

# The Corporation of the City of Kawartha Lakes

## Council Report

Report Number ENG2017-001

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**Date:** January 10<sup>th</sup> 2017

**Time:** 2:00 p.m.

**Place:** Council Chambers

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**Ward Community Identifier:** Ward 9,10,11,12

**Subject:** Colborne St Corridor Study EA

**Author/Title:** Michael Farquhar, Supervisor of Technical Services

**Signature:** 

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**RECOMMENDATION(S):**

**RESOLVED THAT** Report ENG2016-033, Colborne St. Corridor Study EA , be received;

**THAT** ; Council supports the preferred solutions as outlined in Appendix "A" in this report – Project File to improvements to the Colborne St. Corridor, in Lindsay; and

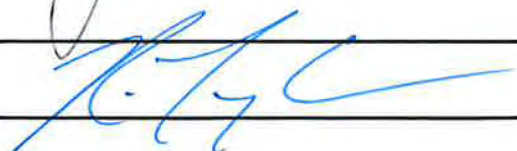
**THAT** Staff be authorized to file the EA report for the legislated 45 day comment period.

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**Department Head:**

**Corporate Services Director / Other:**

**Chief Administrative Officer:**



## Background:

The City of Kawartha Lakes completed a Transportation Master Plan for the municipality in 2012. Among the transportation deficiencies identified during that review were the Kent St. corridor and Colborne St. West corridor within the Town of Lindsay. Based on the identified operational deficiency in these two main traffic corridors the City initiated a corridor operations study following the schedule B Class Environmental Assessment EA in order to identify in detail the operational and developmental issues within these corridors and propose solutions to the identified deficiencies.

The City commissioned HDR Consultants with the project to undergo the study of these two corridors. Staff have elected to bring forward reports on these two corridors separately due to the related development issues within the Colborne St. West corridor and a traffic peer review being done for a proposed development within that corridor. The Kent St. corridor study was brought forward and endorsed by Council on November 22, 2016. **This report deals directly with the Colborne St. corridor.**

The scope of this study was to identify specific needs within this transportation corridor associated to safety, accessibility and capacity needs of this arterial road section. The limits of the Colborne St. study were from William St. to the intersection of Highway 35 as seen below in figure 1.

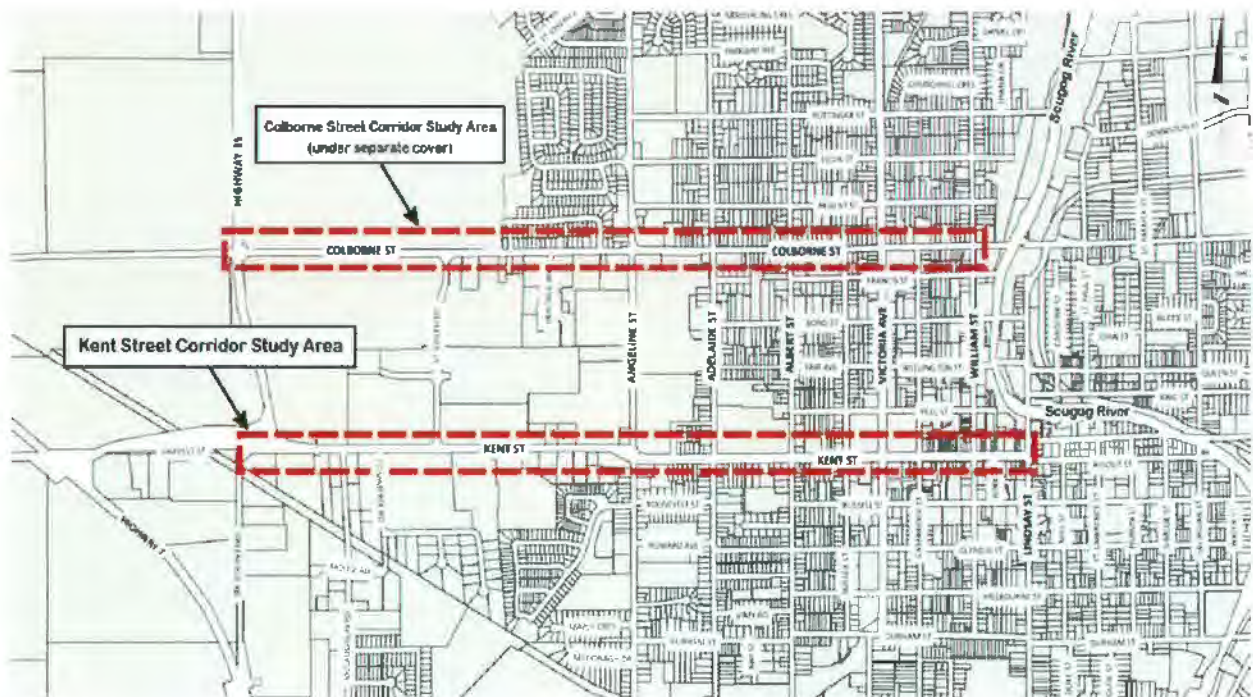


Figure 1

As part of the study a consultation process was held to outline the operational concerns within the Colborne St. corridor initially identified by HDR as well as to seek input from the public as to concerns within the corridor (See project file at Clerk's office). Based on these public consultations and information gathered by the consultant the operational issues can be summarized in the following points.

- Level of Service of intersections within the corridor
- Future Capacity of the corridor
- Intersection improvements
- Safety of pedestrians and motorists
- Parking
- Accessibility (sidewalk width)
- Bike lanes
- Transit
- Future development pressure

Below were the identified areas of deficiencies for traffic operations out to the date of 2031.

