

To: Economic and Development Services Committee

From: Warren Munro, HBA, MCIP, RPP, Commissioner,
Economic and Development Services Department

Report Number: ED-23-98

Date of Report: May 3, 2023

Date of Meeting: May 8, 2023

Subject: Stevenson Road North Municipal Class Environmental
Assessment Study Update

Ward: Ward 2

File: 03-05

1.0 Purpose

The purpose of this Report is to:

1. Provide an update on the status of the Municipal Class Environmental Assessment (“M.C.E.A.”) study for the Stevenson Road North corridor from Taunton Road West to Conlin Road West (the “Study”); and,
2. Obtain Council approval to hold a public engagement in late June 2023 to present the Study process, existing conditions, the alternative solutions, and the next steps in the Study.

Attachment 1 illustrates the Stevenson Road North M.C.E.A. Study Area (the “Study Area”).

Attachment 2 illustrates the location of the future east-west midblock Type ‘C’ Arterial Road.

Attachment 3 illustrates the M.C.E.A. Planning and Design Process.

Attachment 4 provides an overview of existing land uses surrounding the Study Area.

Attachment 5 provides an overview of the existing natural environment surrounding the Study Area.

Attachment 6 illustrates the potential cultural heritage properties.

Attachment 7 illustrates the areas exhibiting archaeological potential within the Study Area.

Attachment 8 illustrates the areas of potential environmental concern within the Study Area.

Attachment 9 illustrates the traffic operations of the intersections assessed under existing conditions.

2.0 Recommendation

That the Economic and Development Services Committee recommend to City Council that, pursuant to Report ED-23-98 dated May 3, 2023, concerning the Stevenson Road North Municipal Class Environmental Assessment Study, staff be authorized to hold a public engagement in late June 2023 to present the Study process, existing conditions, the alternative solutions, and the next steps in the Study.

3.0 Executive Summary

Not applicable.

4.0 Input From Other Sources

The Study is being carried out in consultation with:

- Region of Durham
- Town of Whitby
- Central Lake Ontario Conservation Authority
- Heritage Oshawa
- Oshawa Active Transportation Advisory Committee
- Oshawa Accessibility Advisory Committee
- Oshawa Environmental Advisory Committee
- Property owners and the general public
- Indigenous Communities
- Various other external agencies and stakeholders

5.0 Analysis

5.1 Background

The 2015 Council approved Integrated Transportation Master Plan (“I.T.M.P.”), identified that the Stevenson Road North corridor from Taunton Road West to Conlin Road West as needing to be upgraded from a rural road to an urban road by 2024 and presents an opportunity to integrate a complete streets approach into its design. As a result, an Environmental Assessment was required to confirm the need and identify the environmental impacts of the proposed upgrades.

As part of the 2019 Capital Budget, Council approved Capital Project 73-0456 in the amount of \$260,000, an M.C.E.A. Study to be undertaken for the upgrades to the Stevenson Road North corridor from Taunton Road West to Conlin Road West, and for a future east-west midblock Type ‘C’ Arterial Road proposed within the Northwood Industrial Area lands (from the Oshawa/Whitby border to Stevenson Road North).

In early 2021, the City issued a Request for Proposals (“R.F.P.”), C2021-059 Consulting Services for the Northwood Roads Environmental Assessment, to retain an engineering consultant to undertake an Environmental Assessment (“E.A.”) as part of Project 73-0456 for the upgrades to the Stevenson Road North corridor and the future east-west Type ‘C’ Arterial Road proposed within the Northwood Industrial Area lands. In response to the R.F.P., the City did not receive any submissions that were within the allocated budget.

On October 25, 2021, City Council considered [CNCL-21-93](#), Future East-West Type ‘C’ Arterial Road connection located west of Stevenson Road North, between Taunton Road West and Conlin Road West, and directed staff to undertake the following:

1. That Council reconsider its approval of Capital Project 73-0456 as it relates to the Future Type ‘C’ Arterial Road located north of Taunton Road West and south of Conlin Road West that would run east-west between Stevenson Road North in the City of Oshawa and the municipal boundary with the Town of Whitby.
2. That the Environmental Assessment approved as part of Capital Project 73-0456 for the future east-west Type ‘C’ Arterial Road located west of Stevenson Road North, between Taunton Road West and Conlin Road West, not be undertaken.
3. That Council approve an amendment to Zoning By-law 60-94 to remove the Holding Zone “h-73” provisions.
4. That staff be authorized to initiate the public process for Council to consider an amendment to the Oshawa Official Plan to delete the future east-west Type ‘C’ Arterial Road located west of Stevenson Road North, between Taunton Road West and Conlin Road West.

In November 2021, pursuant to Council direction, a revised R.F.P., C2021-121 Consulting Services for Stevenson Road North Environmental Assessment, was issued for Project 73-0456 with a reduced scope of work to not include the E.A. for the future east-west Type ‘C’ Arterial Road proposed within the Northwood Industrial Area lands.

In April 2022, Council considered [FIN-22-31](#), Contract Awards, and awarded a contract to Gannett Fleming Canada ULC for R.F.P. C2021-121 Consulting Services for Stevenson Road North Environmental Assessment in the amount of \$256,073, excluding H.S.T. The Project budget was also increased by an additional \$12,000 for costs associated with undertaking public consultations, resulting in a net Project budget amount of \$268,073 excluding H.S.T.

Attachment 1 illustrates the Study Area.

5.2 Roads Being Assessed within the Study

5.2.1 Stevenson Road North

The Study will assess Stevenson Road North from Taunton Road West to Conlin Road West. Within the City of Oshawa’s Official Plan, Stevenson Road North is designated as a Type ‘C’ Arterial Road, located within the Northwood Business Park. The general function

of a Type 'C' Arterial Road is to carry lower volumes of traffic, which consist of an Average Annual Daily Traffic ("A.A.D.T.") of 4,000 to 20,000 vehicles, with a typical Right-of-Way ("R.O.W.") width of 26 to 30 meters (85.3 to 98.4 ft.)

Currently, Stevenson Road North, from Taunton Road West to Conlin Road West, is a two-lane rural north-south road with an existing R.O.W. width of 20.1 metres (66 ft.) and a posted speed limit of 50 km/hr. This stretch of Stevenson Road North does not have any paved shoulders or sidewalks.

It should be noted that Stevenson Road North just south of Taunton Road West is identified as Airport Boulevard and is urbanized, has an existing R.O.W. width of 30 metres (98.4 ft.), and sidewalks along both sides.

5.2.2 East-West Midblock Type 'C' Arterial

Both the Durham Regional Official Plan and Schedule 'B', Road Network, of the Oshawa Official Plan show a Future Type 'C' Arterial Road located north of Taunton Road West and south of Conlin Road West that would run east-west between Stevenson Road North in the City of Oshawa and Thickson Road in the Town of Whitby, and which would traverse a portion of the Northwood Business Park (see Attachment 2).

Following the initiation of the Study and consultation with the Region, regional staff requested that an assessment of transportation, natural environment, and land-use and development constraints should be undertaken for the future east-west midblock Type 'C' Arterial Road in order to justify its deletion from the Oshawa Official Plan. City staff have agreed to undertake the additional analysis to the satisfaction of the Region to review the need and to justify the deletion of the future east-west midblock Type 'C' Arterial Road from the Oshawa Official Plan.

In addition, advancing the Study has resulted in the identification of archeological, environmental and cultural heritage issues that were not anticipated and only identified by advancing the Study to this point.

Since the Study scope does not include any assessment for this additional work and the future east-west midblock Type 'C' Arterial Road, the additional assessment requested by regional staff would require additional funding.

On May 8, 2023, Corporate and Finance Services Committee will consider a report requesting additional funding in the amount of \$182,288 inclusive of H.S.T. to complete this work and advance the Study.

5.3 Environmental Assessment Planning Process

The Study is being completed in accordance with the M.C.E.A. process in order to identify, predict, and evaluate the potential environmental effects before decisions are made. The

M.C.E.A. process is broken into five (5) phases with opportunities for public involvement at each phase.

- Phase 1 (Problem and Opportunity) of the M.C.E.A. process focuses on determining project objectives and development of a clear statement of the Problem and Opportunity.
- Phase 2 (Alternative Solutions) of the M.C.E.A. process focuses on the development and evaluation of alternative solutions to the identified problems and opportunities, and the selection of the preferred solution.
- Phase 3 (Alternative Design for the Preferred Solution) of the M.C.E.A. process focuses on the development and evaluation of alternative design concepts for the preferred solution, and the selection of the preferred design.
- Phase 4 (Environmental Study Report) of the M.C.E.A. process focuses on the completion of the Environmental Study Report (E.S.R.).
- Phase 5 (Implementation) of the M.C.E.A. process focuses on completing contract drawings and documents, and proceeding to construction and operation; monitoring construction for adherence to environmental provisions and commitments.

As part of the Study, Phases 1 to 4 of the M.C.E.A. process will be completed and will consider a transportation strategy that will adequately address pedestrian and bicycle connectivity, road safety and traffic capacity.

To date, Phase 1 has been completed and Phase 2 is currently underway. As part of Phase 2, the study team is preparing to undertake public engagement in late June 2023 to present the Study process, existing conditions, the alternative solutions, and the next steps in the Study.

