



TRANSPORTATION MASTER PLAN

Appendix I – Class EA Process and Identification of Project
Schedules
April 2019





TRANSPORTATION MASTER PLAN

CLASS EA PROCESS AND IDENTIFICATION OF PROJECT SCHEDULES

CITY OF BARRIE

TECHNICAL MEMORANDUM

PROJECT NO.: 171-08853-00

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1 INTRODUCTION

The Transportation Master Plan (TMP) has been prepared in accordance with the Municipal Class Environment Assessment or MCEA (October 2000, as amended in 2007, 2011 and 2015) process.

The TMP was completed with a coordinated approach with the City's planning process, ensuring that the principles and public input was considered for future transportation infrastructure assessments.

A TMP is a long-range strategic plan that integrates transportation infrastructure in a large study area, scheduled to be implemented over a set period. A long-term transportation plan is defined as "a document that identifies the needs for transportation infrastructure, services or programmes for an urban area, commonly over a horizon of 10-plus years or even longer" by the Transportation Association of Canada's "Best Practices for Technical Delivery of Long-Term Transportation Planning Studies in Canada". It is a plan developed based on an estimation of forecasted traffic or travel, the identification of needs in transportation capacity or services, the assessment of alternative scenarios to meet these needs, and the selection of a recommended Transportation Plan according to an established set of evaluation criteria.

MCEA does not require a certain minimum or maximum interval for a Master Plan to be updated. However, Section 4.4 of the MCEA advises "A Master Plan should be reviewed every five years to determine the need for a detailed formal review and/or updating. Potential changes which may trigger the need for a detailed review include":

- Major changes to original assumptions
- Major changes to components of the Master Plan
- Significant new environmental effects
- Major changes in proposed timing of projects within the Master Plan

It is recommended that the TMP be updated no later than every five years to address any changes in the original assumptions, changes in the proposed timings of the projects in the TMP, any changes in the TMP components, any significant environmental effects, or any changes in the policies which would impact the implementation of the TMP.

2 THE MUNICIPAL CLASS ENVIRONMENT ASSESSMENT PROCESS (MCEA)

The MCEA defines the EA Act as “the Environmental Assessment Act or the EA Act for the Province of Ontario”.

The MCEA process, as described in Table 2-1, includes five phases: problem or opportunity, alternative solutions, alternative design concepts for preferred solution, environmental study report, and implementation.

Table 2-1 Five Phases of the Municipal Class Environmental Assessment Process

Phase	Description of Phase
1	<u>Problem or Opportunity</u> : Identify the problem or opportunity.
2	<u>Alternative Solutions</u> : Identify alternative solutions to the problem, by taking into consideration the existing environment, and establish the preferred solution providing for public and agency review and input. At this point, determine the appropriate Schedule for undertaking and/or identify the approval requirements; proceed through the following Phases for Schedule C projects.
3	<u>Alternative Design Concepts for Preferred Solution</u> : Examine alternative methods of implementing the preferred solution, based upon the existing environment, public and government agency input, anticipated environmental effects and methods of minimizing negative impacts and maximizing positive effects.
4	<u>Environment Study Report</u> : Document, in an Environment Study Report a summary of the rationale, planning, design and consultation process of the project as established through the above Phases and make such documentation available for scrutiny by review agencies and the public.
5	<u>Implementation</u> : Complete contract drawings and documents, and proceed to construction and operation; monitor construction for adherence to environmental provision and commitments. Where special conditions dictate, also monitor the operation of the complete facilities.

The EA Act defines a Master Plan as “a long-range plan which integrates infrastructure requirements for existing and future land use with environmental assessment principles”, and “At a minimum, a Master Plan addresses Phases 1 and 2 of the Municipal Class EA process.”

A Class EA for a Master Plan requires the completion of Phase 1 (Problem Identification) and Phase 2 (Alternative Solutions) of the five phases of the MCEA process. Depending on the scope and level of analysis in a Master Plan, the requirements of Phases 1 and 2 may be satisfied for projects identified through this process. The Class EA process addresses projects by classifying them into four different “schedules” according to their environmental significance - Schedule A, A+, B, and C. The level of complexity and the potential effects of a project would determine the appropriate schedule that would in turn determine the phases to be addressed. Table 2-2 provides further details to the four schedules of the Class EA process.

Table 2-2 Four Schedules of the Class EA Process

Schedule	Summary
A	<u>Schedule A</u> : Projects are limited in scale, have minimal adverse environmental effects and include many municipal maintenance and operational activities. These projects are pre-approved and may proceed to implementation without following the full Class EA planning process. Schedule A projects generally include normal or emergency operational and maintenance activities.
	<u>Schedule A ±</u> : The purpose of Schedule A + is to ensure some type of public notification for certain projects that are pre-approved under the Municipal Class EA, it is appropriate to inform the public of municipal infrastructure project(s) being constructed or implemented in their area. There, however, would be no ability for the public to request a Part II Order. If the public has any comments, they should be directed to the municipal council where they would be more appropriately addressed.
B (<\$2.4M)	The proponent is required to undertake a screening process, involving mandatory contact with directly affected public and with relevant government agencies to ensure that they are aware of the project and that their concerns are addressed. If there are no outstanding concerns, then the proponent may proceed to implementation. Schedule B projects generally include improvements and minor expansions to existing facilities. However, if the screening process raises a concern which cannot be resolved, a Part II Order may be invoked; alternatively, the proponent may elect voluntarily to plan the project as a Schedule C undertaking.
C (>\$2.4M)	Such projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the Class EA document. Schedule C projects require that an Environmental Study Report (ESR) be prepared and filed for review by the public and review agencies. Schedule C projects generally include the construction of new facilities and major expansions to existing facilities. If concerns are raised that cannot be resolved, a Part II Order may be invoked.

The schedules increase according to the potential impact and level of environmental effects. A Master Plan fulfills the requirements of Phases 1 and 2 of the Class EA process for any identified Schedule B or C projects. Schedule C projects would have to fulfill Phases 3 and 4 of the MCEA process prior to filing an Environmental Study Report (ESR) for public review. This involves a 30-day public review period with a Part II Order appeal mechanism, where an individual can request the Minister of the Environment to extend the project for a higher-level EA investigation. Part II Order requests can only be done for project-specific EAs, not Master Plans.

3 MUNICIPAL CLASS EA MASTER PLANNING APPROACHES

There are four different approaches for developing a Master Plan as mentioned in the EA Act. The following section provides further information to each of the approaches.

3.1 APPROACH NO.1

Approach No.1 involves the preparation of a Master Plan document at the conclusion of Phases 1 and 2 of the Municipal Class EA process. The Master Plan would be made available for public comment prior to being approved by the municipality.

Under this approach, detailed investigations at the project-specific level for the Schedule B and C projects are identified within the Master Plan, and are required to fulfil the Municipal Class EA requirements.

The Master Plan would be used in support of future investigations for the specific Schedule B and C projects identified within it. Schedule B projects would require the filing of the Project file for public review, while Schedule C projects would have to fulfil Phases 3 and 4 prior to filing an Environmental Study Report (ESR) for public review.

3.2 APPROACH NO.2

This approach also requires that the Phases 1 and 2 of the Municipal Class EA process be completed for the Master Plan document, with the level of investigation, consultation, and documentation sufficient to fulfil the requirements for Schedule B projects. The final public notice for the Master Plan therefore, would be the Notice of Completion for the Schedule B projects within it. However, Schedule C projects, must fulfil Phases 3 and 4 before filing an ESR(s) for public review. The Master Plan provides the basis for future investigations for the specific Schedule C projects identified within it.

3.3 APPROACH NO.3

The development of a Master Plan document under this approach requires that Phases, 1, 2, 3, and 4 of the Municipal Class EA process be completed. Therefore, the final public notice for the Master Plan could become the Notice of Completion for the Schedule B and C projects within it.