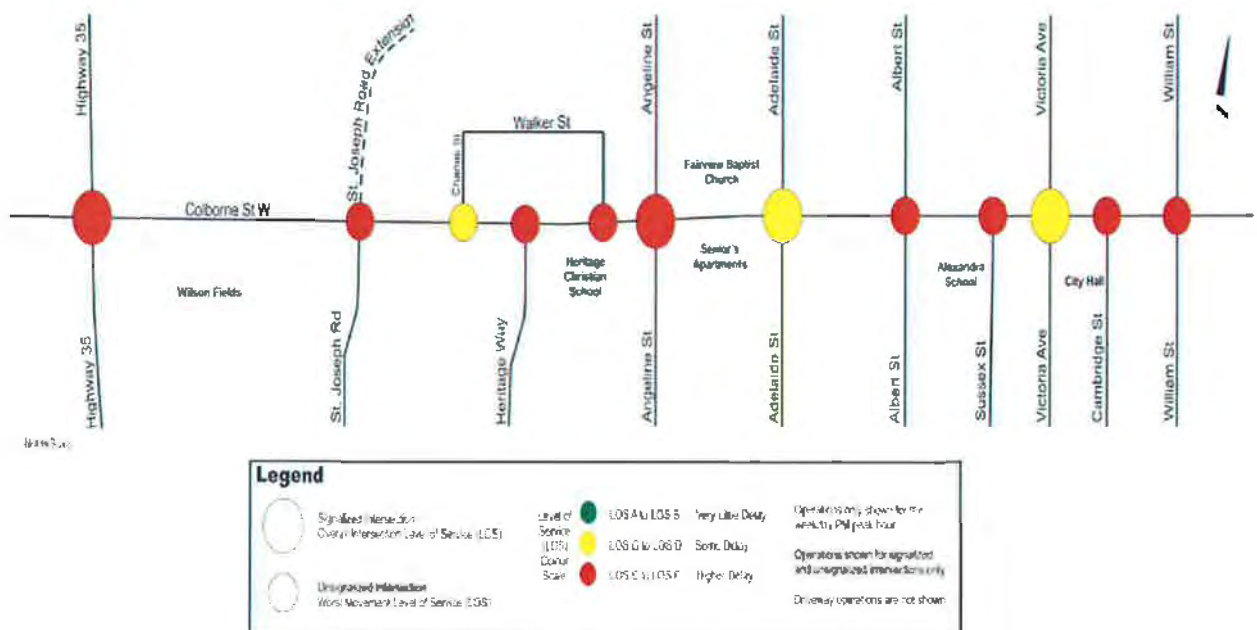


Exhibit 4-5: 2031 Traffic Operations (Do Nothing Scenario with Background Improvements Only)

## **Rationale:**

Through the EA process and based on input received from the stakeholders group and the Public Information Centre meetings the City's consultant compiled the following areas where there were identified deficiencies and proposed alternative solutions as to how these corridor deficiencies could be corrected and improved. The consultant then recommended the preferred solution for correcting the deficiencies. The process that was undertaken can be seen in the project file (located at the clerks office).

These traffic deficiencies within the corridor were reviewed with the distinction between existing and future corridor deficiencies (refer to figure 2).

These identified locations can be summarized as the following:

- Widen Colborne St. West to a four (4) lane section from Highway 35 to Charles Place
- Signalize St. Joseph St.
- Provide for a three (3) lane crossection with a centre twoway left turn lane from Charles Place to Angeline St.
- Colborne St. and Angeline St. intersection improvements being alignment and widening
- Albert St. intersection signalization
- Victoria Ave. provide for a East bound turning lane
- William St. signalization and intersection improvement
- Transit service improvement to new development area



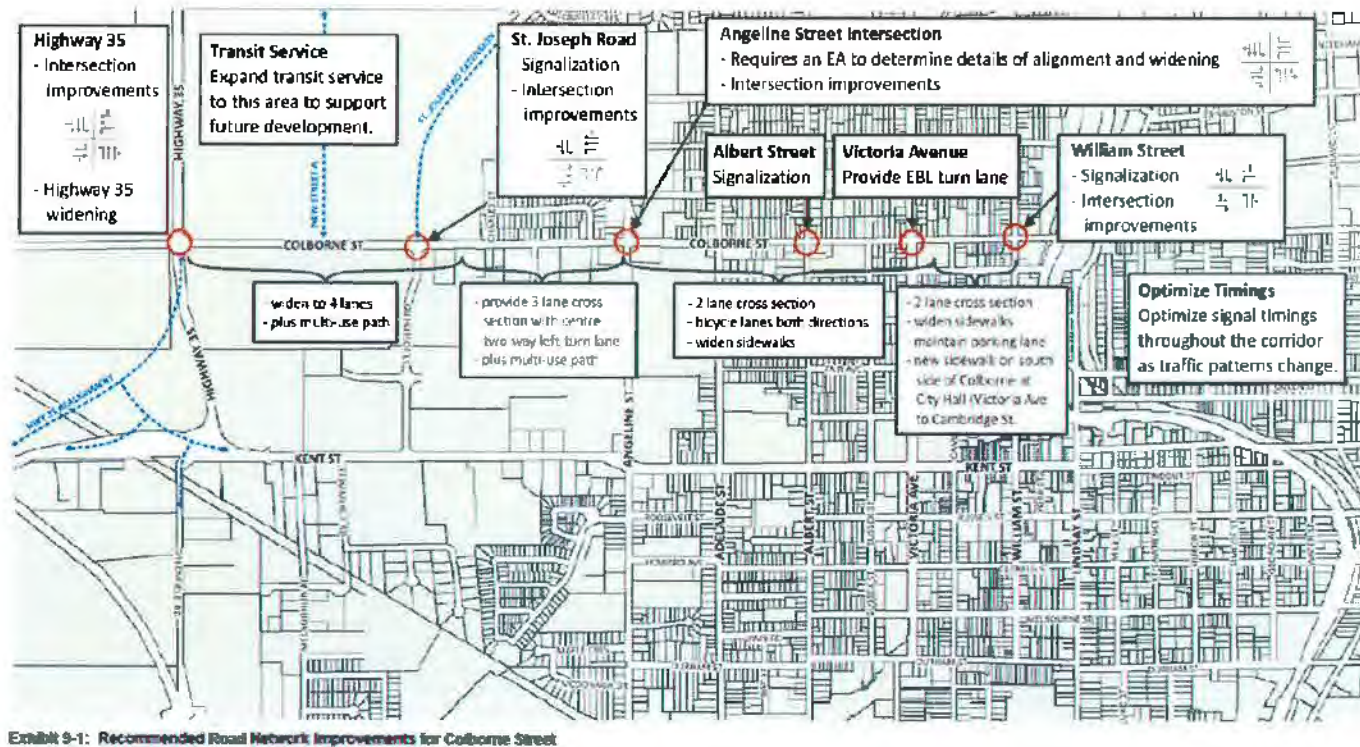


Figure 2

In order to select the preferred solution, the aforementioned proposed alternatives were evaluated with respect to their impact on the existing environment (physical, natural, social, and economic). Each alternative was evaluated using the same criteria. The Physical Environment encompasses the key transportation related items including capacity, geometrics, pedestrian traffic, safety, parking and utilities.

figure 3 outlines the specific improvements recommended by the EA study along with costs and associated timeframes for implementation.

