



# **APPENDIX A**

**Recommended Design** 



CREATED: Wednesday, November

	WINTER CONF	IGURATION 1	METRIC	PLATE No
	LOCATION	CONSTRUCTION TRAFFIC MANAGEMENT	DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN	CONT 2024-2003
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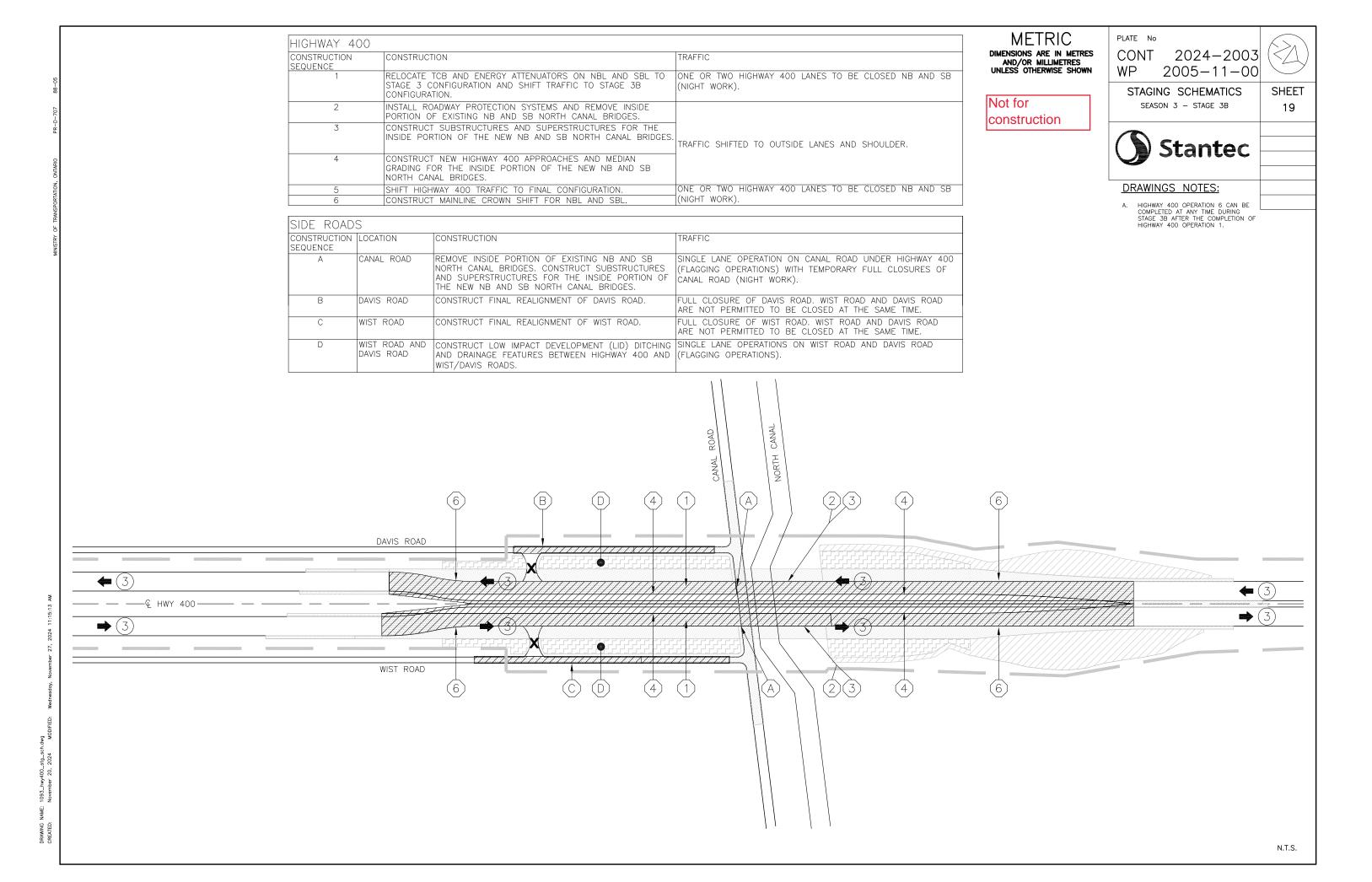
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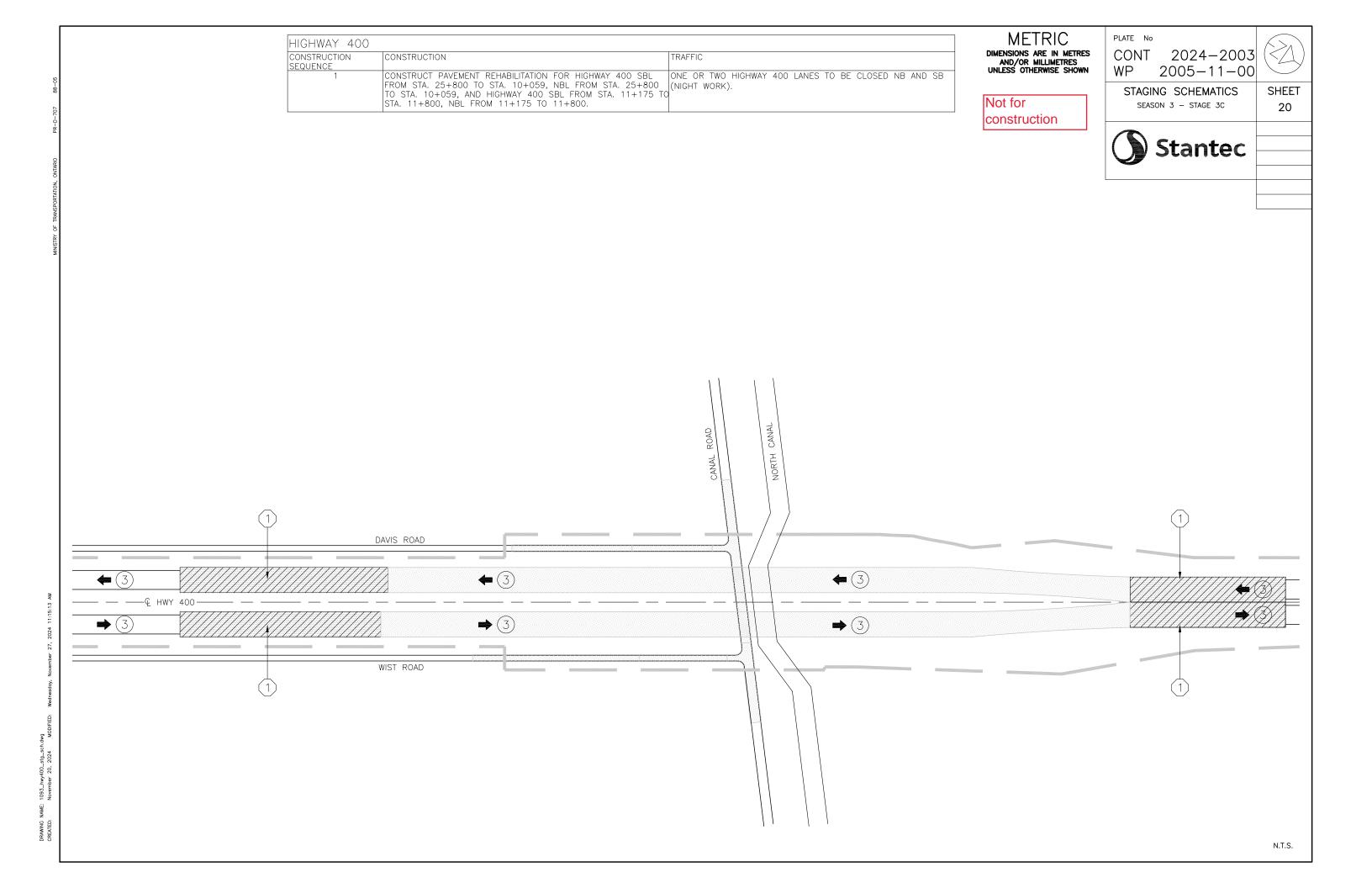
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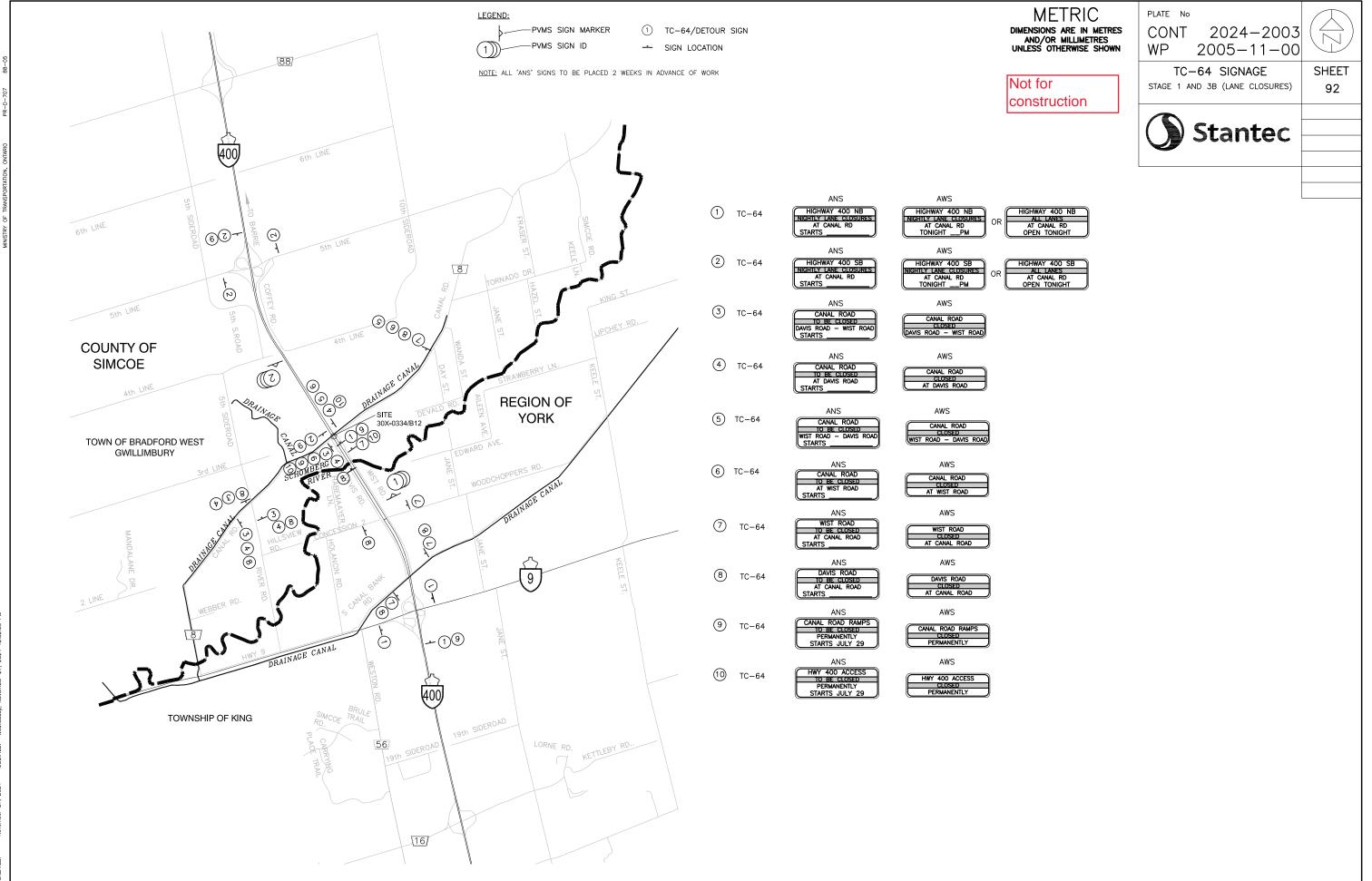
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ò			THE NB AND SB NORTH CANAL BRIDGES.	SEASON 3 - STAGE 3A 18
דאר ה		2	COMPLETE PAVEMENT TIE-ON WORK PRIOR TO SHIFTING TRAFFIC ONE OR TWO HIGHWAY 400 LANES TO BE CLOSED NB AND SB TO NEW OUTSIDE PORTIONS OF THE NB AND SB NORTH CANAL (NIGHT WORK).	
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2024-2003 2005-11-00

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REDUCED TO 1 LANE
AT CANAL ROAD
STARTS 6 TC-64 DAVIS ROAD REDUCED TO 1 LANE AT CANAL ROAD 9 TOWNSHIP OF KING 16/

**METRIC** 

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

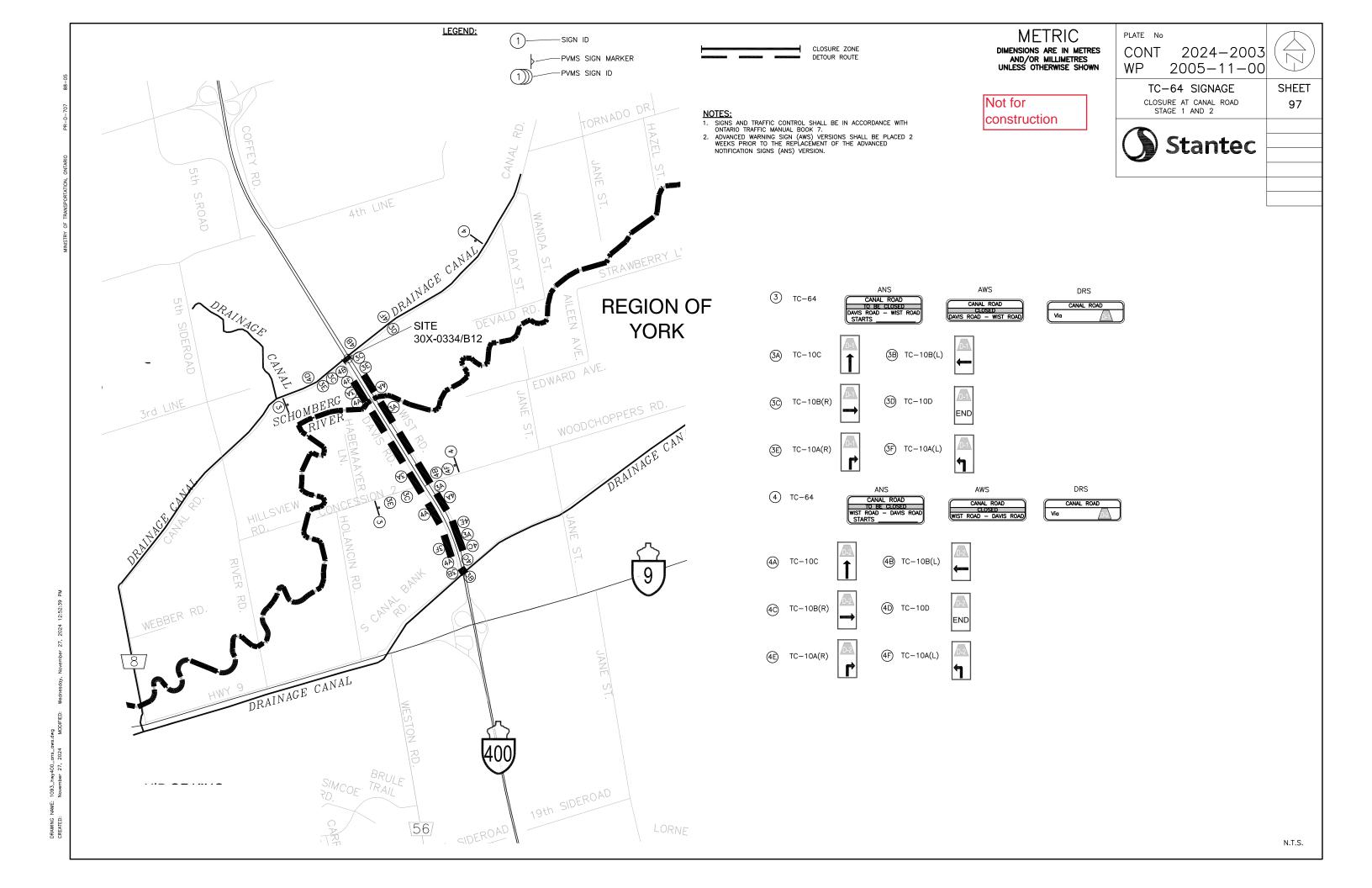
CONT 2024-2003 WP 2005-11-00

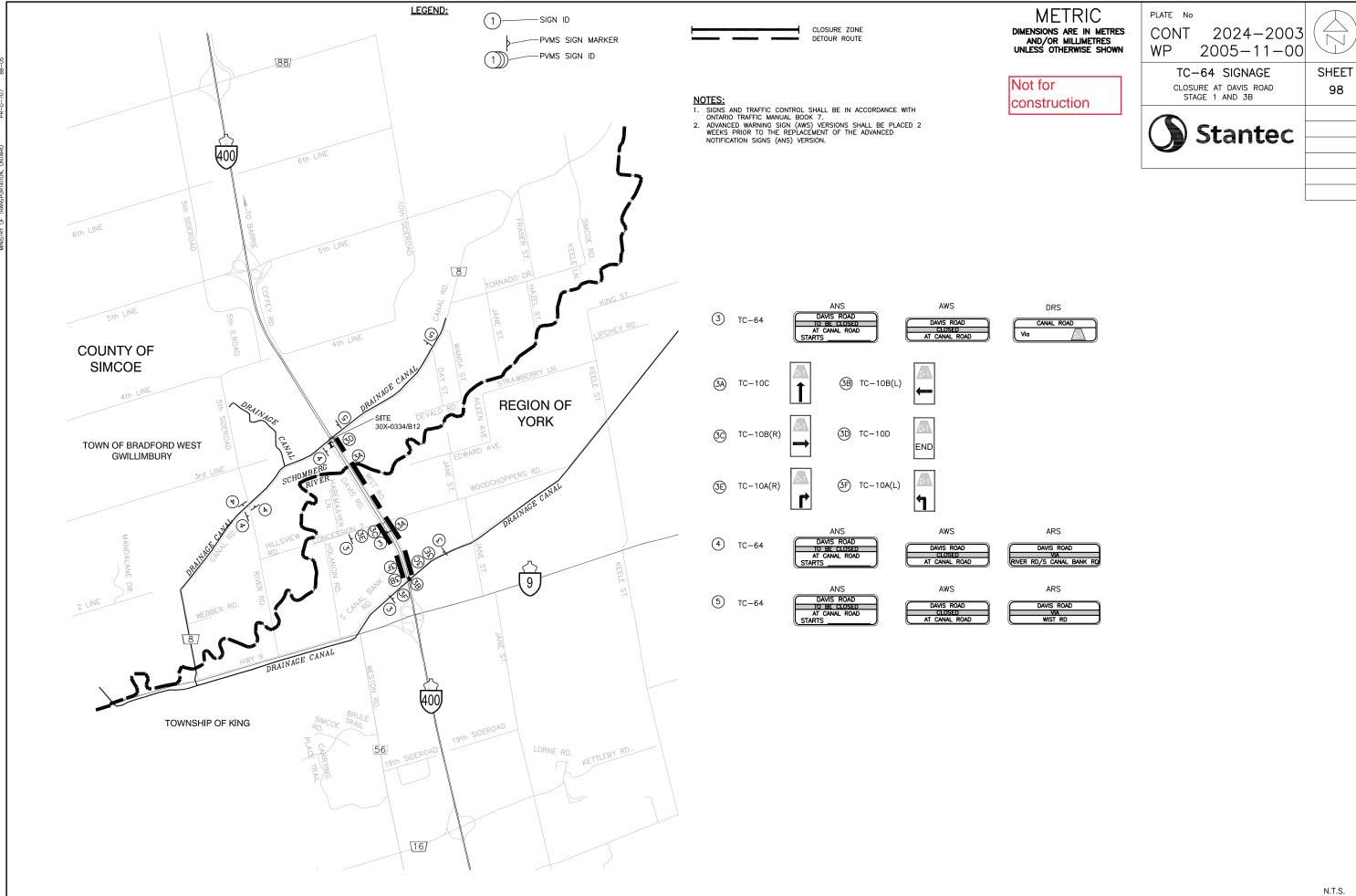
PLATE No

TC-64 SIGNAGE STAGE 3B (PARTIAL CLOSURE)

