

# Municipal Class Environmental Assessment

## Steeles Avenue from Chinguacousy Road to Winston Churchill Boulevard

### PUBLIC INFORMATION CENTRE # 1

Date : Wednesday, November 7, 2012  
Location: Copeland Public School  
Time : 6:30 p.m. – 8:30 p.m.

# 1

# Welcome

- Please sign in and take a comment sheet
- If you have any questions our team is available to help you
- Place your completed comment sheets in the Comment Box, or, send them to:  
Hitesh Topiwala  
Project Manager  
[hitesh.topiwala@peelregion.ca](mailto:hitesh.topiwala@peelregion.ca)

by **Friday, November 23, 2012**

# Purpose of Public Information Centre #1

The purpose of this Public Information Centre (PIC) is to:

- Explain the Municipal Class Environmental Assessment process
- Present the information on the technical studies that have been completed to date
- Present planning alternatives, evaluation of those alternatives and a recommended planning alternative
- Ask for your input and comments on the recommended planning alternative and
- Explain what will happen next



# 3

# Municipal Class EA Process

## Phases

### Phase 1: PROBLEM OR OPPORTUNITY

- ☑ Identify and describe the problem and opportunities

### Phase 2: Alternative Solutions

- ☑ Identify alternative solutions to the problem
- ☑ Inventory the natural, social, economic & cultural environments
- ☑ Identify the impact of the alternative solutions after mitigation
- ☑ Evaluate the alternative solutions with consideration of environmental and technical impacts
- ☑ Identify a recommended alternative solution

### Phase 3: Alternative Design Concepts for the Preferred Solution

- ☐ Confirm preference for recommended solution
- ☐ Identify alternative designs to implement the preferred solution
- ☐ Inventory the natural, social, economic & cultural environments
- ☐ Identify the impact of the alternative designs after mitigation
- ☐ Evaluate alternative designs with consideration of the impacts (preliminary recommendation made)
- ☐ Confirm the recommended design concept

### Phase 4: Environmental Study Report

- ☐ Complete an Environmental Study Report (ESR) which sets out all of the activities undertaken to date through Phases 1, 2 & 3
- ☐ Notify the public and government agencies of completion of the ESR and of the PART II Order provision in the EA Act
- ☐ Place ESR on public record for 30 calendar days for review

### Phase 5: Implementation

- ☐ Proceed to design and construction of the project
- ☐ Property acquisition and utility relocation
- ☐ Initiate construction as appropriate
- ☐ Monitor for environmental provisions and commitments

Notice of Study Commencement

PIC#1 November 7, 2012

- Needs and Justification
- Planning Alternative Solutions
- Evaluation of Planning Alternative Solutions
- Preliminary Recommended Solution

We are here

PIC#2 (Spring 2013)

- Alternative designs for the preferred solution
- Evaluation of alternative design concepts
- Preliminary recommended design concept

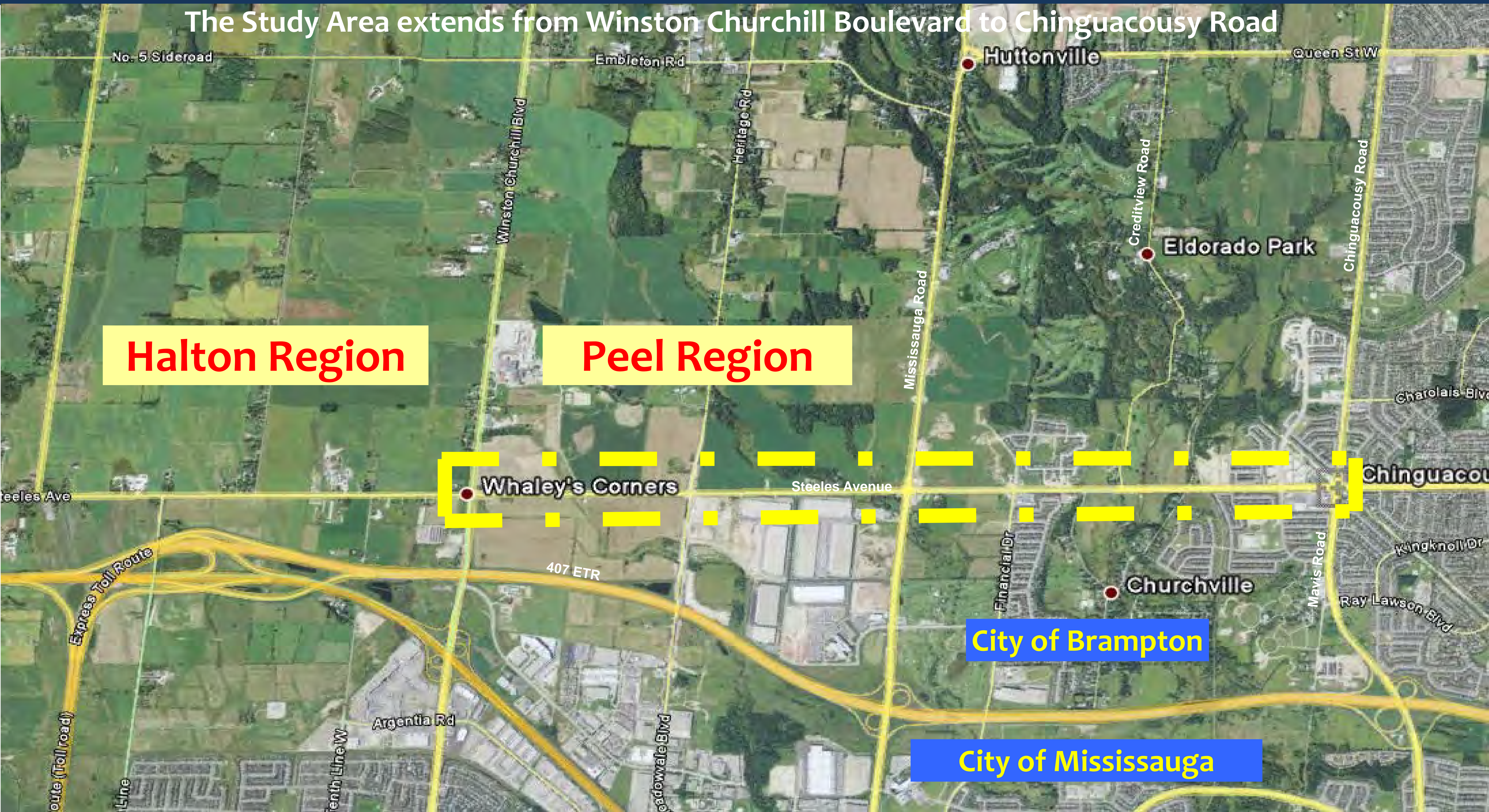
Notice of Study Completion and Filing the ESR



# 4

# Study Area

The Study Area extends from Winston Churchill Boulevard to Chinguacousy Road



**Halton Region**

**Peel Region**

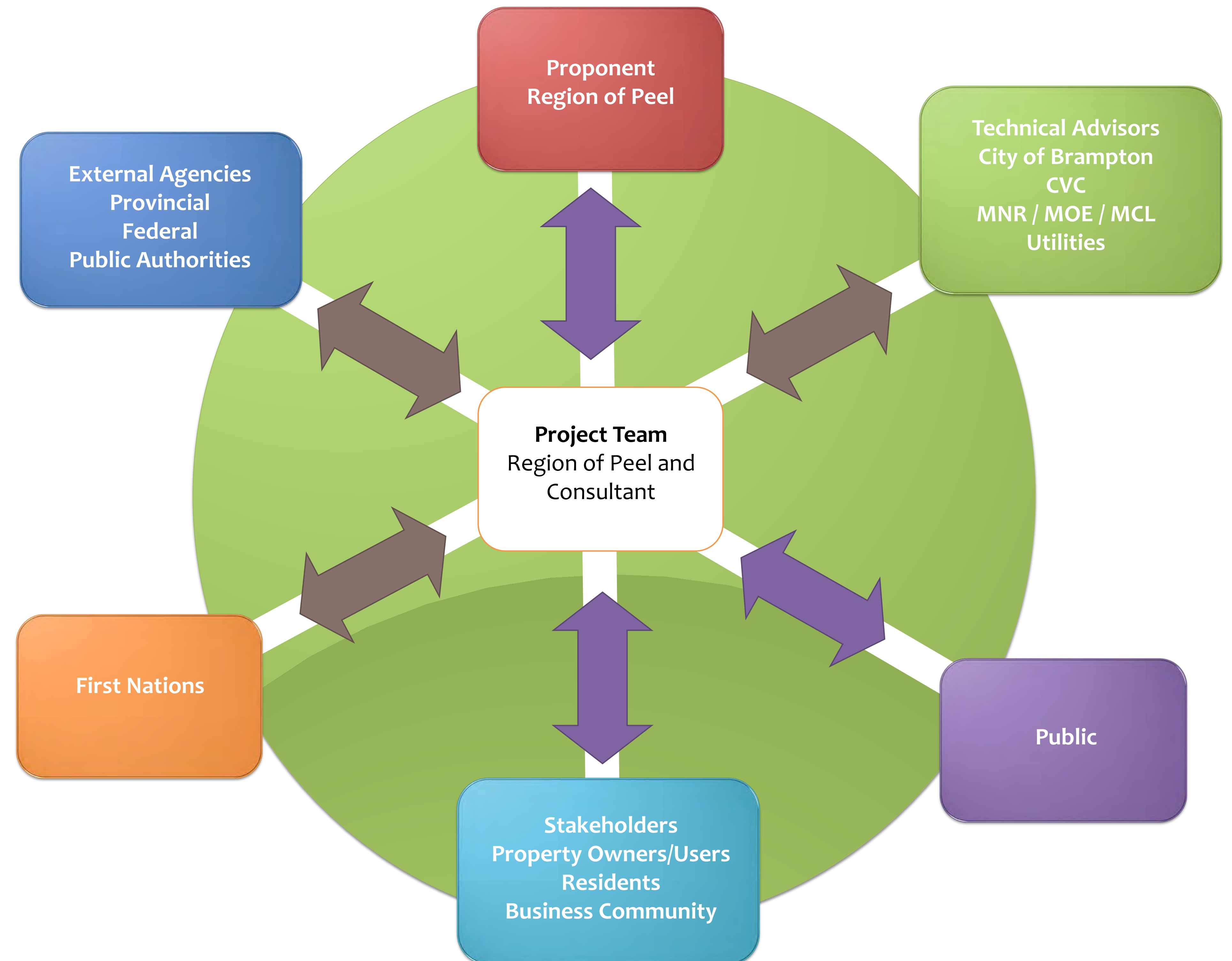
**City of Brampton**

**City of Mississauga**

# 5 Study Objectives and Organization

## Study Objectives

- Identify problems and opportunities
- Develop planning alternative solutions and a preferred solution
- Develop and evaluate design concepts for the preferred solution
- Complete a functional design for the preferred concept
- Prepare a formal Environmental Study Report (ESR) documenting the study findings and recommendations



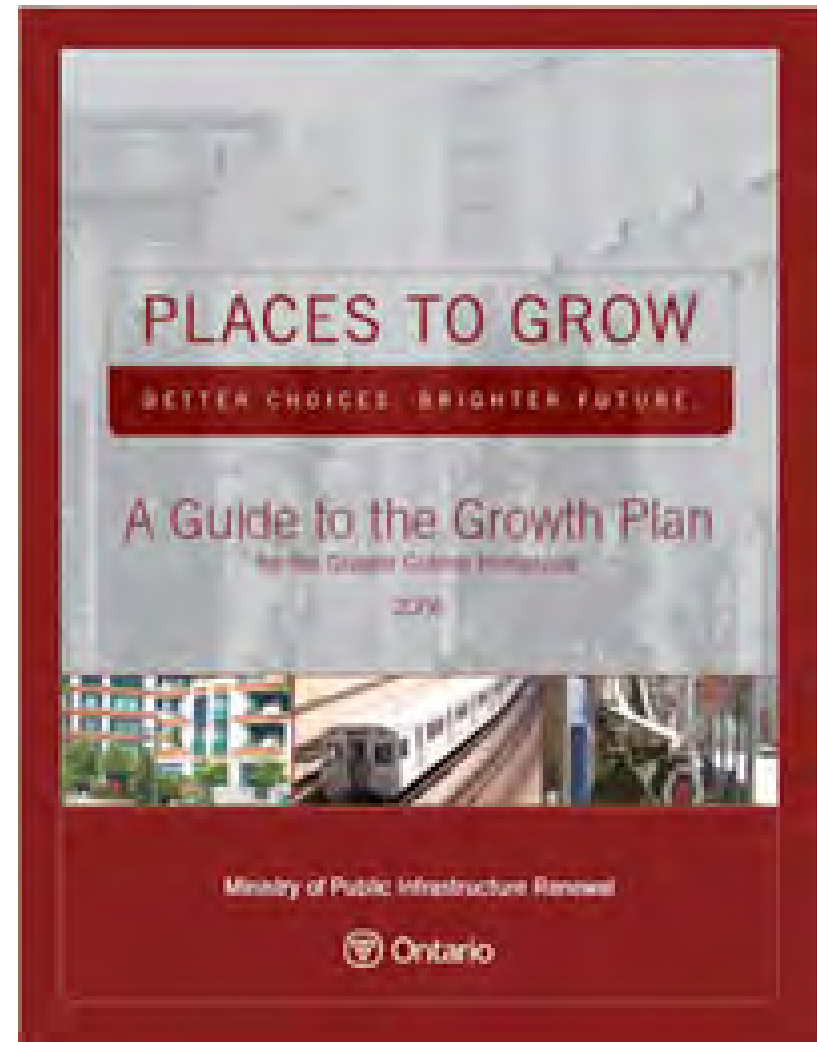
# Strategic Plan and Term of Council Priorities for 2011-2014