Attachment 3 illustrates the M.C.E.A. Planning and Design Process.

5.4 M.C.E.A Phase 1 – Identification and Description of the Problem or Opportunity

Municipalities generally undertake projects in response to certain identified problems, deficiencies, or opportunities that need to be addressed. These problems or opportunities may or may not be obvious to the public but it is necessary to document factors which lead to the conclusion that an improvement or change is needed.

The 2015 I.T.M.P., which was undertaken in accordance with Phase 1 and 2 of the M.C.E.A. process, had identified the need for this Study. However, Phases 1 and 2 of the M.C.E.A. process for this Study were revisited to confirm the needs in greater detail.

To determine the needs (problems, deficiencies, or opportunities) of the Study, a number of technical studies have been completed or have been initiated to document existing conditions, assess any potential impacts of the Study, and develop a clear statement of the

problem or opportunity for the Study. In addition, to support the technical studies, field investigations were undertaken in 2022 to collect data on existing conditions.

The technical studies undertaken include:

- Geotechnical
- Land Use and Socio-Economic
- Stormwater
- Natural Environment
- Cultural Heritage
- Archaeology
- Contamination Overview
- Transportation

5.4.1 Geotechnical

A Geotechnical Investigation was conducted along Stevenson Road North to determine the subsurface conditions along the corridor and to provide recommendations for the design and reconstruction of the road.

A total of 20 boreholes were drilled to varying depths from 4.0 to 4.4 meters (13.1 to 14.4 ft.) below ground surface to determine the subsurface conditions. In order to determine the pavement structure thickness, an additional 10 asphalt cores were extracted.

The findings and recommendations of the geotechnical investigation are as follows:

- The existing pavement structure thickness is inadequate to support the proposed road usage as a Type 'C' Arterial Road;
- Full pavement reconstruction is recommended to address the deteriorating condition of the existing pavement;
- Strengthening the existing pavement is not recommended as this will require raising the grade of the existing road; and,
- No groundwater issue is anticipated during the road reconstruction.

5.4.2 Land Use and Socio-Economic

The Land Use and Socio-Economic study is currently underway. However, a high-level review of the existing land use and socio-economic is provided below.

The study corridor is located within the Northwood Business Park and the existing land uses that have access along Stevenson Road North are a mix of agricultural, residential, industrial, commercial and vacant properties. The Oshawa Executive Airport is located south of the Study Area.

Attachment 4 provides an overview of existing land uses surrounding the Study Area.

5.4.2.1 East-West Midblock Type 'C' Arterial

The area for the alignment of the east-west midblock Type 'C' Arterial Road is located within the former Lake Iroquois shoreline, a physiographic region with sensitive hydrologic and ecologic values and is recognized explicitly in the external connection provisions of the Greenbelt Plan, 2017.

Policy 3.2.6.3 of the Greenbelt Plan specifically calls for municipalities to consider planning, design and construction practices that maintain or, where possible, enhance the size, diversity, connectivity, and functions of key natural heritage features, key hydrologic features and key hydrologic areas of those portions of the Lake Iroquois shoreline within their approved urban boundaries.

The construction of the east-west midblock Type 'C' Arterial Road would not maintain but rather reduce the diversity, connectivity, and functions of features currently located within any proposed road right-of-way. Moreover, meeting the criteria and direction in the applicable watershed planning is often challenging, costly, and lengthy.

5.4.3 Stormwater

The Stormwater Management report is currently underway. However, a background review of previous reports and a site visit was undertaken in the fall of 2022 with C.L.O.C.A. to understand the existing hydraulic and structural conditions. The background review has identified the following existing stormwater conditions:

- The Stevenson Road North corridor receives external drainage from both the Oshawa Creek and the Goodman Creek.
- Road right-of-way drainage is conveyed through rural ditching to three (3) culverts, numbered from south to north.
 - Culvert 1 is a 450 millimetre diameter corrugated steel pipe ("C.S.P."), with stable 2:1 side slopes and is in poor condition.
 - Culvert 2 is a 900 millimetre diameter C.S.P., with stable 2:1 side slope upstream and 5:1 side slope downstream and requires maintenance work at a minimum.
 - Culvert 3 is a 450 millimetre diameter C.S.P., with stable 5:1 side slopes and is in poor condition.

The Stormwater Management report will include an analysis of the existing culvert capacity and will be compared against the existing flow to determine if the culverts are currently adequately sized.

5.4.4 Natural Environment

The Natural Environment studies are currently underway. However, detailed field investigations were conducted between July 2022 and October 2022 to survey the existing conditions pertaining to natural heritage features within the Study Area.

The following are present within the Study Area:

- 7 vegetation communities;
- 84 plant species (50% native and 50% non-native), no plant species at risk;
- 43 wildlife species (1 amphibian, 1 reptile, 35 birds, and 6 mammals);
- 2 wildlife species at risk (Eastern Wood Pewee and Midland Painted Turtle);
- 2 watercourses within 1 watershed, no aquatic species at risk;
- 1 Provincially Significant Wetland; and,
- 1 Greenbelt Plan area.

Attachment 5 provides an overview of the existing natural environment surrounding the Study Area.

5.4.4.1 East-West Midblock Type 'C' Arterial

The east-west midblock Type 'C' Arterial Road would cross at least three (3) watercourses within the Goodman Creek subwatershed, including the Goodman Creek. C.L.O.C.A. had noted that one or more of these features could support direct fish habitat, and their sensitivity to development is likely high, being part of a relatively large provincially significant wetland (Whitby-Oshawa Iroquois Beach Wetland Complex) that constitutes a substantial portion of the lands between Stevenson Road North and the Whitby-Oshawa border.

Much of this area is also designated as a Key Hydrologic Area. This designation means that the area between Stevenson Road North and the Whitby-Oshawa border is a Significant Groundwater Recharge Area, High Vulnerability Aquifer, and an Ecologically Significant Groundwater Recharge Area.

Approximately half (47%) of the proposed alignment for the east-west midblock Type 'C' Arterial Road would be within sensitive environmental areas and presumably would require their destruction to facilitate the establishment of a road right-of-way.

5.4.5 Cultural Heritage

A Cultural Heritage study was undertaken to review the corridor to identify known and potential built heritage resources and cultural heritage landscapes.

The Ministry of Municipal Affairs and Housing defines:

Built Heritage Resource ("B.H.R.") as:

"...a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. built heritage resources are located on property that may be designated under Parts IV or V of the Ontario Heritage Act, or that may be included on local, provincial, federal and/or international registers"

Cultural Heritage Landscape (“C.H.L.”) as:

“...a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the Ontario Heritage Act, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms”

The results of background historical research and a review of secondary source material, including historical mapping, indicate a Study Area with a rural land use history dating back to the early nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are five (5) previously identified features of potential cultural heritage value or interest within the Study Area. One additional feature was identified during fieldwork. These include two (2) B.H.R. and four (4) potential C.H.L.

The six (6) identified properties include the following:

1. 580 Taunton Road West (B.H.R.1 - Residence);
2. 1520 Stevenson Road North (B.H.R.2 - Residence);
3. 1680 Stevenson Road North (C.H.L.1 - Rural Residential);
4. 1725 Stevenson Road North (C.H.L.2 - Rural Residential);
5. 2000 Stevenson Road North (C.H.L.3 - Farmscape); and,
6. 50 Conlin Road West (C.H.L.4 - University Campus).

Attachment 6 illustrates the potential cultural heritage properties.

Based on the results of the assessment, it is recommended that construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified built heritage resources and cultural heritage landscapes.

Once a preferred alternative or detailed designs of the proposed work are available, Cultural Heritage report will be updated with a confirmation of impacts of the undertaking on the cultural heritage resources identified within the Study Area and will recommend appropriate mitigation measures.

It should be noted that some or all of the six (6) properties identified as having potential B.H.R. and C.H.L value, would require Cultural Heritage Evaluation Reports with Heritage Impact Assessments. These additional studies are outside the scope of work for the Study and would require additional funding to complete. It is recommended that these studies be completed as part of the Study in order to not delay detailed design exercise forecast for next year.

5.4.6 Archaeology

A Stage 1 Archaeological Assessment was conducted on October 19, 2022, using visual inspection from the public right-of-way to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area.

The following recommendations were made further to the Stage 1 Archaeological Assessment:

- The assessment identified four (4) registered archaeological sites within one (1) kilometer of the Study Area.
- Parts of the Study Area exhibit archaeological potential and these lands require Stage 2 Archaeological Assessments by test pit and pedestrian survey at 5 meters intervals, where appropriate.
- Stage 2 Archaeological Assessments are required prior to any proposed construction activities on these lands.
- The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, slopes in excess of 20 degrees and having been previously assessed. These lands do not require further archaeological assessment.

Attachment 7 illustrates the areas exhibiting archaeological potential within the Study Area.

It should be noted that the scope of work for the Study only included a Stage 1 Archaeological Assessment, as the number of Stage 2 Archaeological Assessments required was unknown at the time of tendering the Study. Furthermore, the Stage 2 Archaeological Assessments will be required to be completed prior to the commencement of the detailed design for Stevenson Road North. It is staff's recommendation that these assessments be completed as part of this Study in order to not delay the detailed design exercise that is scheduled in the forecast for next year.

