# Highway 60 and Lake Dore Road/ Kokomis Road Intersection Improvements

**Preliminary Design and Class Environmental Assessment Study** Project Reference: GWP 4137-21-00

June 21, 2023



# Me come.

Thank you for joining us at this Public Information Centre (PIC) to learn more about the Highway 60 and Lake Dore Road/Kokomis Road Intersection Improvements.

The purpose of the PIC is to provide an overview of the study and seek feedback from agencies, Indigenous communities and the public.

You can provide your input on the project by:

- Speaking to a member of the project team here today
- Completing the comment form
- Visiting the 'Contact Us' tab of the Project website at: www.hwy60lakedorerd.com
- Emailing the project team at: hwy60lakedorerd@dillon.ca

Please submit your comments by July 5, 2023 and a member of the project team will respond to you directly.

Under the Integrated Accessibility Standards Regulation (2011), the Ministry of Transportation, Ontario (MTO) is committed to making the Class Environmental Assessment (EA) process accessible to all participants



## following accessibility features:

- Accessible venue location for persons with washrooms and parking
- members will:

  - forms
- Service animals are welcome
- printed in large legible font
- available

This Public Information Centre (PIC) incorporates the

disabilities, including wheelchair ramps, accessible

• For persons requiring assistance, project team

• verbally explain presentation board content o assist with the written submission of comment

Presentation boards and consultation materials are

Reading aids (such as magnifying glasses) are



## **Project Location and Scope**



The Ministry of Transportation, Ontario (MTO) retained Dillon Consulting Limited (Dillon) to conduct a Preliminary **Design and Class Environmental** Assessment (EA) Study for improvements to the intersection of Highway 60 and Lake Dore Road /Kokomis Road located in the Township of North Algona Wilberforce, County of Renfrew.

The Project Study Area includes the intersection of Highway 60 and Lake Dore Road/Kokomis Road and surrounding area, as shown on the figure.



## **Environmental Assessment Process**

- Public and agency input to be integrated into the process.

A Transportation Environmental Study Report (TESR) will be prepared and filed for public comment at the completion of the study. The report will document the study process and recommendations.



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The study is following the approved environmental planning process for Group 'B' projects under MTO's Class EA for Provincial Transportation Facilities (2000). The Class EA process requires: Relevant engineering and environmental factors to be considered in the planning and design process Impacts of the proposed changes to be assessed and environmental protection/mitigation measures identified

**Future Detail Design** Phase Develop construction drawings and documents, finalize mitigation measures

Environmental **Protection in** Construction

\* Subject to funding and approvals



## Background

In May 2021, MTO completed an Operational Performance Review (OPR) of the intersection of Highway 60 and Renfrew County Road 30 (Lake Dore Road) / Renfrew County Road 70 (Kokomis Road) as a result of increased traffic volumes at the intersection.

The OPR assessed the existing (2020) operational and geometric conditions of the intersection, identified potential operational and safety concerns, and proposed improvements.

The OPR identified the following operational and safety concerns: Kokomis Road northbound approach experiencing long delays during the Saturday midday

- peak hour
- movements
- and Municipal Community Centre

Highway 60 eastbound and westbound left-turning vehicles have overlapping turning

Numerous private driveways within a short distance of the intersection Lake Dore Road southbound queue frequently blocks access to the Golden Lake Post Office

Sightlines from Kokomis Road looking east are poor due to the close proximity of a building Sightlines looking east along Highway 60 are poor due to a crest (vertical curve) Lake Dore Road/ Kokomis Road traffic experiences long delays



## **Existing Intersection Conditions**





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## **Existing Conditions Assessment**

Understanding the existing environmental conditions within the Study Area is an important component of assessing what features and functions may be impacted by the project. This project currently includes the following environmental studies:

- Terrestrial Ecosystems Existing Conditions
- Fish and Fish Habitat Existing Conditions
- Groundwater Assessment
- Assessment of Past Uses (to assess potential to encounter subsurface contamination)
- Stage 1 Archaeological Assessment
- Cultural Heritage Resource Assessment