*This Environmental Assessment supports a number of actions and initiatives related to transportation and environment in the Region's Strategic Plan Goals and Actions and the Term of Council Priorities.*



- **Environment**  
Protect, enhance and restore the environment
- **Transportation**  
Support and influence sustainable transportation systems
- **Public Safety**  
Ensure a safe Peel community

# Planning and Policy Context



## Provincial Places to Grow

- Forecasts Peel's population to grow to 1.6 million by 2031

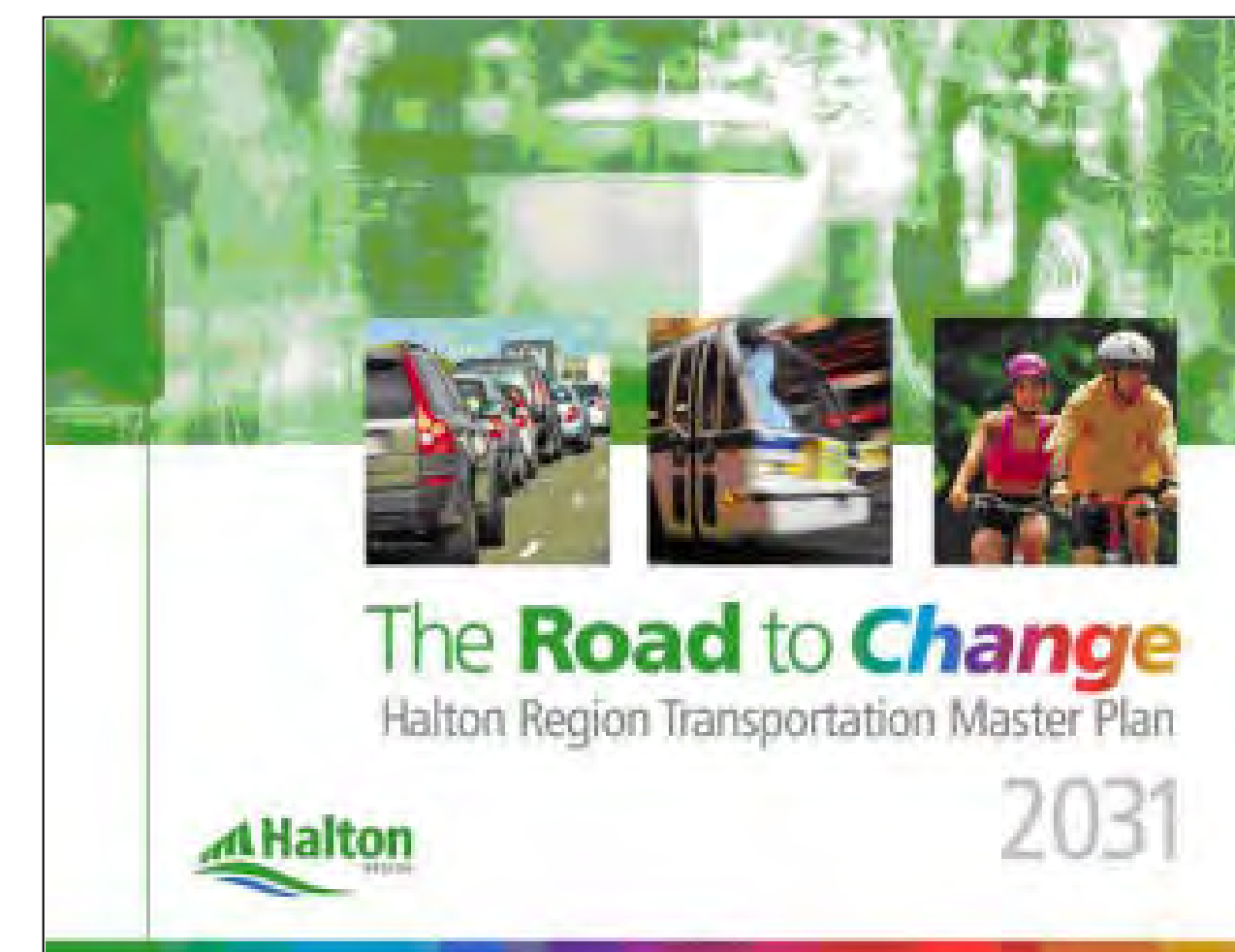


## Peel Long Range Transportation Plan

- Identifies the need for capacity improvements along Steeles Avenue to support growth

## Region of Peel Official Plan

- Provides a framework for guiding growth and development in Peel



## Halton Region Transportation Master Plan 2031

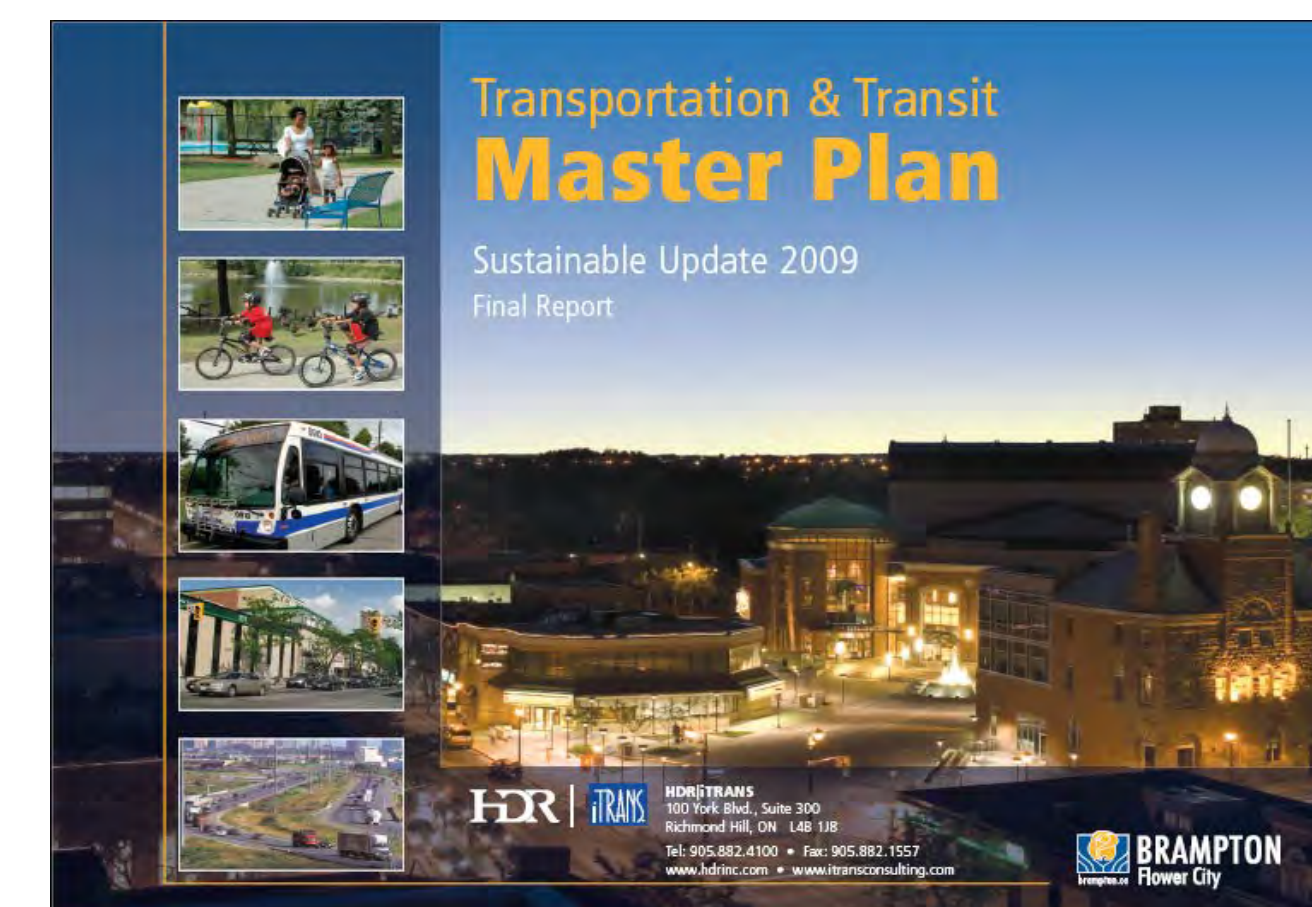
- Recommends the widening of Steeles Avenue to four lanes plus two dedicated bus lanes by 2028

## 2009 Transportation and Transit Master Plan (TTMP)

- Acknowledges the need for improvements to this section of Steeles Avenue

## 2006 Brampton Official Plan

- Designates the area north and south of the study area for growth and development to accommodate 30,000 people and 25,000 employment through the Bram West Secondary Plan

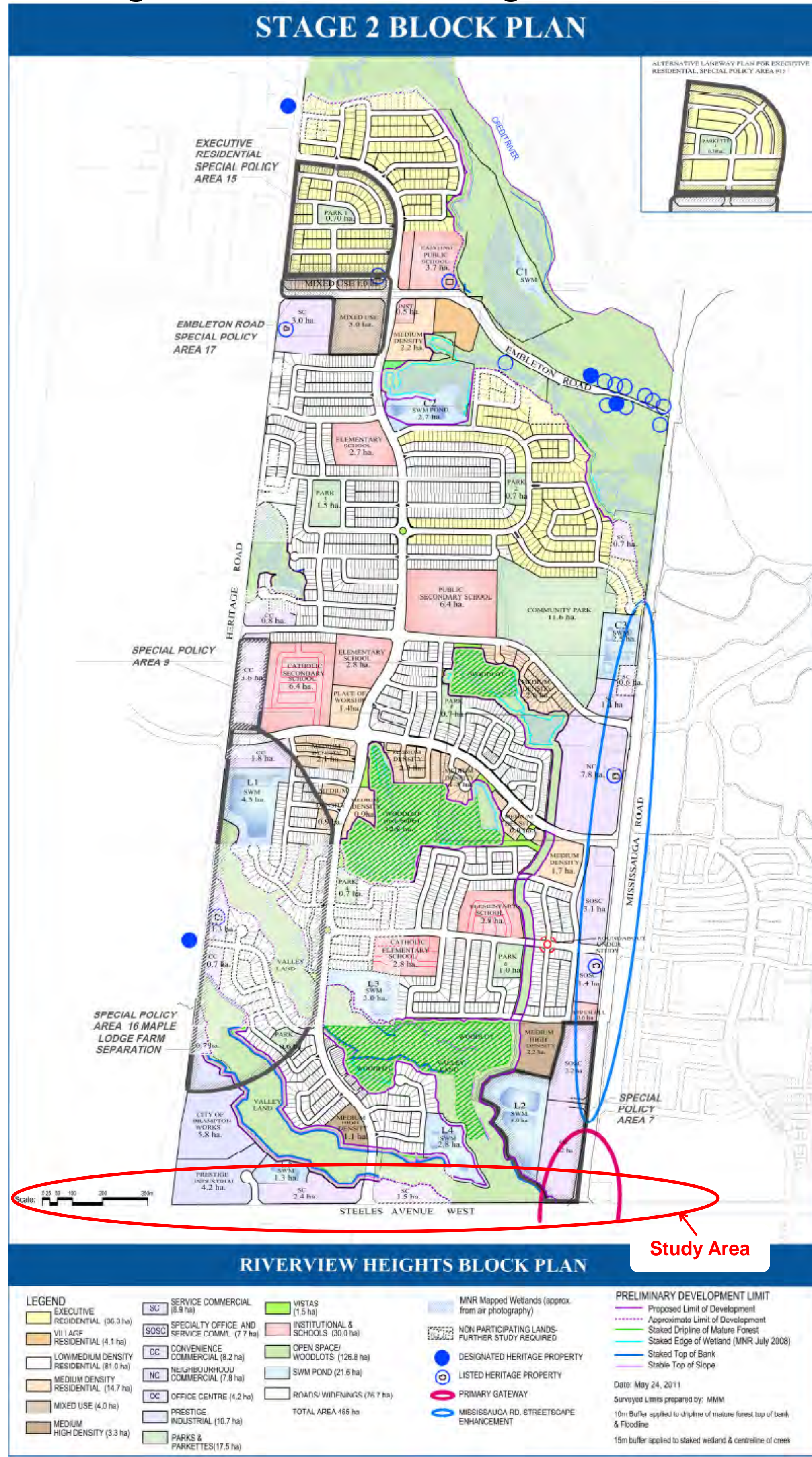




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# Future Conditions – Land Use

