



**Municipality of Middlesex Centre - Roads
Needs Study – Final Report**

March 16, 2023

Prepared for:

Municipality of Middlesex Centre
10227 Ilderton Road
Ilderton, ON N0M 2A0

Prepared by:

Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo, ON N2L 0A4

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

This document entitled Municipality of Middlesex Centre - Roads Needs Study – Final Report was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Municipality of Middlesex Centre. Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____
(signature)

Dean Pettitt, P.Eng.

Reviewed by _____
(signature)

Amr Ayed, Ph.D., P.Eng.

Reviewed by _____
(signature)

Al Cepas, M.A.Sc.

Approved by _____
(signature)

Dean Pettitt, P.Eng.



Table of Contents

EXECUTIVE SUMMARY	I
ABBREVIATIONS	VI
1.0 INTRODUCTION.....	1
1.1 BACKGROUND AND INTRODUCTION	1
1.2 REPORT CONTENT AND SCOPE	1
2.0 STUDY METHODOLOGY	2
2.1 FIELD SURVEY AND NEEDS ANALYSIS	2
2.1.1 Network Segmentation	2
2.1.2 Section Attribute Updates.....	3
2.1.3 Condition Point Ratings	3
2.1.4 Field Observed Condition Ratings.....	3
2.1.5 Time of Need (TON)	6
3.0 ROAD CONDITION RATINGS	9
3.1 TYPES OF IMPROVEMENTS	9
3.2 ROAD SYSTEM INVENTORY AND CLASSIFICATION	10
3.2.1 Roadside Environment	11
3.2.2 Surface Type	12
3.2.3 Road Functional (Design) Class.....	12
3.2.4 Minimum Maintenance Standards (MMS) Class.....	14
3.4 ROADMATRIX ANALYSIS.....	18
3.5 RECOMMENDED PROGRAM FUNDING LEVELS	22
3.5.1 Pavement Management Overview	23
3.5.2 Rehabilitation Costs.....	24
3.5.3 Budget Results	25
3.5.4 Critical Deficiencies Budget.....	27
3.5.5 Conclusions	28

LIST OF TABLES

Table ES.1: Roadside Environment Distribution.....	i
Table ES.2: Surface Type Distribution.....	ii
Table ES.3: Functional (Design) Class Distribution	ii
Table ES.4: Minimum Maintenance Standard (MMS) Class Distribution	ii
Table ES.5: Overall Time of Need Distribution by MMS Class.....	iv
Table ES.6: Budget Scenario Cost and Performance Summary	v
Table 2.1: Structural Adequacy Point Ratings (Hard Top Surfaces)	4
Table 2.2: Drainage Point Ratings	4
Table 2.3: Surface Condition Point Ratings.....	5
Table 2.4: Maintenance Demand Point Ratings	5
Table 2.5: Pavement Condition Index (PCI) Formulas	6
Table 3.1: Road Improvement Types.....	10
Table 3.2: Middlesex Centre Roadside Environment Distribution	11
Table 3.3: Middlesex Centre Surface Type Distribution	12
Table 3.4: Functional (Existing/Design) Classifications	13
Table 3.5: Middlesex Centre Functional (Design) Class Distribution	14
Table 3.6: Ontario Regulation Traffic/Speed Minimum Maintenance Standards Classes.....	15



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Table 3.7: Middlesex Centre Minimum Maintenance Standards Class Distribution 15
 Table 3.8: TON Distribution for Six Critical Areas 16
 Table 3.9: Overall TON Distribution by MMS Class 18
 Table 3.10: HCB Decision Tree Summary 20
 Table 3.11: LCB Decision Tree Summary 22
 Table 3.12: Treatment Benefits 24
 Table 3.13: Rehabilitation Costs 25
 Table 3.14: Budget Scenario Cost and Performance Summary (2019-2029) 26
 Table 3.15: Deficiency Cost Summary 28

LIST OF FIGURES

Figure ES.1: Budget Scenario Performance Results (2023-2032) iv
 Figure 2.1: ‘NOW’ Need Road 7
 Figure 2.2: ‘1 to 5’ Year Need Road 8
 Figure 2.3: ‘6 to 10’ Year Need Road 8
 Figure 2.4: ‘ADEQ’ Road 9
 Figure 3.1: HCB Decision Tree 20
 Figure 3.2: LCB Decision Tree 21
 Figure 3.3: Pavement Deterioration Curve 23
 Figure 3.4: Budget Scenario Performance Results (2022-2032) 27

LIST OF APPENDICES

APPENDIX A MUNICIPALITY OF MIDDLESEX CENTRE ROAD SECTIONS (INVENTORY) A.1
APPENDIX B ROAD NEEDS AND CRITICAL DEFICIENCIES..... B.1
APPENDIX C TIME OF NEED C.1
APPENDIX D 10-YEAR RECOMMENDED WORK PROGRAM D.1



Executive Summary

A Roads Needs Study was conducted for the Municipality of Middlesex Centre by Stantec during the spring / summer of 2022. The condition survey was limited to the asphalt (High Class Bituminous, HCB) and surface treated (Low Class Bituminous, LCB) networks. The gravel (G/S) network was reviewed for physical properties and vertical / horizontal curve deficiencies. The structural condition, ride quality and drainage condition were assessed during the visual distress survey of the HCB and LCB networks. Information is also provided regarding the overall pavement management process, as it relates to the field survey process and analysis, including:

- A review of the Municipality’s road network definition;
- Assessment of current conditions and needs for each road segment; and
- Development of budget scenarios and analysis related to the improvement recommendations and corresponding predicted performance of the road network.

Stantec Consulting Ltd. completed the data collection and condition ratings using the guidelines contained in the Ministry of Transportation Ontario (MTO) *Inventory Manual for Municipal Roads* from 1991 (*Inventory Manual*).

The Municipality of Middlesex Centre (The Municipality) is located in southwestern Ontario in Middlesex County. The Municipality consists of the communities of Ilderton, Coldstream and Poplar Hill, Delaware, Komoka, Kilworth, Denfield, Birr, Arva, and Melrose. The Municipality is predominately rural and covers over 580 square kilometers.

Where possible, key attributes related to the road right-of-way critical to the decision-making process were also recorded during the survey. These additional attributes included lengths, widths, number of lanes, shoulders, curbs, and drainage.

Summary information used to define the road network is provided in Table ES.1 through Table ES.4.

Table ES.1: Roadside Environment Distribution

Roadside Environment	CL-KM	% CL-KM
Rural	529.4	88%
Sem-Urban	23.6	4%
Urban	49.9	8%
Total	602.9	100%



Table ES.2: Surface Type Distribution

Surface Type	Roadside Environment			Total CL-KM	% CL-KM Rural
	Rural	Semi-Urban	Urban		
High Class Bituminous	39.1	20.4	49.6	109.1	18.1%
Low Class Bituminous	218.3	3.1	0.3	221.7	36.8%
Gravel	272.0	0.1	-	272.1	45.1%
Total	529.4	23.6	49.9	602.9	100%

Table ES.3: Functional (Design) Class Distribution

Functional (Design) Class	Roadside Environment Length (CL-KM)			Total CL-KM	% CL-KM
	Rural	Semi-Urban	Urban		
100	17.6	-	-	17.6	2.9%
200	261.4	-	-	261.4	43.3%
300	68.6	-	-	68.6	11.4%
400	95.0	-	-	95	15.8%
500	45.9	-	-	45.9	7.6%
600	32.3	-	-	32.3	5.4%
700	7.1	-	-	7.1	1.2%
800	1.5	-	-	1.5	0.2%
Local Residential (LR)	-	22.4	42.4	64.8	10.7%
Collector Residential (CR)	-	1.2	3.8	5	0.8%
Arterial (ART)	-	-	3.8	3.8	0.6%
Total	529.4	23.6	50.0	603	100.0%

Table ES.4: Minimum Maintenance Standard (MMS) Class Distribution

MMS Class	Roadside Environment			Total CL-KM	% CL-KM
	Rural	Semi-Urban	Urban		
3	76.1	-	-	76.1	12.6%
4	423.9	-	0.4	424.3	70.4%
5	11.8	11.9	31.0	54.7	9.1%
6	17.6	11.7	18.5	47.8	7.9%
Total	529.4	23.6	49.9	602.9	100%



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

The fieldwork included assessing the current condition of the road system. Each road section was evaluated for several critical criteria, which included Structural Adequacy (surface distresses), Drainage, Surface Condition (ride comfort), and Maintenance Demand. Other observed elements included horizontal and vertical alignment deficiencies, and geometric measures, and were used in the analysis to calculate condition ratings based on minimum tolerable standards. All condition ratings were aggregated to one overall condition rating for each road segment.

These condition ratings were then used to determine Time of Need (TON) in six areas critical to the decision-making process:

- Geometrics
- Surface Type
- Surface Width
- Capacity
- Structural Adequacy
- Drainage

One of the following four TON ranges was determined for each of the individual elements listed above. Subsequently an overall TON was determined for every road section based on the most severe TON(s) identified. It is important to note that the TON is a prediction of the time until the road requires reconstruction, and not the time frame until action is required.

- **'NOW'** needs represent road sections that require reconstruction or major rehabilitation due to the existing level of deterioration or deficiency. The 'NOW' needs represent the current backlog of work required on the road system, but should not necessarily be considered the highest priority, within the confines of limited funding and return on investment.
- **'1 to 5'** needs identify road sections where reconstruction is anticipated within the next five years, based on current condition. These roads can be good candidates for resurfacing treatments to extend the life of the pavement (depending on any other deficiencies), thus deferring the need to reconstruct.
- **'6 to 10'** identifies road sections where reconstruction improvements are anticipated within six to ten years, based on current condition. These roads can also be good candidates for resurfacing treatments to extend the life of the pavement (depending on any other deficiencies), thus deferring the need to reconstruct.
- **'ADEQ'** needs identify road sections that do not have reconstruction or resurfacing needs. In some cases, minor maintenance such as crack sealing or spot drainage may be warranted.

A summary of the overall TON ratings for the network, broken down by MMS classes based on all of the critical deficiencies, not just condition, is shown in Table ES.5.



Table ES.5: Overall Time of Need Distribution by MMS Class

MMS Class	Time of Need							
	NOW		1 to 5		6 to 10		ADEQ	
	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km
3	39.2	6.5%	7.1	1.2%	17.1	2.8%	12.6	2.1%
4	81.6	13.5%	22.1	3.7%	95.5	15.8%	225.0	37.3%
5	6.3	1.0%	7.8	1.3%	19.2	3.2%	21.4	3.6%
6	3.3	0.5%	6.1	1.0%	9.0	1.5%	29.5	4.9%
Total	130.4	21.6%	43.1	7.1%	140.8	23.4%	288.5	47.9%

Several budget scenarios were considered as part of this study, to assist the Municipality in future funding planning for their road network. The “Unlimited” and “Do Nothing” scenarios are included as best- and worst-case scenarios. The Maintain the Paved Network at a PCI of 70 is the cost to maintain both the asphalt and surface treated networks at a level of 70 to avoid spending the majority of the money on one network. A PCI of 70 is the target in the Asset Management Plan. The Middlesex Centre Projected Budget includes \$1,100,000 annually for asphalt surfaced roads, \$600,000 for surface treated roads, and \$40,000 for crack sealing and microsurfacing. The results of the budget performance are shown in Figure ES.1 and in Table ES.6.

Figure ES.1: Budget Scenario Performance Results (2023-2032)

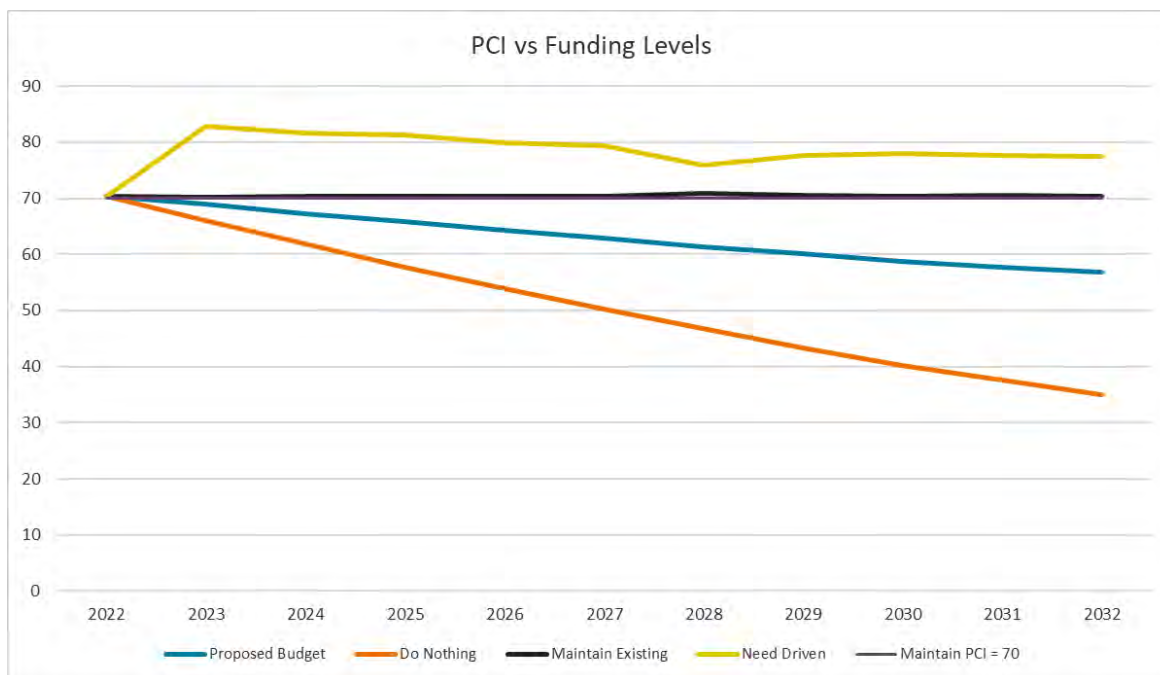


Table ES.6: Budget Scenario Cost and Performance Summary

Budget Scenario	Total 10-Year Funding	Overall Score (/100) (2022)	Overall Score (/100) (2032)
Do Nothing	\$0	70.3	35.0
Maintain PCI = 70 (HCB / LCB)	\$12.3M / \$10.9M	70.3	70
Total Maintain PCI = 70	\$23.2M	70.3	70.0
Unlimited Funding	\$25.3M	70.3	77.6
Proposed Budget	\$17.4M	70.3	56.8



Abbreviations

ADEQ	Adequate
ALL	Alleyways
ART	Arterial
CCI	Collector Commercial or Industrial
CL-km	Centerline-kilometre
CR	Collector Residential
DHV	Design Hourly Volume
ETH	Earth
G/S	Gravel
HCB	High Class Bituminous
LCB	Low Class Bituminous
LCI	Local Commercial or Industrial
LR	Local Residential
MMS	Minimum Maintenance Standard
MTO	Ministry of Transportation Ontario
RNS	Road Needs Study
TON	Time of Need



1.0 INTRODUCTION

1.1 BACKGROUND AND INTRODUCTION

The Municipality of Middlesex Centre (The Municipality) is located in southwestern Ontario in Middlesex County. The Municipality consists of the communities of Ilderton, Coldstream and Poplar Hill, Delaware, Komoka, Kilworth, Denfield, Birr, Arva, and Melrose. The Municipality is predominately rural and covers over 580 square kilometers.

1.2 REPORT CONTENT AND SCOPE

The Municipality of Middlesex Centre, Roads Needs Study 2023-2032 summarizes the road system survey conducted by Stantec during the spring / summer of 2022. The condition survey was limited to the asphalt (HCB) and surface treated (LCB) networks. The gravel (G/S) network was reviewed for physical properties and vertical / horizontal curve deficiencies. The structural condition, ride quality and drainage condition were assessed during the visual distress survey of the HCB and LCB networks. Information is also provided regarding the overall pavement management process, as it relates to the field survey process and analysis, including:

- A review of the Municipality's road network definition;
- Assessment of current conditions and needs for each road segment; and
- Development of budget scenarios and analysis related to the improvement recommendations and corresponding predicted performance of the road network.

The pavement evaluation followed the Road Needs Study (RNS) process. The RNS process was originally implemented by the Ministry of Transportation Ontario (MTO) in the 1960's, and evolved into the current format by the late 1970's. The most current version of the Inventory Manual for Municipal Roads is dated 1991, and defines the methodology used for this study. The process was originally created by the MTO as a means to distribute conditional funding, on an equitable basis, between municipalities. The practice was discontinued by a number of municipalities when conditional funding for roads was eliminated in the mid 1990's. Nevertheless, the RNS process is still a sound and consistent asset management practice that works well today, and in view of the increasing demands on efficiency and asset management, represents a sound business practice that is beneficial to continue.

The enclosed RNS provides an overview of the overall condition of the road system by road section, based on several factors assessed during the field review, including structural adequacy, drainage, and surface condition. The study also provides an indication of apparent deficiencies in horizontal and vertical alignment elements, as per the Ministry of Transportation's manual, "*Geometric Design Standards for Ontario Highways*".



This study also provides an overview of the physical and financial needs of the road system, which may be used as part of the municipality's program and budget planning process. However, once a road section reaches the project design stage, further detailed review, investigation, and design will be required to address the specific requirements of the project.

2.0 STUDY METHODOLOGY

The following resources and methodologies were used as the basis for completion of the network level assessments, findings, and recommendations summarized in this report:

- The Municipality's GIS road layer (provided in August 2019, as part of the previous assessment) formed the initial network definition.
- MTO's *Inventory Manual for Municipal Roads (1991)* provided the guidelines and criteria for the field assessments of each road section.
- Stantec used the data acquired during the field survey, to perform calculations related to the *Inventory Manual* methodology, and complete the network level needs and priority programming analyses.

Information regarding specific aspects of the study process is provided in more detail below.

