BAYFIELD STREET TRANSPORTATION IMPROVEMENTS



Bayfield Street
Conceptual Design and Municipal Class Environmental Assessment

Phase 2: Alternative Planning Solutions Report (Draft) - Revision 1

Project Number: CA0008215.3476

Date: September 10, 2024

Barrie

BAYFIELD STREET CONCEPTUAL DESIGN AND MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

PHASE 2: IDENTIFICATION AND EVALUATION OF ALTERNATIVE PLANNING SOLUTIONS REPORT

CITY OF BARRIE

DRAFT V. 2

PROJECT NO.: CA0008215.3476
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1 Introduction

1.1 Study Purpose

The City of Barrie (the City) has retained WSP Canada Inc. (WSP) to complete a Municipal Class Environmental Assessment (MCEA) Study for transportation improvements on Bayfield Street from Grove Street to the City of Barrie limits.

Bayfield Street is a key gateway in and out of the City of Barrie and represents a major regional commercial / retail hub in Simcoe County and transportation conduit through the City, as well as providing a key interchange with Highway 400.The Ontario Ministry of Transportation (MTO) is planning to replace the existing Highway 400 Bayfield Street interchange and crossing structure starting in 2026. To further support these planned improvements by the MTO, the City of Barrie plans to improve the traffic operations, active transportation facilities and other road-related improvements to this key gateway, the City has initiated this MCEA Study to identify preferred solutions and designs for Bayfield Street between Grove Street to the City limits in the near-term and long-term. The MCEA Study will be carried out in accordance with the approved planning process for a Schedule C undertaking. Through the MCEA process, a preferred design will be selected taking into consideration:

- Potential impacts to the social, cultural, economic and natural environments;
- Public, agency and Indigenous consultation; and,
- Technical / engineering considerations.

This project will assess near-term and long-term transportation improvements that support all modes of travel (pedestrians, transit users, cyclists and motorists). This project will build upon recommendations in the City's Transportation Master Plan (2019) and the Official Plan (2024) as well as other related studies, policies and plans, and includes the following components:

Near-term Implementation

- Assessment and identification of active transportation improvements to incorporate with MTO’s interchange replacement project extending from Grove Street to Coulter Street.
- Assessment and identification of auto capacity and active transportation improvements to connect to MTO’s interchange replacement project extending from Coulter Street to Cundles Road.
- Assessment and identification of interim active transportation improvements extending from Cundles Road to Hanmer Street.
- Assessment and identification of localized intersection improvements at Bayfield Street and Grove Street.

Long-term Corridor Planning

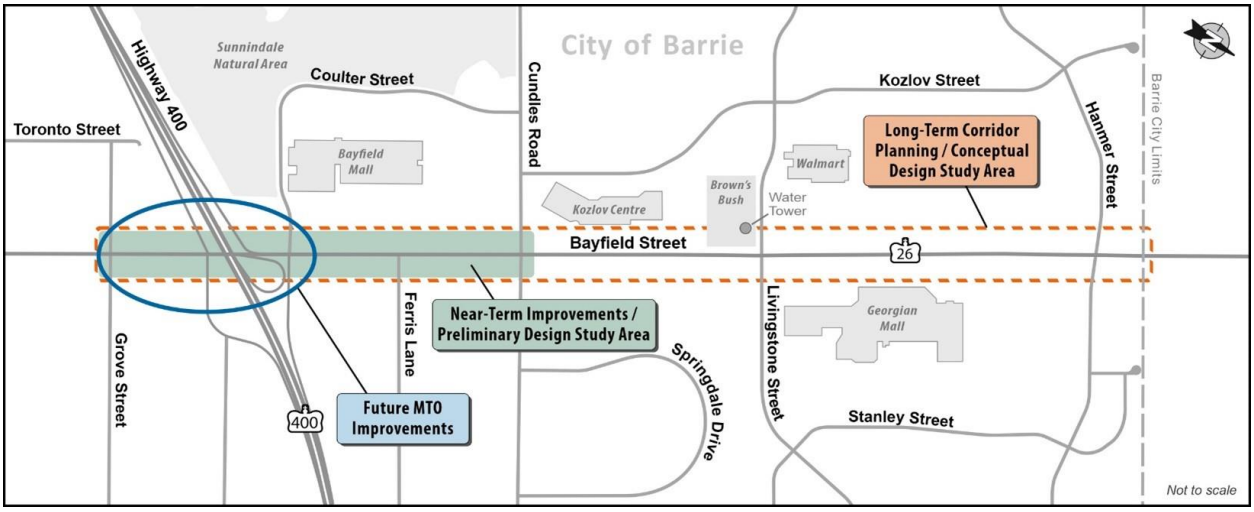
- Development of a long-term transformative plan to reflect planned changes in land-use that includes a mix of medium density residential and commercial uses. The plan will embrace complete street principles and aims to achieve an enhanced pedestrian and cyclist friendly realm while balancing the role this corridor plays as a regional connector. This plan will extend from Grove Street to the City limits.