3.4 APPROACH NO.4 – INTEGRATION WITH THE PLANNING ACT

This approach requires that the preparation of a new official plan or a comprehensive official plan amendment be accompanied by the Master Plan. This approach must satisfy the early phases of the Class EA process, including Phases 1 and 2 for Schedule B projects, and may satisfy Phases 3 and 4 for Schedule C projects.

3.5 APPROACH FOR BARRIE TMP

The Barrie TMP was developed under Approach No.2 of the MCEA process, and will serve to fulfil Phases 1 and 2 of the Municipal Class EA process with a level of consultation and documentation sufficient to fulfil the requirements for Schedule B projects. The final public notice for the study would also be the Notice of Completion for all the Schedule B projects within it. The TMP will provide the basis for future investigations for the specific Schedule C projects identified within it.

3.6 MCEA DEFINITION OF PROJECT

The MCEA Act defines a project as “a specific activity planned and implemented in accordance with the Class EA (may also be referred to as the undertaking). The project consists of all those activities necessary to solve a specific problem (deficiency) or address an opportunity”.

The Act further illustrates that “If the components are interdependent, then they shall be dealt with as a single project. For example, if the problem is to provide additional servicing for future development, then the project must be defined as constituting all those components required to provide servicing to the area. This may include establishing a new roadway, acquisition of land, construction of a bridge, a new water crossing, new water intakes, sewage outfalls etc.”

The MCEA Act mentions that the projects shall be considered separate and distinct if:

- They are initiated to solve distinctly different sets of problems, or if
- The resulting works are stand alone facilities without the requirement of further works to completely solve the problem.

Where a project consists of components with different status under the Class EA if carried out separately, the entire project shall take on the status of the component requiring the most vigorous treatment.

3.7 PIECEMEALING

The MCEA Act prohibits piecemealing, stating that “it is inappropriate for proponents to reduce their responsibility under the EA Act by breaking up or piecemealing a larger project into smaller component parts, with each part addressed separately. Piecemealing is not in compliance with the MCEA Act.”

3.8 PROJECT SCHEDULE BASED ON COSTS

The Class MCEA Act (glossary) mentions that the projects shall not include the costs for:

- (i) acquisition of land
- (ii) feasibility studies and engineering design for the project
- (iii) operation of the project.

The MCEA Act further describes the cost estimate as:

“The estimate includes the capital costs of all components of a project required to solve the problem. If separate components of a project are independent of each other (i.e. are solving separate problems) but are being constructed together as a single project for purposes of cost effectiveness or efficiency (e.g. a defective watermain replaced while a road is being reconstructed), then the costs shall be considered to be separate.”

The MCEA Act, explains that the schedule of a project shall change from a lower schedule to a higher schedule with changes in the cost of the project, as per the Appendix 1 of the MCEA Act. The project’s types and their schedules according to the MCEA Act relevant to this TMP are mentioned in Table 3-1 below.

Table 3-1 Cost Limit for Project (Appendix 1 of the MCEA Act)

Description of the Project <i>(Note: The Schedules shall be reviewed inclusively to ensure that the correct schedule is selected)</i>	Cost Limit for Project Approved Under Schedule			
	Pre- Approved		B	C
	A	A+		
General Operation and Maintenance of Linear Paved Facilities and Related Facilities				
3. Construction or removal of sidewalks or multi-purpose paths or cycling facilities within existing or protected rights-of-way	NL			
13. Installation, construction or reconstruction of traffic control devices (e.g. signing, signalization)	<9.5 m	-	>9.5 m	-
19. Reconstruction where the reconstructed road or other linear paved facilities (e.g. HOV lanes) will be for the same purpose, use, capacity and at the same location (e.g. addition or reduction of cycling lanes/facilities or parking lanes, provided no change in the number of motor vehicle lanes)	-	NL	-	-
20. Reconstruction or widening where the reconstructed road or other linear paved facilities (e.g. HOV lanes will not be for the same purpose, use, capacity or at the same location (e.g. additional motor vehicle lanes, continuous centre turn lane)	-	-	<2.4 m	>2.4 m
21. Construction of new roads or other linear paved facilities (e.g. HOV lanes)	-	-	<2.4 m	>2.4 m
23. Construction of local roads which are required as condition of approval on a site plan, consent, plan of subdivision or plan of condominium which will come into effect under the Planning Act prior to the construction of the road. [Note – Reference to “local” roads refer to roadway function not municipal jurisdiction. See definition in Glossary of Municipal Class EA.]	NL	-	-	-
27. Construction of new grade separations	-	-	<9.5 m	>9.5 m
28. Construction of underpasses or overpasses for pedestrian, cycling, recreational or agricultural use	-	-	<2.4 m	>2.4 m
29. Construction of new interchanges between any two roadways, including a grade separation and ramps to connect the two roadways	-	-	<9.5 m	>9.5 m

NL refers to No Limit.

4 EA SCHEDULE FOR TRANSPORTATION MASTER PLAN PROJECTS

The 2019 TMP outlines the proposed road improvements required to support the population and employment growth projections to 2041. Some of these road improvements are relatively narrow in scope and could be implemented through changes to pavement markings and other minor modifications.

There are, however, some recommended improvements that would involve more significant capital works, including the widening of the pavement to provide additional travel lanes and turn lanes to increase vehicle capacity and improve operations, as well as the implementation of bike lanes to enhance the convenience and safety of cyclists. Given the scope and extent of these road improvements, approval is required under the Municipal Class Environmental Assessment (MCEA) process. This TMP will serve to fulfill the Phase 1 and 2 components of the MCEA process. Phase 1 is the identification of the problem (deficiency) or opportunity, and Phase 2 is the identification of alternative solutions to address the problem or opportunity.

By following Approach #2 of the MCEA process, the preparation of a Master Plan document at the conclusion of Phases 1 and 2 of the Municipal Class EA process where the level of investigation, consultation and documentation are sufficient to fulfill the requirements for Schedule B projects will constitute approval of these projects. There are five Schedule B projects identified in this TMP, as listed in Table 4-1. Therefore, the final public notice for this TMP will represent the “Notice of Completion” for these Schedule B projects and they can then proceed to implementation, subject to the submission of any Part II Order requests.

For Schedule C projects, however, the City would be required to complete Phase 3 (alternative design concepts for the preferred solution) and Phase 4 (the preparation, submission and approval of an Environmental Study Report) prior to implementation. For the reconstruction or widening of roads to increase the capacity of the facility, the Schedule is determined by the estimated cost of construction. Cost estimates, which are planning level estimates and based on typical cross-sections, and anticipated timing of the recommended road improvements are presented in Appendix B - Active Transportation Strategy and Appendix H – Roadway and Transit Costing of the 2019 TMP Final Report. Refinement of the cost estimates should be undertaken over the next few years as the anticipated implementation date approaches in order to confirm the appropriate schedule of the MCEA and that the applicable process has been satisfied.

Currently, road improvement projects expected to exceed \$2.4 million would be subject to Schedule C of the MCEA. In the case of grade separations and construction of an interchange, such as the recommended Mapleview Drive diverging diamond interchange, a construction cost greater than \$9.5 million would be subject to Schedule C. The projects included in Table 4-1 do not exceed these limits.

Table 4-2 provides a list Schedule C roadway projects. Note that several road improvements along the same corridors were grouped together as the MCEA Act prohibits piecemealing, as discussed in Section 3.7. For each Schedule C improvement, the exact limits of the road widenings/extensions would need to be determined through Phase 3 and 4 of the Class EA Process. Figure 4-1 illustrates the assumed limits of the road improvement projects for EA scheduling purposes. Figure 4-2 illustrates the EA schedules of the road improvement projects discussed above.