Improvement	Cost Estimate
Widening of Colborne Street from Highway 35 to west of Charles Street plus installation of multi-use path	\$1,047,250
Install new traffic signal at St. Joseph Road / Colborne Street Intersection plus geometric improvements	\$247,750
Install new traffic signal at Albert Street / Colborne Street	\$173,500
Install new traffic signal at William Street / Colborne Street Intersection plus geometric improvements	\$305,000
Restriping between west of Charles Street and Angeline Street to provide centre two-way left-turn lane	\$10,000
Restriping to provide eastbound left-turn lane at Victoria Street	\$5,000
Colborne / Angeline Intersection Improvements	\$420,000
2.0 m sidewalk east of Angeline Street (excludes any costs for potential streetscaping or utility relocation)	\$159,500
<b>Total</b>	<b>\$2,368,000</b>

Notes: Includes contract administration, contingency, and engineering and excludes property acquisition costs.

Figure 3

These Phases would be prioritized out for timing within the City's next updated five (5) year plan and implemented within the City's reconstruction, resurfacing and traffic light programs.

The improvements at the intersection of Colborne St. and Angeline will require a further detailed design EA due to the need for property acquisition for widening.

### Other Alternatives Considered:

HDR and Associates have reviewed all relevant alternatives and have proposed the preferred solutions within the confines of the EA.

### Financial Considerations:

The total cost of the preferred solutions is \$2,368,000 which would be phased over the City's five (5) year planning process and implemented in the yearly budgeting.

## **Relationship of Recommendation(s) To the 2016-2019 Strategic Plan:**

The Council Adopted Strategic Plan identifies these Strategic Goals:

- A Vibrant and Growing Economy
- An Exceptional Quality of Life
- A Healthy Environment

This application aligns with the vibrant and growing economy strategic goal as it promotes and provides for economic development opportunities.

## **Review of Accessibility Implications of Any Development or Policy:**

The Accessibility Coordinator was involved throughout the EA process.

## **Servicing Comments:**

The recommendations associated with this report will facilitate the comprehensive identification of necessary infrastructure improvements and allow staff to prioritize them within the applicable capital planning.

## **Consultations:**

- Stakeholders group
- General Public
- First Nations

## **Attachments:**



Colborne Street  
Corridor Study Present

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**E-Mail: Department Head: Juan Rojas, Director of Engineering &  
Corporate Assets**