Completion of an MCEA Study is the step towards implementation of large municipal infrastructure projects. The MCEA Study must be completed prior to undertaking subsequent project phases that include detailed design, property acquisition, utility relocations and construction.

1.2 Study Area

The project study area consists of Bayfield Street between Grove Street to the City limits, as shown in **Exhibit 1-1** below.

Exhibit 1-1: Study Area



1.3 Summary of Completed Work as Part of this Study: Phase 1 MCEA

Phase 1 of the MCEA Process for this Study was documented in the Phase 1: Needs and Justification Report, which is on file with the City of Barrie. The report documents:

- The Study purpose;
- Study Area;
- Relevant background studies;
- The legislative and policy context;

- The existing conditions of the study area
- The needs assessment of the study area;
- The consultation approach for this study; and,
- The Problem and Opportunity Statement.

The Problem and Opportunity Statement, which was developed based on the findings of Phase 1 of the MCEA, is reiterated below in **Section 1.4**.

1.4 Problem and Opportunity Statement

A Problem and Opportunity Statement was developed during Phase 1 of this MCEA Study, which is documented in the Phase 1: Needs and Justification Report. For reference in this Phase 2: Alternative Planning Solutions Report, the Problem and Opportunity Statement is reiterated below:

1.4.1 Problem and Opportunity Statement

Bayfield Street is a prominent transportation corridor that is a key gateway into the City of Barrie, a regional shopping destination, and a heavily used transportation link connecting Highway 400 and Highway 27/Highway 26.

- Transportation and land use evolution will be driven by several planned improvements, including:
- MTO's planned replacement of the Bayfield Street interchange and widening of Highway 400;
- Identification of Bayfield Street as an intensification corridor planned for higher-density mixed-use development;
- Recognition of the need for Bayfield Street to support active transportation; and,
- Significant transit improvements on Bayfield Street.

The current street does not meet traffic demands, has narrow sidewalks, no cycling facilities, and numerous uncontrolled private accesses that are contributing to unsafe corridor operations.

In anticipation of Bayfield Street's transformation, there is an opportunity to redesign Bayfield Street into a safe and vibrant complete street that caters to all road users.

1.5 Purpose of the Phase 2: Alternative Planning Solutions Report

The purpose of this report is to document the Phase 2 of the MCEA for the Bayfield Street Conceptual Design and MCEA Study. This report documents the development of the Alternative Planning Solutions (**Section 2.1**), the Evaluation Criteria (**Section 2.2.1**), the Assessment of the

Alternative Planning Solutions (**Section 2.2.2**) and the Technically Preferred Planning Solution(s) (**Section 2.4**).

2 Alternative Planning Solutions

As discussed in the Phase 1: Needs and Justification Report, Phase 1 of the Municipal Class Environmental Assessment (MCEA) process involves the identification of the problems and/or opportunities being addressed by the Study. These are summarized in the Problem and Opportunity Statement, which has been reiterated in this report in **Chapter 1.4**.

This report documents Phase 2 of the MCEA process for this Study, which involves identifying alternative planning solutions to the Problem and Opportunity Statement.

