



G.W.P. 132-90-00

**HIGHWAY 11/17 FOUR-LANING
FROM 800 M WEST OF COUGHLIN ROAD TO RED ROCK ROAD #9
GEOGRAPHIC TOWNSHIP OF LYON AND TOWNSHIP OF RED ROCK,
UNORGANIZED DISTRICT OF THUNDER BAY**

**CLASS ENVIRONMENTAL ASSESSMENT FOR
PROVINCIAL TRANSPORTATION FACILITIES
GROUP 'B' PROJECT**

**MINISTRY OF TRANSPORTATION
NORTHWESTERN REGION**

**ENVIRONMENTAL STUDY REPORT
ADDENDUM**

March 2018

G.W.P. 132-90-00

HIGHWAY 11/17 FOUR-LANING

FROM 800 M WEST OF COUGHLIN ROAD TO RED ROCK ROAD #9

GEOGRAPHIC TOWNSHIP OF LYON AND TOWNSHIP OF RED ROCK,
UNORGANIZED DISTRICT OF THUNDER BAY

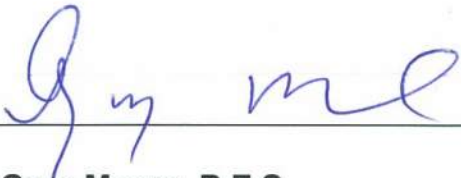
ENVIRONMENTAL STUDY REPORT ADDENDUM

March 2018

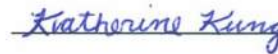
Prepared for the Ministry of Transportation by:

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Consultant Project Manager

THE PUBLIC RECORD

A copy of this document has been submitted to the following office of the Ministry of the Environment and Climate Change to be placed in the Public Record:

Ministry of the Environment and Climate Change

Thunder Bay Regional Office
435 James Street South, Suite 331
Thunder Bay, Ontario P7E 6S7

This Addendum to the Environmental Study Report is also available for public review on the project website (<http://www.hwy11-17-coughlintoredrock9.com>) and during normal business hours at:

Red Rock Public Library

Front Desk
42 Salls Street
Red Rock, Ontario

Township of Dorion

170 Dorion Loop Road
Dorion, Ontario

Dorion Public Library

Front Desk
170 Dorion Loop Road
Dorion, Ontario

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NOTICE OF FILING – ENVIRONMENTAL STUDY REPORT ADDENDUM

Detail Design and Class Environmental Assessment Study Highway 11/17 Four-Laning from Coughlin Road to Red Rock Road #9

THE STUDY

The Ontario **Ministry of Transportation (MTO)** retained **WSP** to undertake the Detail Design and Class Environmental Assessment (EA) Study for the four-lane expansion of Highway 11/17 from 800 m west of Coughlin Road to Red Rock Road #9.

The project includes:

- Expansion of Highway 11/17 to four lanes on a new highway alignment;
- Improvements / modifications to select intersecting side-roads; and
- Two new bridges across the Black Sturgeon River.

In 1997, an Environmental Study Report (ESR) was prepared to document the proposed plans to four-lane this portion of Highway 11/17. The project was approved and subsequently the four-lane highway corridor was designated (protected) in 2003.

ENVIRONMENTAL STUDY REPORT ADDENDUM

MTO is proposing a number of changes to the 1997 EA Approved four-lane plan and has prepared an Addendum to the 1997 Environmental Study Report (ESR). The proposed changes include: a realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing, widening the proposed right-of-way from 90 m to 110 m (minimum), and relocation of Coughlin Road to the east by 35 m.

THE PROCESS

This study is following the approved planning process for Group 'B' projects under the *Class Environmental Assessment for Provincial Transportation Facilities* (2000). In accordance with the Class EA, this Addendum to the original ESR has been prepared to document the proposed changes. The ESR Addendum is available for review at the following locations:

Red Rock Public Library
Front Desk
42 Salls Street
Red Rock, ON

Township of Dorion
170 Dorion Loop Road
Dorion, ON

Dorion Public Library
Front Desk
170 Dorion Loop Road
Dorion, ON

Ministry of the Environment and Climate Change
Thunder Bay Regional Office
435 James Street South, Suite 331
Thunder Bay, ON

The report and additional study information is also available on the project website at www.hwy11-17-coughlintoredrock9.com.

The Addendum will be available for a 30-day review period beginning **Tuesday, March 27, 2018**. If after consulting with ministry staff and consultants, you have serious unresolved concerns, you may request a Part II Order ("bump-up") from the Ministry of the Environment and Climate Change (77 Wellesley Street West, 11th Floor, Toronto, Ontario, M7A 2T5). Opportunities for requesting a Part II Order are only applicable to changes documented in the Addendum.

A copy of your request should also be forwarded to the Ministry of Transportation at the address below. If there are no outstanding concerns received by **Thursday, April 26, 2018** the project will proceed to Detail Design.

COMMENTS

We are interested in any comments or concerns you may have regarding the Addendum and study. Please submit your comments and/or concerns to one of the individuals listed below by **Thursday, April 26, 2018**.

Karen M. Zan, P.Eng., Senior Project Manager
WSP
610 Chartwell Road, Suite 300
Oakville, ON L6J 4A5
tel: 1-877-562-7947 or 289-835-2643
fax: 905-823-8503
e-mail: karen.zan@wsp.com

Kevin Saunders, Senior Project Manager
Ministry of Transportation
615 James Street South
Thunder Bay, ON P7E 6P6
tel: 1-800-465-5034 or 807-473-2109
fax: 807-473-2168
e-mail: kevin.saunders@ontario.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments will be maintained on file for use during the study and, with the exception of personal information, may be included in study documentation and become part of the public record.

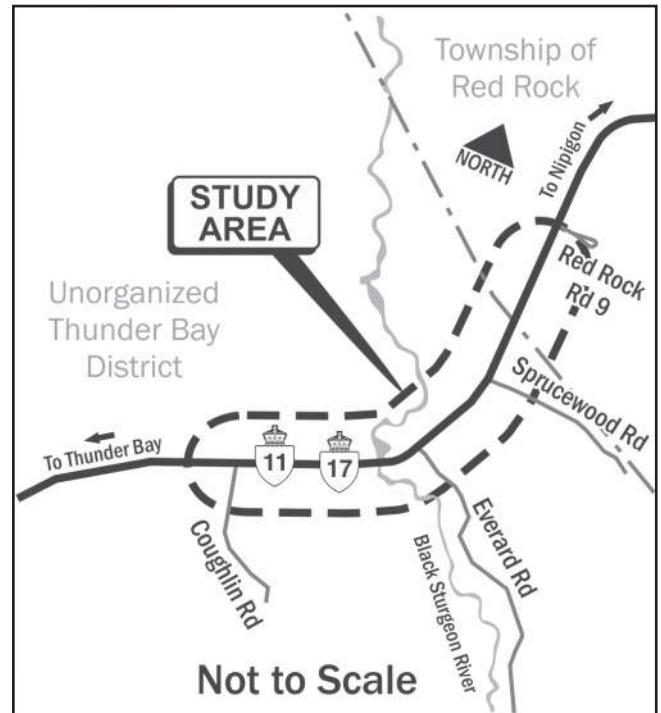


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GLOSSARY

DCR	–	Design and Construction Report
EA	–	Environmental Assessment
ESR	–	Environmental Study Report
MNRF	–	Ministry of Natural Resources and Forestry (<i>formerly Ministry of Natural Resources</i>)
MPP	–	Member of Provincial Parliament
MTO	–	Ontario Ministry of Transportation
PIC	–	Public Information Centre
SAR	–	Species-at-Risk

1.0 Project Summary

1.1 Project Description and Background

In 1996, the Ministry of Transportation (MTO) completed a Planning and Preliminary Design Study for the four-laning of Highway 11/17 from 8 km west of Ouimet easterly 36 km to the Red Rock Township West boundary. The 1996 Planning and Preliminary Design Study included the section from 800 m west of Coughlin Road to Red Rock Road #9, in the unincorporated Township of Lyon, within the Unorganized Thunder Bay District, and in the Township of Red Rock; it is this section that is the focus of the current Detail Design and Class Environmental Assessment Study. An Environmental Study Report (ESR) was filed in January 1997 and received environmental clearance. The study was identified as a Group “B” project and complied with the requirements of the *Provincial Highway Class Environmental Assessment* (1992).

The 1997 ESR documented the following:

- Description of the project, project justification, and its purpose;
- Environmentally significant aspects of the planning, design, and construction of the four-laning within the study limits;
- Description of the alternatives evaluated at the time;
- External agency and public consultation; and
- Anticipated environmental effects, proposed mitigation measures, and monitoring.

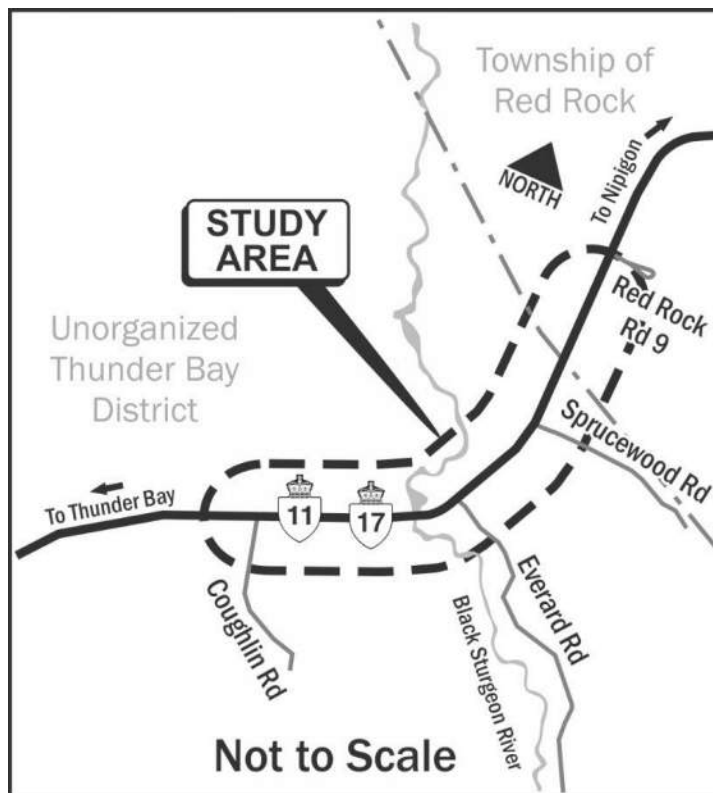
The key design features recommended in the 1997 ESR for the section of Highway 11/17 from 800 m west of Coughlin Road to Red Rock Road #9, included:

- Expansion of Highway 11/17 to four lanes on a new highway alignment;
- Improvements / modifications to select intersecting side-roads; and
- Two new bridges across the Black Sturgeon River.