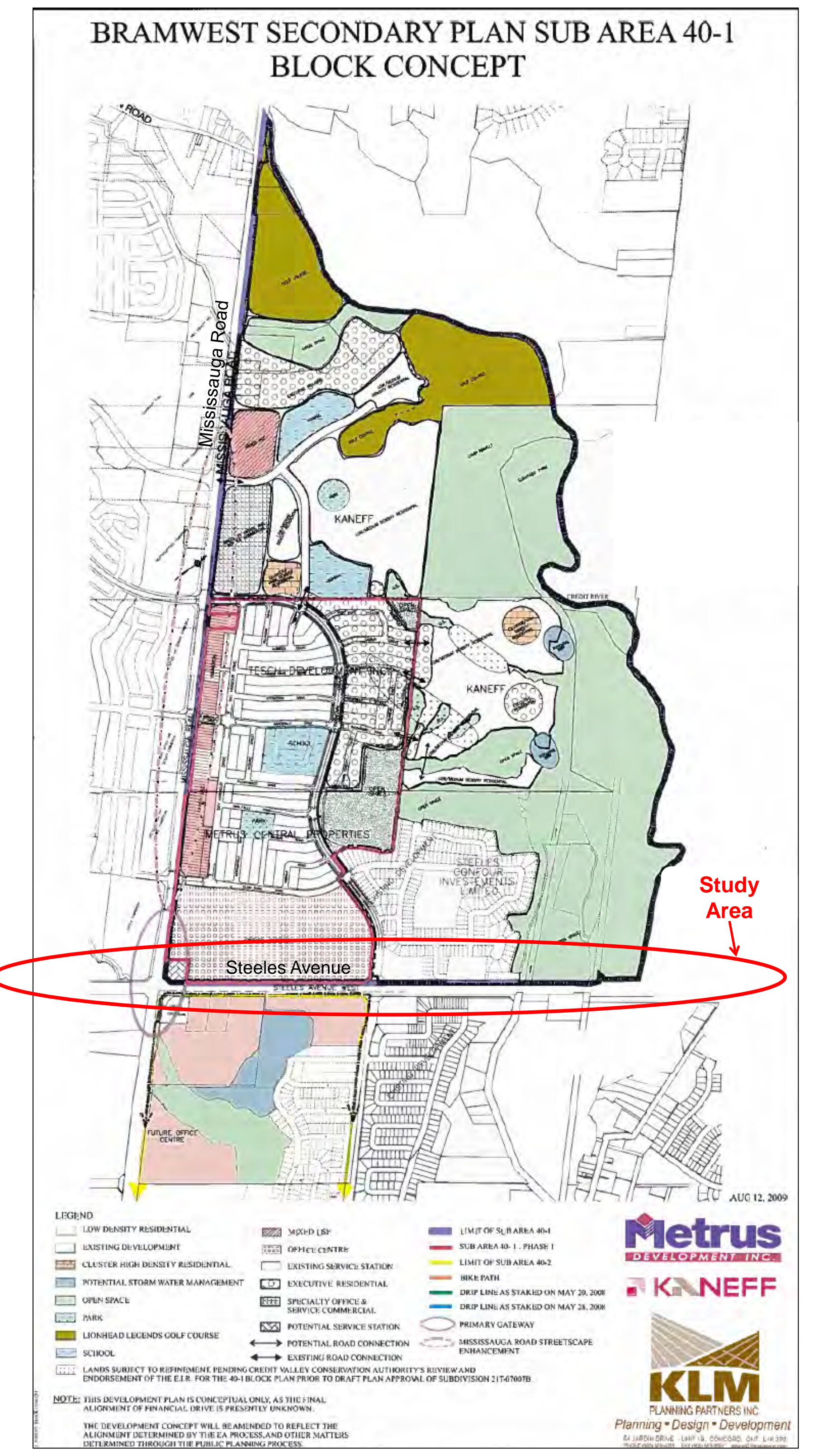
Villages of Riverview Heights Block Plan



BramWest Secondary Plan Sub Area 40-2 Block Concept



BramWest Secondary Plan Sub Area 40-1 Block Concept



Source : City of Brampton web site

**Region of Peel**  
 Working for you

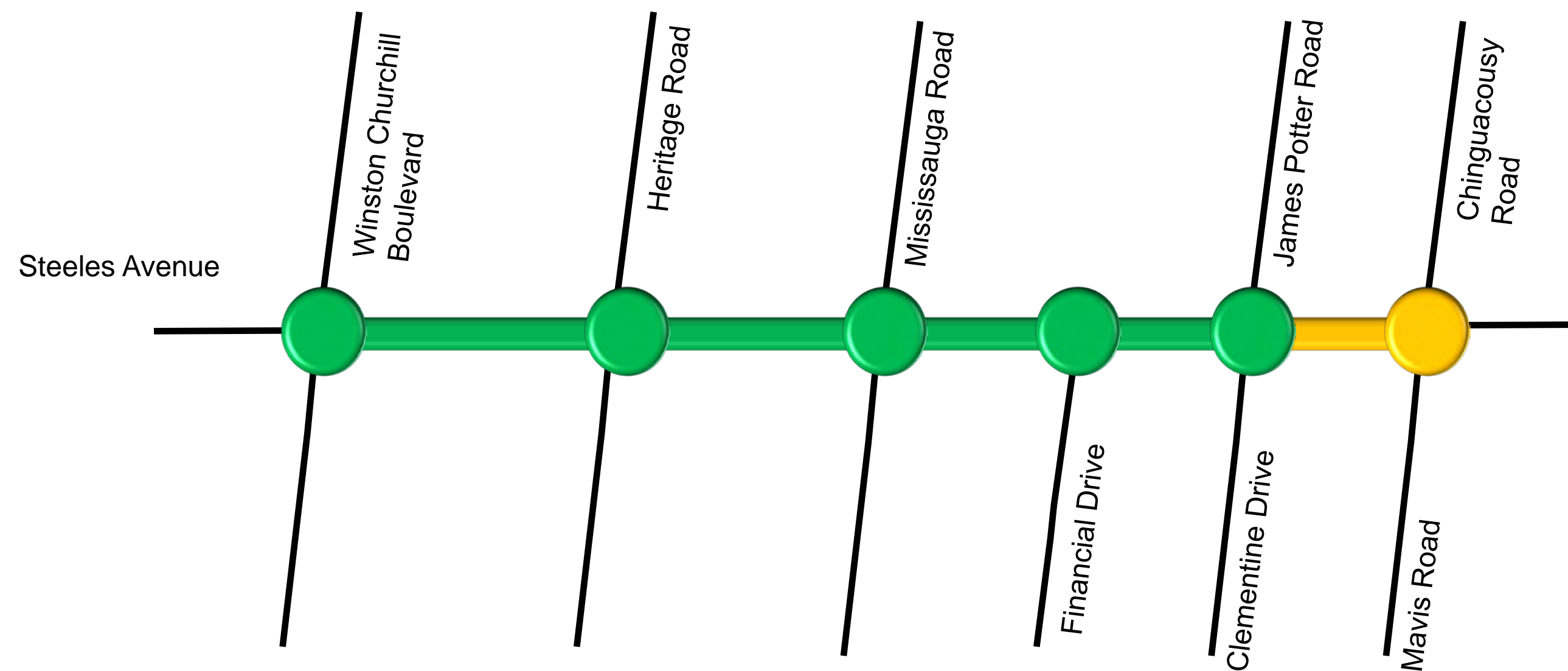
# 9

# Traffic Study

- During peak hours, Steeles Avenue is currently operating with some delays and congestion at intersections
- An increase of 30,000 residents and 25,000 employees is projected in the Bram West area by the year 2031
- Improvements are required to address existing traffic congestion and future congestion from anticipated growth in the area

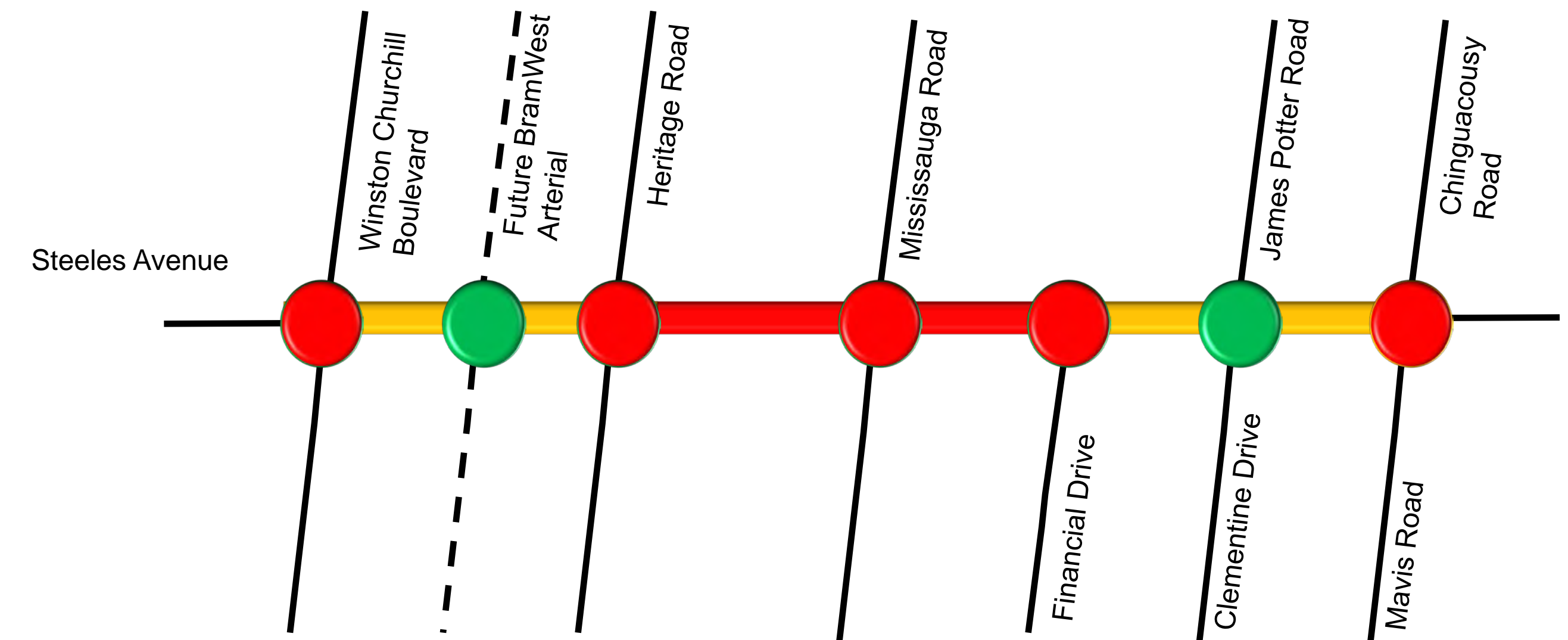


# Traffic Study Overview (AM Peak Hours)



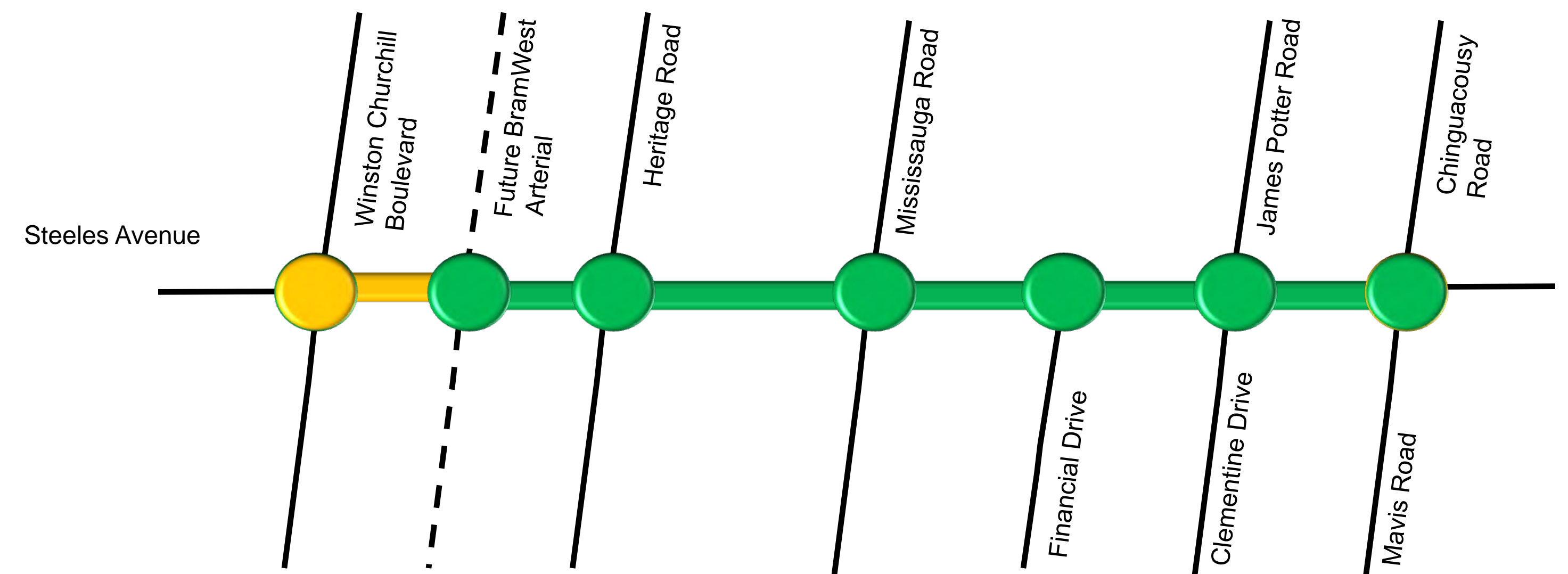
Existing Traffic Conditions

## Level of congestion **with no** improvements to the Road



2031 Projected Traffic Conditions

## Level of congestion **with** improvements to the Road



2031 Projected Traffic Conditions

### Legend



Represents congested conditions with slow operating speeds, high delays, and extensive queues at intersections