\* Additional studies may be identified and carried out as the study progresses

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Conditions Conditions

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## **Existing Conditions - Natural Environment**

Areas within the northern and western extents of the study contain woodlands. While these do not meet the provincial criteria for significance, they do have potential to provide habitat for the following protected Species at Risk (SAR): Bats - Eastern Small-footed Myotis, Little Brown Myotis,

- Northern Myotis
- Wood Turtle



These woodlands also have potential to provide provincially **Significant Wildlife Habitat for:** 

- Bat maternity colonies
- Bird breeding/nesting
- Deer wintering/yarding areas
- **Raptor wintering areas**
- Amphibian breeding
- Species of Conservation Concern



**Remaining vegetation with potential to be** impacted includes roadside cultural meadow and agricultural lands.

There are no Significant Areas of Natural and Scientific Interest (ANSI) or wetlands within the Study Area.

There are no fish bearing watercourses within 30 m of the Study Area.

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## **Existing Conditions - Socio-Economic Environment**







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The project is located in the Township of North Algona Wilberforce. Highway 60 is an important transportation corridor connecting Huntsville to Renfew in Ontario's highlands.

The Study Area is developed predominantly with residential, commercial and institutional land uses at the intersection, and is located just north of the Algonquins of Pikwakanagan First Nation.

Given the high density of development, this intersection is highly constrained and impacts to local properties and businesses are anticipated. The project team will minimize the impacts to the extent feasible and will work closely with the community as the study progresses.







## **Existing Conditions - Cultural Heritage Resources**

- A Stage 1 Archaeological Assessment determined that portions of the Project Study Area (orange and green) maintain archeological potential.
- A Stage 2 Archaeological Assessment will be required for areas that may be impacted by the technically preferred alternative.
- The Cultural Heritage Assessment identified a Cultural Heritage Landscape (CHL) consisting of the historic settlement of Golden Lake at the existing intersection. This area contains numerous nineteenth and early twentieth-century commercial, institutional and residential properties.

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## Development of the Long List of Alternatives

As per the MTO's Class EA for Provincial Transportation Facilities, the project team has developed a long list of technically feasible alternatives to address the issues identified in the Operational Performance Review.

The goal is to provide a long list of intersection improvements that consider environmental constraints while providing a functional and safe improvement for the community.

The Study Area is already highly developed, limiting the number of suitable alternatives.

The project team has developed 20 alternative intersection improvements that are being presented today. The 'Do Nothing' alternative is not a viable alternative as it does not address the operational needs or safety concerns.



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## Long List of Alternatives

Presented below is an overview of the long list of alternatives, grouped according to key design features. The following boards provide conceptual illustration of these alternatives.



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## Alternative 1 – Stop Control

### 1A - All Way Stop Control



#### 1B - Eastbound and Westbound left turn lanes



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### Stop signs in each direction of traffic

## Kokomis Road traffic

Left turn lanes for each direction of Highway 60 traffic

Stop signs for Lake Dore Road and

![](_page_13_Picture_11.jpeg)

## Alternative 2 – Traffic Signals

![](_page_14_Picture_2.jpeg)

#### Traffic signals to manage traffic in all directions

![](_page_14_Picture_5.jpeg)

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Traffic signals to manage traffic in all directions

## Left turn lanes for each approach of Highway 60 traffic

Traffic signals to manage traffic in all directions Left turn lanes for all approaches to the intersection

![](_page_14_Picture_13.jpeg)

## Alternative 3 – Roundabout

### 3A - Roundabout (centered)

![](_page_15_Picture_2.jpeg)

#### Roundabout centered within existing intersection

![](_page_15_Picture_4.jpeg)

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### 3B - Roundabout (skewed)

![](_page_15_Picture_9.jpeg)