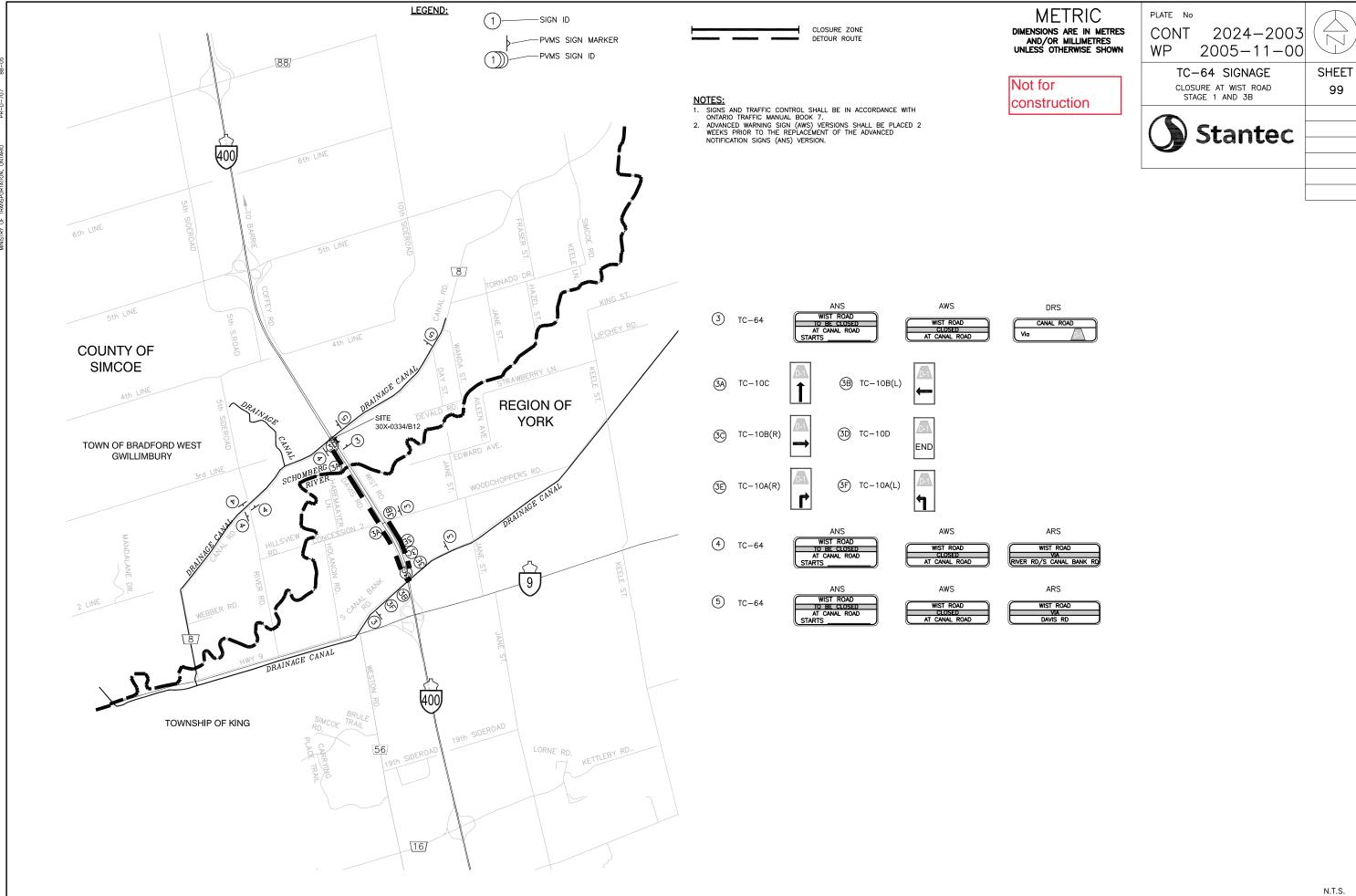
SHEET 96



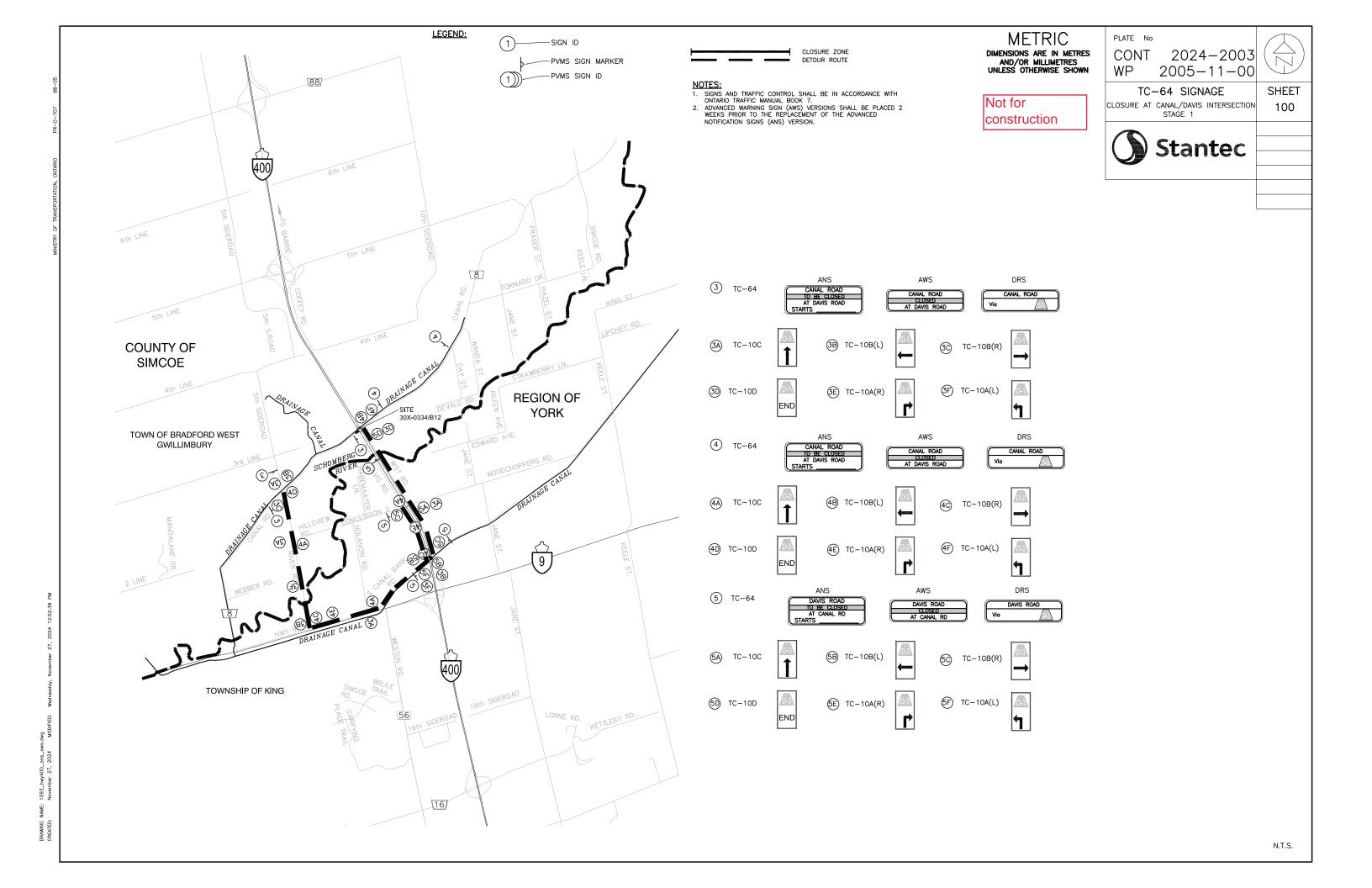


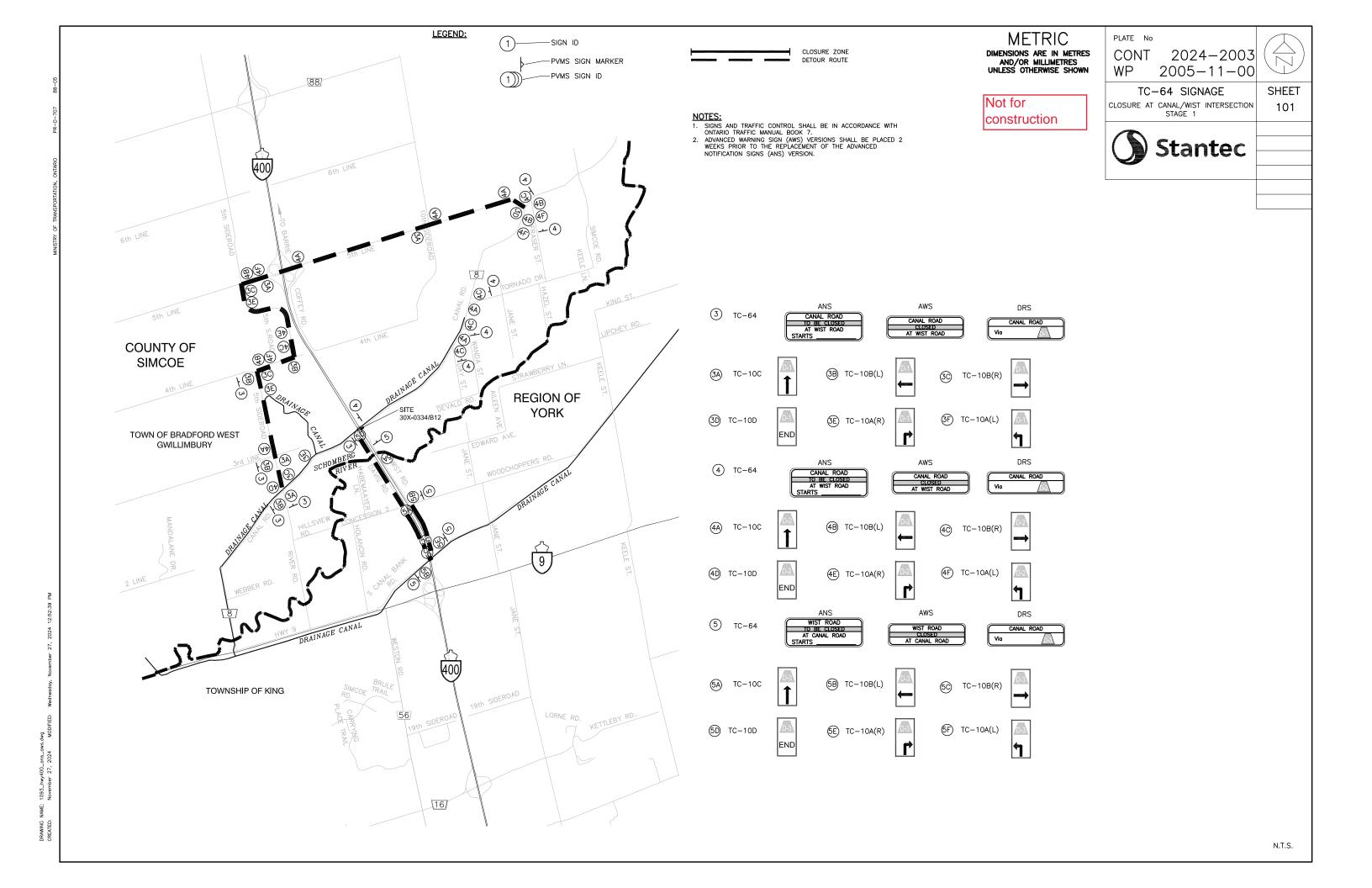


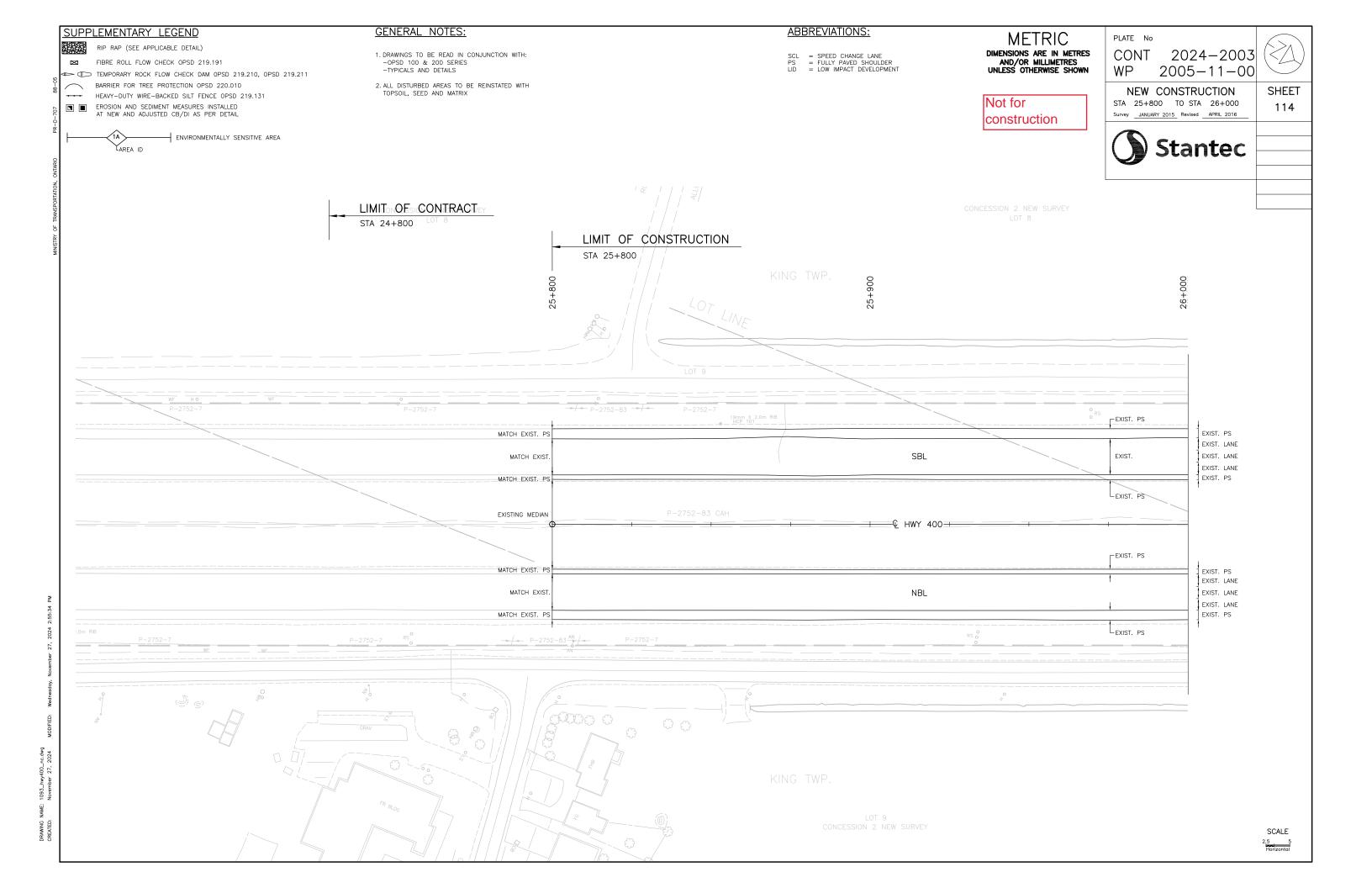
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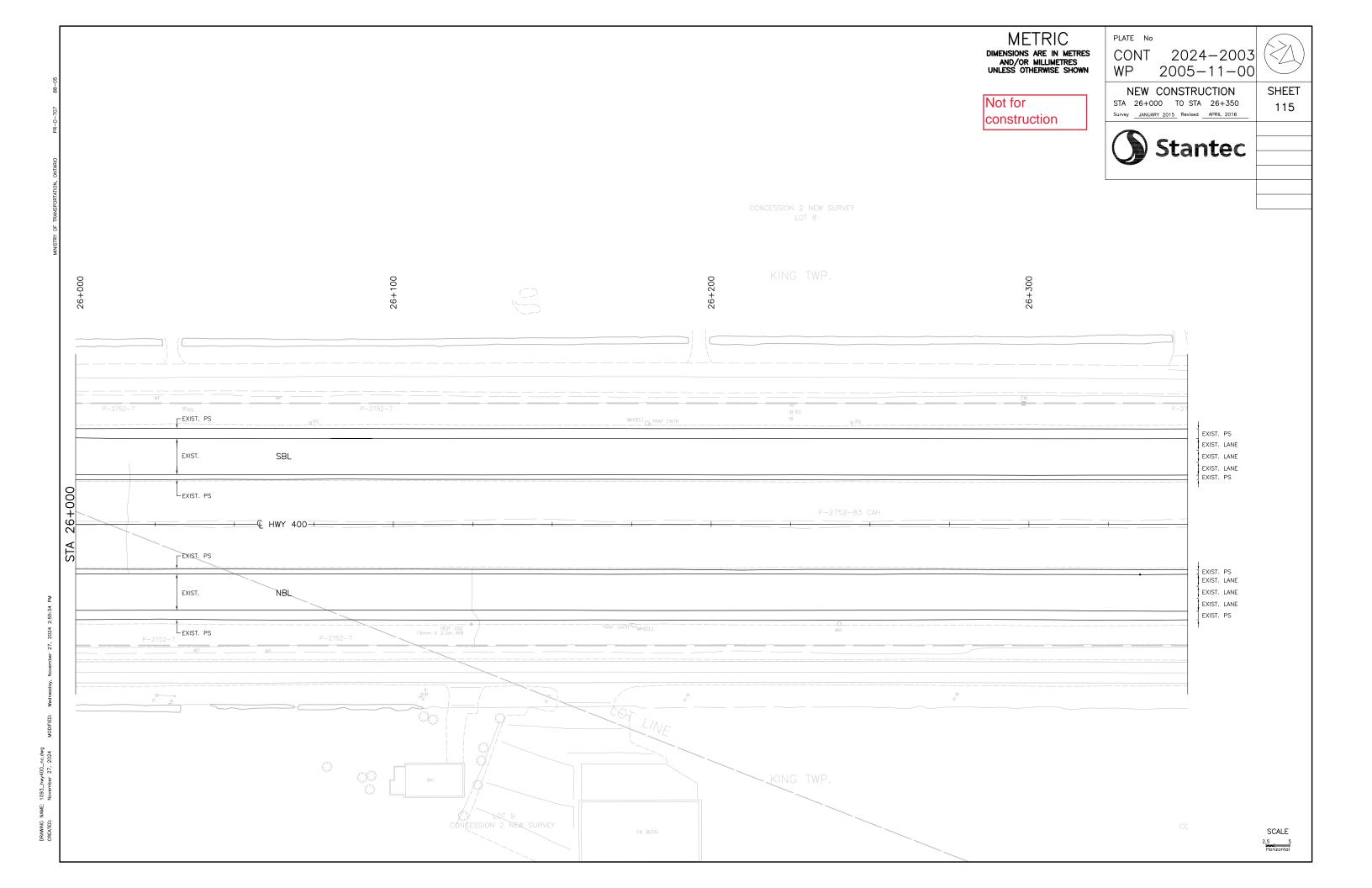


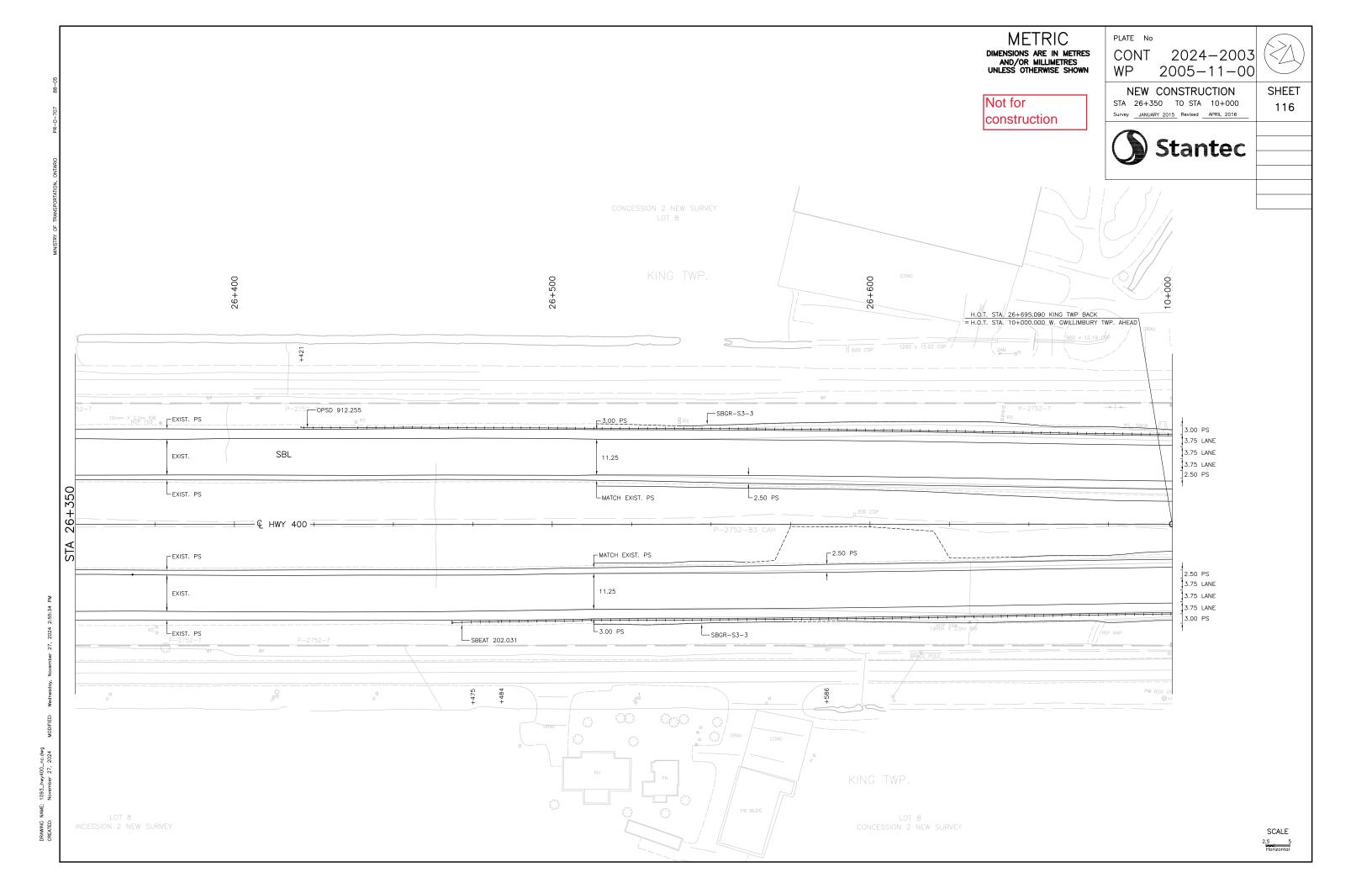
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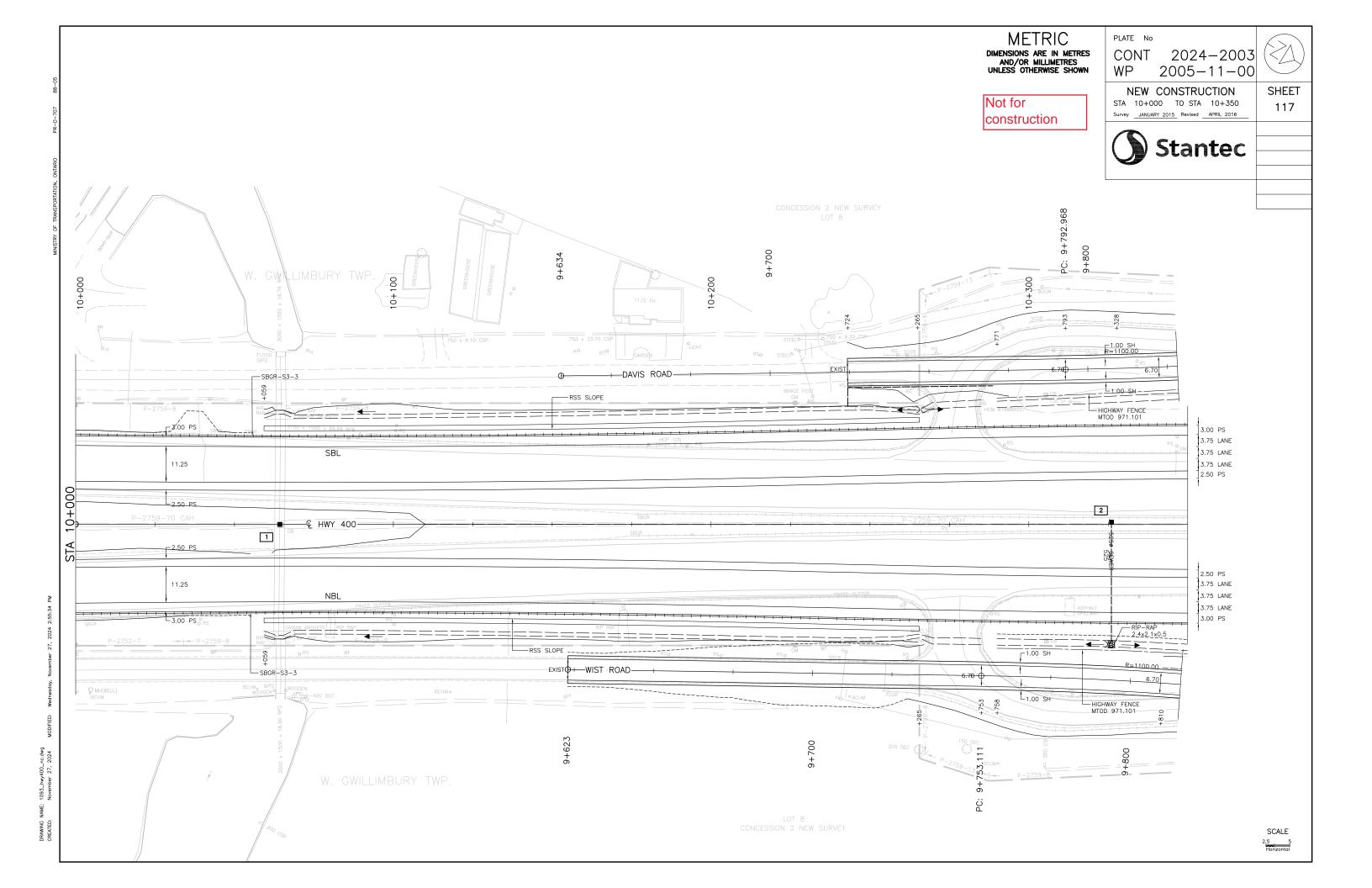