Several of the proposed road projects involves reconstruction of the roadway without adding additional vehicle lanes, such as streetscaping, reconstruction of roadways to urban standard, and conversion of curb lanes to HOV lanes. As per the MCEA, since no additional capacity is added to the roadway, these projects are considered Class A+. Schedule A and A+ projects are listed in Table 4-3.

Some transit related projects that fall under the MCEA Act are also listed in Table 4-3. Construction and reconstruction of bus stop facilities are considered Class A+, while the construction of transit garage and maintenance facilities and terminal facilities are considered Class A projects.

As shown in Table 4-3, road diet projects to accommodate active transportation facilities are considered Class A. Note it is assumed that all active transportation facilities which are not proposed with a road widening project do not

require any change in the right of way or any change in the number of existing vehicle lanes. For these active transportation projects, any sidewalks, multi-use pathways, or cycling facilities proposed within the of the existing or protected right of way, would be considered Class A irrespective of the cost. Furthermore, any linear paved active transportation facilities proposed where the number of vehicle lanes are not changed will be considered Class A+ irrespective of the cost. Please refer to Appendix B - Active Transportation Strategy of the 2019 TMP Final Report for the list of all proposed active transportation facilities.

4.1 EA CLASSIFICATION COMPARISON BETWEEN 2014 MMATMP AND 2019 TMP PROJECTS

A comparison was carried between the classification of 2014 MMATMP and 2019 TMP projects. Classification of some of the projects has changed, and are listed in Table 4-4. All other projected proposed in 2014 MMATMP would be carried out as per their respective schedules.

Table 4-1 EA Schedule B Projects

EA Project ID	Road	Proposed Roadway & Cycling Facility Description	Phasing	Total Road and AT Costs ^{1,2}	EA Trigger
1126	Ferndale Drive North	Addition of 1 Lane along Ferndale Drive from Benson Drive to City Northwest Limits. Repaint pavement markings. Addition of In-Boulevard Pathway along Ferndale Drive from Benson Drive to City Northwest Limits.	2019-2023	\$1,140,000	\$2,400,000
1129	St. Vincent Street	Addition of 1 Two Way Left Turn Lane or Median ³ along St. Vincent Street from Wellington Street to Penetang Street. Addition of Bike Lane along St. Vincent Street from Wellington Street East to Penetang Street.	2024-2041	\$1,480,000	\$2,400,000
1309	Commerce Park Drive	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) ³ along Commerce Park Drive from Bryne Drive to 140m west of Bryne Drive. Addition of Buffered Bike Lane along Commerce Park Drive from Bryne Drive to 140m west of Bryne Drive.	2024-2041	\$1,070,000	\$2,400,000
1310	Sproule Drive	Addition of New Road, 2 lanes along Sproule Drive from west cul-de-sac to Ferndale Drive. Addition of Bike Lane along Sproule Drive from west cul-de-sac to Ferndale Drive	2024-2041	\$910,000	\$2,400,000
2502	Mapleview Drive	Mapleview Diverging Diamond Interchange. Addition of In-Boulevard Pathway on one side along Mapleview Drive East from Highway 400 to Park Place Boulevard.	2024-2041	\$6,630,000	\$9,500,000

Note:

¹ Costs presented in this table are used for the purposes of determining the applicable EA schedule.

² The total project costs exclude land acquisition costs, design/engineering fees, City project management, contract administration and site inspection, and HST.

³ The implementation of a TWLTL vs. a median should be based on a future assessment of local conditions and constraints as part of the design process.

Table 4-2 EA Schedule C Road Projects

EA Project ID	Road	Roadway Description	Proposed Cycling Facility Description	Phasing	Total Road and AT Costs	EA Trigger
1101	Georgian Drive	Addition of 1 Two Way Left Turn Lane or Median along Georgian Drive from Duckworth Street to Johnson Street		2024-2041	\$ 15,320,000	\$2,400,000
1102	Anne Street North	Addition of 1 Two Way Left Turn Lane or Median along Anne Street North from Sunnisdale Road to Barrie City Limits	Addition of Buffered Bike Lane along Anne Street North, from Sunnisdale Road to Barrie City Limits	2024-2041	\$ 6,600,000	\$2,400,000
1103	Bayfield Street	Addition of 1 Two Way Left Turn Lane or Median along Bayfield Street from Sophia Street to Grove Street, Addition of 1 Lane along Bayfield Street from Grove Street to Rose Street, Addition of 2 Lanes along Bayfield Street from Rose Street to Cundies Road East, Streetscape improvements along Bayfield Street from Rose Street to Sophia Street	Addition of Cycle Track along Bayfield Street from Hwy 400 to Barrie City Limits	2024-2041	\$ 30,700,000	\$9,500,000
1104	Blake Street / Collier Street	Addition of 1 Two Way Left Turn Lane or Median along Blake Street / Collier Street from Mulcaster Street to Johnson Street	Addition of Buffered Bike Lane along Collier Street from Mulcaster Street to Dundonald Street, Addition of Buffered Bike Lane along Blake Street from Duckworth Street to Shanty Bay Road, Addition of Bike Lane from Shanty Bay Road to Johnson Street	2024-2041	\$ 16,910,000	\$2,400,000
1105	St.Vincent Street	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along St.Vincent Street from Sperling Drive to Bell Farm Road, Addition of 1 Two Way Left Turn Lane or Median along St.Vincent from Bell Farm Road to Grove Street East	Addition of Bike Lane along St.Vincent Street from Sperling Drive to Bell Farm Road, Addition of Buffered Bike Lane from Bell Farm Road to Grove Street East	2024-2041	\$ 34,430,000	\$9,500,000
1106	Wellington Street West	Addition of 1 Two Way Left Turn Lane or Median along Wellington Street West from Bayfield Street to Sunnisdale Road	Addition of Bike Lane along Wellington Street West from Bayfield Street to Sunnisdale Road	2024-2041	\$ 4,850,000	\$2,400,000
1107	Bradford Street	Addition of 1 Two Way Left Turn Lane along Bradford Street from Dunlop Street to Tiffin Street	Addition of Cycle Track along Bradford Street from Dunlop Street to Tiffin Street	2024-2041	\$ 24,390,000	\$2,400,000
1108	Dunlop Street West	Addition of 3 Lanes (1 Two Way Left Turn Lane or Median) along Dunlop Street West from Ferndale Drive North to Tiffin Street, Addition of 2 Lanes along Dunlop Street West from Cedar Pointe Drive to Ferndale Drive		2024-2041	\$ 19,330,000	\$2,400,000
1109	Tiffin Street	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Tiffin Street from Bradford Street to Ferndale Drive, Addition of 1 Two Way Left Turn Lane or Median along Tiffin Street from Ferndale Drive to Dunlop Street West, Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Tiffin Street from Lakeshore Drive to Bradford Street	Addition of Bike Lane along Tiffin Street from Lakeshore Drive to Anne Street, Addition of In-Boulevard Pathway from Anne Street to Dunlop Street West.	2024-2041	\$ 41,720,000	\$2,400,000
1110	Lakeshore Drive / Hurst Drive	Addition of 2 Lanes along Lakeshore Drive / Hurst Drive from Tiffin Street to Bay Lane, Addition of 1 lane along Hurst Drive from Bay Lane to Cox Mill Drive	Addition of In-Boulevard Pathway along Hurst Drive from Brennan Avenue to Mine's Point Road	2024-2041	\$ 14,550,000	\$2,400,000
1111	Anne Street South	Addition of 1 Two Way Left Turn or Median along Anne Street South from Jacobs Terrace to Centre Street, Addition of 1 Two Way Left Turn along Anne Street South from Centre Street to Adelaide Street, Addition of New Road, 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Anne-Baldwin Connector from Adelaide Street to Innisfil Street	Addition of Buffered Bike Lane along Anne Street South from Jacobs Terrace to Essa Road, Addition of Bike Lane along Anne Street South from Essa Road to Adelaide Street	2024-2041	\$ 4,940,000	\$2,400,000
1112	Burton Avenue	Addition of 2 Lanes along Burton Avenue from Bayview Drive to Milburn Street, Addition of 1 Two Way Left Turn Lane or Median along Burton Avenue from Bayview Drive to Essa Road, Streetscape improvements along Burton Avenue from Essa Road to Milburn Street	Addition of Bike Lane along Burton Avenue from Bayview Drive to Milburn Street	2024-2041	\$ 8,680,000	\$2,400,000
1113a	Anne Street	Addition of 1 Two Way Left Turn Lane or Median along Anne Street North from Dunlop Street West to Wellington Street West	Addition of Cycle Track along Anne Street North from Dunlop Street West to Donald Street/Wellington Street West	2019-2023	\$ 2,280,000	\$9,500,000
1113b	Anne Street	Addition of 1 Two Way Left Turn Lane or Median along Anne Street North from Wellington Street West to Edgehill Drive	Addition of Cycle Track along Anne Street North from Donald Street/Wellington Street West to Edgehill Drive	2024-2041	\$ 16,130,000	\$9,500,000
1114	Mine's Point Road	Addition of 1 Two Way Left Turn Lane or Median along Mine's Point Road from Lakeshore Drive / Hurst Drive to Yonge Street	Addition of Cycle Track along Mine's Point Road from Yonge Street to Lakeshore Drive	2024-2041	\$ 3,510,000	\$2,400,000
1115	Little Avenue	Addition of 1 Two Way Left Turn Lane or Median along Little Avenue from Hurst Drive to Marshall Street, Addition of 3 Lanes (1 Two Way Left Turn Lane or Median) along Little Avenue from Marshall Street to Fairview Road	Addition of Buffered Bike Lane along Little Avenue from Fairview Drive to Yonge Street, Addition of Cycle Track along Little Avenue from Yonge Street to Yeates Avenue, Addition of Buffered Bike Lane along Little Avenue from Yeates Avenue to Hurst Drive	2024-2041	\$ 27,080,000	\$2,400,000