2.1 FIELD SURVEY AND NEEDS ANALYSIS

Each road segment was visited and visually evaluated as part of the field assessment process. Field data collected for the road system included structural adequacy, maintenance demand, horizontal and vertical alignment, surface and shoulder width, pavement and shoulder types, surface condition, and drainage.

As part of the review, road network sectioning was reviewed to ensure that all road sections are reasonably consistent throughout their length. The following factors were used: roadside environment, surface type, condition, cross section, speed limit, or a combination of these factors.

Various inventory data elements were recorded during the field survey. Data gathered by the Stantec field inspection staff are summarized below.

2.1.1 Network Segmentation

The Municipality provided a road centerline layer in GIS shapefile format and in a map of the Municipality. The Municipality's GIS was used to create the database for field collection and the map was used for routing during field collection.



The total length, measured in centreline-kilometers (CL-km), for the hard-surfaced road network, as defined by the map layer provided at the beginning of the study, contained approximately 331.4 CL-km of roads.

Road sections should be reasonably consistent throughout their length, according to attributes such as roadside environment, surface type, condition, cross section, speed limit, or a combination of these factors. Due to inconsistencies observed during the inventory for one or more of these attributes, several existing GIS sections were split into multiple sections by the field inspector.

2.1.2 Section Attribute Updates

Various attributes were recorded during the field inventory. Where existing attribute data was provided by Municipal staff, the field inspector either confirmed the values were accurate, or updated them (where possible) to represent actual observed conditions. For attributes not provided in the initial data set, the field inspector populated fields based on measured or observed conditions.

2.1.3 Condition Point Ratings

For each road section, the field inspector recorded four different point ratings, representing observed current conditions. These observed condition ratings were used to determine the section's overall Condition Rating, Priority Rating, and ultimately the Time of Need (TON).

2.1.4 Field Observed Condition Ratings

The four observed condition ratings recorded by the inspector during the field survey are summarized below, with brief descriptions of the rating criteria provided in the tables.

2.1.4.1 Structural Adequacy

Structural Adequacy ratings (Inventory Manual Item 87) are based on the type, severity, and frequency of surface distresses and defects occurring on the pavement surface and are scored between one (1) and 20.



A general description of the criteria used to determine a hard top section’s Structural Adequacy rating is provided in Table 2.1.

Table 2.1: Structural Adequacy Point Ratings (Hard Top Surfaces)

Point Ratings	Criteria
20	Surface distress < 5% of the section length
19 to 15	Surface distress 5%-10% of the section length
14 to 12	Surface distress 11%-15% of the section length
11 to 8	Surface distress 16%-20% of the section length
7 to 0	Surface distress >20% of the section length

2.1.4.2 Drainage

Drainage ratings (Inventory Manual Item 88) are based on the presence and condition of elements that are required to ensure the sufficient removal of water from the road surface and subbase and are scored between one (1) and 15. Drainage condition scores were not lowered if it was felt that the problems could be improved by implementing reasonable maintenance practices.

General descriptions of the drainage scoring criteria are shown in Table 2.2.

Table 2.2: Drainage Point Ratings

Point Ratings	Criteria
15	Fully adequate
14 to 12	Some minor deficiencies
11 to 8	Substandard drainage, occasional flooding
7 to 0	Inadequate drainage, frequent flooding

2.1.4.3 Surface Condition

Surface Condition ratings (Inventory Manual Item 83) represent the roughness of the pavement surface, and reflect the overall drivability of the road, from the perspective of both comfort and safety. Surface Condition scores range from one (1) to 10.

The general criteria used to assign this score to a section are summarized briefly in Table 2.3.



Table 2.3: Surface Condition Point Ratings

Point Ratings	Criteria
10	Fully adequate
9 to 7	Drivable, with some minor deficiencies not affecting safe operating speed
6 to 4	Poor ride quality, with some safety concern and/or punishment to the vehicle
3 to 1	Inadequate ride quality, where the driver's ability to safely operate the vehicle is compromised

2.1.4.4 Maintenance Demand

Maintenance Demand ratings (Inventory Manual Item 89) reflect the overall needs of a road section, in order to be kept at an acceptable level of operability. Excessive amounts of any of the previously described ratings can contribute to a section’s Maintenance Demand rating, with scores ranging from one (1) to 10.

The criteria used to determine a road’s Maintenance Demand rating is shown in Table 2.4.

Table 2.4: Maintenance Demand Point Ratings

Point Ratings	Criteria
10 to 8	Low
7 to 5	Average
4 to 3	High
2 to 1	Excessive

2.1.4.5 Pavement Condition Index (PCI)

The Pavement Condition Index (PCI) represents the total condition rating of a section. The PCI is calculated by combining ride quality with structural adequacy to determine an overall score for pavement condition. The score varies from 0 to 100. A score of 100 represents a pavement in perfect condition with no cracking roughness or distortion. A score of 0 represents a pavement that is completely deteriorated and very tough to navigate.



The formula to calculate pavement condition ratings for asphalt (HCB) and surface treated (LCB) pavements are presented in Table 2.5.

Table 2.5: Pavement Condition Index (PCI) Formulas

HCB Equation	LCB Equation
$PCI = 13.75 + 9 \times DMI - 7.5 * 10^{\left[\frac{8.52 - RCR}{7.49}\right]}$	$PCI = 12.75 + 9 \times DMI - 5.5 * \ln e^{(9.94 - RCR)/3.46}$
Where, PCI = Pavement Condition Index DMI = Distress Manifestation Index RCR= Ride Condition Rating	Where, PCI = Pavement Condition Index DMI = Distress Manifestation Index RCR= Ride Condition Rating

2.1.5 Time of Need (TON)

The *Inventory Manual* offers a holistic review of each road section, developing a TON or an Adequacy rating using various data attributes and/or the observed condition ratings described above.

Overall, TON assessments are defined for six areas that are critical to the municipal decision-making process:

- Geometrics (Inventory Manual Item 91)
- Surface Type (Inventory Manual Item 92)
- Surface Width (Inventory Manual Item 93)
- Capacity (Inventory Manual Item 94)
- Structural Adequacy (Inventory Manual Item 95)
- Drainage (Inventory Manual Item 96)

Each of the six (6) TON elements are calculated based on criteria defined in the *Inventory Manual*, classifying roads in four levels of need:

- NOW
- '1 to 5' Years
- '6 to 10' Years
- ADEQ (Adequate)

To best utilize the database information and modern asset management concepts, it must be understood that the TON ratings signify the estimated time before the road would require reconstruction, not the time



frame until action is required. While ‘NOW’ needs indicate roads that currently require reconstruction, ‘1 to 5’ and ‘6 to 10’ year needs are current candidates for resurfacing treatments that will elevate their structural status to ‘ADEQ’, and offer the greatest return on investment for the Municipality (notwithstanding a drainage or capacity need, etc.). The overall TON for each road section is defined by the worst elemental TON identified for the six critical areas listed above.

The TON classifications are described more fully in the following sections of this report.

2.1.5.1 ‘NOW’ Needs

‘NOW’ needs represent the current backlog of reconstruction work required on the road system. Construction improvements identified within this time period are representative of roads that have little or no service life left and are in poor condition.

However, for most agencies, particularly where funding is limited, these road sections are not the priority. Focus is typically directed to resurfacing and preservation strategies, where pavement life can be extended on a larger percentage of the network through implementation of improvements that are less costly than reconstruction.

It should be noted that a resurfacing strategy is not considered a ‘NOW’ need, with the exception of a PR2 treatment recommendation (Pulverize and Resurface with two lifts of asphalt), or where the surface type is inadequate for the traffic volume.

If a road with a rehabilitation strategy of “resurface” deteriorates too far, it becomes a ‘NOW’ construction need. A ‘NOW’ need rating may be triggered by substandard ratings in any of the Structural Adequacy, Surface Type, Surface Width, Capacity, Drainage, or Geometrics data fields.



Figure 2.1: ‘NOW’ Need Road



2.1.5.2 '1 to 5' Year Needs

'1 to 5' year needs identify road sections where reconstruction is anticipated within the next five years, based upon a review of their current condition.

These roads can be good candidates for resurfacing treatments that would extend the life of the road (depending on any other deficiencies), thus deferring the need to reconstruct. If the recommended resurfacing improvement is left too long, it will deteriorate to the point of becoming a 'NOW' need.



Figure 2.2: '1 to 5' Year Need Road

2.1.5.3 '6 to 10' Year Needs

'6 to 10' year needs identify road sections where reconstruction improvements are anticipated within six to ten years, based upon a review of their current condition.

These roads can also be good candidates for resurfacing treatments that would extend the life of the road (depending on any other deficiencies), thus deferring the need to reconstruct.



Figure 2.3: '6 to 10' Year Need Road



2.1.5.4 'ADEQ'

An 'ADEQ' rating encompasses a wide range of conditions that include the following:

- Roads that are performing well on all evaluation criteria: less than 10% surface distress, fully acceptable drainage, minimal maintenance requirements, and no other geometric or capacity deficiencies identified.
- As per the *Inventory Manual*, roads with a traffic volume of less than 50 vehicles per day will be deemed ADEQ by default, with the thought that deficiencies on those roads would be corrected within the maintenance budgets.
- Gravel roads with a Structural Adequacy rating that is not a 'NOW' need (more than 25% distress) are considered ADEQ; there is no further differentiation by time period.



Figure 2.4: 'ADEQ' Road

3.0 ROAD CONDITION RATINGS

3.1 TYPES OF IMPROVEMENTS

Based upon the observations from the field survey and considering the associated TON evaluations for each of the six critical areas described earlier, an appropriate pavement improvement strategy was recommended.



A list of the road improvements that were recommended during this study is provided in Table 3.1.

Table 3.1: Road Improvement Types

Code	Description	Improvement Class
CRK*	Crack Sealing	Maintenance
PST	Single Lift Surface Treatment	Rehabilitation
Pad + PST	Pad with Hot Mix Asphalt and Single Lift Surface Treatment	Rehabilitation
Pul + PST	Pulverize and Single Lift Surface Treatment	Construction
RC - PST	Reconstruct – Surface Treated Road	Construction
Mill + OL	50 mm Mill and Overlay	Rehabilitation
Mill + OL w BR	50 mm Mill and Overlay with Asphalt Base Repairs	Rehabilitation
AC Replace	Remove and Repave Asphalt with Granular Base Repairs	Construction
Pul + 2OL	Pulverize and Resurface 2 Lifts	Construction
RC - HMA	Reconstruct Hot Mix Asphalt	Construction
NONE*	No Improvement Recommendation (ADEQ roads only)	n/a

Typically, decisions with respect to recommended improvements were made at the time of the visual survey, when each of the condition ratings was being evaluated. An important determination that was made was whether the appearance and performance of a road appeared related to an underlying structural problem, or simply due to aged surface materials. An observed structural and/or drainage problem would tend to result in a reconstruction/replacement treatment recommendation. Defects related to aged surface materials would result in a resurfacing/rehabilitation treatment recommendation. Determining the root cause of the problem or the condition of any road is critical. Reconstructing a road that should have had some type of resurfacing treatment would be an ineffective use of available resources.

In some cases, an improvement recommendation made during the field survey was amended as part of the office review. This occurred where a more deficient TON rating was calculated by the software, using sectional attributes to define a Condition Rating rather than visual observations. Usually, the earliest TON ratings, and the element it applied to, defined the improvement type that was recommended.

3.2 ROAD SYSTEM INVENTORY AND CLASSIFICATION

The road network, as defined by the GIS map layer provided at the beginning of the study, contains approximately 334 CL-km of hard surfaced roads.



Road sections may be classified in a number of ways, to illustrate their roadside environment, surface type, functional classification, and so forth. The classifications provide assistance in developing and summarizing further information on a network level, such as appropriate improvement types, estimated replacement costs, and performance expectations.

Network summary information for various classification methods is provided below. A summary of the road inventory is provided in Appendix A. Appendix A contains recent rating conditions from the 2022 survey.

3.2.1 Roadside Environment

The *Inventory Manual* classifies the roadside environment in one of three ways, determined by the length, servicing, and adjacent land use. These criteria are useful in characterizing the road section, and in determining costs for reconstruction and rehabilitation treatments.

- **Rural Roads** – within areas of sparse development, or where development is less than 50% of the frontage, including developed areas extending less than 300 m on one side or 200 m on both sides, with no curb and gutter.
- **Semi-Urban Roads** – within areas where development exceeds 50% of the frontage for a minimum of 300 m on one side, or 200 m on both sides, with no curb and gutter, with or without storm/combination sewers, or for subdivisions where the lot frontages are 30 m or greater.
- **Urban Roads** – within areas where there are curbs and gutters on both sides, served with storm or combination sewers, or curb and gutter on one side, served with storm or combination sewers, or reversed paved shoulders with, or served by, storm or combination sewers, or for subdivisions with frontages less than 30 m.

Each road section was assigned a roadside environment classification as part of the field survey, based on the criteria described above.

A network distribution of the three roadside environment classifications is provided in Table 3.2. The majority of Middlesex Centre’s road system is made up of two-lane rural roads.

Table 3.2: Middlesex Centre Roadside Environment Distribution

Roadside Environment	CL-KM	% CL-KM
Rural	529.4	88%
Sem-Urban	23.6	4%
Urban	49.9	8%
Total	602.9	100%



3.2.2 Surface Type

A road’s surface type is an important element in its overall management, driving the type, timing, and costs of maintaining and improving the road over its life cycle. In some cases, the underlying road structure may not be easily determined from a visual inspection only (e.g. concrete pavement overlaid with hot mix asphalt, hot mix pavement preserved with a chip seal or other surface treatment, surface treated pavement spot-repaired with hot mix asphalt padding or patching). For this study, existing surface type information provided by the Municipality was used as the initial data point in the database and was modified during the field inspection if it was observed that a different pavement structure was now in place.

The following road surface types were identified:

- **Low Class Bituminous (LCB)** – Surface treated roads; emulsified or liquid asphalt and select aggregate over a prepared granular base or existing surface.
- **High Class Bituminous (HCB)** – Hot mix asphalt roads.

A network distribution of the various surface types occurring on each roadside environment classification is provided in Table 3.3.

Table 3.3: Middlesex Centre Surface Type Distribution

Surface Type	Roadside Environment			Total CL-KM	% CL-KM
	Rural	Semi-Urban	Urban		
High Class Bituminous	39.1	20.4	49.6	109.1	18.1%
Low Class Bituminous	218.3	3.1	0.3	221.7	36.8%
Gravel	272.0	0.1	-	272.1	45.1%
Total	529.4	23.6	49.9	602.9	100%

Approximately 45 percent of the network is comprised of gravel pavement, mostly on rural roads, approximately 37 percent of the network is comprised of LCB pavement, and another 18 percent of the roads are asphalt surfaced pavements (HCB).

3.2.3 Road Functional (Design) Class

Roads are also classified within the database as Local, Collector, or Arterial, and further categorized as Residential or Industrial. Items 33 and 105 in the *Inventory Manual* provide further direction on the definition and determination of the Existing or Design Classes of road.



Generally, the classifications are based on the roadside environment, and the quantity and type of traffic using the road. The Existing Class is assigned based on the current conditions of the road sections, while the Design Class is set according to anticipated growth over either a ten- or twenty-year planning horizon.

Middlesex Centre road sections were classified by the rater at the time of the field review while rural classifications dependent on AADT were confirmed during an office review. The Municipality’s previous traffic data was reviewed and it was noted that traffic in 2020 and 2021 was typically less than previous years due to the pandemic. Therefore, the AADT prior to 2020 was considered to be more accurate. The traffic was aged to 2022 using a 2% growth rate and the roads were classified based on the calculated AADT. A map showing the AADT for each section is provided in Appendix E.

Both the existing and design road classifications are defined in the *Inventory Manual* as shown in Table 3.4. The distribution of the functional (design) classes identified for the Municipality of Middlesex Centre road network is provided in Table 3.5.

Table 3.4: Functional (Existing/Design) Classifications

Rural Sections		Semi-Urban and Urban Sections	
Design Class	Description	Design Class	Description
100	AAADT = 1 – 49	ALL	Alleyways
200	AAADT = 50 – 199	L/R	Local Residential
300	AAADT = 200 - 399	LCI	Local Commercial or Industrial
400	AAADT = 400 - 999	C/R	Collector Residential
500	AAADT = 1,000 - 1,999	CCI	Collector Commercial or Industrial
600	AAADT = 2,000 - 2,999	ART	Arterial
700	AAADT = 3,000 - 3,999	EXP	Urban Expressway
800	AAADT = 4,000+		
4LN	4+ lanes		
EXP	Rural Expressway		



Table 3.5: Middlesex Centre Functional (Design) Class Distribution

Functional Design	Roadside Environment			Total CL-KM	% CL-KM
	Rural	Semi-Urban	Urban		
100	17.6	-	-	17.6	2.9%
200	261.4	-	-	261.4	43.3%
300	68.6	-	-	68.6	11.4%
400	95.0	-	-	95	15.8%
500	45.9	-	-	45.9	7.6%
600	32.3	-	-	32.3	5.4%
700	7.1	-	-	7.1	1.2%
800	1.5	-	-	1.5	0.2%
Local Residential (LR)	-	22.4	42.4	64.8	10.7%
Collector Residential (CR)	-	1.2	3.8	5	0.8%
Arterial (ART)	-	-	3.8	3.8	0.6%
Total	529.4	23.6	50.0	603	100.0%

3.2.4 Minimum Maintenance Standards (MMS) Class

Regulation 239/02, Minimum Maintenance Standards for Municipal Highways (MMS), came into effect in November 2002. It was developed to provide municipalities with a defense against liability from actions arising with respect to levels of care/service on roads and bridges. A revised version of the MMS, Regulation (O. Reg. 366/18), came into effect in May 2018, and is currently active.

Roads are divided into six service classes by posted speed and traffic count, with Class 1 roads requiring the highest service level, down to Class 6 roads (which have no service standard). Because this classification method is used to determine liability of the municipality on an incident-by-incident basis, the importance of maintaining accurate, defensible traffic counts on a network level is significant. MMS service levels should define the equipment and staffing needs of a municipality, particularly for winter control, to ensure that the minimum standards for inspection and service are being met. The classification of the road for the MMS, based on average daily traffic and speed limits is summarized in Table 3.6.