**Department File: Engineering**



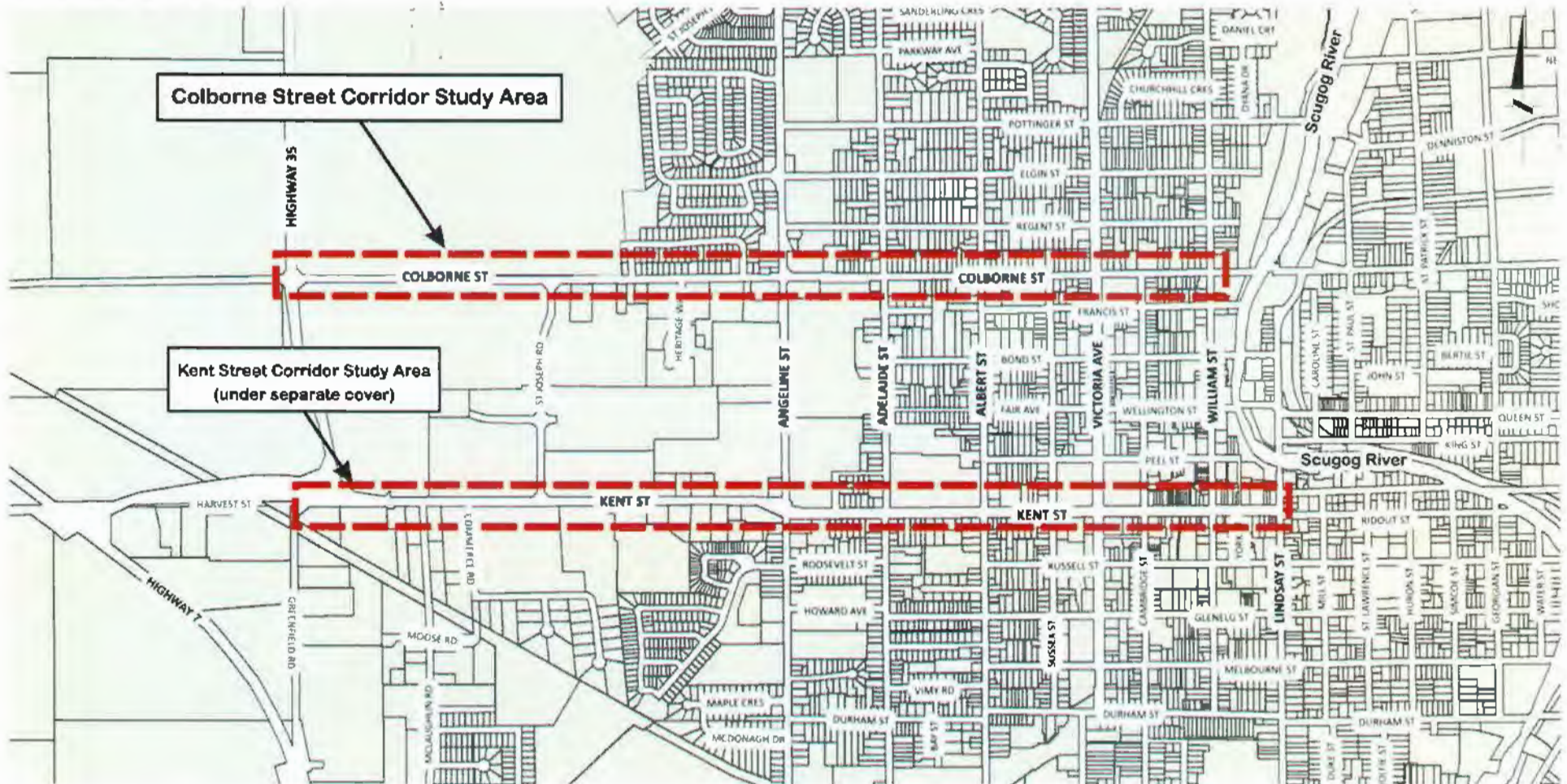
# Colborne Street

## Schedule B MEA Class EA and Corridor Study



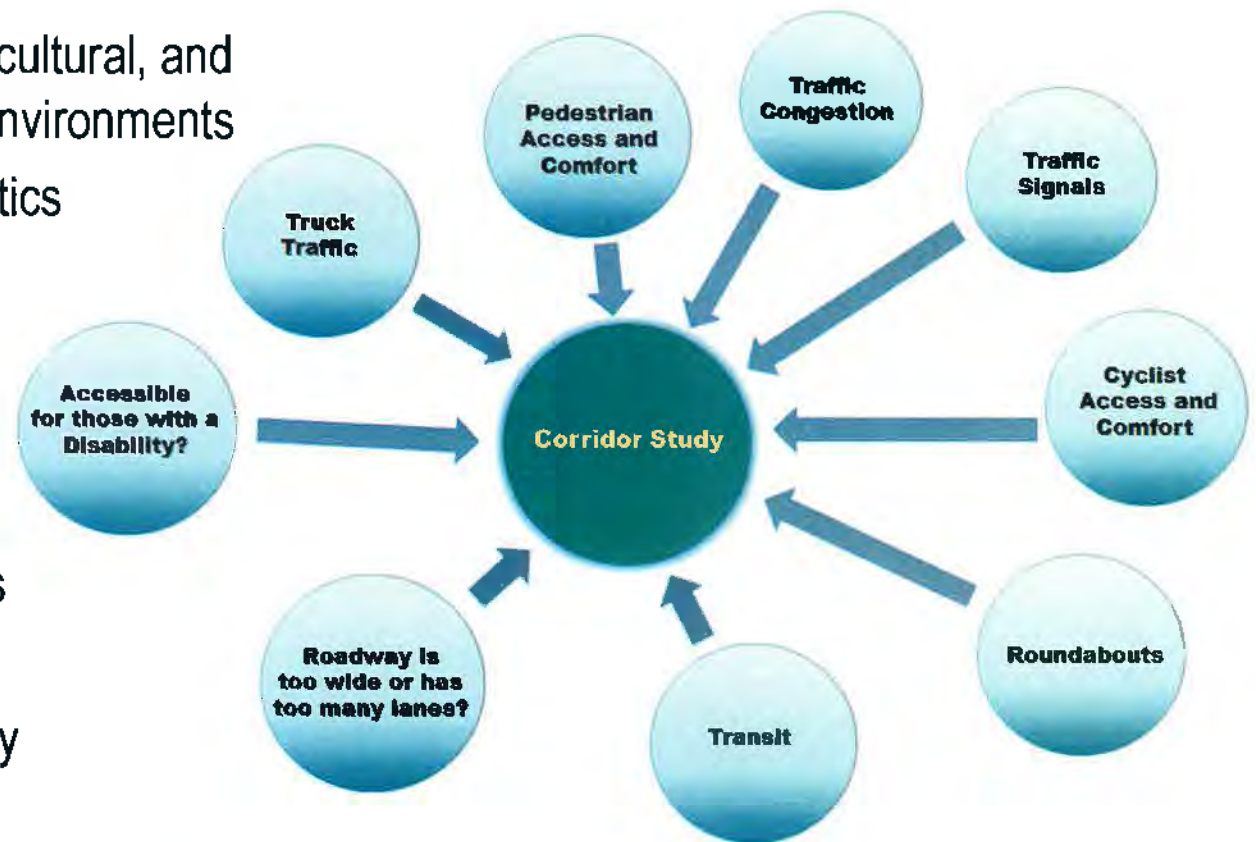


# Study Area



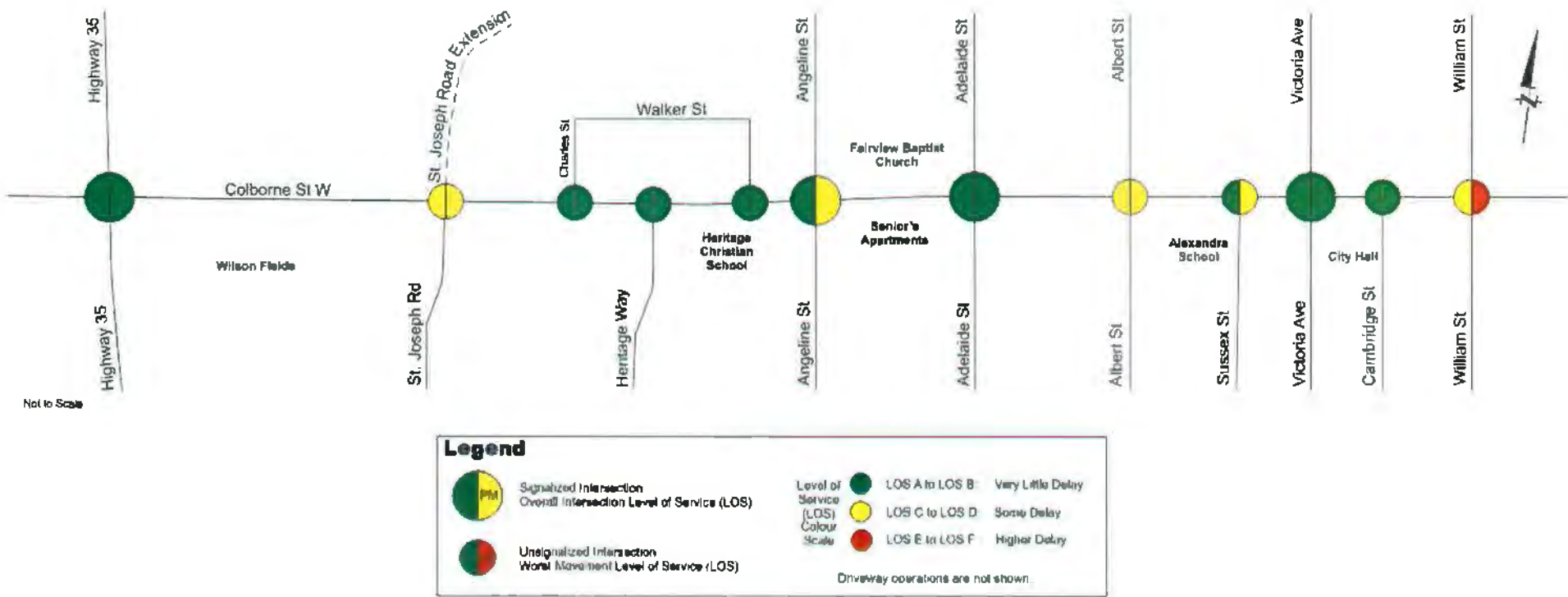
# EA Process & Existing Conditions

- Followed MEA Class EA Schedule 'B' process
- Existing Condition Inventory
  - Natural, socio-economic, cultural, and infrastructure and traffic environments
  - Road network characteristics
  - Pavement markings
  - Signage
  - Active transportation
  - Transit
- Existing Conditions Analysis
  - Traffic Operations
  - Safety and collision history





# Existing Conditions



# Consultation

- Conducted a consultation program that extended beyond the requirements of the **MEA Class EA** for a **Schedule 'B'** project
  - Newspaper advertisements; mailings; website updates, two stakeholder meetings; and two Public Open Houses; First Nations engagement
- Comments and questions received from the public and stakeholders via comment sheets, verbal questions, letters, e-mails, and telephone calls were compiled and considered in the analysis and evaluation of alternative solutions for the Colborne Street corridor.