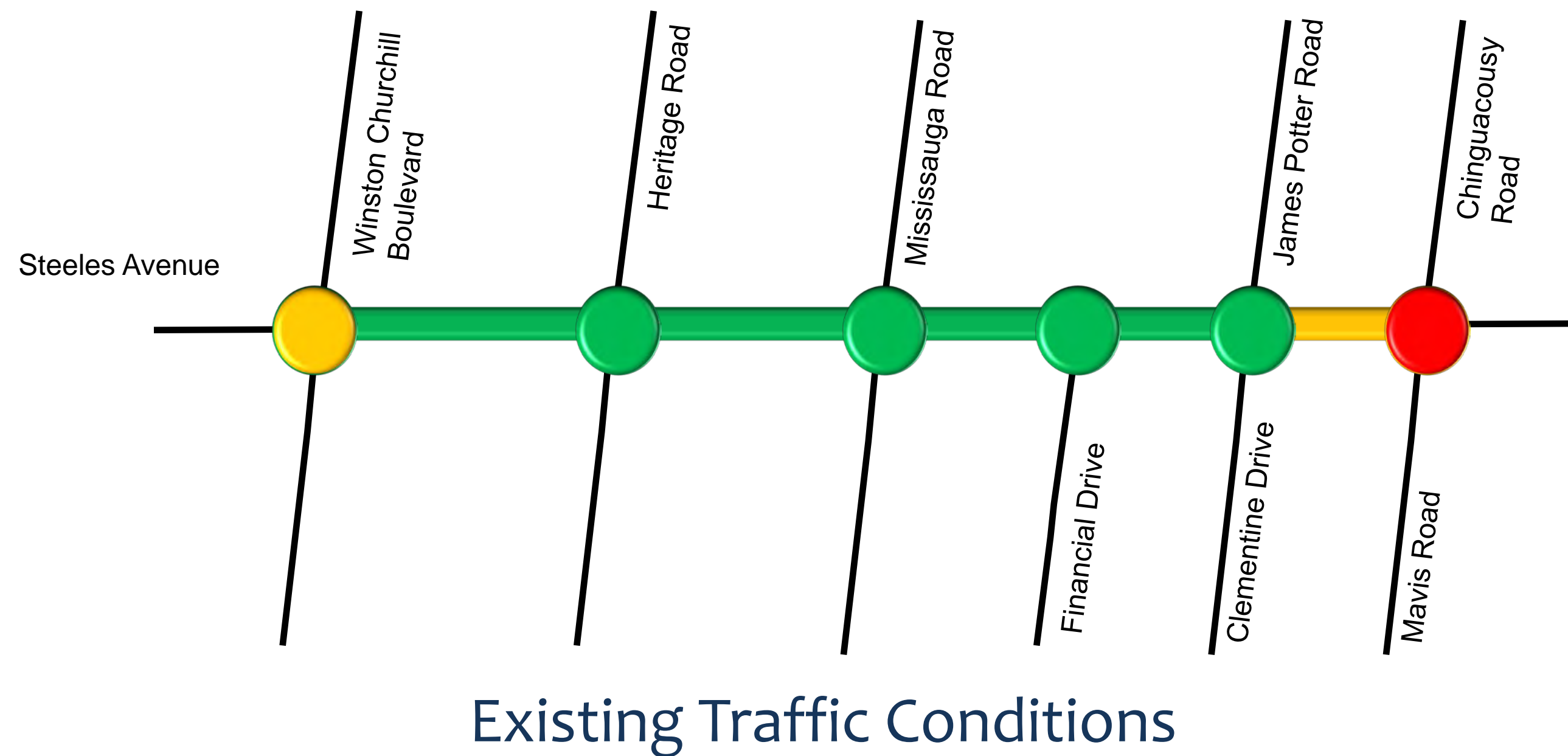


Represents moderate congestion where small increases in volume can reduce operating speeds and increase delays and queues at intersections

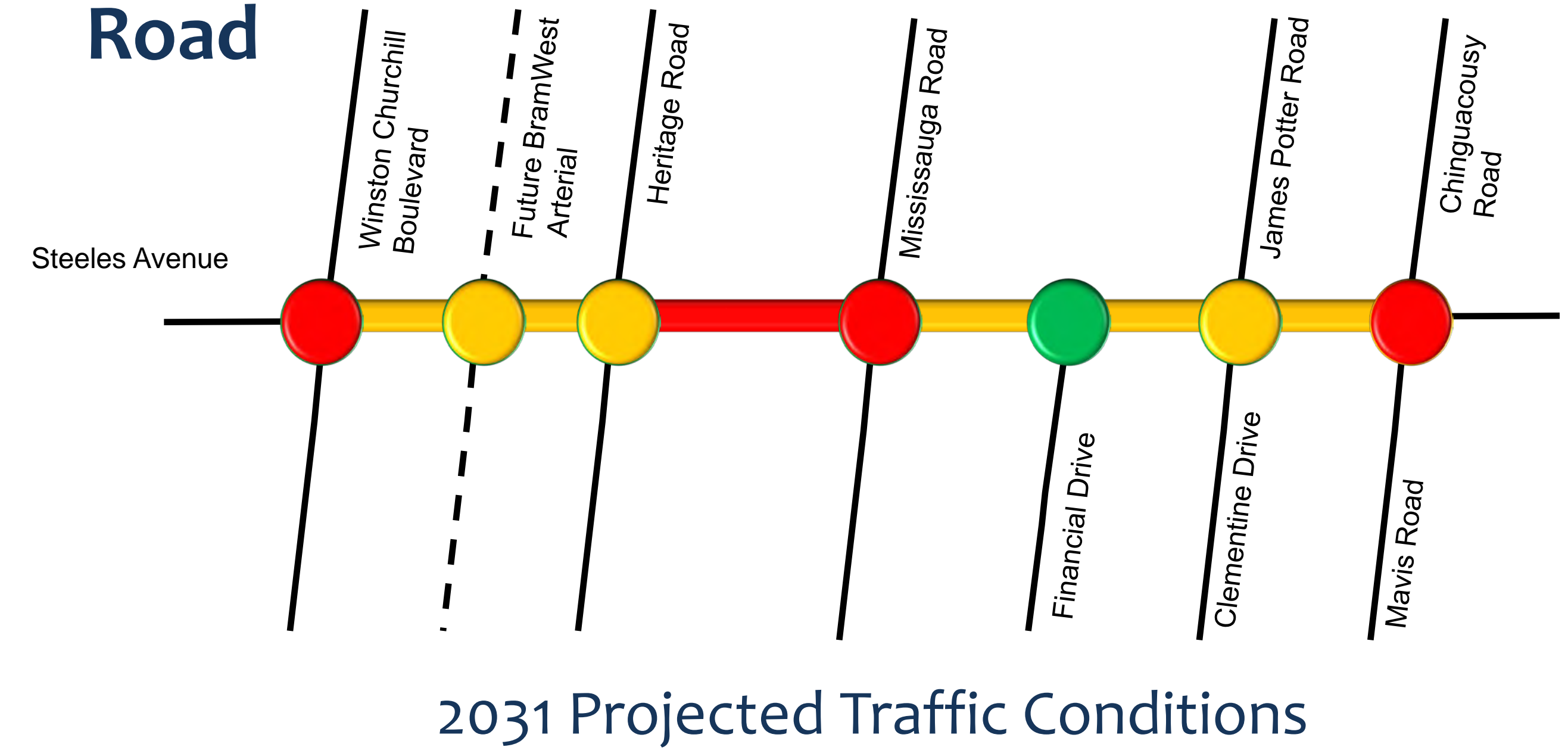


Represents stable traffic flow conditions with modest reduction in operating speeds and minimal delays at intersections

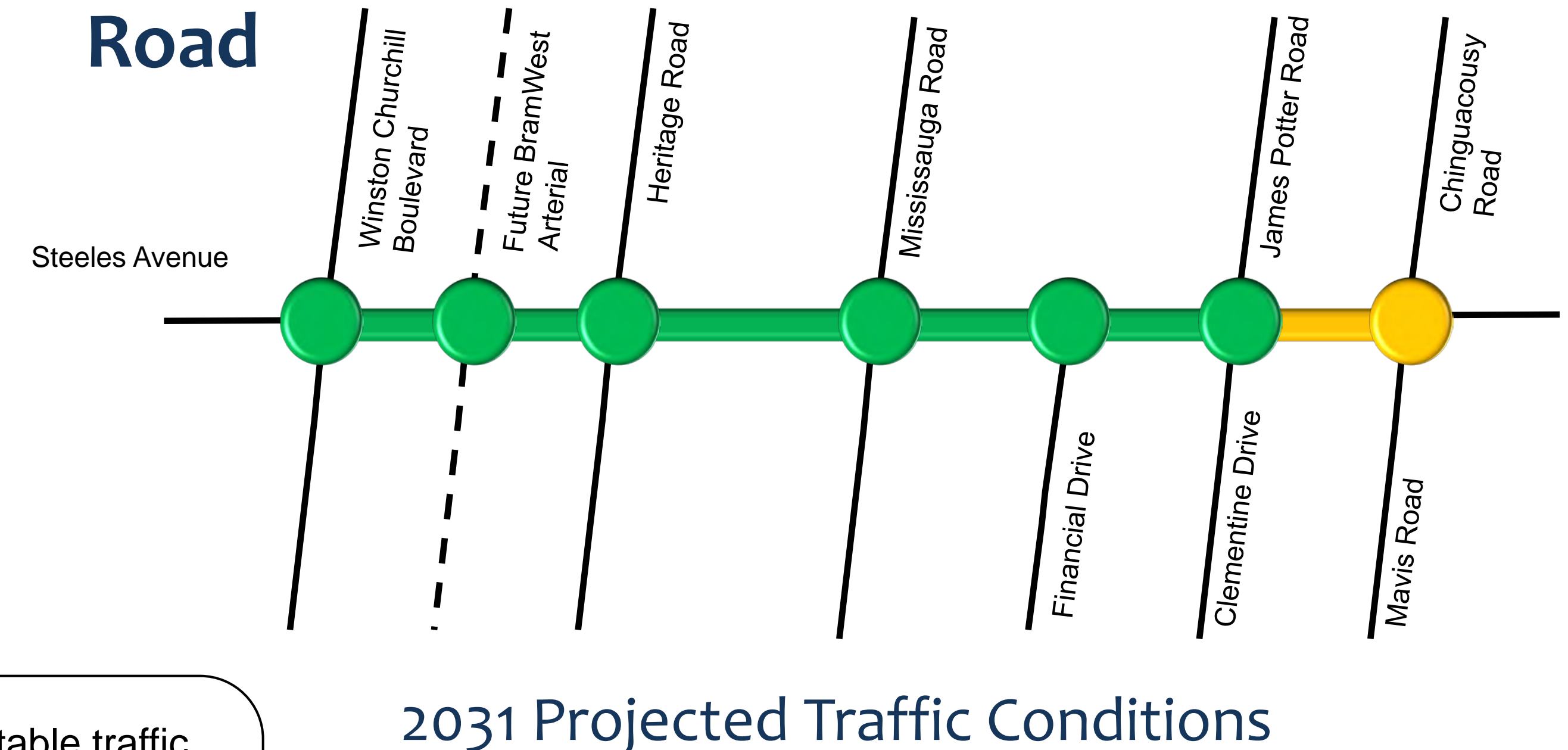
# Traffic Study Overview (PM Peak Hours)