Table 4-2 EA Schedule C Road Projects

EA Project ID	Road	Roadway Description	Proposed Cycling Facility Description	Phasing	Total Road and AT Costs	EA Trigger
1116	Fairview Road	Addition of 1 Two Way Left Turn Lane or Median along Fairview Road from Essa Road to Little Avenue. Addition of 2 Lanes along Fairview Road from Big Bay Point Road to Little Avenue	Addition of Bike Lane along Fairview Road from Little Avenue to Big Bay Point Road	2024-2041	\$ 15,840,000	\$2,400,000
1117a	Huronio Road	Addition of 1 Two Way Left Turn Lane or Median along Huronio Road from Yonge Street to Herrell Avenue	Addition of Cycle Track along Huronio Road from Yonge Street to Herrell Avenue	2019-2023	\$ 12,830,000	\$2,400,000
1117b	Huronio Road	Phase 1: Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Huronio Road from Herrell Avenue to Lockhart Road; Phase 2: Addition of 2 Lanes along Huronio Road from Herrell Avenue to Lockhart Road by 2041	Addition of Cycle Track along Huronio Road from Herrell Avenue to Lockhart Road	2024-2041	\$ 39,140,000	\$2,400,000
1118	Big Bay Point Road / Harvie Road	Addition of 5 Lanes (including 1 Two Way Left Turn Lane or Median) along Big Bay Point Road from Byrne Drive to Bayview Drive. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Big Bay Point Road from Bayview Drive to Huronio Road. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Harvie Road from Byrne Drive to Veterans Drive. Addition of 1 Two Way Left Turn Lane or Median along Harvie Road from Veterans Drive to Essa Road.	Addition of Buffered Bike Lane along Big Bay Point Road / Harvie Road from Huronio Road to Essa Road.	2019-2023	\$ 71,720,000	\$9,500,000
1119	Big Bay Point Road	Addition of 1 Two Way Left Turn Lane or Median along Big Bay Point Road from Loon Avenue to Dean Avenue	Addition of Cycle Track along Big Bay Point Road from Loon Avenue to Dean Avenue.	2024-2041	\$ 14,610,000	\$2,400,000
1120a	Big Bay Point Road	Addition of 3 lanes (including 1 Two Way Left Turn Lane or Median) on Big Bay Point from 230m west of Collector 11 to Collector 11. Addition of 1 Two Way Left Turn Lane or Median on Big Bay Point from Collector 11 to 200m east of Collector 11	Addition of Cycle Track along Big Bay Point Road from Prince William Way to McCormick Gate	2019-2023	\$ 5,100,000	\$2,400,000
1120b	Big Bay Point Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Big Bay Point Road from Prince William Way to 230 west of Collector 11. Reconstruct to urban standard along Big Bay Point Road from 230m west of Collector 11 to 20th Sideroad	Addition of Cycle Track along Big Bay Point Road from McCormick Gate to 20th Sideroad	2024-2041	\$ 8,920,000	\$2,400,000
1121	Bayview Drive	Addition of 1 Two Way Left Turn Lane or Median along Bayview Drive from Salem Road to Mapleview Drive East	Addition of Buffered Bike Lane along Bayview Drive from Lockhart Road to Mapleview Drive East	2024-2041	\$ 9,580,000	\$2,400,000
1122	Byrne Drive	Addition of New Road, 5 Lanes (including 1 Two Way Left Turn Lane or Median) along Byrne Drive from North of Caplan Avenue to North Cul-de-Sac. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Byrne Drive from North Cul-de-sac to South of Essa Road	Addition of Buffered Bike Lane along Byrne Drive from North of Caplan Avenue to Essa Road	2019-2023	\$ 22,120,000	\$2,400,000
1123a	Welham Road	Addition of New Road, 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Welham Road from South Cul-de-sac to Lockhart Road	Addition of Bike Lane along Welham Road from South Cul-de-sac to Lockhart Road	2019-2023	\$ 4,050,000	\$2,400,000
1123b	Welham Road	Addition of 1 Two Way Left Turn Lane or Median along Welham Road from Big Bay Point Road to South Cul-de-sac	Addition of Bike Lane along Welham Road from Big Bay Point Road to South Cul-de-sac	2024-2041	\$ 14,860,000	\$2,400,000
1124	Essa Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Essa Road from Osmington Entrance to Highway 400 S-E/W Ramp. Addition of 2 Lanes along Essa Road from Highway 400 S-E/W Ramp to Ardagh Road / Byrne Drive. Addition of 1 Two Way Left Turn Lane or Median along Essa Road from Bradford Street to Osmington Entrance. Streetscape improvements along Essa Road from Tiffin Street to Fairview Road	Addition of In-Boulevard Pathway along Essa Road from Gowan Street to Tiffin Street	2019-2023	\$ 33,360,000	\$9,500,000
1125	Ardagh Road	Addition of 1 Two Way Left Turn Lane or Median along Ardagh Road from Patterson Road to Essa Road	Addition of In-Boulevard Pathway along Ardagh Road from Patterson Road to Essa Road	2024-2041	\$ 5,690,000	\$2,400,000
1127	Dunlop Street West	Addition of 5 Lanes (including 1 Two Way Left Turn Lane or Median) along Dunlop Street West from Anne Street to Hart Drive. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Dunlop Street West from Hart Drive to Cedar Pointe Drive		2024-2041	\$ 28,230,000	\$2,400,000
1128	Cundlies Road	Addition of 1 Two Way Left Turn Lane or Median along Cundlies Road from St Vincent Street to Livingstone Street	Addition of In-Boulevard Pathway along Cundlies Road from St Vincent Street to Livingstone Street	2024-2041	\$ 3,960,000	\$2,400,000
1202	Innisfil Street	Addition of 1 Two Way Left Turn Lane or Median along Innisfil Street From Perry Street to Essa Road. Addition of 1 Two Way Left Turn Lane or Median along Perry Street from Innisfil Street to Eccles Street South, and Addition of 1 Two Way Left Turn Lane or Median along Eccles Street South from Perry Street to Dunlop Street West	Addition of Bike Lane along Eccles Street South from Dunlop Street to Innisfil Street. Addition of Bike Lane along Innisfil Street from Perry Street to Essa Road	2024-2041	\$ 21,170,000	\$2,400,000
1203	Baldwin Lane	Addition of 1 Two Way Left Turn Lane or Median along Baldwin Lane from Innisfil Street to Bayview Drive	Addition of Bike Lane along Baldwin Lane from Innisfil Street to Bayview Drive	2024-2041	\$ 4,490,000	\$2,400,000