Transportation alternative planning solutions represent reasonable means of addressing the stated transportation problems and opportunities, as well as achieving the project objectives. In addition to 'doing nothing', alternatives to address improvements to a municipal transportation corridor typically involves a complete street approach including a review of the motor vehicle capacity requirements, addition of active transportation, and landscaping and streetscaping opportunities. These alternatives are:

1. Do Nothing
2. Support of the City's On-Going Transportation Demand Management (TDM) Efforts
3. Increase Motor Vehicle Travel Lanes
4. Improvements to Intersections
5. Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities
6. Provision and/or Improvement Transit Facilities and Amenities
7. Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities
8. Provision of High Occupancy Vehicle (HOV) Lanes
9. Operational Safety Improvements
10. Improvements to the Overall Transportation Network

These alternatives are discussed in **Section 2.1**. In **Section 2.2**, the alternatives are assessed against their ability to reasonably address the problems and opportunities, and in consideration of the constraints identified in the early stages of the Study, to identify a preferred solution(s).

2.1 Alternative Planning Solutions

2.1.1 Do Nothing

"Do Nothing" is considered the status quo, maintaining the existing road network as is, in which the transportation system would be limited to the implementation of approved municipal, regional, and provincial initiatives. To maintain the status quo would not prepare Bayfield Street for the planned evolution in the Study area, including the future Highway 400 improvements and the planned intensification along the corridor. It would not address any of the identified problems and opportunities.

2.1.2 Support of the City's On-Going Transportation Demand Management (TDM) Efforts

This alternative seeks to reduce traffic demand on Bayfield Street by implementing Transportation Demand Management (TDM) strategies such as:

- shifting demands to time periods outside of rush hours (encouraging flex time work schedules);
- encouraging a behavioural shift to alternative modes of transportation (transit, cycling, walking) or rideshare;
- providing traveller information tools including intelligent transportation systems, mobile and social applications and other methods for promoting more efficient use of the transportation network.

TDM strategies are being planned and implemented separately through the Transportation Master Plan update, which is currently underway at the City of Barrie.

2.1.3 Increasing Motor Vehicle Travel Lanes

This alternative includes a review of the capacity requirements of the vehicular travel lanes, and considers adding one motor vehicle travel lane per direction. This new infrastructure will require the City to acquire private property as the additional travel lane cannot fit within the existing right-of-way.

Adding one-lane of traffic per direction increases the capacity of the roadway by approximately 50%. This additional capacity is required to accommodate existing demand and planned growth. The additional travel lanes will improve level of service and travel time.

The existing vehicular travel lanes on Bayfield Street are summarized in **Table 2-1** and typical cross sections are shown in **Exhibit 2-1**, **Exhibit 2-2** and **Exhibit 2-3.**

Table 2-1: Existing Lane

Segment	Vehicular Through Lanes	Vehicular Turn Lanes
1. Grove Street to Rose Street / Hwy 400 Off-Ramp	4 (2 in each direction)	SB Left Turn Lane at Grove Street
2. Coulter Street / Hwy 400 Off-Ramp to Cundles Road	4 (2 in each direction)	Two-way Centre Left Turn Lane SB Right Turn Lane at Cundles Road

Segment	Vehicular Through Lanes	Vehicular Turn Lanes
3. Cundles Road to City Boundary North of Hanmer Street	6 (3 in each direction)	Two-way Centre Left Turn Lane