5.4.7 Contamination Overview

A Contamination Overview Study was conducted to identify and review properties and areas with actual or potential sources of contamination that may impact future road improvements and to determine appropriate environmental studies and mitigation measures required to be implemented during the design and construction phases of the project.

The study is based solely on the known, current and former land uses and activities within and surrounding the Study Area.

Based on the findings of the study, two (2) areas of high potential for contamination and five (5) areas of moderate contamination were identified within or abutting the Study Area.

In addition, two (2) areas of high potential for contamination and two (2) areas for moderate potential of contamination were identified outside of the Study Area.

The two (2) areas identified for high potential for contamination are as follows:

- 1725 Stevenson Road North (Commercial 1 – CI1)
- 550 Taunton Road West (Automotive Centre 1 – AC1)

Two (2) additional areas outside of the Study Area that were identified having a high potential for contamination are as follows:

- Southern Portion of the Study Area (Trans-Northern Pipeline 1 – TNP1)
- 1319 and 1320 Airport Boulevard (Municipal Airport 1 – MA1)

The five (5) areas identified for moderate potential for contamination within or abutting the Study Area are as follows:

- 1560 Stevenson Road North (Commercial 2 – CI2)
- 1618 Stevenson Road North (Storage Yard 1 – SY1)
- 1520 Stevenson Road North (Storage Yard 2 – SY2)
- 1410 Stevenson Road North (Storage Yard 3 – SY3)
- 500 Taunton Road West (Storage Yard 4 – SY4)

The two (2) additional areas outside of the Study Area that were identified as having a moderate potential for contamination are as follows:

- 1319 Airport Boulevard (Air Hangar Operations 1 – AH1)
- 1320 Airport Boulevard (Air Hangar Operations 2 – AH2)

Attachment 8 illustrates the areas of potential environmental concern within and outside of the Study Area.

The following recommendations are provided further to the contamination overview study:

- If property acquisitions are required along Stevenson Road North to obtain the recommended right-of-way, and if they fall within the areas of potential environmental concerns of high to moderate potential for contamination, it is recommended that property specific Phase 1 Environmental Site Assessments (and if necessary, Phase 2 Environmental Site Assessments) be completed.
- For road construction and management of excess soil, it is recommended that an assessment of past uses, sampling and analysis plan (if required) and soil characterization report (if required) be completed.

5.4.8 Transportation Assessment

5.4.8.1 Existing Conditions

An existing conditions transportation assessment was carried out to assess traffic operations and safety of the Stevenson Road North corridor, and to identify any operational constraints and potential safety related concerns.

5.4.8.2 Traffic Operations

The transportation assessment needed to consider transportation issues beyond the Study Area. Accordingly, the transportation assessment reviewed an area that encompassed Highway 407 to the north, Simcoe Street North to the east, Taunton Road West to the south, and Thickson Road North to the west; and the assessment of the following six (6) intersections:

- Taunton Road West at Stevenson Road North (Signalized);
- Taunton Road West at Thornton Road North (Signalized);
- Taunton Road West at Garrard Road (Signalized);
- Conlin Road West at Stevenson Road North (Unsignalized);
- Conlin Road West at Thornton Road North (Roundabout); and,
- Conlin Road West at Garrard Road (Unsignalized).

In consultation with the Region of Durham and Town of Whitby, the transportation assessment was expanded to include the assessment of the following additional four (4) intersections outside of the Study Area:

- Taunton Road West at Simcoe Street North (Signalized);
- Taunton Road West at Thickson Road North (Signalized);
- Conlin Road West at Simcoe Street North (Signalized); and,
- Conlin Road West at Thickson Road North (Signalized).

Intersection operations were assessed for all ten (10) intersections for the weekday morning (“AM”) and afternoon (“PM”) peak hours. Performance metrics are reported in terms of Level of Service (“L.O.S.”), delays, and volume-to-capacity (“v/c”) ratios. L.O.S. is based on the average control delay per vehicle for a given movement of an intersection. Delay is an indicator of how long a vehicle must wait to complete a movement and is represented by a letter between ‘A’ and ‘F’, with ‘F’ being the longest delay (greater than 80 seconds for signalized intersections and greater than 50 seconds for unsignalized intersections).

Critical movements for intersections were identified based on the following criteria:

- Where the v/c ratio for a movement is equal or greater than 0.90 (volumes reaching equal to or greater than 90% of the available capacity); and/or,
- Where the L.O.S. for a movement is ‘F’.

The results of the transportation assessment for existing conditions indicate that all intersections operate with acceptable L.O.S. of 'D' (less than 55 seconds for signalized intersections and less than 35 seconds for unsignalized intersections) or better and have residual capacity during the weekday AM and weekday PM peak hours except for following movements:

- Taunton Road West at Simcoe Street North
 - Westbound through movement during the weekday AM peak hour
 - Eastbound through and Westbound left movements during the weekday PM peak hour
- Taunton Road West at Thornton Road North
 - Northbound left movement during the weekday PM peak hour
- Taunton Road West at Garrard Road
 - Northbound left movement during the weekday PM peak hour
- Taunton Road West at Thickson Road North
 - Westbound through and northbound left movement during the weekday AM peak hour
 - Eastbound left, eastbound through, westbound left and northbound left movements during the weekday PM peak hour
- Conlin Road West at Stevenson Road North
 - Northbound Left movement during the weekday PM hour
- Conlin Road West at Garrard Road
 - Eastbound movement during the weekday PM peak hour

Attachment 9 illustrates the traffic operations of the intersections assessed under existing conditions.

5.4.8.3 Safety Assessment

A safety assessment was carried out to analyze the collision history along the Stevenson Road North corridor and identify any patterns with respect to collision type, direction, severity, and other contributing factors. The collision analysis findings provide an understanding of the overall safety performance of the corridor, intersections, and midblock segment.

The collision analysis was conducted using records from the most recent five (5) year period from the Region of Durham.

Over the five (5) year period, the study corridor experienced a total of 19 collisions and an annual average of 3.8 collisions each year. Of the 19 collisions, 18 were at the intersection of Taunton Road West at Stevenson Road North and the other occurred midblock. Nine (or 47%) resulted in property damage only with 10 (or 53%) involving non-fatal injuries. No fatal collisions were recorded.

Rear-end (47% or 9 out of 19) and angle or turning collisions (37% or 7 out of 19) are the predominant impact types. Single motor vehicle (11% or 2 out of 19) and sideswipe (5% or 1 out of 19) were the other impact types.

Majority of the collisions occurred during clear (68%) and daylight (79%) conditions.

Within the five (5) year period, two (2) collisions involving vulnerable road users were recorded and both were at the intersection of Taunton Road West at Stevenson Road North. One of the collisions was an angled collision between a motorized vehicle travelling northbound and a cyclist travelling westbound, which resulted in non-fatal injuries. The second collision involved a pedestrian who was struck by a vehicle making an eastbound left turn.

5.4.8.4 2033 Horizon Year

As part of the transportation assessment, future conditions, for the year 2033 (horizon year), were modelled to identify future needs and deficiencies the study corridor would experience and to determine transportation network improvements required to support future traffic demands and travel patterns with a focus on study corridor and the future east-west Type 'C' midblock arterial road. The future analysis considered scenarios with and without the future east-west Type 'C' midblock arterial road being built.

In addition to forecasted growth, the following network assumptions were considered to be in place for modelling future conditions for the year 2033:

- The east-west midblock Type 'C' midblock arterial road from Stevenson Road North to Thickson Road North (only the scenarios with the east-west midblock Type 'C' Arterial Road);
- Britannia Avenue West extension into the Town of Whitby from Windfields Farm Drive West to Garrard Road;
- Windfields connector (new collector road) from Windfields Farm Drive West to Winchester Road East;
- Simcoe Street North widened to five (5) lanes, from Conlin Road West to Winchester Road;
- Simcoe Street North has rapid transit implemented within the existing four lane cross-section to the north of Conlin Road West, and as a median bus rapid transit being implemented south of Conlin Road West where only two (2) lanes of traffic would be available for regular traffic;

- Conlin Road West widened to four (4) lanes from Stevenson Road North to Garrard Road;
- Taunton Road West widened to six (6) lanes with H.O.V. lanes from Simcoe Street North to Anderson Street;
- Winchester Road East widened to four (4) lanes from Simcoe Street North to Garrard Road
- A new Type 'B' midblock arterial road in the Town of Whitby, from Anderson Street to Garrard Road; and,
- Thickson Road North widened to four (4) or five (5) lanes from Taunton Road West to Highway 407.

The above future network assumptions were developed in consultation with the Region of Durham and the Town of Whitby.