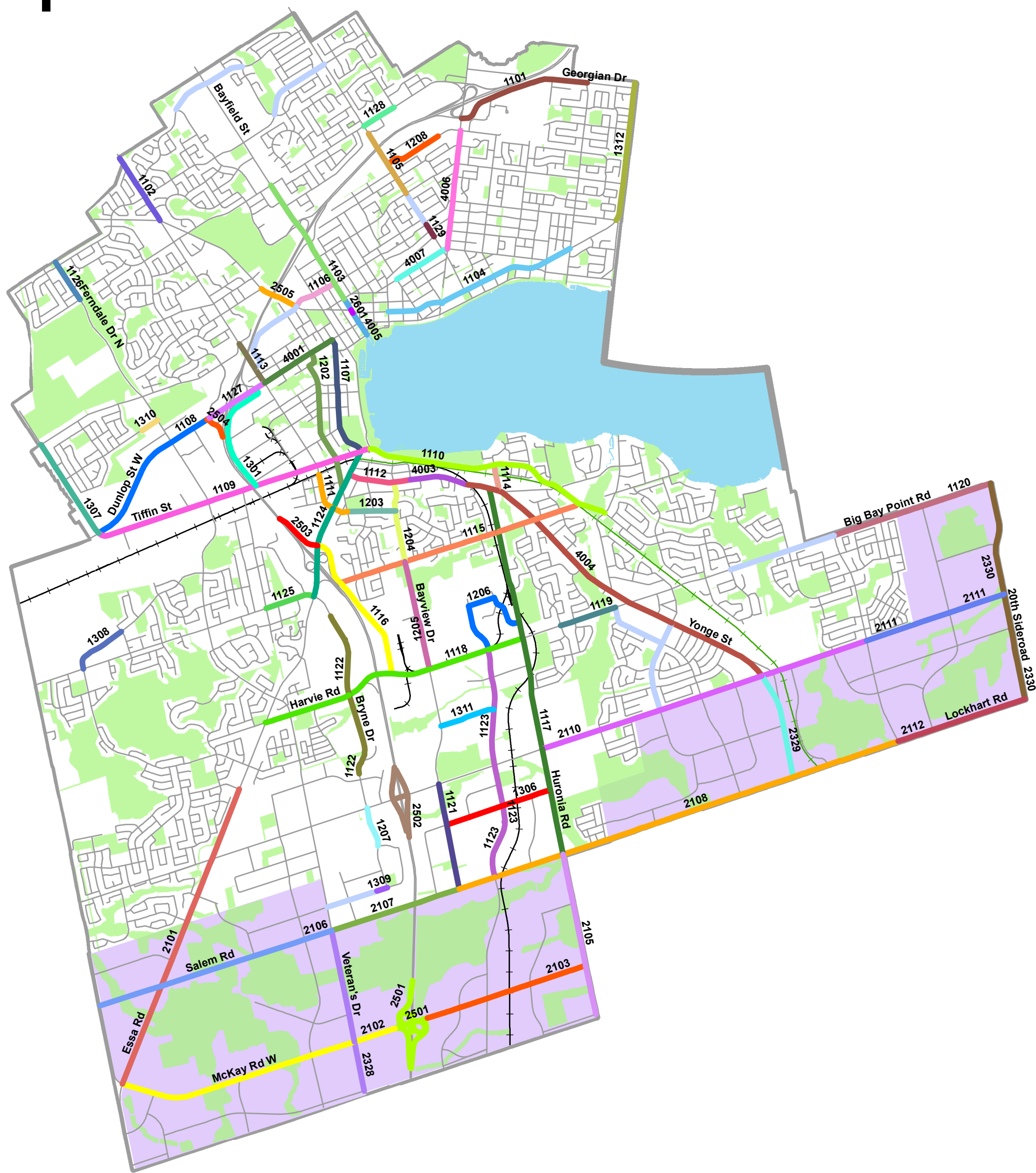
Table 4-2 EA Schedule C Road Projects

EA Project ID	Road	Roadway Description	Proposed Cycling Facility Description	Phasing	Total Road and AT Costs	EA Trigger
1204	Bayview Drive	Addition of 1 Two Way Left Turn Lane or Median along Bayview Drive from Burton Avenue to Little Avenue	Addition of Buffered Bike Lane along Bayview Drive from Burton Avenue to Little Avenue	2024-2041	\$ 7,150,000	\$2,400,000
1205	Bayview Drive	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Bayview Drive from Little Avenue to Big Bay Point Road	Addition of Bike Lane along Bayview Drive from Little Avenue to Big Bay Point Road	2019-2023	\$ 12,770,000	\$2,400,000
1206	Welham Road, Truman Road, and Ham Road	Addition of 1 Two Way Left Turn Lane or Median along Welham Road, Truman Road, and Hamilton Road from Huronia Road to Big Bay Point Road		2024-2041	\$ 9,520,000	\$2,400,000
1207	Byrne Drive	Addition of 2 Lanes along Byrne Drive from Mapleview Drive to South of Mapleview Drive	Addition of In-Boulevard Pathway along Byrne Drive from Mapleview Drive West to Commerce Park Drive	2019-2023	\$ 4,410,000	\$2,400,000
1208	Bell Farm Road	Addition of 1 Two Way Left Turn Lane or Median along Bell Farm Road from St Vincent Street to West of Duckworth Street	Addition of Bike Lane along Bell Farm Road from St Vincent Street to Duckworth Street	2019-2023	\$ 4,550,000	\$2,400,000
1301	Dymont Road / Hart Drive	Reconstruct to urban standard along Dymont Road from Vespra Street to Tiffin Street.	Addition of Bike Lane along Dymont Road from Tiffin Street to Vespra Street. Addition of Bike Lane along Hart Drive from Dunlop Street West to Vespra Street	2024-2041	\$ 12,420,000	\$2,400,000
1306	Saunders Road	Reconstruct to urban standard along Saunders Road from Bayview Drive to Huronia Road	Addition of Bike Lane along Saunders Road from Bayview Drive to Huronia Road	2024-2041	\$ 7,980,000	\$2,400,000
1307	Miller Drive	Reconstruct to urban standard along Miller Drive from Dunlop Street West to Edgehill Drive	Addition of Buffered Bike Lane along Miller Drive from Dunlop Street West to Edgehill Drive	2024-2041	\$ 8,810,000	\$2,400,000
1308	Summerset Road	Addition of New Road 2 lanes along Summerset Road from Ardagh Road to Wright Drive	Addition of Buffered Bike Lane along Summerset Road from Ardagh Road to Wright Drive	2019-2023	\$ 3,580,000	\$2,400,000
1311	Churchill Drive	Reconstruct to urban standard along Churchill Drive from Bayview Drive to Welham Drive	Addition of Bike Lane along Churchill Drive from Bayview Drive to Welham Drive	2024-2041	\$ 3,870,000	\$2,400,000
1312	Penetanguishene Road	Reconstruct to urban standard along Penetanguishene Road from Steele Street to Barrie City Limits	Addition of In-Boulevard Pathway along Penetanguishene Road from Steele Street to Barrie City Limits	2024-2041	\$ 10,840,000	\$2,400,000
2101	Essa Road	Addition of 1 Two Way Left Turn Lane or Median along Essa Road from Barrie City Limits to County Road 27. Addition of 3 lanes (including 1 Two Way Left Turn Lane or Median) along Essa Road from Mapleview Drive West to Coughlin Road.	Addition of In-Boulevard Pathway on one side, along Essa Road from Barrie City Limits to Coughlin Road	2019-2023	\$ 28,220,000	\$2,400,000
2102a	McKay Road	Phase 1 Interim Improvements: Total of 5 lanes - McKay Road from West Bndry of Interchange to Veterans Drive; Total of 3 lanes - McKay Road Veterans Drive to Reid Drive	Addition of Cycle Track along McKay Road East from Veterans Drive to West Boundary of Interchange. Addition of Cycle Track along McKay Road from Reid Drive to Veterans Drive	2019-2023	\$ 6,510,000	\$2,400,000
2102b	McKay Road	Phase 2 Ultimate Improvements: Total of 7 lanes - McKay Road from West Bndry of Interchange to Veterans Drive; Total of 5 lanes - McKay Road from Veterans Drive to Reid Drive	Addition of Cycle Track along McKay Road East from Reid Drive to County Road 27	2024-2041	\$ 19,060,000	\$2,400,000
2103a	McKay Road East	Phase 1 Interim Improvements: Total of 5 lanes - McKay Road from East Bndry of Interchange to Rawson Drive; Total of 3 lanes - McKay Road from Rawson Drive to Huronia Road	Addition of Cycle Track along McKay Road East from Highway 400 to Huronia Road	2019-2023	\$ 11,670,000	\$2,400,000
2103b	McKay Road East	Phase 2 Ultimate Improvements: Total of 7 lanes - McKay Road From East Bndry of Interchange to Rawson Drive; Total of 5 lanes - McKay Road from Rawson Drive to Huronia Road		2024-2041	\$ 7,270,000	\$2,400,000
2105a	Huronia Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Huronia Road from Lockhart Road to Barrie City Limits	Addition of Cycle Track along Huronia Road from Lockhart Road to Barrie City Limits	2019-2023	\$ 14,540,000	\$2,400,000
2105b	Huronia Road	Addition of 2 Lanes along Huronia Road from Lockhart Road to Barrie City Limits		2024-2041	\$ 9,420,000	\$2,400,000