## Level of congestion **with no** improvements to the Road



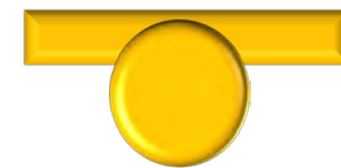
## Level of congestion **with** improvements to the Road



### Legend



Represents congested conditions with slow operating speeds, high delays, and extensive queues at intersections

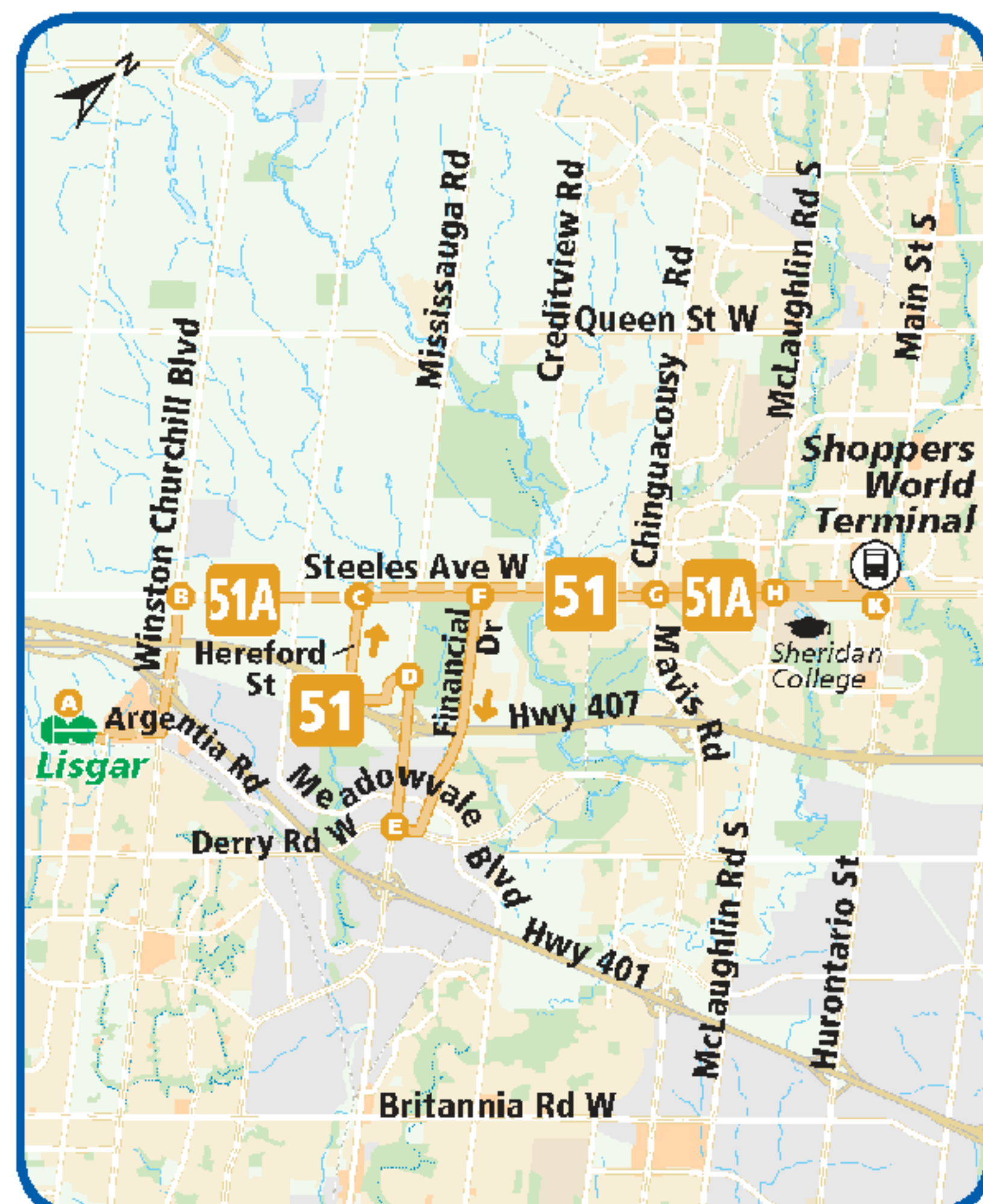


Represents moderate congestion where small increases in volume can reduce operating speeds and increase delays and queues at intersections

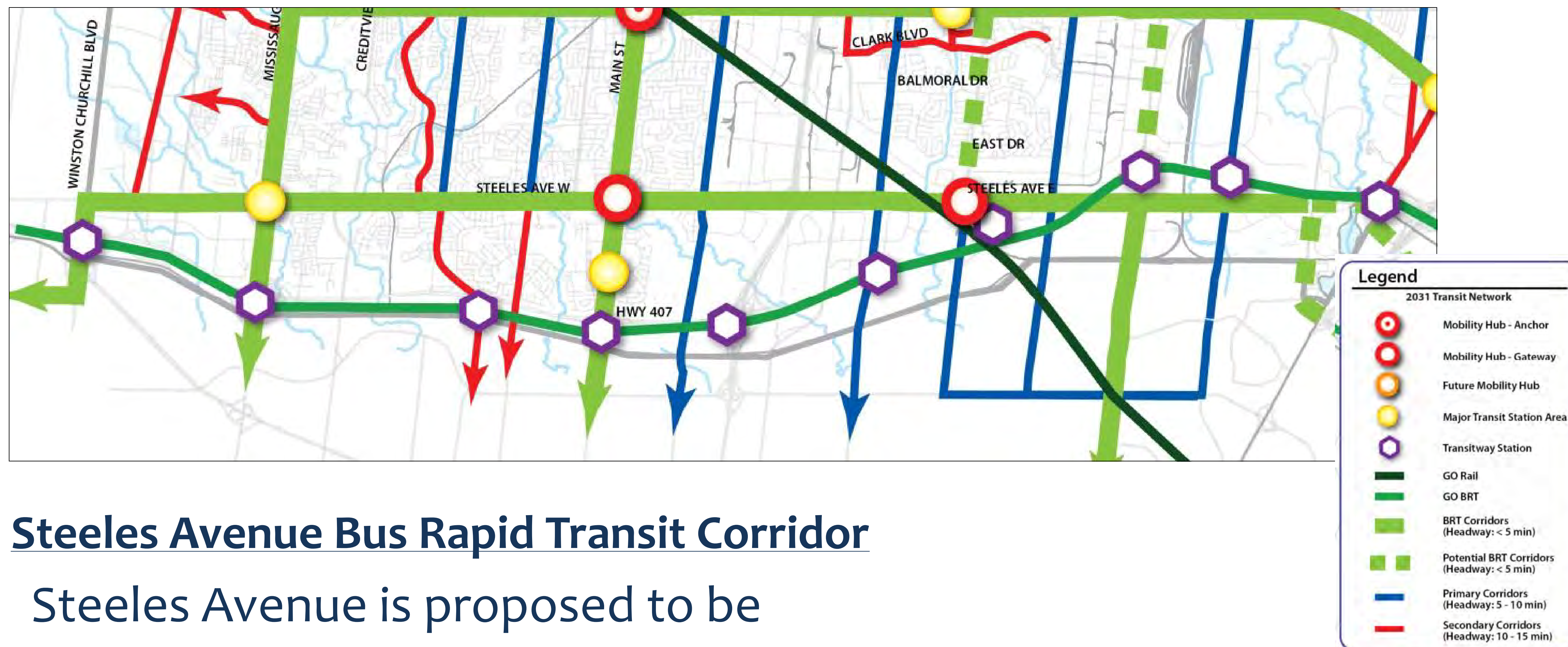


Represents stable traffic flow conditions with modest reduction in operating speeds and minimal delays at intersections

## Existing Transit Network



## Future Transit Network

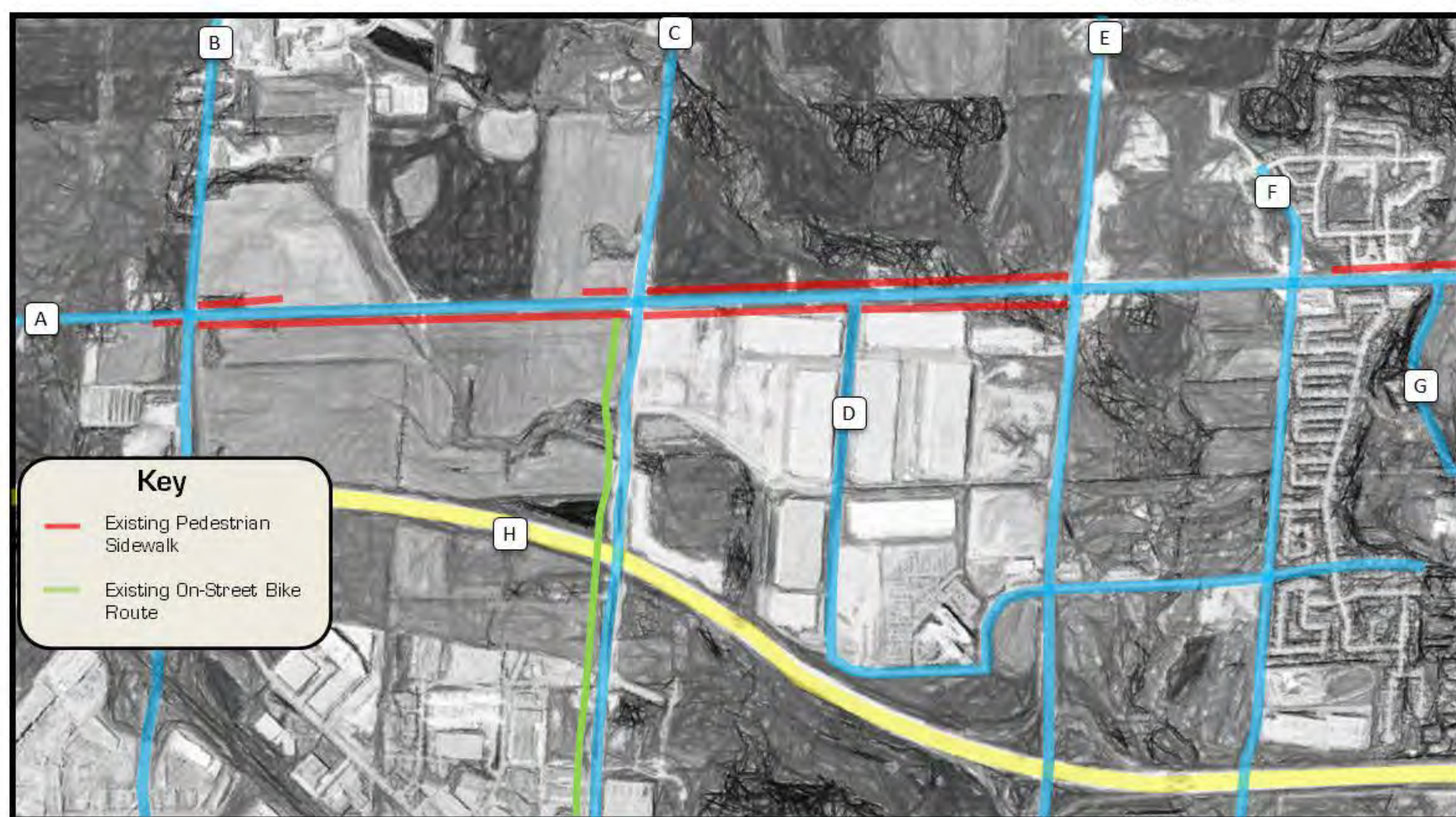


### Steeles Avenue Bus Rapid Transit Corridor

Steeles Avenue is proposed to be a transit corridor from Lisgar GO Station in Mississauga along: Argentia Road, Winston Churchill Boulevard and Steeles Avenue, that will connect with the Steeles Avenue rapid transit service in Toronto/York



A Steeles Ave.    C Heritage Rd.    E Mississauga Rd.    G Creditview Rd. S.    I Creditview Rd. N.    K Polonia Ave.    M Mavis Rd./ Chinguacousy Rd.  
 B Winston Churchill Blvd.    D Hereford St.    F Financial Dr.    H Hwy. 407    J Churchill Rd.    L James Potter Rd./ Clementine Dr.