# Public and Stakeholder Feedback

- Pedestrian safety is very important
- Demographics need to be taken into account with more seniors and children
- It was noted that Colborne Street functions to funnel traffic to the downtown and plays an important role in the overall transportation hierarchy.
- There is interest in improving the pedestrian environment and transit connections along Colborne.
- Some would like a new signal near Alexandria School to facilitate crossing.
- Cycling is a popular sport and some feel that better accommodation is needed.

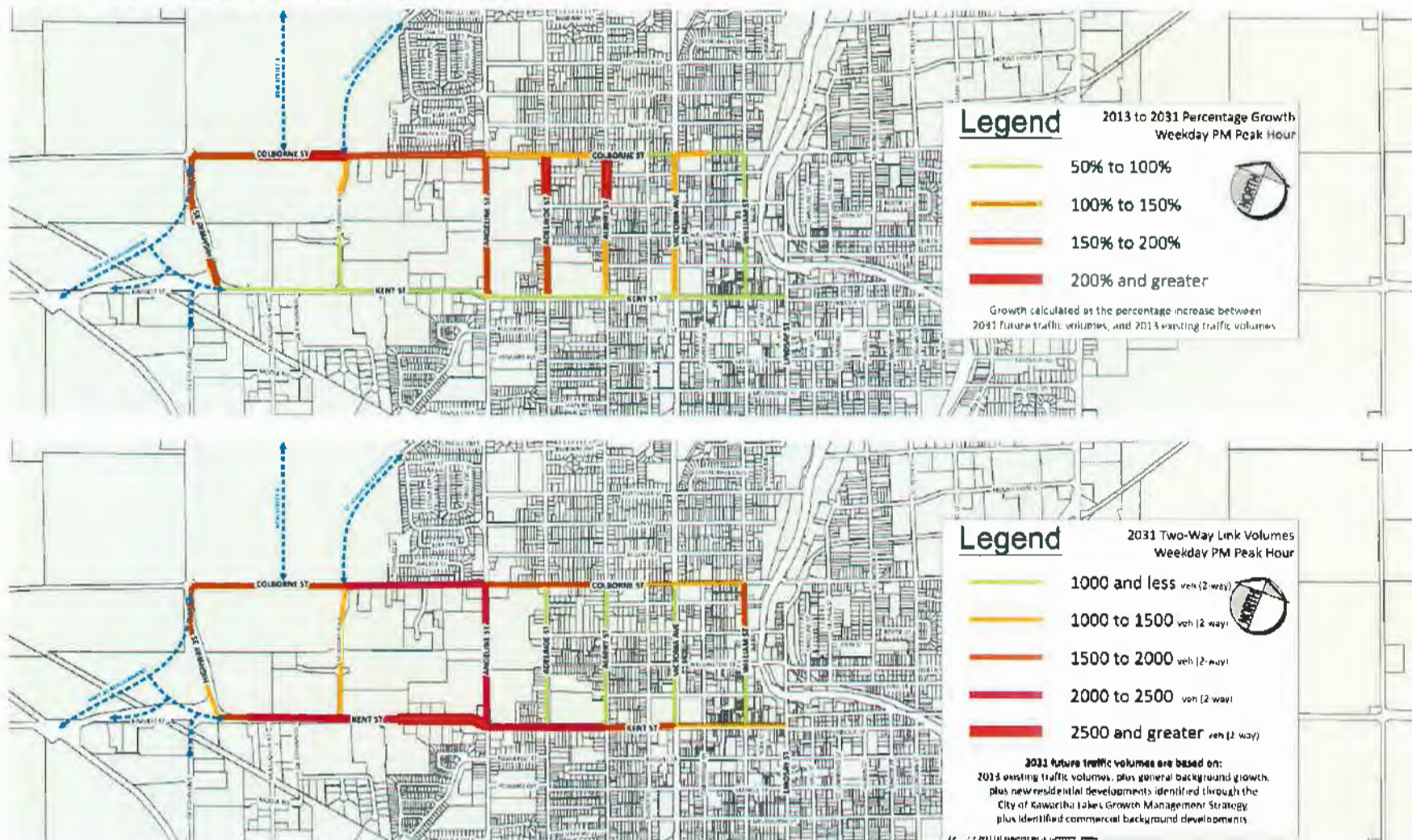


# Problem Statement

- The City of Kawartha Lakes is projected to be home to an estimated 100,000 residents by 2031. This is a population increase of approximately 33% from 2011.
- The bulk of this growth is expected to occur within Lindsay, and as a result, traffic volumes are expected to increase anywhere between 50% to over 200% compared to existing traffic volumes.
- As a result of this growth, the existing road network will not be able to accommodate future 2031 traffic volumes.
- Colborne Street will operate with Level of Service E and F during the weekday PM peak hour. 2 out of 4 signalized intersections will operate with overall Level of Service E or F.
- Vehicular flow, pedestrian and cyclist safety will also be impacted by the City's growth. These modes of travel must be addressed through improvement options that will provide a balanced approach.

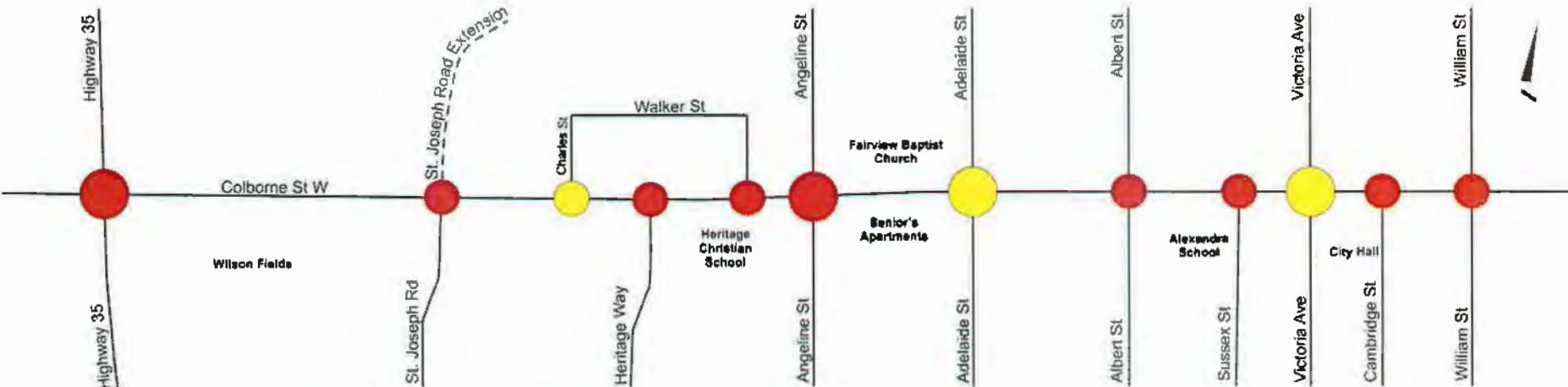


# Future Deficiencies





# Future Deficiencies



Not to Scale

Signalized Intersection

Overall Intersection Level of Service (LOS)

Unsignalized Intersection

Worst Movement Level of Service (LOS)

Level of Service (LOS)

Colour Scale

LOS A to LOS B

LOS C to LOS D

LOS E to LOS F

Very Little Delay

Some Delay

Higher Delay

Operations only shown for the weekday PM peak hour

Operations shown for signalized and unsignalized intersections only.