2106	Salem Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Salem Road from Veterans Drive to Reid Drive. Addition of 1 Two Way Left Turn Lane or Median along Salem Road from Barrie City Limits to Reid Drive	Addition of Cycle Track along Salem Road from Veterans Drive to County Road 27	2024-2041	\$ 18,820,000	\$2,400,000
2107	Lockhart Road / Salem Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Lockhart Road from East of Highway 400 to Bayview Drive. Addition of 5 Lanes (including 1 Two Way Left Turn Lane or Median) along Salem Road from East of Highway 400 to West of Highway 400. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Salem Road from West of Highway 400 to Veterans Drive	Addition of Cycle Track along Lockhart Road from Bayview Drive to Highway 400. Addition of Cycle Track along Salem Road from Highway 400 to Veterans Drive	2024-2041	\$ 35,640,000	\$2,400,000
2108a	Lockhart Road	Interim improvements along Lockhart from Huronia Road to Yonge Street		2019-2023	\$ 64,740,000	\$2,400,000
2108b	Lockhart Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Lockhart Road from Bayview Drive to Prince William Way	Addition of Cycle Track along Lockhart Road from Bayview Drive to Prince William Way	2024-2041	\$ 45,530,000	\$2,400,000

Table 4-2 EA Schedule C Road Projects

EA Project ID	Road	Roadway Description	Proposed Cycling Facility Description	Phasing	Total Road and AT Costs	EA Trigger
2110a	Mapleview Drive East	Addition of 2 Lanes along Mapleview Drive East from Huronia to Country Lane. Addition of 5 Lanes (including 1 Two Way Left Turn Lane or Median) along Mapleview Drive East from Country Lane to Collector 8. Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Mapleview Drive East from Collector 8 to Prince William Way	Addition of In-Boulevard Pathway on one side along Mapleview Drive East from Stunden Lane to Prince William Way	2019-2023	\$ 66,580,000	\$2,400,000
2110b	Mapleview Drive East	Addition of 2 lanes along Mapleview Drive East from Country Lane to Yonge Street (Phase 2) by 2041		2024-2041	\$ 10,520,000	\$2,400,000
2111	Mapleview Drive East	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Mapleview Drive East from Prince William Way to Collector 11. Addition of 1 Two Way Left Turn Lane or Median along Mapleview Drive East from Collector 11 to 200m west of 20th Sideroad. Reconstruct to urban standard along Mapleview Drive East from 200m west of 20th Sideroad to 20th Sideroad	Addition of In-Boulevard Pathway on one side along Mapleview Drive East from Prince William Way to 20th Sideroad	2019-2023	\$ 10,580,000	\$2,400,000
2112	Lockhart Road	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Lockhart Road from Prince William Way to Collector 11. Addition of 1 Two Way Left Turn Lane or Median along Lockhart Road from Collector 11 to 160m east of Collector 11. Reconstruct to urban standard along Lockhart Road from 160m east of Collector 11 to 20th Sideroad	Addition of Cycle Track along Lockhart Road from Prince William Way to 20th Sideroad	2024-2041	\$ 9,000,000	\$2,400,000
2328	Veterans Drive	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Veterans Drive from Salem Road to Barrie City Limits	Addition of Cycle Track along Veterans Drive from Salem Road to Barrie City Limits	2019-2023	\$ 15,320,000	\$2,400,000
2329	Yonge Street	Addition of 3 Lanes (including 1 Two Way Left Turn Lane or Median) along Yonge Street from Mapleview Drive East to Lockhart Road	Addition of Cycle Track along Yonge Street from Mapleview Drive East to Lockhart Road	2019-2023	\$ 9,800,000	\$2,400,000
2330	20th Sideroad	Reconstruct to urban standard along 20th Sideroad from Big Bay Point Road to Lockhart Road	Addition of In-Boulevard Pathway along 20th Sideroad from Big Bay Point Road to Lockhart Road	2024-2041	\$ 13,950,000	\$2,400,000
2601a	Ross Street	Ross Street Roundabout - Interim		2019-2023	\$ 2,180,000	\$2,400,000
2601b	Ross Street	Ross Street Roundabout - Ultimate		2024-2041	\$ 2,340,000	\$2,400,000
2601	McKay Road	McKay Road Interchange		2019-2023	\$ 52,000,000	\$9,500,000
2503	Essa Road	Essa Interchange add 1 lane to northbound on ramp		2024-2041	\$ 11,410,000	\$9,500,000
2504	Dunlop Street	Dunlop Interchange add 1 lane to southbound on ramp		2024-2041	\$ 4,940,000	\$9,500,000
2505	Sunnidale Road	Reconstructing Sunnidale Road Highway 400 crossing to 2 lanes (existing is 2 lanes) - not included in the cost	Addition of Buffered Bike Lane along Sunnidale Road from Wellington Street West to Shirley Avenue	2019-2023	\$ 3,650,000	\$2,400,000

Note: Costs presented in this table are used to determine EA schedules. These are total project costs excluding land acquisition costs, design/engineering allowance, city project management, contract administration and site inspection, and HST



Note: Road diets are not assigned EA Project IDs.