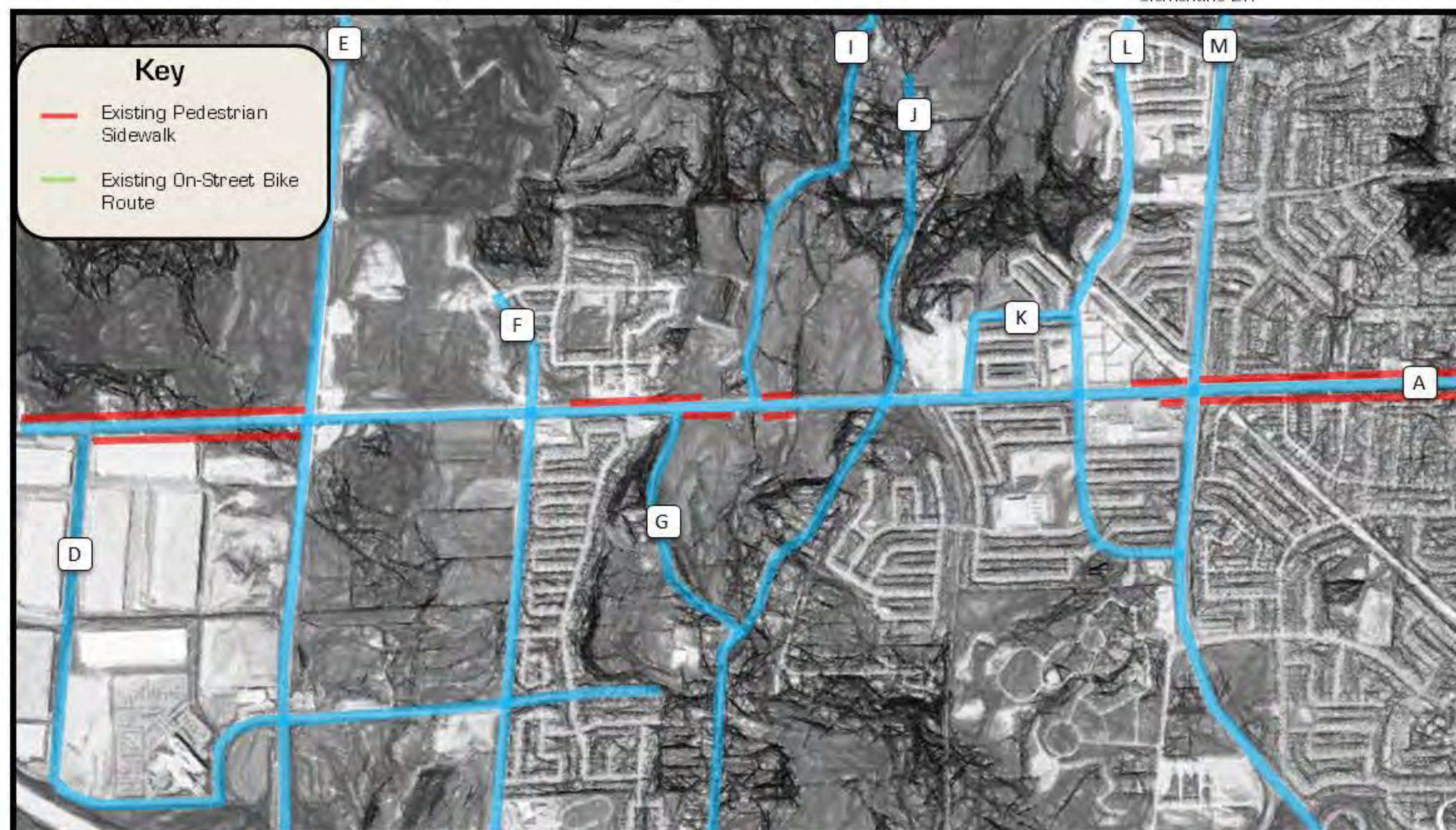


Steeles Avenue EA



**Figure 2.4A**  
Existing Pedestrian & Cycling Network (West Section)

A Steeles Ave.    C Heritage Rd.    E Mississauga Rd.    G Creditview Rd. S.    I Creditview Rd. N.    K Polonia Ave.    M Mavis Rd./ Chinguacousy Rd.  
 B Winston Churchill Blvd.    D Hereford St.    F Financial Dr.    H Hwy. 407    J Churchill Rd.    L James Potter Rd./ Clementine Dr.



Steeles Avenue EA



**Figure 2.4B**  
Existing Pedestrian & Cycling Network (East Section)

- At present, a low level of cycling and pedestrian activity occurs along Steeles Avenue
- The intersections with the highest pedestrian activity have sidewalks on either side of the roadway and pedestrian signal heads to facilitate safe crossings
- Future development planned along Steeles Avenue will increase the demand for additional active transportation infrastructure
- The Region of Peel Active Transportation Master Plan recommends a 3m wide multi-use path along both sides of Steeles Avenue

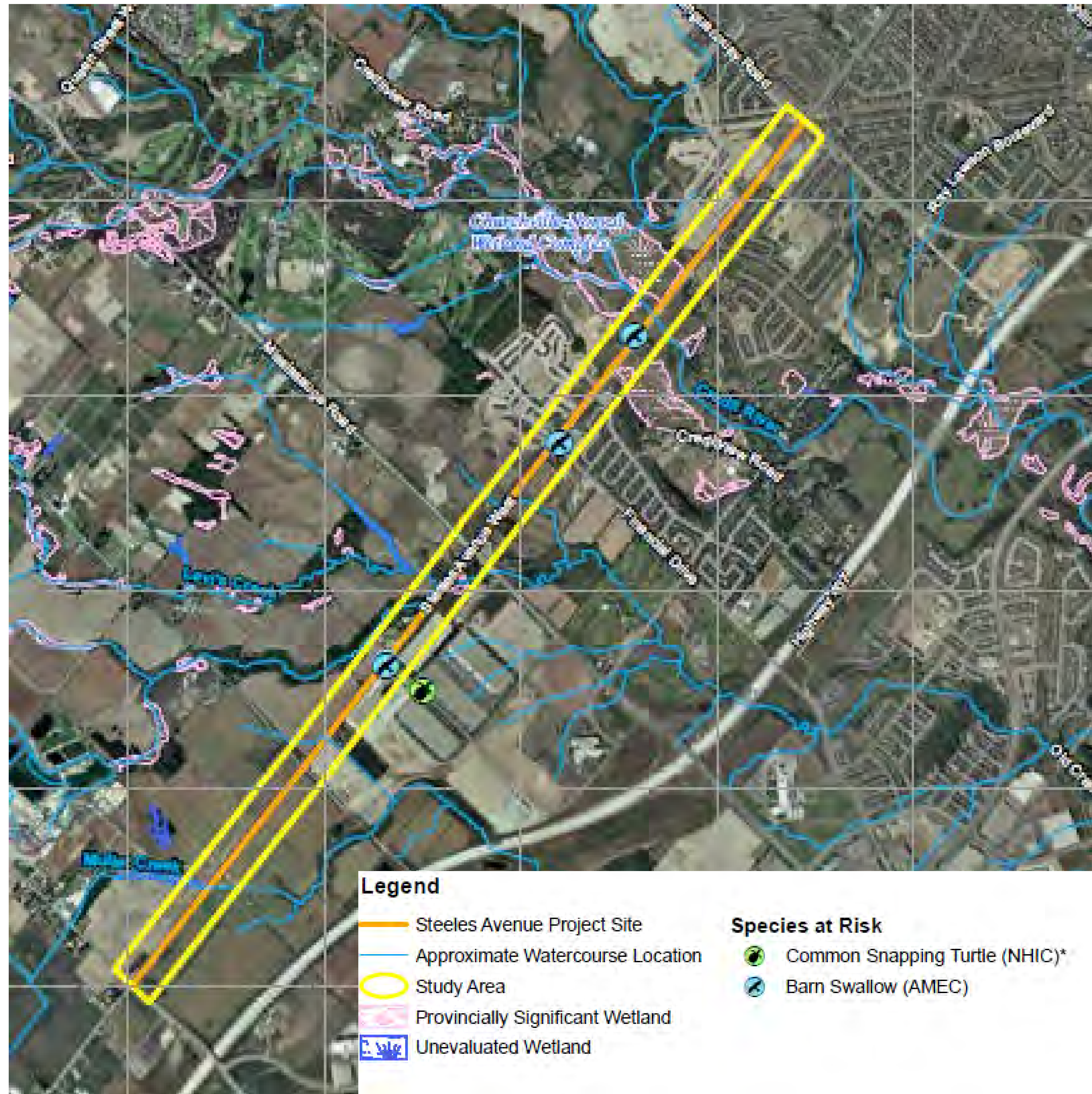
# 14

# Environmental Inventories

The following environmental inventories are being completed for Steeles Avenue:

- Terrestrial Resources
- Drainage and Stormwater Management
- Fisheries and Fish Habitat
- Traffic Noise
- Archaeology
- Built Heritage and Cultural Landscape

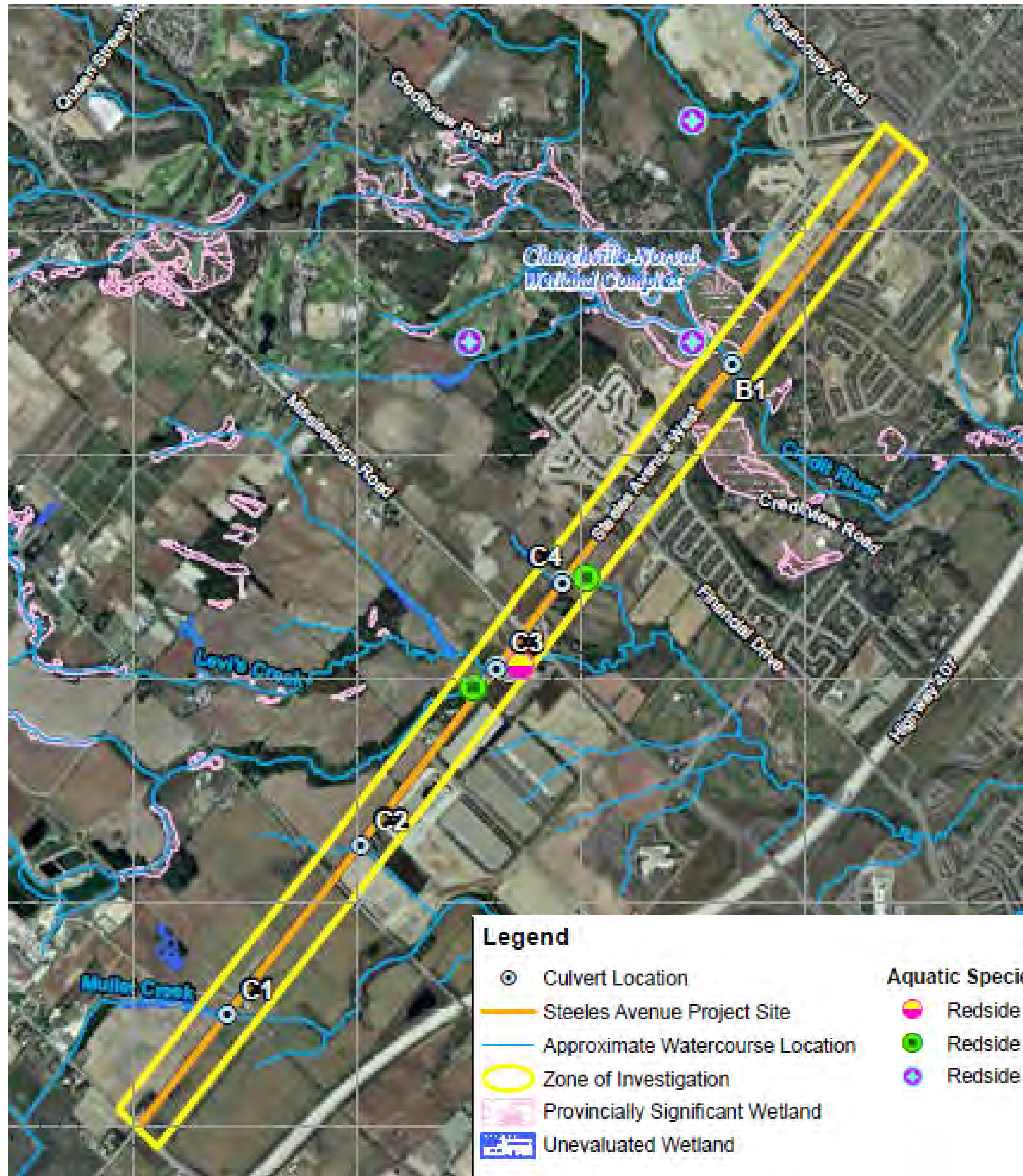




- The study area has experienced considerable habitat disturbance and fragmentation
- A Species at Risk, the **Barn Swallow** (listed as “Threatened”), was observed at three locations







- The tributaries that cross the study area vary in sensitivity
- Levi's Creek Crossing and Tributary 8B are classified as Redside Dace Recovery Habitat
- All design concepts will be evaluated with consideration to Ministry of Natural Resources guidelines and legislation



Redside Dace

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# Drainage and Stormwater Management