Table 3.6: Ontario Regulation Traffic/Speed Minimum Maintenance Standards Classes

Average Daily Traffic (number of motor vehicles)	Speed Limit						
	91 - 100 km/h	81 - 90 km/h	71 - 80 km/h	61 - 70 km/h	51 - 60 km/h	41 - 50 km/h	1 - 40 km/h
53,000 or more	1	1	1	1	1	1	1
23,000 - 52,999	1	1	1	2	2	2	2
15,000 - 22,999	1	1	2	2	2	3	3
12,000 - 14,999	1	1	2	2	2	3	3
10,000 - 11,999	1	1	2	2	3	3	3
8,000 - 9,999	1	1	2	3	3	3	3
6,000 - 7,999	1	2	2	3	3	4	4
5,000 - 5,999	1	2	2	3	3	4	4
4,000 - 4,999	1	2	3	3	3	4	4
3,000 - 3,999	1	2	3	3	3	4	4
2,000 - 2,999	1	2	3	3	4	5	5
1,000 - 1,999	1	3	3	3	4	5	5
500 - 999	1	3	4	4	4	5	5
200 - 499	1	3	4	4	5	5	6
50 - 199	1	3	4	5	5	6	6
0 - 49	1	3	6	6	6	6	6

Speed limits were recorded for all road sections during the field inspection. Traffic data was provided by The Municipality and aged to current 2022 levels using a growth rate of 2%.

The MMS class distribution for each roadside environment is provided in Table 3.7. The MMS class is based on the traffic count data and posted speed limit.

Table 3.7: Middlesex Centre Minimum Maintenance Standards Class Distribution

Road Class	Roadside Environment			Total CL-KM	% CL-KM
	Rural	Semi-Urban	Urban		
3	76.1	-	-	76.1	12.6%
4	423.9	-	0.4	424.3	70.4%
5	11.8	11.9	31.0	54.7	9.1%
6	17.6	11.7	18.5	47.8	7.9%
Total	529.4	23.6	49.9	602.9	100%



3.3 ROAD SYSTEM CONDITION

There are a number of ways that the condition of the road system can be evaluated, each able to provide valuable information on network performance trends over time, if undertaken on a regular basis. The following subsections will summarize some results regarding the system condition, from the field inspections and subsequent analyses.

3.3.1 Time of Need (TON)

A description of the six critical areas for which the Inventory Manual methodology assesses needs can be found in Section 2.1.5. For each of the six elements (Geometrics, Surface Type, Surface Width, Structural Adequacy, Drainage, and Capacity), scores were assigned or calculated based on field observations and/or measured or estimated data attributes, and a corresponding TON was assigned to each road section.

The number of CL-km for the four TON levels in each of the six need assessment areas is shown in Table 3.8. A list of all road sections and the ratings each received is provided in Appendix B.

Table 3.8: TON Distribution for Six Critical Areas

Area of Need	Time of Need							
	NOW		1 to 5		6 to 10		ADEQ	
	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km
Geometrics	16.3	2.7%	-	-	-	-	586.7	97.3%
Surface Type	44.2	7.3%	3.0	0.5%	15.5	2.6%	540.3	89.6%
Surface Width	34.0	5.6%	3.8	0.6%	0.5	0.1%	564.7	93.6%
Capacity	-	-	-	-	-	-	602.9	100.0%
Structural Adequacy	56.1	9.3%	56.4	9.4%	75.4	12.5%	415.1	68.8%
Drainage	-	-	-	-	159.9	26.5%	443.1	73.5%

Geometric needs are only assessed as ‘NOW’ or ‘ADEQ’ on Rural roads, and are based on the posted speed limit, the minimum tolerable operating speed for that speed limit, and the observed average operating speed on each road segment.

Approximately three percent of the road network was identified as having a Geometric need. A list of sections with Geometric deficiencies is provided in Appendix B.

Surface Type needs are identified differently, depending on the roadside environment. For Rural roads, minimum tolerable standards are defined for various surface types based on traffic counts, and the TON is determined based on whether the existing or forecasted AADT exceeds that standard. For Semi-Urban



and Urban roads, the TON is 'NOW' for roads that do not have a hard top surface. The threshold for conversion from gravel to surface treated roads was set at 400 AADT and the threshold for conversion from surface treated to hot mix asphalt was set at 1,500 AADT. It should be noted that exceeding these thresholds doesn't mean that it needs to be or should be upgraded, other factors such as previous performance, type of traffic using the road (commercial traffic), and projected future road use should be considered when determining whether to convert a road to HCB from LCB or from Gravel to LCB. Roads that could be due for conversion are provided in Appendix B.

Surface Width needs are based on the measured widths from the field inspections, and how they relate to the minimum tolerable widths defined for the existing road classes. For Semi-Urban and Urban roads, the number of lanes and traffic operation (one-way or bi-directional) are also used to classify minimum tolerable surface widths.

Approximately 6 percent of the road network was identified as having a Surface Width need. A list of sections with Surface Width deficiencies is provided in Appendix B.

Capacity needs are determined based whether the existing conditions meet the minimum tolerable standard of Level of Service 'E' for all roads (*Inventory Manual Appendices C, D*).

Using the traffic data available, none of the roads in the Middlesex Centre network were identified as having a Capacity need.

Structural Adequacy needs are based on distress related observations recorded during the field inspection, and the corresponding surface material. For hard top surfaces, TON relates to the range of scores described in Table 2.1. For gravel roads the roads are either a 'NOW' need or 'ADEQ' need based on the inventory manual, with everything rated a 7 or below being a 'NOW' need and everything above being 'ADEQ'.

Approximately 68 percent of the roads are currently performing at an adequate level, while another 10 percent are considered 'NOW' needs for reconstruction. The remaining 22 percent of roads are currently candidates for some type of resurfacing improvement that would extend the pavement life and delay the need to reconstruct. A list of sections with Structural deficiencies is provided in Appendix B.

Drainage needs are based on the drainage scores recorded during the field inspection. Generally, a 'NOW' need score (1 to 7) was not assigned unless there were indications of severe flooding occurring. For Urban roads with storm sewers, an 'ADEQ' score of 15 was assigned, with the assumption that the underground infrastructure is functioning as designed.

Approximately 74 percent of the road network was identified as adequate for drainage and approximately 26 percent of the road network was identified as '6-10' drainage need. A list of sections with Drainage deficiencies is provided in Appendix B.

For each road section, the overall section TON was determined by selecting the worst case scenario from the six elemental condition ratings. If any elemental rating resulted in a 'NOW' need, the section would receive an overall TON of 'NOW'. The one exception is on low volume roads with an AADT count of less



than 50 vehicles per day. As per the *Inventory Manual*, these roads (MMS Class 6) are always assigned an ‘ADEQ’ TON rating, with improvements expected to be dealt with under general maintenance.

The distribution of overall TON ratings for the road system, broken down by MMS classifications, is shown in Table 3.9.

Table 3.9: Overall TON Distribution by MMS Class

MMS Class	Time of Need							
	NOW		1 to 5		6 to 10		ADEQ	
	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km	CL-km	% CL-km
3	39.2	6.5%	7.1	1.2%	17.1	2.8%	12.6	2.1%
4	81.6	13.5%	22.1	3.7%	95.5	15.8%	225.0	37.3%
5	6.3	1.0%	7.8	1.3%	19.2	3.2%	21.4	3.6%
6	3.3	0.5%	6.1	1.0%	9.0	1.5%	29.5	4.9%
Total	130.4	21.6%	43.1	7.1%	140.8	23.4%	288.5	47.9%

Approximately 22 percent of the network is considered to be at a “NOW” Time of Need rating, 7 percent of the network at a “1 to 5” Time of Need rating, 23 percent at a “6 to 10” Time of Need rating, and 48 percent is considered to be adequate.

3.4 ROADMATRIX ANALYSIS

3.4.1.1 Analysis Method & Section Strategies

There are two Analysis Methods available in RoadMatrix:

1. PQL Trigger Level – A minimum acceptable PQL is defined for each functional class and pavement type combination. A pavement section will become a candidate for M&R, **ONLY** when its PQL falls below the minimum acceptable PQL.
2. Always Analyze – RoadMatrix will **ALWAYS** analyze a section for M&R (regardless of its PQL). The section becomes a candidate for M&R only if it meets prescribed criteria defined in the decision trees. This analysis mode is suited for pavement preservation practices, whereby any criteria can be defined to trigger a maintenance activity that can extend the life of a pavement section, **BEFORE** the section reaches its lowest acceptable PQL value.

There are three Section M&R Strategies available in RoadMatrix:



1. Single Implementation (Simple) – Within the analysis (or programming) period, RoadMatrix will determine when the **EARLIEST** intervention will be required (e.g. could be the “need year”). Once the timing has been established, RoadMatrix will evaluate the decision tree and select a feasible treatment strategy for that timing. No further M&R recommendations are made during the programming period once the **EARLIEST** intervention has been established.
2. Repeat Implementation (Advanced) – Within the analysis (or programming) period, RoadMatrix will determine when the **FIRST** intervention will be required (e.g. could be the “need year”). Once timing has been established, RoadMatrix will evaluate the decision tree and select a feasible treatment strategy for that timing. Once the first intervention has been established, RoadMatrix will continue to determine the timing of the next intervention and subsequent interventions for the duration of the programming period. For each required intervention, the **SAME** treatment strategy as the first intervention will be “repeated” as the recommendation.
3. Multiple Tree Implementation (Complex) – For each year in the analysis (or programming) period, RoadMatrix will evaluate the decision tree to recommend a treatment strategy and timing based on the decision tree criteria. The recommendation for any given year can include a feasible treatment or “do nothing”.

For the purpose of this assignment, Always Analyze and Multiple Tree were selected as the Analysis Method and Section Strategy.

3.4.1.2 Decision Trees

RoadMatrix uses a decision tree approach to determine feasible maintenance and rehabilitation strategies for each section requiring some work during the programming period. RoadMatrix allows for building decision trees for each combination of pavement type and functional class. The decision trees used for analysis were developed by Stantec for standard Roads Needs Studies and in discussions with the Municipality regarding their typical rehabilitation strategies.

The HCB decision tree is presented in Table 3.10 and the description of the logic of each node within the decision tree is provided in Table 3.10. The LCB decision tree is presented in Figure 3.2 and the description of the logic of each node within the decision tree is provided in Table 3.11.



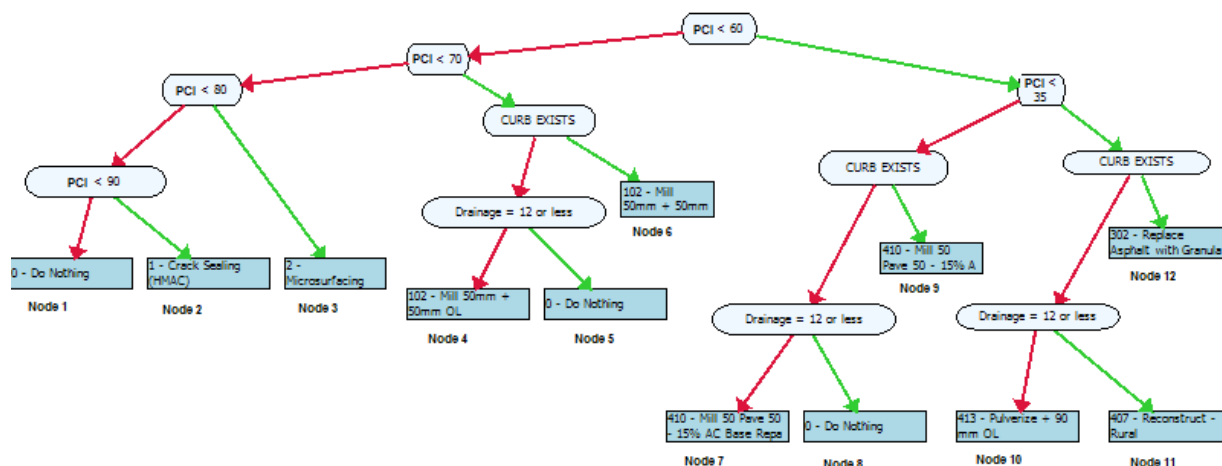


Figure 3.1: HCB Decision Tree

Table 3.10: HCB Decision Tree Summary

Node	General Description	Possible Pavement Condition	Recommended Treatment
1	Structural Condition (PCI) > 90	Structurally Adequate Very little to no surface distress	Do Nothing
2	80 < PCI < 90	Structurally Adequate Minor surface distress	Crack Seal
3	70 < PCI < 80	Structurally Adequate Minor surface distress	Microsurface
4	60 < PCI < 70 No Curbs Present Drainage is Greater than 12 out of 15	6 to 10 Year Structural Need Distresses Starting to Appear Good Candidate for minor resurfacing	Mill 50 mm and Pave 50 mm
5	60 < PCI < 70 No Curbs Present Drainage is 12 or Less out of 15	6 to 10 Year Structural Need Distresses Starting to Appear Drainage Issue Present, Resurfacing not Considered	Do Nothing (Due to Drainage Issue)
6	60 < PCI < 70 No Curbs Present	6 to 10 Year Structural Need Distresses Starting to Appear Good Candidate for minor resurfacing	Mill 50 mm and Pave 50 mm
7	35 < PCI < 60 No Curbs Present Drainage is Greater than 12 out of 15	1 to 5 Year Structural Need Good Candidate for Resurfacing No Curbs to Limit Grade Raise	Mill 50 mm and Pave 50 mm with asphalt base repairs



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Node	General Description	Possible Pavement Condition	Recommended Treatment
8	35 < PCI < 60 No Curbs Present Drainage is 12 or Less out of 15	1 to 5 Year Structural Need Drainage Issues Present, Resurfacing not Considered	Do Nothing (Dues to Drainage)
9	35 < PCI < 60 Curbs Present Drainage is Greater than 12 out of 15	1 to 5 Year Structural Need Good Candidate for Resurfacing Curbs are Present and Limit Grade Raise Potential	Mill 50 mm and Pave 50 mm with asphalt base repairs
10	PCI < 35 No Curbs Present Drainage is Greater than 12 out of 15	Now Need for Structure Drainage is Acceptable No Curbs to Limit Grade Raise	Pulverize and 90 mm Overlay
11	PCI < 35 No Curbs Present Drainage is 12 or Less out of 15	Now Need for Structure No Curbs (Rural Cross Section) Drainage Issue Present	Reconstruct (Rural)
12	PCI < 35 Curbs Present	Now Need for Structure Curbs Limit Grade Raise	Replace Asphalt (90 mm) with Granular Base Repairs

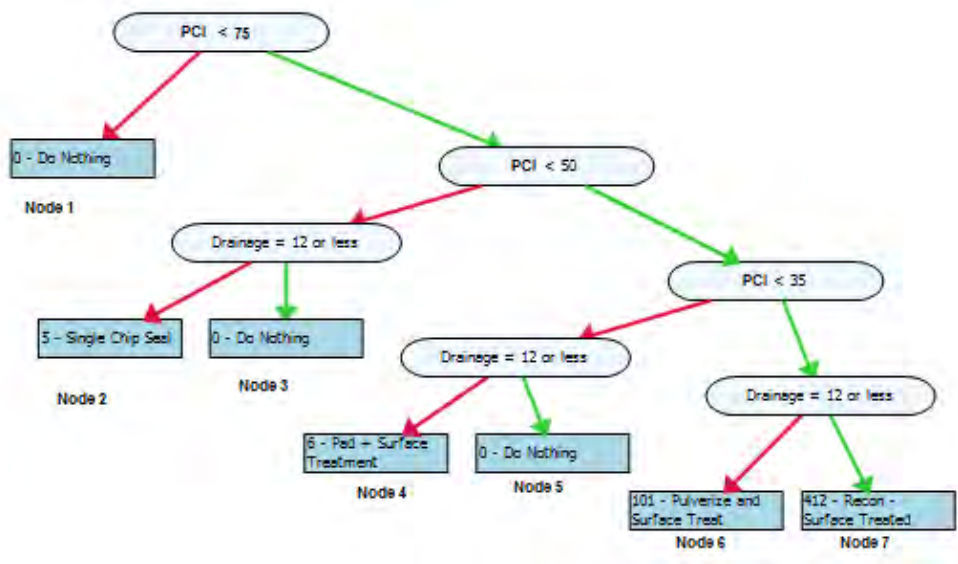


Figure 3.2: LCB Decision Tree



Table 3.11: LCB Decision Tree Summary

Node	General Description	Possible Pavement Condition	Recommended Treatment
1	Structural Condition (PCI) > 75	Structurally Adequate Very little to no surface distress	Do Nothing
2	50 < PCI < 75 Drainage is Greater than 12 out of 15	Between a 1 to 5 and 6 to 10 year structural need Distresses showing Good Candidate for minor resurfacing	Single Surface Treatment
3	50 < PCI < 75 Drainage is 12 or Less out of 15	Between a 1 to 5 and 6 to 10 year structural need Distresses showing Drainage Issue Present, Resurfacing not Considered	Do Nothing (Due to Drainage Issue)
4	35 < PCI < 50 Drainage is Greater than 12 out of 15	1 to 5 Year Structural Need Distresses Starting to Appear Good Candidate for minor resurfacing	Pad with Hot Mix Asphalt and Surface Treat
5	35 < PCI < 50 Drainage is 12 or Less out of 15	1 to 5 Year Structural Need Drainage Issues Present, Resurfacing not Considered	Do Nothing (Dues to Drainage)
6	PCI < 35 Drainage is Greater than 12 out of 15	Now Need for Structure Drainage is Acceptable	Pulverize and Surface Treat
7	PCI < 35 Drainage is 12 or Less out of 15	Now Need for Structure Drainage Issue Present	Reconstruct Surface Treat

3.5 RECOMMENDED PROGRAM FUNDING LEVELS

Program funding recommendations are a function of the dimensional information, surface type, roadside environment, and functional class of the individual road sections. Recommended funding for the road system should include sufficient capital expenditures that allow for the replacement of infrastructure as the end of design life is approached, in addition to sufficient funding for maintenance to ensure that that the full life expectancy is realized.