Transportation Features

- GO Transit Railway
- BCRY Railway
- Roads

Natural Features

- Park / Open Space

Other Features

- Secondary Plan Areas

Date Updated: March 29, 2019
Project: 171-08853-00
Map Created By: WSP Thornhill

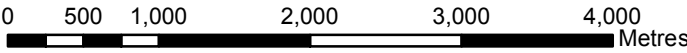
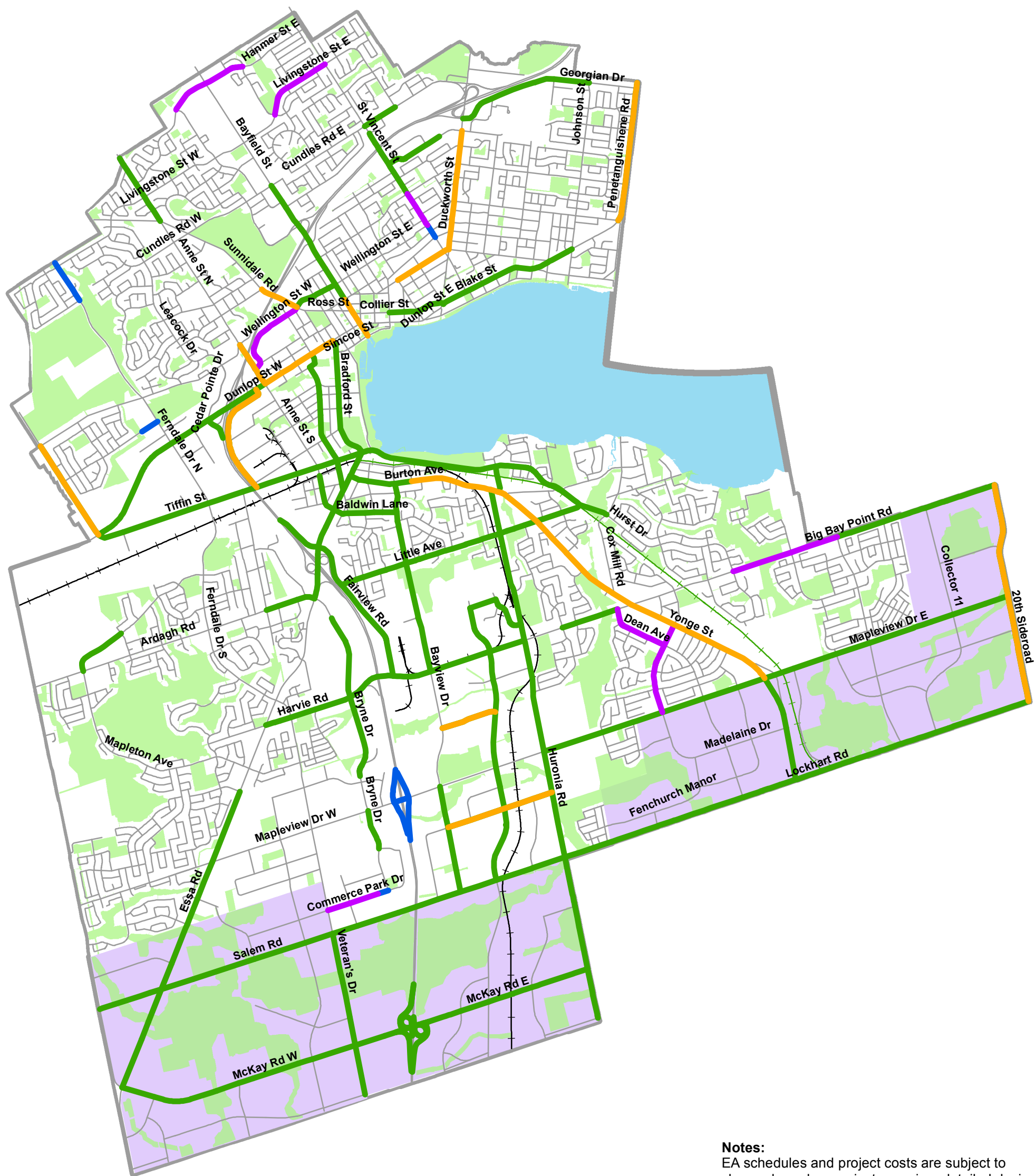


Figure 4-1
EA Road Project IDs and Assumed Project Limits
City of Barrie Transportation Master Plan





Notes:
EA schedules and project costs are subject to change based on project grouping, detailed design, and change in unit cost estimate.