The proposed new four-lane divided highway was designated as a four-lane facility and registered as a controlled access highway in 2003.

In April 2017, MTO retained WSP to undertake the Detail Design and Class Environmental Assessment (EA) Study for the four-laning of Highway 11/17 from 800 m west of Coughlin Road to Red Rock Road #9. The project location is shown in **Exhibit 1-1**.

Exhibit 1-1: Project Location



The initial design phase includes an update to the current environmental conditions, and a review of the proposed changes to the original design decisions that have occurred since the submission of the original 1997 ESR. An Addendum to the ESR is necessary to document any significant revisions to the original design as part of the requirements of the MTO Class EA process (see **Section 1.2** for further discussion).

The proposed changes to the 1997 EA Approved Plan (documented in the 1997 ESR) for the study area include: a realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing, widening the proposed right-of-way from 90 m to 110 m (minimum), and the relocation of Coughlin Road to the east by 35 m. Further details regarding these proposed changes to the 1997 EA Approved Plan are provided in **Section 3.0**.

The provincial government has committed funding for the expansion of the Highway 11/17 within the study area and construction is anticipated to proceed as early as 2019, subject to the clearance of this Addendum to the ESR, obtaining necessary environmental approvals, and funding. The Northern Highways Program 2017-2021 notes the target completion date of 2021.

1.2 Purpose of the Addendum to the Environmental Study Report

As construction did not commence within five years of the 1997 ESR, this Addendum to the 1997 ESR has been prepared, in part, to provide an update to the current environmental conditions within the study area to determine whether there have been any changes to conditions in the study corridor that may affect, or be affected by, the proposed four-laning of Highway 11/17. This Addendum also provides a review of any proposed changes to the commitments made in the 1997 ESR (and/or the basic intent of the undertaking) that may be significant.

Given that some changes to the original 1997 EA Approved Plan (as documented in the 1997 ESR) are proposed, an Addendum to the ESR must be prepared and made available for a 30-day review period. The proposed changes include: realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing, widening the proposed right-of-way from 90 m to 110 m (minimum), and relocation of Coughlin Road to the east by 35 m. A Notice of the ESR Addendum Filing has been sent to external agencies, Indigenous communities, affected and interested parties via direct notification letters, property owners within the vicinity of the study area through Canada Post's unaddressed ad-mail service (i.e. bulk), published in local newspapers, and posted on the project website (www.hwy11-17-coughlintoredrock9.com).

During the 30-day public review period, parties are encouraged to bring their concerns regarding the proposed changes to the 1997 EA Approved Plan to the attention of MTO by **April 26, 2018**. If you have serious unresolved concerns after consulting with MTO and its Consultant, you have the right to submit a Part II Request ("bump-up") to the Minister of the Environment and Climate Change (11th Floor Ferguson Block, 77 Wellesley Street West, Toronto, Ontario, M7A 2T5) to elevate this project to an Individual Environmental Assessment. Only the changes identified in the Addendum to the ESR are eligible for "bump-up".

A copy of the bump-up request should also be sent to the MTO and Consultant Project Manager at the following addresses:

Kevin Saunders

Senior Project Manager
Ministry of Transportation
615 James Street South
Thunder Bay, ON P7E 6P6
tel: 1-800-465-5034 or 807-473-2109
fax: 807-473-2168
e-mail: kevin.saunders@ontario.ca

Karen M. Zan, P.Eng.

Senior Project Manager
WSP
610 Chartwell Road, Suite 300
Oakville, ON L6J 4A5
tel: 1-877-562-7947 or 289-835-2643
fax: 905-823-8503
e-mail: karen.zan@wsp.com

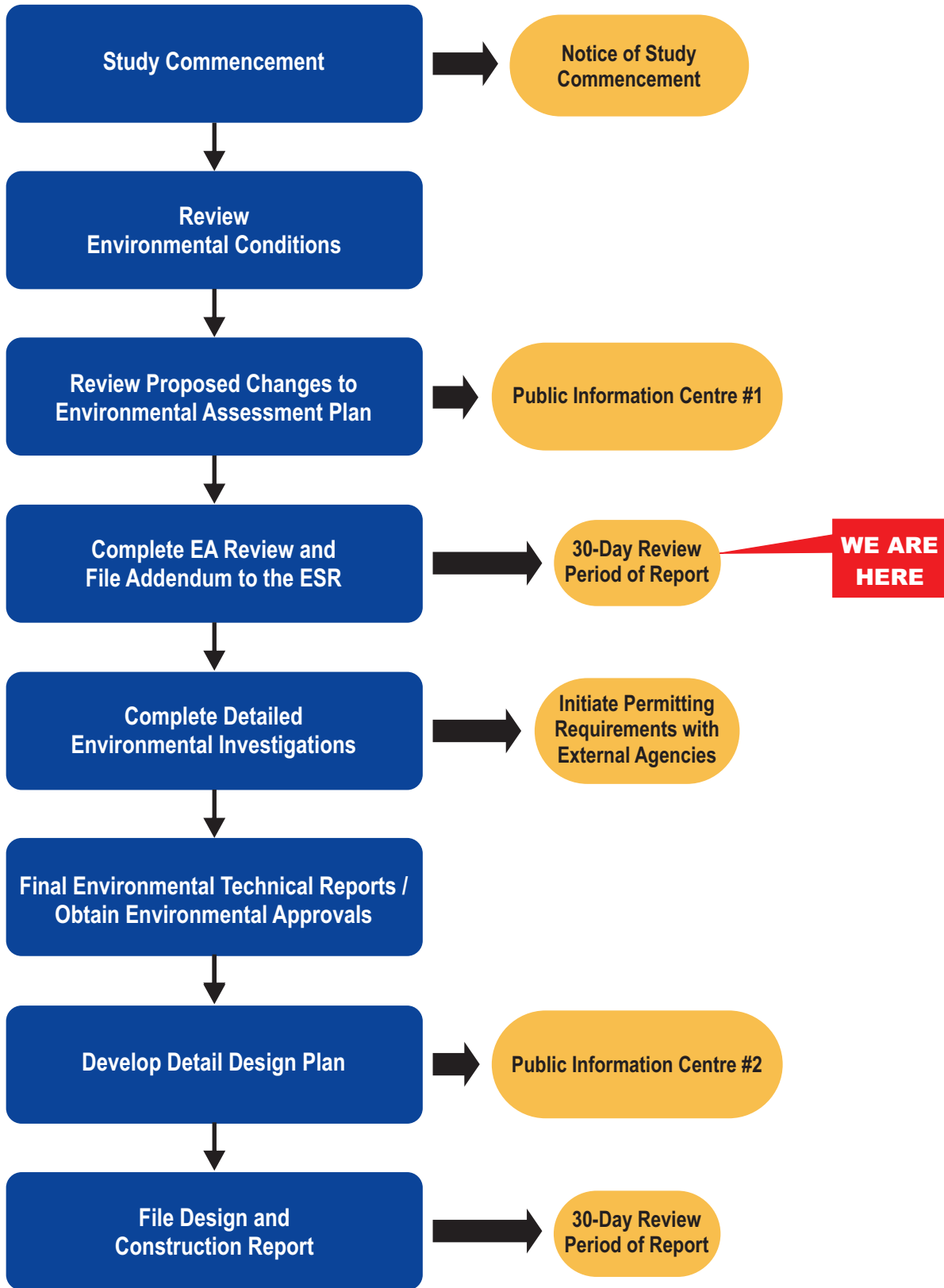
1.3 Study Process

The key steps in this Detail Design Study are highlighted in **Exhibit 1-2**. Upon completion of this Detail Design Study, a Design and Construction Report (DCR) will be prepared to document the updated Detail Design plan and the proposed environmental mitigation measures. There is a possibility that the final design plans may identify minor design modifications or refinements that could result in environmental benefits or impacts that may not have been anticipated or identified in this Addendum to the ESR. All minor design modifications or refinements to the final design plans and resultant environmental benefits or impacts will also be documented in the DCR. The DCR will be made available for a 30-day public and external agency review period, as shown in **Exhibit 1-2**. A notice of DCR filing will be sent to contacts on the study mailing-list, posted on the project website, and published in local newspapers when the DCR is available for viewing.

Should significant design modification or refinements be required as a result of the detailed environmental investigations, a second Addendum to the ESR will be prepared and made available for a 30-day public review prior to the preparation of the DCR.