Budgetary recommendations in this report do not include items related to development and growth; Middlesex Centre Municipality should consider those items as additional to the recommendations in this report.



3.5.1 Pavement Management Overview

Stantec used the RoadMatrix Pavement Management System (RoadMatrix) to develop the most cost-effective pavement management program. RoadMatrix leverages over 40 years of engineering, research, and software design and development to offer our municipal clients a superior software tool to meet all their pavement management needs.

The system uses the results of the pavement condition survey, coupled with predictive pavement deterioration curves and decision tree models, to determine Maintenance and Rehabilitation (M&R) treatments for each pavement segment in the Municipality’s road network.

The decision trees described in previous sections allow the Municipality to identify maintenance and light rehabilitation treatments early in a pavement’s life, when surface conditions are good, and the pavement has not begun to experience more rapid deterioration due to weather, traffic loadings, and age. Applying early intervention strategies extends the life of the pavement significantly at a low cost; therefore, the cost-benefit of these types of interventions is typically high.

Allowing pavements to deteriorate further, triggers the need for heavier rehabilitation strategies. Although heavy rehabilitation is typically less cost-effective than maintenance and light rehabilitation, it is still preferable to apply this type of treatment, instead of the costlier full reconstruction of a road section. Using a combination of appropriate decision tree criteria and cost-benefit analyses is an optimal approach to identifying maintenance and rehabilitation work, minimizing the need for costly reconstruction activities.

An example of the cost benefit of maintenance and light rehabilitation as opposed to full reconstruction is provided in Figure 3.3 below.

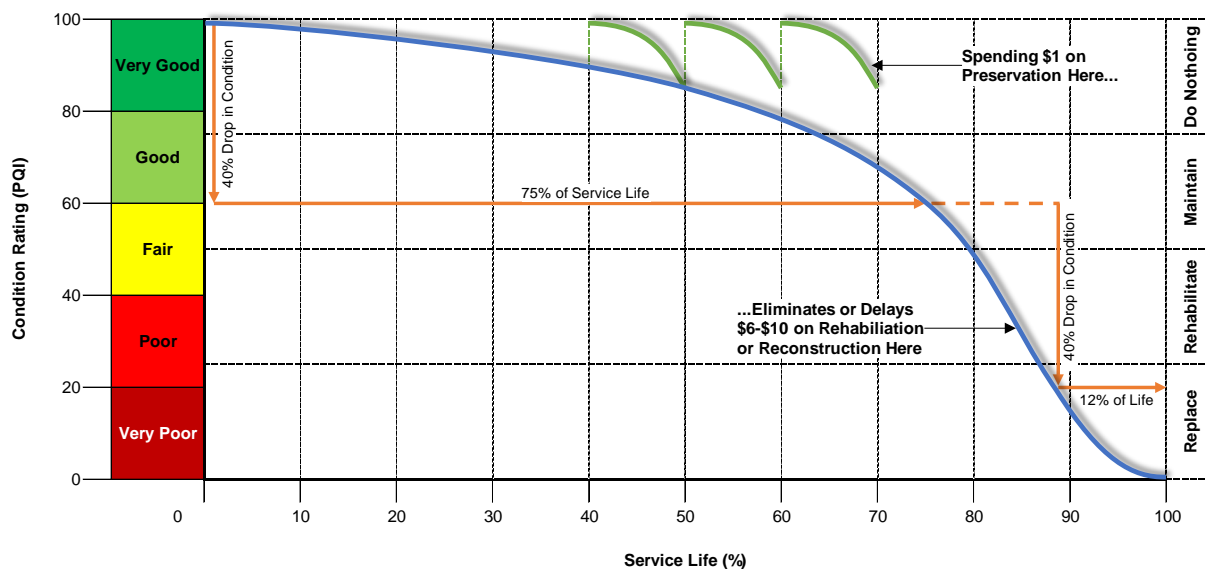


Figure 3.3: Pavement Deterioration Curve



The treatment benefits can be organized into two categories, performance improvement and deterioration delay. Items that delay deterioration do not actively increase the existing PQI but slow down further deterioration, an example of this is crack sealing. Items that improve performance provide additional condition improvements. The benefits of the various treatments are provided in Table 3.12 below.

Table 3.12: Treatment Benefits

Code	Description	Deterioration Delay	PQI Increase
PST	Single Lift Surface Treatment	-	25
Pad + PST	Pad with HMA and Surface Treat	-	40
Pulv + PST	Pulverize and Surface Treat	-	80
RC - PST	Reconstruct – Surface Treated Road	-	100
CRK	Crack Sealing	2	-
Micro	Microsurface	4	-
Mill + OL	50 mm Mill and Overlay	-	35
Mill + OL + BR	50 mm Mill and Overlay Plus AC Base Repair	-	50
RMV + RPLC	Remove and Replace Asphalt with Granular Base Repairs	-	100
Pulv +2 OL	Pulverize and Resurface 90 mm	-	100
RC – HMA R	Reconstruct Hot Mix Asphalt (Rural)	-	100

3.5.2 Rehabilitation Costs

Rehabilitation costs were produced from typical costs contained in the Ministry of Transportation’s contract records, standard costs used for other Cities and Municipalities in Ontario, and from the 2022 lowest bid documents supplied by the Municipality of Middlesex Centre. The costs used for analysis are provided in Table 3.13 below.



Table 3.13: Rehabilitation Costs

Pavement Type	Roadside Environment	Code	Description	Cost
LCB	Rural	PST	Single Lift Surface Treatment	\$2.75 / m ²
		Pad + PST	Pad with HMA and Surface Treat	\$5.50 / m ²
		Pulv + PST	Pulverize and Surface Treat	\$8.60 / m ²
		RC - PST	Reconstruct – Surface Treated Road	\$16.45 / m ²
HCB	Urban / Semi Urban	CRK	Crack Sealing	\$2.0 / m
		Micro	Microsurface	\$6.74 / m ²
		Mill + OL	50 mm Mill and Overlay	\$28.7 / m ²
		Mill + OL + BR	50 mm Mill and Overlay Plus AC Base Repair	\$30.74 / m ²
		RMV + RPLC	Remove and Replace Asphalt with Granular Base Repairs	\$41.48 / m ²
HCB	Rural	CRK	Crack Sealing	\$2.0 / m
		Micro	Microsurface	\$6.74 / m ²
		Mill + OL	50 mm Mill and Overlay	\$28.7 / m ²
		Pulv +2 OL	Pulverize and Resurface 90 mm	\$32.14 / m ²
		RC – HMA R	Reconstruct Hot Mix Asphalt (Rural)	\$38.26 / m ²

The rural reconstruction costs include the cost for granular subbase, granular base, asphalt, ditching and a 10% contingency for engineering. The urban remove and replace asphalt costs include asphalt, adjustments of catch basins and manholes and a 10% contingency for engineering.

It should be noted that these rates assume that the work is outsourced. The Municipality has performed a lot of the surface treated rehabilitations in the past and the rates for completing the work in house would be less than those used in the analysis.

3.5.3 Budget Results

The budget recommendations provided in this report are based on the constitution of the Municipality’s road system and a best practice pavement management approach. It is intended to act as a high-level estimate to assist in the development of a sound road asset management plan.



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

The following network-level budget options were developed for consideration:

- Do Nothing (worst case scenario)
- Maintain Pavement Network at PCI=70 (Both Asphalt and Surface Treated Networks)
- The Middlesex Centre Projected Budget
 - o \$1,100,000 for Asphalt Surfaced Roads
 - o \$600,000 for Surface Treated Roads
 - o \$40,000 for Crack Sealing and Microsurfacing
- Unlimited funding scenario

The Municipality provided the work completed in 2022 which was then entered into RoadMatrix. The appropriate performance criteria were updated according to the treatment type performed.

The budget scenarios are summarized in Table 3.14 and shown graphically in Figure 3.4.

Table 3.14: Budget Scenario Cost and Performance Summary (2019-2029)

Budget Scenario	Total 10-Year Funding	Overall Score (/100) (2022)	Overall Score (/100) (2032)
Do Nothing	\$0	70.3	35.0
Maintain PCI = 70 (HCB / LCB)	\$12.3M / \$10.9M	70.3	70
Total Maintain PCI = 70	\$23.2M	70.3	70.0
Unlimited Funding	\$25.3M	70.3	77.6
Proposed Budget	\$17.4M	70.3	56.8



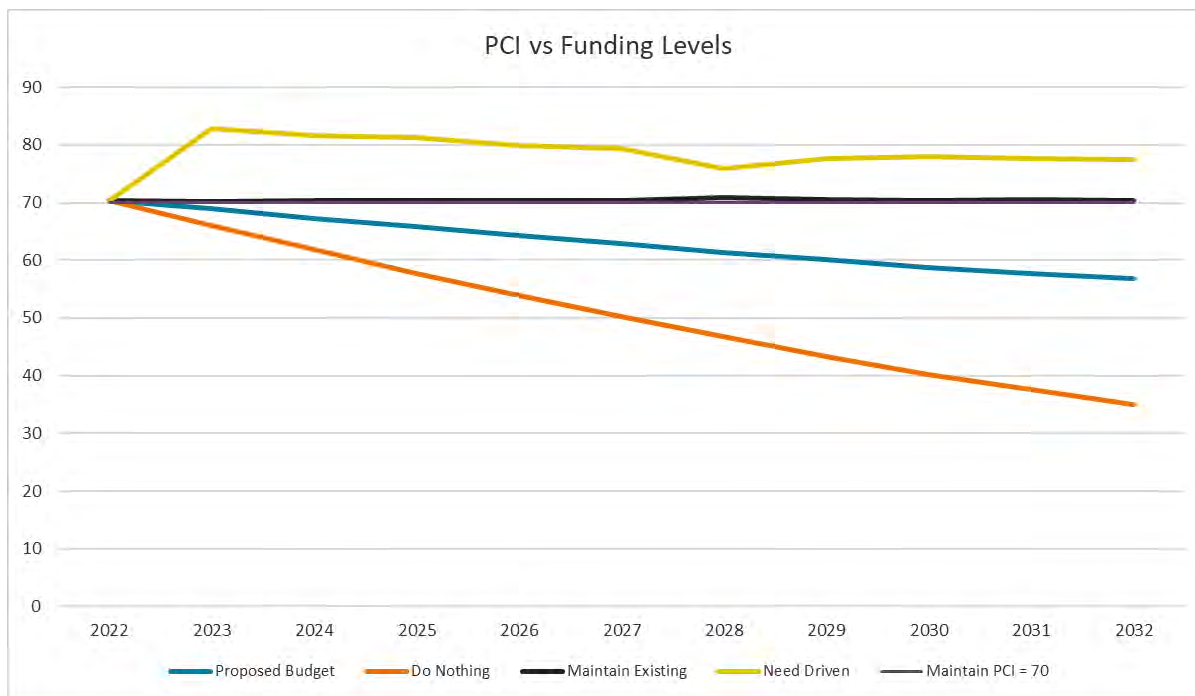


Figure 3.4: Budget Scenario Performance Results (2022-2032)

3.5.4 Critical Deficiencies Budget

The budget scenarios described in the preceding section are to rehabilitate the existing roads based on their current geometry and surface type. As part of this project, Stantec identified several critical deficiencies which include geometric, surface type, surface width, structural adequacy, drainage, and combinations of the aforementioned. An analysis was undertaken to consider the cost of upgrading all of these critical deficiencies. A priority ranking was also provided for each deficiency type based on risk to the public, traffic, pavement condition, and surface type. The critical deficiencies are provided in Appendix B. There were several sections that had multiple deficiencies. Those sections were combined into a separate category and should be considered priorities.



Table 3.15: Deficiency Cost Summary

Deficiency	Total Cost (\$)
Multiple Deficiencies	\$ 3,506,989
Surface Type Deficiencies – Now Need	\$ 8,412,414
Surface Type Deficiencies – 1-5 Yr Need	\$ 899,493
Surface Type Deficiencies – 6-10 Yr Need	\$ 3,714,082
Surface Width Deficiencies	\$ 6,986,075
Structural Adequacy Deficiencies	\$ 3,121,204
Geometric Deficiencies	\$ 2,628,400
Drainage Deficiencies	\$ 266,684
Total	\$ 29,535,341

In order to upgrade the network to the appropriate level of service, it would take approximately \$29.5 M in today’s dollars or roughly \$2.95 M per year over the next 10 years. It should be noted that reconstruction was assumed for the LCB to HCB upgrade and it is possible that some of these roads would just require resurfacing and not a full reconstruction. It should also be noted that two ongoing projects were left out - the River Road reconstruction and the roundabout at the Glendon Dr / Jeffries Rd / Vanneck Rd / Coldstream Rd intersections.

3.5.5 Conclusions

The budget analysis shows that the existing Municipal budget would result in a slowly declining level of service over the next 10 years with the condition deteriorating from 70.3 to 56.8. The municipalities asset management plan has a goal to keep the pavement condition at or above a PCI of 70, in order to maintain a network at a PCI of 70, approximately \$12.3M would be required for the asphalt budget and approximately \$10.9M would be required for the surface treated budget for a total of \$23.2 over the next ten years. Although the dollar value is similar to the proposed Municipal budget, this budget scenario is unencumbered by restraints on the use of money and would focus actions on the most efficient treatments by largely investing in the surface treated network and ignoring the hot mix asphalt network. An unlimited budget would require an excessive amount of money in the first year of the programming, but over a ten-year period \$25.3M would be required to rehabilitate all sections of the network as they reach their triggers for rehabilitation.



APPENDIX A

Road Sections (Inventory)