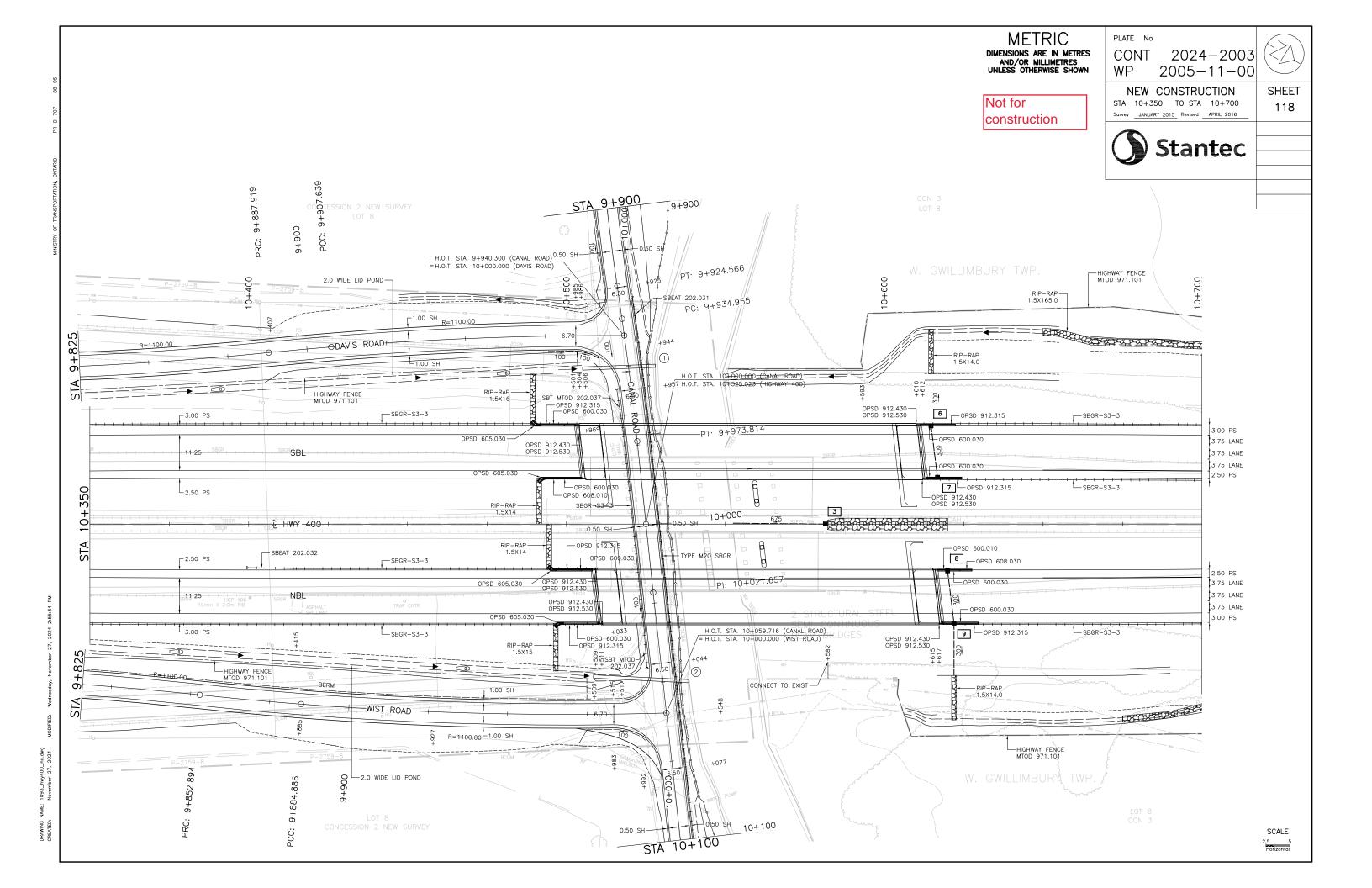


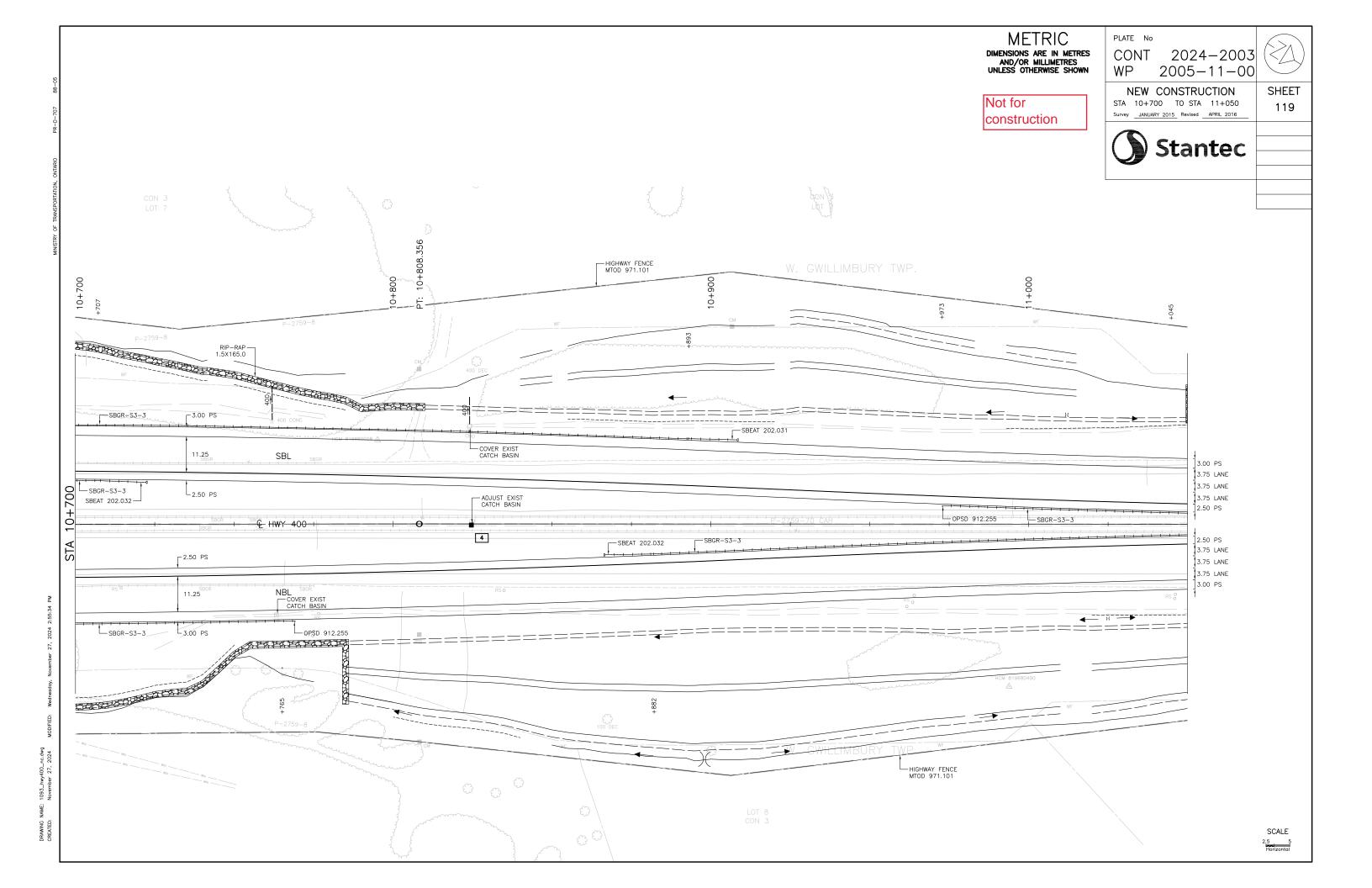




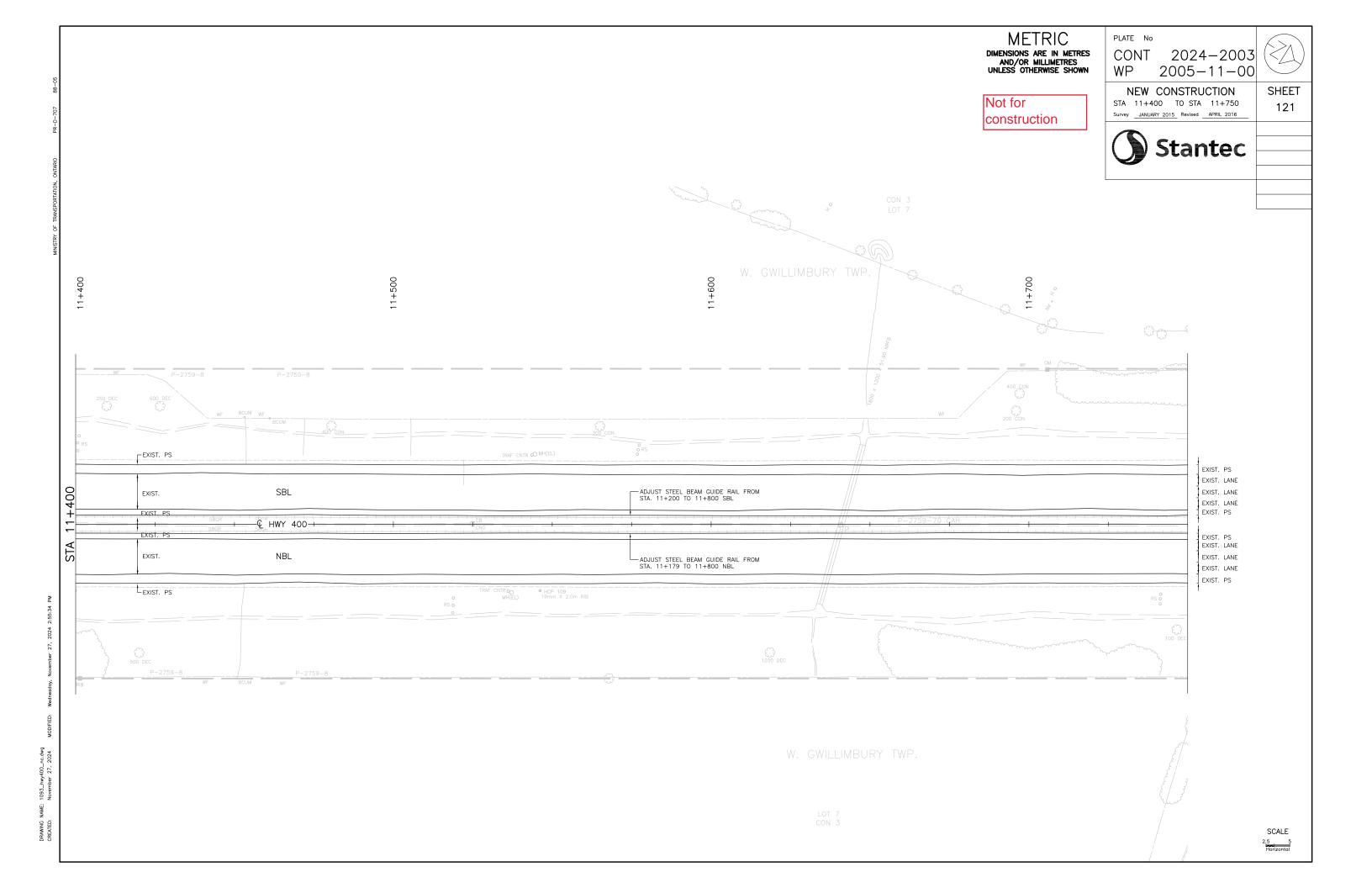


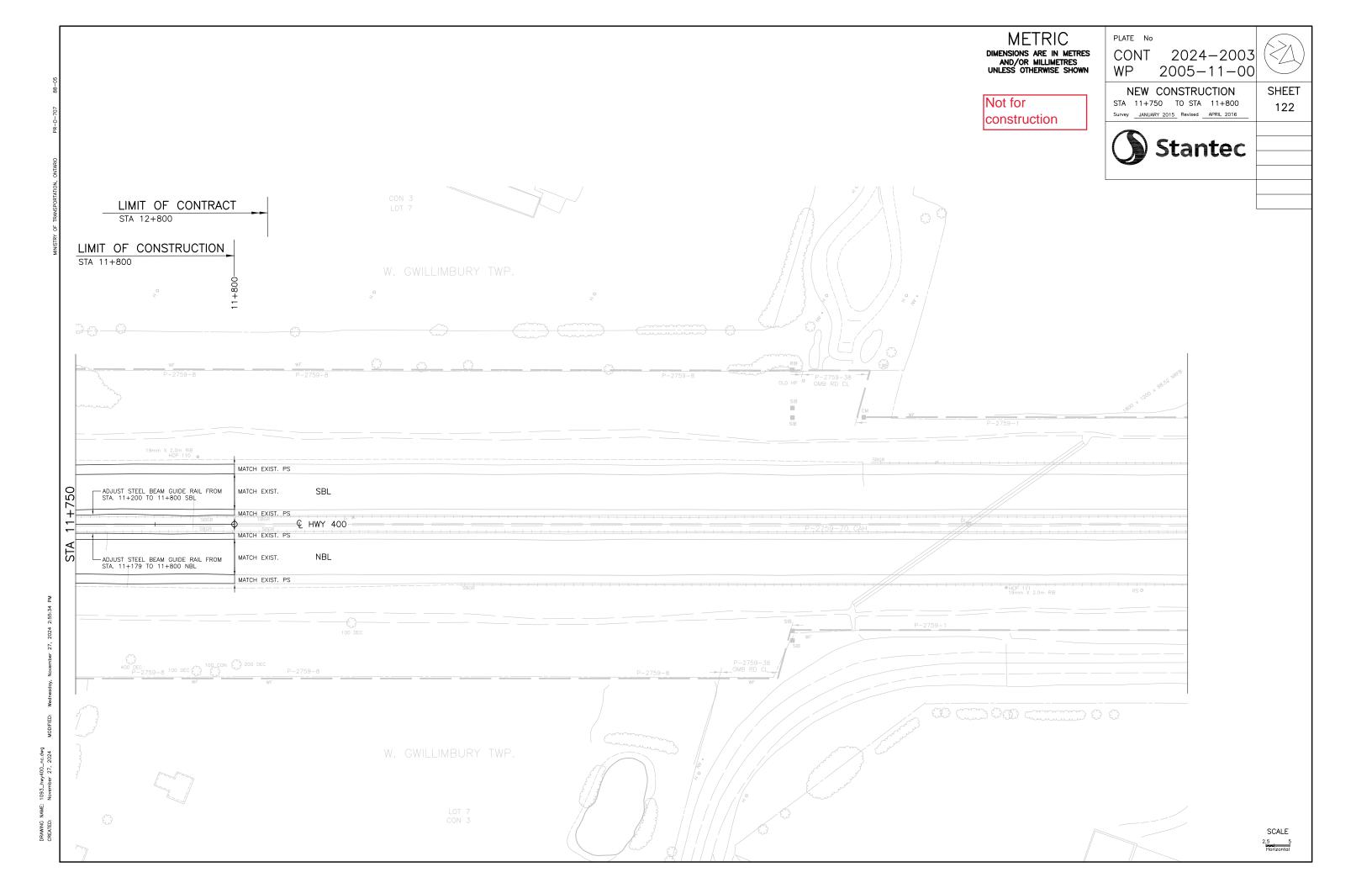






**METRIC** PLATE No CONT DIMENSIONS ARE IN METRES 2024-2003 AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN WP 2005-11-00 SHEET **NEW CONSTRUCTION** Not for STA 11+050 TO STA 11+400 120 Survey JANUARY 2015 Revised APRIL 2016 construction Stantec 11+100 HIGHWAY FENCE MTOD 971.101 CONNECT TO EXIST \_3.00 PS 19mm X 2.0m RIB HCP 108 ● EXIST. PS 3.00 PS MATCH EXIST. PS EXIST. LANE -ADJUST STEEL BEAM GUIDE RAIL FROM STA. 11+200 TO 11+800 SBL +050 11.25 SBL EXIST. LANE - ADJUST EXIST CATCH BASIN EXIST. LANE EXIST. PS +Q HWY 400-EXIST. PS STA EXIST. LANE EXIST. LANE MATCH EXIST. NBL -ADJUST STEEL BEAM GUIDE RAIL FROM STA. 11+179 TO 11+800 NBL 11.25 └─SBGR-S3-3 EXIST. LANE 3.00 PS MATCH EXIST. PS EXIST. PS CB Full of Water -HIGHWAY FENCE MTOD 971.101 - CONNECT TO EXIST SCALE





METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN CONT WP 2005-11-00 Not for STA 9+850 TO STA 9+900 Survey JANUARY 2015 Revised APRIL 2016 construction LIMIT OF CONSTRUCTION 9+828 STA 9+830 PI: 9+849.999 PC: 9+883.290

PLATE No

2024-2003



**NEW CONSTRUCTION** 

SHEET 123

Stantec

SCALE

Not for

construction

METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No CONT 2024-2003 WP 2005-11-00



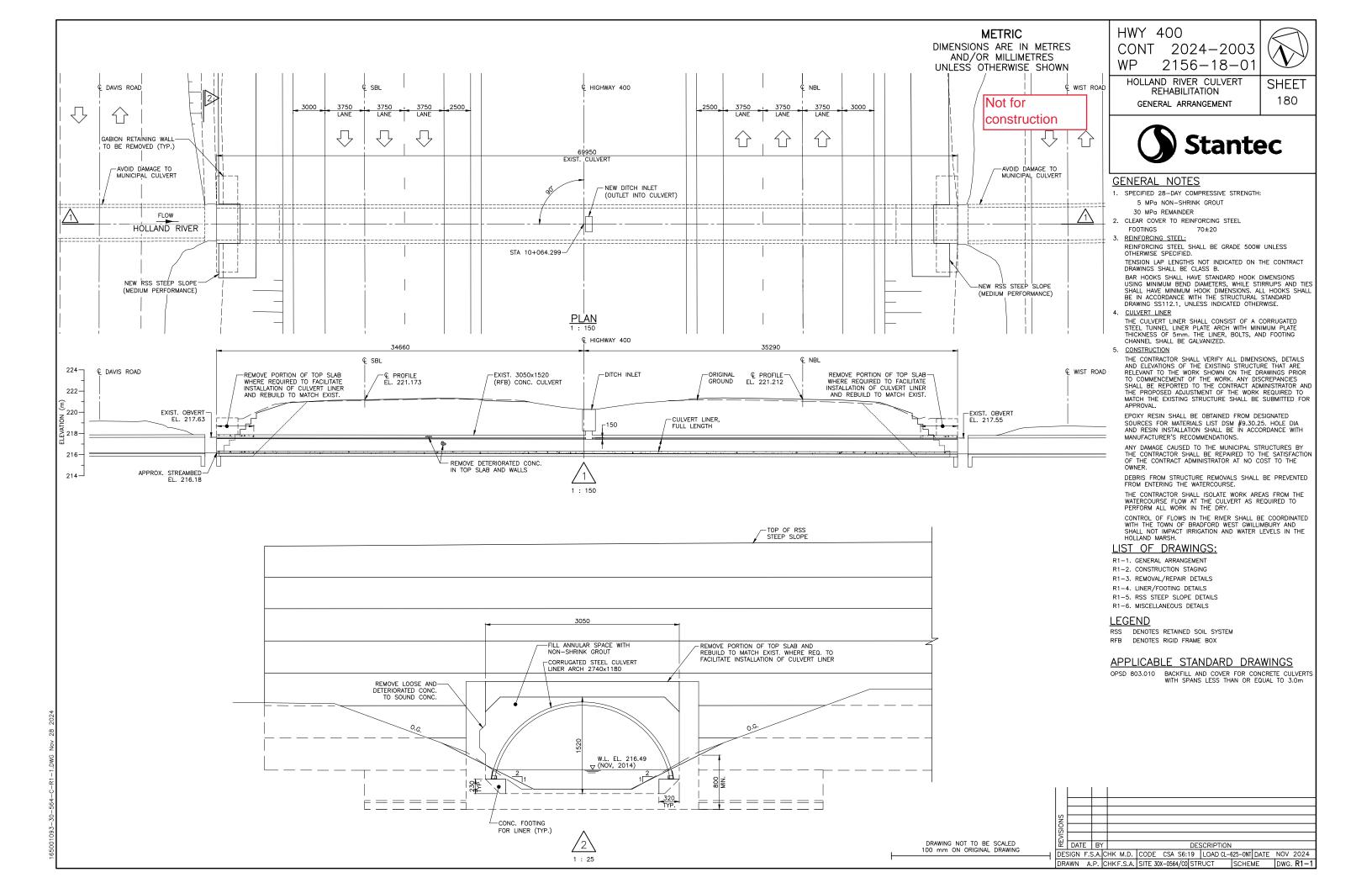
NEW CONSTRUCTION STA 10+100 TO STA 10+175

SHEET 124

Stantec

Survey JANUARY 2015 Revised APRIL 2016

STA 10+100 PI: 10+117.937 SBEAT 202.031 LIMIT OF CONSTRUCTION STA 10+146 CANAL ROAD



**METRIC** 

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

construction

Not for

DRAWING NOT TO BE SCALED 100 mm ON ORIGINAL DRAWING

CONT 2024-2003 WP 2156-18-01

> HOLLAND RIVER CULVERT REHABILITATION CONSTRUCTION STAGING

SHEET 181



# CONSTRUCTION STAGING

REFER TO HIGHWAY STAGING DRAWINGS FOR ADDITIONAL STAGING INFORMATION.

# STAGE 1

NO WORK AT CULVERT.

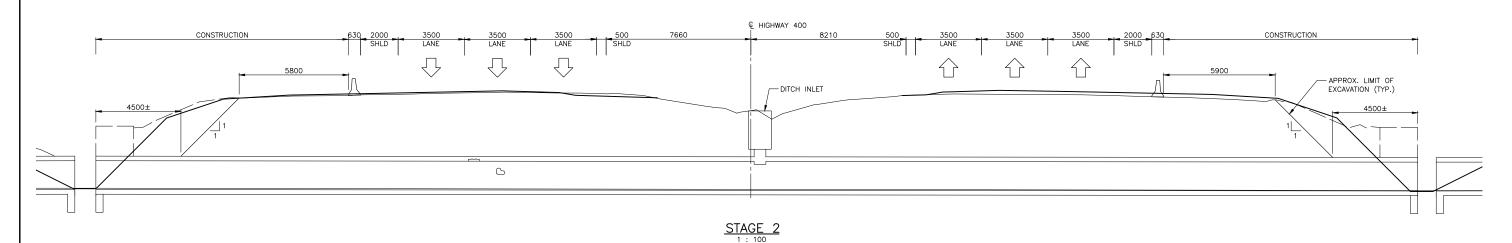
# STAGE 2

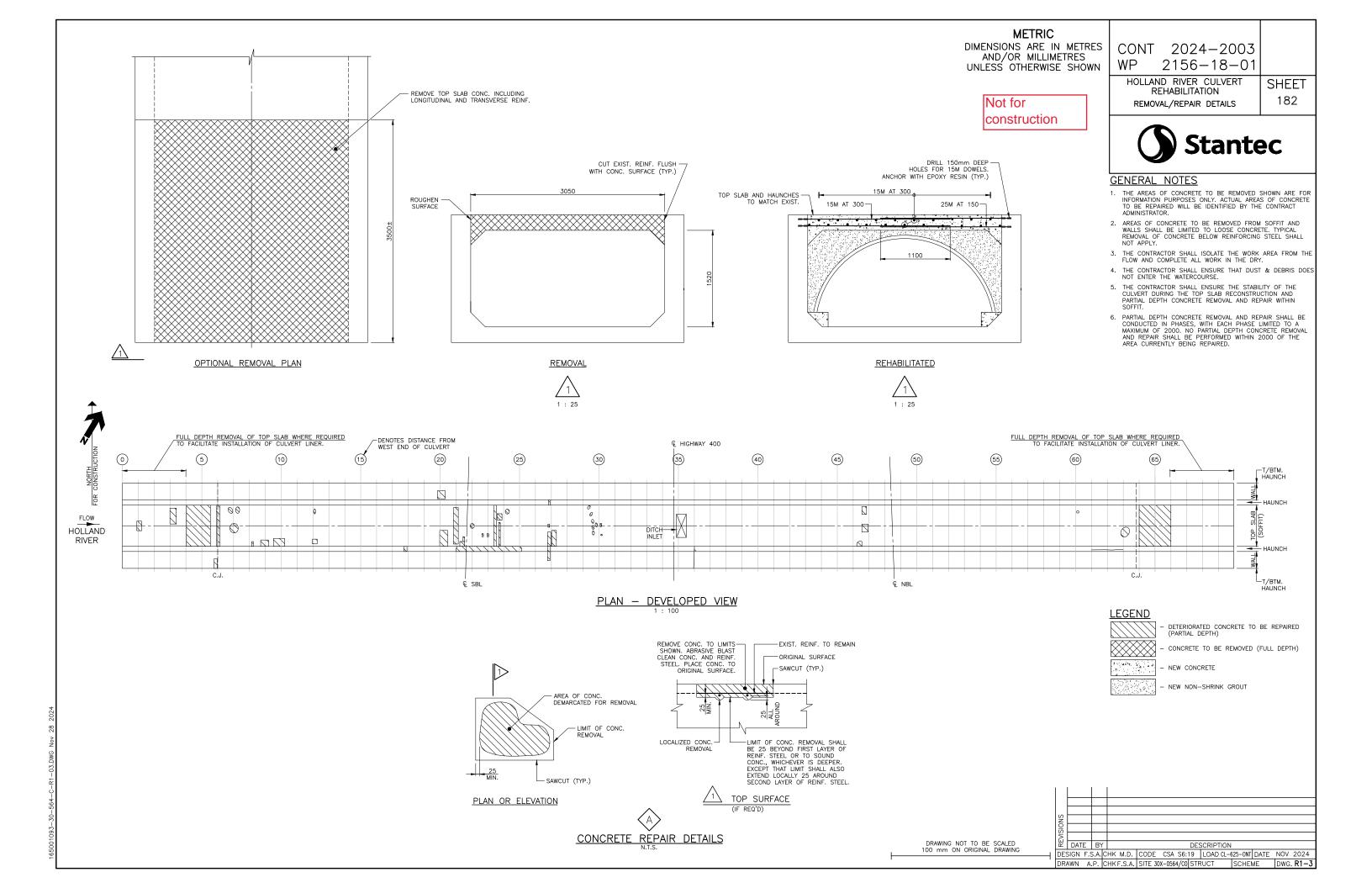
- ERECT TEMPORARY CONCRETE BARRIERS AND PROVIDE THREE LANES OF TRAFFIC IN EACH DIRECTION.
- 2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM.
- EXCAVATE TO EXPOSE CULVERT ENDS AND REMOVE EXISTING GABION RETAINING WALLS.
- 4. REMOVE PORTION OF TOP SLAB WHERE REQUIRED TO FACILITATE INSTALLATION OF CULVERT LINER.
- 6. REMOVE DETERIORATED CONCRETE.
- 7. INSTALL CONCRETE FOOTINGS.
- 8. INSTALL CULVERT LINER.
- FILL ANNULAR SPACE BETWEEN CONCRETE CULVERT AND LINER.
- 10. CONSTRUCT RSS STEEP SLOPE, BACKFILL AND RE-GRADE EMBANKMENTS.
- 11. REMOVE TEMPORARY FLOW PASSAGE SYSTEM.
- REMOVE TEMPORARY FLOW PASSAGE STSTEM.

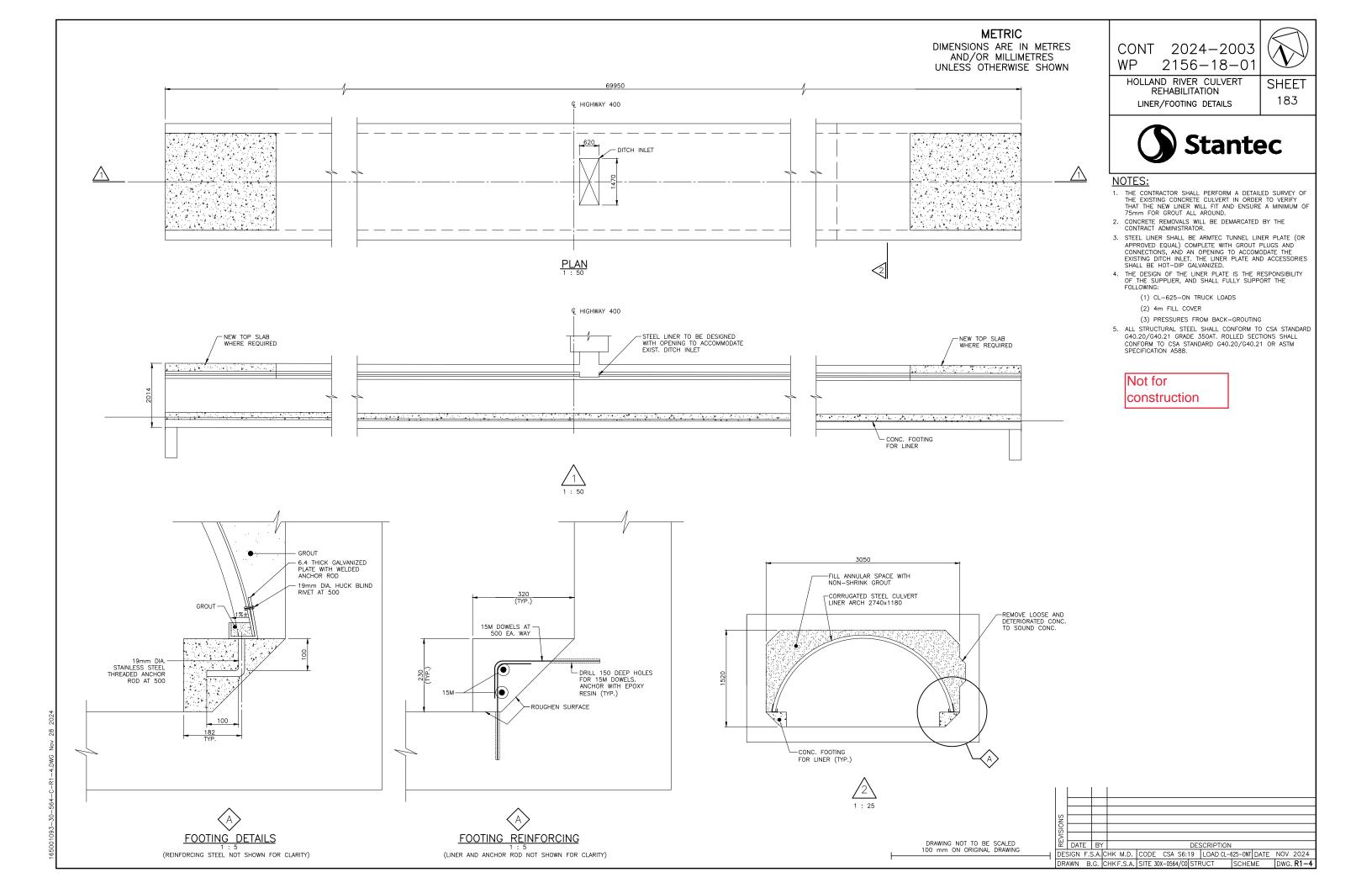
   REMOVE TCB AND PROVIDE LANE ARRANGEMENT AS SPECIFIED ELSEWHERE IN THE CONTRACT.

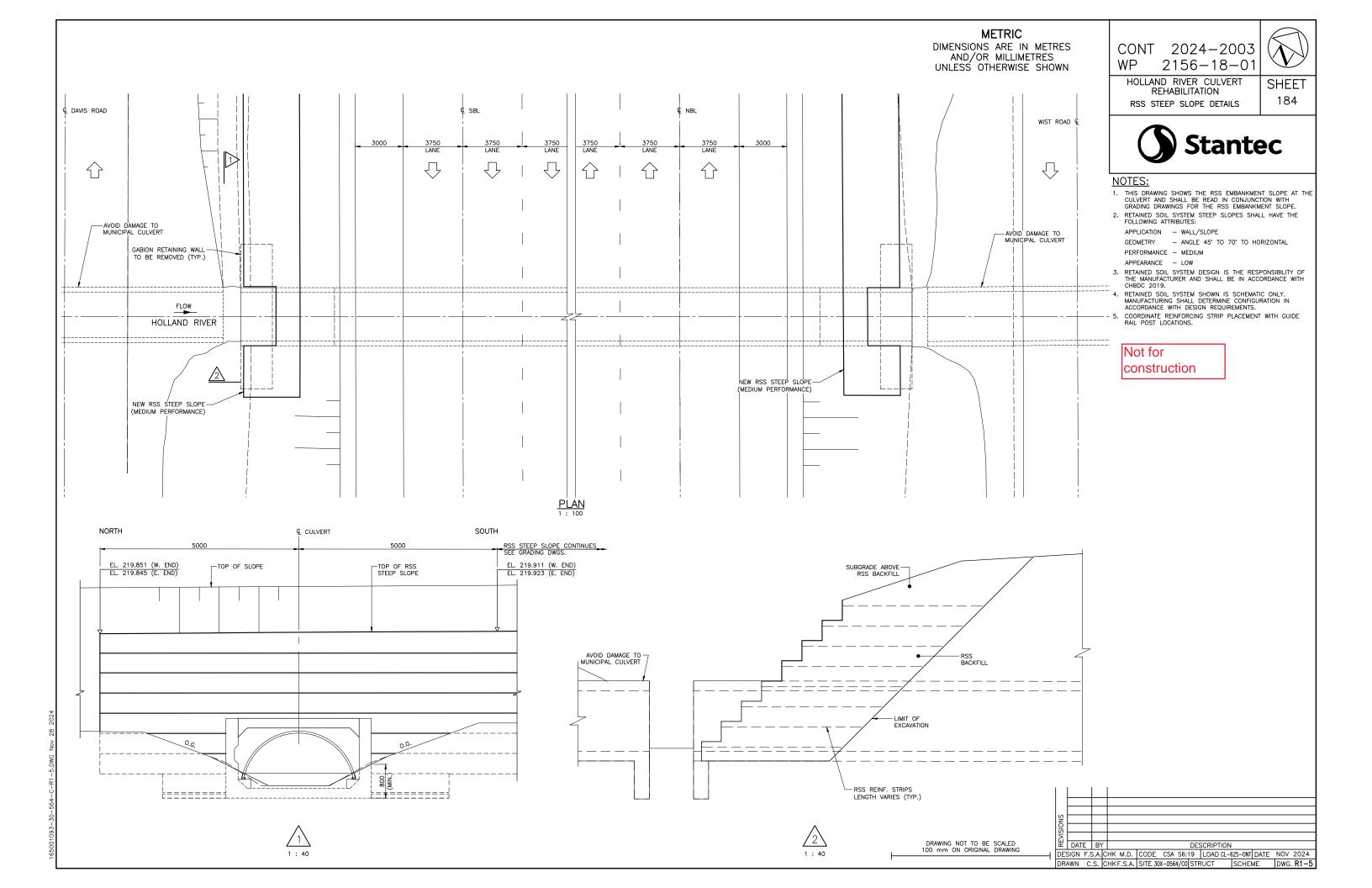
# STAGE 3A AND 3B

NO WORK AT CULVERT.









# METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

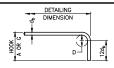
> Not for construction

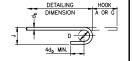
CONT 2024-2003 2156-18-01

HOLLAND RIVER CULVERT REHABILITATION MISCELLANEOUS DETAILS

SHEET 185







STANDARD 180° HOOK

#### STANDARD 90° HOOK

MINI	MUM BENDING PIN (	DIAMETER, D, mm
BAR	STEEL	GRADE
SIZE	400R <sup>(2)</sup>	400W or 500W
10M	70	60
15M	100	90
20M	120	100
25M	150	150
30M	250	200
35M	300	250
45M	450 (1)	400
55M	600 (1)	550

Special fabrication is required for bends exceeding 90° for bars of these sizes and grade.
 For stainless steel, with Fy = 500, the same D as for 400R.

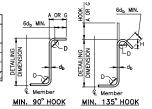
#### STANDARD HOOK DIMENSIONS

STANDARD HOOK DIMENSIONS							
D. D.	90° ⊦	IOOKS	180° HOOKS				
BAR	A OR G	(mm)	A OR G	(mm)	J (mm)		
JIZE	400R	400W 500W	400R	400W 500W	400R	400W or 500W	
10M	180	180	140	130	90	80	
15M	260	250	180	170	130	120	
20M	310	300	220	200	160	140	
25M	400	400	280	280	200	200	
30M	510	490	400	350	310	260	
35M	610	590	480	430	370	320	
45M	790	770	680	630	540	490	
55M	1030	1010	900	850	710	660	

NOTE: All Hook Dimensions are according to the CHBDC-2019.

