MINISTRY OF TRANSPORTATION, CENTRAL REGION

QEW AND HIGHWAY 403 (FREEMAN) INTERCHANGE

QEW FROM THE NORTH END OF THE BURLINGTON SKYWAY TO GUELPH LINE & HIGHWAY 403 FROM FREEMAN INTERCHANGE TO GRINDSTONE CREEK

PRELIMINARY DESIGN AND CLASS ENVIRONMENTAL ASSESSMENT STUDY
2016-E-0005

TRANSPORTATION ENVIRONMENTAL STUDY REPORT

DECEMBER 2020

wsp

Ontario

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CLASS ENVIRONMENTAL ASSESSMENT FOR PROVINCIAL TRANSPORTATION FACILITIES (2000)
GROUP 'B' PROJECT

2016-E-0005

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DISCLAIMER

WSP prepared this report solely for the use of the intended recipient, Ministry of Transportation (MTO), in accordance with the professional services agreement between the parties. The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment.

The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

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Benchmark and elevations used in this report are primarily to establish relative elevation differences between the specific testing and/or sampling locations and should not be used for other purposes, such as grading, excavating, construction, planning, development, etc.

Design recommendations given in this report are applicable only to the project and areas as described in the text and then only if constructed in accordance with the details stated in this report. The comments made in this report on potential construction issues and possible methods are intended only for the guidance of the designer. The number of testing and/or sampling locations may not be sufficient to determine all the factors that may affect construction methods and costs. We accept no responsibility for any decisions made or actions taken as a result of this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time.

This limitations statement is considered an integral part of this report.

THE PUBLIC RECORD

This document has been submitted electronically to the following office of the Ministry of the Environment, Conservation and Parks to be placed in the Public Record:

Ministry of the Environment, Conservation and Parks
Central Region Office
5775 Yonge Street, 8th Floor
Toronto ON, M2M 4J1

This Transportation Environmental Study Report is also available for a 45-day period starting **December 3, 2020** on the project website (www.qew403freeman.ca).

NOTICE OF STUDY COMPLETION

QEW AND HIGHWAY 403 FREEMAN INTERCHANGE (2016-E-0005)
PRELIMINARY DESIGN STUDY AND CLASS ENVIRONMENTAL ASSESSMENT

STUDY

The **Ontario Ministry of Transportation** (MTO) has retained **WSP Canada Group Limited** to undertake a Preliminary Design and Class Environmental Assessment (Class EA) Study for the Queen Elizabeth Way (QEW) from the north end of the Burlington Skyway to Guelph Line and Highway 403 from QEW to Grindstone Creek, in the City of Burlington. The study area is shown on the key plan.

The study includes:

- Rehabilitation, widening or replacement of bridges in the study area;
- Improvements to the QEW and Highway 403 through the Freeman Interchange;
- Improvements to interchange ramps, drainage and illumination and other related works; and
- Environmental mitigation measures.

PROCESS

This study followed the approved environmental planning process for Group 'B' projects under the *Class Environmental Assessment for Provincial Transportation Facilities* (2000).

The Preliminary Design has been completed and a Transportation Environmental Study Report (TESR) has been prepared and made available for public review. The TESR documents the existing conditions, transportation opportunities, consultation undertaken, generation, assessment and evaluation of alternatives, the recommended plan, and a summary of environmental issues, potential mitigation measures and commitments to future works.

The TESR is available for a 45-day review period from **December 3 2020 to January 17, 2021** on the project website at **www.qew403freeman.ca.** In light of COVID-19 and associated physical distancing requirements for the foreseeable future, this report will only be available for online review.

COMMENTS

Interested persons may provide written comments to our project team by **January 17, 2021**. All comments and concerns should be sent directly to Cameron Bevers at the Ontario Ministry of Transportation (MTO).

Mr. Cameron Bevers
Project Manager
Ministry of Transportation - Central Region
159 Sir William Hearst Avenue, 4th Floor
Toronto, ON M3M 0B7
Cameron.Bevers@ontario.ca

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 Park
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

Requests should also be sent to Cameron Bevers by mail or by e-mail.

This Notice issued December 3, 2020.

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

Ontario

EXECUTIVE SUMMARY

Project Overview

This Transportation Environmental Study Report (TESR) documents the Preliminary Design Study and Class Environmental Assessment (EA) undertaken by the Ontario Ministry of Transportation (MTO) for the Queen Elizabeth Way (QEW) from the north end of the Burlington Skyway to Guelph Line and Highway 403 from QEW to Grindstone Creek, in the City of Burlington. In particular, the objectives of the study include:

- Rehabilitation, widening or replacement of bridges in the study area;
- Improvements to the QEW and Highway 403 through the Freeman Interchange;
- Improvements to interchange ramps, drainage and illumination and other related works;
- A carpool lot near the Plains / Fairview Interchange; and,
- Environmental mitigation measures.

The study followed the approved environmental planning process for Group 'B' projects under the Class Environmental Assessment for Provincial Transportation Facilities (2000).

The project includes approximately 7.2 km of QEW, from east of Guelph line to Burlington Skyway and 5.3 km of Highway 403 from the Freeman Interchange to Grindstone Creek, for a total study length of just under 13 km, in the City of Burlington.