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (2%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (2%)	AADT 2027	AADT 2032	AADT 2037
8230	ABERDEEN DR	ASHLEY LANE	LEWIS DR	2	Urban	HC	Storm Sewer		302	L/R	6	140	0	8.0	0	0	0	0	67.9	14	8	8	140	155	171	188
4300	ADELAIDE ST N	ELGINFIELD RD	SIXTEEN MILE RD	2	Rural	HC	Open Ditch	Gravel	1075	600	3	2031	8.6	7.0	0	0	0	0	18.4	3	8	7	2031	2242	2476	2733
4290	ADELAIDE ST N	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1515	600	3	2087	10.3	8.0	0	0	0	0	68.2	13	8	7	2087	2304	2544	2809
4280	ADELAIDE ST N	FIFTEEN MILE RD	FOURTEEN MILE RD	2	Rural	HC	Open Ditch	Gravel	1387	600	3	2131	10.8	7.0	0	0	0	0	88.3	18	9	8	2131	2353	2598	2868
4270	ADELAIDE ST N	FOURTEEN MILE RD	THIRTEEN MILE RD	2	Rural	HC	Open Ditch	Gravel	1423	600	3	2181	11.2	7.0	0	0	0	0	88.3	18	9	8	2181	2408	2659	2935
4260	ADELAIDE ST N	THIRTEEN MILE RD	TWELVE MILE RD	2	Rural	LCB	Open Ditch	Gravel	1384	600	3	2238	10.6	7.0	0	0	0	0	48.6	9	7	7	2238	2471	2728	3012
4250	ADELAIDE ST N	TWELVE MILE RD	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	1449	600	3	2266	10.9	7.0	0	0	0	0	39.6	7	7	7	2266	2502	2762	3050
50064	AMIENS RD	WOOD RD	HEDLEY DR	2	Rural	LCB	Open Ditch	Gravel	1007	500	3	1105	8.8	7.0	0	0	0	0	33.3	7	7	7	1105	1220	1347	1487
50063	AMIENS RD	HEDLEY DR	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	1365	500	3	1105	8.8	7.0	0	0	0	0	33.3	7	7	7	1105	1220	1347	1487
50062	AMIENS RD	ILDERTON RD	IVAN DR	2	Rural	LCB	Open Ditch	Gravel	1365	500	3	1105	9	7.1	0	0	0	0	28.8	6	7	7	1105	1220	1347	1487
50061	AMIENS RD	IVAN DR	SINCLAIR DR	2	Rural	LCB	Open Ditch	Gravel	1356	500	3	1105	9	7.1	0	0	0	0	58.9	12	8	7	1105	1220	1347	1487
50060	AMIENS RD	SINCLAIR DR	LAMONT DR	2	Rural	LCB	Open Ditch	Gravel	1393	500	3	1105	8.8	7.0	0	0	0	0	54.4	11	8	7	1105	1220	1347	1487
30060	AMIENS RD	LAMONT DR	GOLD CREEK DR	2	Rural	LCB	Open Ditch	Gravel	1359	400	4	932	9.9	7.0	0	1	0	0	59.2	11	8	7	932	1029	1136	1254
30040	AMIENS RD	GOLD CREEK DRIVE	MELROSE DR	2	Rural	LCB	Open Ditch	Gravel	1131	500	3	1105	10.3	7.0	0	0	0	0	38.0	7	6	6	1105	1220	1347	1487
30020	AMIENS RD	MELROSE DRIVE	OXBOW DRIVE	2	Rural	LCB	Open Ditch	Gravel	1586	500	3	1113	10	7.0	0	0	0	0	48.6	9	7	7	1113	1229	1357	1498
30000	AMIENS RD	OXBOW DRIVE	GLENDON DR	2	Rural	LCB	Open Ditch	Gravel	1364	500	3	1505	9.1	7.0	0	0	0	0	62.1	12	7	7	1505	1662	1835	2026
6450	ARTHUR ST	N END	DUKE ST	2	Semi Urban	HC	Open Ditch	Earth	146	L/R	6	116	6.9	6.0	0	0	0	0	60.3	13	7	8	116	128	141	156
6440	ARTHUR ST	DUKE ST	HAMILTON ST	2	Semi Urban	HC	Open Ditch	Gravel	139	L/R	6	102	7.5	6.0	0	0	0	0	42.3	9	7	7	102	113	124	137
9420	ARVA ST	MEDWAY RD	WELDON AVE	2	Urban	HC	Storm Sewer		126	L/R	5	471	0	8.0	0	0	0	0	74.8	15	9	8	471	520	574	634
9410	ARVA ST	WELDON AVE	ST JOHN	0	Urban	HC	Storm Sewer		116	L/R	5	467	7.9	7.9	0	0	0	0	72.4	15	8	8	467	516	569	629
8220	ASHLEY LANE	ABERDEEN DR	ILDERTON RD	2	Urban	HC	Storm Sewer		91	L/R	6	195	0	8.0	0	0	0	0	54.4	11	8	7	195	215	238	262
8210	ASHLEY LANE	ILDERTON RD	S END	2	Urban	HC	Storm Sewer		262	L/R	6	96	0	8.0	0	0	0	0	36.4	7	8	7	96	106	117	129
9640	ASHWOOD CRES	MAPLEWOOD LANE	MAPLEWOOD LANE	2	Urban	HC	Storm Sewer		400	L/R	6	178	0	8.0	0	0	0	0	88.3	18	9	9	178	197	217	240
5280	ATKINSON CRT	E END	THAMES ST	2	Urban	HC	Storm Sewer		265	L/R	6	191	0	7.0	0	0	0	0	54.4	11	8	8	191	211	233	257
5270	ATKINSON CRT	THAMES ST	MILL CREEK LANE	2	Urban	HC	Storm Sewer		176	L/R	5	387	0	7.0	1	0	0	0	36.4	7	8	7	387	427	472	521
3350	ATTWOOD LANE	VANNECK RD	ILDERTON RD	2	Rural	Gravel	Open Ditch	Gravel	768	100	6	42	0	6.0	0	0	0	0	58.9	12	8	8	42	46	51	57
7060	AYLESFORD CRT	N END	STEPHEN MOORE DR	2	Urban	HC	Storm Sewer		64	L/R	6	157	0	9.0	0	0	0	0	68.3	15	7	8	157	173	191	211
8010	BARCLAY BLVD	E END	POPLAR HILL RD	2	Semi Urban	HC	Open Ditch	Earth	317	L/R	6	43	7.6	6.0	0	0	0	0	59.3	15	7	8	43	47	52	58
8000	BARCLAY BLVD	POPLAR HILL RD	W END	2	Semi Urban	HC	Open Ditch	Earth	371	L/R	6	130	7.8	6.0	0	0	0	0	69.3	15	7	8	130	144	158	175
7680	BARON CR	EARLS COURT TERRACE	WOODLAND DR	2	Urban	HC	Storm Sewer		545	L/R	5	379	0	8.0	0	0	0	0	83.8	17	9	8	379	418	462	510
3280	BEAR CREEK RD	FERNHILL DR	MCEWEN DR	2	Rural	Gravel	Open Ditch	Gravel	1366	100	6	42	0	6.0	0	0	0	0	15	8	8	42	46	51	57	
3270	BEAR CREEK RD	MCEWEN DR	GREYSTEAD DR	2	Rural	Gravel	Open Ditch	Gravel	1340	200	4	53	0	6.0	0	0	0	0	15	8	8	53	59	65	71	
3260	BEAR CREEK RD	GREYSTEAD DR	CHARLTON DR	2	Rural	Gravel	Open Ditch	Gravel	1376	100	6	48	0	6.0	0	0	0	0	12	7	8	48	53	59	65	
3250	BEAR CREEK RD	CHARLTON DR	HEDLEY DR	2	Rural	Gravel	Open Ditch	Gravel	1359	200	4	52	0	6.0	0	0	0	0	10	8	8	52	57	63	70	
3240	BEAR CREEK RD	HEDLEY DR	ILDERTON RD	2	Rural	Gravel	Open Ditch	Gravel	1370	200	4	65	0	6.0	0	0	0	0	13	8	8	65	72	79	87	
3230	BEAR CREEK RD	ILDERTON RD	IVAN DR	2	Rural	LCB	Open Ditch	Gravel	1363	400	5	455	8.9	7.0	0	0	0	0	68.2	13	8	7	455	502	555	612
3220	BEAR CREEK RD	IVAN DR	SINCLAIR DR	2	Rural	LCB	Open Ditch	Gravel	1367	400	5	488	8.4	7.0	0	0	0	0	50.2	9	8	7	488	539	595	657
3210	BEAR CREEK RD	SINCLAIR DR	LAMONT DR	2	Rural	LCB	Open Ditch	Gravel	1366	400	4	588	8.4	7.0	0	0	0	0	77.2	15	8	8	588	649	717	791
3200	BEAR CREEK RD	LAMONT DR	VANNECK RD	2	Rural	LCB	Open Ditch	Gravel	1090	400	4	620	7.7	6.0	0	0	0	0	77.2	15	8	8	620	685	756	834
7240	BEECHNUT PL	ELMHURST ST	BEECHNUT ST	2	Semi Urban	HC	Open Ditch	Gravel	128	L/R	6	46	6.3	5.0	0	0	0	0	36.4	7	8	7	46	51	56	62
7300	BEECHNUT ST	PARKLAND PL	BEECHNUT PL	2	Semi Urban	HC	Open Ditch	Gravel	131	L/R	5	264	7.5	5.0	0	0	0	0	37.8	8	7	7	264	291	322	355
7290	BEECHNUT ST	ELMHURST ST	BEECHNUT ST	2	Semi Urban	HC	Open Ditch	Gravel	294	L/R	6	150	7.3	6.0	0	0	0	0	33.3	7	7	7	150	166	183	202
7280	BEECHNUT ST	ELMHURST ST	BLACKBURN CRES	2	Semi Urban	HC	Open Ditch	Gravel	179	L/R	6	129	7.2	5.0	0	0	0	0	15.3	3	7	6	129	142	157	174
50	BELLS RD	N END	SHARON DR	2	Rural	Gravel	Open Ditch	Gravel	624	200	4	61	0	5.0	0	0	0	0	15	8	8	61	67	74	82	
40	BELLS RD	SHARON DR	WESTMINSTER DR	2	Rural	Gravel	Open Ditch	Gravel	1225	200	4	96	0	6.0	0	0	0	0	16	8	8	96	106	117	129	
30	BELLS RD	WESTMINSTER DR	LITTLEWOOD DR	2	Rural	Gravel	Open Ditch	Gravel	3737	200	4	58	0	6.0	0	0	0	0	15	8	8	58	64	71	78	
20	BELLS RD	LITTLEWOOD DR	LITTLE CHURCH DR	2	Rural	Gravel	Open Ditch	Gravel	1798	200	4	89	0	6.0	0	0	0	0	17	8	8	89	98	108	120	
10	BELLS RD	LITTLE CHURCH DR	SOUTHDEL BRNE	2	Rural	Gravel	Open Ditch	Gravel	1840	200	4	197	0	6.0	0	0	0	0	17	8	8	197	218	240	265	
7410	BIRCHCREST DR	KILWORTH PARK DR	EARLS COURT TERRACE	2	Urban	HC	Storm Sewer		120	L/R	5	408	0	8.0	0	0	0	0	51.3	11	7	7	408	450	497	549
7405	BIRCHCREST DR	EARLS COURT TERRACE	WESTBROOK CRES	2	Urban	HC	Storm Sewer		402	C/R	5	1257	0	8.0	0	0	0	0	55.8	12	7	7	1257	1388	1532	1692
7400	BIRCHCREST DR	WESTBROOK CRES	WOODLAND DR	2	Urban	HC	Storm Sewer		160	L/R	5	239	0	8.0	0	0	0	0	59.9	12	8	8	239	264	291	322
7560	BLACKBURN CRES	KILWORTH PARK DR	BEECHNUT ST	2	Semi Urban	HC	Open Ditch	Gravel	302	L/R	6	167	6.5	5.0	0	0	0	0	28.8							

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (2%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (2%)	AADT 2027	AADT 2032	AADT 2037
8260	CAMPBELL CRES	THIRLWALL BLVD	LEWIS DR	2	Urban	LCB	Storm Sewer		236	L/R	6	78	0	8.0	0	0	0	0	33.3	7	7	7	78	86	95	105
8270	CAMPBELL CRES	LEWIS DR	THIRLWALL BLVD	2	Urban	LCB	Storm Sewer		290	L/R	6	135	0	8.0	0	0	0	0	33.3	7	7	6	135	149	165	182
7120	CANDLEWOOD LANE	WINONA RD	DAVENTRY WAY	2	Urban	LCB	Storm Sewer		267	L/R	6	73	0	8.0	0	0	0	0	45.4	9	8	7	73	81	89	98
810	CARRIAGE RD	GIDEON DR	HARRIS RD	2	Rural	LCB	Open Ditch	Gravel	2279	L/R	3	2171	8.8	7.0	2	0	0	0	92.3	18	9	7	2171	2397	2646	2922
800	CARRIAGE RD	HARRIS RD	LONGWOODS RD	2	Rural	LCB	Open Ditch	Gravel	951	L/R	3	1672	9.2	8.0	0	0	0	0	68.2	13	8	8	1672	1846	2038	2250
70	CARRIAGE RD	LITTLEWOOD DR	LITTLE CHURCH DR	2	Rural	LCB	Open Ditch	Gravel	1836	L/R	4	849	9.5	8.0	0	0	0	0	92.3	18	9	8	849	937	1035	1143
60	CARRIAGE RD	LITTLE CHURCH DR	SOUTHDEL BRNE	2	Rural	LCB	Open Ditch	Gravel	1807	L/R	4	590	9.9	8.0	0	0	0	0	92.3	18	9	8	590	651	719	794
6536	CAVERHILL CRES	EAST END	PRINCE ST	0	Urban	LCB	Storm Sewer		72	L/R	6	183	0	8.5	0	0	0	0	99.0	20	10	9	183	202	223	246
6534	CAVERHILL CRES	PRINCE ST	DUKE ST	0	Urban	LCB	Storm Sewer		477	L/R	6	183	0	8.5	0	0	0	0	97.3	20	9	9	183	202	223	246
6530	CAVERHILL CRES	HAMILTON ST	DUKE ST	2	Urban	LCB	Storm Sewer		355	L/R	6	183	0	8.0	0	0	0	0	92.8	19	9	9	183	202	223	246
8040	CHARLES ST	ILDERTON RD	PARK CRES	2	Semi Urban	LCB	Open Ditch	Earth	119	L/R	6	68	7.4	6.0	0	0	0	0	88.3	18	9	8	68	75	83	92
2160	CHARLTON DR	VANNECK RD	NEW ONTARIO RD	2	Rural	Gravel	Open Ditch	Gravel	1112	L/R	4	54	0	6.0	0	0	0	0	14	7	8	8	54	60	66	73
2150	CHARLTON DR	NEW ONTARIO RD	DUNCRIEF RD	2	Rural	Gravel	Open Ditch	Gravel	1610	L/R	4	50	0	6.0	0	0	0	0	16	8	8	8	50	55	61	67
2140	CHARLTON DR	DUNCRIEF RD	BEAR CREEK RD	2	Rural	Gravel	Open Ditch	Gravel	823	L/R	4	53	0	6.0	0	0	0	0	14	8	8	8	53	59	65	71
2130	CHARLTON DR	BEAR CREEK RD	NAIRN RD	2	Rural	Gravel	Open Ditch	Gravel	2444	L/R	6	49	0	6.0	0	0	0	0	15	8	8	8	49	54	60	66
2120	CHARLTON DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2441	L/R	4	125	0	6.0	0	0	0	0	15	8	8	8	125	138	152	168
2110	CHARLTON DR	COLDSTREAM RD	POPLAR HILL RD	2	Rural	Gravel	Open Ditch	Gravel	2445	L/R	4	105	0	7.0	0	0	0	0	14	8	8	8	105	116	128	141
2100	CHARLTON DR	POPLAR HILL RD	WOOD RD	2	Rural	Gravel	Open Ditch	Gravel	2437	L/R	4	120	0	7.0	0	0	0	0	5	6	7	7	120	132	146	162
4450	CLARKE RD	ELGINFIELD RD	SIXTEEN MILE RD	2	Rural	Gravel	Open Ditch	Gravel	976	L/R	4	185	0	7.0	0	0	0	0	15	7	8	8	185	204	226	249
4440	CLARKE RD	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	Gravel	Open Ditch	Gravel	1595	L/R	4	150	0	7.0	0	0	0	0	15	7	8	8	150	166	183	202
4430	CLARKE RD	FIFTEEN MILE RD	FOURTEEN MILE RD	2	Rural	Gravel	Open Ditch	Gravel	1380	L/R	4	188	0	7.0	0	0	0	0	15	7	8	8	188	208	229	253
4420	CLARKE RD	FOURTEEN MILE RD	THIRTEEN MILE RD	2	Rural	Gravel	Open Ditch	Gravel	1417	L/R	4	219	0	7.0	0	0	0	0	15	7	8	8	219	242	267	295
4410	CLARKE RD	THIRTEEN MILE RD	PLOVER MILLS RD	2	Rural	Gravel	Open Ditch	Gravel	1428	L/R	4	189	0	7.0	0	0	0	0	15	8	8	8	189	209	230	254
4400	CLARKE RD	PLOVER MILLS RD	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	1359	L/R	4	241	9	7.0	0	0	0	0	87.8	17	9	8	241	266	294	324
4390	CLARKE RD	ILDERTON RD	TEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1399	L/R	4	346	0	7.0	0	0	0	0	87.8	17	9	8	346	382	422	466
4380	CLARKE RD	TEN MILE RD	NINE MILE RD	2	Rural	LCB	Open Ditch	Gravel	1391	L/R	4	411	9.7	8.0	0	0	0	0	72.7	14	8	8	411	454	501	553
4370	CLARKE RD	NINE MILE RD	EIGHT MILE RD	2	Rural	LCB	Open Ditch	Gravel	1387	L/R	3	1367	9.4	7.0	0	0	1	0	54.7	10	8	7	1367	1509	1666	1840
4360	CLARKE RD	EIGHT MILE RD	MEDWAY RD	2	Rural	LCB	Open Ditch	Gravel	1436	L/R	3	2299	9.4	7.0	1	0	0	0	59.2	11	8	7	2299	2538	2802	3094
3000	COLDSTREAM RD	VANNECK RD	OXBOW DR	2	Rural	LCB	Open Ditch	Gravel	1485	L/R	4	1550	9.1	7.0	2	0	4	0	36.4	7	8	4	1550	1711	1889	2086
3010	COLDSTREAM RD	OXBOW DR	MELROSE DR	2	Rural	LCB	Open Ditch	Gravel	1357	L/R	3	1080	10.8	7.0	0	0	0	0	92.3	18	9	7	1080	1192	1317	1454
3020	COLDSTREAM RD	MELROSE DR	GOLD CREEK DR	2	Rural	LCB	Open Ditch	Gravel	1371	L/R	4	957	10.7	7.0	0	0	0	0	92.3	18	9	8	957	1057	1167	1288
3030	COLDSTREAM RD	GOLD CREEK DR	LAMONT DR	2	Rural	LCB	Open Ditch	Gravel	1356	L/R	4	766	10.5	7.0	0	0	0	0	92.3	18	9	7	766	846	934	1031
3040	COLDSTREAM RD	LAMONT DR	EGREMONT DR	2	Rural	LCB	Open Ditch	Gravel	990	L/R	4	735	8.9	7.0	0	0	0	0	67.9	14	8	8	735	811	896	989
3050	COLDSTREAM RD	EGREMONT DR	SINCLAIR DR	2	Rural	LCB	Open Ditch	Gravel	400	L/R	4	834	9.7	7.0	0	0	0	0	99.0	20	10	9	834	921	1017	1122
3060	COLDSTREAM RD	SINCLAIR DR	IVAN DR	2	Rural	LCB	Open Ditch	Gravel	1356	L/R	4	828	9.7	7.0	0	0	0	0	99.0	20	10	9	828	914	1009	1114
3070	COLDSTREAM RD	IVAN DR	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	1373	L/R	4	784	10	7.0	0	0	0	0	99.0	20	10	9	784	866	956	1055
3080	COLDSTREAM RD	QUAKER LANE	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	274	L/R	4	323	10.9	8.0	0	0	0	0	72.7	14	8	8	323	357	394	435
3090	COLDSTREAM RD	270 M N OF QUAKER LANE	HEDLEY DR	2	Rural	Gravel	Open Ditch	Gravel	819	L/R	4	323	0	7.0	0	0	0	0	13	8	8	8	323	357	394	435
3100	COLDSTREAM RD	HEDLEY DR	CHARLTON DR	2	Rural	Gravel	Open Ditch	Gravel	1359	L/R	4	216	0	7.0	0	0	0	0	15	8	8	8	216	238	263	291
3110	COLDSTREAM RD	CHARLTON DR	GREYSTEAD DR	2	Rural	Gravel	Open Ditch	Gravel	1374	L/R	4	137	0	6.0	0	0	0	0	14	8	8	8	137	151	167	184
3120	COLDSTREAM RD	GREYSTEAD DR	MCEWEN DR	2	Rural	Gravel	Open Ditch	Gravel	1369	L/R	4	118	0	6.0	0	0	0	0	14	8	8	8	118	130	144	159
3130	COLDSTREAM RD	MCEWEN DR	FERNHILL DR	2	Rural	Gravel	Open Ditch	Gravel	1361	L/R	4	106	0	7.0	0	0	0	0	15	8	8	8	106	117	129	143
340	COOK RD	TWP LIMIT	DECKER DR	2	Rural	Gravel	Open Ditch	Gravel	1148	L/R	4	57	0	6.0	0	0	0	0	17	8	8	8	57	63	69	77
330	COOK RD	DECKER DR	DECKER DR	2	Rural	LCB	Open Ditch	Gravel	116	L/R	4	57	0	6.0	0	0	0	0	77.2	15	8	8	57	63	69	77
320	COOK RD	DECKER DR	LITTLEWOOD DR	2	Rural	Gravel	Open Ditch	Gravel	2075	L/R	4	111	0	6.0	0	0	0	0	15	7	8	8	111	123	135	149
310	COOK RD	LITTLEWOOD DR	WELDON WAY	2	Rural	Gravel	Open Ditch	Gravel	1737	L/R	4	76	0	5.0	1	0	0	0	16	7	8	7	76	84	93	102
6610	CRESTVIEW DR	N END	RIVERS EDGE LANE	2	Urban	LCB	Storm Sewer		40	L/R	6	90	0	6.0	0	0	0	0	63.4	13	8	8	90	99	110	121
6600	CRESTVIEW DR	RIVERS EDGE LANE	S END	2	Urban	LCB	Storm Sewer		130	L/R	6	180	0	8.0	0	0	0	0	54.4	11	8	5	180	199	219	242
9520	CROYDON DR	RICHMOND ST	CROYDON PL	2	Urban	LCB	Storm Sewer		88	L/R	5	348	0	8.0	0	0	0	0	67.9	14	8	8	348	384	424	468
9510	CROYDON DR	CROYDON PL	N END	2	Urban	LCB	Storm Sewer		654	L/R	6	88	0	8.0	0	0	0	0	70.3	14	9	8	88	97	107	118
9530	CROYDON PL	CROYDON PL	W END	2	Urban	LCB	Storm Sewer		46	L/R	6	95	0	8.0	0	0	0	0	70.3	14	9	8	95	105	116	128
8080	CURRIE CRT	PARK CRES	JAMES ST	2	Semi Urban	LCB	Open Ditch	Earth	108	L/R	6	117	6.2	5.0	0	0	0	0	36.4	7	8	7	117	129	143	157
8070	CURRIE CRT	JAMES ST	S END	2	Semi Urban	LCB	Open Ditch	Earth	158	L/R	6	38	7.7	6.0	0	0	0	0	36.4	7	8	7	38	42	46	51
9820	DAUSETT DR	PEREGRINE AVE	JEFFRIES RD	2	Urban	LCB	Storm Sewer		175	L/R	5	671	0	8.0	0	0	0	0	92.8	19	9	10	671	741	818	903
7110	DAVENTRY WAY	WINONA RD	CANDLEWOOD LANE	2	Urban	LCB	Storm Sewer		214	L/R	6	48	0	8.0	0	0	0	0	63.4	13	8	8	48	53	59	65
7100	DAVENTRY WAY	CANDLEWOOD LANE	STEPHEN MOORE DR	2	Urban	LCB	Storm Sewer		87	L/R	6	94	0	8.0	0	0	0	0	49.9	10	8	7	94	104	115	127
7090	DAVENTRY WAY	STEPHEN MOORE DR	W END	2	Urban	LCB	Storm Sewer		43	L/R	6	94	0	8.0	0	0	0	0	46.8	10	7	7	94	104	115	127
5550	DAVIS ST	N END	WELLINGTON ST	2	Urban	LCB	Storm Sewer		344	L/R	5	255	0	8.0	0	0	0	0	67.9	14	8	8	255	282	311	343
480	DECKER DR	E LIMIT	COOK RD	2	Rural	LCB	Open Ditch	Earth	1013	L/R	4	117	8.5	7.0	0	0	0	0	78.8	15	9	8	117	129	143	157
470	DECKER DR	COOK RD	WESTDEL BRNE	2	Rural	Gravel	Open Ditch	Gravel	991	L/R	4	213	0	6.0	0	0	0	0	15	7	8	8	213</			