### MINIMUM STIRRUP AND TIE HOOK DIMENSIONS

IVI	HIMOM	STIKKO	AND HE	TOOK DIN	ALIASIONS
BAR BAR		PIN	90°	1.	35°
BAR	DIAM.	DIAM.	A OR G	A OR G	H (approx.
3121	d <sub>b</sub> (mm)	D(mm)	(mm)	(mm)	(mm)
10M	11.3	45	100	100	70
15M	16.0	65	140	140	100
20M	19.5	100	190	190	115
25M	25.2	150	280		//////
	•				

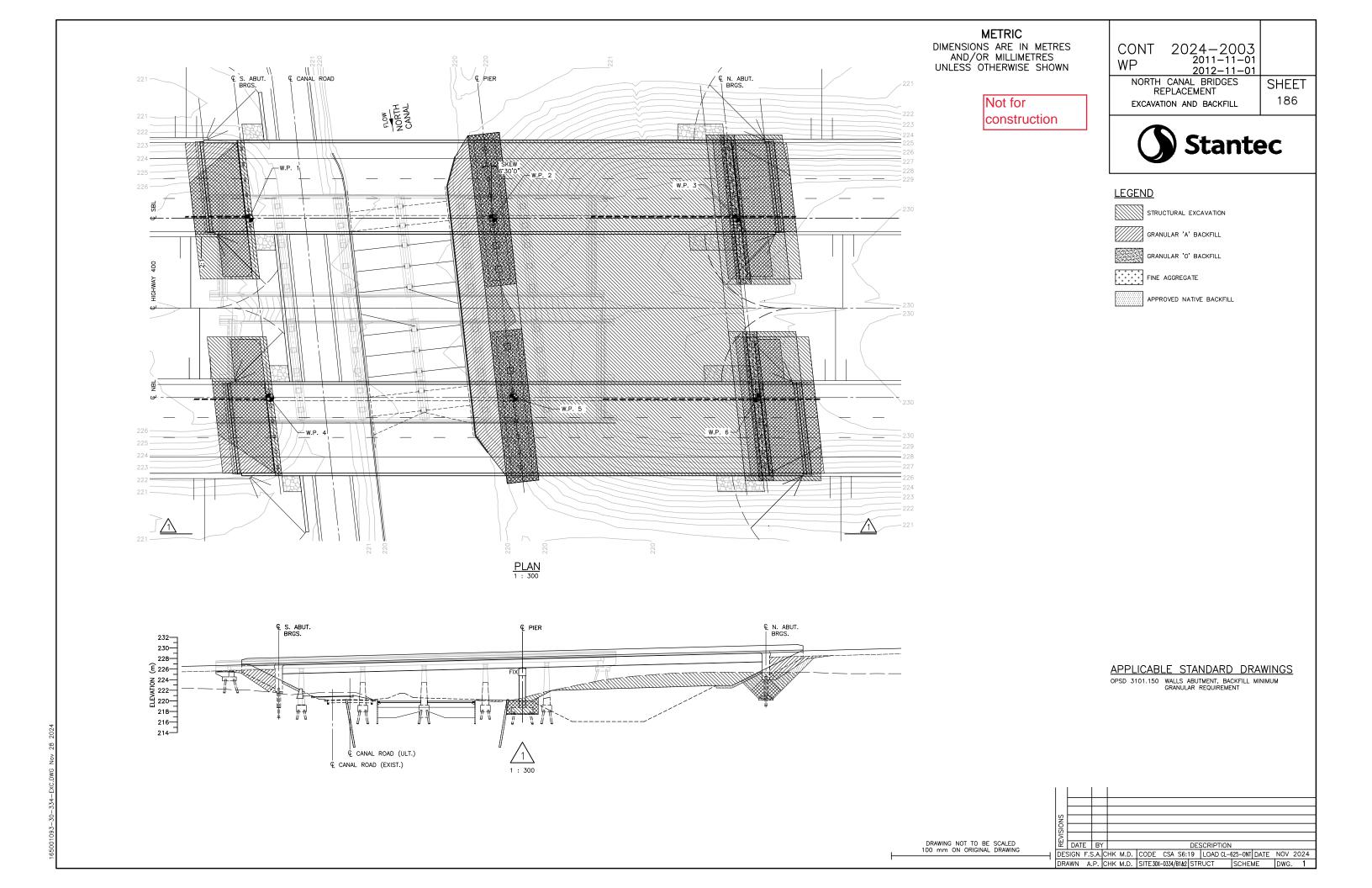


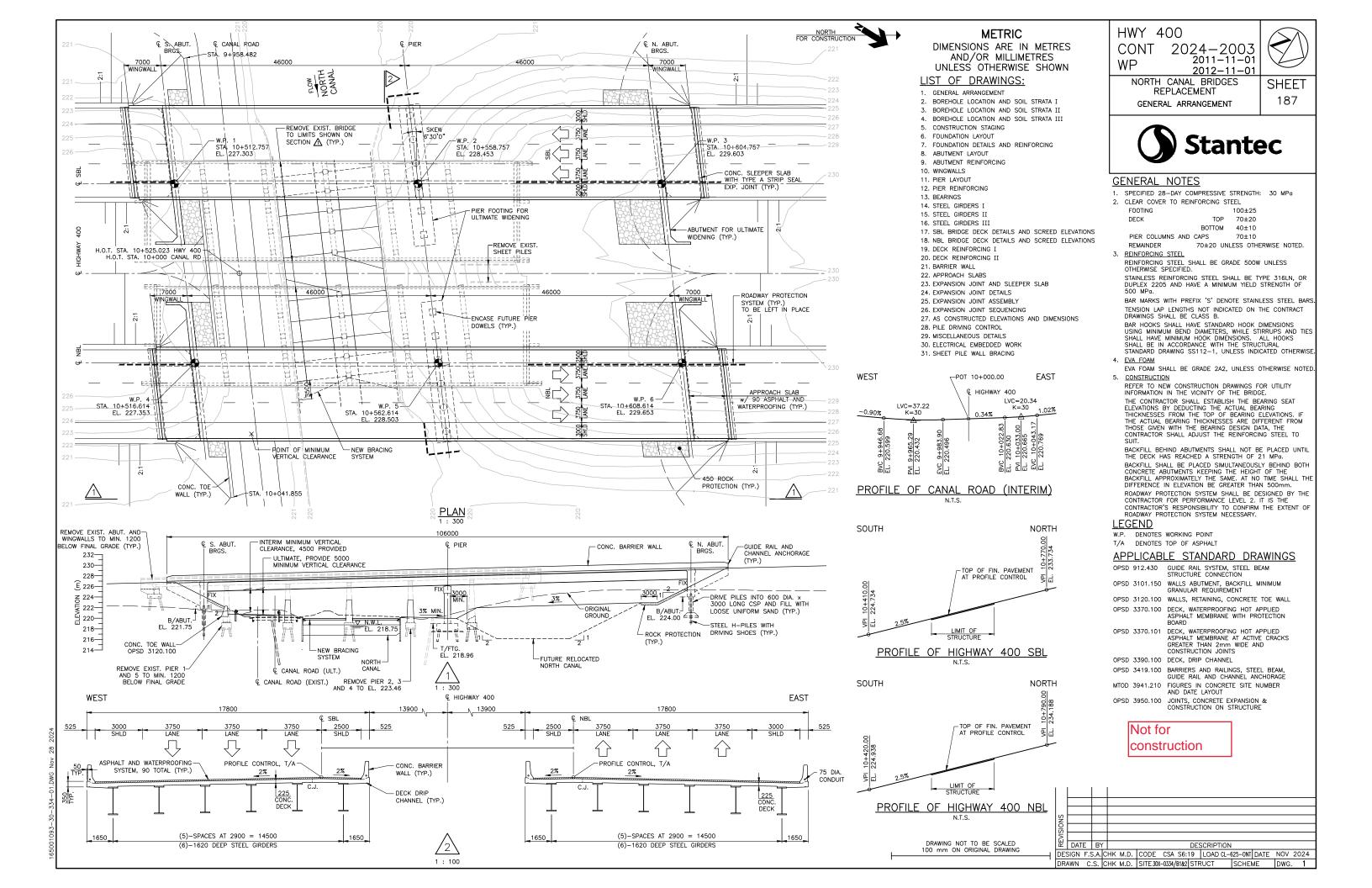
HOOK DIMENSIONS FOR REINFORCING STEEL BARS

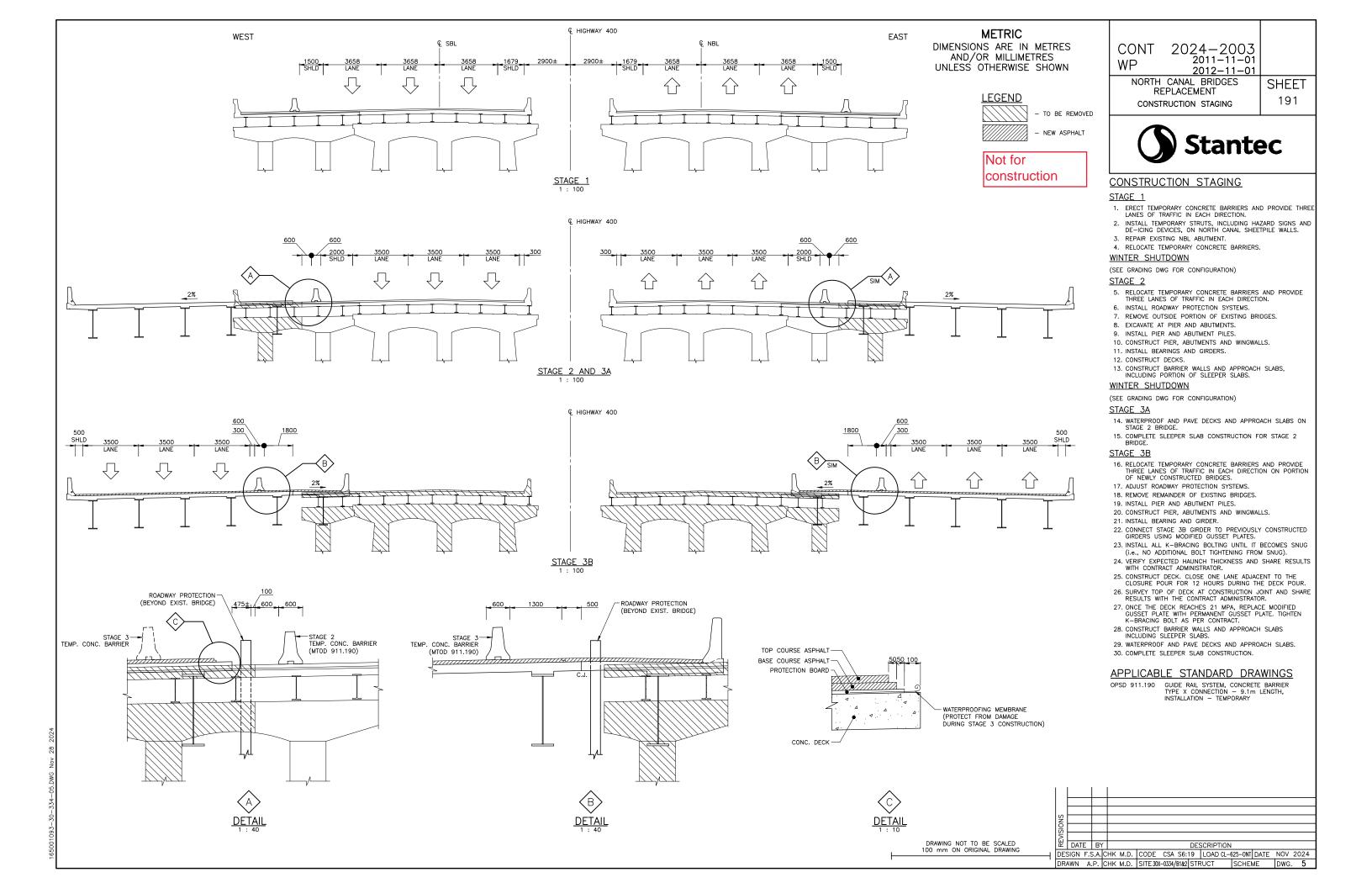
Ontario Ministry of Transportation SS112-1

Date OCTOBER 2022 Rev -

DRAWING NOT TO BE SCALED 100 mm ON ORIGINAL DRAWING







# **APPENDIX B**

**Notification Materials** 

# **Stantec**

Stantec Consulting Ltd.

401 Wellington Street West, Suite 100 Toronto ON M5V 1E7 Tel: (416) 596-6686 Fax: (416) 596-6680

November 24, 2014 File: 165000911

Attention: Ashley Johnson, Senior Advisor (Acting)
Ontario Ministry of Aboriginal Affairs – Consultation Unit
160 Bloor Street East, 9th Floor
Toronto ON M7A 2E6

Dear Ms. Johnson,

Reference: NOTICE OF COMMENCEMENT

Highway 400 North Canal Overpass Structure Replacement Study, GWP 2005-11-00

The Ontario Ministry of Transportation (MTO) is undertaking a Class Environmental Assessment (EA) study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe. A notice with additional information is attached.

The project team will be contacting the following First Nations / Métis Groups to request their involvement in this study:

Mississauga of Scugog Island Attn: Rhonda Coppaway R. R. #5, 22521 Island Rd. Port Perry, ON L9L 1B6	Chippewas of Rama First Nation Attn: Chief Sharon Stinson Henry 5884 Rama Road, Suite 200 Rama, ON L3V 6H6	Alderville First Nation Attn: Chief James R. Marsden Alderville Administrative Office   11696 Second Line Rd. P.O. Box 46 Roseneath, ON KOK 2X0
Mississauga of Scugog Island Attn: Chief Kelly LaRocca R. R. #5, 22521 Island Rd. Port Perry, ON L9L 1B6	Hiawatha First Nation Attn: Chief Greg Cowie 123 Paudash Street Hiawatha, ON KOL 2G0	Alderville First Nation Attn: Mary MacLeod-Beaver Lands and Resources Alderville Administrative Office 11696 Second Line Rd. P.O. Box 46, Roseneath, ON KOK 2X0
Mississauga of Scugog Island Attn: Dave Mowat R. R. #5, 22521 Island Rd. Port Perry, ON L9L 1B6	Beausoleil First Nation Attn: Chief Roland Monague 11 Ogema Miikaan Christian Island, ON L9M 0A9	Curve Lake First Nation Attn: Chief Phyllis Williams 22 Winookeeda Road Curve Lake, ON KOL 1R0
Chippewas of Georgina Island First Nation Attn: Chief Donna Big Canoe RR#2 PO Box N13   Sutton West, ON LOE 1R0	Huron-Wendat Nation c/o Gestion MV Management Attn: Mélanie Vincent 635 Jean-Picard Wendake, PQ G0A 4V0	Curve Lake First Nation Attn: Corey Kinsella, Lands and Resources Consultation 22 Winookeeda Road Curve Lake, ON KOL 1R0



Reference: NOTICE OF COMMENCEMENT

Highway 400 North Canal Overpass Structure Replacement Study, GWP 2005-11-00

Mississauga of New Credit Attn: Chief Bryan Laforme 2789 Mississauga Road R.R. #6, Hagersville, ON NOA 1H0	Coordinator for the Williams Treaties Attn: Karry Sandy-McKenzie (Barrister/Solicitor) 8 Creswick Court Barrie, ON L4M 2J7	Métis Nation of Ontario, Lands, Resources and Consultation Branch Attn: Ms. Melanie Paradis, Director 75 Sherbourne St., Suite 222 Toronto, ON M5A 2P9
Mississauga of New Credit Attn: Ms. Carolyn King 2789 Mississauga Road R.R. #6, Hagersville, ON NOA 1H0	Huron-Wendat Nation Attn: Chief Line Gros-Louis - Ontario Portfolio 255 Place Chef Michel Laveau Wendake, PQ G0A 4V0	Métis Consultation Unit Attn: Métis Nation of Ontario Head Office 500 Old St. Patrick Street, Unit D Ottawa, ON K1N 9G4
Huron-Wendat Nation Attn: Grand Chief Konrad Sioui 255 Place Chef Michel Laveau Wendake, PQ G0A 4V0	Métis Nation of Ontario Attn: Mr. James Wagar, MNO Supervisor, Lands & Resources 75 Sherbourne St., Suite 222, Toronto, ON M5A 2P9	Métis Nation of Ontario Attn: Mr. Steven Sarrazin, MNO Consultation Coordinator Lands, Resources and Consultation stevens@metisnation.org
Georgian Bay Métis Council Attn: Mr. David Dusome 355 Cranston Cres. Midland, ON L4R 4K4	Aboriginal Relations Branch, MTO Attn: Ms. Leslie Currie, Aboriginal Liaison Officer College Park, 777 Bay Street, Suite 3000 Toronto ON M7A 2J8	Ministry of Aboriginal Affairs Attn: Mr. David Pickles, Team Lead, Aboriginal Relations 160 Bloor Street East, 9th Floor, Toronto, ON, M7A 2E6

We would appreciate it if you could advise us if there are any outstanding land claims associated with the study area or any additional First Nation or Métis groups that should be contacted as part of this study.

If you have any questions, you may contact either the undersigned or the MTO Project Manager named in the enclosed material.

Regards,

STANTEC CONSULTING LTD.

Maya Caron, B.Sc., MCIP, RPP Senior Environmental Planner

Phone: (416) 598-7162 Fax: (416) 596-6680

Maya.Caron@stantec.com



Reference: NOTICE OF COMMENCEMENT

Highway 400 North Canal Overpass Structure Replacement Study, GWP 2005-11-00

c.c. R. Gribbon, N. Kandiah – Ministry of Transportation

A. Barg – Stantec Consulting Ltd.



# Stantec Consulting Ltd.

401 Wellington Street West, Suite 100, Toronto ON M5V 1E7

November 24, 2014 File: 165000911

«Organization\_Name» «Region» «Address» «Address 2» «City» «Prov» «PostCode»

Attention: «First Name» «Last Name», «Position» **EXTERNAL AGENCY LETTER** 

Dear «Title» «Last\_Name»:

Reference: NOTICE OF COMMENCEMENT

Highway 400 North Canal Overpass Structure Replacement Study

GWP 2005-11-00

The Ontario Ministry of Transportation (MTO) is undertaking a Class Environmental Assessment (EA) study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe. A notice with additional information is enclosed.

The purpose of this letter is to introduce the project, to seek your input on the existing conditions within the study area, and to identify any issues, concerns or approval requirements that your organization may have. A reply by Monday, December 22<sup>nd</sup>, 2014 is appreciated so that your comments may be considered early in the study process. A comment form is enclosed to facilitate your input.

One Public Information Centre (PIC) is planned for this study. You will be notified in advance of the PIC, which is currently scheduled for the Spring of 2015. A separate External Agency and municipal meeting will also be scheduled to coincide with the PIC.

If you have any questions regarding the study, please contact the undersigned or one of the Project Managers named in the enclosed material.

Sincerely,

STANTEC CONSULTING LTD.

Maya Caron, B.Sc., MCIP, RPP Senior Environmental Planner

Phone: (416) 598-7162 Fax: (416) 596-6680

maya.caron@stantec.com

Attachment: Notice of Study Commencement, Comment Sheet

c. N. Kandiah, R. Gribbon, Ministry of Transportation M. Trader, Stantec Consulting Ltd.

# Highway 400 North Canal Overpass Structure Replacement Study GWP 2005-11-00 REPLY FORM – PLEASE RETURN BY MONDAY, DECEMBER 22, 2014

Please remove my group/agency from the study maili	ing list.
I would like to provide the following comments.	
-	-
Contact Information on Study Mailing List	
«Title» «FirstName» «LastName», «Position»	If this information is
«OrganizationName»	incorrect please provious updated information o
«Region», «Address» «Address_2»	identify the key project
«City» «Province» «PostalCode»	contact below.
Tel: «WorkPhone»	
Plages return the completed form to:	
Please return the completed form to:	
Maya Caron, B.Sc., MCIP, RPP	
Senior Environmental Planner	
Phone: (416) 598-7162	
Fax: (416) 596-6680	
maya.caron@stantec.com	
Key Project Contact:	
Job Title:	
Name of Group/Agency:	



Tel:

Comments and information regarding this project are being collected to assist the Ministry of Transportation in meeting the requirements of the *Environmental Assessment Act*. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*.

E-mail:

Fax:

# Highway 400 North Canal Overpass Structure Replacement Study GWP 2005-11-00 REPLY FORM – PLEASE RETURN BY MONDAY, DECEMBER 22, 2014



November 21, 2014 File: 165000911

Attention: Julia Munro, MPP York Simcoe

Constituency Office 45 Grist Mill Road, Unit 8 Holland Landing, ON L9N 1M7

Dear Ms. Munro:

Reference: NOTICE OF COMMENCEMENT

Highway 400 North Canal Overpass Structure Replacement Study

**GWP 2005-11-00** 

The Ontario Ministry of Transportation (MTO) is undertaking a Class Environmental Assessment (EA) study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe.

At this time, we are contacting your office to advise you of the project. The Ontario Government Notice of Study Commencement is enclosed for your information and will appear in *The Bradford West Gwillimbury Times* and *Bradford West Gwillimbury Topic* on Thursday, November 27, 2014.

One Public Information Centre (PIC) is currently planned for this study. You will be notified in advance of the PIC, currently scheduled for the Spring of 2015. A separate External Agency and municipal session will also be scheduled to coincide with the PIC.

If you have any questions regarding the study, please contact the undersigned or one of the Project Managers indicated in the enclosed material.

Regards,

STANTEC CONSULTING LTD.

Maya Caron, B.Sc., MCIP, RPP Senior Environmental Planner

Phone: (416) 598-7162 Fax: (416) 596-6680

maya.caron@stantec.com

Attachment: Ontario Government Notice

c. R. Gibbon, N. Kandiah, Ministry of Transportation M. Trader, Stantec Consulting Ltd.

# NOTICE OF COMMENCEMENT

# Highway 400 North Canal Overpass Structure Replacement Study G.W.P. 2005-11-00

### THE PROJECT

The Ontario Ministry of Transportation (MTO) is undertaking a Class Environmental Assessment (EA) study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe.

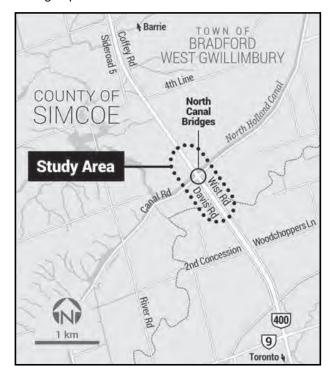
Subject to the outcome of the study, the Ministry is proposing the following improvements:

- Replacement of the Highway 400 North Canal Bridges
- Realignment of the North Canal within the MTO right-of-way
- Rehabilitation/replacement of the Holland (Schomberg) River Culvert
- Minor realignment of Wist Road, Davis Road, and Canal Road to accommodate the new bridges

#### THE PROCESS

This study is being carried out in accordance with the Class Environmental Assessment (EA) for Provincial Transportation Facilities (2000) as a Group 'B' undertaking. MTO completed a Preliminary Design Study for the rehabilitation of these bridges as part of a larger study that included the future expansion of the highway. The study was documented in a Transportation Environmental Study Report (TESR) that received environmental clearance in the winter of 2004. Since 2004, there have been changes in the study area including the realignment of the North Canal and updated information about the condition of the bridges. These changes led to the initiation of this study. As part of this study, a TESR Addendum will be prepared and made available for a 30-day public review period.

A Public Information Centre (PIC) for this project is currently scheduled for the spring of 2015 to display and seek input on the proposed improvements.



# **COMMENTS**

Comments and information regarding this project are being collected to assist the MTO in meeting the requirements of the Environmental Assessment Act. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

Additional information, updates and the opportunity to submit comments is available through the project website: www.hwy400ncanalbridges.ca

If you wish to comment on this project, have your name added to the project mailing list or have any questions about this project, please contact one of the individuals identified below:

### Mr. Mike Trader, P.Eng.

Consultant Project Manager Stantec Consulting Ltd. 200-835 Paramount Drive Stoney Creek, ON L8J 0B4 tel: 905-385-3234 (call collect)

fax: 905-385-3534

e-mail: comments@hwy400ncanalbridges.ca

### Ms. Maya Caron, B.Sc., MCIP, RPP

Senior Environmental Planner Stantec Consulting Ltd. 100-401 Wellington Street West Toronto, ON M5V 1E7 tel: 416-598-7162 (call collect)

fax: 416-596-6680

e-mail: comments@hwy400ncanalbridges.ca

Mr. Nanda Kandiah, P.Eng.

MTO Senior Project Engineer

Ministry of Transportation 1201 Wilson Avenue, Building D, 4th Floor Downsview, ON M3M 1J8

tel: 416-235-5397 fax: 416-235-3576

e-mail: comments@hwy400ncanalbridges.ca

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

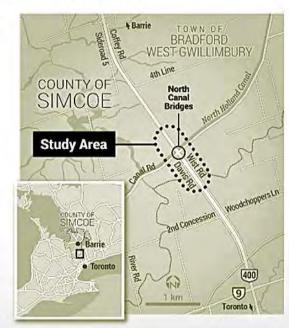




# HIGHWAY 400 NORTH CANAL OVERPASS STRUCTURE REPLACEMENT STUDY TOWN OF BRADFORD WEST GWILLIMBURY, COUNTY OF SIMCOE

The Ontario Ministry of Transportation is undertaking a Class Environmental Assessment study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe. The Preliminary Design component of the study was initiated as part of a larger study that included the future expansion of Highway 400. The study was documented in the Highway 400 Planning Study from the South Canal Bridge Northerly to 1 km South of Highway 89 Transportation Environmental Study Report that received Environmental Assessment clearance in the Winter of 2004.

Since 2004, there have been changes in the study area, including the realignment of the North Canal and updated information about the condition of the bridges. These changes led to the initiation of this study. As part of this study, an addendum to the previous report will be prepared and made available for a 30-day public review period. A Public Information Centre for this project is currently planned for the Spring of 2015



to display and seek input on the proposed improvements. Details regarding the proposed improvements will be available on this website, which will be maintained for the duration of the study and updated as new information becomes available. You are encouraged to check for updates at your convenience.



	Title	FirstName	LastName	JobTitle	Branch	Address1	Address2	City	Prov	Postal Code
Federal Agencies				22.5						
							Government of Canada			
Transport Canada	Mr.	Derek	Zeit	Senior Environmental Officer	Ontario Region 4900	4900 Government Street	Building	North York	ON	M2N 6A5
Transport Canada				Attn: Environmental Coordinator	Ontario Region 4900	4900 Government Street	Government of Canada Building	North York	ON	M2N 6A5
Department of Fisheries and Oceans	Sir / Madam			District Manager	Fisheries Protection Program	867 Lakeshore Road	ballaling	Burlington	ON	L7S 1A1
Department of Fisheries and Oceans	Mr.	Dave	Balint	Species At Risk Coordinator	Fisheries Protection Program	867 Lakeshore Road		Burlington	ON	L7S 1A1
Provincial Agencies						0.11.0000	45 1 0 11		211	1450015
Infrastructure Ontario Ontario Ministry of Agriculture, Food, and Rural	Ms.	Lisa	Myslicki	Environmental Specialist	Heritage Projects	Suite 2000	1 Dundas St. W.	Toronto	ON	M5G2L5
Affairs				Attn: Rural Planner	Central and Northern Region	95 Dundas Street		Brighton	ON	KOK 1HO
Ontario Ministry of Agriculture, Food, and Rural					Environmental and Land Use	1 Stone Road West	3rd Floor			N1G4Y2
Affairs	Ms.	Michele	Doncaster	Policy Advisor	Policy	i storie Road west	31d F1001	Guelph	ON	NIG4Y2
Ministry of the Environment and Climate Change	Mr.	Mike	Parker	Supervisor APEP		Unit 1201	54 Cedar Point Drive,	Barrie	ON	L4N5R7
will istry of the Environment and Climate Change	IVII.	IVIIKE	Faikei	Env. Resource Planner and EA		01iit 1201	34 Cedai Foliit Dilve,	bame	ON	L4INJI(/
Ministry of the Environment and Climate Change	Ms.	Cindy	Hood	Coordinator	Barrie District Office	Unit 1201	54 Cedar Point Drive	Barrie	ON	L4N5R7
Ministry of Natural Resoures and Forestry	Ms.	Kim	Benner	District Planner	Midhurst District	2284 Nursery Rd		Midhurst	ON	LOL 1XO
Ministry of Natural Resoures and Forestry Ministry of Natural Resoures and Forestry	Mr. Mr.	Graham Cliff	Findlay Vankoughnett	Management Biologist Fish and Wildlife Technical Specialist	Midhurst District Midhurst District	2284 Nursery Rd 2284 Nursery Rd		Midhurst Midhurst	ON ON	LOL 1X0 LOL 1X0
Ministry of Natural Resources and Forestry	Ms.	Jodi	Benvenuti	Species at Risk Biologist	Midhurst District	2284 Nursery Rd 2284 Nursery Rd		Midhurst	ON	LOL 1XO
Ministry of Tourism Culture and Sport	Ms.	Laura	Hatcher	Team Lead - Culture Services Unit	Programs and Services	401 Bay Street	Suite 1700	Toronto	ON	M7A 0A7
Elected Official										
MPP	Ms.	Julia	Munro	MPP- York Simcoe	York-Simcoe	45 Grist Mill Road, Unit 8		Holland Landing	ON	L9N1M7
Municipal	1713.	Julia	IVIdiTIO	Wirr-Tolk Sifficoe	TOIK-SITIEGE	43 Grist Willi Road, Orlit o		Landing	ON	L7IVIIVI/
County of Simcoe	Ms.	Brenda	Clark	County Clerk		1110 Highway 26		Midhurst	ON	LOL 1XO
Town of Bradford West Gwillimbury	Ms.	Rebecca	Murphy	County Clerk		Box 160, 61 Holland St E.		Bradford	ON	L3Z 2A8
Lake Simcoe Region Conservation Authority	Mr.	Tom	Hogenbirk	Manager, Engineer, Technical Services	Watershed Management	120 Bayview Parkway	Box 282	Newmarket	ON	L3Y 4X1
					_					
Lake Simcoe Region Conservation Authority	Mr.	Charles F.	Burgess	Planning Coordinator	Watershed Management	120 Bayview Parkway	Box 282	Newmarket	ON	L3Y 4X1
Lake Simcoe Region Conservation Authority	Mr.	Brook	Piotrowski	Environmental Project Coordinator	Conservation Lands	120 Bayview Parkway	Box 282	Newmarket	ON	L3Y 4X1
Eake Simede Region Conservation Authority	1011.	ысок	11011044310	Environmental Project coordinator	Conservation Earles	120 Bayview I aikway	DOX 202	Wewmarket		E31 4X1
Lake Simcoe Region Conservation Authority	Ms.	Marianne	Maertens	Water Resource Specialist	Watershed Management	120 Bayview Parkway	Box 282	Newmarket	ON	L3Y 4X1
Simcoe County Federation of Agriculture	Mr.	Brian	Mosley	President		1110 Highway 26		Midhurst	ON	LOL 1XO
Simcoe County District School Board					Education Centre	1170 Highway 26		Midhurst	ON	LOL 1XO
Town of Bradford/ West Gwillimbury	Mr.	Paul	Feehely	Superintendent of Public Works	Public Works	305 Barrie Street, Unit 2	P.O. Box 419	Bradford	ON	L3Z 2A9
				·						
Town of Bradford/ West Gwillimbury	Mr.	Arup	Mukherjee	Director of Engineering Services	Engineering Services	305 Barrie Street, Unit 2	P.O. Box 419	Bradford	ON	L3Z 2A9
Town of Bradford West Gwillimbury	Mr.	Frank	Jonkman	Drainage Superintendent	HMDSCIP- Project Manager	100 Dissette St.	Unit 7 & 8, P.O. Box 100	Bradford	ON	L3Z 3G8
Town of Bradford West Gwillimbury Town of Bradford West Gwillimbury	Mr. Mr.	Nick Khurram	Poulos Tunio	Traffic Consultant  Manager of Capital Projects		535 Buroak Avenue,		Markham	ON	L6C 2S5
Town of Bradford/ West Gwillimbury	Mr.	Ed	O'Donnell	Manager of Water	Water Division	305 Barrie Street, Unit 2	P.O. Box 419	Bradford	ON	L3Z 2A9
				General Manager of Corporate						
County of Simcoe	Mr.	Rick	Newlove	Services		1110 Highway 26		Midhurst	ON	LOL 1XO
County of Simcoe	Ms.	Julie	Scruton	Transportation Construction Manager		1110 Highway 26		Midhurst	ON	LOL 1XO
County of sinicoe	1713.	Julie	Scruton	Engineering Technician, Transportation		THO Highway 20		iviidi idi st	ON	LUL TAU
County of Simcoe	Mr.	Chris	Doherty	Division		1110 Highway 26		Midhurst	ON	LOL 1XO
County of Simcoe	Mr.	Christian	Meile	Director of Transportation Construction		1110 Highway 26		Midhurst	ON	LOL 1XO
County of Simcoe	Mr.	David	Parks	Director of Planning, Development, and Tourism		1110 Highway 26		Midhurst	ON	LOL 1XO
						g				
County of Simcoe	Mr.	Mark	Aitken	Chief Administrative Officer		1110 Highway 26		Midhurst	ON	LOL 1XO
Potentially Interested Parties / Stakeholders  Bradford & District Produce Ltd.		Sal	Pirri	General Manager		355 Dissette St., Box 940		Bradford	ON	127.200
DIAGIOID & DISTRICT PRODUCE LTD.		Sai	Dibble	General wanager		333 DISSELLE St., BOX 940		DIZUIDIG	ON	L3Z 3G9
Simcoe Muskoka Catholic District School Board	Ms.	Kristin	Pechkovsky	Planning Officer	Planning Department	46 Alliance Boulevard		Barrie	ON	L4M 5K3
Simcoe County Student Transportation				011.05						
Consortium Ontario Cycling Association	MR. Mr.	Michael Jim	Kodama Crosscombe	Chief Executive Officer Chief Executive Officer		64 Cedar Pointe Drive 3 Concorde Gate, Suite 212	Suite 1403	Barrie Toronto	ON ON	L4N 5R7 M3C 3N7
Holland Marsh Growers' Association	Ms.	Jody	Mott	Interim Executive Director		50 Barrie Street	Suite 1514	Bradford	ON	L3Z 1A0
Holland Marsh Drainage System Joint Municipal							1011			52 10
Services Board	Mr.	Daniel	Sopuch	Chair		100 Dissette St.	P.O. Box 100	Bradford	ON	L3Z 2A7
1				Agriculture Economic Development	OMAFRA Midhurst	2224 N D.I			ON	LOL1XO
Ontario Endoration of Agricultura	h.A									
Ontario Federation of Agriculture	Ms.	Marilyn	Bigwood	Advisor - MIDHURST	OIVIAFRA MIdnurst	2284 Nursery Rd	100 Stone Road West, Suite	Midhurst	ON	LULTAU