**KEY
ACTIVITY**

**CONSULTATION
MILESTONE**



2.0 Existing Environmental Conditions and Changes

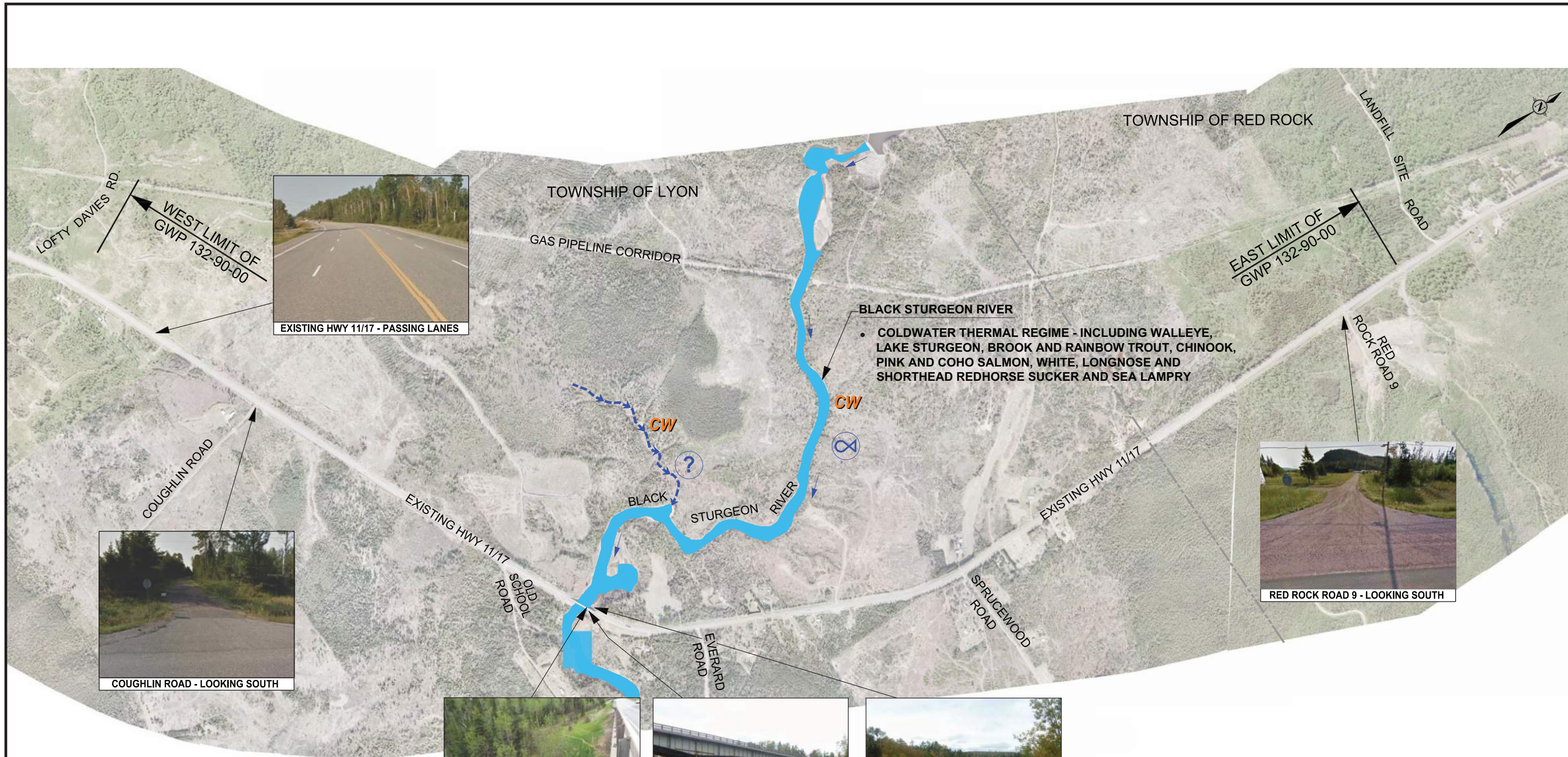
As noted in **Section 1.2**, the proponent must carry out a review of any portion of a project for which construction has not commenced and a Design and Construction Report (DCR) has not been submitted within five years of the Notice of Submission for the Environmental Study Report (ESR). This review must consider changes that have taken place since the submission of the original ESR, including new conditions that exist within the study area.

This section reviews and compares the current environmental conditions with the environmental conditions documented in the 1997 ESR to determine if there have been any significant changes that may affect the proposed four-laning of Highway 11/17 within the study limits. The 2017 existing environmental conditions are presented in **Exhibit 2-1** while the comparison table of the 1997 environmental conditions and the 2017 existing environmental conditions are presented in **Exhibit 2-2**.

As part of the Detail Design Study to date, initial field reconnaissance and a preliminary review of existing terrestrial and aquatic has been completed to date and documented in **Exhibit 2-2**. Further natural environmental field investigations along the alignment are scheduled to occur Spring / Summer 2018 to augment data collection regarding current environmental conditions in accordance with MTO's current guidelines, standards and policy directives. The collection of updated information was and will be necessary to build upon the existing data, supplement the current existing conditions and constraints, and identify required agency permits. The 1997 existing conditions were obtained from the 1997 ESR. The preliminary data collection and 2017/2018 field investigations will be used to complete an impact assessment on the proposed alignment revisions outlined on the preferred plan and to identify mitigation measures. The findings of these detailed investigations, impact assessments of the preferred plan, and recommended mitigation measures will be presented at the second Public Information Centre, and documented in the DCR later in the study.

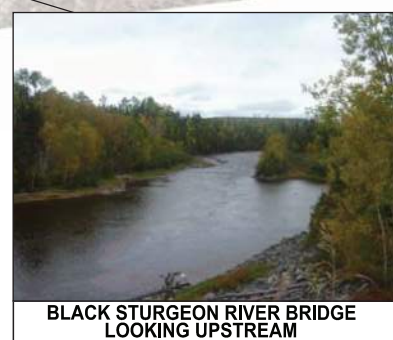
A noise impact assessment will be undertaken in Spring 2018 to assess the potential noise impacts to adjacent Noise Sensitive Areas based on current MTO noise guidelines. The findings of the noise assessment will be presented at the second Public Information Centre, which is anticipated in Fall 2018.

A Stage 1 archaeological assessment will be completed in Spring 2018 for the entire corridor (right-of-way to right-of-way) within the study limits. Further Stage 2 archaeological assessments may be required if previously unassessed areas are impacted by the proposed changes. All archaeological assessments will be carried out in conformance with the Ministry of Tourism, Culture and Sport's (MTCS) *Standards and Guidelines* (2011) and submitted to MTCS for archaeological concurrency prior to construction.



BLACK STURGEON RIVER

- COLDWATER THERMAL REGIME - INCLUDING WALLEYE, LAKE STURGEON, BROOK AND RAINBOW TROUT, CHINOOK, PINK AND COHO SALMON, WHITE, LONGNOSE AND SHORHEAD REDHORSE SUCKER AND SEA LAMPRY



LEGEND

- Tributary of Black Sturgeon River
- Direction of Flow
- Coldwater Thermal Classification
- Direct Fish Use
- Unknown Fish Use (to be confirmed)

Exhibit 2-2: Comparison between 1997 and 2017 Review of Environmental Conditions

Factor / Indicator	Existing Environmental Conditions (1997)	Review of Existing Environmental Conditions (2017) ¹
Natural Environment		
Geology and Soils	<ul style="list-style-type: none"> The bedrock within the study area is entirely composed of rock formed in the Precambrian era. Rockland generally dominates the landscape. 	<ul style="list-style-type: none"> No changes since 1997. Additional geotechnical investigations to support Detail Design will be carried out in Spring/Summer 2018
Vegetation	<ul style="list-style-type: none"> Dominant tree species along the highway corridor include: Poplar, White Birch, Balsam Fir, Black Spruce, White Cedar, and White Spruce. Most forests have good understory of ferns, grasses and herbaceous plants. No significant species identified by the Ministry of Natural Resources and Forestry (MNR) (<i>formerly Ministry of Natural Resources</i>). Vegetation within the vicinity of the Black Sturgeon River bridges consist of scattered Poplar, Alder, Red-osier Dogwood with Joe Pye Weed, Horsetail and grasses. 	<ul style="list-style-type: none"> Data collection and assessment of the vegetation and vegetation communities within the remainder of the study limits will be completed in the Spring/Summer of 2018. Vegetation species and communities are anticipated to be consistent with the 1997, with potential changes to composition and age. No vegetation species or communities of Conservation Concern were noted by the MNR to be within the project area.
Wildlife and Wildlife Habitat	<ul style="list-style-type: none"> Area supports a wide range of species, including: moose, black bear, deer, rabbit, gamebirds, and waterfowl. An osprey nest was observed east of the Black Sturgeon River, approximately 3 km south of existing Highway 11/17. 	<ul style="list-style-type: none"> Data collection and assessment of the wildlife and wildlife habitat conditions within the remainder of the study area will be completed in the Spring/Summer of 2018. The project area continues to support a wide range of common wildlife species and habitats.

¹ Existing conditions based on preliminary review of existing natural environmental conditions. Detailed natural environmental investigations will be completed in Spring/Summer 2018, potential for impacts will be reviewed, mitigation measures developed as required and documented in the Design and Construction Report.

Factor / Indicator	Existing Environmental Conditions (1997)	Review of Existing Environmental Conditions (2017) ¹
	<ul style="list-style-type: none"> No species of conservation concern were identified. 	<ul style="list-style-type: none"> Area known to be of high use to moose. Mitigation to reduce moose attractants/accidents will be implemented. A Bald Eagle nest was noted by MNRF to be present on a hydro tower ~1.2 km north of the Black Sturgeon Crossing. No additional wildlife species or communities of Conservation Concern or habitats were noted by MNRF to be within the project area.
<p>Fish and Fish Habitat</p>	<p><u>Overall Study Area</u></p> <ul style="list-style-type: none"> Waterbodies within the study area are identified as cold water streams. Streams flowing into Lake Superior are considered significant by MNRF. Lake Superior tributaries contain a wide range of aquatic wildlife, such as resident brook trout, rainbow trout, salmon, pickerel, northern pike, smallmouth bass, perch suckers and cyprinids. No species of conservation concern were identified. <p><u>Black Sturgeon River</u></p> <ul style="list-style-type: none"> Banks predominantly consist of sand, with erosion evident on the north-east caused by highway run-off. Meander on north-east has been diverted or straightened to protect the east bank near the Black Sturgeon River bridges. Covered with clubrush, sedges and horsetail. Black Sturgeon River was assessed to provide little habitat due to lack of significant instream cover. 	<ul style="list-style-type: none"> Additional data collection will be carried out in Spring/Summer 2018 to document existing conditions at all watercourse crossing locations. <p><u>Black Sturgeon River</u></p> <ul style="list-style-type: none"> MNRF indicated that Black Sturgeon River is a coldwater system that supports a number of native and non-native species; some of which move from Black Bay to just below the Camp 43 dam (through highway corridor) for migration to spawning habitat. These include a number of Salmonid species as well as Lake Sturgeon, a species of conservation concern. In 2016 Northern Brook Lamprey were also confirmed within Black Sturgeon River generally. There are a few unnamed watercourses along this stretch that also have the potential to support fish within the highway ROW reaches, including a direct tributary of Black Sturgeon River. Several groundwater fed tributaries enter into Black Sturgeon River. The banks of this reach of the Black Sturgeon River are known to be prone to slumping and will be taken into consideration in the design of the new Black Sturgeon River bridges. Camp 43 dam (undergoing separate environmental review) is situated north of the highway crossing.