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AAAD 2022 (2%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AAAD 2022 (2%)	AAAD 2027	AAAD 2032	AAAD 2037
7710	DOAN DR	ENTERPRISE DRIVE	CURVE	2	Urban	HCB	Storm Sewer		140	L/R	5	411	0	8.0	0	0	0	0	54.4	11	8	7	411	454	501	553
7715	DOAN DR	CURVE	SPRINGFIELD WAY	2	Urban	HCB	Storm Sewer		232	L/R	5	411	0	8.0	0	0	0	0	49.9	10	8	7	411	454	501	553
9060	DOGWOOD TRAIL	N END	WILLOW RIDGE RD	2	Urban	HCB	Storm Sewer		161	L/R	5	261	0	8.0	0	0	0	0	72.4	15	8	8	261	288	318	351
6510	DUKE ST	KOMOKA RD	ARTHUR ST	2	Semi Urban	HCB	Open Ditch	Gravel	120	L/R	5	627	7.5	6.0	0	0	0	0	63.4	13	8	8	627	692	764	844
6500	DUKE ST	ARTHUR ST	PRINCE ST	2	Semi Urban	HCB	Open Ditch	Gravel	121	L/R	5	492	7.2	6.0	0	0	0	0	54.4	11	8	7	492	543	600	662
6520	DUKE ST	PRINCE ST	CAVERHILL CRES	2	Urban	HCB	Storm Sewer		86	L/R	6	183	0	8.0	0	0	0	0	92.8	19	9	9	183	202	223	246
3290	DUNCRIEF RD	CHARLTON DR	HEDLEY DR	2	Rural	Gravel	Open Ditch	Gravel	1516	100	6	15	0	5.0	2	0	0	0	16	8	8	8	15	17	18	20
7677	EARLSCOURT TERRACE	BIRCHCREST DR	BARON CRES	2	Urban	HCB	Storm Sewer		103	L/R	5	791	0	9.0	0	0	0	0	79.3	16	9	8	791	873	964	1065
7675	EARLSCOURT TERRACE	BARON CRES	PEREGRINE AVE	2	Urban	HCB	Storm Sewer		425	L/R	5	536	0	8.0	0	0	0	0	88.3	18	9	8	536	592	653	721
9810	EARLSCOURT TERRACE	PEREGRINE AVE	WOODLAND DR	2	Urban	HCB	Storm Sewer		206	L/R	5	346	0	8.0	0	0	0	0	88.3	18	9	8	346	382	422	466
1430	EIGHT MILE RD	PROSPECT HILL RD	CLARKE RD	2	Rural	Gravel	Open Ditch	Gravel	2379	200	4	185	0	6.0	0	0	0	0	16	8	8	8	185	204	226	249
1420	EIGHT MILE RD	CLARKE RD	HIGHBURY AVE N	2	Rural	LCB	Open Ditch	Gravel	2489	300	4	248	8.7	7.0	0	0	0	0	77.2	15	8	8	248	274	302	334
1410	EIGHT MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2	Rural	LCB	Open Ditch	Gravel	2466	400	4	422	8.9	7.0	0	0	0	0	81.7	16	8	8	422	466	514	568
1400	EIGHT MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	LCB	Open Ditch	Gravel	2451	400	4	523	9.2	7.0	0	0	0	0	77.2	15	8	8	523	577	638	704
1390	EIGHT MILE RD	RICHMOND ST	WONDERLAND RD N	2	Rural	LCB	Open Ditch	Gravel	2469	300	4	386	8.3	7.0	0	0	0	0	77.2	15	8	8	386	426	471	520
1380	EIGHT MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	LCB	Open Ditch	Gravel	2469	300	4	313	8.4	7.0	0	0	0	0	63.7	12	8	8	313	346	382	421
1370	EIGHT MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	Gravel	Open Ditch	Gravel	2476	300	4	234	0	6.0	0	0	0	0	13	8	7	7	234	258	285	315
1360	EIGHT MILE RD	DENFIELD RD	VANNECK RD	2	Rural	Gravel	Open Ditch	Gravel	2256	300	4	248	0	6.0	0	0	0	0	14	8	8	8	248	274	302	334
9440	ELGIN ST	ELGIN ST	MEDWAY RD	2	Urban	HCB	Storm Sewer		169	L/R	5	531	0	8.0	0	0	0	0	67.9	14	8	8	531	586	647	715
9460	ELGIN ST	ELGIN ST	RICHMOND ST	2	Urban	HCB	Storm Sewer		117	L/R	5	269	0	8.0	0	0	0	0	51.3	11	7	8	269	297	328	362
5040	ELIZABETH ST	HIGHLAND RD	BLOSDALE CRES	2	Urban	HCB	Storm Sewer		123	L/R	6	47	0	8.0	0	0	0	0	69.3	15	7	8	47	52	57	63
7270	ELMHURST ST	GLENDON DR	PARKLAND PL	2	Semi Urban	HCB	Open Ditch	Gravel	209	L/R	5	382	7.6	5.0	0	0	0	0	15.3	3	7	6	382	422	466	514
7260	ELMHURST ST	PARKLAND PL	BEECHNUT PL	2	Semi Urban	HCB	Open Ditch	Gravel	129	L/R	5	232	8.1	5.0	0	0	0	0	18.4	3	8	6	232	256	283	312
7250	ELMHURST ST	BEECHNUT PL	BEECHNUT ST	2	Semi Urban	HCB	Open Ditch	Gravel	370	L/R	6	192	7.4	5.0	0	0	0	0	40.9	8	8	7	192	212	234	258
5380	ELMVIEW DR	YOUNG ST	S END	2	Urban	HCB	Storm Sewer		119	L/R	6	120	0	7.0	0	0	0	0	45.4	9	8	8	120	132	146	162
760	ELVIAGE DR	TWP LIMIT	BRIGHAM RD	2	Rural	LCB	Open Ditch	Gravel	752	400	4	827	8.7	7.0	0	3	0	0	53.1	10	7	8	827	913	1008	1113
750	ELVIAGE DR	BRIGHAM RD	W END	2	Rural	LCB	Open Ditch	Gravel	697	200	4	70	0	4.0	0	0	0	0	72.7	14	8	8	70	77	85	94
7660	ENTERPRISE DR	JEFFERIES RD	DOAN DR	2	Urban	HCB	Storm Sewer		176	L/R	6	69	0	9.0	0	0	0	0	74.8	15	9	8	69	76	84	93
7670	ENTERPRISE DR	DOAN DR	W END	0	Urban	LCB	Storm Sewer		232	L/R	5	791	11	8.0	0	0	0	0	86.2	17	8	8	791	873	964	1065
5890	ERIE AVE	SPRINGRIDGE ST	DELAWARE ST S	2	Semi Urban	HCB	Open Ditch	Earth	186	L/R	6	86	7.1	5.0	0	0	0	0	58.9	12	8	8	86	95	105	116
5880	ERIE AVE	DELAWARE ST S	KOMOKA RD	2	Semi Urban	HCB	Open Ditch	Earth	184	L/R	6	126	6.9	6.0	0	0	0	0	58.9	12	8	7	126	139	154	170
50050	FAIRGROUND RD	LITTLEWOOD DR	620 m SOUTH OF LITTLEWOOD DR	2	Rural	Gravel	Open Ditch	Gravel	620	200	4	130	9.8	7.2	0	0	0	0	38.0	7	6	7	130	144	158	175
9620	FERNHILL DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2400	200	4	120	0	6.0	0	0	0	0	10	7	7	7	120	132	146	162
9610	FERNHILL DR	COLDSTREAM RD	POPLAR HILL RD	2	Rural	Gravel	Open Ditch	Gravel	2400	200	4	65	0	6.0	0	0	0	0	10	7	7	7	65	72	79	87
9600	FERNHILL DR	POPLAR HILL RD	WOOD RD	2	Rural	Gravel	Open Ditch	Gravel	2400	200	4	178	0	6.0	0	0	0	0	11	8	8	8	178	197	217	240
6200	FIELDRUN DR	OXBOW DR	FIELDSTONE CRES N	2	Urban	HCB	Storm Sewer		79	L/R	5	395	0	8.0	0	0	0	0	92.8	19	9	10	395	436	482	532
6190	FIELDRUN DR	FIELDSTONE CRES N	FIELDSTONE CRES S	2	Urban	HCB	Storm Sewer		121	L/R	5	393	0	8.0	0	0	0	0	88.3	18	9	10	393	434	479	529
6180	FIELDRUN DR	FIELDSTONE CRES S	SIMCOE AVE	2	Urban	HCB	Storm Sewer		112	L/R	5	957	0	8.0	0	0	0	0	88.3	18	9	10	957	1057	1167	1288
6210	FIELDSTONE CRES N	FIELDSTONE CRES S	DELAWARE ST N	2	Urban	HCB	Storm Sewer		115	L/R	6	171	0	8.0	0	0	0	0	85.9	18	8	10	171	189	208	230
6230	FIELDSTONE CRES N	FIELDRUN DR	FIELDRUN DR	2	Urban	HCB	Storm Sewer		139	L/R	6	173	0	8.0	0	0	0	0	90.4	19	8	10	173	191	211	233
6220	FIELDSTONE CRES N	DELAWARE ST N	FIELDRUN DR	2	Urban	HCB	Storm Sewer		184	L/R	5	204	0	8.0	0	0	0	0	85.9	18	8	10	204	225	249	275
6260	FIELDSTONE CRES S	FIELDSTONE GATE	FIELDRUN DR	2	Urban	HCB	Storm Sewer		245	L/R	6	186	0	8.0	0	0	0	0	81.4	17	8	10	186	205	227	250
6250	FIELDSTONE CRES S	FIELDRUN DR	DELAWARE ST N	2	Urban	HCB	Storm Sewer		179	L/R	6	186	0	8.0	0	0	0	0	81.4	17	8	10	186	205	227	250
2640	FIFTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2	Rural	Gravel	Open Ditch	Gravel	2462	200	4	66	0	5.0	0	0	0	0	17	9	8	6	66	73	80	89
2630	FIFTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2	Rural	Gravel	Open Ditch	Gravel	2461	200	4	171	0	6.0	0	0	0	0	14	7	8	8	171	189	208	230
2620	FIFTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2	Rural	LCB	Open Ditch	Gravel	2459	300	4	355	9.1	7.0	0	0	0	0	92.3	18	9	7	355	392	433	478
2610	FIFTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	LCB	Open Ditch	Gravel	2425	300	4	392	8.8	7.0	0	0	0	0	92.3	18	9	8	392	433	478	528
2600	FIFTEEN MILE RD	RICHMOND ST	WONDERLAND RD N	2	Rural	LCB	Open Ditch	Gravel	2460	200	4	175	9.1	7.0	0	0	0	0	92.3	18	9	7	175	193	213	236
2590	FIFTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	LCB	Open Ditch	Gravel	2459	200	4	136	9.2	7.0	0	0	0	0	92.3	18	9	7	136	150	166	183
2580	FIFTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	Gravel	Open Ditch	Gravel	2456	200	4	115	0	6.0	0	0	0	0	15	8	8	8	115	127	140	155
2570	FIFTEEN MILE RD	DENFIELD RD	MILL LANE	2	Rural	Gravel	Open Ditch	Gravel	1831	200	4	97	0	6.0	0	0	0	0	16	8	8	8	97	107	118	131
2560	FIFTEEN MILE RD	MILL LANE	VANNECK RD	2	Rural	Gravel	Open Ditch	Gravel	447	200	4	97	0	6.0	0	0	0	0	17</							