The existing hydraulic conditions of the five crossings have been evaluated for flow capacity based upon the Region of Peel culvert and bridge design standards. The below summarizes the conveyance at the key structures during the Regional design storm event:

- 1) Mullet Creek Crossings (C2) and Credit River Bridge (B1) currently provide adequate flow conveyance
- 2) Mullet Creek Crossing (C1) overtops the road by 0.2 m during the Regional Storm (Hurricane Hazel)
- 3) Levi's Creek Crossing (C3) is undersized and overtops during major storm events
- 4) Levi's Creek Crossing (C4) has been replaced with a storm sewer under the Streetsville Glen West and the Manors residential subdivisions

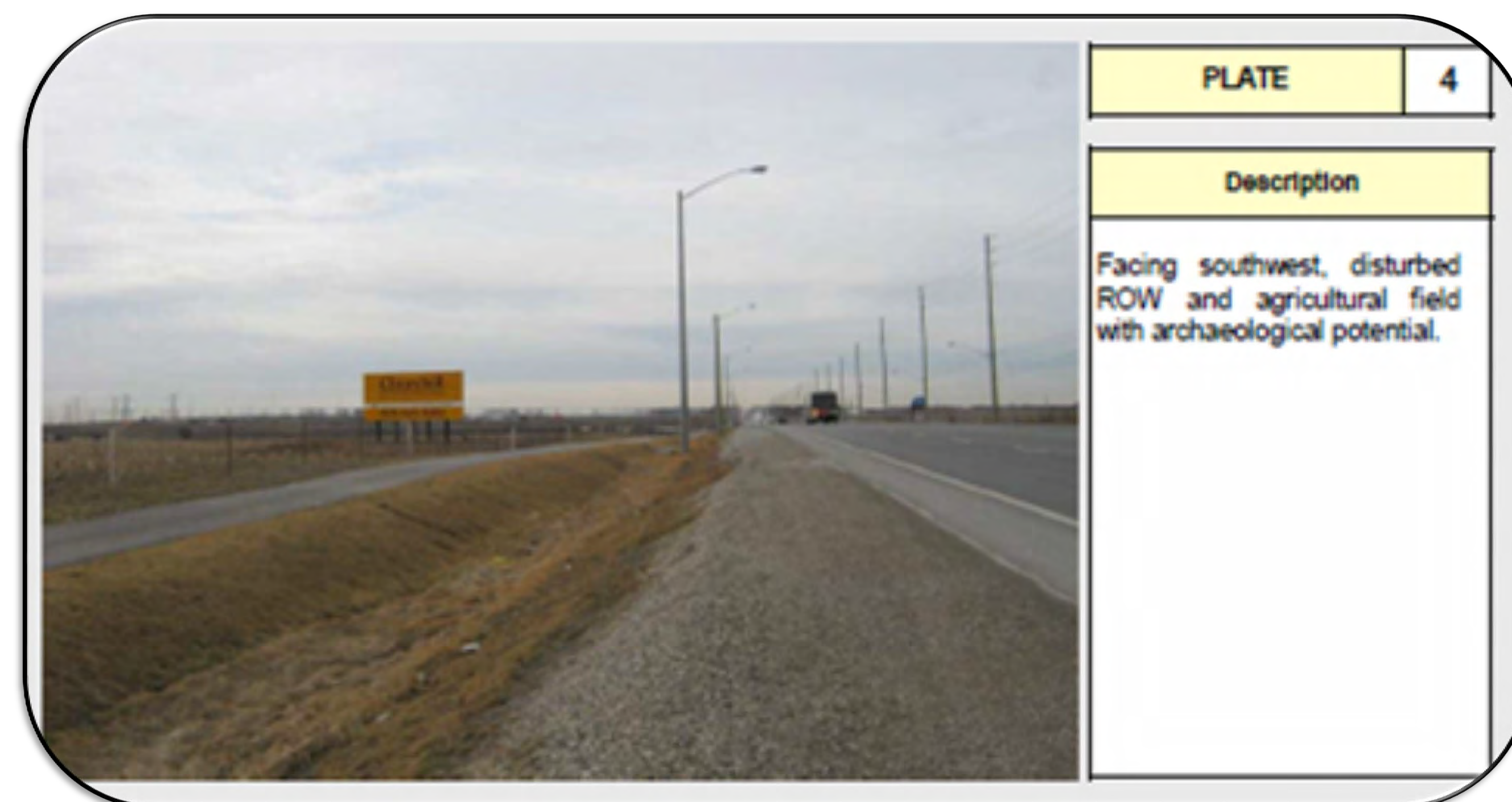
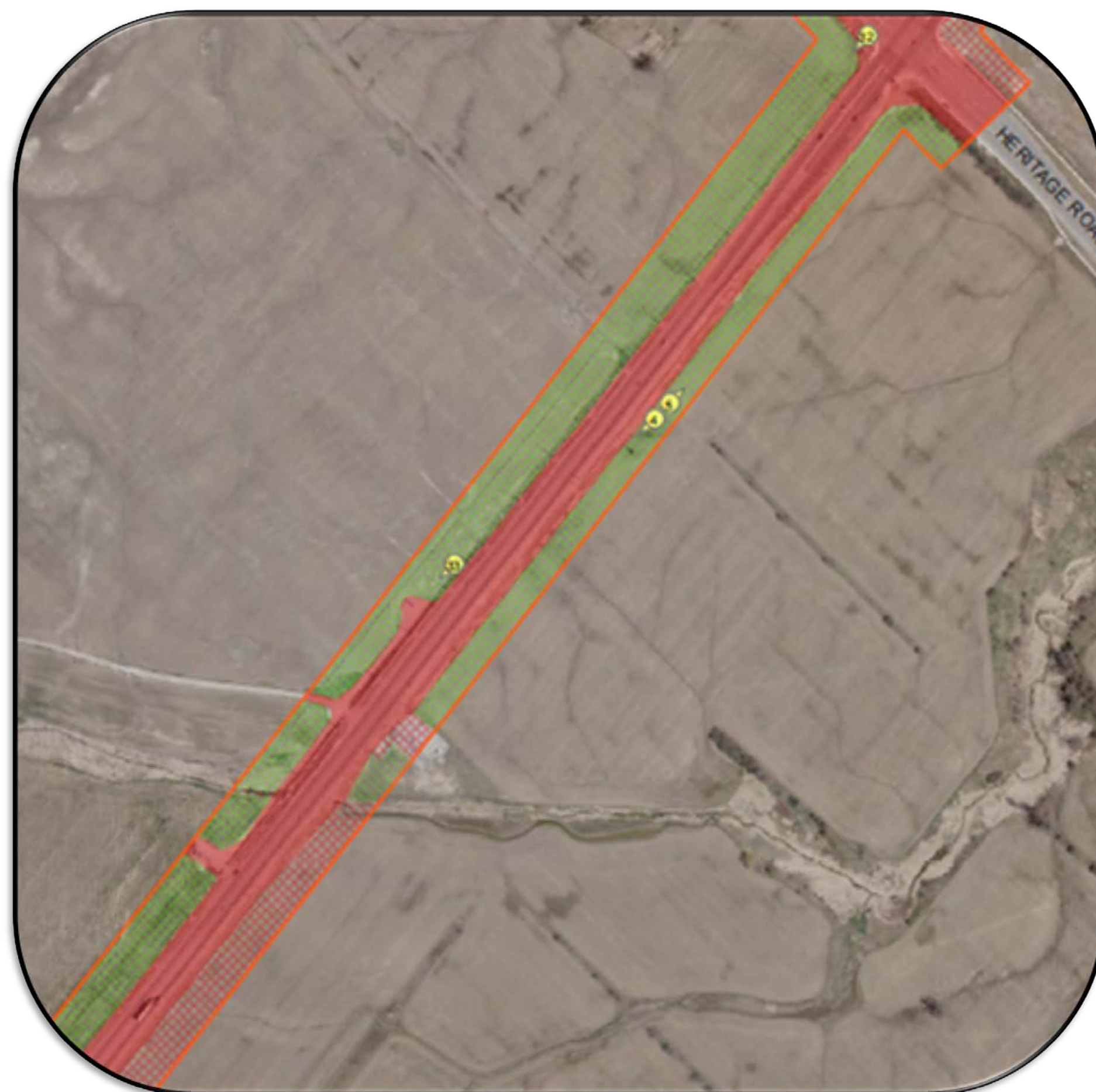


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# Archaeology

The Stage 1 Archaeological Assessment concluded that there is potential for archaeological resources and that a Stage 2 assessment will be required, for four reasons:

- 1) Presence of 82 registered archaeological sites within 2 km
- 2) Proximity to water (Credit River and Levi's Creek)
- 3) Possible in situ evidence may have survived
- 4) 20% of the study corridor consists of undeveloped land



# 19 Built Heritage

There are three significant cultural heritage resources:

- 1) the Creditview Road Corridor Cultural Landscape
- 2) the Creditdale Farm and
- 3) the Churchville Heritage Conservation District



Improvements are needed along the Steeles Avenue corridor to address/accommodate:

- Existing and future traffic demands
- Future transportation network improvements including BramWest Parkway
- Transit system expansion along the corridor
- Pedestrian and cyclist movements through the corridor and
- Drainage deficiencies and opportunities for stormwater management

Six alternative solutions were developed to address the problem statement

## 1. DO NOTHING

- No improvements
- Continue regular maintenance

## 2. IMPROVE OTHER ROADS

Add capacity to adjacent parallel roads

## 3. TRANSIT INFRASTRUCTURE IMPROVEMENTS

Improve transit infrastructure to support Brampton Bus Rapid Transit Plans and address capacity requirements

## 4. TRAVEL DEMAND MANAGEMENT

Encourage and support change in travel behaviour to reduce peak travel demand by:

- Promoting car-pooling and possible HOV lanes to reduce single auto occupancy trips
- Promoting flexible work hours, work from home or tele-working etc. at work places to reduce travel needs for work, and,
- Increasing active transportation trips (biking/walking) share in peak travel demands

## 5. WIDEN STEELES AVENUE WITH INTERSECTION IMPROVEMENTS

Addition of through traffic lanes including intersection improvements, to increase traffic capacity of the corridor.

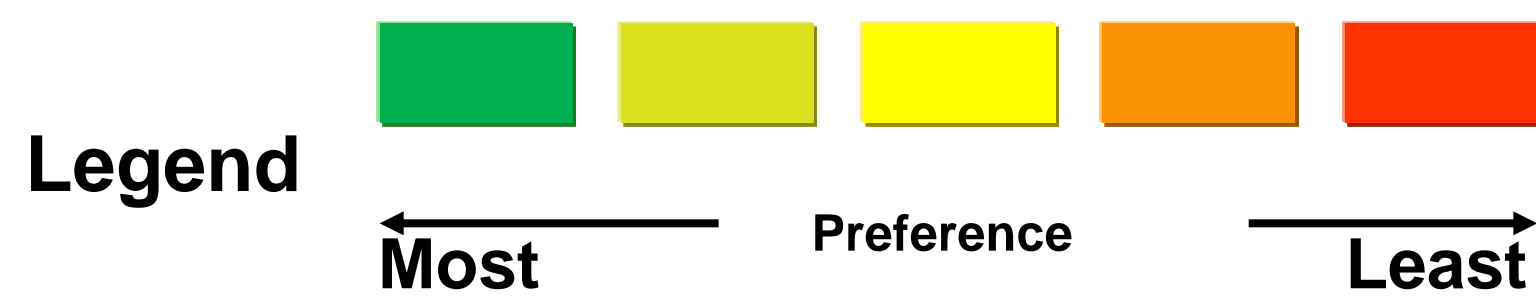
## 6. COMBINATION

Combination of:

- Improve transit services
- Travel Demand Management
- Widen Steeles Avenue with intersection improvements