Factor / Indicator	Existing Environmental Conditions (1997)	Review of Existing Environmental Conditions (2017) ¹
Social and Cultural Environment		
Land-use	<ul style="list-style-type: none"> The area is generally characterized by rural land uses with majority of the residential developed occurring immediately west of the Township of Red Rock boundary in the vicinity of the Black Sturgeon River. There is a trailer park along Highway 11/17 (Black Sturgeon Mobile Trailer Park). There is an airfield located on the north side of the Highway which is private, grassed and has no structures. There are no businesses. 	<ul style="list-style-type: none"> No significant changes since 1997. Black Sturgeon Mobile Trailer Park and privately owner airfield no longer exist.
Noise Sensitive Areas	<ul style="list-style-type: none"> 25 residences exist in the community east of the Black Sturgeon River. 	<ul style="list-style-type: none"> Existing residences have not significantly changed since 1997.
Agriculture	<ul style="list-style-type: none"> Soils within the Thunder Bay corridor are classified as Class 3, 5 and 7. General agricultural conditions exist in the study area and adjacent to the existing Highway 11/17. A small potato operation exists east of Coughlin Road south of Highway 11/17. A tree farm (A and R Greenhouses Ltd.) exists just east of the study area. 	<ul style="list-style-type: none"> Agricultural operations exist within the study area. A and R Greenhouses Ltd. moved west of the current study area.
Archaeology and Heritage	<ul style="list-style-type: none"> The 1997 ESR recommended future archaeological assessments be conducted along the corridor. 	<ul style="list-style-type: none"> A Stage 1 archaeological assessment will be carried out in Spring 2018 to determine if areas containing archaeological potential exist within the study area. All areas recommended for additional Stage 2 archaeological assessment will be carried out later in the study and cleared with the Ministry of Tourism, Culture and Sport.

Factor / Indicator	Existing Environmental Conditions (1997)	Review of Existing Environmental Conditions (2017)¹
Heritage	<ul style="list-style-type: none">No heritage features were documented in the 1997 ESR.	<ul style="list-style-type: none">The Black Sturgeon River Bridges were screened out with the <i>Heritage Bridges - Identification and Assessment Guide</i> (Ontario 1945-1965) as not having heritage value.

3.0 Description of the Proposed Design Changes from 1997 EA Approved Plan

This Detail Design and Class Environmental Assessment (EA) Study includes a review of the commitments made in the 1997 Environmental Study Report (ESR) based on new engineering standards, and new environmental constraints. The review of the EA approved highway alignment for Highway 11/17 was based on new highway engineering standards, and new environmental constraints. The review of the 1997 EA Approved Plan includes the following:

- Review of Highway Alignment;
- Review of Highway Cross-Section; and
- Review of Intersecting Roadway Alignments.

Based on the review of the 1997 EA Approved Plan and integration of comments received through the consultation / engagement process, the Ministry is proposing three design changes to the EA approved plan. The proposed design changes to the EA approved plan are summarized as follows:

- Widening the proposed right-of-way from 90 m to 110 m;
- Realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing depicted in the 1997 EA Approved Plan; and
- Relocation of Coughlin Road to the east by 35 m.

Further refinements to the property requirements may be required as the grading design progresses as part of Detail Design, gather more detailed soils information and undertake legal surveys of the various parcels. Should significant design modification or refinements to the proposed plan be required as a result of the detailed environmental investigations, a second Addendum to the ESR will be prepared and made available for a 30-day public review. Any minor design modifications or refinements to the final design plans and resultant environmental benefits or impacts will be documented in the DCR.

Exhibits 3-1a to 3-1d illustrate the updated preferred plan for the four-laning of Highway 11/17 within the study limits, while **Exhibit 3-2** illustrates the updated preferred plan for Coughlin Road. **Exhibit 3-3** illustrate the typical cross section for the updated plan. The following sub-sections summarize the proposed design changes from the 1997 Approved Plan in greater detail.

3.1 Review of Highway Alignment

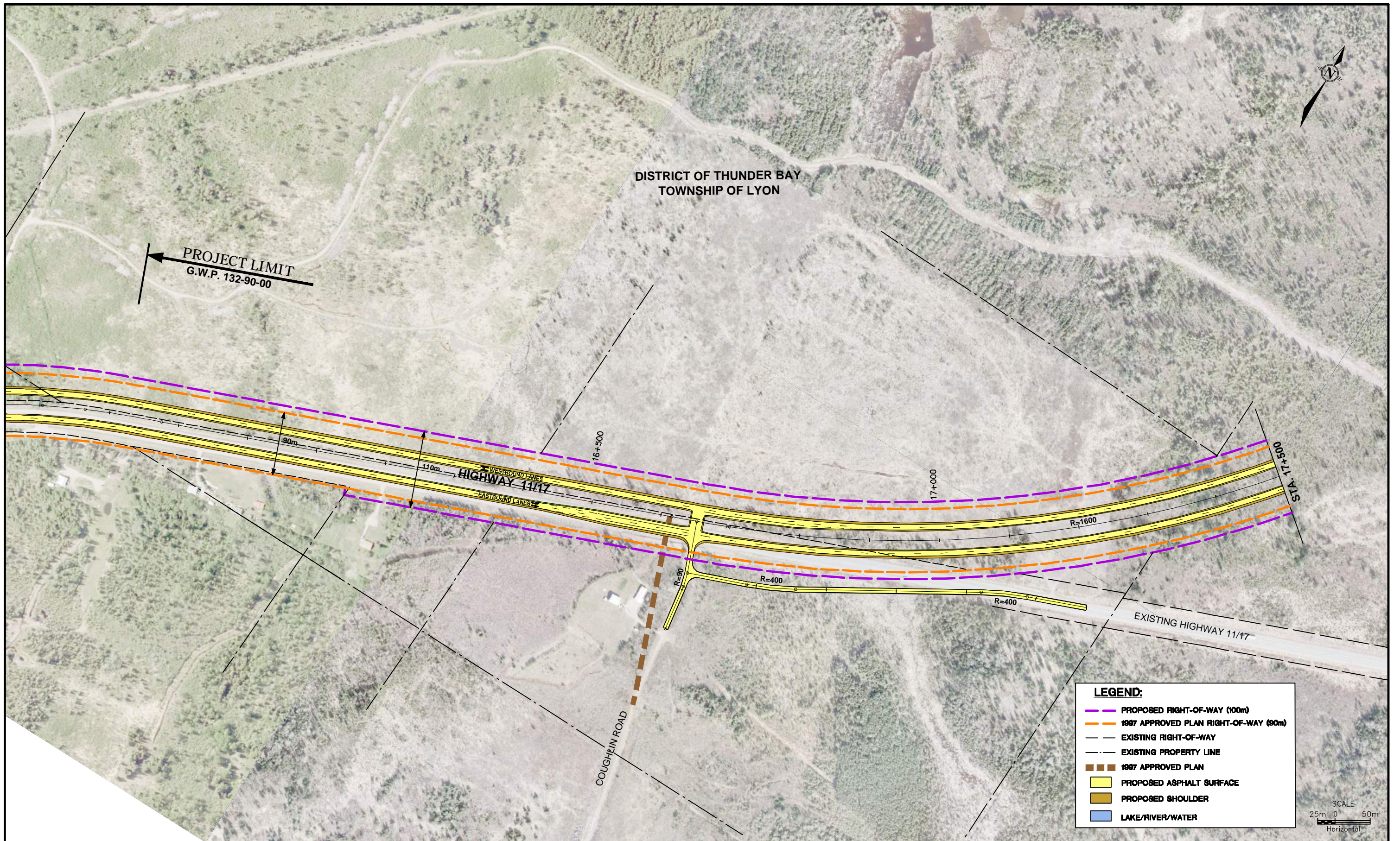
The four-laning alignment identified in the 1997 EA Approved Plan was reviewed to ensure the proposed highway alignment meets current highway engineering standards and minimizes / avoids existing environmental constraints. This resulted in a proposed realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing depicted in the 1997 EA Approved Plan. The median crossing at Landfill Site Road will accommodate any required turnarounds. No additional revisions to the 1997 ESR approved alignment for Highway 11/17 are proposed.

3.2 Review of Intersecting Roadway Alignments

Intersecting roadway alignments identified in the 1997 EA Approved Plan were reviewed in consideration of current highway design standards, as well as impact to privately owned properties. As a result, the alignment for Coughlin Road has been shifted approximately 35 m to the east. This revision will move the proposed Coughlin Road alignment back in line with the existing alignment and will significantly reduce the impact on a residential property located immediately to the west of Coughlin Road and Highway 11/17.