#### Roundabout skewed for improved approach angles

Roundabout skewed to minimize property impacts

![](_page_15_Picture_12.jpeg)

## Alternative 4 – Realigned Kokomis Road with Cul-De-Sac Options

### 4A-1 - With Signals

![](_page_16_Picture_2.jpeg)

### 4A-2 - With Roundabouts

![](_page_16_Picture_4.jpeg)

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Signals at realigned Kokomis Road and Highway 60 Cul-de-sac original Kokomis Road with variations Potential to include commercial parking for businesses

Roundabout at realigned Kokomis Road and Highway 60 Cul-de-sac original Kokomis Road with variations Potential to include commercial parking for businesses

![](_page_16_Picture_9.jpeg)

## Alternative 4 – Realigned Kokomis Road with Cul-De-Sac Options

### 4D - With Offset Lake Dore Road

![](_page_17_Picture_2.jpeg)

### Roundabout at realigned Kokomis Road and Highway 60 Lake Dore Road offset for improved sightlines

### 4E-2 - With Signals and South Cul-de-sac

![](_page_17_Picture_5.jpeg)

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### 4E-1 - With Signals and Left Turn Lanes

![](_page_17_Picture_9.jpeg)

Left turn lanes on Highway 60 Stop sign for approaches to Highway 60

Signals at realigned Kokomis Road and Highway 60 Stop sign for approaches to Highway 60

# Signals at realigned Kokomis Road and Highway 60

![](_page_17_Picture_14.jpeg)

## Alternative 5 – Realigned Lake Dore Road and Kokomis Road

### 5A - With Signals

![](_page_18_Picture_2.jpeg)

#### 5B - With Roundabout

![](_page_18_Picture_4.jpeg)

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Signals at realigned municipal roads

Roundabout at realigned municipal roads Cul-de-sac original Kokomis Road Stop sign at original Lake Road Road approach Potential to include commercial parking for businesses

## Cul-de-sac original municipal road alignments

![](_page_18_Picture_10.jpeg)

## Alternative 6 – Realigned Highway 60

![](_page_19_Picture_1.jpeg)

Realigned Highway 60 to improve sight lines at approaches to intersection Signals at intersection Left turn lanes on all approaches

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![](_page_19_Picture_5.jpeg)

Coarse screening criteria was developed in order to assess and screen out alternatives that didn't meet design criteria or had impacts to significant environmental features.

The multi-disciplinary team assessed the long list of alternatives using the coarse screening criteria to identify which alternatives should be carried forward for a more rigorous evaluation as part of the next step in the process.

Based on the high-level assessment, the long list was screened down to 4 short-listed intersection improvements.

A summary of the results is presented in the following boards.

## Screening Criteria and High-Level Assessment of Intersection Alternatives

## Engineering

- $\bullet$

### Natural Environment

## Socio-economic Environment

- Permanent Property Acquisition

## Cultural Environment

Impacts to Existing Infrastructure Traffic Operations, Capacity and Safety **Access Management Requirements** Flexibility for Staged Construction

**Avoids Significant Natural Heritage Features** 

Potential to Encounter Contaminated Soil

Potential Impact to Archaeological Resources Potential to Impact Built Heritage Resources Potential Impacts to Cultural Heritage Landscapes

![](_page_20_Picture_27.jpeg)

## Initial Screening

### The following alternatives were removed from further consideration because they do not address existing intersection operational and safety concerns.