Exhibit 2-1: Grove Street to Rose Street / Hwy 400 Off-Ramp



Exhibit 2-2: Coulter Street / Hwy 400 Off-Ramp to Cundles Road

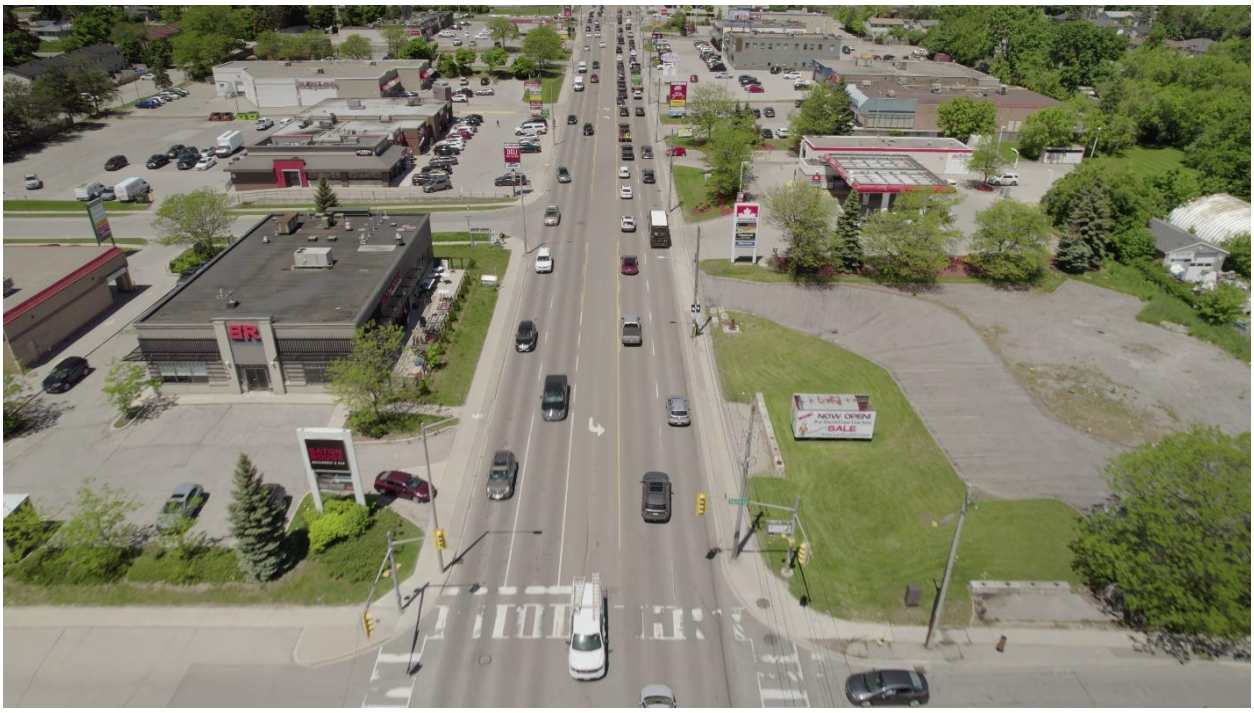


Exhibit 2-3: Cundles Road to City Boundary North of Hanmer Street



This alternative includes a review of travel lane configuration of 4 lanes and 6 lanes, and lane widths, following complete street principles.

2.1.4 Improvements to Intersections

This alternative seeks to improve traffic queues and safety at intersections by improving intersection operations, including through the provision of turning lanes, optimizing of traffic signal timing, and the implementation of smart technologies. These improvements would optimize the flow of traffic.

Improving intersection provides an opportunity to improve geometrics, sightlines to vulnerable road users and improve traffic operations and level of service.

2.1.5 Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities

This alternative looks at improving the existing sidewalks and at implementing cycling facilities that meet standards set byt the Accessibility for Ontarians with Disabilities Act (2005). Adding safe, connected and comfortable cycling facilities and improving pedestrian facilities reduces automobile reliance and encourages active transportation. . This new infrastructure cannot fit within the existing right-of-way and would require the City to acquire private property.

On its own, this alternative does not address the overall traffic capacity needs. However, it is recommended to be included and evaluated as part of the alternative planning solutions, as it promotes a complete street design and offers alternative modes of transportation.

2.1.6 Provision and/or Improvement Transit Facilities and Amenities

This alternative encourages the reduction in automobile use by improving transit system efficiency and reliability by introducing transit priority measures such as transit priority lanes, transit queue jump lanes and/or transit shelters. Depending on the improvement type, it may require the City to acquire private property. Improving transit system efficiency and reliability reduces automobile reliance and encourages active transportation. On its own, this alternative does not address the overall traffic capacity needs; however, it supports the improvement of alternative modes of transportation.

On its own, this alternative does not address the overall traffic capacity needs. However, it is recommended to be included and evaluated as part of the alternative planning solutions.

2.1.7 Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities

This alternative includes a review of the potential amenity space on Bayfield Street. Creating a more attractive and inviting amenity space is in line with the vision of the corridor as a pedestrian friendly, walkable destination, as it supports active transportation modes and future land uses. The amount of amenity space available may not be possible or limited due to corridor width constraints.