Driveway operations are not shown



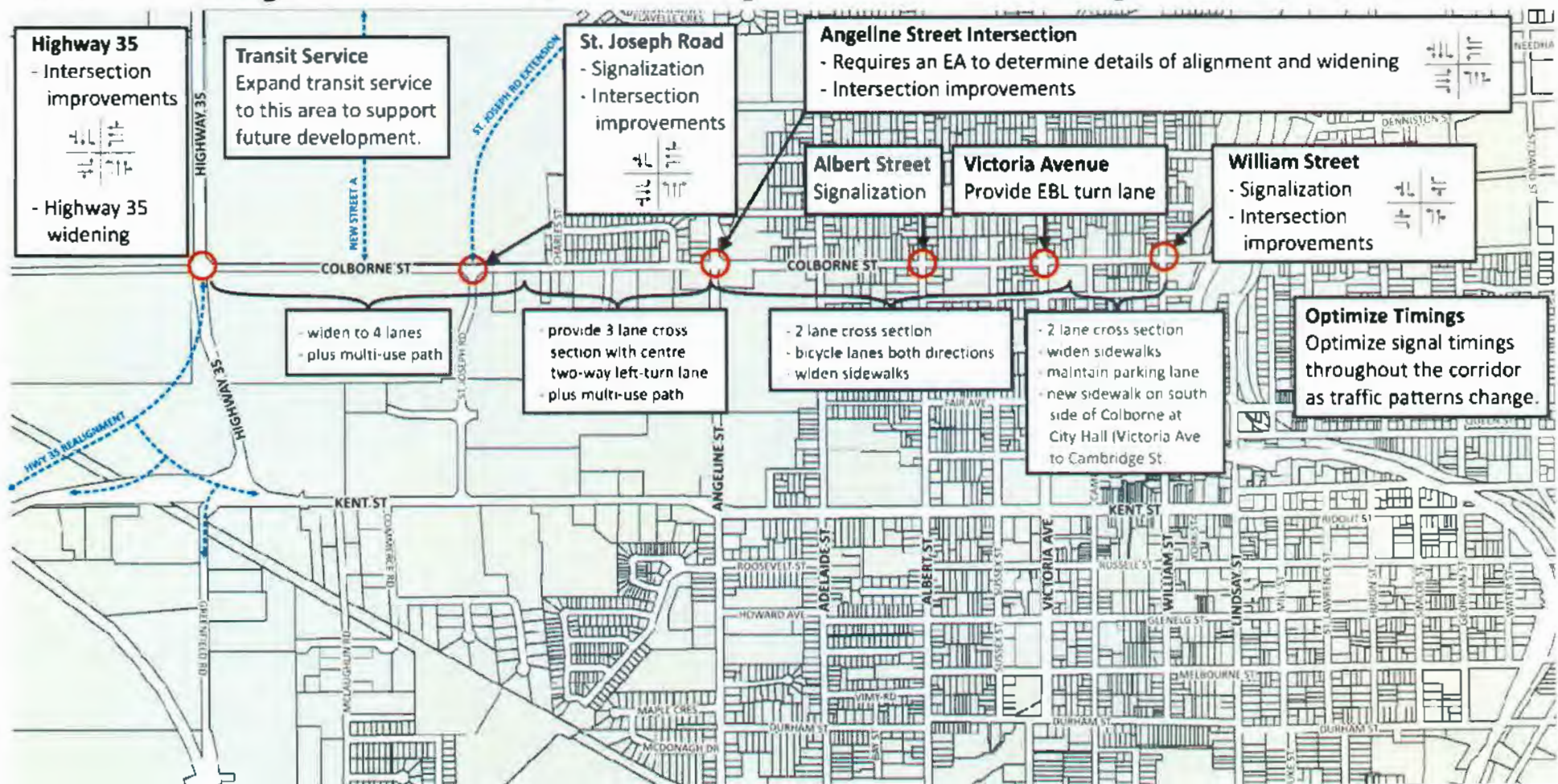


# Alternatives Solutions

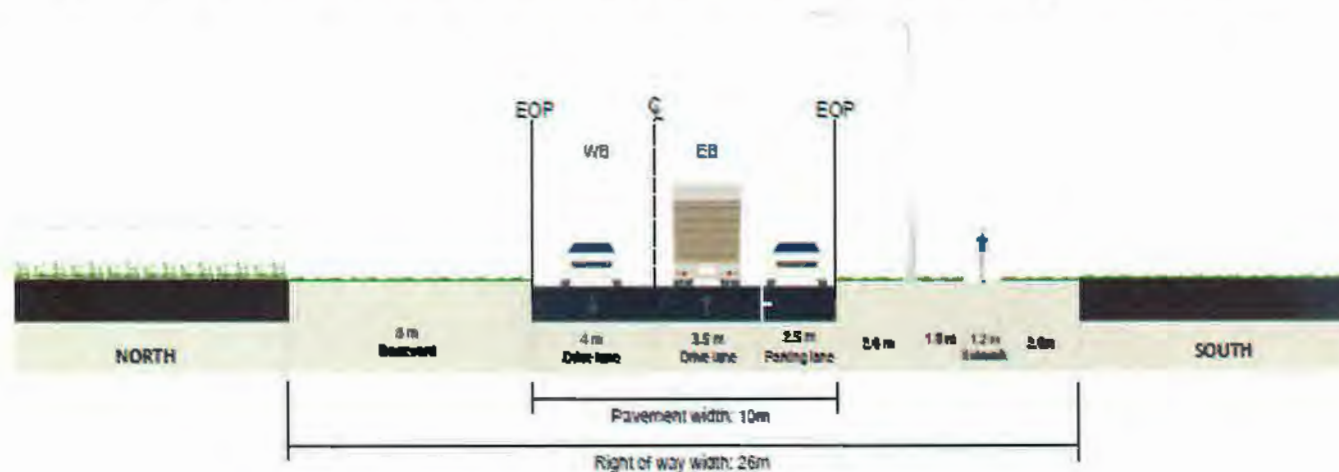
- Do Nothing
- TDM Measures only
- Improve Transit
- Improve Active Transportation Network Connections
- Improve Intersection Operations
- Improve Road Network (including widening and new roads)