EA Schedule

- A+ Projects
- A Projects
- B Projects
- C Projects

Transportation Features

- + + + + GO Transit Railway
- + + + + BCRY Railway
- Roads

Natural Features

- Park / Open Space

Other Features

- Secondary Plan Areas

0 500 1,000 2,000 3,000 4,000 Metres

Date Updated: March 30, 2019
Project: 171-08853-00
Map Created By: WSP Thornhill

Figure 4-2
Road Projects EA Schedules
City of Barrie Transportation Master Plan

Table 4-3 EA Schedule A and A+ Projects

Road	Description	Phasing	EA Schedule	Estimated Costs (rounded to nearest \$10k)
Road Diets				
Dean Avenue	Road Diet along Dean Avenue from Madelaine Drive to Big Bay Point Road . Addition of Bike Lane along Dean Avenue from Madelaine Drive to Big Bay Point.	2024-2041	A	\$ 40,000
Madelaine Drive	Road Diet along Madelaine Drive from Yonge Street to Mapleview Drive East. Addition of Bike Lane along Madelaine Drive from Yonge Street to Mapleview Drive East.	2019-2023	A	\$ 20,000
Donald Street	Road Diet along Donald Street from Anne Street North to Ross Street. Addition of Buffered Bike Lane along Donald Street from Anne Street North to Wellington Street West.	2024-2041	A	\$ 3,000
Wellington Street West	Road Diet along Wellington Street West from Donald Street to Ross Street. Addition of Buffered Bike Lane along Wellington Street West from Donald Street to Ross Street.	2024-2041	A	\$ 20,000
Hanmer Street	Road Diet along Hanmer Street from Kozlov Street to Stanley Street. Addition of Bike Lane along Hanmer Street from Kozlov Street to Stanley Street.	2019-2023	A	\$ 30,000
Livingstone Street East	Road Diet along Livingstone Street East from St. Vincent Street to Stanley Street. Addition of Buffered Bike Lane along Livingstone Street East from St. Vincent Street to Stanley Street.	2019-2023	A	\$ 50,000
St. Vincent Street	Road Diet along St. Vincent Street from Wellington Street East to Grove Street. Addition of Buffered Bike Lane along St. Vincent Street from Wellington Street East to Grove Street.	2024-2041	A	\$ 30,000
Big Bay Point Road	Road Diet along Big Bay Point Road from Hurst Drive to Prince William Way. Addition of Buffered Bike Lane along Big Bay Point Road from Hurst Drive to Prince William Way.	2024-2041	A	\$ 50,000
Cundles Road East	Road Diet along Cundles Road East from Carlton Road to Springdale Drive. Addition of In-Boulevard Pathway along Cundles Road East from Carlton Road to Springdale Drive.	2024-2041	A	\$ 60,000
Commerce Park Drive	Road Diet along Commerce Park Drive from 140m west of Bryne Drive to Veterans Drive. Addition of Buffered Bike Lane along Commerce Park Drive from 140m west of Bryne Drive to Veterans Drive.	2019-2023	A	\$ 40,000
Streetscaping without a Road Widening Project				
Dunlop Street	Streetscape improvements along Dunlop Street from Anne Street to High Street.	2024-2041	A+	\$ 4,720,000
Burton Avenue	Streetscape improvements along Burton Avenue from Milburn Street to Garden Drive. Addition of Buffered Bike Lane along Burton Avenue from Milburn Street to Garden Drive.	2024-2041	A+	\$ 1,900,000
Yonge Street	Streetscape improvements along Yonge Street from Garden Drive to Mapleview Drive. Addition of Buffered Bike Lane along Yonge Street from Garden Drive to Huronia Road, Addition of Cycle Track along Yonge Street from Huronia Road to Mapleview Drive.	2024-2041	A+	\$ 17,640,000
Bayfield Street	Streetscape improvements along Bayfield Street from Sophia Street to Simcoe Street.	2024-2041	A+	\$ 1,710,000
Duckworth Street	Streetscape improvements along Duckworth Street from Bell Farm Road to Codrington Street. Addition of Bike Lane along Duckworth Street from Bell Farm Road to Codrington Street.	2024-2041	A+	\$ 4,760,000
Codrington Street	Streetscape improvements along Codrington Street from Duckworth Street to Berczy Street.	2024-2041	A+	\$ 2,600,000
Reconstruct Road to Urban Standard (no vehicle lanes added)				
Dymont Road / Hart Drive	Reconstruct to urban standard along Dymont Road from Vespra Street to Tiffin Street. Reconstruct to urban standard along Hart Drive from Dunlop Street West to Vespra Street. Addition of Bike Lane along Dymont Road from Tiffin Street to Vespra Street. Addition of Bike Lane along Hart Drive from Dunlop Street West to Vespra Street.	2024-2041	A+	\$ 16,360,000
Saunders Road	Reconstruct to urban standard along Saunders Road from Bayview Drive to Huronia Road. Addition of Bike Lane along Saunders Road from Bayview Drive to Huronia Road.	2024-2041	A+	\$ 10,510,000
Miller Drive	Reconstruct to urban standard along Miller Drive from Dunlop Street West to Edgehill Drive. Addition of Buffered Bike Lane along Miller Drive from Dunlop Street West to Edgehill Drive.	2024-2041	A+	\$ 11,610,000
Churchill Drive	Reconstruct to urban standard along Churchill Drive from Bayview Drive to Welham Drive. Addition of Bike Lane along Churchill Drive from Bayview Drive to Welham Drive.	2024-2041	A+	\$ 5,100,000
Penetanguishene Road	Reconstruct to urban standard along Penetanguishene Road from Steele Street to Barrie City Limits. Addition of In-Boulevard Pathway along Penetanguishene Road from Steele Street to Barrie City Limits.	2024-2041	A+	\$ 14,280,000
20th Sideroad	Reconstruct to urban standard along 20th Sideroad from Big Bay Point Road to Lockhart Road. Addition of In-Boulevard Pathway along 20th Sideroad from Big Bay Point Road to Lockhart Road.	2024-2041	A+	\$ 18,380,000
Sunnidale Road	Reconstruct Sunnidale Road Highway 400 crossing to 2 lanes (existing is 2 lanes) only includes widening of the structure for AT facilities. Addition of Buffered Bike Lane along Sunnidale Road from Wellington Street West to Shirley Avenue.	2019-2023	A+	\$ 4,810,000
HOV Lanes				
Essa Road	Conversion of 2 General Purpose Lanes to HOV along Essa Road from Mapleview Drive West to Bradford Street.	2029-2041	A+	\$ 10,000
Bradford Street	Conversion of 2 General Purpose Lanes to HOV along Bradford Street from High Street to Tiffin Street.	2029-2041	A+	\$ 5,000

Table 4-3 EA Schedule A and A+ Projects

Road	Description	Phasing	EA Schedule	Estimated Costs (rounded to nearest \$10k)
Yonge Street / Burton Avenue	Conversion of 2 General Purpose Lanes to HOV along Yonge Street from Burton Avenue to Mapleview Drive, Conversion of 2 General Purpose Lanes to HOV along Burton Avenue from Bayview Drive to Yonge Street.	2029-2041	A+	\$ 20,000
Mapleview Drive	Conversion of 2 General Purpose Lanes to HOV along Mapleview Drive from Essa Road to Yonge Street.	2029-2041	A+	\$ 22,000
Bayfield Street	Conversion of 2 General Purpose Lanes to HOV along Bayfield Street from Barrie City Limits to Ross Street.	2029-2041	A+	\$ 10,000
Garage and Maintenance Facility				
Barrie's Transit Garage Expansion (133 Welham Road)		2024-2028	A	\$ 12,940,800
New Transit Garage (Location TBD)		2029-2041	A	\$ 45,131,040
Terminal Facilities				
McKay and Veterans		2029-2041	A	\$ 260,000
Barrie South GO		2029-2041	A	\$ 360,000
Allandale HUB		2019-2023	A	\$ 9,140,000
Downtown mini-hub		2019-2023	A	\$ 480,000
Former Barrie - Variable Message Signs		2019-2023	A	\$ 130,000
Secondary Plan Area - Variable Message Signs		2019-2023	A	\$ 40,000
Bus Stops				
Bus Stops (bus pad construction/reconstruction, stop poles, new and replacement bus shelters, bike rack stop infrastructure)		2019-2023	A+	\$ 1,790,000
		2024-2028	A+	\$ 1,020,000
		2029-2041	A+	\$ 1,050,000

Table 4-4 Changes in 2014 MMATMP EA Schedules compared to 2019 TMP EA Schedules

2014 MMATMP							2019 TMP							
2014 MMATMP Project ID	Road	From	To	Description	EA Schedule	EA Note (1)	EA Project ID	Road	From	To	Description	EA Schedule	EA Note (1)	
1209	Burton Avenue		Bayview Drive	Milburn Street	Roads Widened with Additional Through Lanes and AT	20	B	1112	Burton Avenue	Essa Road	Milburn Street	Roads Widened - Addition of 2 Lanes along Burton Avenue from Bayview Drive to Milburn Street. Addition of 1 Two Way Left Turn Lane or Median along Burton Avenue from Bayview Drive to Essa Road	C	20
1401	Penetanguishene Road		Steel Street	Barrie City Limits	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	20	C	1312	Penetanguishene Road	Steel Street	Barrie City Limits	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	A+	19
1403	Miller Drive		Dunlop Street West	Edgehill Drive	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	20	C	1307	Miller Drive	Dunlop Street West	Edgehill Drive	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	A+	19
1404	Hart Drive		Dunlop Street West	Vespra Street	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	20	C	1301	Hart Drive	Dunlop Street West	Vespra Street	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	A+	19
1405	Dymont Road		Vespra Street	Tiffin Street	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	20	C	1301	Dymont Road	Vespra Street	Tiffin Street	Roads Reconstructed to Urban Standard (No Additional Vehicle Lanes) with AT Added	A+	19
1592	Dunlop Street West		Anne Street	High Street	Roads Improved in Intensification Corridors for AT and Streetscape	20	C	4001	Dunlop Street West	Anne Street	High Street	Streetscape improvements along Dunlop Street from Anne Street to High Street	A+	19
1595	Bayfield Street		Ross Street	Grove Street	Roads Improved in Intensification Corridors for AT and Streetscape	20	C	4005	Bayfield Street	Sophia Street	Simcoe Street	Streetscape improvements along Bayfield Street from Sophia Street to Simcoe Street	A+	19
1594	Duckworth Street		Bell Farm Road	Wellington Street East	Roads Improved in Intensification Corridors for AT and Streetscape	20	B	4006	Duckworth Street	Bell Farm Road	Codrington Street	Streetscape improvements along Duckworth Street from Bell Farm Road to Codrington Street. Addition of Bike Lane along Duckworth Street from Bell Farm Road to Codrington Street	A+	19

Note: (1) Refer to the EA note in Appendix 1 of the MCEA Act, also summarized in Table 3-1 of this memorandum.