Trees and landscape plantings create a streetscape that is more attractive and friendly public realm. They also help to create a more urban environment that aligns with future land use.

2.1.8 Provision of High Occupancy Vehicle (HOV) Lanes

This alternative encourages the reduction in individual automobile use by encouraging carpooling on high occupancy vehicle (HOV) lanes. On its own, this alternative does not address the overall traffic capacity needs. However, it is recommended to be included and evaluated as part of the alternative planning solutions.

2.1.9 Improvements to Corridor Safety and Operations

This alternative involves incorporating design elements that improve the operation and safety of Bayfield Street, including medians and consolidating and controlling driveway accesses. This alternative does not address the overall traffic capacity needs. However, it is recommended to be included and evaluated as part of the alternative planning solutions.

2.1.10 Improvements to the Overall Transportation Network (i.e. Other Parallel Routes)

Undertake capital improvements to upgrade the overall transportation network, as well as other parallel routes (i.e. Anne Street, St. Vincent Street) to address the need for increased north-south traffic capacity. This does not address the problems and opportunities and defers capital investment from Bayfield Street. Improvements to the overall transportation network will be planned through the Transportation Master Plan update, which is currently underway at the City of Barrie.

2.2 Assessment of Alternative Planning Solutions

2.2.1 Criteria for Assessment

The alternative planned solutions were assessed based on their ability to address the problems and opportunities through the criteria listed in **Table 2-2**.

Table 2-2: Criteria for Assessment of Planning Solutions

Category	Factors
Socio-Economic	• Community input and feedback • Consistency with Provincial and Municipal Planning Objectives, including the City's vision for Bayfield Street • Ability to enhance public realm, streetscape character and opportunities to incorporate placemaking strategies • Potential impact (disruption and nuisance) and benefits to residences and businesses • Potential property impacts • Potential cost

Category	Factors
Natural Environment	• Potential for the Project's ability to be adaptable / resilient to climate change • Potential for climate change mitigation (i.e., reduction of GHG emissions) • Potential for the Project to impact local air quality and the acoustic environment at nearby sensitive receptor locations • Potential impacts/improvements to street tree canopy, vegetation and landscaped areas
Cultural Heritage	• Potential impacts on cultural heritage resources • Potential impacts to archaeological resources
Planning and Transportation	• Consistent with Transportation Master Plan • Compatible to and supports the planned MTO Interchange improvements • Potential impacts and improvements to transit and traffic operations • Provisions for and quality of active transportation facilities (cycling and walking) • Potential opportunity to improve safety and connectivity for motorists, cyclists and pedestrians • Impacts to Utilities and Municipal Services • Impacts to emergency response

2.2.2 Assessment and Evaluation of Alternative Planning Solutions

To identify a preferred planning solution(s), the alternative planning solutions are evaluated against their ability to reasonably address the identified problems and opportunities, as well as against the evaluation criteria identified in **Section 2.2.1.**

2.3 Assessment and Evaluation of Alternative Solutions

The assessment and evaluation of alternative solutions is provided in **Table 2-3**.

.

Table 2-3: Assessment and Evaluation of Planning Solutions

Criteria	Do Nothing	Alternative 1: Transportation Demand Management (TDM)	Alternative 2: Increasing Motor Vehicle Travel Lanes	Alternative 3: Improvements to Intersections	Alternative 4: Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities	Alternative 5: Provision and/or Improvement to Transit Facilities and Amenities	Alternative 6: Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities	Alternative 7: Provision of High Occupancy Vehicle (HOV) Lanes	Alternative 8: Improvements to Corridor Safety and Operations	Alternative 9: Improvements to the Overall Transportation Network
Socio-Economic										
Community input and feedback	Does not address community input and feedback	Somewhat addresses community input and feedback	Addresses community input and feedback	Addresses community input and feedback	Addresses community input and feedback	Addresses community input and feedback	Addresses community input and feedback	Somewhat addresses community input and feedback	Addresses community input and feedback	Does not address community input and feedback
Consistency with Provincial and Municipal Planning Objectives, including the City's vision for Bayfield Street	Not consistent with the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street	Consistent to the planning objectives and vision for Bayfield Street
Ability to enhance public realm	Does not create the potential ability to enhance the public realm	Does not create potential ability to enhance the public realm on its own	Does not create potential ability to enhance the public realm on its own	Does not create potential ability to enhance the public realm on its own	Creates strong potential ability to enhance the public realm as the inclusion of active transportation is an integral public realm improvement	Creates strong potential ability to enhance the public realm if facilities include a landscape strip	Creates strong potential ability to enhance the public realm	Does not create potential ability to enhance the public realm on its own	Does not create potential ability to enhance the public realm on its own	Does not create potential ability to enhance the public realm on its own