Based on the future conditions analyses, the following are the findings for the year 2033:

- The east-west midblock Type 'C' Arterial Road provides minor relief to parallel roads and would be generally used as an alternative route to Conlin Road West and Taunton Road West.
- During the PM peak hour, most eastbound trips originating from the north would use the east-west midblock Type 'C' Arterial Road to access Taunton Road West via Stevenson Road North.
- The Britannia Avenue West Extension into the Town of Whitby provides additional east-west capacity as an inter-municipal alternative and provides congestion relief for Conlin Road West.
- The widening of Conlin Road West between Stevenson Road North and Garrard Road is expected to improve operations along this corridor. Town of Whitby should consider widening Conlin Road West from Garrard Road to Thickson Road North to maintain a consistent four (4) lane cross-section and further improve corridor operations.
- If the east-west midblock Type 'C' Arterial Road is not implemented, Conlin Road West and Stevenson Road North are both expected to operate with acceptable capacity reserve or v/c ratios (Conlin Road West having 24% available capacity and Stevenson Road North having 35% available capacity). However, Taunton Road West is expected to decrease in capacity by approximately 6% leaving only 7% available.
- Regardless of whether the east-west midblock Type 'C' Arterial Road was implemented or not, Simcoe Street North, south of Colin Road West, is expected to operate under very congested conditions (exceeding available capacity). This is primarily due to the implementation of rapid transit.

At the request of the Region of Durham, a sensitivity test was undertaken to determine the impacts of not widening Taunton Road West to six (6) lane for H.O.V. The results of this

sensitivity test identified that regardless of whether the east-west midblock Type 'C' Arterial Road was implemented or not, Taunton Road West would be expected to operate under very congested conditions (exceeding available capacity).

In summary, the 2033 future conditions analysis identified that although the east-west midblock Type 'C' Arterial Road would provide minor relief to parallel roads and would be generally used as an alternative route to Conlin Road West and Taunton Road West, implementing the east-west midblock Type 'C' Arterial Road provides negligible improvements in travel times along Conlin Road West and Taunton Road West.

Furthermore, based on the projected growth by 2033 and the forecasted traffic volumes for Stevenson Road North, a two (2) lane cross-section would be sufficient.

5.4.8.5 2051 Horizon Year (Potential Closure of the Oshawa Executive Airport)

Although a two (2) lane cross-section would be sufficient for Stevenson Road North to accommodate future growth and traffic volumes, additional sensitivity analyses were undertaken to confirm if the same cross-section would be sufficient to accommodate future growth following the closure of the Oshawa Executive Airport. For this sensitivity analysis, in addition to the 2031 network assumptions, the following additional assumptions were made:

- The Oshawa Executive Airport would be closed by 2041 in the fulness of time.
- The analysis would assess traffic patterns for the year 2051, following the potential closure of the Oshawa Executive Airport.
- Currently, there is no policy direction on the future land use for the airport lands after the planned closure. However, land use estimates were developed by treating the airport lands as a greenfield development, resulting in an estimate 5,157 people and 1,289 jobs.
- Stevenson Road North would be extended from Rossland Road to Taunton Road West as a four (4) lane road.
- Stevenson Road North from Taunton Road West to Conlin Road West would be built to a four (4) lane cross-section.
- Beatrice Street would be extended from Somerville Street to Thornton Road North as a two (2) lane road.
- Thornton Road North from Taunton Road West to Conlin Road West would be widened to four (4) lanes by 2035.

Based on the sensitivity analyses results, the following are the findings for the year 2051:

- Similar to the findings of the future analysis for the year 2033, by 2051, the east-west midblock Type 'C' Arterial Road continues to provide relief to parallel roads and most eastbound trips originating from the north would use the east-west midblock Type 'C' Arterial Road to access Taunton Road West via Stevenson Road North.

- Thornton Road North would provide additional north-west capacity and more trips would be expected to use this corridor to access Conlin Road West and Taunton Road West.
- The road network with or without the east-west midblock Type 'C' Arterial Road is expected to operate near capacity along Taunton Road West, Stevenson Road North and sections of Conlin Road West (west of Garrard Road).

In summary, the 2051 future conditions analysis identified that due to the closure of the Oshawa Executive Airport, the traffic operations is expected to be similar to the 2033 future conditions. The east-west midblock Type 'C' Arterial Road would continue to provide minor relief to parallel roads and would be generally used as an alternative route to Conlin Road West and Taunton Road West. However, the implementation of the east-west midblock Type 'C' Arterial Road is expected to only provide negligible improvements in travel times along Conlin Road West and Taunton Road West.

Furthermore, in order to accommodate the projected growth by 2051 (including the redevelopment of the airport lands) and the forecasted traffic volumes, a four (4) lane cross-section for Stevenson Road North would be required. However, since several assumptions were made in the modelling of the 2051 future conditions, it is recommended that the right-of-way for Stevenson Road North be protected for a four (4) lane cross-section. The widening of Stevenson Road North to four (4) lane should be confirmed with a more rigorous analysis when details are finalized for the airport lands redevelopment.

5.4.9 East-West Midblock Type 'C' Arterial Road Recommendation

To assess the need for the proposed east-west midblock Type 'C' Arterial Road, transportation, natural environment, land-use and development constraints were assessed.

Based on the results of the assessments as described in the previous sections, it is evident that the east-west midblock Type 'C' Arterial Road would provide minor relief to parallel roads but, it would only provide negligible improvements in travel times along Conlin Road West and Taunton Road West. However, the environmental impacts resulting from its implementation would be much greater. As a result, it is recommended that the east-west midblock Type 'C' Arterial Road be removed from the City of Oshawa Official Plan to mitigate significant environmental effects and possible misalignment with the objectives of the Greenbelt Plan, watershed plans, and sound land use planning.

5.4.10 Problem and Opportunity Statement

A Problem and Opportunity Statement has been developed to provide the overall need and justification for the Study and to satisfy the Phase 1 of the M.C.E.A. process. This statement will be used consistently throughout the Study, and was developed in consultation with stakeholders.

The Problem and Opportunity Statement is as follows:

“Stevenson Road North is a two-lane rural north-south Type 'C' arterial road, with no paved shoulders or sidewalks and is inadequate to support the proposed road

usage as a Type 'C' arterial road. There is an opportunity to significantly improve the overall function of Stevenson Road North by upgrading the roadway infrastructure and municipal services to contribute to the development of adjacent lands and advance economic and job creation opportunities for the City.

The improvements to Stevenson Road North will focus on measures that will improve road safety, enhance traffic capacity, and support active modes of transportation.”

5.5 M.C.E.A. Phase 2 – Alternative Solutions Development and Assessment

The main focus of Phase 2 of the M.C.E.A. process is the identification and evaluation of various solutions to the problems and opportunities identified. The following sections outline the process that was followed to review and evaluate potential solutions.

5.5.1 Alternative Solutions Considered

The M.C.E.A. planning process requires that various reasonable and feasible solutions to the identified problems and opportunities be examined. The following possible solutions were developed and considered for the study corridor and they include:

- Do nothing;
- Minor operational improvements; and,
- Reconstruct and widen Stevenson Road North.

5.5.2 Alternative 1: Do Nothing

This solution provides a benchmark for the evaluation of alternatives. It involves no change to the existing road and represents continued use of Stevenson Road North in its current form. No modifications to the road other than normal operational and maintenance activities.

5.5.3 Alternative 2: Minor Operational Improvements

This solution proposes minor operational improvements to Stevenson Road North within the existing road right-of-way width of 20.1 metres (66 ft.). Improvements could include repaving the road, adding turning lanes to improve capacity at intersections, street lights, signage, and making other modifications to improve roadside safety (e.g., increasing sightlines by adjusting road profile).

5.5.4 Alternative 3: Reconstruct and widen Stevenson Road North

This solution proposes reconstructing Stevenson Road North to a typical two-lane urban arterial road cross section and protecting for the possible need for a four-lane cross-section with a maximum allowable road right-of-way width of 30 metres (98.4 ft.) in accordance with the latest City of Oshawa design standards. It would involve urbanizing and widening the roadway to accommodate and encourage all modes of travel, including vehicular, transit, pedestrian, and cyclists.

5.5.5 Evaluation of Alternative Solution

The alternative solutions developed were evaluated on the basis of how well the problems and opportunities could be addressed by each.

To provide a basis for evaluating each alternative solution, evaluation criteria were used.

5.5.6 Evaluation Criteria

Each alternative solution was assessed against various evaluation criteria that include:

- Natural Environment;
 - Terrestrial Ecosystems
 - Fisheries/Aquatic
 - Drainage (Surface and Groundwater)
 - Climate Change
- Socio-Economic Environment;
 - Provincial Land Use Planning
 - Regional/Municipal Policies and Land Use Planning
 - Local Development Objectives
 - Property Impacts
 - Regional/Municipal Economy
 - Municipal Services (Sanitary, Water, Storm)
- Cultural Environment;
- Transportation; and,
 - Safety
 - Traffic Operations
 - Accommodation of Public Transit
 - Active Transportation (Pedestrians/Cyclists)
- Cost.
 - Property Acquisition Costs
 - Construction Costs
 - Operation/Maintenance Costs

The alternatives were then evaluated against one another to determine which alternative solution is least preferred, partially preferred, or preferred.

The alternative solutions were evaluated as follows:

- **Preferred** indicates that the criterion either meets the objective or there is an overall net benefit;

- **Partially Preferred** indicates that the criterion partially meets the objective, or there will likely be no residual effect; and,
- **Least Preferred** indicates that the criterion fails to meet the objective or there is an impact that cannot be mitigated.

5.5.6.1 Natural Environment

The natural environment related criteria reflect the importance of key features such as Terrestrial Ecosystems, Fisheries/Aquatic, Drainage (Surface and Groundwater), and Climate Change.