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (%)	AADT 2027	AADT 2032	AADT 2037
5350	HARRIS RD	MARTIN RD	HOGS BACK CS	2	Semi Urban	HC	Open Ditch	Gravel	715	L/R	5	788	6.8	5.0	0	0	0	0	64.8	14	7	8	788	870	961	1061
5340	HARRIS RD	HOGS BACK CS	VICTORIA ST	2	Semi Urban	HC	Open Ditch	Gravel	19	L/R	5	788	0	8.0	0	0	0	0	88.3	18	9	8	788	870	961	1061
9660	HAVENWOOD LANE	S END	STONEFIELD GATE	2	Urban	HC	Storm Sewer		80	L/R	6	77	0	8.0	0	0	0	0	88.3	18	9	10	77	85	94	104
9670	HAVENWOOD ST	S END	STONEFIELD GATE	2	Urban	HC	Storm Sewer		80	L/R	6	112	0	8.0	0	0	0	0	92.8	19	9	10	112	124	137	151
6550	HEATHER PLACE	S END	UNION AVE	2	Urban	HC	Storm Sewer		165	L/R	6	165	0	7.0	0	0	0	0	76.9	16	8	8	165	182	201	222
970	HEATLY DR	SPRINGER RD	1.2 KM WEST OF SPRINGER RD	2	Rural	Gravel	Open Ditch	Gravel	1271	200	4	73	7	6.0	1	0	0	0	16	7	8	73	81	89	98	
980	HEATLY DR	1.2 KM WEST OF N. JTN OF SPRIN	SPRINGER DR. SOUTH JUNCTION	2	Rural	Gravel	Open Ditch	Gravel	2445	200	4	73	0	5.0	3	0	1	0	17	8	8	73	81	89	98	
2020	HEDLEY DR	VANNECK RD	NEW ONTARIO RD	2	Rural	Gravel	Open Ditch	Gravel	502	200	4	76	0	6.7	0	0	0	0	14	7	8	76	84	93	102	
2010	HEDLEY DR	NEW ONTARIO RD	DUNCRIF RD	2	Rural	Gravel	Open Ditch	Gravel	1825	200	4	93	0	6.0	0	0	0	0	15	7	8	93	103	113	125	
2000	HEDLEY DR	DUNCRIF RD	BEAR CREEK RD	2	Rural	Gravel	Open Ditch	Gravel	621	200	4	83	0	6.0	0	0	0	0	15	8	8	83	92	101	112	
1990	HEDLEY DR	BEAR CREEK RD	NAIRN RD	2	Rural	Gravel	Open Ditch	Gravel	2446	200	4	65	0	5.0	0	0	0	0	12	8	8	65	72	79	87	
1980	HEDLEY DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2441	200	4	110	0	6.0	0	0	0	0	7	7	7	110	121	134	148	
1970	HEDLEY DR	COLDSTREAM RD	POPLAR HILL RD	2	Rural	Gravel	Open Ditch	Gravel	2444	200	4	120	0	6.0	0	0	0	0	12	8	8	120	132	146	162	
1960	HEDLEY DR	POPLAR HILL RD	EGREMONT DR	2	Rural	Gravel	Open Ditch	Gravel	1589	200	4	134	0	6.0	0	0	0	0	7	7	7	134	148	163	180	
1950	HEDLEY DR	EGREMONT DR	AMIENS RD	2	Rural	Gravel	Open Ditch	Gravel	843	200	4	99	0	6.0	0	0	0	0	14	8	8	99	109	121	133	
8630	HERITAGE DR	HYDE PARK RD	ROBERT ST	2	Urban	HC	Storm Sewer		154	C/R	5	1882	0	8.0	0	0	0	0	92.8	19	9	9	1882	2078	2294	2533
8620	HERITAGE DR	ROBERT ST	MILL ST	2	Urban	HC	Storm Sewer		124	L/R	5	475	0	8.0	0	0	0	0	94.5	19	10	9	475	524	579	639
8610	HERITAGE DR	MILL ST	HERITAGE PL	2	Urban	HC	Storm Sewer		118	L/R	5	263	0	8.0	0	0	0	0	36.4	7	8	6	263	290	321	354
8600	HERITAGE DR	HERITAGE PL	S END	2	Urban	HC	Storm Sewer		60	L/R	5	263	0	8.0	0	0	0	0	54.4	11	8	7	263	290	321	354
8640	HERITAGE PL	HERITAGE DR	MILL ST	2	Urban	HC	Storm Sewer		447	L/R	6	139	0	8.0	0	0	0	0	36.4	7	8	7	139	153	169	187
5100	HIGHLAND RD	N END	ELIZABETH ST	2	Urban	HC	Storm Sewer		29	L/R	6	105	0	8.0	0	0	0	0	81.4	17	8	8	105	116	128	141
5090	HIGHLAND RD	ELIZABETH ST	WILLIAM ST	2	Urban	HC	Storm Sewer		102	L/R	6	112	0	8.0	0	0	0	0	90.0	18	10	8	112	124	137	151
5080	HIGHLAND RD	WILLIAM ST	TOWERLINE RD	2	Urban	HC	Storm Sewer		92	L/R	6	75	0	8.0	0	0	0	0	83.8	17	9	8	75	83	91	101
5070	HIGHLAND RD	TOWERLINE RD	S END	2	Urban	HC	Storm Sewer		27	L/R	6	75	0	8.0	0	0	0	0	94.5	19	10	9	75	83	91	101
5580	HILLCREST AVE	N END	HILLCREST AVE	2	Urban	HC	Storm Sewer		41	L/R	6	174	0	8.0	0	0	0	0	88.3	18	9	8	174	192	212	234
5570	HILLCREST AVE	HILLCREST AVE	WELLINGTON ST	2	Urban	HC	Storm Sewer		108	L/R	6	174	0	7.0	0	0	0	0	63.4	13	8	8	174	192	212	234
5370	HOGS BACK CS	N END	HARRIS RD	2	Urban	HC	Storm Sewer		106	L/R	6	126	0	8.0	0	0	0	0	67.9	14	8	8	126	139	154	170
6000	HURON AVE	QUEEN ST	SPRINGER ST	2	Semi Urban	HC	Open Ditch	Earth	262	L/R	5	262	7.7	6.0	0	0	0	0	92.8	19	9	10	262	289	319	353
5990	HURON AVE	SPRINGER ST	DELAWARE ST N	2	Semi Urban	HC	Open Ditch	Earth	187	L/R	5	290	7.3	5.0	0	0	0	0	33.3	7	7	7	290	320	354	390
5980	HURON AVE	DELAWARE ST N	KOMOKA RD	2	Semi Urban	HC	Open Ditch	Earth	178	L/R	5	292	7.5	6.0	0	0	0	0	49.9	10	8	7	292	322	356	393
4010	HYDE PARK RD	ELGINFIELD RD	SIXTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1225	600	3	2064	10.9	8.0	0	0	0	0	57.6	11	7	7	2064	2279	2516	2778
4000	HYDE PARK RD	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1425	600	3	2102	9.2	8.0	0	0	0	0	44.1	8	7	8	2102	2321	2562	2829
3990	HYDE PARK RD	FIFTEEN MILE RD	FOURTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1392	600	3	2171	9.1	8.0	0	0	0	0	39.6	7	7	7	2171	2397	2646	2922
3980	HYDE PARK RD	FOURTEEN MILE RD	THIRTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1439	600	3	2157	10	8.0	0	0	0	0	50.2	9	8	7	2157	2382	2629	2903
3970	HYDE PARK RD	THIRTEEN MILE RD	TWELVE MILE RD	2	Rural	HC	Open Ditch	Paved	1373	600	3	2617	11.2	7.0	0	0	0	0	94.5	19	10	9	2617	2889	3190	3522
3960	HYDE PARK RD	TWELVE MILE RD	N. LIMITS OF ILDERTON	2	Urban	HC	Open Ditch	Gravel	734	600	3	2823	12.4	8.0	0	0	0	0	94.5	19	10	9	2823	3117	3441	3799
3953	HYDE PARK RD	N. LIMITS OF ILDERTON	MAPLEWOOD LANE	2	Urban	HC	Storm Sewer		200	ART	5	2823	0	10.0	0	0	0	0	94.5	19	10	9	2823	3117	3441	3799
3952	HYDE PARK RD	MAPLEWOOD LANE	STONE FIELD LANE	2	Urban	HC	Storm Sewer		2693	ART	5	2823	0	10.0	0	0	0	0	92.8	19	9	9	2823	3117	3441	3799
3950	HYDE PARK RD	STONE FIELD LANE	ILDERTON RD	2	Urban	HC	Storm Sewer		253	ART	5	2823	0	10.0	0	0	0	0	92.8	19	9	9	2823	3117	3441	3799
1920	ILDERTON RD	PROSPECT HILL RD	CLARKE RD	2	Rural	LCB	Open Ditch	Gravel	2457	300	4	398	8.7	7.0	0	0	0	0	35.1	6	7	8	398	439	485	536
1910	ILDERTON RD	CLARKE RD	HIGHBURY AVE N	2	Rural	LCB	Open Ditch	Gravel	2451	400	4	596	9.2	7.0	0	0	0	0	36.7	6	8	7	596	658	727	802
1900	ILDERTON RD	EGREMONT DR	AMIENS RD	2	Rural	LCB	Open Ditch	Gravel	2048	600	3	2231	7.9	6.0	0	0	0	0	72.7	14	8	8	2231	2463	2720	3003
8450	ILDERTON ST	N END	ILDERTON RD	2	Semi Urban	Gravel	Open Ditch	Gravel	116	L/R	6	98	0	7.0	0	0	0	0	12	7	7	98	108	119	132	
1750	IVAN DR	VANNECK RD	BEAR CREEK RD	2	Rural	Gravel	Open Ditch	Gravel	1715	200	4	122	0	5.0	0	0	0	0	14	8	8	122	135	149	164	
1740	IVAN DR	BEAR CREEK RD	NAIRN RD	2	Rural	LCB	Open Ditch	Gravel	2433	200	4	158	9.3	7.0	0	0	0	0	86.2	17	8	8	158	174	193	213
1730	IVAN DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2441	200	4	104	0	6.0	0	0	0	0	16	8	8	104	115	127	140	
1720	IVAN DR	COLDSTREAM RD	EGREMONT DR	2	Rural	Gravel	Open Ditch	Gravel	1590	200	4	96	0	6.0	0	0	0	0	14	8	8	96	106	117	129	
1710	IVAN DR	EGREMONT DR	KOMOKA RD	2	Rural	Gravel	Open Ditch	Gravel	855	200	4	97	0	6.0	0	0	0	0	12	8	8	97	107	118	131	
1700	IVAN DR	KOMOKA RD	AMIENS RD	2	Rural	Gravel	Open Ditch	Gravel	2444	200	4	80	0	6.0	0	0	0	0	10	7	7	80	88	98	108	
8060	JAMES ST	E END	CURRIE CRT	2	Semi Urban	HC	Open Ditch	Gravel	196	L/R	6	100	7.5	5.5	0	0	0	0	54.4	11	8	7	100	110	122	135
7600	JEFFERIES RD	PIONEER DR	WESTBROOK DR	2	Urban	HC	Storm Sewer		141	L/R	5	486	0	8.0	0	0	0	0	58.9	12	8	7	486	537	592	654
7610	JEFFERIES RD	WESTBROOK DR	STEPHEN MOORE DR	2	Urban	HC	Storm Sewer		447	C/R	5	1326	0	8.0	0	0	0	0	67.9	14	8	8	1326	1464	1616	1785
7630	JEFFERIES RD	STEPHEN MOORE DR	PEREGRINE AVE	2	Urban	HC	Storm Sewer		102	ART	5	2475	0	8.0	0	0	0	0	88.3	18	9	8	2475	2733	3017	3331
7635	JEFFERIES RD	PEREGRINE AVE	ENTERPRISE DR	2	Urban	HC	Storm Sewer		103	ART	5	2837	0	8.0	0	0	0	0	88.3	18	9	8	2837	3132	3458	3818
7640	JEFFERIES RD	ENTERPRISE DR	GLENDON DR	2	Urban	HC	Storm Sewer		258	ART	4	3493	0	8.0	0	0	0	0	83.8	17	9	8	3493	3857	4258	4701
5140	JOHN ST	LONGWOODS RD	PLEASANT ST	2	Semi Urban	HC	Ditch Sewer	Earth	95	L/R	6	121	8.5	6.0	0	0	0	0	88.3	18	9	8	121	134	147	163
450	JONES DR	CARRIAGE RD	BODKIN RD	2	Rural	Gravel	Open Ditch	Gravel	1371	200	4	65	0	6.0	0	0	0	0	10	7	7	65	72	79	87	
3140	JURY RD	NAIRN RD	VANNECK RD	2	Rural	LCB	Open Ditch	Gravel	1294	200	4	120	0	7.0	0	0	0	0	92.3	18	9	8	120	132	146	162
8770	KENNEDY AVE	E END	VINTAGE WAY S	2	Semi Urban	HC	Storm Sewer	Earth	37	L/R	5	486	0	8.0	0	0	0	0	97.3	20	9	9	486	537	592	654
8760	KENNEDY AVE	VINTAGE WAY S	ROBERT ST	2	Urban	HC	Storm Sewer		78	L/R	5	486	0	8.0	0	0	0	0	54.4	11	8	7	486	537	592	

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (%)	AADT 2027	AADT 2032	AADT 2037
4600	LANSDOWNE PARK CRES	OXBOW DR	END OF CURBS	2	Urban	HC	Storm Sewer		1043	L/R	5	130	0	8.0	0	0	0	0	19.8	4	7	7	130	144	158	175
4605	LANSDOWNE PARK CRES	END OF CURBS	OXBOW DR	2	Rural	HC	Open Ditch	Earth	364	200	5	130	0	8.0	0	0	0	0	28.8	6	7	7	130	144	158	175
8305	LEWIS DR	E END	ABERDEEN DR	2	Urban	HC	Storm Sewer		82	L/R	6	38	0	8.0	0	0	0	0	36.4	7	8	6	38	42	46	51
8300	LEWIS DR	ABERDEEN DR	SYDENHAM DR	2	Urban	HC	Storm Sewer		146	L/R	6	40	0	8.0	0	0	0	0	58.9	12	8	8	40	44	49	54
8290	LEWIS DR	SYDENHAM DR	70M WEST OF CAMPBELL CRES	2	Urban	HC	Storm Sewer		218	L/R	6	111	0	8.0	0	0	0	0	40.9	8	8	7	111	123	135	149
8280	LEWIS DR	70M WEST OF CAMPBELL CRES	CAMPBELL CRES	2	Urban	HC	Storm Sewer		75	L/R	6	38	0	8.0	0	0	0	0	18.4	3	8	6	38	42	46	51
7570	LINNELL CRES	KILWORTH PARK DR	KILWORTH PARK DR	2	Semi Urban	HC	Open Ditch	Gravel	327	L/R	6	97	6.7	5.0	0	0	0	0	60.3	13	7	8	97	107	118	131
430	LITTLE CHURCH DR	WESTDELL BRNE	WOODHULL RD	2	Rural	Gravel	Open Ditch	Gravel	1551	200	4	82	0	6.0	0	0	0	0	18	9	8	8	82	91	100	110
420	LITTLE CHURCH DR	WOODHULL RD	BELLS RD	2	Rural	Gravel	Open Ditch	Gravel	1239	200	4	59	0	6.0	0	0	0	0	17	8	8	8	59	65	72	79
410	LITTLE CHURCH DR	BELLS RD	CARRIAGE RD	2	Rural	Gravel	Open Ditch	Gravel	1389	100	6	49	0	5.0	0	0	0	0	18	8	8	8	49	54	60	66
400	LITTLE CHURCH DR	CARRIAGE RD	BODKIN RD	2	Rural	Gravel	Open Ditch	Gravel	1371	200	4	156	0	7.0	0	0	0	0	9	7	7	7	156	172	190	210
50090	LITTLEWOOD DR	BODKINS RD	FAIRGROUNDS RD	2	Rural	HC	Open Ditch	Gravel	1382	300	4	250	10.5	8.7	0	0	0	0	94.5	19	10	9	250	276	305	336
7900	LOBO LANE	GOLD CREEK DR	EGREMONT DR	2	Rural	LCB	Open Ditch	Earth	213	200	4	140	5.9	5.0	0	0	0	0	72.7	14	8	8	140	155	171	188
9630	MAPLEWOOD LANE	HYDE PARK ROAD	W END	2	Urban	HC	Storm Sewer		453	L/R	5	760	0	8.0	0	0	0	0	92.8	19	9	9	760	839	926	1023
8680	MARGARET ST	ROBERT ST	MILL ST	2	Urban	HC	Storm Sewer		95	L/R	5	270	0	8.0	0	0	0	0	67.9	14	8	8	270	298	329	363
8320	MARSH LANE	N END	ILDERTON RD	2	Semi Urban	LCB	Open Ditch	Gravel	184	L/R	6	136	5.6	5.0	0	0	0	0	57.6	11	7	7	136	150	166	183
9014	MARTIN DR	WILLOW RIDGE RD	CALVERT DR	2	Urban	HC	Storm Sewer		218	L/R	5	871	0	8.0	0	0	0	0	88.3	18	9	9	871	962	1062	1172
9012	MARTIN DR	CALVERT DR	BLUE HERRON DR	2	Urban	HC	Storm Sewer		353	L/R	6	137	0	8.0	0	0	0	0	88.3	18	9	10	137	151	167	184
9010	MARTIN DR	BLUE HERRON DR	CALVERT DR	2	Urban	HC	Storm Sewer		243	L/R	6	149	0	8.0	0	0	0	0	88.3	18	9	9	149	165	182	201
5490	MARTIN DR	HARRIS RD	WELLINGTON ST	2	Semi Urban	HC	Storm Sewer		472	L/R	5	612	6.9	5.0	0	0	0	0	94.5	19	10	9	612	676	746	824
5480	MARTIN DR	WELLINGTON ST	LONGWOODS ST	2	Urban	HC	Storm Sewer		307	L/R	5	744	0	8.0	0	0	0	0	94.5	19	10	8	744	821	907	1001
7080	MAXINE CRT	N END	STEPHEN MOORE DR	2	Urban	HC	Storm Sewer		66	L/R	6	194	0	8.0	0	0	0	0	99.0	20	10	9	194	214	236	261
2550	MCEWEN DR	VANNECK RD	NEW ONTARIO RD	2	Rural	Gravel	Open Ditch	Gravel	2308	200	4	64	0	6.0	0	0	0	0	14	8	8	8	64	71	78	86
2540	MCEWEN DR	NEW ONTARIO RD	BEAR CREEK RD	2	Rural	Gravel	Open Ditch	Gravel	2443	200	4	68	0	6.0	0	0	0	0	15	8	8	8	68	75	83	92
2530	MCEWEN DR	BEAR CREEK RD	NAIRN RD	2	Rural	Gravel	Open Ditch	Gravel	2445	100	6	44	0	6.0	0	0	0	0	15	8	8	8	44	49	54	59
2520	MCEWEN DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2439	200	4	85	0	6.0	0	0	0	0	14	8	8	8	85	94	104	114
2510	MCEWEN DR	COLDSTREAM RD	POPLAR HILL RD	2	Rural	Gravel	Open Ditch	Gravel	2443	200	4	108	0	6.0	0	0	0	0	14	8	8	8	108	119	132	145
2500	MCEWEN DR	POPLAR HILL RD	WOOD RD	2	Rural	Gravel	Open Ditch	Gravel	2443	200	4	89	0	6.0	0	0	0	0	7	7	7	7	89	98	108	120
8090	MCKAY ST	ZAVITZ DR	ILDERTON RD	2	Semi Urban	HC	Open Ditch	Earth	437	L/R	6	67	7.7	6.0	0	0	0	0	92.8	19	9	10	67	74	82	90
8910	MEADOWCREEK DR	E END	CALVERT DR	2	Urban	HC	Storm Sewer		283	L/R	5	434	0	8.0	0	0	0	0	63.4	13	8	8	434	479	529	584
8900	MEADOWCREEK DR	CALVERT DR	HYDE PARK RD	2	Urban	HC	Storm Sewer		162	C/R	5	1197	0	8.0	0	0	0	0	72.4	15	8	8	1197	1322	1459	1611
8520	MEADOWSWEET CRES	STONE FIELD LANE	STONE FIELD LANE	2	Urban	HC	Storm Sewer		311	L/R	6	86	0	8.0	0	0	0	0	46.8	10	7	7	86	95	105	116
1275	MEDWAY RD	HYDE PARK	DENFIELD RD	2	Rural	HC	Open Ditch	Paved	2474	500	3	1770	9.2	7.0	0	0	0	0	92.8	19	9	9	1770	1954	2158	2382
1270	MEDWAY RD	DENFIELD RD	VANNECK RD	2	Rural	HC	Open Ditch	Paved	2329	500	3	1650	9.3	7.0	0	2	0	0	92.8	19	9	9	1650	1822	2011	2221
1190	MELROSE DR	VANNECK DR	EGREMONT DR	2	Rural	Gravel	Open Ditch	Gravel	732	200	4	92	0	6.0	0	0	0	0	15	8	8	8	92	102	112	124
1180	MELROSE DR	EGREMONT DR	NAIRN RD	2	Rural	Gravel	Open Ditch	Gravel	246	200	4	135	0	6.0	0	0	0	0	12	8	8	8	135	149	165	182
1170	MELROSE DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2444	200	4	198	0	6.0	0	0	0	0	12	8	8	8	198	219	241	266
1160	MELROSE DR	COLDSTREAM RD	KOMOKA RD	2	Rural	Gravel	Open Ditch	Gravel	2462	300	4	220	0	6.0	0	0	0	0	11	8	8	8	220	243	268	296
1150	MELROSE DR	KOMOKA RD	AMIENS RD	2	Rural	Gravel	Open Ditch	Gravel	2430	200	4	118	0	6.0	0	0	0	0	12	8	8	8	118	130	144	159
8470	MEREDITH DR	N END	STONE FIELD LANE	2	Urban	HC	Storm Sewer		298	L/R	5	337	0	8.0	0	0	0	0	90.4	19	8	9	337	372	411	454
8460	MEREDITH DR	STONE FIELD LANE	ILDERTON RD	2	Urban	HC	Storm Sewer		252	L/R	5	904	0	8.0	0	0	0	0	92.8	19	9	10	904	998	1102	1217
5260	MILL CREEK LANE	ATKINSON CRT	88 M EAST OF YORK ST	2	Urban	HC	Storm Sewer		56	L/R	5	456	0	7.0	1	0	0	0	58.9	12	8	8	456	503	556	614
5255	MILL CREEK LANE	88 M EAST OF YORK ST	YORK ST	2	Semi Urban	HC	Ditch Sewer	Earth	88	L/R	5	456	0	7.0	0	0	0	0	72.4	15	8	8	456	503	556	614
5250	MILL CREEK LANE	YORK ST	YORKDALE ST	2	Semi Urban	HC	Ditch Sewer	Earth	213	L/R	5	456	7.3	6.0	0	0	0	0	54.4	11	8	8	456	503	556	614
5240	MILL CREEK LANE	YORKDALE ST	GIDEON DR	2	Urban	HC	Storm Sewer		134	L/R	5	497	0	8.0	0	0	0	0	92.8	19	9	9	497	549	606	669
3820	MILL LANE	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	Gravel	Open Ditch	Gravel	1403	200	4	53	0	4.0	0	0	0	0	15	8	8	8	53	59	65	71
8670	MILL ST	ILDERTON RD	MARGARET ST	2	Urban	HC	Storm Sewer		357	L/R	5	284	0	8.0	0	0	0	0	46.8	10	7	7	284	314	346	382
8660	MILL ST	MARGARET ST	HERITAGE PL	2	Urban	HC	Storm Sewer		222	L/R	5	225	0	8.0	0	0	0	0	33.3	7	7	7	225	248	274	303
8650	MILL ST	HERITAGE PL	HERITAGE DR	2	Urban	HC	Storm Sewer		354	L/R	5	223	0	8.0	0	0	0	0	92.8	19	9	10	223	246	272	300
280	MILLER RD	W END	SPRINGER ROAD	2	Rural	LCB	Open Ditch	Earth	1902	200	5	99	7.2	6.0	0	0	0	0	72.7	14	8	8	99	109	121	133
5530	MILLMANOR PL	W END	PRINCE ALBERT ST	2	Urban	HC	Storm Sewer		308	L/R	5	215	0	7.0	0	0	0	0	67.9	14	8	8	215	237	262	289
3400	NEW ONTARIO RD	FERNHILL DR	MCEWEN DR	2	Rural	LCB	Open Ditch	Gravel	1365	400	4	671	9.8	7.0	0	0	0	0	77.2	15	8	8	671	741	818	903
3390	NEW ONTARIO RD	MCEWEN DR	GREYSTAD DR	2	Rural	LCB	Open D																			