Criteria	Do Nothing	Alternative 1: Transportation Demand Management (TDM)	Alternative 2: Increasing Motor Vehicle Travel Lanes	Alternative 3: Improvements to Intersections	Alternative 4: Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities	Alternative 5: Provision and/or Improvement to Transit Facilities and Amenities	Alternative 6: Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities	Alternative 7: Provision of High Occupancy Vehicle (HOV) Lanes	Alternative 8: Improvements to Corridor Safety and Operations	Alternative 9: Improvements to the Overall Transportation Network
Potential impact (disruption and nuisance) and benefits to residents and businesses (e.g. utility disruptions, access issues, reduced foot traffic, dust and debris, etc.)	No impacts to residents and businesses No improvement to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	Temporary impacts to residents and businesses during construction Great improvements to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	No impacts to residents and businesses No improvement to residents and businesses	Temporary impacts to residents and businesses during construction Good improvements to residents and businesses	No impacts to residents and businesses No improvement to residents and businesses
Potential property impacts	No impacts	Potential Property Impacts	Property impacts	Potential property impacts	Potential property impacts	Property impacts	Potential property impacts	Property impacts	No potential for property impacts	Potential for property impacts to Bayfield Street dependent on the project
Potential cost	No impacts	Low cost	High cost	Moderate cost	High cost	Moderate cost	Moderate cost	High cost	Moderate cost	High cost
Natural Environment										
Potential for the Project's ability to be adaptable / resilient to climate change	No potential to adapt Bayfield Street for climate change resiliency	Low direct potential to adapt Bayfield Street for climate change resiliency on its own.	High potential to adapt Bayfield Street for climate change resiliency by narrowing motor vehicle lane widths for transit of active transportation facilities. Further, uundertaking construction allows construction of up-to-date stormwater infrastructure,	High potential to adapt Bayfield Street for climate change resiliency by reducing queuing and idling. Further, uundertaking construction allows construction of up-to-date stormwater infrastructure,	High potential to adapt Bayfield Street for climate change resiliency by providing safe and attractive facilities for alternative modes of transportation	Low potential to adapt Bayfield Street for climate change resiliency by providing safe and attractive facilities for alternative modes of transportation	Low potential to adapt Bayfield Street for climate change resiliency by providing for increased landscaping and greenery given corridor width constraints	Moderate potential to adapt Bayfield Street for climate change resiliency by encouraging the reduction of single occupancy vehicles	No direct potential to adapt Bayfield Street for climate change resiliency on its own	High potential to adapt Bayfield Street for climate change resiliency by encouraging the reduction of single occupancy vehicles. City-wide transportation improvements allow for implementation of up-to-date stormwater infrastructure and watercourse culverts, as well as implement active transportation infrastructure.