- Terrestrial ecosystems reviews will assess impacts and disruption to wildlife species and habitats, trees and vegetation.
- Fisheries/Aquatic reviews will assess impacts to fish, fish habitat, and waterbodies. It also reviews the extent and quality/characteristics of aquatic area removed or impacted.
- Drainage (Surface and Groundwater) reviews will assess impacts to surface and groundwater drainage.
- Climate Change reviews will assess impacts to air quality and climate change.

As shown in Table 1, Alternative 1: Do Nothing is the preferred alternative from a natural environment perspective as it has no adverse impacts.

Table 1: Natural Environment Evaluation

	Alternative 1: Do Nothing	Alternative 2: Minor Operational Improvements	Alternative 3: Reconstruct and widen Stevenson Road North
Terrestrial Ecosystems	Preferred	Partially Preferred	Least Preferred
Fisheries/Aquatic	Preferred	Partially Preferred	Least Preferred
Drainage (Surface and Groundwater)	Preferred	Partially Preferred	Least Preferred
Climate Change	Least Preferred	Least Preferred	Preferred
Overall	Preferred	Partially Preferred	Least Preferred

5.5.6.2 Socio-Economic Environment

The socio-economic environment related criteria focus on the importance of ensuring compatibility with:

- Provincial, Regional and Municipal Policies and Land Use Planning;
- Local development objectives;
- Property impacts, Regional and Municipal economic goals; and,
- Municipal services (Sanitary, Water, Storm).

As shown in Table 2, Alternative 1: Do Nothing and Alternative 2: Minor Operational Improvements are the least preferred and partially preferred alternatives from a socio-economic environment perspective. While they do not have much direct adverse impacts, they do not facilitate future growth and therefore does not meet the intent of local and regional planning policies and planning documents. As such, they do not address the problem and opportunity for this Study. Overall, Alternative 3: Reconstruct and widen Stevenson Road North is the preferred alternative from a socio-economic perspective.

Table 2: Socio-Economic Environment Evaluation

	Alternative 1: Do Nothing	Alternative 2: Minor Operational Improvements	Alternative 3: Reconstruct and widen Stevenson Road North
Regional/Municipal Policies and Land Use Planning	Least Preferred	Least Preferred	Preferred
Local Development Objectives	Least Preferred	Least Preferred	Preferred
Property Impacts	Preferred	Partially Preferred	Least Preferred
Regional/Municipal Economic Goals	Least Preferred	Partially Preferred	Preferred
Municipal Services (Sanitary, Water, Storm)	Least Preferred	Least Preferred	Preferred
Overall	Least Preferred	Partially Preferred	Preferred

5.5.6.3 Cultural Environment

The cultural environment criterion focuses on efforts required to avoid potential impact to the cultural environment.

As shown in Table 3, both Alternative 1 and 2 are the preferred alternatives as no widening is proposed, as a result requiring no additional effort to avoid potential impacts to the cultural environment.

Table 3: Cultural Environment Evaluation

	Alternative 1: Do Nothing	Alternative 2: Minor Operational Improvements	Alternative 3: Reconstruct and widen Stevenson Road North
Cultural Environment	Preferred	Preferred	Least Preferred

5.5.6.4 Transportation

The transportation related criteria focus on the effectiveness to meet requirements for traffic operations, safety, accommodation of public transit, and active transportation (pedestrian/cyclists).

- Traffic operations focuses on the effectiveness to meet future demands for vehicular traffic.
- Safety focuses on improvement to safety for all road users.
- Accommodation of public transit focuses on the effectiveness to accommodate and support future public transit.
- Active transportation (pedestrians/cyclists) focuses on the effectiveness to meet future demands for non-motorist transportation modes, and the connectivity to and ability to support other transportation modes.

As shown in Table 4, due to the widening of the road right-of-way, Alternative 3: Reconstruct and widen Stevenson Road North is preferred as it will provide more opportunities for safety improvements, including providing appropriate space for cars, transit, pedestrians, and cyclists.

Table 4: Transportation Evaluation

	Alternative 1: Do Nothing	Alternative 2: Minor Operational Improvements	Alternative 3: Reconstruct and widen Stevenson Road North
Safety	Least Preferred	Partially Preferred	Preferred
Traffic Operations	Least Preferred	Least Preferred	Partially Preferred
Accommodation of Public Transit	Least Preferred	Least Preferred	Preferred
Active Transportation (Pedestrians/Cyclists)	Least Preferred	Least Preferred	Preferred
Overall	Least Preferred	Partially Preferred	Preferred

5.5.6.5 Cost

The cost related criteria focus a comparison of costs associated with property acquisition, construction costs, and operation/maintenance costs.

- Property acquisition costs focus on capital costs associated with acquiring additional property for infrastructure.
- Construction costs focus on capital costs associated with construction.
- Operation/maintenance costs focus on costs associated with operating and maintaining the infrastructure.

As shown in Table 5, Alternative 3: Reconstruct and widen Stevenson Road North is the least preferred as it will require the acquisition of additional property to widen the road right-of-way to accommodate roadway and municipal service upgrades, and providing appropriate spaces for all modes of transportation. As a result, it has the largest footprint and therefore would require the highest construction costs.

All alternatives will require varied maintenance costs. However, Alternative 3 will save in maintenance costs by replacing aging infrastructure.

Table 5: Cost Evaluation

	Alternative 1: Do Nothing	Alternative 2: Minor Operational Improvements	Alternative 3: Reconstruct and widen Stevenson Road North
Property Acquisition Costs	Preferred	Preferred	Partially Preferred
Construction Costs	Preferred	Partially Preferred	Least Preferred
Operation / Maintenance Costs	Least Preferred	Partially Preferred	Preferred
Overall	Preferred	Partially Preferred	Least Preferred

5.5.7 Preferred Alternative Solution

The Alternative 1: Do Nothing solution was screened out as it does not address or enhance road safety, traffic capacity, or provide for active transportation and connectivity within the Study Area. Furthermore, there is no opportunity to upgrade municipal services needed to support the development of the Northwood Business Park.

Similar to the Alternative 1: Do Nothing alternative, Alternative 2: Minor Operational Improvements does not provide opportunities to improve/enhance municipal services, traffic capacity, or provide for active transportation and connectivity. Although there would be some improvements to roadway safety but they would be limited.

Alternative 3: Reconstruct and widen Stevenson Road North is the preferred solution as it best addresses the problems and opportunities identified by widening the road right-of-way to improve the condition of the road, enhancing road safety, and providing appropriate space for all modes of transportation including cars, transit, pedestrians, and cyclists along the study corridor.

5.6 Next Steps

5.6.1 Public Consultation Process

A key component of the Study is consultation with interested stakeholders, and the public.

Staff recommend that a Public Information Centre (“P.I.C.”) be scheduled to be held at the end of June in order to advance the study process in a timely manner. Staff will provide notice of the P.I.C. for the Study a minimum of two (2) weeks in advance of the meeting through:

- Advertising in the Oshawa This Week newspaper;
- Mailing notice to all property owners in the Study Area;
- Circulating notice to all interested parties and stakeholder groups (including Indigenous community groups) on the Study mailing list; and,
- Posting on the City’s Corporate website, and social media channels.

6.0 Financial Implications

Although there are no immediate financial implications resulting from the recommendations of this Report. However, additional funding is required for:

- The assessment of the future east-west midblock Type ‘C’ Arterial Road to justify its deletion from the Oshawa Official Plan; and,
- Additional studies needed to undertake additional due diligence for Cultural Heritage Evaluation Reports with Heritage Impact Assessments, Stage 2 Archaeological Assessments, and possibly Phase 1 and 2 Environmental Site Assessments.

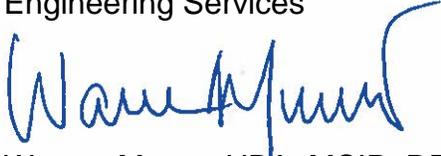
On May 8, 2023, Corporate and Finance Services Committee will consider a report requesting additional funding in the amount of \$182,288 inclusive of H.S.T. to complete this work and advance the Study.

7.0 Relationship to the Oshawa Strategic Plan

The recommendation advances the Accountable Leadership, Economic Prosperity and Financial Stewardship, Environmental Responsibility, Social Equality and Cultural Vitality goals of the 2020-2023 Oshawa Strategic Plan.