	Title	FirstName	LastName	JobTitle	Branch	Address1	Address2	City	Prov	Postal Code
Federal Agencies										l .
Ontario Fruit and Vegetable Growers Association	Ms.	Alison	Robertson	Program Manager		Unit 105, 355 Elmira Rd. N.		Guelph	ON	N1K 1S5
K. Smart	Mr.	Kenn	Smart	K. Smart Associates Limited		85 McIntyre Drive		Kitchener	ON	N2R 1H6
University of Guelph Office of Research	Mr.	Sean	Janse	Station Manager	Muck Crops Research Station	1125 Woodchoppers Lane		King	ON	L7B 0E9
Emergency Services										
Ontario Provincial Police- Nottawasaga	Sgt.	Dirk	Cockburn	Att: Detachment Commander	Nottawasaga	4601 Industrial Parkway	P.O. Box 939	Aliston	ON	L9R 1V4
Ontario Provincial Police- Aurora Detachment	Insp	Tracy	Lowe		Aurora Detachment	100 Bloomington Road		Aurora	ON	L4G 7N5
South Simcoe Police	Staff Sergeant	John	Van Dyke	Staff Sergeant	Uniform Branch	2137 Innisfil Beach Road		Innisfil	ON	L9S 1A2
Bradford, West Gwillimbury Fire and Emergency Services	Mr.	Kevin	Gallant	Fire Chief	Bradford Fire Hall	PO Box 1226	75 Melbourne Dr	Bradford	ON	L3Z 2B6
County of Simcoe Paramedic Services	Mr.	Andrew	Robert	Director and Chief		1110 Highway 26		Midhurst	ON	
Central Ambulance Communications Centre	Mr.	Mark	Desjardins			273 Tiffin St, Suite 102		Barrie	ON	L4N 2N3
County of Simcoe	Ms.	Cathy	Clark	Emergency Planning		1110 Highway 26		Midhurst	ON	LOL 1XO

# NOTICE OF PUBLIC INFORMATION CENTRE

Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)

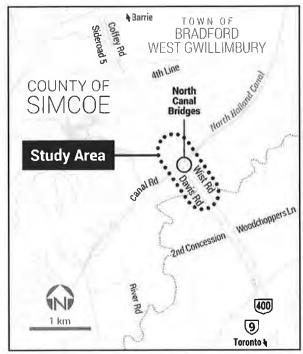
#### THE PROJECT

The Ontario Ministry of Transportation (MTO) is undertaking the Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe, as shown on the key plan. Subject to the outcome of the study, the Ministry is proposing the following:

- Replacement of the Highway 400 North Canal Bridges;
- Realignment of the North Canal within the MTO right-of-way;
- Rehabilitation; replacement; or removal of the Holland (Schomberg) River Culvert under Highway 400;
- Minor realignment of Wist Road, Davis Road, and Canal Road to accommodate the new bridges; and
- Closure of the Highway 400 Canal Road Ramps.



This study is being carried out in accordance with the Class Environmental Assessment (EA) for Provincial Transportation Facilities (1999, amended 2000) as a 'Group B' undertaking. The MTO completed a Preliminary Design Study for the rehabilitation of these bridges as part of a



larger study that included the future expansion of Highway 400. The study was documented in a Transportation Environmental Study Report (TESR) that received environmental clearance in 2004. Since 2004, there have been changes in the study area, including the realignment of the North Canal and updated information about the condition of the bridges. As part of this study, a TESR Addendum will be prepared and made available for a 30-day public review period. Notices will be published at that time to explain the process and identify the locations where the TESR Addendum is available for review.

### **PUBLIC INFORMATION CENTRE**

The public is invited to attend a Public Information Centre (PIC) for this project. The purpose of the PIC is to present and receive input on the design details of the proposed Highway 400 bridge replacements over the North Canal and the associated road improvements, including information on construction staging, potential environmental impacts and proposed mitigation measures. The PIC will be held on:

Date: Time: Location: Wednesday, March 30, 2016 4:00 p.m. to 7:00 p.m. BWG Leisure Centre

471 West Park Ave., Bradford, ON

This PIC is planned as an informal drop-in style, open house format. Representatives from the MTO and Stantec will be available to answer questions, receive comments and discuss the next steps in this project. You are encouraged to attend the PIC and provide the Project Team with your views and comments so that they can be considered as the project progresses.

## **COMMENTS**

Comments and information regarding this project are being collected to assist the MTO in meeting the requirements of the *Environmental Assessment Act*. This material will be maintained on file for use during the project and may be included in project documentation. Additional information, updates, and the opportunity to submit comments is available through the project website: **www.hwy400ncanalbridges.ca**; by email: **comments@hwy400ncanalbridges.ca** or by contacting one of the following individuals:

Mr. Mike Trader, P.Eng. Consultant Project Manager Stantec Consulting Ltd. 200 - 835 Paramount Drive Stoney Creek, ON L8J 0B4 tel: 905-385-3234 (call collect) Mr. Lukasz Grobel, P.Eng.
Project Engineer – York/Simcoe
Ministry of Transportation
159 Sir William Hearst Avenue, 4th Floor
Toronto, ON M3M 0B7
tel: 416-235-5616

Mrs. Donna Madden, C.P.T. Senior Environmental Planner Stantec Consulting Ltd. 200 - 835 Paramount Drive Stoney Creek, ON L8J 0B4 tel: 905-381-3217

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



Provincial Agencies	Ontario Ministry of Agriculture, Food, and Rural Affairs Central-East Ontario Arthur Churchyard, Rural Planner RR # 3 95 Dundas Street Brighton ON KOK 1HO	Ontario Ministry of Agriculture, Food, and Rural Affairs Environmental and Land Use Policy Michele Doncaster, Policy Advisor 1 Stone Road West 3rd Floor Guelph ON N1G 4Y2
Ministry of the Environment and Climate Change Mike Parker, Supervisor APEP Unit 1201 54 Cedar Point Drive, Barrie ON L4N5R7	Ministry of the Environment and Climate Change Barrie District Office Cindy Hood, Manager Unit 1201 54 Cedar Point Drive Barrie ON L4N5R7	Ministry of Natural Resoures and Forestry Midhurst District <b>Kim Benner, District Planner</b> 2284 Nursery Rd Midhurst ON LOL 1X0
Ministry of Natural Resoures and Forestry Midhurst District Graham Findlay, Management Biologist 2284 Nursery Rd Midhurst ON LOL 1X0	Ministry of Natural Resoures and Forestry Midhurst District Brent Shirley, Fish and Wildlife Technical Specialist 2284 Nursery Rd Midhurst ON LOL 1X0	Ministry of Natural Resoures and Forestry Midhurst District Jodi Benvenuti, Management Biologist 2284 Nursery Rd Midhurst ON LOL 1X0
Ministry of Tourism Culture and Sport Programs and Services Laura Hatcher, Team Lead - Heritage Land Use Planning (Acting) - Culture Services Unit 401 Bay Street Suite 1700 Toronto ON M7A 0A7		
Municipal	County of Simcoe Brenda Clark, County Clerk 1110 Highway 26 Midhurst ON LOL 1X0	Town of Bradford West Gwillimbury Rebecca Murphy, Director of Corporate Services / Municipal Clerk 100 Dissette St., Unit 7 P.O. Box 100 Bradford ON L3Z 2A7
Lake Simcoe Region Conservation Authority Watershed Management Tom Hogenbirk, Manager, Engineering 120 Bayview Parkway Newmarket ON L3Y 4X1	Lake Simcoe Region Conservation Authority Watershed Management Charles F. Burgess, Manager, Planning 120 Bayview Parkway Newmarket ON L3Y 4X1	Lake Simcoe Region Conservation Authority Conservation Lands Phil Davies, Manager, Forestry and Stewardship 120 Bayview Parkway Newmarket ON L3Y 4X1
Lake Simcoe Region Conservation Authority Watershed Management Marianne Maertens, Water Resources Specialist 120 Bayview Parkway Newmarket ON L3Y 4X1	Simcoe County Federation of Agriculture Jim Partridge, President 192 Line 4 North Shanty Bay ON LOL 2LO	Simcoe County District School Board Education Centre 1170 Highway 26 Midhurst ON LOL 1X0

External Agencies March 14, 2016

# NOTICE OF PUBLIC INFORMATION CENTRE – WEDNESDAY, MARCH 30, 2016 Preliminary Design and the Initiation of Detail Design for the Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)

Letter PIC Notice

Town of Bradford/ West Gwillimbury Business Operations, Public Works and Drainage Paul Feehely, Superintendent of Public Works 305 Barrie Street, Unit 2 P.O. Box 419 Bradford ON L3Z 2A9	Town of Bradford/ West Gwillimbury Development and Engineering Services Arup Mukherjee, Director of Development and Engineering Services 305 Barrie Street, Unit 2 P.O. Box 419 Bradford ON L3Z 2A9	Town of Bradford West Gwillimbury Business Operations, Public Works and Drainage Frank Jonkman, Drainage Superintendent / Stormwater Management 305 Barrie Street, Unit 2 P.O. Box 419 Bradford ON L3Z 2A9
Poulos and Chung Ltd.  Nick Poulos, Traffic Consultant 535 Bur Oak Avenue  Markham ON L6C 2S5	Town of Bradford West Gwillimbury Capital Projects Khurram Tunio, Manager of Capital Projects 305 Barrie Street, Unit 2 P.O. Box 419 Bradford ON L3Z 2A9	Town of Bradford/ West Gwillimbury Water <b>Ed O'Donnell, Manager of Water</b> 305 Barrie Street, Unit 2 P.O. Box 419 Bradford ON L3Z 2A9
County of Simcoe Trevor Wilcox, General Manager, Corporate Performance Division 1110 Highway 26 Midhurst ON LOL 1X0	County of Simcoe Julie Scruton, Transportation Construction Manager 1110 Highway 26 Midhurst ON LOL 1X0	County of Simcoe Chris Doherty, Transportation Engineering Technician 1110 Highway 26 Midhurst ON LOL 1X0
County of Simcoe Christian Meile, Director Transportation Construction and Maintenance 1110 Highway 26 Midhurst ON LOL 1X0	County of Simcoe  David Parks, Director of Planning,  Development, and Tourism  1110 Highway 26  Midhurst ON LOL·1X0	County of Simcoe Mark Aitken, Chief Administrative Officer 1110 Highway 26 Midhurst ON LOL 1X0
Potentially Interested Parties / Stakeholders	Bradford & District Produce Ltd. Sal Pirri, General Manager 355 Dissette St., Box 940 Bradford ON L3Z 3G9	Simcoe Muskoka Catholic District School Board Business and Finance Department <b>Barb Fox, Planning Officer</b> 97 Ferndale Drive Barrie ON L4N 9V5
Simcoe County Student Transportation Consortium  Michael Kodama, Chief Executive Officer 64 Cedar Pointe Drive Suite 1403 Barrie ON L4N 5R7	Ontario Cycling Association Jim Crosscombe, Chief Executive Officer 2-2015 Pan Am Blvd Milton ON L9T 8Y9	Holland Marsh Growers' Association Jody Mott, Executive Director 50 Barrie Street Suite 1514 Bradford ON L3Z 1A0
Holland Marsh Drainage System Joint Municipal Services Board <b>Daniel Sopuch, Chair</b> 100 Dissette St. P.O. Box 100 Bradford ON L3Z 2A7	Ontario Federation of Agriculture OMAFRA Midhurst Marilyn Bigwood, Agriculture Economic Development Advisor - MIDHURST 2284 Nursery Rd Midhurst ON LOL1X0	Ontario Federation of Agriculture Ontario AgriCentre 100 Stone Road West, Suite 206 Guelph ON N1G 5L3

External Agencies March 14, 2016

# NOTICE OF PUBLIC INFORMATION CENTRE – WEDNESDAY, MARCH 30, 2016 Preliminary Design and the Initiation of Detail Design for the Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)

Letter PIC Notice

Ontario Fruit and Vegetable Growers Association <b>Dan Tukendorf, Project Manager</b> 105-355 Elmira Road North Guelph ON N1K 1S5	K. Smart Kenn Smart, K. Smart Associates Limited 85 McIntyre Drive Kitchener ON N2R 1H6	University of Guelph Office of Research Muck Crops Research Station <b>Shawn Janse, Station Manager</b> 1125 Woodchoppers Lane King ON L7B 0E9
Emergency Services	Ontario Provincial Police- Nottawasaga Nottawasaga OPP <b>Dirk Cockburn, Detachment</b> <b>Commander</b> 4601 Industrial Parkway P.O. Box 939 Alliston ON L9R 1W1	Ontario Provincial Police- Aurora Detachment Aurora Detachment Tracy Lowe, Detachment Commander 100 Bloomington Road West Aurora ON L4G 7N5
South Simcoe Police Uniform Branch John Van Dyke, Staff Sergeant 2137 Innisfil Beach Road Innisfil ON L9S 1A2	Bradford, West Gwillimbury Fire and Emergency Services Bradford Fire Hall <b>Kevin Gallant, Fire Chief</b> PO Box 1226 75 Melbourne Dr Bradford ON L3Z 2B6	County of Simcoe Paramedic Services Andrew Robert, Director and Chief 1110 Highway 26 Midhurst ON LOL 1X0
Central Ambulance Communications Centre Jody-Lynn Berdan, 102 Commerce Park Drive, Unit 2 Barrie ON L4N 8W8	County of Simcoe Cathy Clark, Manager 911 and Emergency Planning - Community Emergency Management Coordinator 1110 Highway 26 Midhurst ON LOL 1X0	



Stantec Consulting Ltd.

200 - 835 Paramount Drive, Stoney Creek ON L8J 0B4

March 14, 2016 File: 165000911

Attention: Julia Munro, MPP York Simcoe 45 Grist Mill Road, Unit 8 Holland Landing ON L9N 1M7

Dear Ms. Munro,

Reference: NOTICE OF PUBLIC INFORMATION CENTRE – WEDNESDAY, MARCH 30, 2016
Preliminary Design and the Initiation of Detail Design for the Highway 400 North Canal
Overpass Structure Replacement Study (GWP 2005-11-00)

I am writing to notify you of the Public Information Centre (PIC) for the replacement of the Highway 400 North Canal Overpass Structure in the Town of Bradford West Gwillimbury, County of Simcoe. Additional information is provided in the enclosed Ontario Government Notice (OGN). The PIC will be held as follows:

Wednesday, March 30, 2016 – 4:00 PM to 7:00 PM BWG Leisure Centre, 471 West Park Avenue, Bradford Ontario

The OGN will be sent directly to property owners in the study area and published in the Bradford West Gwillimbury Times and the Bradford West Gwillimbury Topic on Thursday, March 17, 2016.

Municipal and external agency representatives are invited to attend from 3:00 PM to 4:00 PM in advance of the general public session.

The project website <u>www.hwy400ncanalbridges.ca</u> provides project updates and the opportunity to submit comments at any time throughout the study.

Yours truly,

STANTEC CONSULTING LTD.

Donna M. Madden, CPT

Senior Environmental Planner

10.m. Madden

Phone: (905) 381-3217 Fax: (905) 385-3534

donna.madden@stantec.com

Encl. Ontario Government Notice

c. L. Grobel, Project Engineer, MTO
 R. Gribbon, Environmental Planner, MTO
 M. Trader, P. Eng., Consultant Project Manager, Stantec

Design with community In mind

### **Ministry of Transportation**

Highway Engineering York and Simcoe
Central Region
159 Sir William Hearst Avenue
4<sup>th</sup> Floor
Toronto ON M3M 0B7
Telephone: (416) 235-5616
Facsimile: (416) 235-3576
Email: lukasz.grobel@ontario.ca

### Ministère des Transports

Génie Routier -York et de Simcoe Région du Centre 159, avenue Sir William Hearst 4e étage Toronto ON M3M 0B7 Téléphone: (416) 235-5616 Télécopieur: (416) 235-3576



March 14, 2016

### To be sent to:

Mr. James Wagar, MNO Manager Natural Resources and Consultations Métis Nation of Ontario, Lands Resources and Consultation Branch 75 Sherbourne St., Suite 311 Toronto ON M5A 2P9	Mr. Aly N. Alibhai, Director Métis Nation of Ontario, Lands, Resources & Consultation Branch 75 Sherbourne St., Suite 311 Toronto ON M5A 2P9	Mr. Steven Sarrazin Coordinator, Lands, Resources and Consultation Métis Nation of Ontario 260 Alder Street Sudbury ON P3C 5P4
Métis Consultation Unit Métis Nation of Ontario Head Office 500 Old St. Patrick Street, Unit D Ottawa ON K1N 9G4	Mr. David Dusome Georgian Bay Métis Council 355 Cranston Cres., PO Box 4 Midland ON L4R 4K6	Ms. Karry Sandy-McKenzie (Barrister/Solicitor) Coordinator for the Williams Treaties 8 Creswick Court Barrie ON L4M 2J7
Chief Kelly LaRocca Mississaugas of Scugog Island RR 5, 22521 Island Road Port Perry ON L9L 1B6	Ms. Rhonda Coppaway Mississaugas of Scugog Island RR 5, 22521 Island Road Port Perry ON L9L 1B6	Mr. Dave Mowat Mississaugas of Scugog Island RR 5, 22521 Island Road Port Perry ON L9L 1B6
Ms. Monica Sanford Mississaugas of Scugog Island RR 5, 22521 Island Road Port Perry ON L9L 1B6	Attn: Lands and Resources Coordinator Alderville First Nation Alderville Administrative Office 11696 Second Line Road PO Box 46 Alderville ON K0K 2X0	Chief James R. Marsden Alderville First Nation Alderville Administrative Office 11696 Second Line Road PO Box 46 Alderville ON K0K 2X0
Melissa Dokis, Lands Resource Consultation Liaison Curve Lake First Nation 22 Winookeedaa Road Curve Lake ON K0L 1R0	Chief Phyllis Williams Curve Lake First Nation 22 Winookeedaa Road Curve Lake ON K0L 1R0	Chief Roland Monague Beausoleil First Nation 11 Ogemaa Miikaan Christian Island ON L9M 0A9
Chief Greg Cowie Hiawatha First Nation 123 Paudash Street Hiawatha ON K0L 2G0	Chief Donna Big Canoe Chippewas of Georgina Island First Nation RR 2 PO Box N-13 Sutton West ON L0E 1R0	Chief Rodney Noganosh Chippewas of Rama First Nation 5884 Rama Road, Suite 200 Rama ON L3V 6H6
Chief Line Gros-Louis - Ontario Portfolio Huron-Wendat Nation 255 Place Chef Michel Laveau Wendake Quebec G0A 4V0	Grand Chief Konrad Sioui Huron-Wendat Nation 255 Place Chef Michel Laveau Wendake Quebec G0A 4V0	Ms. Mélanie Vincent Huron-Wendat Nation c/o Gestion MV Management 635 Jean-Picard Wendake Quebec G0A 4V0

Chief R. Stacey LaForme Mississaugas of New Credit 2789 Mississauga Road RR 6, Hagersville ON N0A 1H0	Ms. Carolyn King Mississaugas of New Credit 2789 Mississauga Road, RR 6 Hagersville ON N0A 1H0	
Mr. Mark LaForme Director, Department of Consultation and Accommodation Mississaugas of New Credit 6 First Line Road, RR 6 Hagersville ON N0A 1H0	Ms. Fawn Sault Consultation Manager Department of Consultation and Accommodation Mississaugas of New Credit 6 First Line Road, RR 6 Hagersville ON N0A 1H0	

Dear <<Title>> < <Last>>:

LETTER TO FIRST NATIONS

Reference: NOTICE OF PUBLIC INFORMATION CENTRE – WEDNESDAY, MARCH 30, 2016 Canal Overpass Structures Replacement Study (GWP 2005-11-00)

The Ontario Ministry of Transportation (MTO) is undertaking a *Class Environmental Assessment* (EA) study for Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe. In follow-up to the Notice of Study Commencement, this letter is to notify you of the Public Information Centre (PIC) for the project.

The purpose of the PIC is to present and receive input on the design details of the proposed Highway 400 bridge replacements over the North Canal and the associated road improvements. Construction is anticipated to commence in 2019 subject to the necessary approvals and funding. Stage 1 Archaeological Assessment for the existing Hwy 400 right-of-way has determined that it is considered free of archaeological concern. Should any additional property beyond the existing right-of-way be required, it will be subject to a Stage 2 archaeological assessment. Additional information is provided in the enclosed Ontario Government Notice. The PIC will be held as follows:

Wednesday, March 30, 2016 - 4:00 PM to 7:00 PM

BWG Leisure Centre, 471 West Park Avenue, Bradford Ontario

You are invited to attend the PIC from 3:00 PM to 4 PM in advance of the general public session. Should you have any comments or questions regarding this project, and cannot attend the PIC anytime between 3:00 PM and 7:00 PM please contact the undersigned via telephone at (416) 235-5616, or by email at lukasz.grobel@ontario.ca.

The project website <u>www.hwy400ncanalbridges.ca</u> provides updates and the opportunity to submit comments at any time throughout the study.

Yours truly,

Lukasz Grobel, P.Eng. Project Engineer, York/Simcoe

Encl. Ontario Government Notice

c. R. Gribbon, J. Seibert, MTO
M. Trader, D. Madden, Stantec Consulting Ltd.

Ministry of Transportation Highway Engineering -York and Simcoe Central Region

159 Sir William Hearst Avenue 4th Floor Toronto ON M3M 0B7 Telephone: (416) 235-5616 Facsimile: (416) 235-3576 Ernail: lukasz.grobel@ontario.ca Ministère des Transports Génie Routier -York et de Simcoe Région du Centre

159, avenue Sir William Hearst 4e étage Toronto ON M3M 0B7 Téléphone: (416) 235-5616 Télécopieur: (416) 235-3576



March 14, 2016

Attention: Chief Phyllis Williams Curve Lake First Nation 22 Winookeeda Road Curve Lake ON K0L 1R0

Reference:

Highway 400 North Canal Overpass Structures Replacement Study

GWP 2005-11-00

Dear Chief Williams:

The Ontario Ministry of Transportation (MTO) would like to acknowledge receipt of your comments. Consultation is an important component of this study and your input is appreciated. I can confirm that Karry Sandy-Mackenzie, Williams Treaty First Nation Claims Coordinator was informed of this project as part of the initial notification process and will continue to be advised throughout the study.

The Ministry recognizes Curve Lake First Nations' inherent interests regarding the remains of your ancestors, and will proceed with the proper notification procedure under the Cemeteries Act should any evidence of Archaeological findings or native burial sites be discovered. If any unforeseen issues arise that could lead to negative environmental impacts, or impacts on Treaty or Aboriginal Rights, you will be contacted immediately.

In follow-up to the Notice of Study Commencement, this letter provides Notice of the Public Information Centre (PIC) for the project. The purpose of the PIC is to present and receive input on the design details of the proposed Highway 400 bridge replacements over the North Canal and the associated road improvements. Additional information is provided in the enclosed Ontario Government Notice. The PIC will be held as follows:

Wednesday, March 30, 2016 - 4:00 PM to 7:00 PM

BWG Leisure Centre, 471 West Park Avenue, Bradford Ontario

You are invited to attend the PIC from 3:00 PM to 4 PM in advance of the general public session. Should you have any comments or questions regarding this project, and cannot attend the PIC anytime between 3:00 PM and 7:00 PM please contact the undersigned via telephone at (416) 235-5616, or by email at lukasz.grobel@ontario.ca. If you would prefer a meeting with Ministry staff, that could also be arranged.

The project website www.hwy400ncanalbridges.ca provides updates and the opportunity to submit comments at any time throughout the study.

Yours truly,

Lukasz Grobel, P.Eng.

Project Engineer, York/Simcoe

Encl. Ontario Government Notice

c. R. Gribbon, Ministry of Transportation

M. Trader, D. Madden, Stantec Consulting Ltd.

### Ministry of Transportation

Highway Engineering -York and Simcoe Central Region

159 Sir William Hearst Avenue 4<sup>th</sup> Floor Toronto ON M3M 0B7 Telephone: (416) 235-5616 Facsimile: (416) 235-3576 Email: lukasz.grobel@ontario.ca Ministère des Transports

Génie Routier -York et de Simcoe Région du Centre

159, avenue Sir William Hearst 4e étage Toronto ON M3M 0B7 Téléphone: (416) 235-5616 Télécopieur: (416) 235-3576



March 14, 2016

Attention: Mélanie Vincent Huron-Wendat Nation c/o Gestion MV Management 635 Jean-Picard Wendake QC G0A 4V0

Reference:

Highway 400 North Canal Overpass Structures Replacement Study

Preliminary Design and the Initiation of Detail Design

GWP 2005-11-00

Dear Ms. Vincent:

On behalf of the Ontario Ministry of Transportation (MTO) I am writing to acknowledge receipt of your comments related to archeological and cultural, heritage interests and rights in the study area for the above-noted project. Consultation is an important component of this study and we appreciate your input.

In follow-up to the Notice of Study Commencement, this letter provides Notice of the Public Information Centre (PIC) for the project. The purpose of the PIC is to present and receive input on the design details of the proposed Highway 400 bridge replacements over the North Canal and the associated road improvements. Additional information is provided in the enclosed Ontario Government Notice. The PIC will be held as follows:

Wednesday, March 30, 2016 - 4:00 PM to 7:00 PM

BWG Leisure Centre, 471 West Park Avenue, Bradford Ontario

You are invited to attend the PIC from 3:00 PM to 4 PM in advance of the general public session. Should you have any comments or questions regarding this project, and cannot attend the PIC anytime between 3:00 PM and 7:00 PM please contact the undersigned via telephone at (416) 235-5616, or by email at lukasz.grobel@ontario.ca. If you would prefer a meeting with Ministry staff, that could also be arranged.