3.3 Review of Highway Cross-Section

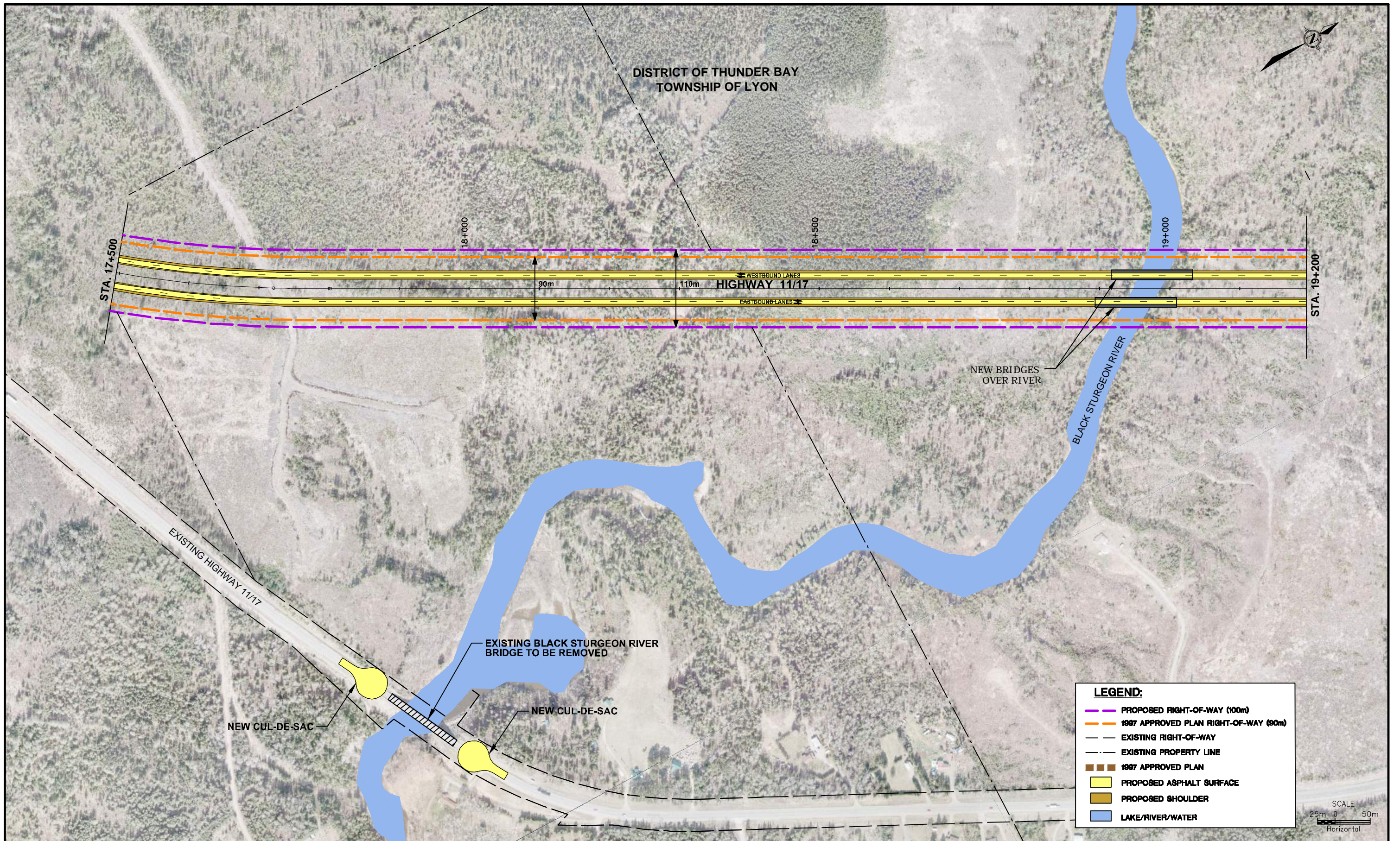
MTO is proposing to increase the right-of-way from 90 m to 110 m (minimum) as a result of revisions to highway engineering design and safety standards that have occurred since the 1997 ESR. This will accommodate a 30 m median and flatter (4:1) side slopes. In addition, the decision to provide a minimum right-of-way width of 110 m ensures a consistent corridor width for Highway 11/17 between Thunder Bay and Nipigon.



W.P. 132-90-00
HIGHWAY 11/17 FOUR-LANING
 From Coughlin Road to Red Rock Road 9
 Environmental Study Report Addendum

PREFERRED PLAN - (Part 1 of 4)

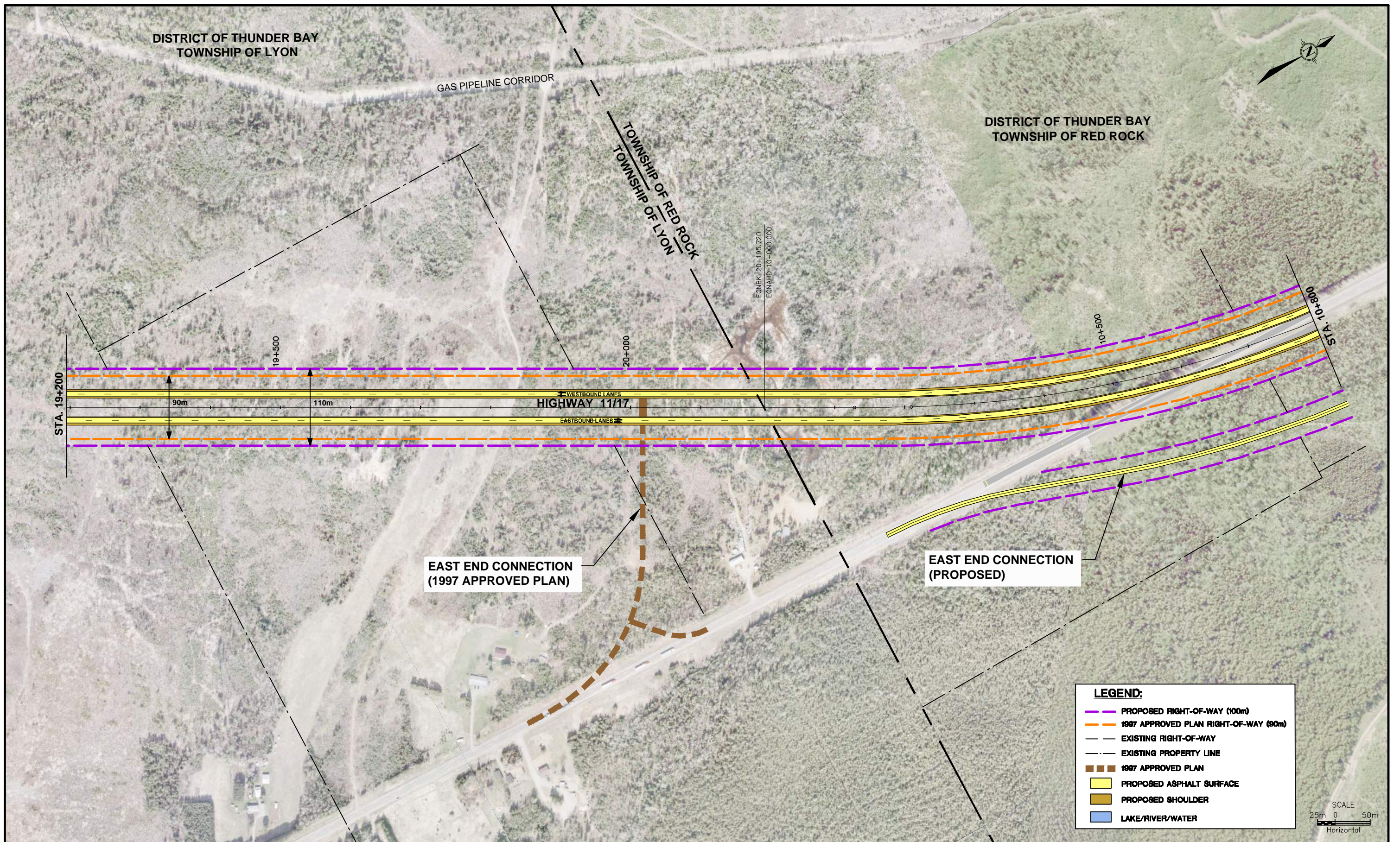
EXHIBIT
3-1a



W.P. 132-90-00
 HIGHWAY 11/17 FOUR-LANING
 From Coughlin Road to Red Rock Road 9
 Environmental Study Report Addendum