Anthony Ambra, P.Eng., Director,
Engineering Services



Warren Munro, HBA, MCIP, RPP, Commissioner,
Economic and Development Services Department

Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update

Ward: Ward 2

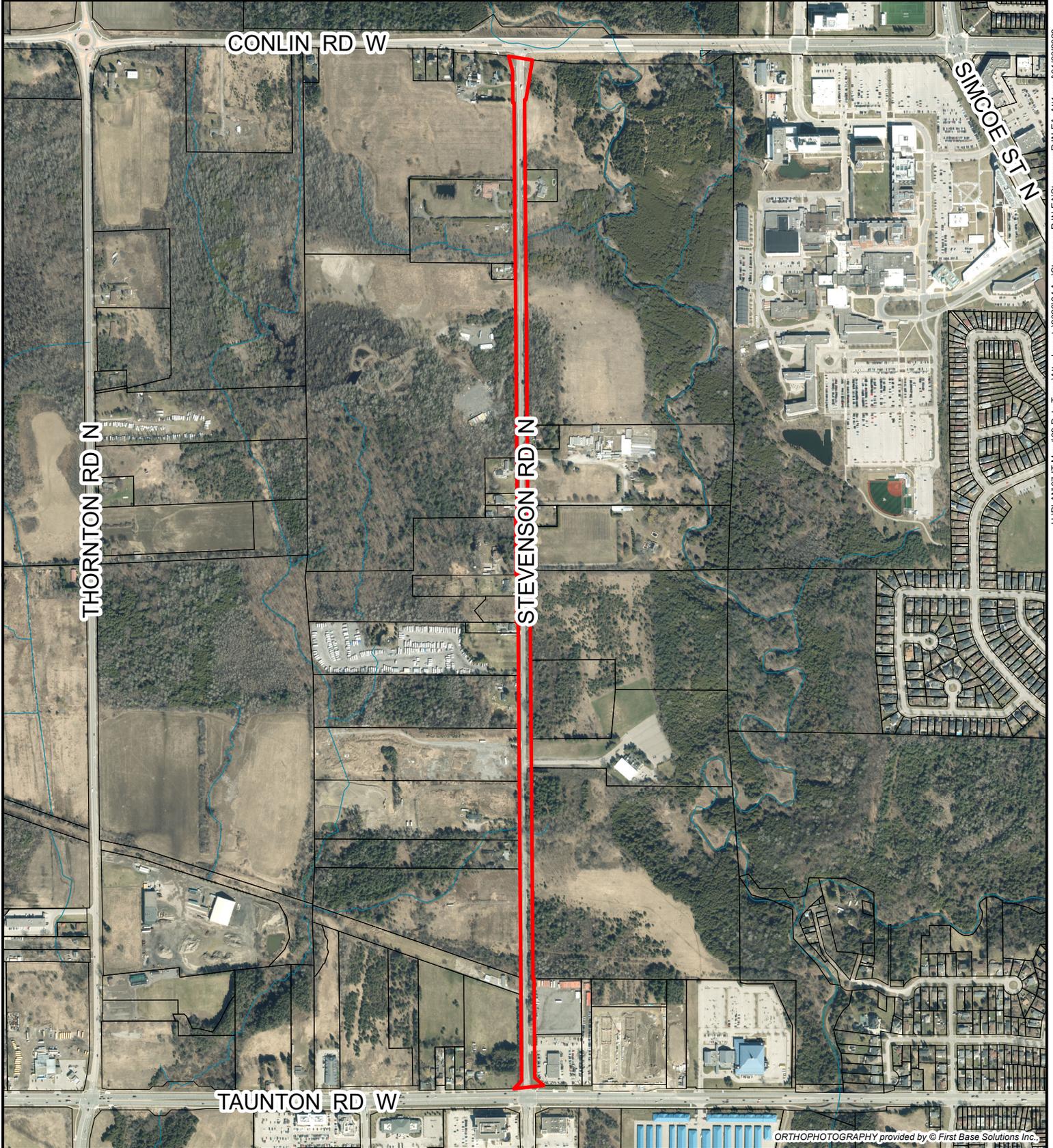
File: 03-05

Item: ED-23-98
Attachment 1



Stevenson Road North Municipal Class Environmental Assessment Study Area

City of Oshawa
Economic and Development Services



H:\PLAN07-1T Mgmt\09-Data Trans\Attachments\2023\04-Apr\StevensonRdN-EA\StevensonRdN-EA_Att_1.mxd 04/26/2023

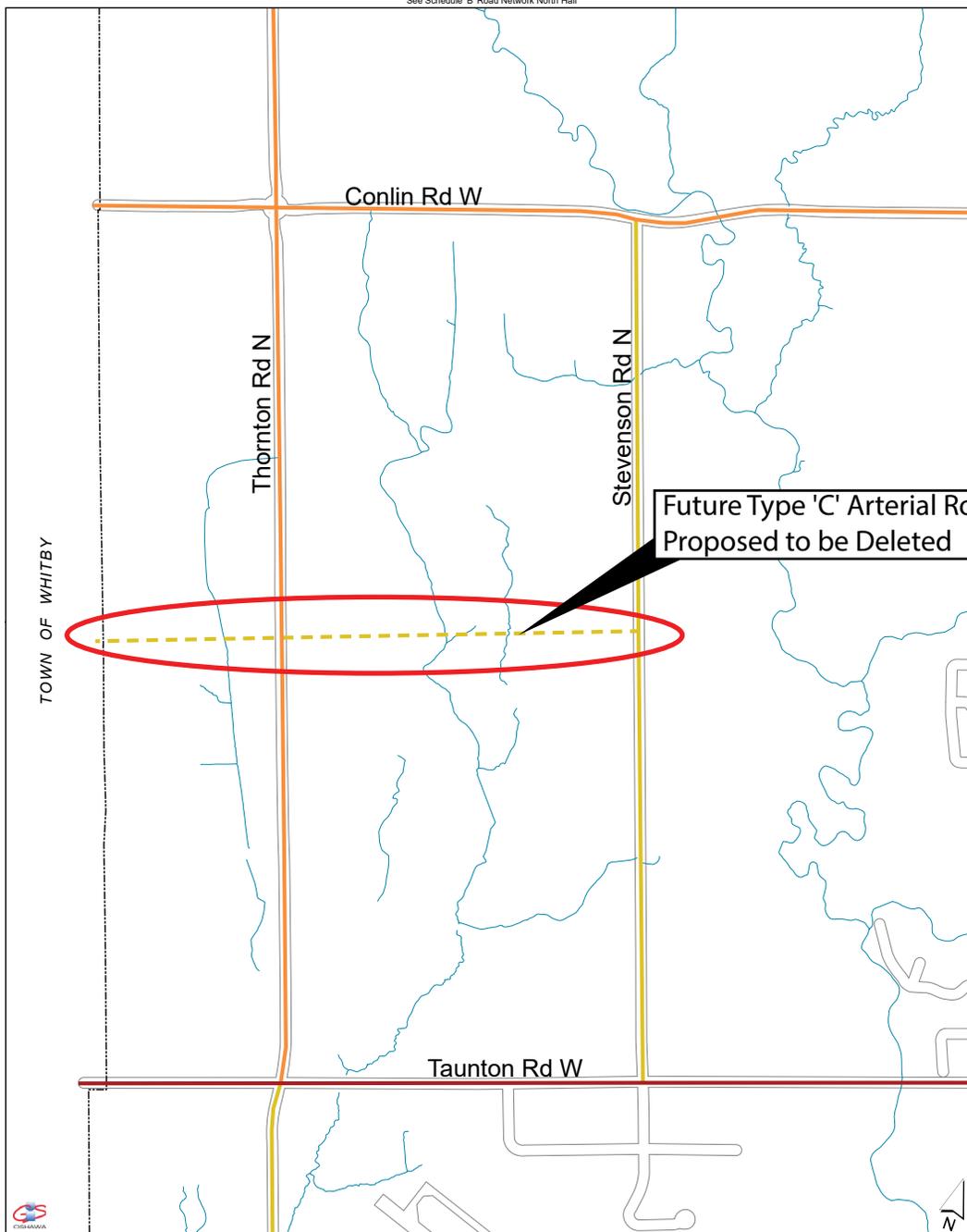
Title: Excerpt from Schedule 'B', Road Network (South Half), from the Oshawa Official Plan Showing Future East-West Type 'C' Arterial Road connection located west of Stevenson Road North, between Taunton Road West and Conlin Road West