The project website www.hwy400ncanalbridges.ca provides updates and the opportunity to submit comments at any time throughout the study.

Yours truly,

Lukasz Grobel, P.Eng.

Project Engineer, York/Simcoe

Encl. Ontario Government Notice

R. Gribbon, Ministry of Transportation
 M. Trader, D. Madden, Stantec Consulting Ltd.

From: Kielstra, David

**Sent:** Tuesday, September 21, 2021 1:00 PM caroline.mulroneyco@pc.ola.org

Cc: Palys, Rebecca (MTO); Hohner, Paula; Porter, Brad; Barg, Adam; Rhonda Gribbon

(rhonda.gribbon@ontario.ca)

Subject: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP

2110-21-00) - Notice of Study Commencement

Attachments: let\_0911\_Highway 400\_North Canal\_gwp\_2110-21-00\_mpp\_fnl.pdf

Dear Hon. Caroline Mulroney, MPP,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached correspondence for more details.

Please let me know if you have any questions or comments.

Thank you,

### David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

Stantec

200-835 Paramount Drive Stoney Creek ON L8J 0B4



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### Stantec Consulting Ltd. 200-835 Paramount Drive, Stoney Creek ON L8J 0B4



September 21, 2021 File: 165000911

Attention: Hon. Caroline Mulroney, MPP, York-Simcoe

Unit 8, 45 Grist Mill Road Holland Landing, ON L9N 1M7

By email: <a href="mailto:caroline.mulroneyco@pc.ola.org">caroline.mulroneyco@pc.ola.org</a>

Dear Hon. Caroline Mulroney, MPP,

Reference: NOTICE OF STUDY COMMENCEMENT

Highway 400, North Canal Overpass Structures Rehabilitation, Town of

**Bradford West Gwillimbury (GWP 2110-21-00)** 

**Detail Design and Class Environmental Assessment Study** 

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. See the attached study area map.

The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities (2000)* as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA. Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

This letter is being sent to advise you that notice of study commencement letters will be circulated on September 21, 2021 to the project mailing list.

September 21, 2021 Hon. Caroline Mulroney, MPP, York-Simcoe Page 2 of 3

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

Please communicate any concerns or questions related to this project to the undersigned.

Regards,

**Stantec Consulting Ltd.** 

David Kielstra M.A, EP

Environmental Planner Phone: 905 381 3247 Fax: 905 385 3534

David.Kielstra@stantec.com

Encl. Study Area Map

c. R. Palys, R. Gribbon, Ministry of Transportation, MTO B. Porter, A. Barg, P. Hohner, D. Kielstra, Stantec Consulting Ltd.

 $kd \cd1224-f02\work\_group\c01650\active\c01093\design\environmental\c0201\_rehab\consult\let\_0911\_mpp\_fnl.docx$ 

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

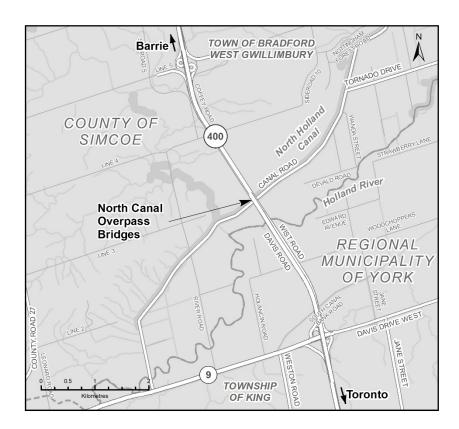


Figure 1: Study Area Map

From: Kielstra, David

**Sent:** Tuesday, September 21, 2021 12:57 PM eanotification.cregion@ontario.ca

Cc: Palys, Rebecca (MTO); Hohner, Paula; Porter, Brad; Barg, Adam; Rhonda Gribbon

(rhonda.gribbon@ontario.ca)

Subject: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP

2110-21-00) - Notice of Study Commencement

**Attachments:** pif\_0911\_hwy400\_North\_Canal\_Bradford\_West\_Gwillimbury\_Simcoe\_MTO\_ClassEA.pdf; pif\_0911

\_hwy400\_North\_Canal\_Bradford\_West\_Gwillimbury\_Simcoe\_MTO\_ClassEA.xlsx; Highway 400\_North

Canal\_gwp\_2110-21-00\_map.pdf

### Hello,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached study area map and completed Project Information Form (PIF). The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities* (2000) as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA. Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

We are seeking your feedback as well as any questions or concerns you may have regarding the project. Please communicate any concerns or questions related to this project to the undersigned.

Thank you,

# David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

Stanted

200-835 Paramount Drive Stoney Creek ON L8J 0B4



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What to do:

Step 1: Look for the type of EA project in column B that applies to you.

Step 2: Complete columns C to J for that project.

Step 3: Email this file to an EA coordinator in the MOECC region where the project is located.

MOECC regional office email addresses are listed at

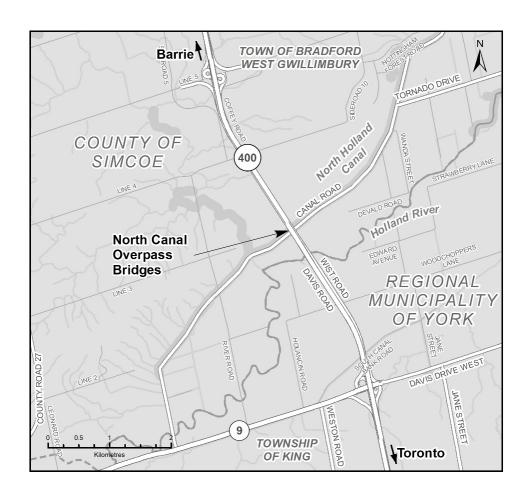
www.ontario.ca/page/preparing-environmental-assessments

Read the "Field descriptions" worksheet to learn how to complete each field.

	Class EA/Streamlined EA	Proponent Name	Proponent Contact	Project Name	Project Schedule	Project Type	Project Location	MOECC Region	Project Initiation Date
1	CO - Remedial flood and erosion control projects								
2	GO Transit - Class EA								
3	Hydro One - Minor transmission facilities								
4	Infrastructure Ontario - Public works								
5	MEA - Class EA for municipal infrastructure projects								
6	MNDM - Activities of the Ministry of Northern Development and Mines under the Mining Ac								
	MNRF - Forest management on Crown lands in Ontario (Declaration Order MNR-75								
8	MNRF - Provincial parks and conservation reserves								
9	MNRF - Resource stewardship and facility development projects								
10	MTO - Provincial transportation facilities	Ontario Ministry of Transportation	Toronto, Ort Moin obt Tol. 410	Structures Rehabilitation, Town	Group C	Minor improvement to provincial transportation facilities	Bradford West Gwillimbury, Town of	Central	21/9/2021
11	O. Reg. 101/07 - Waste management projects								
12	O. Reg. 116/01 - Electricity projects								
13	OWA - Waterpower projects								

Highway 400 North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury, Detail Design and Class Environmental Assessment Study (GWP 2110-21-00)

### **Study Area Map**







From: Kielstra, David

Sent: Tuesday, September 21, 2021 1:00 PM

**To:** rwestlake@townofbwg.com

Cc: Palys, Rebecca (MTO); Hohner, Paula; Porter, Brad; Barg, Adam; Rhonda Gribbon

(rhonda.gribbon@ontario.ca)

Subject: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP

2110-21-00) - Notice of Study Commencement

Attachments: let\_0911\_Highway 400 North Canal\_gwp\_2110-21-00\_Holland Drainage Board\_fnl.pdf

### Hello,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached correspondence for more details.

Please let me know if you have any questions or comments.

Thank you,

### David Kielstra M.A. EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

Stantec

200-835 Paramount Drive Stoney Creek ON L8J 0B4



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September 21, 2021 File: 165000911

Attention: Ruth Westlake, Holland Marsh Drainage Board Coordinator

Holland Marsh Drainage System Joint Municipal Services Board 3541 Line 11 Bradford ON L3Z 2A7

By email: <a href="mailto:rwestlake@townofbwg.com">rwestlake@townofbwg.com</a>

Dear Ruth Westlake,

Reference: NOTICE OF STUDY COMMENCEMENT

Highway 400, North Canal Overpass Structures Rehabilitation, Town of

**Bradford West Gwillimbury, (GWP 2110-21-00)** 

**Detail Design and Class Environmental Assessment Study** 

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. See the attached study area map.

The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

The purpose of this letter is to inform the Holland Marsh Drainage System Joint Municipal Services Board of this proposed work. The current project will address structural rehabilitation at the existing overpass structures only and it will not alter the North Canal or the alignment of the overpass structures. No in-water work is anticipated.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities (2000)* as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA.

Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

September 21, 2021 Ruth Westlake, Holland Marsh Drainage Board Coordinator Page 2 of 3

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury, (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

We are seeking your feedback as well as any questions or concerns you may have regarding the project. Please communicate any concerns or questions related to this project to the undersigned.

Regards,

**Stantec Consulting Ltd.** 

Kielston

David Kielstra M.A, EP

Environmental Planner Phone: 905 381 3247 Fax: 905 385 3534

David.Kielstra@stantec.com

Encl. Study Area Map

c. R. Palys, R. Gribbon, Ministry of Transportation, MTO B. Porter, A. Barg, P. Hohner, Stantec Consulting Ltd.

kd \cd1224-f02\work\_group\01650\active\165001093\design\environmental\2021\_rehab\consult\let\_0911\_holland drainage board\_fnl.docx

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury, (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

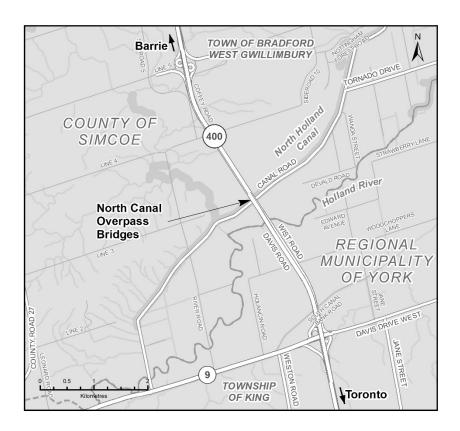


Figure 1: Study Area Map

From: <u>Kielstra, David</u>

Cc: Palys, Rebecca (MTO); Hohner, Paula; Porter, Brad; Barg, Adam; Rhonda Gribbon (rhonda.gribbon@ontario.ca)

Bcc: kim.benner@ontario.ca; jodi.benvenuti@ontario.ca; omafra.eanotices@ontario.ca; john.daly@simcoe.ca;

<u>kim.benner@ontario.ca; jodi.benvenuti@ontario.ca; omarra.eanotices@ontario.ca; jonn.daiy@simcoe.ca; rmurphy@townofbwg.com; k.cheney@lsrca.on.ca; m.bessey@lsrca.on.ca; jcoleman@townofbwg.com;</u>

christian.meile@simcoe.ca; OPP.Nottawasaga@opp.ca; OPP.Aurora.Detachment@opp.ca;

john.vandyke@southsimcoepolice.ca; inquiries@southsimcoepolice.ca; traeburn@townofbwg.com;

andrew.robert@simcoe.ca; Amanda.Barrowcliffe@ontario.ca; cathy.clark@simcoe.ca;

growers@hollandmarshgold.com

Subject: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) -

Notice of Study Commencement

**Date:** Tuesday, September 21, 2021 12:57:00 PM

Attachments: Highway 400 North Canal gwp 2110-21-00 map.pdf

Hello,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached study area map. The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities (2000)* as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA. Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

We are seeking your feedback as well as any questions or concerns you may have regarding the project. Please communicate any concerns or questions related to this project to the undersigned.

Thank you,

### David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

Stantec

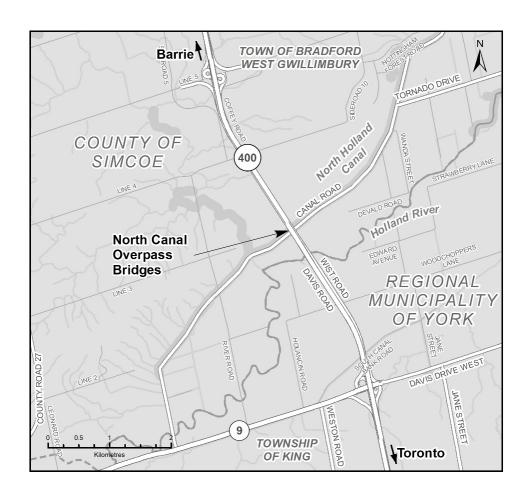
200-835 Paramount Drive Stoney Creek ON L8J 0B4

numorization. Il you are not the interided recipient, please delete all copies and notify us infinediately.	

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Highway 400 North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury, Detail Design and Class Environmental Assessment Study (GWP 2110-21-00)

### **Study Area Map**







	First Name	Last Name	Job Title	Branch	Address1	Address2	City	Prov	Postal Code	Phone Number	Phone Number2	Email Address
Provincial Agencies												
Ministry of the Environment, Conservation and Parks			EA Notification	Central Region								eanotification.cregion@ontario.ca
Ministry of Natural Resoures and Forestry	Kim	Benner	District Planner	Midhurst District	2284 Nursery Road		Midhurst	ON	L9X 1N8	705-725-7534	249-288-4563	kim.benner@ontario.ca
Ministry of Natural Resoures and Forestry	Jodi	Benvenuti	Management Biologist	Midhurst District	2284 Nursery Road		Midhurst	ON	L9X 1N8	249-288-3760		jodi.benvenuti@ontario.ca
Ontario Ministry of Agriculture, Food and Rural Affairs	,		EA Notification									omafra.eanotices@ontario.ca
Elected Officials												
MPP	Hon. Caroline	Mulroney	MPP, York-Simcoe		45 Grist Mill Road	Unit 8	Holland Landing	ON	L9N 1M7	905-895-1555	905-895-0337	caroline.mulroneyco@pc.ola.org
Municipal												
County of Simcoe	John	Daly	County Clerk		1110 Highway 26		Midhurst	ON	L9X 1N6	705-726-9300 ext. 1623		john.daly@simcoe.ca
Town of Bradford West Gwillimbury	Rebecca	Murphy	Director of Corporate Services / Municipal Clerk		100 Dissette Street, Units 7&8	PO Box 100	Bradford	ON	L3Z 2A7	905-775-5366 ext. 1101		rmurphy@townofbwg.com
Lake Simcoe Region Conservation Authority	Ken	Cheney	Acting Director, Engineering		120 Bayview Parkway		Newmarket	ON	L3Y 4X1	905-895-1281 ext. 294		k.cheney@lsrca.on.ca
Lake Simcoe Region Conservation Authority	Melinda	Bessey	Director, Planning		120 Bayview Parkway		Newmarket	ON	L3Y 4X1	905-895-1281 ext.151		m.bessey@lsrca.on.ca
Town of Bradford/ West Gwillimbury	Joe	Coleman	Manager of Transportation		3541 Line 11	PO Box 160	Bradford	ON	L3Z 2A8	905-775-5369 ext. 2203		jcoleman@townofbwg.com
County of Simcoe	Christian	Meile	Director Transportation Construction and Maintenance		1110 Highway 26		Midhurst	ON	L9X 1N6	705-726-9300 ext.1178		christian.meile@simcoe.ca
Emergency Services												
Ontario Provincial Police- Nottawasaga			Detachment Commander	Nottawasaga OPP	4601 Industrial Parkway	PO Box 939	Alliston	ON	L9R 1W1	705-434-1939	705-434-9109	OPP.Nottawasaga@opp.ca
Ontario Provincial Police- Aurora Detachment			Detachment Commander	Aurora OPP	100 Bloomington Road West		Aurora	ON	L4G 7N5	905-841-5777	905-841-6794	OPP.Aurora.Detachment@opp.ca
South Simcoe Police	John	Van Dyke	Staff Sergeant	Uniform Branch	81 Melbourne Drive		Bradford	ON	L3Z 1M2	905-775-3311		iohn.vandyke@southsimcoepolice.ca; inquiries@southsimcoepolice.ca
Bradford West Gwillimbury Fire and Emergency Services	Tom	Raeburn	Fire Chief	Bradford Fire Hall	75 Melbourne Drive	PO Box 1226	Bradford	ON	L3Z 2B6	905-775-7311 ext. 4101		traeburn@townofbwg.com
County of Simcoe Paramedic Services	Andrew	Robert	Director and Chief		1110 Highway 26		Midhurst	ON	LOL 1XO	705-726-9300 ext. 1231	705-722-6601	andrew.robert@simcoe.ca
Central Ambulance Communications Centre	Amanda	Barrowcliffe			102 Commerce Park Drive	Unit 2	Barrie	ON	L4N 8W8	705-737-3861	705-739-6489	Amanda.Barrowcliffe@ontario.ca
County of Simcoe	Cathy	Clark	Manager, 911 & Emergency Plannina	Emergency Department	1110 Highway 26		Midhurst	ON	L9X 1N6	705-726-9300 ext. 1155	705-792-5743	cathy.clark@simcoe.ca
Interested Parties / Stakeholders												
Holland Marsh Growers' Association	Quinton	Woods	Chair		140 Holland Street	Box 13065	Bradford	ON	L3Z 1Y0	905-251-6786		growers@hollandmarshgold.com
Holland Marsh Drainage System Joint Municipal Services Board	Ruth	Westlake	Holland Marsh Drainage Board Coordinator		3541 Line 11		Bradford	ON	L3Z 2A7	905-778-4321	905-778-4343	rwestlake@townofbwg.com





September 21, 2021 File: 165000911

**Attention: Attention**Property Owners

**Property Owner Letter** 

Dear Recipient's Name,

Reference: NOTICE OF STUDY COMMENCEMENT

Highway 400, North Canal Overpass Structures Rehabilitation, Town of

**Bradford West Gwillimbury (GWP 2110-21-00)** 

**Detail Design and Class Environmental Assessment Study** 

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. See the attached study area map.

The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities (2000)* as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA.

Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

September 21, 2021

Attention Page 2 of 3

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

We are seeking your feedback as well as any questions or concerns you may have regarding the project. Please communicate any concerns or questions related to this project to the undersigned.

Regards,

**Stantec Consulting Ltd.** 

David Kielstra M.A, EP Environmental Planner Phone: 905 381 3247 Fax: 905 385 3534

David.Kielstra@stantec.com

Encl. Study Area Map

c. R. Palys, R. Gribbon, Ministry of Transportation, MTO B. Porter, A. Barg, P. Hohner, D. Kielstra, Stantec Consulting Ltd.

kd v:\01650\active\165001093\design\environmental\2021\_rehab\consult\let\_0911\_property owners\_fnl.docx

Reference:

NOTICE OF STUDY COMMENCEMENT Highway 400, North Canal Overpass Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) Detail Design and Class Environmental Assessment Study

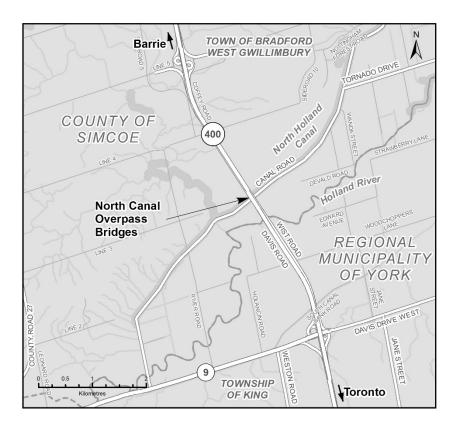


Figure 1: Study Area Map

# **APPENDIX C**

Correspondence



# Highway 400 North Canal Overpass Structure Replacement Study GWP 2005-11-00

## REPLY FORM - PLEASE RETURN BY MONDAY, DECEMBER 22, 2014

No concerns at this time.	
No concerns at this time.	
AITMEN	Tracy Lowe
- 1:209	to the second
Contact Information on Study Mailing List	If this information is
Att: Detachment Commander	incorrect please provid
Ontario Provincial Police	updated information or
Aurora Detachment, 100 Bloomington Road	identify the key project
Aurora ON L4G 7N5	contact below.
Tel: 905-841-7888	
Please return the completed form to:	
The date retain the completed faint to.	
Maya Caron, B.Sc., MCIP, RPP	
Senior Environmental Planner	
Phone: (416) 598-7162	
Fax: (416) 596-6680	
maya.caron@stantec.com	
Key Project Contact:	
Job Title:	
Name of Group/Agency:	
Mailing Address:	
Tol: Fax: F-m	ail:



Comments and information regarding this project are being collected to assist the Ministry of Transportation in meeting the requirements of the *Environmental Assessment Act*. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*.

# Highway 400 North Canal Overpass Structure Replacement Study GWP 2005-11-00

# REPLY FORM - PLEASE RETURN BY MONDAY, DECEMBER 22, 2014

	uld like to provide the following comments.	
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-	Francis.	
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{	E IN NOW TEXMSENT.	
<u>~~</u>	MONEGORE, WE AME INTENESTED IN RECEIVE	is information
	REVALED TO POST CLOSURES & SCHOOLE OF	REPLICEMENT WORK.
	THANK YOU.	
Cont	act Information on Study Mailing List	
Ms. K	tact Information on Study Mailing List Pechlous by Kristen Dibble, Planning T <del>ochnician</del> OPPicer	If this information is
	coe Muskoka Catholic District School Board	incorrect please provide updated information or
Planr	ning Department, 46 Alliance Boulevard	identify the key project
	e ON L4M 5K3	contact below.

Maya Caron, B.Sc., MCIP, RPP Senior Environmental Planner

Phone: (416) 598-7162 Fax: (416) 596-6680

maya.caron@stantec.com

Key Project Contact	KRISTIN DIBBLE PECHKOUSKY
Job Title:	pumuia officer
Name of Group/Ag	ency: SIMCOE MUSKOJU UNHOLIC BISTRUCT SCHOOL BOAMD
	46 MULLINE BUD BARRIE, ON
Tel: 705 722-1	3559 x. 250 Fax: 705 727-1451 E-mail: kdpechkousky@smcdsb.on.co



Comments and information regarding this project are being collected to assist the Ministry of Transportation in meeting the requirements of the *Environmental Assessment Act*. This material will be maintained on file for use during the project and may be included in project documentation. Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*.

# Highway 400 North Canal Overpass Structure Replacement Study GWP 2005-11-00 REPLY FORM – PLEASE RETURN BY MONDAY, DECEMBER 22, 2014

ALSO NOTE CONTRET FROM:
SIM COE COURTY SMOONT MUSPONTHON CONSONTHY
MICHAEL KODAMA
TOS CHIEF EXECUTIVE OFFICER
705 733-8965 x. 112
Mkodama escstc.ca
64 CEDAR POINTE DRIVE, WIT 1403
BARRIE, ON
L4N 5R7

From: Meile, Christian [mailto:Christian.Meile@simcoe.ca]

**Sent:** Tuesday, December 30, 2014 3:11 PM **To:** comments@hwy400ncanalbridges.ca

Subject: Highway 400 North Canal Overpass Structure Replacement Study

Good Afternoon,

This is in response to the recently received notice of study for the above referenced project.

Our only comment is – will this study also consider closing the on and off ramps for Canal Road to/from Hwy 400 as was originally contemplated in the 2004 TESR. If not, we ask that it does as the soon to be constructed interchange at Hwy. 400 and the 5<sup>th</sup> Line of Bradford-West Gwillimbury will provide improved access to Bradford.

Regards,

Christian Meile, P. Eng.
Director, Transportation & Engineering
Engineering, Planning and Environment Division
County of Simcoe

From: Vanderkooy, Caitlin (IO) [mailto:Caitlin.Vanderkooy@infrastructureontario.ca]

**Sent:** Monday, December 22, 2014 10:31 AM

To: Caron, Maya; 'comments@hwy400ncanalbridges.ca'

Subject: Highway 400 North of Canal Overpass Structure Replacement Study - Notice of Commencement

To whom it may concern,

On behalf of Lisa Myslicki, please refer to attached PDF that highlights next steps only if your project impacts lands owned by Infrastructure Ontario. If your project does not impact any lands owned by IO, please remove IO from the mailing list.

Thank you, Caitlin

Caitlin Vanderkooy, M.Env.Sc., MBA, P.Geo. Environmental Specialist

Infrastructure Ontario
Environmental Management
1 Dundas Street West, Suite 2000
Toronto ON M5G 2L5

T: 416-327-8001

E: Caitlin.Vanderkooy@infrastructureontario.ca

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### **December 19, 2014**

To whom it may concern,

Thank you for circulating Infrastructure Ontario (IO) on your Notice. Infrastructure Ontario is the strategic manager of the provincial government's real estate with a mandate of maintaining and optimizing value of the portfolio while ensuring real estate decisions reflect public policy objectives of the government.

### **Identifying IO Managed Lands**

As you may be aware, IO is responsible for managing property that is owned by Her Majesty the Queen in Right of Ontario as represented by the Minister of Economic Development, Employment and Infrastructure (MEDEI) (Note as of June 2014: Ministry of Infrastructure has changed to Ministry of Economic Development, Employment and Infrastructure since). There is a potential that IO manages lands that fall within your study area. As a result, your proposal may impact IO managed properties and/or the activities of tenants present on IO-managed properties. In order to determine if IO property is within your study area, IO requires that the proponent of the project conduct a title search by reviewing parcel register(s) for adjoining lands, to determine the extent of ownership by MEDEI or its predecessor's ownership (listed below). Please contact IO if any ownership of provincial government lands are known to occur within your study area and are proposed to be impacted. IO managed land can include within the title but is not limited to variations of the following: Her Majesty the Queen/King, OLC, ORC, Public Works, Hydro One, PIR, MGS, MBS, MEDEI, MTO, MNR, MEI, MOI and MEDEI\*. Please ensure that a copy of your notice is also sent to the ministry/agency on title. As an example, if the study area includes a Provincial Park, then MNR is to also to be circulated notices related to your project.

### **Impacts to Land holdings**

Negative impacts to land holdings, such as the taking of developable parcels of IO managed land or fragmentation of utility or transportation corridors, should be avoided. If the potential for such impacts is present as part of this undertaking, you should contact the undersigned to discuss these issues at the earliest possible stage of your study.

IO obligates proponents to complete all due diligence for any realty activity on IO managed lands and this should be considered for project timelines and budget.

### The MEDEI Class EA & Associated Due Diligence

All realty undertakings are subject to the "Ministry of Infrastructure Public Work Class Environmental Assessment 2012 Office Consolidation" (PW Class EA). The PW Class EA applies to a wide range of realty activities including leasing or letting, disposition, granting of easements, demolition and property maintenance/repairs.

For details on the PW Class EA please visit the Environment and Heritage page of the IO website found at: http://www.infrastructureontario.ca/Templates/Buildings.aspx?id=2147490336&langtype=1033

Please note that completion of an EA process does not automatically provide an approval for MEDEI's Class EA obligations. Class EA processes are developed and in place to assess undertakings associated with different types of projects. For example, assessing the impacts of disposing of land from the public portfolio is significantly different then assessing the best location for a proposed road. However, where an undertaking involves multiple proponents/undertakings with different class EAs, Municipalities and other proponents may work together to ensure that the EA processes for related but separate undertakings are not duplicative. That one process can be relied on by both the proponent and MEDEI to evaluate their respective undertakings and meet their respective obligations for the project. MEDEI can rely on an alternative EA process to satisfy MEDEI's obligations under the Environment Assessment Act if:

- The MEDEI lands are clearly articulated in the streamlined EA study area.
- Explicit reference to the corresponding undertaking in the MEDEI Class EA is evaluated (e.g., if the proponent identifies the need to acquire land owned by MEDEI, then "acquisition of MEDEI-owned land", or similar statement, must be referenced in the EA document).
- Sufficient levels of consultation with MEDEI's/IO's specific stakeholders, such as the Ontario
  Ministry of Natural Resources, must be documented with the relevant information
  corresponding to MEDEI's/IO's undertaking and the associated maps.
- Details of appropriate mitigation measures and how the MEDEI Class EA 7 point analysis has been fulfilled. Negative environmental impacts associated with the project design and construction, such as the potential for dewatering, dust, noise and vibration impacts, impacts to natural heritage features/habitat and functions, etc should be avoided and/or appropriately mitigated in accordance with applicable regulations best practices as well as Ministry of Natural Resources (MNR) and Ministry of the Environment (MOE) standards. Avoidance and mitigation options that characterize baseline conditions and quantify the potential impacts should be present as part of the EA project file. Details of appropriate mitigation, contingency plans and triggers for implementing contingency plans should also be present.
- The proponent is required to provide to IO, in writing, how it intends to meet MEDEI's environmental obligations and report back on how it has met those obligations.

Other due diligence requirements such a Phase One Environmental Site Assessment (ESA) may also be required for the MEDEI lands proposed to be impacted.