![](_page_21_Figure_2.jpeg)

![](_page_21_Figure_4.jpeg)

![](_page_21_Picture_6.jpeg)

## Coarse Screening Summary Table

			Signals	Roundabout	Realigned Kokomis Road									Realigned Lake Dore and Kokomis Road		Realigned Hwy 60
Criteria		2B Traffic Signals with left turn lane	2C Traffic Signals with left turn lane on all legs	3B Skewed	4A-1 With signals and driveway	4A-2 With roundabout and driveway	4B-1 With signals and left cul-de- sac	4B-2 With roundabout and left cul- de-sac	4C-1 With signals and right cul- de-sac	4C-2 With roundabout and right cul-de-sac	4D With signals and offset Lake Dore Road	4E-1 With South cul- de-sac and Left Turn Lanes	4E-2- With South cul-de-sac	5A With signals	5B With roundabout	6A With Signals
	Generally avoids impacts to existing infrastructure	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	Improves Traffic Operations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Meets existing and future capacity requirements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Ability to minimize impacts to traffic during construction	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Natural Environment	Avoids significant natural heritage features	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
Socio- Economic Environment	Full Permanent Property Acquisition	5	5	9	No	No	1	1	1	1	1	1	1	1	No	5
	Partial Permanent Property Acquisition	2	2	No	4	4	4	4	3	3	4	4	4	10	10	5
	Potential to encounter contaminated soil during construction	Low	Low	High	Low	Low	High	High	Low	Low	Low	Low	Low	Low	Low	Low
Cultural   Environment	Potential to impact archaeological resources	Low	Low	Low	High	High	High	High	High	High	High	High	High	High	High	Low
	Potential to impact built heritage resources	Moderate	Moderate	High	Low	Low	High	High	High	High	Moderate	Low	Low	High	Low	High
	Potential Impacts to Cultural Heritage Landscapes	Moderate	Moderate	High	High	High	High	High	High	High	High	High	High	High	High	High

Note. Proposed short list alternatives to be carried for ward are ingringitted in yenow.

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![](_page_22_Picture_4.jpeg)

## Short List of Alternatives

![](_page_23_Figure_2.jpeg)

### Based on the coarse screening assessment by the project team, 5 intersection alternatives will be carried forward on the 'short list' for further evaluation to identify the Technically Preferred Alternative (TPA)

#### Realigned Kokomis Road

4A-1 - WithSignals and Driveway

4A-2 – With Roundabout and Driveway

4E-1 – With Signals, South Cul-de-sac, and Left Turn Lanes

4E-2 – With Signals and South Cul-de-sac

![](_page_23_Picture_10.jpeg)

4E-1 - With Signals & Left Turn Lanes

![](_page_23_Picture_12.jpeg)

#### 4A-2 - With Roundabouts

![](_page_23_Picture_15.jpeg)

#### 4E-2 - With Signals & South Cul-de-sac

![](_page_23_Picture_17.jpeg)

![](_page_23_Picture_18.jpeg)

## Next Steps

The project team will consider comments received following this PIC#1 to confirm if any new information significantly affects the short-list of alternatives, and will incorporate any new information into the comparative evaluation of the 5 short-listed alternatives.

The comparative evaluation will be completed based on the following criteria:

#### Transportation

- •Traffic Operations, Capacity and Safety
- Highway and Side Road Geometric Improvements
- Impacts on Existing Infrastructure
- Potential Utility Conflicts
- Access Management Requirements
- Excess Earth Management
- •Constructability, Traffic Management, **Construction Duration**

#### Natural Environment

- Habitat

 Impacts to Natural Heritage Features Impacts to Wetlands Impacts to Species at Risk (SAR) and SAR Habitat Impacts to Fish and Fish

#### Socio-Economic Environment

- Impacts to Land Use
- Permanent Property Requirements
- Potential to encounter **Contaminated Soils**
- Impacts on Nearby Noise Receptors
- Traffic Impacts During Construction

![](_page_24_Figure_24.jpeg)

![](_page_24_Picture_25.jpeg)

## Thank you for your interest in the project and your participation!

## **Project Timeline**

![](_page_25_Figure_2.jpeg)

*Timing to be determined.* Subject to funding and approvals. Information for this project is being collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

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We want to hear from you! Please submit any questions or comments you may have via the 'Contact Us' page at www.hwy60lakedorerd.com or to one of the team members listed below by July 5, 2023.

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![](_page_25_Picture_13.jpeg)