Item: ED-23-98
Attachment 2

Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update

Ward: Ward 2

File: 03-05



**Schedule 'B'
Road Network**
City of Oshawa
Official Plan
South Half
January 2021

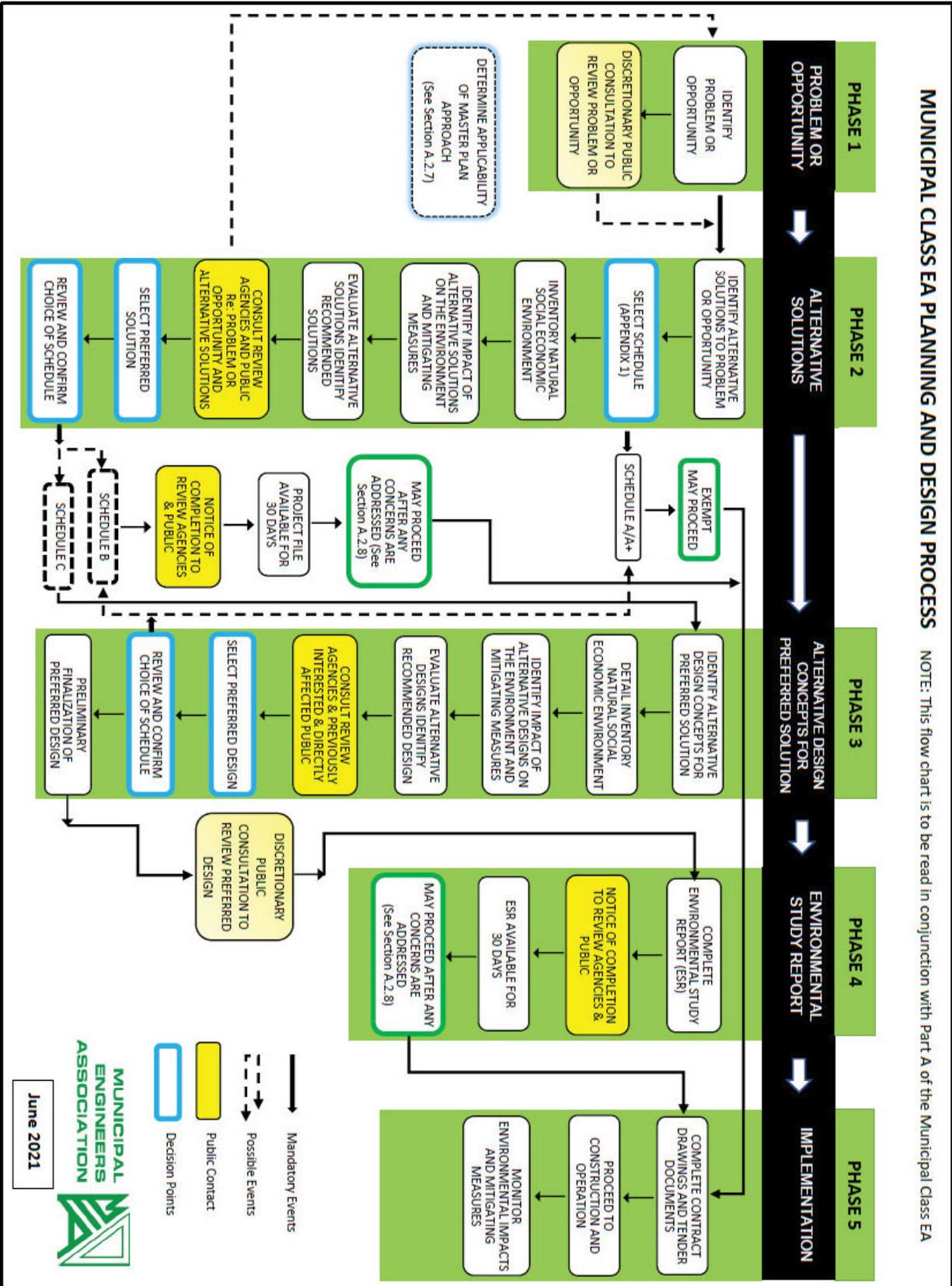
0 50 100 200 300 Meters
Development Services Department

Notes:
1. This Schedule should be read in conjunction with the text.
2. Future roads on the Schedule are shown conceptually and may be subject to further planning study under the Environmental Assessment Act and/or Planning Act to determine the need, alternatives to the road, and precise alignments. This schedule is not intended to predetermine the outcome in instances where additional study is required.

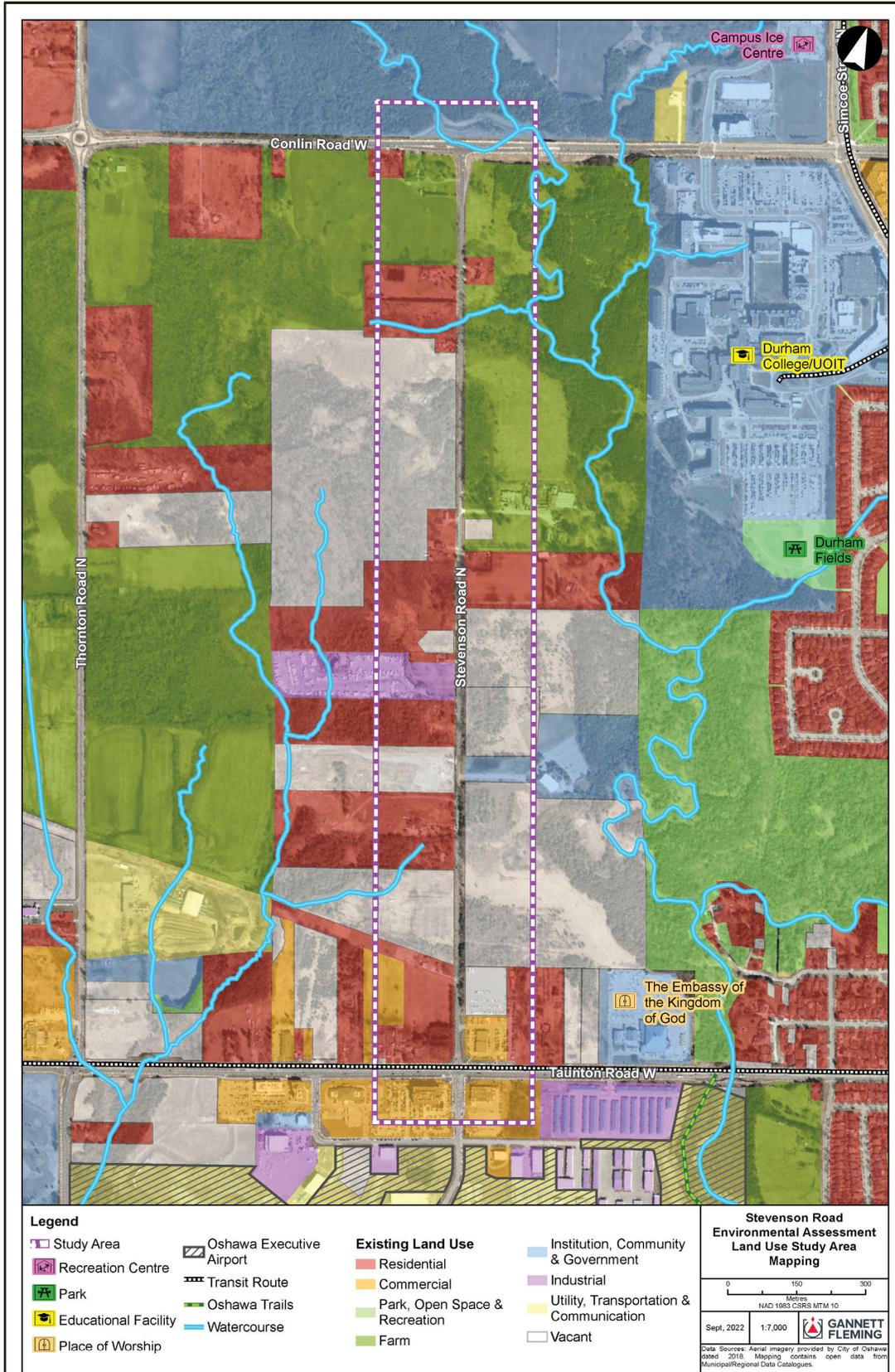
Existing		Future			
	Type 'A' Arterial Road				Provincial Highway 401
	Type 'B' Arterial Road				Limits of Approved Highway 407 Corridor
	Type 'C' Arterial Road				Oak Ridges Moraine
	Collector Road				Greenbelt Protected Countryside Area Boundary
	Interchange				Rail Line
					Existing Interchange to be Deleted
					Deferred by Regional Council

Title: M.C.E.A. Planning and Design Process
 Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
 Ward: Ward 2
 File: 03-05

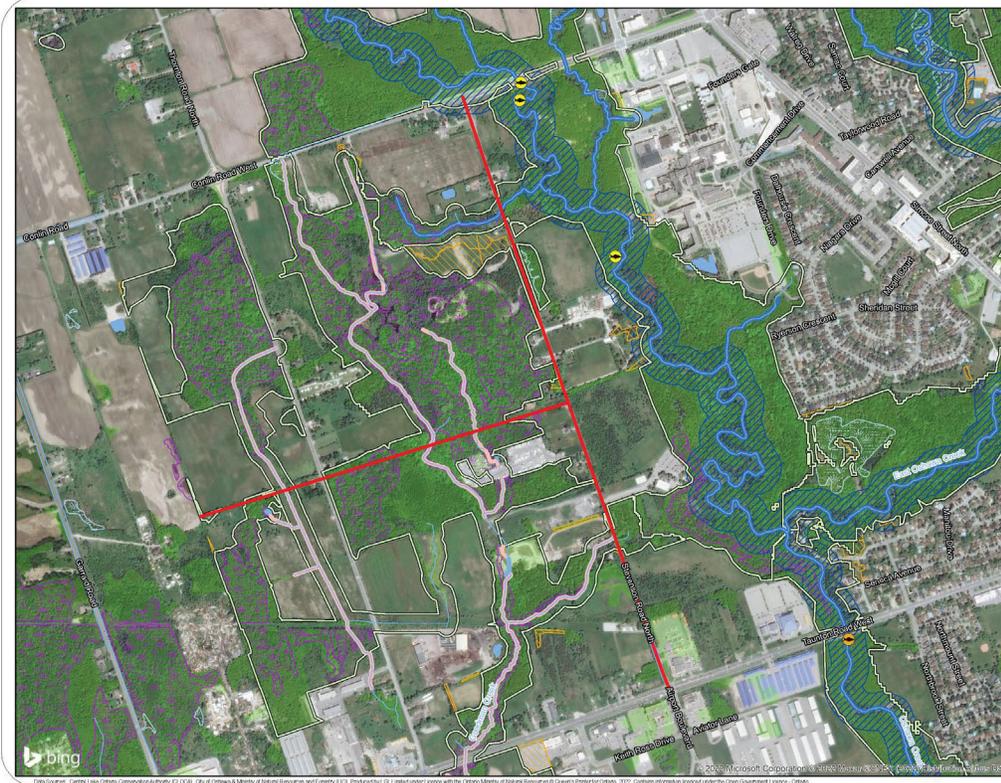
MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