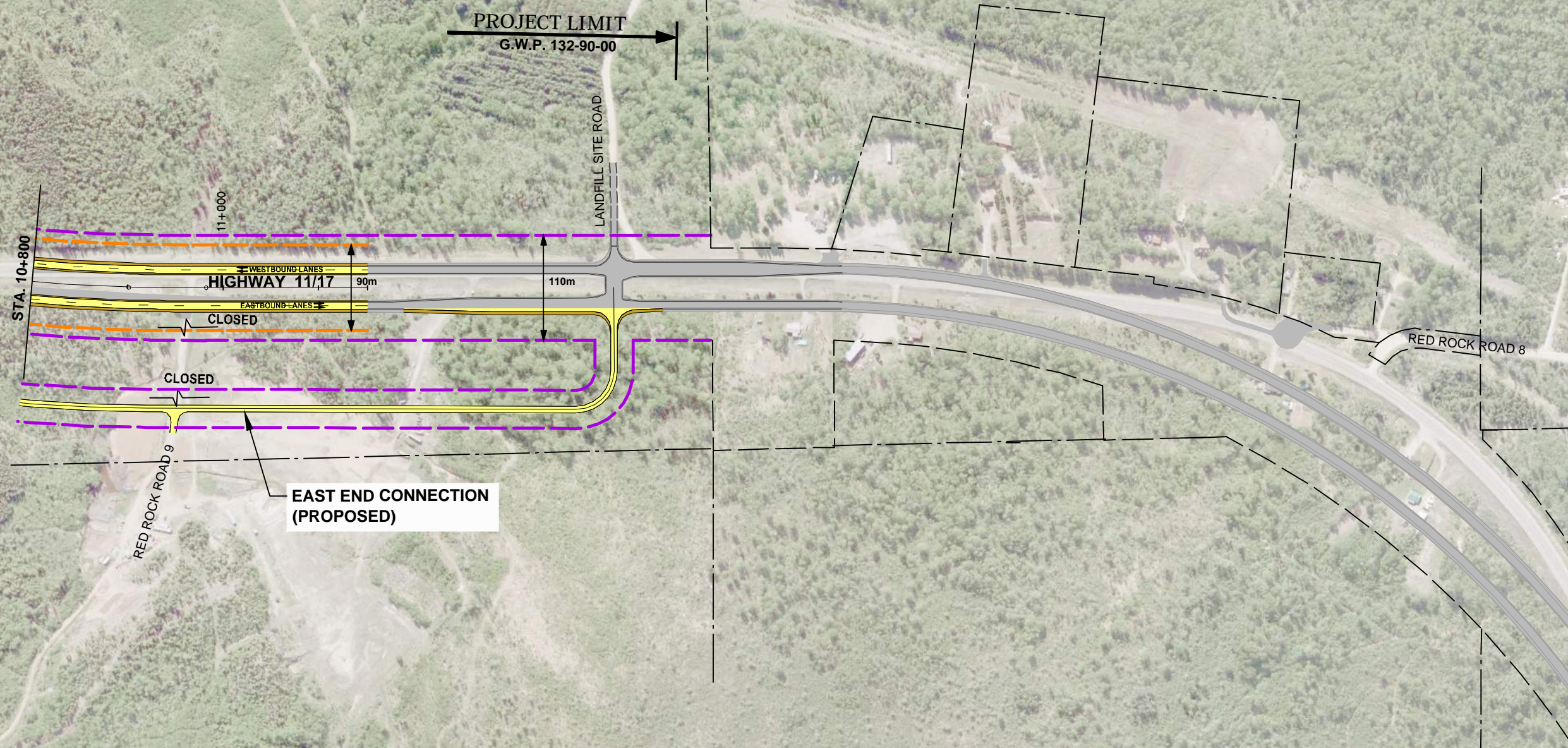
PREFERRED PLAN - (Part 2 of 4)

EXHIBIT
 3-1b





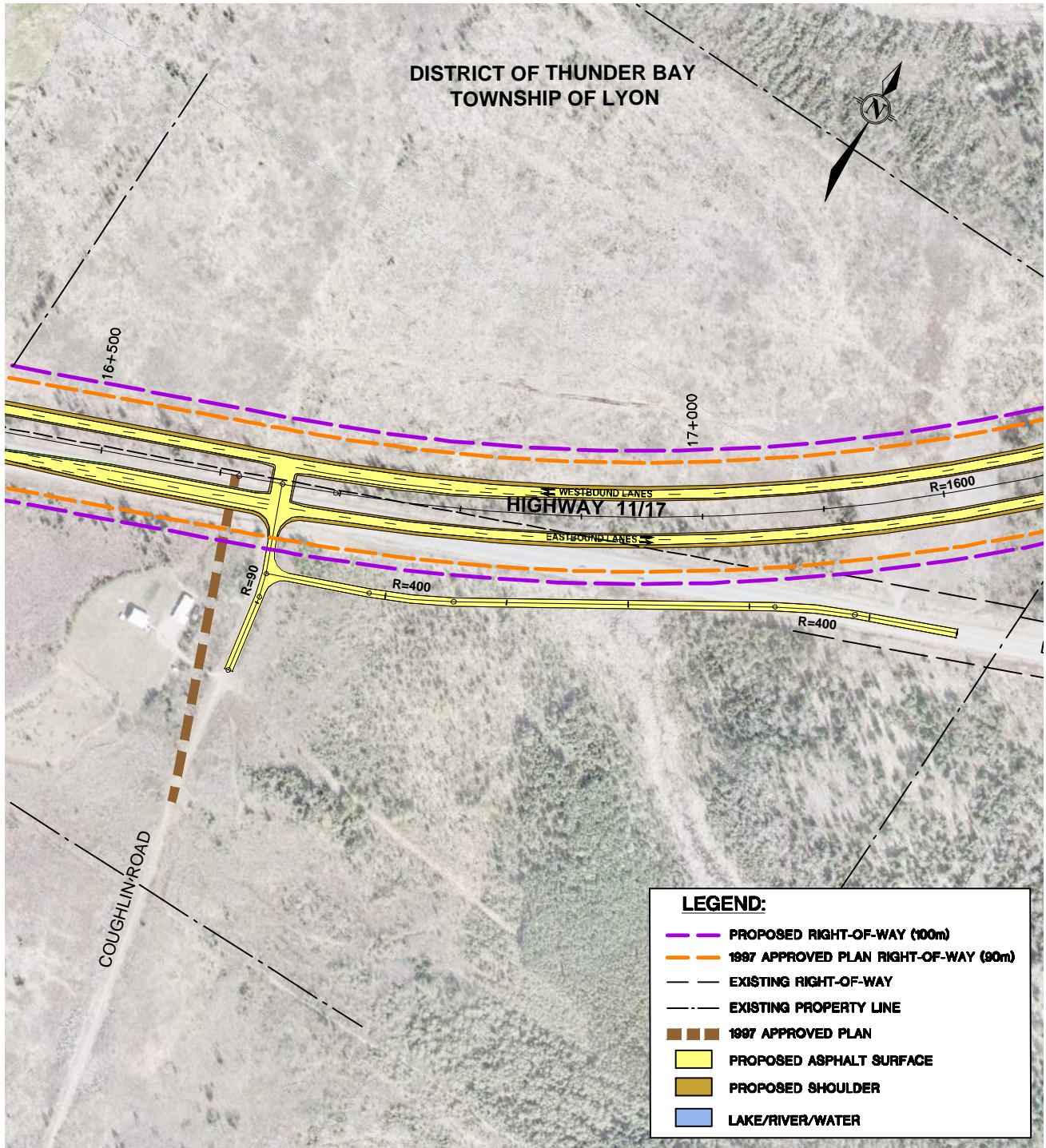
PROJECT LIMIT
G.W.P. 132-90-00



LEGEND:

- PROPOSED RIGHT-OF-WAY (100m)
- 1997 APPROVED PLAN RIGHT-OF-WAY (90m)
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- 1997 APPROVED PLAN
- PROPOSED ASPHALT SURFACE
- PROPOSED SHOULDER
- LAKE/RIVER/WATER

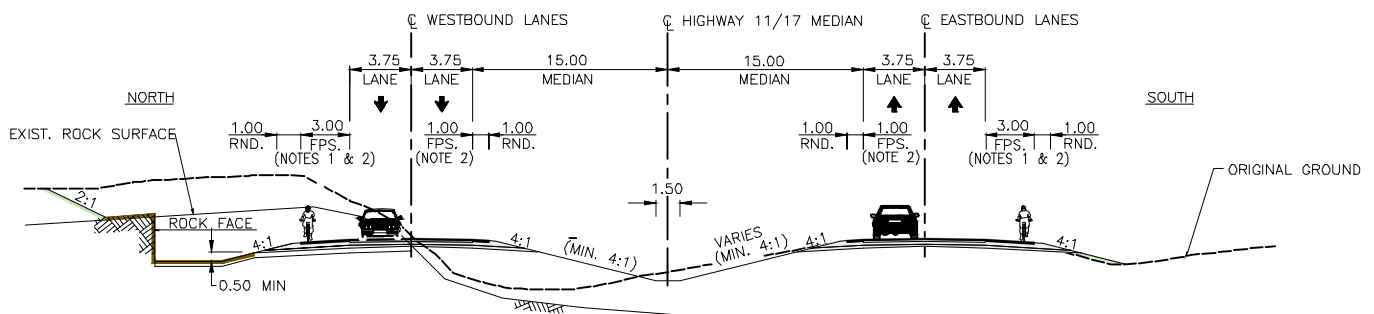
SCALE
25m 0 50m
Horizontal



W.P. 132-90-00
HIGHWAY 11/17 FOUR-LANING
From Coughlin Road to Red Rock Road 9
Environmental Study Report Addendum

**COUGHLIN ROAD
RELOCATION**

EXHIBIT
3-2



TYPICAL SECTION - HIGHWAY 11/17
N.T.S.

NOTES:

1. A 3.0m FULLY PAVED RIGHT SHOULDER WILL BE PROVIDED ALONG EASTBOUND AND WESTBOUND HIGHWAY 11/17 WITHIN THE STUDY AREA TO ACCOMMODATE CYCLISTS.
2. RUMBLE STRIPS WILL BE INSTALLED ON THE OUTER AND MEDIAN SHOULDERS.

4.0 Consultation / Engagement

Consultation / engagement is an integral component of the Environmental Assessment (EA) process and provides an opportunity for communication between the community and the Project Team to identify potentially significant environmental issues early in the decision making process and throughout the study.

The Project Team has engaged, and will continue to engage, members of the public, property owners, federal and provincial government review agencies, Indigenous Communities, the Ministry of Municipal Affairs and Housing (responsible for future land-use planning for the geographic Township of Lyon within the unorganized district of Thunder Bay), the Township of Red Rock, as well as other potentially interested stakeholders.

4.1 Initial Notification

External agencies, including federal and provincial government review agencies, Ministry of Municipal Affairs and Housing (responsible for the land-use for the geographic Township of Lyon within the unorganized district of Thunder Bay), Indigenous Communities, adjacent property owners, and other potentially interested stakeholders were notified regarding the commencement of this study by letter or email on June 9, 2017. The Ministry of Transportation (MTO) notified the local Members of Parliament (MP) and Members of Provincial Parliament (MPP) of the study commencement on June 2, 2017, and the appropriate Indigenous Communities on June 9, 2017. In addition, a copy of the study commencement notice was sent via Canada Post unaddressed mailing (i.e. bulk) to approximately 1235 property owners within the vicinity of the study area.

All external agencies were provided with a form on which they could provide comments and/or background information relevant to the study, as well as the project website address (www.hwy11-17-coughlintoredrock9.com). The study commencement notices were published in the *Thunder Bay Chronicle-Journal* and *Nipigon-Red Rock Gazette* on June 13, 2017. Copies of the newspaper notices are located in **Appendix A** while all relevant correspondence can be found in **Appendix B**.