Criteria	Do Nothing	Alternative 1: Transportation Demand Management (TDM)	Alternative 2: Increasing Motor Vehicle Travel Lanes	Alternative 3: Improvements to Intersections	Alternative 4: Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities	Alternative 5: Provision and/or Improvement to Transit Facilities and Amenities	Alternative 6: Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities	Alternative 7: Provision of High Occupancy Vehicle (HOV) Lanes	Alternative 8: Improvements to Corridor Safety and Operations	Alternative 9: Improvements to the Overall Transportation Network
Potential for the Project's ability to mitigate climate change (i.e. reduce GHG emissions)	No potential for climate change mitigation	Some potential for climate change mitigation by generally encouraging alternative modes of transportation	Moderate potential for climate change mitigation on its own	Some potential for climate change mitigation on its own	High direct potential for climate change mitigation. Implementing improvements may encourage use if alternative modes of transportation.	High direct potential for climate change mitigation. Implementing improvements may encourage more transit use and support existing users.	Moderate direct potential for climate change mitigation by increasing landscaping and plants	Moderate direct potential for climate change mitigation by generally discouraging single occupancy vehicles	Moderate potential for climate change mitigation on its own	Moderate potential for climate change mitigation on its own
Potential for the Project to impact local air quality and the acoustic environment at nearby sensitive receptor locations	No potential to lower air and noise impacts	Low potential for lowering air and noise impacts by generally encouraging alternative modes of transportation	No potential for lowering air and noise impacts on its own	No potential for lowering air and noise impacts on its own	Moderate direct potential for lowering air and noise impacts by encouraging alternative modes of transportation	Moderate direct potential for lowering air and noise impacts by encouraging alternative modes of transportation	Moderate direct potential for lowering air and noise impacts by generally encouraging alternative modes of transportation	Moderate direct potential for lowering air and noise impacts by generally discouraging single occupancy vehicles	No potential for lowering air and noise impacts on its own	No potential for lowering air and noise impacts on its own
Potential impacts/improvements to street tree canopy, vegetation and landscaped areas on corridor	No potential for improvements to street tree canopy, vegetation and landscaped areas	No potential for improvements to street tree canopy, vegetation and landscaped areas if lanes are narrowed, or if road is widened	No potential for improvements to street tree canopy, vegetation and landscaped areas if lanes are narrowed, or if road is widened	Low potential for improvements to street tree canopy, vegetation and landscaped areas	Low potential for improvements to street tree canopy, vegetation and landscaped areas	No potential impacts or improvements to streetscaping and vegetation.	Low potential for improvements to street tree canopy, vegetation and landscaped areas. The corridor width constraints highly limit the ability to create areas large enough for trees or landscape plantings.	No potential impacts or improvements to street tree canopy, vegetation and landscaped areas	Low potential impacts or improvements to street tree canopy, vegetation and landscaped areas	No potential impacts or improvements to street tree canopy, vegetation and landscaped areas

Criteria	Do Nothing	Alternative 1: Transportation Demand Management (TDM)	Alternative 2: Increasing Motor Vehicle Travel Lanes	Alternative 3: Improvements to Intersections	Alternative 4: Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities	Alternative 5: Provision and/or Improvement to Transit Facilities and Amenities	Alternative 6: Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities	Alternative 7: Provision of High Occupancy Vehicle (HOV) Lanes	Alternative 8: Improvements to Corridor Safety and Operations	Alternative 9: Improvements to the Overall Transportation Network
Cultural Heritage										
Potential impacts on cultural heritage resources	No potential impacts on cultural heritage resources No potential for improving the access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation Potential to improve access to, or the environment near cultural heritage resources	Potential temporary impacts cultural heritage resources during implementation No potential to improve access to, or the environment near cultural heritage resources
Potential impacts to archaeological resources	No potential impacts to archaeology	No potential impacts to archaeology	Low potential impacts to archaeology as potential construction activities will be generally limited to disturbed areas	No potential impacts to archaeology on its own	Low potential impacts to archaeology if widening is between Coulter Street and Ferris Lane as potential construction activities will be generally limited to disturbed areas	Low potential impacts to archaeology if widening is between Coulter Street and Ferris Lane as potential construction activities will be generally limited to disturbed areas	Low potential impacts to archaeology if widening is between Coulter Street and Ferris Lane as potential construction activities will be generally limited to disturbed areas	Low potential impacts to archaeology if widening is between Coulter Street and Ferris Lane as potential construction activities will be generally limited to disturbed areas	Low potential impacts to archaeology as potential construction activities will be generally limited to disturbed areas	Potential impacts to archaeology dependent on the project
Planning and Transportation										
Consistent with Transportation Master Plan	Not consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan	Consistent with the Transportation Master Plan
Compatible to and supports the planned MTO Interchange improvements	Does not support the interchange improvements	Does not support the interchange improvements	Supports the interchange improvements	Does not support the interchange improvements	Does not support the interchange improvements	Does not support the interchange improvements	Does not support the interchange improvements	Does not support the interchange improvements	Supports the interchange improvements	Does not support the interchange improvements
Potential impacts and improvements to Transit and Traffic operations	No potential improvement	Low potential improvement	High potential improvement	High potential improvement	Low potential improvement	High potential improvement	No potential improvement	High potential improvement	Same as “Do Nothing”	Some potential improvement