Title: Overview of Existing Land Uses Surrounding the Study Area
 Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
 Ward: Ward 2
 File: 03-05



Title: Overview of the Existing Natural Environment Surrounding the Study Area
 Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
 Ward: Ward 2
 File: 03-05



LEGEND

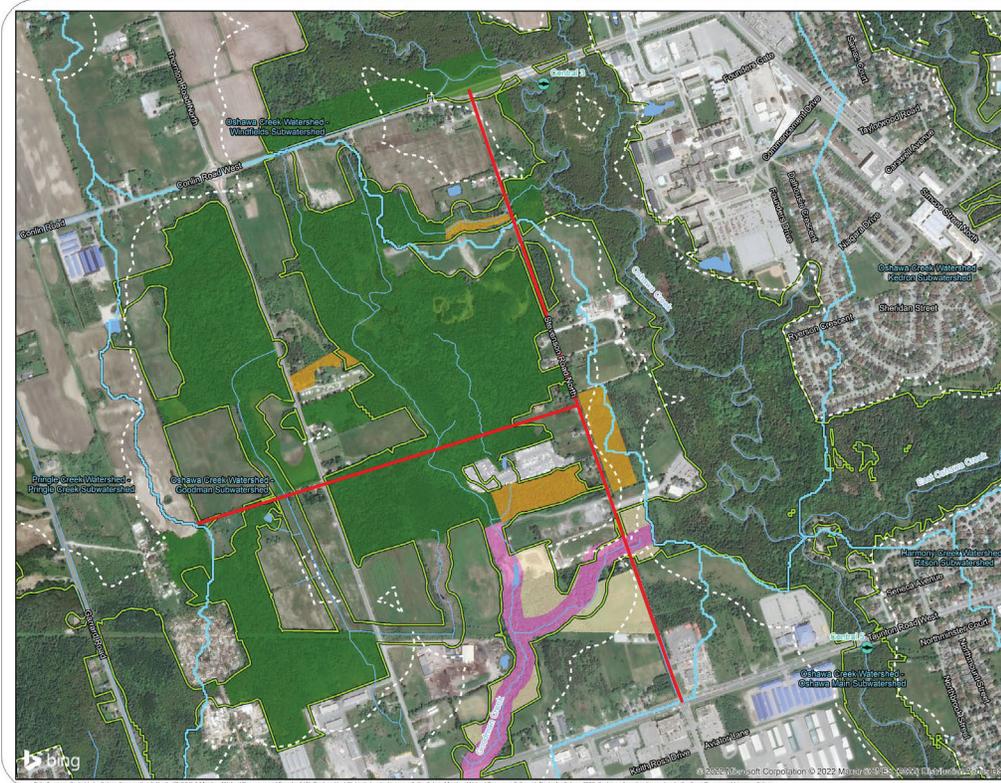
- ARA Survey Location (AU-007-039)
- ARA Survey Location (AU-008-039)
- Study Area
- Watercourse - Cold Thermal Regime
- Watercourse - Warm Thermal Regime
- Drainage/Watercourse (CLOCA)
- Great River Valley Designation - Greenbelt Plan
- Natural Heritage System (City of Oshawa)
- Natural Heritage/hydrologic Features Outside Natural Heritage System (City of Oshawa)
- Wetland Not Evaluated per OWES
- Wetland Evaluated Provincial (Whitby-Oshawa Ingress Beach Wetland Complex)
- Waterbody
- Wooded Area

0 110 220 330 440 m

STEVENSON ROAD NORTH MUNICIPAL CLASS EA NATURAL HERITAGE

LGL LIMITED
environmental research associates

Project: TA9256 Figure: 2
 Date: December 2022 Prepared By: JJP
 Scale: 1 : 6,500 Checked By: JMV



LEGEND

- Aquatic Monitoring Station
- Drainage/Watercourse
- Study Area
- Natural Heritage System
- Regulation Limit
- Subwatershed Boundary
- Core Wildlife Habitat Network
- Local Wildlife Habitat Network
- Regional Wildlife Habitat Network
- Secondary Wildlife Habitat Network

0 100 200 300 400 m

STEVENSON ROAD NORTH MUNICIPAL CLASS EA CLOCA NATURAL HERITAGE

LGL LIMITED
environmental research associates

Project: TA9256 Figure: 3
 Date: December 2022 Prepared By: JJP
 Scale: 1 : 6,500 Checked By: JMV

Title: Potential Cultural Heritage Properties
Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
Ward: Ward 2
File: 03-05



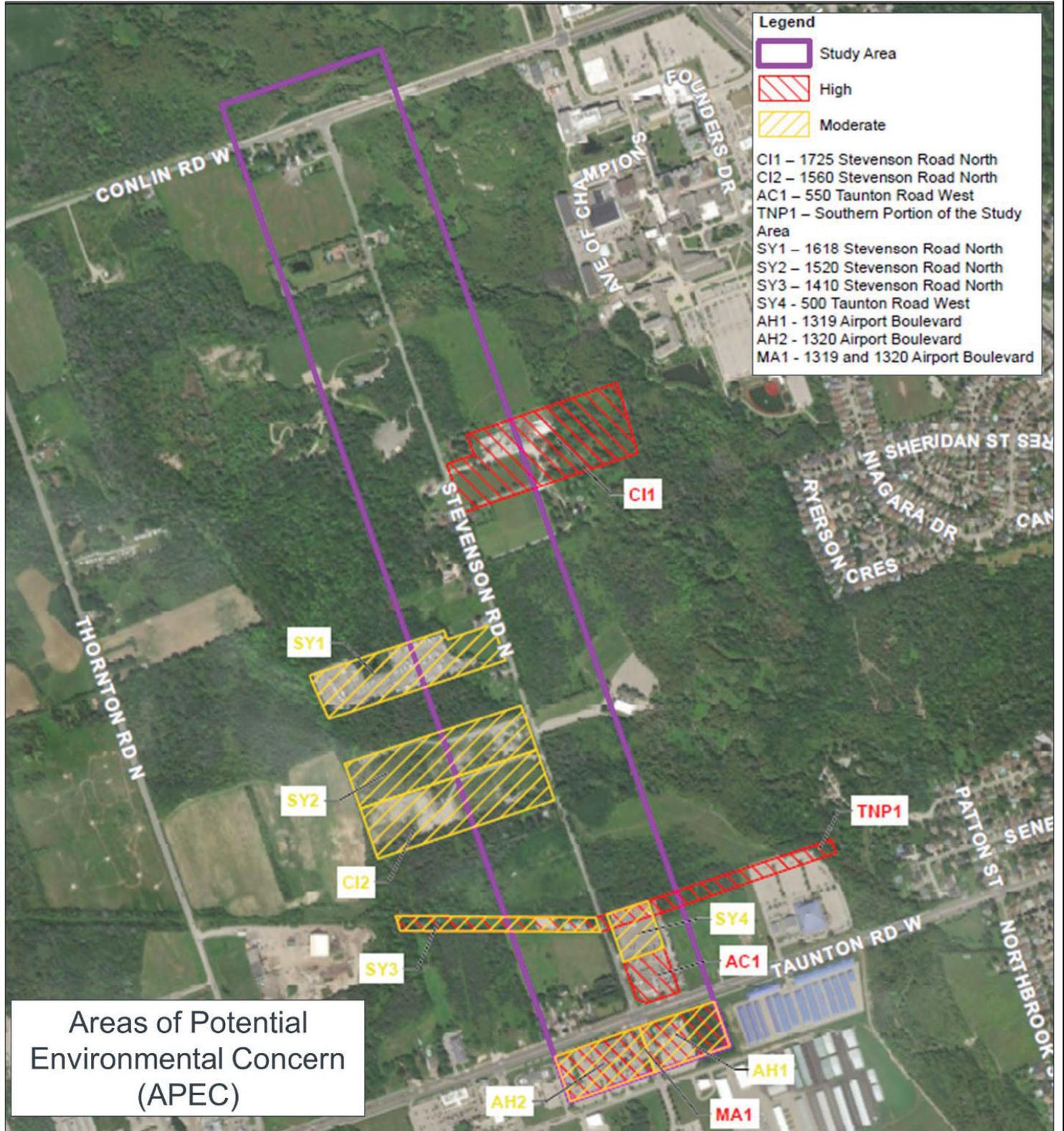
City of Oshawa
Economic and Development Services



Title: Areas Exhibiting Archaeological Potential Within the Study Area
Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
Ward: Ward 2
File: 03-05



Title: Areas of Potential Environmental Concern Within the Study Area
Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
Ward: Ward 2
File: 03-05



Title: Traffic Operations of the Intersections Assessed Under Existing Conditions
 Subject: Stevenson Road North Municipal Class Environmental Assessment Study Update
 Ward: Ward 2
 File: 03-05