4.2 Impacted Property Owners

As a result of the proposed changes, new property impacts will be identified and will be confirmed as the detail design progresses. Letters to notify property owners of impacts were sent in Spring / Summer 2017. The Ministry will continue to correspond and meet with impacted property owners on an individual basis as required to discuss the proposed changes and the potential impacts to their property. The Ministry will negotiate with individual owners for property purchases in accordance with standard MTO property acquisition process.

4.3 External Agency Participation, Input, and Comments

Municipal, agency, commercial and interest group input is an integral part of the study, and assists the Project Team to understand and incorporate federal, provincial, and local perspectives.

The following agencies, municipalities, businesses and other stakeholders have been consulted as part of the study:

Federal Government Agencies

- Department of Fisheries and Oceans Canada
- Transport Canada

Provincial Government Agencies

- Infrastructure Ontario
- Ministry of Indigenous Relations and Reconciliation (*formerly Ministry of Aboriginal Affairs*)
- Ministry of Community Safety and Correctional Services
- Ministry of Agriculture and Food & Ministry of Rural Affairs
- Ministry of the Environment and Climate Change
- Ministry of Municipal Affairs and Housing
- Ministry of Natural Resources and Forestry
- Ministry of Northern Development and Mines
- Ministry of Tourism, Culture and Sport

Municipal / Emergency Services / District School Boards

- Township of Red Rock
- Ministry of Municipal Affairs and Housing, Manager of Community Planning and Development (North – Thunder Bay)
- Ontario Provincial Police
- Nipigon Fire Department
- Superior North Emergency Medical Service
- Superior North Catholic District School Board
- Superior Greenstone District School Board
- Conseil scolaire de district catholique des Aurores boreales
- Conseil Scolaire de District Du Grand Nord
- East of Thunder Bay Transportation Consortium

Utilities / Agencies

- Bell Canada
- Canadian National Railway
- Canadian Pacific Railway
- Hydro One Networks
- Union Gas Limited
- TransCanada Pipe Lines
- Shaw Communications
- Tbaytel

Potentially Interested Stakeholder / Interest Groups

- Ontario Trucking Association
- Ontario Federation of Snowmobile Clubs
- Thunder Bay Field Naturalists
- Thunder Bay District Fish and Game Association
- North Shore Steelhead Association

A tracking table of all communication with external agency participants was maintained during the study. A summary of these communications is included in **Exhibit 4-1**.

Copies of all external agency correspondence are provided in **Appendix B**.

Exhibit 4-1: Summary of External Agency Correspondence

Agency / Participant	Comments Received	Action Taken / Response
Federal Agencies		
Transport Canada	Comment received via email on June 13, 2017: <ul style="list-style-type: none"> • Noted Transport Canada does not require receipt of all Class EA related notifications. • Requested proponents complete a self-assessment to determine if input from Transport Canada is required. 	Comment was noted by the Project Team. The project will not require approval and/or authorization under act Acts administered by Transport Canada.
Provincial Agencies		
Ministry of Natural Resources and Forestry Kimberley McNaughton	Comment received via email on July 14, 2017 provided detailed project specific information on the following: <ul style="list-style-type: none"> • Crown Land • Forestry • Fisheries (Black Sturgeon River) • Wildlife <hr/> Follow-up email received on July 27, 2017 noted MNRF has commenced reviewing project information and requested a copy of the shapefiles showing the proposed increased right-of-way for the two Highway 11/17 Four-Laning projects between Highway 582 and Red Rock Road #9 (i.e. Red Rock Road 9 – Coughlin, and Coughlin – Hwy 582).	Response sent by email on October 3, 2017 noted the following: <ul style="list-style-type: none"> • Information provided on Crown Land, Forestry, Fisheries, and Wildlife have been noted. • Shapefile and Detail Design plan will be sent to MNRF for review, once available. • The Project Team is aware Black Sturgeon River is sensitive fish habitat, which has been considered in the Preliminary Design of the Black Sturgeon River Bridges. • The intent of the design will be to clear span the banks above the highwater mark and no in water work will occur (i.e. full span). • Terrestrial and aquatic impact assessments will be completed as the study progresses and minimize potential impacts to the watercourse. • Terrestrial and aquatic field investigations will occur in Fall 2017 and Summer 2018. The Project Team will complete the impact assessment and follow standard

Agency / Participant	Comments Received	Action Taken / Response
		MNR/DFO permitting protocols pending results of the assessment. <ul style="list-style-type: none"> The Project Team will forward correspondence received relating to Camp 43 Dam to MNR/DFO.
Ministry of Tourism, Culture, and Sport Jeff Elkow, Heritage Planner	Comment received via email on June 20, 2017: <ul style="list-style-type: none"> Provided information to determine a project potential impact on cultural heritage resources. Acknowledged a Stage 1 archaeology assessment will be completed as part of this study and requested the assessment be undertaken as early as possible. Recommended a Cultural Heritage Evaluation Report be prepared to determine if cultural heritage resources exist within the study area. 	Response sent by email on October 3, 2017 noted the following: <ul style="list-style-type: none"> A Stage 1 archaeological assessment is tentatively scheduled for Fall 2017 to determine if further Stage 2 surveys are required. All archaeological assessments completed for the study will be submitted to the MTCS for registration. The Ministry determined a Cultural Heritage Evaluation Report (CHER) or a Heritage Impact Assessment (HIA) is not required for this study.
Emergency Service Providers		
Ontario Provincial Police Denver Poole	Comment received via email on August 3, 2017 noted no comments at this time.	Acknowledgement response was sent by email on October 3, 2017.

4.4 Utilities Consultation

Letters notifying of potentially impacted utilities were sent to utility companies on July 5, 2017 to introduce the project scope and request information on existing and proposed utility plant within the study area.

The following utility companies were contacted for this study:

- Bell Canada
- Hydro One Networks
- Union Gas Limited
- TransCanada Pipe Lines
- Shaw Communications
- Tbaytel

The Project Team will continue to consult with any affected utility companies to identify conflicts and develop relocation plans to suit the Detail Design.

4.5 Public Information Centre #1

Public Information Centres (PICs) are informal meetings where area residents, interested stakeholders, agencies and Indigenous communities are provided an opportunity to review planning and project information, identify concerns and provide input to the Project Team. PICs served an important function in providing an opportunity for direct, two-way communication with stakeholders on specific local conditions, issues, and concerns regarding the study. Two rounds of PICs will be held during the study.

The first PIC for this study was held on November 8, 2017 at the Red Rock Recreation and Community Centre from 4:00 p.m. to 8:00 p.m. The PIC #1 was arranged as drop-in sessions (open-house style) where representatives of the Project Team were available to answer questions and discuss the study. Information presented at PIC #1 included: existing environmental conditions, the proposed changes to the preliminary design that was identified in the 1997 ESR, summary of potential environmental affects and proposed mitigation measures, and next steps. A copy of the displays presented at PIC #1 is included in **Appendix C**.

PIC #1 was advertised in the *Thunder Bay Chronicle-Journal* and *Nipigon Red Rock Gazette* on October 31, 2017. A copy of the publication is included in **Appendix A**.

Notification letters were distributed by direct mail or emailed to contacts on the study mailing list on October 27, 2017, including government agencies (federal and provincial), Indigenous communities, local municipalities (Township of Red Rock, Ministry of Municipal Affairs and Housing), emergency service providers, schoolboards, and other potentially interested stakeholder groups. Individuals and groups that expressed an interest in the project were either confirmed on or added to the study mailing list following project commencement and were notified of PIC #1. In addition, a copy of the PIC #1 notice was sent via Canada Post unaddressed mailing (i.e. bulk) to approximately 1235 property owners within the vicinity of the study area.

A pre-PIC meeting was held for external agencies and Indigenous communities between 3:00 p.m. and 4:00 p.m. where community members from the Red Rock Indian Band attended. No other representatives attended the pre-PIC meeting.

PIC #1 was attended by approximately 35 people and a total of 23 participants signed the registration sheet. There was one comment received prior to the PIC, five comment sheets submitted at the PIC, and two comments received following the PIC via project website webform. All agency and public comments gathered throughout the study are summarized in **Exhibit 4-2**.

Copies of PIC #1 notification materials, including the newspaper notices are included in **Appendix A**. The PIC #1 display materials presented at the first PIC are provided in **Appendix C**.

4.6 Indigenous Community Engagement

Indigenous communities and government agencies were contacted by the Project Team at key milestones throughout the study process. The Ministry of Indigenous Relations and Reconciliation (*formerly Ministry of Aboriginal Affairs*) were sent letters to confirm the Indigenous communities that may have an interest in the study.

The following communities were notified of the study commencement on June 9, 2017 and sent a notice of PIC #1 on October 27, 2017:

- Fort William First Nation
- Nishnawbe Aski Nation
- Anishinabek Nation / Union of Ontario Indians
- Red Rock Indian Band
- Pays Plat First Nation
- Animbiigoo Zaagi'igan Anishinaabek
- Métis Nation of Ontario (Head Office)
- Thunder Bay Métis Council
- Biinjitiwaabik Zaaging Anishinaabek First Nation
- Bingwi Neyaashi Anishinaabek
- Pic Moberg First Nation
- Ojibways of Pic River First Nation
- Michipicoten
- Long Lake #58 First Nation
- Kiashke Zaaging Anishinaabek

Letters were sent by MTO to all of the above-mentioned Indigenous communities and organizations to inform them of the filing of the Addendum to the 1997 ESR. MTO will continue to engage with Indigenous communities as the study progresses.

4.7 Integration of External Consultation / Engagement

The intent of the consultation / engagement program for the study is to ensure that the public and review agencies had an opportunity to identify any potential concerns and influence the outcome of selection the preferred plan as appropriate while also addressing the consultation principles identified in MTO Class EA Document. One of the consultation principles relates to showing how the input received in earlier stages affected the project.