### **Cultural Heritage:**

Should the activities have the potential to impact cultural heritage features on IO managed lands, a request to examine cultural heritage features, which can include cultural landscapes, built heritage, and archaeological potential and/or sites, could be required. This may be a requirement outside of an EA process and must meet the obligations set out under the Standards and Guidelines for Provincial Heritage Properties (Ministry of Tourism, Culture and Sport 2010). All archaeological assessments must be completed by a professional archaeologist licensed by the province of Ontario and must adhere to the Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism, Culture and Sport 2011).

### **Duty to Consult (DTC)**

Please note that the Crown has a duty to consult under the Constitution Act. The requirement for Aboriginal consultation is determined by MEDEI and facilitated by IO. DTC may be triggered for a host of reasons: Aboriginal treaty or treaty rights, established consultation or notification protocols,

government policy and/or program decisions, archaeological potential and/or cultural heritage consultation obligations. For these types of undertakings MEDEI will need to evaluate the potential impact of an undertaking on Aboriginal and treaty rights. A proponent with an established consultation process, under their own EA process, must submit to MEDEI (via IO) their complete Aboriginal consultation documentation. This documentation will be reviewed against IO's and/or MEDEI's assessment for Aboriginal consultation based on the proposed undertaking. Additional consultation may be required to satisfy MEDEI.

### **Concluding Remarks**

In summary, the purchase of MEDEI-owned/IO-managed lands or disposal of rights and responsibilities (e.g. easement) for IO-managed lands triggers the application of the MEDEI Class EA.

Deficiencies in any of these requirements could result in an inability to rely on the EA process proposed to streamline the EA approvals.

IO is providing this information so that adequate timelines and project budgets incorporate MEDEI's regulatory requirements, which may be required to support a realty activity required for the proponent's project.

If the proposed undertaking directly affects all or in part any IO-managed property, prior to finalizing the report, please contact the undersigned at your earliest convenience to ensure that all MEDEI Class EA requirements can be met through the EA study. Please send the undersigned a copy of the DRAFT EA report and allow a minimum of 30 calendar days for review.

If MEDEI owned lands are not anticipated to be impacted, please remove IO from your circulation list.

Thank you for the opportunity to provide initial comments on this undertaking. If you have any questions I can be reached at the contact information below.

Sincerely,

Lisa Myslicki

J. Myslicki

Environmental Specialist, Environmental Management Infrastructure Ontario
1 Dundas Street West,
Suite 2000, Toronto, Ontario
M5G 2L5
(416) 212-3768
lisa.myslicki@infrastructureontario.ca

(OLC) Ontario Land Corporation

(ORC) Ontario Realty Corporation (PIR) Public Infrastructure and Renewal

(MGS) Ministry of Government Services

(MBS) Management Board and Secretariat

(MTO) Ministry of Transportation

(MNR) Ministry of Natural Resources (MEI) Ministry of Energy and Infrastructure

(MOI) Ministry of Infrastructure

(MEDEI) Ministry of Economic Development, Employment and Infrastructure

<sup>\*</sup> Below are the acronyms for agencies/ministries listed in the above letter

### Ministry of Tourism, Culture & Sport

#### Ministère du Tourisme et de la Culture

Unité des services culturels

Culture Services Unit Programs and Services Branch 401 Bay Street, Suite 1700

Direction des programmes et des services Toronto ON M7A 0A7 401, rue Bay, Bureau 1700 Toronto ON M7A 0A7

416 314-7159 Tel. Tél.: 416 314-7159 Téléc.: 416 212-1802 416 212-1802 Fax.



### February 18, 2015 (EMAIL ONLY)

Maya Caron, Senior Environmental Planner Stantec Consulting Ltd 401 Wellington Street West, Suite 100 Toronto, ON M5V 1E7 E: maya.caron@stantec.com

MTCS file #: 0002244 **Proponent:** MTO

Subject: **Notice of Commencement for** 

Highway 400 North Canal Overpass Replacement Study (GWP 2005-11-00)

Town of Bradford West Gwillimbury, County of Simcoe Location:

### Dear Maya Caron

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Commencement for this EA project. MTCS's interest in this EA project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land-based and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources.

### **Project Summary**

The Notice of Commencement states that subject to the **outcome** of this EA study, MTO is proposing the following improvements:

- Replacement of the Highway 400 North Canal Bridges
- Realignment of the North Canal with the MTO right-of way
- Rehabilitation/replacement of the Holland River Culvert
- Realignment of Wist Road, Davis Road and Canal Road to accommodate the new bridges

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

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Aboriginal communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Aboriginal communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local

heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

### **Archaeological Resources**

Would you please advise whether an archaeological assessment is being undertaken for this EA? If the present study area was included in a previous archaeological assessment, could you provide a PIF number.

If you require further information as to whether this EA project may impact archaeological resources, you may screen the project with the MTCS <u>Criteria for Evaluating Archaeological Potential</u> to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at <u>archaeologicalsites @ontario.ca</u>. If your EA project area exhibits archaeological potential, and an archaeological assessment (AA) has not already been done, then an assessment should be undertaken by an *OHA* licensed consultant archaeologist, who is responsible for submitting the report directly to MTCS for review.

### **Built Heritage and Cultural Heritage Landscapes**

The draft <u>MTO Ontario Heritage Bridge Guidelines for Provincially Owned Bridges</u> screening criteria have also been established for cultural heritage evaluation of bridges under the Class EA for Provincial Transportation Facilities.

MTO has advised that the North Canal Overpass is not eligible for the Ontario Heritage Bridge List. If you are aware that any of the structures have potential cultural heritage value or interest, then please advise us.

### **Environmental Assessment Reporting**

All technical heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical heritage studies will be completed for your EA project, and provide them to MTCS before issuing a Notice of Completion.

Thank-you for circulating MTCS on this project, please continue to do so through the EA process. Meanwhile kindly update your contact list to remove the name of Laura Hatcher and send future notices to me at the address above Please contact me for any questions or clarification.

Sincerely,

Rosi Zirger Heritage Planner rosi.zirger@ontario.ca

Please notify MTCS if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out a determination of their nature and significance.

If human remains are encountered, all activities must cease immediately and the local police be contacted as well as the Cemeteries Regulation Unit of the Ministry of Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.

#### Ministry of Tourism, Culture and Sport

Archaeology Programs Unit Programs and Services Branch Culture Division 401 Bay Street, Suite 1700 Toronto ON M7A 0A7 Archaeology@ontario.ca

#### Ministère du Tourisme, de la Culture et du Sport

Unité des programmes d'archéologie Direction des programmes et des services Division de culture 401, rue Bay, bureau 1700 Toronto ON M7A 0A7 Archaeology@ontario.ca



Mar 12, 2018

Thanos Webb (P400) Stantec Consulting 23 Ruskin Toronto ON M6P 3P7

RE: Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 1-2 Archaeological Assessment of Highway 400 North and North Canal Overpass Structure Replacement (GWP 2005-11-00)", Dated Feb 12, 2018, Filed with MTCS Toronto Office on N/A, MTCS Project Information Form Number P400-0055-2016, MTCS File Number 0002244

Dear Mr. Webb:

The above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18, has been entered into the Ontario Public Register of Archaeological Reports without technical review.<sup>1</sup>

Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require further information, please do not hesitate to send your inquiry to <a href="mailto:Archaeology@Ontario.ca">Archaeology@Ontario.ca</a>

cc. Archaeology Licensing Officer
Jason White, Ontario Ministry of Transportation
Lukasz Grobel, Ministry of Transportation

1In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

From: Leah Emms [mailto:Leah.Emms@ofa.on.ca]

**Sent:** Tuesday, April 19, 2016 9:51 AM

To: Madden, Donna

**Subject:** North Canal bridge replacement

#### Hi Donna,

I have a question for you regarding the possible removal of the Holland River Culvert. Why is this being considered? Thank you.

## Leah

Leah Emms
Ontario Federation of Agriculture
Member Service Representative
Peel, Simcoe & York
Toll free 1-866-660-5511
leah.emms@ofa.on.ca
www.ofa.on.ca

**From:** Leah Emms [mailto:Leah.Emms@ofa.on.ca]

**Sent:** Wednesday, April 20, 2016 8:47 AM **To:** comments@hwy400ncanalbridges.ca

**Subject:** comments

Thank you for the opportunity to comment on this project.

I have reserved my comments since the PIC in Bradford as I wanted the opportunity to discuss the project with farmers in the marsh. I spoke with several at the Muck Conference.

The closure of the north canal road for the entire length of the project continues to be a concern in the community. I understand the safety aspect of keeping the road closed but I would ask your design-build team to consider if it is possible to have limited openings during the fall harvest seasons.

The designated detour routes on Wist Road and Davis Road will require some improvements as they are narrow and rough. We hope that MTO will undertake the responsibility for the maintenance of these roads for the duration of the project as this maintenance will further strain local municipal road budgets.

With the impending closure of the on and off ramps from Hwy 400 to the North Canal Road, farmers are very concerned for their safety when having to use Hwy 9 west of Hwy 400 to access Hwy 400. As you know, Hwy 9 is a very busy commuter route and when Hwy 400 experiences traffic accidents many drivers use Hwy 9 as an alternate route to either exit Hwy 400 or enter it. There are no traffic signals on Hwy 9 west of Hwy 400. This creates a hazardous situation for farmers making a left hand turn from the marsh onto Hwy 9 with trucks and tractor trailers loaded with produce headed to market. It is especially difficult for those slow moving trucks to slide into the right lane on Hwy 9 to enter the on ramp for Hwy 400 south as passenger vehicles are travelling at a high rate of speed along this section of Hwy 9. Will MTO consider installing traffic signals on Hwy 9?

Will compensation be offered to the owners of the Farmers Market on North Canal Road as they will lose the access point off Hwy 400 with the ramp closure?

I do want to say that I was pleased to see that the new bridges will provide an additional foot of vertical height for farm vehicles travelling underneath on the North Canal Road.

Best Regards,

## Peah

Leah Emms
Ontario Federation of Agriculture
Member Service Representative
Peel, Simcoe & York
Toll free 1-866-660-5511
leah.emms@ofa.on.ca

From: Kielstra, David

**Sent:** Thursday, September 23, 2021 1:05 PM

**To:** 'Meile, Christian'

Cc: Palys, Rebecca (MTO); Hohner, Paula; Porter, Brad; Barg, Adam; Rhonda Gribbon

(rhonda.gribbon@ontario.ca)

Subject: RE: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP

2110-21-00) - Notice of Study Commencement

#### Hello Christian,

Thank you for your email and for the information. You are correct that the scope of the project is for rehabilitation of the Highway 400 bridges over Canal Road.

We will continue to keep you on the project mailing list as the project proceeds.

Thank you,

#### David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

Stantec

200-835 Paramount Drive Stoney Creek ON L8J 0B4



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**From:** Meile, Christian < Christian. Meile@simcoe.ca> **Sent:** Wednesday, September 22, 2021 10:49 AM **To:** Kielstra, David < David. Kielstra@stantec.com>

**Cc:** Palys, Rebecca (MTO) <Rebecca.Palys@ontario.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Porter, Brad <Brad.Porter@stantec.com>; Barg, Adam <adam.barg@stantec.com>; Rhonda Gribbon (rhonda.gribbon@ontario.ca) <rhonda.gribbon@ontario.ca>

Subject: RE: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00)

- Notice of Study Commencement

Hello David,

Thanks for sending the Study Notice.

It seems the scope of work has been revised from the previous 2015/2016 preliminary work to include only a structure rehabilitation.

At the end of the day, the County of Simcoe no longer owns or maintains Canal Road (under the structures), as jurisdiction has been transferred to the Town of Bradford West Gwillimbury.

Please simply keep us informed of any potential area traffic impacts as the project proceeds.

Regards,

Christian Meile, P. Eng.
Director, Transportation & Engineering
Engineering, Planning and Environment Division
County of Simcoe
705-726-9300 Ext. 1178
1110 Hwy. 26
Midhurst, ON
L9X 1N6
www.simcoe.ca



**From:** Kielstra, David < <u>David.Kielstra@stantec.com</u>>

Sent: Tuesday, September 21, 2021 1:00 PM

**Cc:** Palys, Rebecca (MTO) < <a href="mailto:Rebecca.Palys@ontario.ca">Rebecca.Palys@ontario.ca</a>; Hohner, Paula < <a href="mailto:Paula.Hohner@stantec.com">Paula.Hohner@stantec.com</a>; Porter, Brad < <a href="mailto:Paula.Hohner@stantec.com">Paula.Hohner@stantec.com</a>; Porter, Brad < <a href="mailto:Paula.Hohner@stantec.com">Rhonda.gribbon@ontario.ca</a>; Rhonda Gribbon (<a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>; Rhonda Gribbon (<a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>)

**Subject:** Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) - Notice of Study Commencement

Hello,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached study area map. The proposed work includes minor rehabilitation of the existing overpass bridges to repair and rehabilitate several bridge elements such as concrete barrier walls and expansion joints to extend their useful life. The traffic management strategy will be confirmed as part of the study and may consist of temporary night-time lane closures of Highway 400 and Canal Road during construction.

This project is being completed in accordance with the MTO *Class EA for Provincial Transportation Facilities* (2000) as a Group 'C' project. Group 'C' projects are considered approved, subject to compliance with the Class EA. Upon completion of the study, an Environmental Screening Document will be prepared for MTO's internal use. Construction timing is subject to funding and approvals.

We are seeking your feedback as well as any questions or concerns you may have regarding the project. Please communicate any concerns or questions related to this project to the undersigned.

Thank you,

# David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534

David.Kielstra@stantec.com

200-835 Paramount Drive Stoney Creek ON L8J 0B4

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From: Kielstra, David

Sent: Friday, October 01, 2021 9:44 AM

To: 'Ruth Westlake' <rwestlake@townofbwg.com>

**Cc:** Palys, Rebecca (MTO) <Rebecca.Palys@ontario.ca>; Hohner, Paula <Paula.Hohner@stantec.com>; Porter, Brad <Brad.Porter@stantec.com>; Barg, Adam <adam.barg@stantec.com>; Rhonda Gribbon (rhonda.gribbon@ontario.ca) <rhonda.gribbon@ontario.ca>; Frank Jonkman <fjonkman@townofbwg.com>

Subject: RE: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00)

- Notice of Study Commencement

Hello Ms. Westlake,

Thank you for your email response regarding this MTO project at the Highway 400 North Canal bridges. The proposed holding strategy includes minor repairs to the existing Highway 400 North Canal bridges to several bridge elements such as abutments, soffit ends and expansion joints to maintain the bridges until they are replaced.

The proposed work is summarized below:

- Place Temporary Construction Barrier (TCB) adjacent to existing barrier wall
- Scale concrete at the end soffit and repair soffit under expansion joint only
- Replace portion of expansion joint and seal at construction joint
- Install a steel support post under one girder at the south abutment of the northbound structure
- Place granular fill material under the north slope of the southbound structure to address erosion of embankment slopes

I wish to clarify that no in-water work is required to complete the project and it will not impact the function of the North Canal. The project is also not related to the bridge replacement project and it does not involve the realignment of Wist or Davis Roads, or the closure of the access from Hwy 400 to Canal Road.

I am available to discuss the project with you further this week. Please give me a call if you have any other questions or concerns at 226-203-7334.

Thank you,

## David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534 David.Kielstra@stantec.com

Stantec 200-835 Paramount Drive Stoney Creek ON L8J 0B4



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From: Ruth Westlake <<u>rwestlake@townofbwg.com</u>>

**Sent:** Monday, September 27, 2021 2:20 PM **To:** Kielstra, David < <u>David.Kielstra@stantec.com</u>>

**Cc:** Palys, Rebecca (MTO) < <a href="mailto:Rebecca.Palys@ontario.ca">Rebecca.Palys@ontario.ca</a>; Hohner, Paula < <a href="mailto:Paula.Hohner@stantec.com">Paula.Hohner@stantec.com</a>; Porter, Brad < <a href="mailto:Brad.Hohner@stantec.com">Barg, Adam < adam.barg@stantec.com</a>; Rhonda Gribbon (<a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>) < <a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>); Frank Jonkman < <a href="mailto:fjonkman@townofbwg.com">fjonkman@townofbwg.com</a>)

**Subject:** RE: Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) - Notice of Study Commencement

## Good afternoon,

Thank for your letter of September 21, 2021. The Holland Marsh Drainage System Joint Municipal Service Board has serious concerns regarding the scope of the project as set out in your letter.

The Board is in the process of consulting with the engineer responsible for the Canal Improvement Project report and will be providing a letter in the coming dates outlining the Board's comments and concerns.

Thanks,

#### **Ruth Westlake**

Holland Marsh Drainage Board Coordinator



Town of Bradford West Gwillimbury
3541 Line 11, PO Box 160 | Bradford, ON | L3Z 2A8
Phone: 905-778-4321 x.2500 | Cell: 905-836-3187
rwestlake@townofbwg.com
www.townofbwg.com
Like us on Facebook Follow us on Twitter

#### **PLEASE NOTE:**

Town of BWG administrative offices are open and customer service staff are here to serve you, but virtual services are still available – see our website for details: <a href="www.townofbwg.com/service">www.townofbwg.com/service</a>. At times I may be working remotely, so if you wish to meet with me in person, please contact me by phone or email in advance. To contact other Town of departments, see: <a href="www.townofbwg.com/contact">www.townofbwg.com/contact</a>

From: Kielstra, David < David. Kielstra@stantec.com>

Sent: September 21, 2021 1:00 PM

To: Ruth Westlake <rwestlake@townofbwg.com>

**Cc:** Palys, Rebecca (MTO) < <a href="mailto:Rebecca.Palys@ontario.ca">Rebecca.Palys@ontario.ca</a>; Hohner, Paula < <a href="mailto:Paula.Hohner@stantec.com">Paula.Hohner@stantec.com</a>; Porter, Brad < <a href="mailto:Brad.Porter@stantec.com">Brad.Porter@stantec.com</a>; Rhonda Gribbon (<a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>) < <a href="mailto:rhonda.gribbon@ontario.ca">rhonda.gribbon@ontario.ca</a>)

**Subject:** Highway 400 North Canal Structures Rehabilitation, Town of Bradford West Gwillimbury (GWP 2110-21-00) - Notice of Study Commencement

Hello,

The Ontario Ministry of Transportation (MTO) has retained Stantec Consulting Ltd. to complete the Detail Design and Class Environmental Assessment (EA) study for Highway 400 North Canal Overpass Structures Rehabilitation in the Town of Bradford West Gwillimbury in Simcoe County. Please see the attached correspondence for more details.

Please let me know if you have any questions or comments.

Thank you,

## David Kielstra M.A, EP

**Environmental Planner** 

Direct: 905 381-3247 Fax: 905 385-3534 David.Kielstra@stantec.com

Stantec

200-835 Paramount Drive Stoney Creek ON L8J 0B4



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# GOVERNMENT SERVICES BUILDING AND CULTURAL CENTRE



CURVE LAKE, ONTARIO KOL 1R0

December 11, 2014

Nanda Kandiah 1201 Wilson Avenue Building D, 4th Floor Downview, Ontario M3M 1J8

Dear Nanda Kandiah,

RE: Notice of Commencement Highway 400 North Canal Overpass Structures Replacement Study GWP 2005-11-00

We would like to acknowledge receipt of your correspondence, which we received on 12/1/2014 regarding the above noted project.

As you may be aware, the area in which your project is proposed is situated within the Traditional Territory of Curve Lake First Nation. Our First Nation's Territory is incorporated within the Williams Treaty Territory and is the subject of a claim under Canada's Specific Claims Policy. We strongly suggest that you provide Karry Sandy-Mackenzie, Williams Treaty First Nation Claims Coordinator, 8 Creswick Court, Barrie, ON L4M 2S7, with a copy of your proposal as your obligation to consult to also extend to the other First Nations of the Williams Treaty.

Although we have not conducted exhaustive research nor have we the resources to do so, Curve Lake First Nation Council is not currently aware of any issues that would cause concern with respect to our Traditional, Aboriginal and Treaty rights.

Please note that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains or other such evidence of a native burial site or any Archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the *Cemeteries Act* to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is needed before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately. Curve Lake First Nation also has available, trained Archaeological Liaisons who are able to actively participate in the archaeological assessment process as a member of a field crew, the cost of which will be borne by the proponent.

If any new, undisclosed or unforeseen issues should arise, that has potential for anticipated negative environmental impacts or anticipated impacts on our Treaty and Aboriginal rights we require that we be notified regarding these as well.

Thank you for recognizing the importance of consultation and respecting your duty to consult obligations as determined by the Supreme Court of Canada.

Should you have further questions or if you wish to hire a liaison for a project, please feel free to contact Nat Cummings, Lands and Resources Consultation Liaison, at 705-657-8045 x 222 or NathanielC@curvelake.ca.

Yours sincerely,

Chief Phyllis Williams Curve Lake First Nation From: Melanie Vincent

To: <u>comments@hwy400ncanalbridges.ca</u>

Subject: Huron-Wendat Nation

**Date:** Sunday, December 14, 2014 5:16:38 PM

Hello, the Huron-Wendat Nation received a letter about the North Canal Overpass replacement (HWY 400). Our Nations may have archeological and cultural, heritage interests and rights in this project area. Please keep us informed and involved. Thank you!

Mélanie Vincent, M.Sc.AJS Cell / SMS: (418) 580-4442 melanievincent21@yahoo.ca Government Services Building 22 Winookeeda Street Curve Lake, Ontario K0L1R0



Phone: 705.657.8045 Fax: 705.657.8708

www.curvelakefirstnation.ca

1 April, 2016

Mr. Mike Trader 200-835 Paramount Drive Stoney Creek, Ont L8J 0B4

Dear Mr. Mike Trader,

## RE: Replacement of the Highway 400 North Canal Bridges

I would like to acknowledge receipt of your correspondence, which was received on 3/18/2016 regarding the above noted project.

As you may be aware, the area in which your project is proposed is situated within the Traditional Territory of Curve Lake First Nation. Our First Nation's Territory is incorporated within the Williams Treaties Territory and is the subject of a claim under Canada's Specific Claims Policy. We strongly suggest that you provide Karry Sandy-Mackenzie, Williams Treaty First Nation Claims Coordinator, 8 Creswick Court, Barrie, ON L4M 2S7, with a copy of your proposal as your obligation to consult to also extend to the other First Nations of the Williams Treaties.

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Government Services Building 22 Winookeeda Street Curve Lake, Ontario K0L1R0



Phone: 705.657.8045 Fax: 705.657.8708 www.curvelakefirstnation.ca

Thank you for recognizing the importance of consultation and respecting your duty to consult obligations as determined by the Supreme Court of Canada.

Should you have further questions or if you wish to hire a liaison for a project, please feel free to contact our Lands and Resources Consultation Liaison Melissa Dokis at MelissaD@curvelake.ca, or by phone at 705-657-8045.

Yours sincerely,

Chief Phyllis Williams

Curve Lake First Nation



Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)
Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)
Solution to clooning Canal Road
CANAL RD
1 1 HOO SONTH
400 NORTH CANAL
* KO
EXISTING EXIT TO BECLOSED   ELOSE
TUNNEL UNDER EXISTING 6 LANES
OF 400 TO ACCOMEDIATE FARM
TRACTORS & MACHINERY NOTTRUCK TRAFFIC

Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to:

Mrs. Donna Madden, CPT Senior Environmental Planner Stantec Consulting Ltd. 200-835 Paramount Drive

Stoney Creek ON L8J oB4

Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com

Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca

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Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)
Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)

I have been born and raised in the Marsh
on conal road and in my 25 years I've seen several
changes occur but this will be the largest!
I come originally from Conal Rock and thuy the
and rever had the issue of traffic flows From
the 400 exits. Dow I like right clown from
The exit. My joy for rowno, the exit closed
onto Canal Rock is incredible! The amount of
times I almost home on occasent under that
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" And to restrict out too west out at with "
nour sitting at my house NO ONE does the
speed limit and it's an interaption for the
Fermina comminated; so his happy for the coun
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Mrs. Donna Madden, CPT Senior Environmental Planner  Senior Environmental Planner
Stantec Consulting Ltd.
Stoney Creek ON L8J 0B4  Stoney Creek ON L8J 0B4
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Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Name:
As for the clowre it will greatly effect the 400 formers marked sad to see that this will greatly effect them.  I rape they can kkep this worked elipe and continue support. It's a great formers marked with great local produce

Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

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DISSAPOINTED IN The Chouser of the
ETIT DENTRANCE OF CANAL RD NORTH
BREQUEST & LIVE off SINCOT + BILLING
MY SON LIVES IKM OF 400 ON
CANAL RD, VERY CONVINIENT fo ces
To get to the Hwy NORTH Or SOUTH.
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for Hundreds, of BRANFORD Residents
who live on the south side of
BRADEORD That take This Route
EVERYDAY by Charging this route
theory it will take us another
20 Minutes langer to travel each way
every day - we should be spening

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Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Name:
Mere roads LEADING TO The TOWN OF
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Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

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Closing down exit 58 WILL close down
Canal Rd Farmers Market. We are new owners
with young children, we finally found a
place we call home and know we can
support our families and save for our
children's education. Closing down the ramps
will affect us in every way. It will cause
glot of job loss. We now employ 6 fulltime
and 6 parttime employees.
They need to do a study on how many
people use the North Canal Rd to and from
work.
DONT SHUT OUR SUSINESS DOW

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Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

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	Please	make	Sure	the	farmer	s ha	Je	
	access	to	both	sides	04 +	he 1	nighway	1
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0	Please	make	Sure	either	- Wiq	+ Ro	d or	
	Davie	1-1	1~	2000	nt o	11 42	mai	

Please make sure the access under the bridges will be at least two lanes wide at all times

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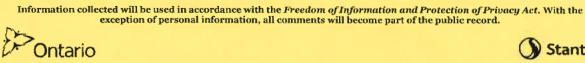


Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

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North Caral Pd 400 Underpress
- best to remain open between
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horvesting and shipping of vegtables
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· 180th 400 underpasses can never be
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Please provide your comments on the project. (Use the back of this sheet if you need more space.)
Thee Should Koar Chia, Rd
THE STICK THE THE
ofen under the 400 not
Close it for 3 years
Also ist Bad Talia to
Plase the Rampe to work
And South I Do not
spor agree with plan
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Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca
Name and Address (optional)
Name:
Mailing Address:
(include postal code)  Tel: Fax: Email:
Tel: Fax: Email:

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Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)
Closing runal Road under the 400 is not a viable
option. Re. You are asking farms to travel to Hw9.  I Buck up toget to thier properties on either side of the Michary.
I Buck up toget to thier properties on either side
of the Highway.
Mow is the closure of this Road not a
SAFtey issue for the Residence of Conal
Road This Cosper will possible added minter
of to first responders time which will adend up
being the difference between Life a death in some
situations.
Withe \$ losocr of the aviolest eggs south
withe blosser of the quickest egress node out of the Marsh Sor many Residence Dover

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Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Name: if all buildings + structures hove to
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important - Glosing the Brige Canal Road of
the Bridge for up to 3 years it there was
a hurricane duto is responible for the possib
injuries that could Happen to residence trying
to get out.
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many travelers, taking a business puncy
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Mave been hard working contributors to the
Scon a coople of young Semilies Hat Mave been hard working contributors to the Bradford & Holland Warsh Area.

Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

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Town of Bradford West Gwillimbury, County of Simcoe

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Please provide your comments on the project. (Use the back of this sheet if you need more space.)  The Farmers need the Canal Bank  Road to be open during construction *  The Ramps will be missed.
Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to:  Mrs. Donna Madden, CPT Senior Environmental Planner Stantec Consulting Ltd. 200-835 Paramount Drive Stoney Creek ON L8J oB4 Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com
Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca
Name and Address (optional)
Name:
Mailing Address:
(include postal code)
Tel: Fax: Email:





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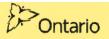
THE CLOSURE OF THE # CANAL RUAD
ALLESS RAMPS TO HWY 400 WILL
PREVENT MASY ALCESS FOR FARM PRODUCE
TO THE TORONTO MARKETS.
Aly TrefEALED OPTIONS TO THIS ARE :
1. KEED THE RAMPS TO HWY 400 FROM CAVALRO
2. PLACE TRAFFIC LIBITIS AT HOY 9
and RUPKE ROAD, I BELIEVE MOST
FARM TRUCKS WILL ALCESS HWY 400
From Hay 9 VIA PUPKE ROAD.
THEY WILL need lights to provide
SAFE ALLESS TO HOWY 9

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Town of Bradford West Gwillimbury, County of Simcoe

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Places provide your comments on the project (Use the back of this short if you need more engage)	
Please provide your comments on the project. (Use the back of this sheet if you need more space.)	
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AND ADDITIONAL TIME ADDED ONTO THEIR DAY	•
LOST REVENUE IF NO ACCESS IS AVAILABLE.	
By THE MINISTRY TRYING TO SAVE MONEY-THIS IS FOLLOW.	MG
ONTO THE FARMERS WHICH PROVISE THE FOOD. YOU WILL S	EE
Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to: 15 VER	THUESTT
Mrs. Donna Madden, CPT	hed.
Semoi Environmental Flanner	
	111 THE
Stoney Creek ON L8J oB4  SECONDARY CITIZENS, THEY NEED A	TEN
Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com	E 2 1)
Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca	M.