# Summary of Preferred Improvement Options

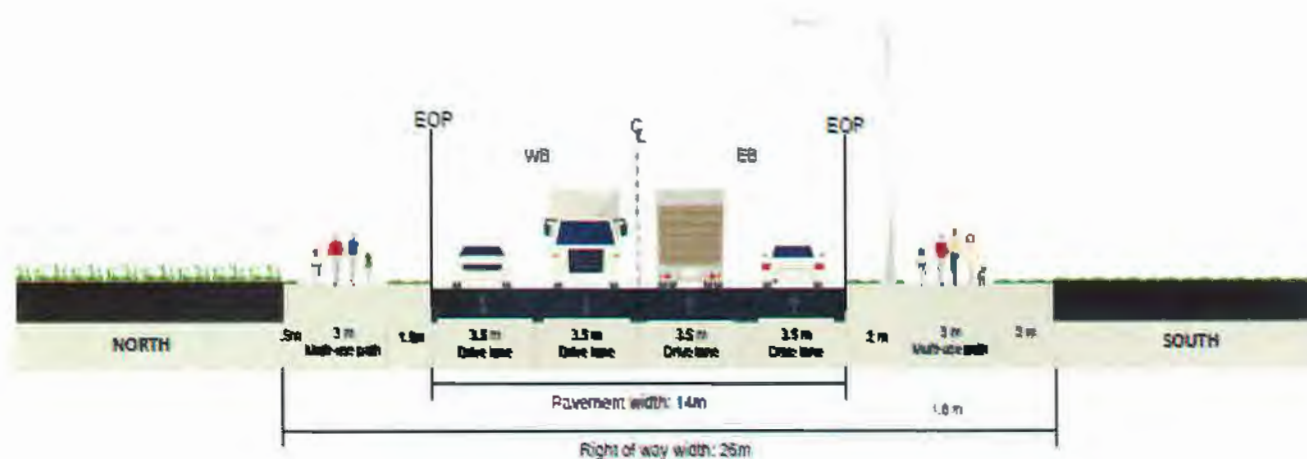


# Cross Section Improvements (west of St. Joseph)



Existing

- 1.2m sidewalk
- 2 lanes & parking

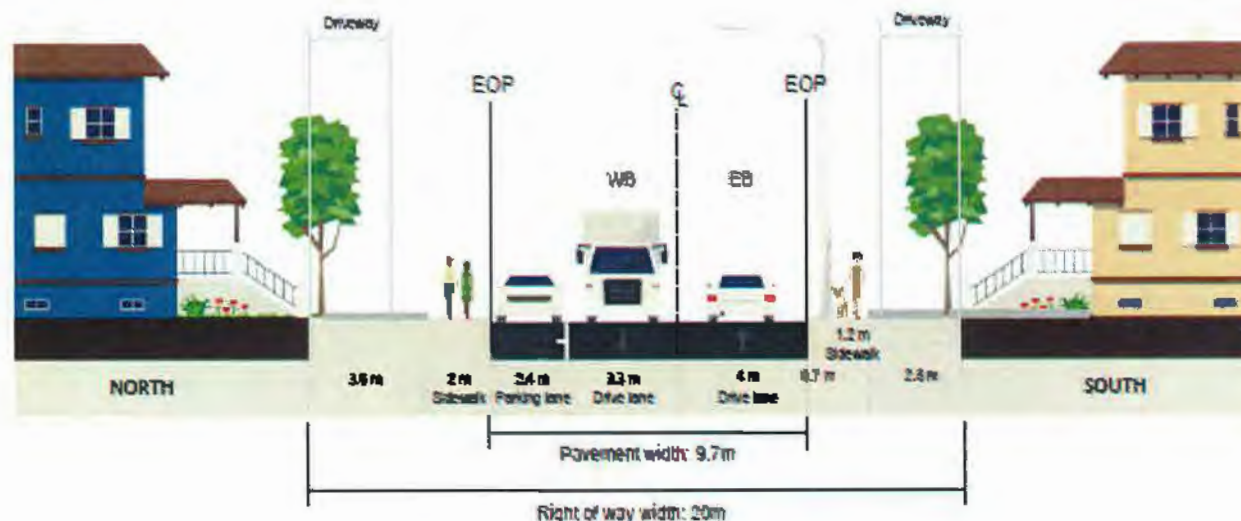


Recommended

- Multi-use Path
- 4 lanes, no parking

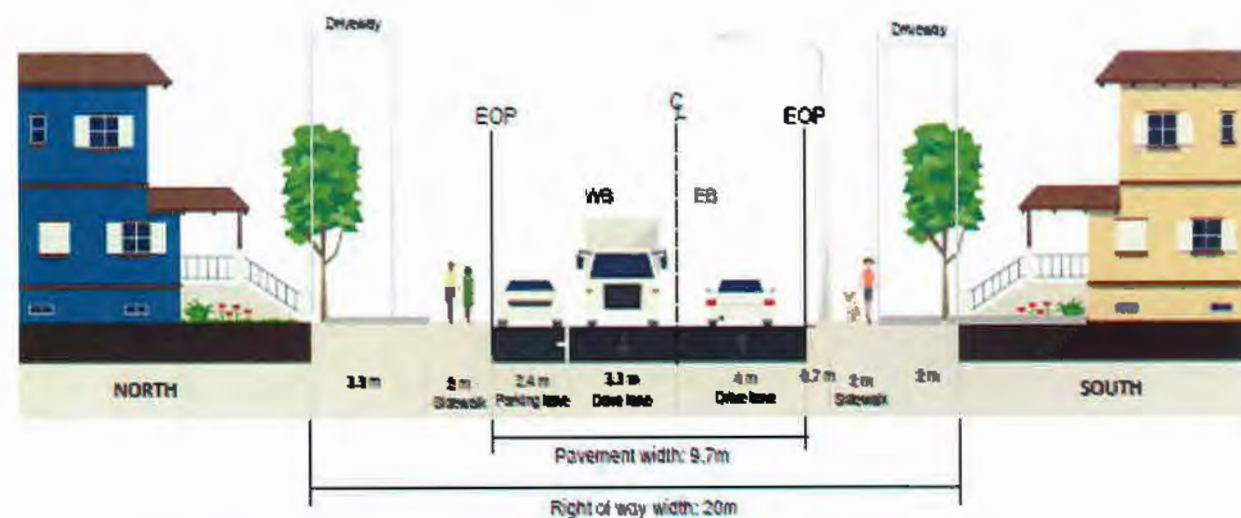


# Cross Section Improvements (west of Cambridge)



## Existing

- 1.2-2.0m sidewalk
- 2 lanes
- parking on north side



## Recommended

- 2.0m sidewalk
- 2 lanes
- parking on north side



# Scugog River Crossing at Colborne Street

- An analysis of 2031 traffic operations with a new crossing at Colborne Street indicates that the crossing:
  - Will provide some benefit to Colborne Street operations
  - Will not have a major negative impact on Colborne St/William St operations
  - Will relieve the existing Wellington/Queen bridge under 2031 conditions
  - Will provide major benefits to the street network surrounding the study area, specifically at Wellington St/William St, and at Wellington St/Lindsay St:

Location	Without Bridge	With Bridge	% Difference
<i>Total Hourly Intersection Volume</i>			
Colborne Street at William Street	1,860	2,320	+25%
William Street at Wellington Street	2,600	1,090	- 58%
Wellington Street at Lindsay Street	3,110	1,960	- 37%
<i>Two-Way Hourly Volume</i>			
Colborne Street Bridge	n/a	1,450	n/a
Wellington Street Bridge	2,100	670	- 68%



# Recommended Solutions – Intersection Specific

- Angeline Street
  - widening (carried forward to future Angeline Street EA)
  - add east-west right-turn lanes on Colborne
- Albert Street – signalization
- Highway 35
  - east-west turn lanes
  - widening to 3 lanes per direction
- William Street
  - signalization
  - turn lanes for all approaches



- Victoria Street
  - add eastbound left-turn lane
- Walker Street & Heritage Way
  - add centre two-way left-turn lane
- St Joseph Road
  - signalization (with new development)

## Recommended Solutions – Corridor Wide

- Increase existing sidewalk widths east of Angeline Street;
- Multi-use paths west of Angeline Street, bicycle lanes to the east;
- Remove on-street parking, except for east of Victoria Avenue;
- Improve transit service in-line with future commercial-retail development and Jennings Creek SPA, and coordinate improvements through a city-wide Transit Strategy or Transit Master Plan; and
- Optimize signal timings and implement signal coordination software / hardware to improve progression and to minimize interruptions of traffic flow.





## Recommended Solutions – Estimated Costs

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Excludes property acquisition costs

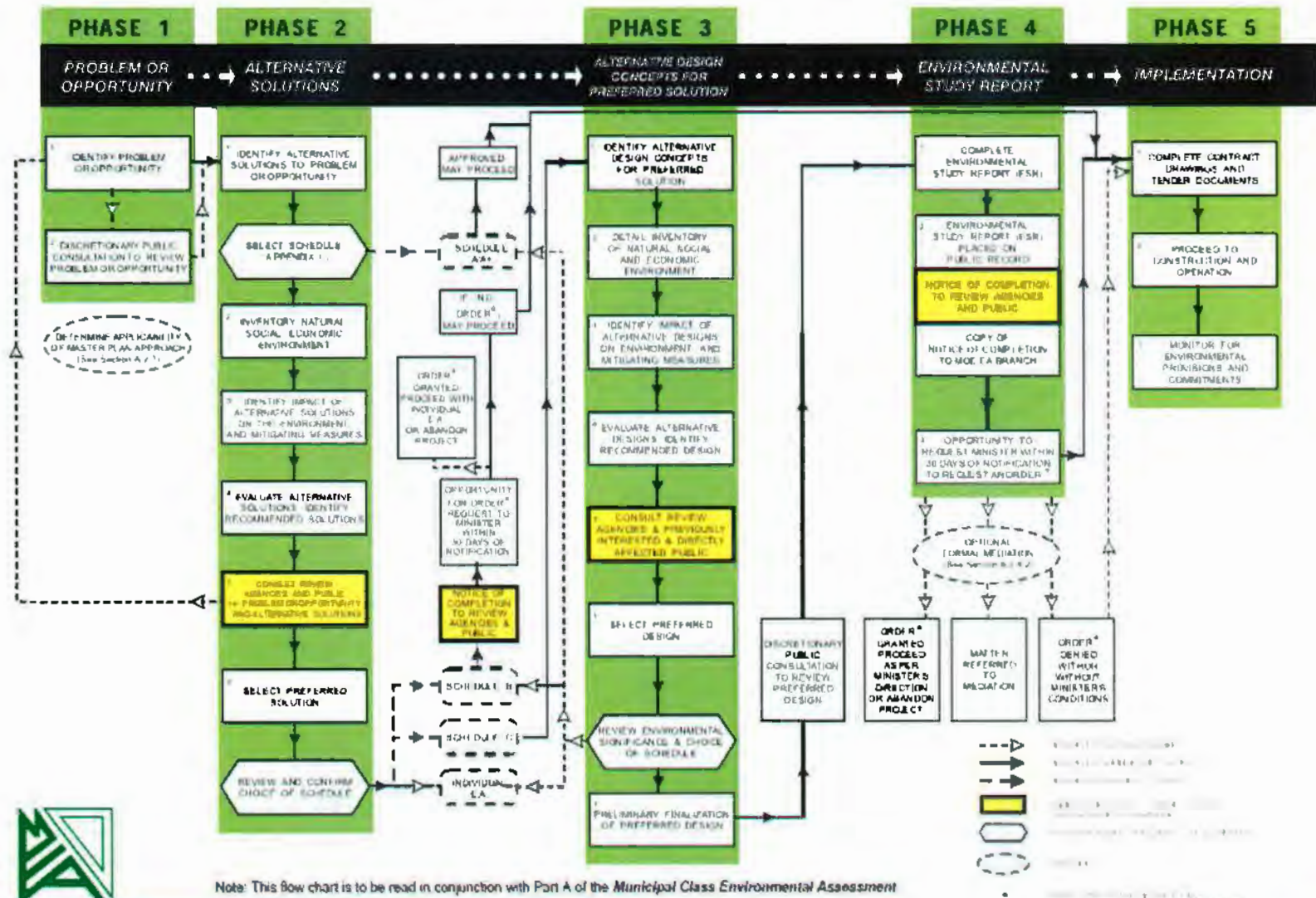


# Colborne Street

## Schedule B MEA Class EA and Corridor Study



# Kent Street Schedule B Class EA and Corridor Study: Municipal Class Environmental Assessment Process



Note: This flow chart is to be read in conjunction with Part A of the Municipal Class Environmental Assessment