Criteria	Do Nothing	Alternative 1: Transportation Demand Management (TDM)	Alternative 2: Increasing Motor Vehicle Travel Lanes	Alternative 3: Improvements to Intersections	Alternative 4: Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities	Alternative 5: Provision and/or Improvement to Transit Facilities and Amenities	Alternative 6: Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities	Alternative 7: Provision of High Occupancy Vehicle (HOV) Lanes	Alternative 8: Improvements to Corridor Safety and Operations	Alternative 9: Improvements to the Overall Transportation Network
Provisions for and quality of Active Transportation Facilities (Cycling and Walking)	No improvement with sidewalks and lack of cycling facilities	No impact	No impact	No impact	High potential improvement	No impact	Some improvement to pedestrian and cyclist user experience	No impact	No impact	No impact
Potential opportunity to improve safety and connectivity for motorists, cyclists and pedestrians	No potential improvement in safety and connectivity	Same as “Do Nothing”	High potential to improve safety and connectivity	Low potential to improve safety and connectivity	High potential to improve safety and connectivity	Some potential to improve safety and connectivity	No potential improvement in safety and connectivity	Some potential to improve safety and connectivity	High potential to improve safety	Same as “Do Nothing”
Impacts to Utilities and Municipal Services	No impacts	No impacts	High potential impacts but also opportunity to bundle improvements	Potential impacts but also opportunity to bundle improvements	Potential impacts but also opportunity to bundle improvements	High potential impacts but also opportunity to bundle improvements	Potential impacts but also opportunity to bundle improvements	High potential impacts but also opportunity to bundle improvements	No impacts	No impacts
Impacts to emergency response	No change	No change	Improvement to emergency responses by adding lane capacity	Potential minor improvements to emergency responses	No change	No change	No change	No change	Potential for both improvement and deterioration to emergency responses (i.e. improved traffic operations, but potential for less direct access when left turns restricted)	Positive improvement to emergency response
Recommendation	**Do Not Carry Forward**	**Being Carried Forward as part of Transportation Master Plan Update**	**Carry Forward**	**Carry Forward**	**Carry Forward**	**Being Carried Forward as part of Transportation Master Plan Update**	**Carry Forward**	**Carry Forward, to be coordinated with the Transportation Master Plan Update**	**Carry Forward**	**Being Carried Forward as part of Transportation Master Plan Update**

2.4 Technically Preferred Planning Solution

The preferred planning solution includes a combination of the following alternatives:

- Increasing Motor Vehicle Travel Lanes;
- Improvements to Intersections;
- Provision and/or Improvement of Active Transportation (i.e. Pedestrian and Cycling) Facilities;
- Improvement of Public Realm for Landscaping, Streetscaping and/or Amenities;
- Provision of High Occupancy Vehicle (HOV) Lanes (to be coordinated with the Transportation Master Plan Update); and,
- Operational Safety Improvements.

Through the on-going Transportation Master Plan Update at the City of Barrie, TDM, transit priority lanes and overall transportation network improvements will be evaluated separately for the long-term planning of Bayfield Street and the overall transportation network.

The preferred planning solution addresses the problems and opportunities by:

- Supporting multi-modal transportation for the future intensification along Bayfield Street;
- Addressing current traffic congestion;
- Supporting the safety and comfort of all roadway users (pedestrians, cyclists, transit users and motorists); and,
- Exploring potential public realm opportunities.

3 Next Steps

Phase 2 of the MCEA Study has been summarized in this Phase 2: Alternative Planning Solutions report. The work completed in Phase 2 of the MCEA for this project, which includes the development of the alternative planning solutions, the evaluation criteria, the assessment of the alternative planning solutions and the technically preferred alternative planning solutions will be presented to stakeholders and to the public.

The next phase of work for the Bayfield Street MCEA Study will be Phase 3: Alternative Design Concepts. This involves developing alternative design concepts, including the alternative typical cross-section, based on the alternative planning solutions carried forward in Phase 2, as documented in this report.