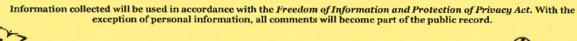


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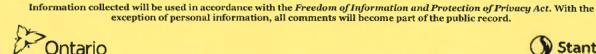
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Please provide your comments on the project. (Use the back of this sheet if you need more space.)
This should be kept agen for the farming community who eves it daily. They were the main supporter of Bradfard for money year and something this ramp will as make it very difficult for delivere
Loing to Neumarket will make it dangerous, turning left on though,
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Senior Environmental Planner Stantec Consulting Ltd. 200-835 Paramount Drive Stoney Creek ON L8J 0B4 Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com
Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca
Name and Address (optional)  Name:
Mailing Address:
(include postal code)
Tel: Fax: Email:



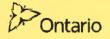


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are being sont out meetings etc
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Thoul concerns for closure under bridge

From Sept - March due to delivering my

Acodule: This pact winter I travelled under

the bridge Hoo fines.

Also Closure to delicering produce: Leaves me

with no other op trons but to take Canad

road which is not up to specs for heavy

loads:

Also Closure after police fire and

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Please provide your comments on the project. (Use the back of this sheet if you need more space.)

IF CANAL ROAD IS CLOSED UNDER
HWY 400 NORTH WIST ROAD MUST
REMAIN OPEN TO ALLOW FARM TRACTORS
TO ACCESS SOUTH CHNAL UNDER PASS
TO ACEESS HWYKY TO HARDEST.
AND GROW CROPS HWY #9 MUST NOT
BE ANY CLOSURES BECAUSE TWO
TRACTOR EUERY 15 MINUTES RUNNING
EQUIPMENT AND CROP FROM HUNKY TO
SIMCUE ROAD WERE BARNS COOLERS
DRMER LUCATED

EXTREME CONCERN WITH CLOSING CULVERTUNDER HWY 400 THAT WILL CAUSE FLOODING IN FARMERS FIELDS.

Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to:

Mrs. Donna Madden, CPT Senior Environmental Planner Stantec Consulting Ltd. 200-835 Paramount Drive Stoney Creek ON L8J 0B4

Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com

Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca



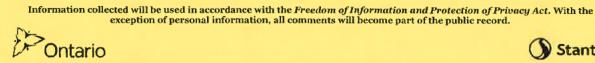


Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)  THE BI goest 158 ve in my eyes is the observable farmers
market closure, THE Farmers within the community rely
on this market for a major source of exposure and income.
with the second
- an extension mumoria Wist RD. across the canal that
would continue the to the 5th line on ramp would keep this
market running and allow faster emergency access to the
people on CAMAL Rp.
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Mrs. Donna Madden, CPT Senior Environmental Planner
Stantec Consulting Ltd.
200-835 Paramount Drive Stoney Creek ON L8J oB4
Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com

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Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)

1) Why is the closure of North Canal Rd for 3 years
necessary? Many of us who farm have land on
both sides of they 400. We need to get our
equipment to our land and without access to canal
Id under the they too bridge it is a huge
inconvenience to have to use south canal Rd or the 5th
It is possible to construct a bridge without closing
the boad (ie 11th line Bridge across they 400)

2) As a resident of Holland Marsh
of Houry 400 - our mail box is on the east side-
during this period our mail boxes should be
moved to the west side.

Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to: Mrs. Donna Madden, CPT Senior Environmental Planner Stantec Consulting Ltd. 200-835 Paramount Drive Stoney Creek ON L8J oB4

Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com

Web. hwv400ncanalhridges ca Fmail: comments@hwv400ncanalhridges ca

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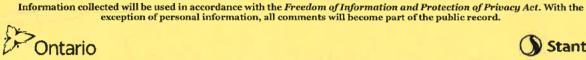
Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00) Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)

	where to start? So frustrative as we
	went through this in 2003 is Before.
0	Ramps. These are part of the livelihood of
	our farmers. Who are already not so hunch
	appreciated. We need these RAMPS to get,
	ohr fresh local Produce to market so don't
PACE	Close the Ramps.
2	Emergency Access. Our ramps are needed
	for an Emergincy Detair Konte. This
	15 noted regularly when there's an
	accident further North : reple read to get
6	at the highway.
(3	) thomas like these ramps as a tim-
	around in wilter months. It's helpful that
	Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to:
	Mrs. Donna Madden, CPT Senior Environmental Planner
	Stantec Consulting Ltd.
	Stoney Creek ON L8J oB4
	Tel. 905-381-3217, Fax 905-385-3534, Email: <u>donna.madden@stantec.com</u>

Web: hwy400ncanalbridges.ca Email: comments@hwy400ncanalbridges.ca





Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)
Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Name: 1 understand the need for traffic flaw
however it's another example of the
lack of respect for our farmers.
The Holland Marsh is a slice of
Black GOLD in our Province. We should
celebrate these people and help them with
their livelinood, not burden them with
their livelihood, not burden them with more time & frustration to their days.
Concerns for the Bridge Construction -
we need to ensure the farmers
have easy access for their & their
equipment to Pass. Some of them
live on one side & farm on the other
Some farmers rely on rental # to help & access is important to
help & access is important to
continue with 4bot.
20.0 It I all all all all all all all all all a
tamp- IF the ramps are closed can't we
have GATES so there could still be
access, in emergency.
Also - Hink of the Dredge for the
Cleaning of the thiver.
thank You.
2

Wednesday, March 30,2016

# TO THE MINISTRY OF TRANSPERTATION AND BRADFORD WEST GWILLIMBURY

As residents of Canal Rd. we have many concerns in regards to the closing of Wist, Davis, North Canal Rd. And the North and South Ramps to Hwy 400. We would like a written report to the following questions.

- 1. What measures will be taken to ensure access, for the Farming Community to both sides of the 400 Hwy?
- 2. Will Davis and Wist roads be closed at the same time?
- 3. Will a stop light be installed at Jane Street and Hwy 9? Currently it is very dangerous to access the East bound lanes onto Hwy 9.
- 4. Snow removal is currently done first thing in the morning as we are a main route. How will the snow removal be affected?
  - 5. What routes will Ambulance, Fire Trucks, and Police take and how will it effect response time?
  - How will the time children have to ride the school bus be affected?
  - 7. Do you have an evacuation plan in place for the 100 year storm that is expected to flood the area, as this was one of the reason given for the canal relocation project?
  - 8. During the construction of the new interchange at Hwy 400 and line 5 BWG will the dump trucks be using North Canal Road? The past three years have been a nightmare of large dump trucks going past my home. Every time they carry loads and travel over the speed limit the whole house vibrates. Our well is also disturbed, causing clay to come into the house and making our water undrinkable.
  - Will the Police monitor all day ,the speed of the trucks?
  - 10. When will Canal Rd, be repayed? We have been waiting many years already.
  - 11. Will Farmers have to lose land to accommodate the widening of the 400 Hwy?
  - 12. Will new ramps be included on Canal Rd. so we access to the 400 Hwy when the project is completed?

Light & Jano/ (N) accer

partairs to 400/5

- 13. Explain what the central river culvert is and why is there a possibility it will be closed?
- 14. What are the plans for the water flow on both sides of the closure? The farming community depends and the water from the canal to irrigate the crops. The loss of the water is **unacceptable**!

Many farmers have land on both sides of the 400. Many need to bring crop to the Hillside Gardens Packing Plant. There is not a time of the year that will not affect the farming community. The residents of the 7000 acres must have access to quick and safe routes during the time it will take to finish the project. Thee years is what is projected, however unforeseen problems could extend this time line.

The Ministry of Transportation must consider the above question and have a proper solution that will enable the residents to have services that are safe and reasonable. I am requesting a written response to the above questions before the work on the project is start.

We would like to thank you for your co-operation in advance

# FACSIMILE TRANSMISSION

The information contained herein is privileged and confidential, and is intended for the recipient only. Copying or distribution or disclosure of any sort is strictly prohibited. If you receive this fax in error, please notify us immediately at the telephone number shown above and promptly destroy this transmitted material. Thank you!

Date: April 4, 2016

Fax To: Stantec Consulting Ltd.

Attention: Mrs. Donna Madden

200 - 835 Paramount Drive Stoney Creek, ON, L8J 0B4

Fax #: 1(905)385-3534

Copy

Sent To:

Number of Pages Sent,

including this cover sheet: Three (3)

### MESSAGE

Mrs. Madden:

RE: Hwy # 400/Canal Road Ramp Closure

As per attached comment sheets.

Thank you.

Yours truly.

Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)

Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

Please provide your comments on the project. (Use the back of this sheet if you need more space.)

	AND THANKS, TO ALL WHO PARTICIPATED IN
NG	THE PIC LAST WED. MARCH 30/16.
Š	
	AS MENTIONED BY MYSELF & OTHERS AT THE
	MEETING, FOLLOWING ARE REASONS OF MYSELF AND
39	MANY OTHER OF MY NEIGHBOURS FOR WANTING TO
	MAINTAIN ACCESS EGRESS FROM HWY. # 400 TO
4.	CANAL ROAD:
1)	PROVIDE QUICK, CLOSE ACCESS TO HIGHWAY FOR
	1ST RESPONDERS DURING EMERGENCY SCENARIOS;
2)	PROVIDE CLOSE DETOUR FOR MOTORISTS DURING
	GRIDLOCK CAUSED BY COLLISIONS, WEEKEND COTTAGE!
	COMMUTER TRAFFIC, ETC.;
00	

Completed comment sheets can be left in the drop box provided or submitted by April 30, 2016 to:

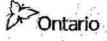
Mrs. Donna Madden, CPT
Senior Environmental Planner
Stantec Consulting Ltd.
200-835 Paramount Drive

Stoney Creek ON L8J oB4

Tel. 905-381-3217, Fax 905-385-3534, Email: donna.madden@stantec.com

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**Stantec** 

Highway 400 North Canal Overpass Structure Replacement Study (GWP 2005-11-00)
Town of Bradford West Gwillimbury, County of Simcoe

Public Information Centre - Wednesday, March 30, 2016 - BWG Leisure Centre, Bradford

	INALITE,
₹)	MINIMIZE GHG POLLETION   MOTORIST STRESS AS
٦,	CAUSED IN (2) ABOVE;
4)	RETAIN QUICK, RELIABLE TRANSPORTATION ACCESS
	FOR HOLLAND MARSH GROWERS TRUCKING THEIR
.0	PERISHABLES TO MARKET;
5)	MAINTAIN CRITICAL TURN-AROUND POINT FOR
27 K	SNOW-REMOVAL EQUIPMENT.
6)	RETAIN ALREADY CONSTRUCTED AUTERNATE ROUTE
94	FOR TRAFFIC OVERFLOW DURING RAPIDLY EXPANDI
	GROWTH OF BRADFORD'S BEDROOM COMMUNITY
- X	THANK YOU FOR YOUR ATTENTION TO THIS
**	MATTER.
2	
*	
174	
8	

_			
Е	rn	m	•

**Sent:** Thursday, January 25, 2018 8:25 PM **To:** comments@hwy400ncanalbridges.ca

Cc: ktunio@townofbwg.com

Subject: Please Don't Close Canal Road Ramps

Hi Engineers,

Please Don't Close Canal Road Ramps, they makes our commute easier and I feel safe to drive in and out of hwy 400. I live in Semcoe rd and Canal road, by driving Canal road, it saves me lots of time to go to Toronto to work.

If someone feel it is not safe, more safety actions can be taken to improve the safety, but not close the ramps. We can add flashing lights and more flag panel to increase the awareness of the ramps for the nights. Or better ramps can be built there.

Thanks,

# **APPENDIX D**

**Public Information Centre Materials** 



# Welcome

to the Public Information Centre for

# Highway 400 North Canal Bridges

Town of Bradford West Gwillimbury, County Of Simcoe

GWP 2005-11-00

# Please sign-in

and take time to review the information, or discuss any aspect of the project with the team members in attendance.

# **Public Information Centre Objectives**

- Present design details for the Preferred Plan
- Present information on associated road improvements and construction staging
- Provide other project related information
- Get your input on the project
- Answer your questions about the study

Ontario



# About the Study

# This is a Class Environmental Assessment study, classified as a Group 'B' project.



It will update engineering and environmental work completed during the initial 2004 Preliminary Design Study. The initial Preliminary Design Study was completed as part of a larger study which included the future expansion of Highway 400. The study was documented in a report<sup>1</sup> which received environmental clearance in 2004.

Since 2004, there have been changes in the study area, including the realignment of the North Canal and updated information about the condition of the bridges. These changes led to the initiation of this study.

1. Highway 400 Planning Study from the South Canal Bridge Northerly to 1 km South of Highway 89 Transportation Environmental Study Report, 2004

# The Class Environmental Assessment Process

is an approved process for highway planning, design, and construction projects. The study is following the Group 'B' process which is completed for major improvements to existing provincial transportation facilities.

At the end of the study a *Transportation Environmental Study Report (TESR) Addendum* will be filed for a 30-day Public Review Period. Revisions to the 2004 TESR recommendations for each design element will be highlighted in the TESR Addendum, which will summarize the following:

- Major features of the proposed work
- Updated existing conditions in the study area
- A full description of the consultation program
- Identification of all approvals, licenses, and permits that have been, or must be obtained
- Environmental impacts, mitigation and commitments to future work and future consultation



# About the Project

# Highway 400 is a Controlled Access Highway

It is managed by the Ontario Ministry of Transportation (MTO), and connects Southern Ontario to Central Ontario, Northern Ontario, and Western Canada via Highway 69 and Highway 11. This Class Environmental Assessment study includes the Preliminary Design and the initiation of Detail Design for the replacement of the Highway 400 bridges over the North Canal of the Holland Marsh in the Town of Bradford West Gwillimbury, County of Simcoe.

This project includes detailed design, to a level ready for the design-build package.

# The Proposed Improvements

Subject to the outcome of the study, the Ontario Ministry of Transportation (MTO) is proposing the following improvements:

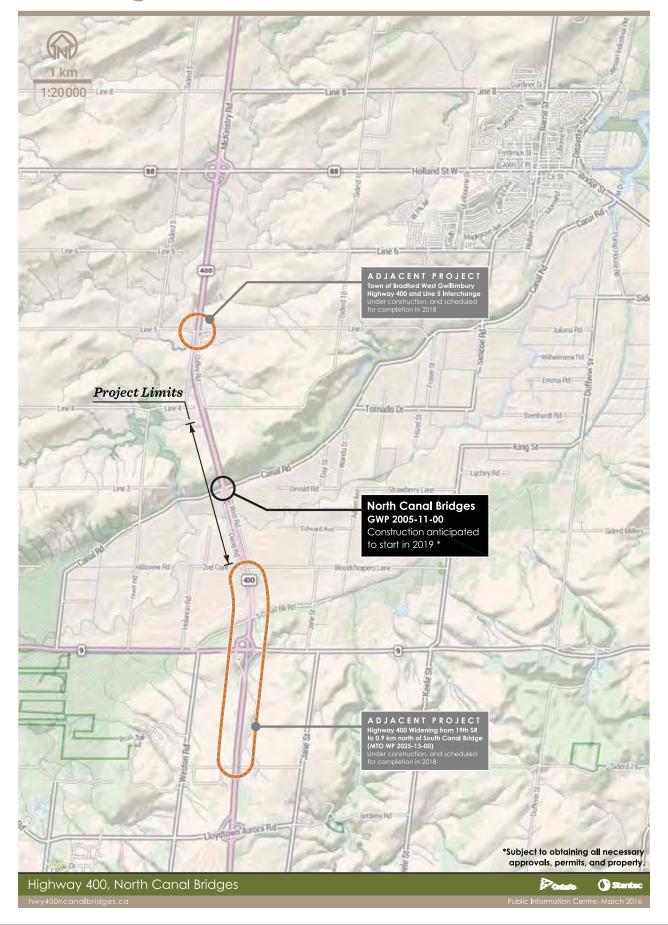
- Replacement of the Highway 400 North Canal Bridges
- Realignment of the North Canal within the MTO right-of-way
- Rehabilitation, replacement, or removal of the Holland (Schomberg) River Culvert
- Minor realignment of Wist Road, Davis Road, and Canal Road to accommodate the new bridges
- Closure of the Highway 400 Canal Road Ramps

This project does not include expansion of the existing highway. Three lanes of traffic will be maintained in each direction on Highway 400 during construction. All of the proposed improvements will be compatible with both the interim 8-laning and future 10-laning of Highway 400 that were approved as part of the original Preliminary Design Study.

This is planned to be a design-build project. Construction is anticipated to last 2-3 years. Canal Road at the bridge site, will be closed during construction.



# Project Location



# Ittigation, and Commitments Existing Conditions,

minimize and/or address potential impacts associated with the Highway 400 Planning determine existing environmental conditions and to identify mitigation measures to and Preliminary Design Study Area from the South Canal Bridge to 1.0 km south of Environmental factors were assessed during the 2004 Preliminary Design Study to Highway 89 (GWP 40-00-00).

Recommended Plan confirmed during this Pre-Design Study. Environmental issues and commitments to eliminate or reduce environmental impacts will be identified and Additional field work and background reviews will be undertaken to update mitigated during pre-design or carried forward to the Detail Design phase. information and identify changes to statutory requirements, based on the

The table below summarizes the factors that will be considered as the project is designed and constructed.

Pish, fish labitat, and species-at-risk         Confirm scholabitat and talk communities and test communities and test communities and test communities and test communities.         * Septicant statemen the position to the position of the positi	Factor	Issue	Commitments / Mitigation
ter  Confirm sensitive communities affected by design (i.e., wildlife; wetlands; forests; vegetation; and designated/special areas)  Sediment and erosion control  Confirm groundwater sensitive ecosystems Identify private wells  Drainage associated with the improvements  Temporary reduction in air quality during construction  Assess nearby noise sensitive areas to comply with MTO Noise Policy  Assess nearby noise sensitive areas to comply with MTO Noise Policy  Holland Marsh Drainage Scheme  Emergency service access  Holland Marsh Drainage Scheme  Emergency service access  Holland Marsh Drainage Scheme  Emergency service access  Bullt Horling and Coltural Landscapes – no known archaeological sites of canada Post mall boxes at Canal Road / Wist Road  Canada Post mall boxes at Canal Road / Wist Road  Grands and contamination  Management of excess materials in proximity to sensitive areas  Follow-up to Contamination Overview Study  Follow-up to Contamination Overview Study	Fish, fish habitat, and species-at-risk	• Confirm fish habitat and fish communities and potential impacts	
ter  • Confirm groundwater sensitive ecosystems • Identify private wells • Drainage associated with the improvements • Temporary reduction in air quality during construction • Assess nearby noise sensitive areas to comply with MTO Noise Policy • Assess nearby noise sensitive areas to comply with MTO Noise Policy • Assess nearby noise sensitive areas to comply with MTO Noise Policy • Holland Marsh Drainage Scheme • Emergency service access • Bellt, hydro in study area • Canada Post mail boxes at Canal Road / Wist Road • Canada Post mail boxes at Canal Road / Wist Road • Built Heritage and Cultural Landscapess – no known archaeological sites directly adjacent to Highway 400 right-of-way • Management of excess materials in proximity to sensitive areas • Follow-up to Contamination Overview Study • Follow-up to Contamination Overview Study	Vegetation protection and restoration	<ul> <li>Confirm sensitive communities affected by design (i.e., wildlife; wetlands; forests; vegetation; and designated/special areas)</li> <li>Sediment and erosion control</li> </ul>	<ul> <li>Identify Environmentally Sensitive Areas (ESAs) on design drawings</li> <li>Mitigation for Barn Swallow and any other Species at Risk</li> <li>Vegetation protection and restoration</li> </ul>
Temporary reduction in air quality during construction  Temporary reduction in air quality during construction  Assess nearby noise sensitive areas to comply with MTO Noise Policy  Land use resources – agricultural, wholesale produce market, experimental research station  Holland Marsh Drainage Scheme  Emergency service access  Bell; Hydro in study area  Canada Post mail boxes at Canal Road / Wist Road  Canada Post mail boxes at Canal Road / Wist Road  Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way  Management of excess materials in proximity to sensitive areas  Follow-up to Contamination Overview Study  Follow-up to Contamination Overview Study	Groundwater	Confirm groundwater sensitive ecosystems     Identify private wells	Confirm potential impacts to groundwater recharge area and private wells
nd socio-economic environment  • Land use resources – agricultural, wholesale produce market; experimental research station  • Holland Marsh Drainage Scheme • Emergency service access • Bell: hydro in study area • Canada Post mail boxes at Canal Road / Wist Road • Canada Post mail boxes at Canal Road / Wist Road • Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way • Management of excess materials in proximity to sensitive areas • Follow-up to Contamination overview Study • Follow-up to Contamination overview Study	Surface water	Drainage associated with the improvements	Low Impact Development (LID) drainage scheme proposed to deal with storm water quality and quantity issues
Onomic environment  Land use resources – agricultural, wholesale produce market; experimental research station  Holland Marsh Drainage Scheme Emergency service access Ball hydro in study area  Canada Post mail boxes at Canal Road / Wist Road  Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way  Management of excess materials in proximity to sensitive areas  Follow-up to Contamination Overview Study	Air quality	Temporary reduction in air quality during construction	Construction methods and operational constraints
Land use resources – agricultural; wholesale produce market; experimental research station     Holland Marsh Drainage Scheme     Emergency service access     Bell; hydro in study area     Canada Post mail boxes at Canal Road / Wist Road     Canada Post mail boxes at Canal Road / Wist Road     Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way     Management of excess materials in proximity to sensitive areas     Rollow-up to Contamination Overview Study	Noise	Assess nearby noise sensitive areas to comply with MTO Noise Policy	
Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way  Ontamination     Management of excess materials in proximity to sensitive areas     Follow-up to Contamination Overview Study	Land-use and socio-economic environment	Land use resources – agricultural; wholesale produce market; experimental research station     Holland Marsh Drainage Scheme     Emergency service access     Bell; hydro in study area     Canada Post mail boxes at Canal Road / Wist Road	
Management of excess materials in proximity to sensitive areas     Follow-up to Contamination Overview Study	Cultural environment	<ul> <li>Built Heritage and Cultural Landscapes – no known archaeological sites directly adjacent to Highway 400 right-of-way</li> </ul>	<ul> <li>Stage 1 archaeological assessment has determined that the existing highway right-of-way is considered free of archaeological concerns</li> </ul>
	Property, waste, and contamination	<ul> <li>Management of excess materials in proximity to sensitive areas</li> <li>Follow-up to Contamination Overview Study</li> </ul>	Complete excess materials management plan     Complete designated substance survey     Update Phase 1 Environmental Site Assessment

# Transportation Environmental Study Report Addendum

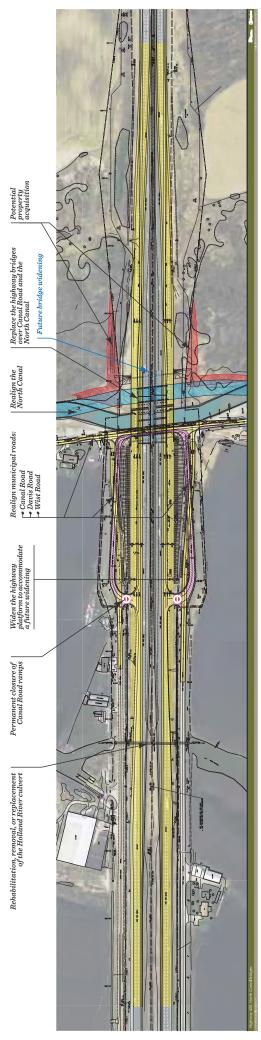
to 1.0 km South of Highway 89, therefore a Transportation Environmental Study Report (TESR) review is required. since the completion of the Highway 400 Planning and Preliminary Design Study from the South Canal Bridge with consideration of future widening to the ultimate 10-lane configuration. More than 5 years have passed The scope of this assignment involves providing new twin structures that carry three lanes in each direction,

In response to a request from a person or party to review the status of a project, the Minister of the Environment and Climate Change (MOECC) may order the proponent of a project to comply with Part II of the Environmental Assessment Act (EAA). Such an order from the Minister is reterred to as a Part II of the Exp. The Commonly called a "burp-up" in the status of the project; orfit of the EAA addresses what is reterred to as an Individual Environmental Assessment (Individual EAI, an Individual EA equies that the proponent of a project efficie a planning and design process specifically for that proposed project of the project of

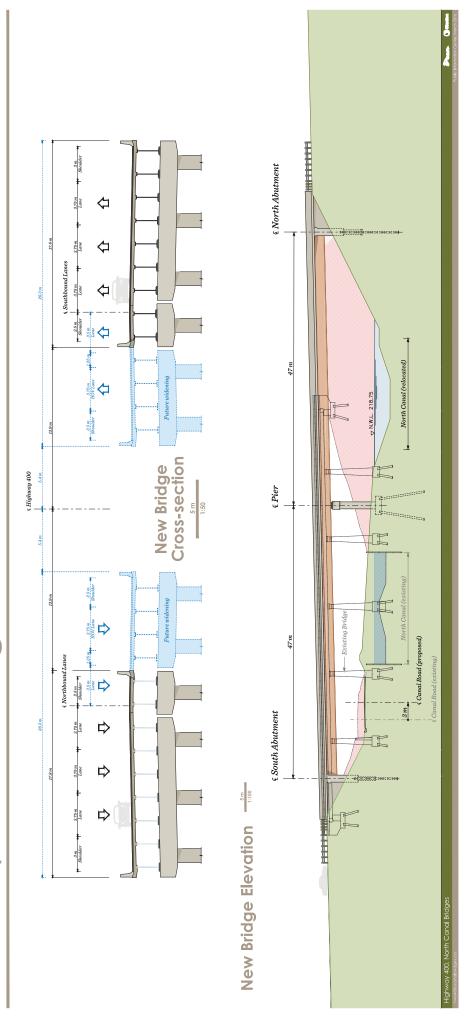
# In the table below, only **bold** items are eligible for a Part II Order \*

Design Element	2003 TESR Recommendations (Preliminary Design)	Pre-detail Design Recommendations
Horizontal alignment	Project limits from the South Canal Bridge to 1.0 km south of Highway 89.	Project limits are within original study area.
Vertical alignment	No change in vertical alignment.	Minor profile change to Highway 400 at bridge (400 mm)
Highway drainage	Stormwater Management (SWM) Pond, adjacent to Wist Road.	Low Impact Development (LID) ditches with sediment control features.
	Rehabilitate or replace the Holland River Culvert under Highway 400.	Additional alternative under review includes abandoning Holland River Culvert.
Bridge	Rehabilitate and widen existing Highway 400 structures over Canal Road and North Canal.	Replace existing Highway 400 structures over Canal Road and North Canal.
Canal Road ramps	Closure of the Canal Road access from Highway 400.	Closure of the Canal Road access from Highway 400.
Wist Road and Davis Road	Concepts for realignment and profile changes to Wist Road and Davis Road.	Wist Road and Davis Road will be realigned to accommodate widening of the Highway 400 embankment.
Canal Road	No change or impact to Canal Road.	Canal Road realigned and lowered. Canal Road closed under the bridge during construction.
North Canal	No changes to North Canal alignment within the MTO right-of-way.	Realignment of the North Canal further north. Additional property acquisition required.





# The Proposed Bridge







# Thank you for attending

# To provide your comments,

please fill out a comment sheet and place it in the comment box at today's meeting, or send your comments to:

### Mrs. Donna Madden,

Consultant Environmental Planner Stantec Consulting Ltd. 200–835 Paramount Dr Stoney Creek, ON L8J 0B4

: 905-385-3234 (+0 collect)

**ii**: 905-385-3534

### Mr. Mike Trader, P.Eng.

Consultant Project Manager Stantec Consulting Ltd. 200–835 Paramount Dr Stoney Creek, ON L8J 0B4

: 905-385-3234 (+0 collect)

**1**: 905-385-3534

## Mr. Lukasz Grobel, P.Eng.

MTO Project Manager Ministry of Transportation 159 Sir William Hearst Avenue, 4th Floor

Toronto ON M3M 0B7

**1**:416-235-5616

Web: hwy400ncanalbridges.ca

■ Email: comments@hwy400ncanalbridges.ca

We would appreciate receiving your comments by April 30, 2016.

# Your input is important!

Comments may be submitted at any time during the study, however, we encourage you to submit your comments now so they can be considered early in the design process.

# Freedom of Information & Protection of Privacy Act

Comments and information regarding this study are being collected to satisfy the requirements of the *Environmental Assessment Act*, and in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will be part of the public record.