Throughout the study to date, the Project Team has attempted to address all comments, concerns and requests for additional information from external agencies, property owners, local interest groups, stakeholders, and members of the public. **Exhibit 4-2** highlights some of the key concerns and comments provided by the public and review agencies and how they were addressed.

Future consultations will continue throughout the Detail Design phase, including a second PIC. Should significant design modification or refinements be required as a result of the detailed environmental investigations, a second Addendum to the ESR will be prepared and made available for a 30-day public review. Any changes resulting from minor design modifications and refinements and associated mitigation measures will be addressed and discussed with affected external agencies and property owners at PIC #2 and prior to construction.

Exhibit 4-2: Summary of Key External Agency and Public Comments and Responses

Summary of Key Comments	MTO Response
Many comments supporting the four-laning of Highway 11/17.	The comments were noted by the Project Team.
Questions regarding median crossings as they relate to emergency service providers.	Median crossings will be provided at Coughlin Road and the new east end connection (Landfill Site Road)
Comment / concern for moose crossing the highway.	The Project Team is aware that the highway corridor / area is known to be of high use to moose. Mitigation measures to reduce moose attractants/accidents will be implemented into the design, as appropriate.
Question about ownership / maintenance of the existing Highway 11/17 following construction.	The existing Highway 11/17 will be retained as a service road following the four-laning of Highway 11/17. Future ownership and maintenance of the service road will be discussed with the municipality at a later stage in the detail design process.

Summary of Key Comments	MTO Response
<p>Inquiries about access to public roads following the four-laning (i.e. Everard Road, utility access road east of Black Sturgeon River).</p>	<p>Everard Road will continue to connect to the new service road (existing Highway 11/17) as it does today. Access to the realigned Highway 11/17 will be via the service road and the new east end connection to Landfill Site Road. Existing utility accesses will be reviewed with the applicable utility companies as the detail design progresses.</p>
<p>Inquiries about the adjacent studies.</p>	<p>The status of the adjacent projects and contact information for MTO Project Managers within the Highway 11/17 corridor were provided, where available.</p>
<p>Inquiries about the property acquisition process.</p>	<p>A representative from the MTO property section was present at the PIC to inform property owners of the property acquisition process and responded to property specific questions.</p>
<p>Concern with the environmental impacts to watercourses within the study area, particularly the sensitive fisheries habitat in Black Sturgeon River.</p>	<p>Additional data collection and detailed environmental field investigations will be carried out in Spring/Summer 2018 to document existing conditions at all watercourse crossing locations and an impact assessment will be completed. Recommended mitigation measures to minimize/avoid environmental impacts will be documented in the Design and Construction Report.</p>
<p>Property specific questions / concerns.</p>	<p>MTO will continue working with affected property owners and compensate those owners whose private property is physically impacted by the proposed improvements on a one-on-one basis.</p>
<p>Concern for the social impacts to residences on the north-east side of Black Sturgeon River.</p>	<p>The Ministry has given extensive consideration and review of the impacts and other potential alternative alignment. However, based on through investigations and analysis, the Ministry has determined that the preferred alignment provides the best balance between environmental considerations, highway geometry, property, safety and construction cost.</p>
<p>Request for bike lanes along Highway 11/17.</p>	<p>The design will include 3 m wide fully paved outer shoulders which can accommodate cyclists.</p>
<p>Request for stop signs at all intersection crossings.</p>	<p>As part of this study, the Ministry will complete a sign inventory of all road signage within the study limits to ensure they comply with Ministry standards. Stop signs will be installed on all side roads intersecting with Highway 11/17.</p>

Summary of Key Comments	MTO Response
<p>What is the timing of construction for the four-laning of Highway 11/17?</p>	<p>A provincial funding commitment for the construction of the four-laning of this portion of Highway 11/17 is included in the 2017 Ontario Budget. Construction of the new 4-lane highway is anticipated to start as early as 2019 and scheduled to be completed in 2021.</p>
<p>Inquiries about timing of construction for the four-laning of Highway 11/17 adjacent to the study area.</p>	<p>The Ministry provided responses regarding the proposed timing of construction :</p> <p>Birch Beach to Pass Lake (6.5 km)</p> <ul style="list-style-type: none"> • Construction Start – 2015 • Construction Complete – 2017 <p>Pass Lake to Pearl (14.6 km)</p> <ul style="list-style-type: none"> • Construction Start – 2018 • Construction Complete – 2020 <p>Ouimet to Dorion (8.5 km)</p> <ul style="list-style-type: none"> • Construction Start – 2019 • Construction Complete – 2021 <p>Coughlin Road to East Junction Hwy 582 (6.5 km)</p> <ul style="list-style-type: none"> • Construction Start - 2019 • Construction Complete - 2021 <p>Red Rock to Still Water Creek (10 km)</p> <ul style="list-style-type: none"> • Construction Start – 2015 • Construction Complete – 2021 <p>Nipigon River Bridge and approaches (3.5 km)</p> <ul style="list-style-type: none"> • Construction Start – 2013 • Construction Complete – 2018

5.0 Environmental Effects and Proposed Mitigation

5.1 Summary of Environmental Concerns and Proposed Mitigation

This section focuses on the direct and indirect potential environmental effects to the existing environmental, socio-economic and cultural features and sensitivities in the study area associated with the revisions to the 1997 EA Approved Plan for Highway 11/17 that were documented in the 1997 Environmental Study Report (ESR).

Further natural environmental field investigations along the alignment are scheduled to occur Spring / Summer 2018 to augment data collection regarding current environmental conditions in accordance with MTO's current guidelines, standards and policy directives. The preliminary data collection and 2017/2018 field investigations will be used to complete an impact assessment on the proposed alignment revisions outlined on the preferred plan and to identify mitigation measure. The approved mitigation measures and commitments outlined in the 1997 ESR and the Addendum to the 1997 ESR will be carried forward to the Detail Design and construction phases for this project.

Exhibit 5-1 summarizes the identified concerns and proposed mitigation measures based on the identified environmental sensitivities and proposed increase in right-of-way from 90 m to 110 m (minimum), realignment of the east end connection to the existing Highway 11/17 and removal of the east end median crossing depicted in the 1997 EA Approved Plan, and the relocation of Coughlin Road. The criteria used in the assessment of effects reflected those used by MTO in the 1997 ESR.

The criteria used in the assessment of effects as part of this study was generally consistent with the 1997 ESR, however, the following considerations to transportation / engineering were added:

- Soil Erosion, Water Quality, Drainage
- Highway Geometrics;
- Flexibility to Accommodate Future Interchanges;
- Intersection Spacing Requirements (3 - 8 km);
- Complexity and Difficulty of Construction;
- Geotechnical Suitability; and
- Structures.

The proposed changes to the 1997 EA approved plan allows for an overall improvement to traffic and road safety. Although additional property requirements are necessary, the design changes do not result in significant changes to the impacts on existing environmental conditions, as outlined in the 1997 ESR.

Exhibit 5-1: Summary of Environmental Concerns / Potential Impacts of Proposed Design Changes

Factor	Potential Impacts Resulting From:		
	Increasing Right-of-Way Width from 90 m to 110 m	East end Connection to Existing Highway - Alignment Changes	Relocation of Coughlin Road
Natural Environment			
Vegetation	<ul style="list-style-type: none"> Increasing the right-of-way only incrementally increases the footprint from the 1997 ESR, thus, incremental impacts to the natural environment are anticipated. Significant impacts to the natural environment are not anticipated. Specific natural environmental impacts and mitigation measures will be determined once natural environmental field investigations are completed in Spring / Summer 2018, and the detail design plan is developed. All recommended mitigation measures will be documented in the DCR and incorporated into the Contract Package. 	<ul style="list-style-type: none"> Specific natural environmental impacts and mitigation measures will be determined once natural environmental field investigations are completed in Spring / Summer 2018 and the detail design plan is developed. All recommended mitigation measures will be documented in the DCR and incorporated into the Contract Package. 	
Wildlife			
Aquatic Resources			
Social and Cultural Environment			
Archaeology	<ul style="list-style-type: none"> An archaeological assessment is being carried out to determine potential archaeological impacts in all previously unevaluated undisturbed areas. The area will be cleared for archaeological potential and the archaeological assessment reports completed for this study will be submitted to MTCS for archaeological concurrency prior to construction. 		
Land Use	<ul style="list-style-type: none"> Proposed changes result in new property impacts. MTO will negotiate with individual owners for property purchase in accordance with standard MTO procedures. 	<ul style="list-style-type: none"> Reduced impact to residential property on the west side of Coughlin Road. 	
	<ul style="list-style-type: none"> A noise impact assessment will be undertaken to assess the potential noise impacts to adjacent Noise Sensitive Areas based on current MTO noise guidelines. Any recommended noise mitigation measures will be implemented, as required. 		
Public Access	<ul style="list-style-type: none"> No change 	<ul style="list-style-type: none"> Improved safety by consolidation of the EA Approved median crossing at the east limit with the median crossing at Landfill Site Road, just east of Red Rock Road #9. Red Rock Road #9 will connect to the new alignment and then to Highway 11/17 at Landfill Site Rd. This will provide a full moves intersection for users of Red Rock Road #9. 	<ul style="list-style-type: none"> No significant impacts are anticipated to motorists. Significantly reduces the impact on a residential property located on the west side of Coughlin Road.

Engineering			
Utilities and Municipal Services	<ul style="list-style-type: none">Increasing the right-of-way width does not change the conflicts identified in the 1997 ESR.	<ul style="list-style-type: none">The Project Team will consult with any affected utility companies to develop relocation plans to suit the detail design plan.	<ul style="list-style-type: none">Impacts to utilities are not anticipated.

APPENDIX A

ONTARIO GOVERNMENT NOTICES AND NOTIFICATIONS

See Separate File

APPENDIX B

RELAVENT AGENCY CORRESPONDENCE

See Separate File

APPENDIX C

PUBLIC INFORMATION CENTRE #1 DISPLAY PANELS

See Separate File