Transportation Needs and Opportunities

As the QEW is a critical element in the provincial highway network, traffic impacts due to the rehabilitation work would have a large, far-reaching impact if they required long term lane closures. To mitigate these impacts, the structures are proposed to be widened in addition to their rehabilitation so that all QEW lanes can be maintained during construction.

To ensure future QEW improvements are not precluded and to minimize throw-away costs associated with the improvements, it is prudent to make sure the QEW structural widening that occurs now for the rehabilitation work is compatible with a long-term plan. As a result, the study also examined the longer-term capacity needs within a project horizon of 2041 to identify the future lane and interchange ramp requirements. This includes requirements for future structural rehabilitation, or replacement where structures have reached the end of their service life.

The QEW, Highway 403 and the QEW and Highway 403 (Freeman) Interchange currently experience significant congestion and operational issues. Given current population and employment forecasts, the traffic volumes will likely continue to grow and congestion will worsen.

Capacity expansion improvements can range from localized operational improvements to the widening and/or replacement of infrastructure to accommodate additional lanes and/or managed lanes. Managed lanes are lanes within a highway that are different from the general-purpose lanes. The use of managed lanes is governed by variables such as pricing, vehicle eligibility, and access control. Types of managed lanes include High-Occupancy Toll (HOT) lanes and High-Occupancy Vehicle (HOV) Lanes. The study considered these improvements as they could not only alleviate current capacity and operational issues, but are also in-line with provincial aims and objectives.

To identify the future traffic capacity requirements, the study included a comprehensive traffic analysis component. The modelling concluded that future congestion levels will be high and continue to worsen unless network improvements are made.

Analysis & Evaluation

The study undertook a comprehensive review and analysis of alternatives for the improvements to the study area. The assessment and evaluation of alternatives consisted of the following key steps:

- Identification of the problems and opportunities within the study area;
- Identification of assessment factors and criteria to be used in evaluating the alternatives:
- Assessment of planning alternatives to establish the most appropriate approach to address the overall problem;
- Assessment of preliminary design alternatives; and
- Selection of an overall recommended plan.

Consultation / Engagement

An extensive stakeholder consultation / engagement program was undertaken to assist in the planning and impact assessment for this project. Throughout this study, the public, external agencies, local and regional municipalities, Indigenous Communities have been engaged.

Numerous opportunities for input from these stakeholders were provided at key points during the study process including two (2) Public Information Centres (PICs), a Noise Information Package mail out, individual face-to-face meetings, and one (1) pop-up event booth. Stakeholder meetings, newspaper advertisements, notification mail outs, and direct contact with the Project Team via mail, email, phone and / or fax took place throughout the study. Additional stakeholder consultation will take place during the subsequent Detail Design phase.

Section 6 summarizes all of the consultation / engagement undertaken during the course of this study.

Preferred Plan

The assessment and evaluation of planning and preliminary design alternatives consisted of the following key steps:

- Identification of the problems and opportunities within the study area;
- Identification of assessment factors and sub-factors to be used in the evaluation of alternatives;
- Assessment of alternatives to the undertaking to establish and approach most appropriate to address the overall problem;
- Development of a long list of alternative methods;
- Assessment and evaluation of short-listed alternative methods; and;
- Establish an overall Recommended Plan.

Based on the comprehensive review and analysis of the alternatives and consultation throughout the study, the Recommended Plan for the study area constitutes three phases:

- Immediate Improvements: Structural rehabilitation of QEW bridges at three locations that have reached their rehabilitation milestones
- Interim Improvements: Addition of one High Occupancy Vehicle (HOV) lane on the QEW and addition of one General Purpose Lane (GPL) on Highway 403, in each direction
- Ultimate Improvements: Addition of one GPL on the QEW, in each direction

The Recommended Plan includes a new carpool lot at the Plains Road East / Fairview Street location identified by the MTO Central Region Carpool Lots Opportunity Study (2007).

Section 7 of the Transportation Environmental Study Report (TESR) further describes and presents the Recommended Plan. The design components of the Recommended Plan will be confirmed in the subsequent Detail Design phase. The Ultimate Improvements (Technically Preferred Alternative) Preliminary Design Plates are included in Appendix A**.**

Potential Environmental Impacts / Proposed Mitigation Measures

Section 8 of the TESR outlines the potential environmental effects associated with the selected design, proposed mitigation measures and commitments to future work. Identified concerns, proposed mitigation measures and future commitments are summarized further in the sections below.

Other Approval Requirements

To implement the Recommended Plan, additional provincial, federal, municipal and utility approvals / permits are required. A number of approvals / endorsements from the following ministries and government agencies will be necessary for the Recommended Plan:

- Department of Fisheries and Oceans Canada
- Ministry of Natural Resources and Forestry
- Ministry of Heritage, Sport, Tourism and Culture Industries
- Ministry of the Environment, Conservation and Parks
- Utility Providers

Discussions with potentially affected utility providers within the study corridor have been initiated. The Recommended Plan requires a number of utilities to be relocated. During subsequent design phases, formal notification and consent will be obtained from relevant authorities.

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EXHIBITS

APPENDICES

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