# Evaluation of Alternative Solutions

Category	Criteria	Criteria Indicators	Alternative 1 Do Nothing	Alternative 2 Improve Other Roads	Alternative 3 Transit Infrastructure Improvements	Alternative 4 Travel Demand Management	Alternative 5 Widen Steeles Avenue with Intersection Improvements	Alternative 6 A combination of 3, 4, and 5
Natural Environment	Wetlands and Vegetation	Potential adverse effects on terrestrial species and habitats	Green	Green	Yellow	Yellow	Orange	Yellow
	Wildlife Habitat	Potential adverse effects on wildlife due to loss of habitat	Green	Green	Yellow	Yellow	Orange	Yellow
	Species at Risk	Potential adverse effect on Species at Risk identified in the study area	Green	Green	Yellow	Yellow	Orange	Yellow
	Groundwater/Surface Water/Drainage	Potential adverse effects on groundwater, wells, surface water quality, flood potential	Yellow	Yellow	Yellow	Yellow	Orange	Yellow
	Fisheries and Water Quality	Potential to minimize impact on aquatic features	Green	Green	Yellow	Yellow	Orange	Yellow
	Flooding	Potential to minimize flooding impacts due to proposed improvements	Green	Green	Yellow	Yellow	Orange	Yellow
Social, Cultural, and Economical Environment	Land Use	Presents, number and characteristics of residences, community facilities, public parks, institutions, and businesses	Red	Yellow	Yellow	Yellow	Yellow	Yellow
	Noise	Ability to minimize noise after construction	Green	Green	Yellow	Yellow	Yellow	Yellow
	Archaeology and Cultural Heritage Resources	Potential adverse effects on archaeological and built heritage resources	Green	Green	Yellow	Yellow	Orange	Yellow
	Agriculture	Potential adverse effects of loss of agricultural lands	Green	Green	Yellow	Yellow	Orange	Yellow
	Access Considerations	Ability to maintain/maximize access	Red	Red	Orange	Orange	Yellow	Yellow
	Utilities	Ability to minimize effects on existing and proposed utilities	Green	Green	Yellow	Yellow	Orange	Yellow
	Construction Disruptions	Ability to minimize construction constraints and complexity	Green	Yellow	Yellow	Yellow	Orange	Yellow
Transportation	Safety	Ability to improve vehicular safety	Red	Orange	Orange	Orange	Green	Green
	Travel Delay/Traffic Capacity	Potential to address existing and future capacity and operational needs	Red	Red	Orange	Orange	Yellow	Green
	Transit	Potential to address transit needs for future planned initiatives	Orange	Orange	Green	Orange	Orange	Green
	Active Modes of Transportation	Potential to address requirements for active modes of transportation	Orange	Orange	Orange	Orange	Yellow	Green
Cost	Capital Cost	Capital costs of proposed improvements	Green	Green	Yellow	Yellow	Orange	Orange
Transportation Plans and Policies	Compatible with Regional and City Transportation Policies	Compatibility with Regional and Municipal Official Plans and Policies	Red	Orange	Yellow	Yellow	Yellow	Green

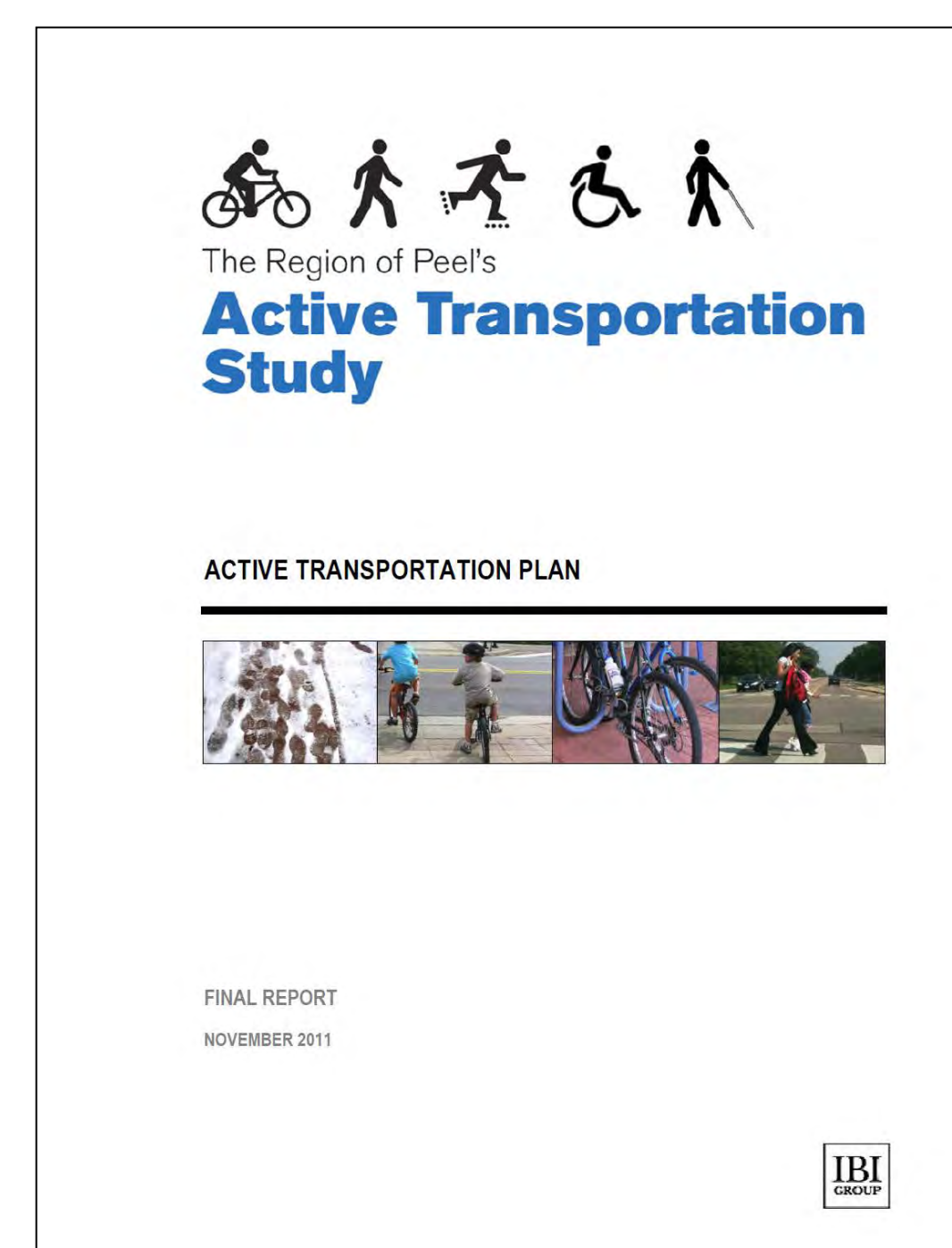


ALTERNATIVE 6 HAS BEEN CHOSEN AS THE PRELIMINARY RECOMMENDED ALTERNATIVE SOLUTION

# Preliminary Recommended Alternative Solution

The preliminary recommended alternative solution developed in consultation with Agencies is Alternative 6: A combination of alternatives 3-5, as follows:

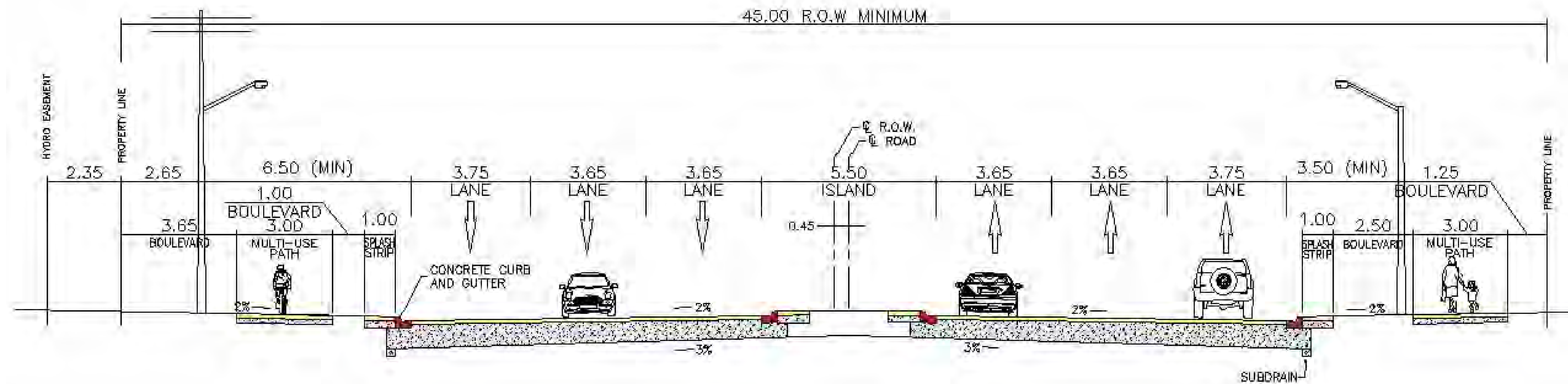
3. **Transit Infrastructure Improvements**
4. **Travel Demand Management**
5. **Widen Steeles Avenue with intersection improvements to increase capacity**



A combination of Alternative 3 - 5 will address the problem statement developed for the Steeles Avenue corridor, while minimizing environmental impacts. It also supports the recommendations of Peel's Active Transportation Plan and Healthy Development Index

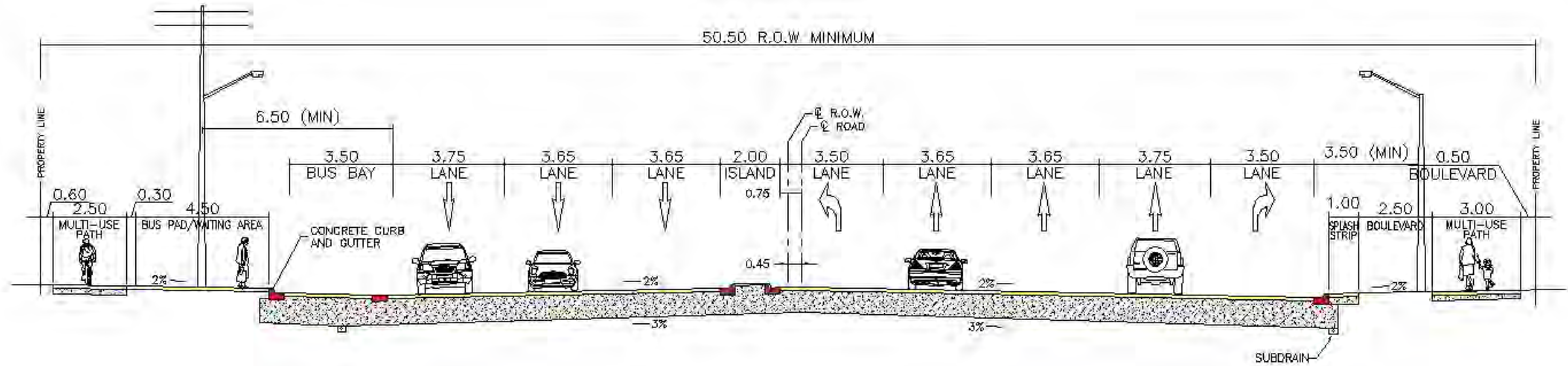


# Preliminary Typical Cross-Sections

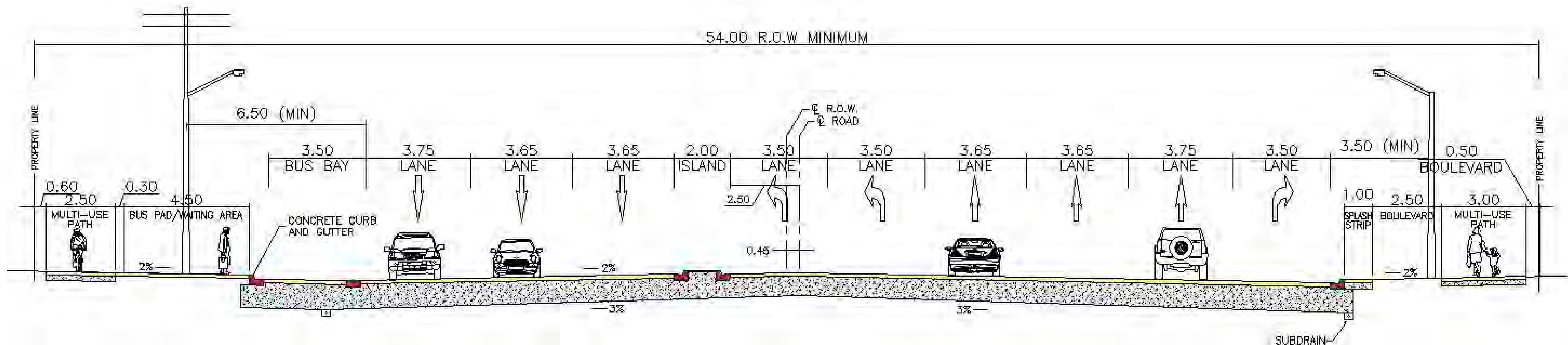


**TYPICAL MIDBLOCK CROSS SECTION**

# Preliminary Typical Cross-Sections



**SINGLE LEFT TURN LANE AT INTERSECTION**



**DUAL LEFT TURN LANE AT INTERSECTION**

- Receive public comments by **Friday, November 23, 2012**
- Review and confirm preferred planning alternatives and assessment in light of comments received from the public and Agencies to date
- Complete Environmental Inventory
- Develop alternative design concepts
- Complete detailed impact analysis
- Public Information Center # 2 - to be held in Spring 2013
- Prepare and File Environmental Study Report

# How Can You Provide Your Comments on the Project?

Please complete the comment sheet and place in the Comment Box or send your comments by email/fax/letter to either of the following project team members by **Friday, November 23, 2012.**

You can view tonight's information boards again on our website:

<http://www.peelregion.ca/pw/roads/enviro-assess/index-bram.htm>



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**Thank you for your participation**