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AAOT 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AAOT 2022 (%)	AAOT 2027	AAOT 2032	AAOT 2037
1040	OXBOW DR	FIELDRUN DR	DELAWARE ST N	2	Urban	HCB	Storm Sewer		180	C/R	5	1775	0	8.0	0	0	0	0	90.4	19	8	9	1775	1960	2164	2389
1030	OXBOW DR	DELAWARE ST N	KOMOKA RD	2	Urban	HCB	Storm Sewer		178	C/R	5	1945	0	8.0	0	0	0	0	92.8	19	9	9	1945	2147	2371	2618
1020	OXBOW DR	KOMOKA RD	LANSDOWNE PARK CRES	2	Rural	LCB	Open Ditch	Gravel	1390	500	4	1039	9.5	7.0	0	0	0	0	39.6	7	7	7	1039	1147	1267	1398
1010	OXBOW DR	LANSDOWNE PARK CRES	LANSDOWNE PARK CRES	2	Rural	LCB	Open Ditch	Gravel	319	400	4	824	9.5	7.0	0	0	0	0	59.2	11	8	8	824	910	1004	1109
1000	OXBOW DR	LANSDOWNE PARK CRES	AMIENS RD	2	Rural	LCB	Open Ditch	Gravel	738	400	4	840	9.2	7.0	0	0	0	0	72.7	14	8	8	840	927	1024	1131
1067	OXBOW DRIVE	UNION AVENUE	END OF CURBS	2	Rural	HCB	Open Ditch	Gravel	251	500	5	1867	10.5	8.0	0	0	0	0	83.8	17	9	8	1867	2061	2276	2513
1065	OXBOW DRIVE	END OF CURBS	VALLEYVIEW DRIVE	2	Urban	HCB	Storm Sewer		96	C/R	5	1867	0	8.0	0	0	0	0	81.4	17	8	8	1867	2061	2276	2513
8030	PARK CRES	N END	CURRIE CRT	2	Semi Urban	HCB	Open Ditch	Earth	48	L/R	5	205	9.1	7.0	0	0	0	0	92.8	19	9	10	205	226	250	276
8020	PARK CRES	CURRIE CRT	POPLAR HILL RD	2	Semi Urban	HCB	Open Ditch	Earth	105	L/R	5	205	9.2	7.0	0	0	0	0	85.9	18	8	8	205	226	250	276
7230	PARKLAND PL	ELMHURST ST	BEECHNUT ST	2	Semi Urban	HCB	Open Ditch	Gravel	128	L/R	5	238	7	5.0	0	0	0	0	92.8	19	9	9	238	263	290	320
7220	PARKLAND PL	BEECHNUT ST	KILWORTH PARK DR	2	Semi Urban	HCB	Open Ditch	Gravel	132	L/R	5	412	7.1	6.0	0	0	0	0	92.8	19	9	9	412	455	502	554
6390	PARKVIEW DR	UNION AVE	VALLEYVIEW DR	2	Semi Urban	HCB	Open Ditch	Earth	201	L/R	6	121	7.7	6.0	0	0	0	0	54.4	11	8	7	121	134	147	163
6380	PARKVIEW DR	VALLEYVIEW DR	OAKCREST DR	2	Semi Urban	HCB	Open Ditch	Earth	93	L/R	5	249	7.3	6.0	0	0	0	0	76.9	16	8	8	249	275	304	335
6370	PARKVIEW DR	OAKCREST DR	DELAWARE ST N	2	Semi Urban	HCB	Open Ditch	Gravel	235	L/R	6	83	6.7	6.0	0	0	0	0	36.4	7	8	7	83	92	101	112
9835	PEREGRINE AVE	EARLS COURT TERRACE	DAUSETT DR	2	Urban	HCB	Storm Sewer		132	L/R	5	891	0	8.0	0	0	0	0	90.0	18	10	10	891	984	1086	1199
9830	PEREGRINE AVE	JEFFERIES RD	DAUSETT DR	2	Urban	HCB	Storm Sewer		115	L/R	5	790	0	8.0	0	0	0	0	94.5	19	10	10	790	872	963	1063
8570	PERRIWINKLE DR	WOOD LILY LANE	RED CLOVER CRT	2	Urban	HCB	Storm Sewer		211	L/R	5	477	0	8.0	0	0	0	0	72.4	15	8	8	477	527	581	642
7210	PHEASANT TRAIL	WESTBROOK DR	W END	2	Urban	HCB	Storm Sewer		204	L/R	5	262	0	8.0	0	0	0	0	45.4	9	8	7	262	289	319	353
7500	PIONEER DR	BLACKBURN CRES	WISHINGWELL CRT	2	Urban	HCB	Storm Sewer		350	L/R	5	388	0	8.0	0	0	0	0	92.8	19	9	9	388	428	473	522
7490	PIONEER DR	WISHINGWELL CRT	JEFFERIES RD	2	Urban	HCB	Storm Sewer		107	L/R	5	348	0	8.0	0	0	0	0	99.0	20	10	9	348	384	424	468
5130	PLEASANT ST	E END	JOHN ST	2	Semi Urban	HCB	Ditch Sewer	Earth	160	L/R	6	74	8.1	7.0	0	0	0	0	74.8	15	9	8	74	82	90	100
5120	PLEASANT ST	JOHN ST	BRIDGE STREET	2	Semi Urban	HCB	Ditch Sewer	Earth	246	L/R	6	74	7.5	6.0	0	0	0	0	83.8	17	9	8	74	82	90	100
5125	PLEASANT ST	BRIDGE STREET	LONGWOODS RD	2	Urban	HCB	Open Ditch	Gravel	29	L/R	6	74	9	7.0	0	0	0	0	88.3	18	9	8	74	82	90	100
5110	PLEASANT ST	PLEASANT ST	LONGWOODS RD	2	Urban	HCB	Ditch Sewer	Gravel	39	L/R	6	181	9	7.0	0	0	0	0	83.8	17	9	8	181	200	221	244
2900	POPLAR HILL RD	ILDERTON RD	ZAVITZ DR	2	Rural	LCB	Open Ditch	Gravel	434	400	4	671	9.3	7.0	0	0	0	0	83.3	16	9	8	671	741	818	903
2910	POPLAR HILL RD	ZAVITZ DR	HEDLEY DR	2	Rural	HCB	Open Ditch	Gravel	928	400	4	525	8.8	7.0	0	0	0	0	92.8	19	9	9	525	580	640	707
2920	POPLAR HILL RD	HEDLEY DR	CHARLTON DR	2	Rural	HCB	Open Ditch	Gravel	1364	400	4	500	9.1	7.0	0	0	0	0	92.8	19	9	9	500	552	609	673
2930	POPLAR HILL RD	CHARLTON DR	GREYSTEAD DR	2	Rural	HCB	Open Ditch	Gravel	1364	400	4	466	10.1	7.0	0	0	0	0	92.8	19	9	9	466	515	568	627
2940	POPLAR HILL RD	GREYSTEAD DR	MCEWEN DR	2	Rural	HCB	Open Ditch	Gravel	1372	300	4	358	9.1	7.0	0	0	0	0	99.0	20	10	9	358	395	436	482
2950	POPLAR HILL RD	MCEWEN DR	FERNHILL DR	2	Rural	HCB	Open Ditch	Gravel	1365	300	4	296	9.1	7.0	0	0	0	0	99.0	20	10	9	296	327	361	398
5520	PRINCE ALBERT ST	WELLINGTON ST	PRINCE OF WALES ST	2	Semi Urban	HCB	No Drainage	Earth	189	L/R	5	319	7.8	6.0	0	0	0	0	76.9	16	8	8	319	352	389	429
5510	PRINCE ALBERT ST	PRINCE OF WALES ST	MILLMANOR PL	2	Semi Urban	HCB	No Drainage	Earth	60	L/R	5	321	7.8	6.0	0	0	0	0	81.4	17	8	8	321	354	391	432
5500	PRINCE ALBERT ST	MILLMANOR PL	LONGWOODS RD	2	Semi Urban	HCB	No Drainage	Earth	114	L/R	5	528	7.8	6.0	0	0	0	0	81.4	17	8	8	528	583	644	711
5540	PRINCE OF WALES ST	VICTORIA ST	PRINCE ALBERT ST	2	Semi Urban	HCB	No Drainage	Earth	120	L/R	6	134	7.7	6.0	0	0	0	0	72.4	15	8	8	134	148	163	180
6470	PRINCE ST	N END	DUKE ST	2	Urban	HCB	Storm Sewer		264	L/R	5	406	0	8.0	0	0	0	0	85.9	18	8	8	406	448	495	546
6460	PRINCE ST	DUKE ST	HAMILTON ST	2	Urban	HCB	Storm Sewer		142	L/R	5	694	0	8.0	0	0	0	0	99.0	20	10	9	694	766	846	934
6455	PRINCE ST	HAMILTON ST	CAVERHILL CRES	2	Urban	HCB	Storm Sewer		67	L/R	5	694	0	8.0	0	0	0	0	88.3	18	9	8	694	766	846	934
6360	PRINCESS AVE	DELAWARE ST N	KOMOKA RD	2	Semi Urban	HCB	Open Ditch	Earth	177	L/R	6	62	7.4	6.0	0	0	0	0	58.9	12	8	7	62	68	76	83
50029	PROSPECT HILL RD	ELGINFIELD RD	SIXTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	950	500	3	1282	10.8	7.0	1	0	0	0	67.9	14	8	8	1282	1415	1563	1725
50028	PROSPECT HILL RD	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1632	500	3	1282	11	7.1	1	0	0	0	67.9	14	8	8	1282	1415	1563	1725
50027	PROSPECT HILL RD	FIFTEEN MILE RD	EBENEZER DR	2	Rural	LCB	Open Ditch	Gravel	868	500	3	1282	10.4	7.1	1	0	0	0	74.8	15	9	8	1282	1415	1563	1725
50026	PROSPECT HILL RD	EBENEZER DR	FOURTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	561	500	3	1282	10.2	7.0	1	0	0	0	74.8	15	9	8	1282	1415	1563	1725
50025	PROSPECT HILL RD	FOURTEEN MILE RD	THIRTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1400	500	3	1282	10.7	7.0	1	0	0	0	67.9	14	8	8	1282	1415	1563	1725
50024	PROSPECT HILL RD	THIRTEEN MILE RD	-PLOVER MILLS RD	2	Rural	LCB	Open Ditch	Gravel	1300	500	3	1282	10.8	7.1	1	0	0	0	63.4	13	8	8	1282	1415	1563	1725
30270	PROSPECT HILL RD	PLOVER MILLS ROAD	ILDERTON RD	2	Rural	LCB	Open Ditch	Gravel	1423	500	3	1245	8	8.0	0	0	0	0	59.2	11	8	8	1245	1375	1518	1676
30260	PROSPECT HILL RD	ILDERTON RD	TEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1388	500	3	1282	10.1	8.0	0	0	0	0	63.7	12	8	7	1282	1415	1563	1725
30240	PROSPECT HILL RD	TEN MILE ROAD	NINE MILE RD	2	Rural	LCB	Open Ditch	Gravel	1398	500	3	1319	10.1	8.0	0	0	0	0	57.6	11	7	7	1319	1456	1608	1775
30230	PROSPECT HILL RD	NINE MILE RD	EIGHT MILE RD	2	Rural	LCB	Open Ditch	Gravel	1379	500	3	1340	10.1	8.0	0	0	0	0	68.2	13	8	7	1340	1479	1633	1803
30220	PROSPECT HILL RD	EIGHT MILE RD	THORNDALE RD	2	Rural	LCB	Open Ditch	Gravel	592	500	3	1410	10.1	8.0	0	0	1	0	68.2	13	8	8	1410	1557	1719	1898
3470	PULHAM RD	VANNECK RD	OLD RIVER RD	2	Rural	LCB	Open Ditch	Gravel	378	500	3	1406	8.9	6.0	0	0	1	0	92.3	18	9	7	1406	1552	1714	1892
3460	PULHAM RD	OLD RIVER RD	S END	2	Rural	LCB	Open Ditch	Gravel	474	100	6	42	5.9	5.0	1	0	0	0	9							

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AAAD 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AAAD 2022 (%)	AAAD 2027	AAAD 2032	AAAD 2037
660	SHARON DR	TWP LIMIT	WOODHULL RD	2	Rural	LCB	Open Ditch	Gravel	728	500	3	1150	10.8	7.0	0	0	0	0	54.4	11	8	8	1150	1270	1402	1548
650	SHARON DR	WOODHULL RD	BRIGHAM RD	2	Rural	LCB	Open Ditch	Gravel	341	500	3	1165	10.5	7.0	0	0	0	0	67.9	14	8	8	1165	1286	1420	1568
640	SHARON DR	BRIGHAM RD	HWY 402 W	2	Rural	LCB	Open Ditch	Gravel	377	500	3	1021	10.5	7.0	0	0	0	0	70.3	14	9	8	1021	1127	1245	1374
620	SHARON DR	HWY 402 E	BELLS RD	2	Rural	LCB	Open Ditch	Gravel	594	500	3	1021	10.6	7.0	0	0	0	0	79.3	16	9	8	1021	1127	1245	1374
610	SHARON DR	BELLS RD	CARRIAGE RD	2	Rural	LCB	Open Ditch	Gravel	1338	400	4	789	11.2	7.0	0	0	0	0	79.3	16	9	8	789	871	962	1062
600	SHARON DR	CARRIAGE RD	SPRINGER RD	2	Rural	LCB	Open Ditch	Gravel	1417	300	4	296	9.2	7.0	0	0	0	0	83.3	16	9	8	296	327	361	398
2680	SIDDALL RD	VANNECK RD	FERNHILL DR	2	Rural	Gravel	Open Ditch	Gravel	831	200	4	144	0	7.0	0	0	0	0		13	8	7	144	159	176	194
6060	SIMCOE AVE	QUEEN ST	SIMCOE CRES	2	Urban	LCB	Storm Sewer		332	L/R	5	838	8.9	8.0	0	0	0	0	72.4	15	8	8	838	925	1022	1128
6050	SIMCOE AVE	SIMCOE CRES	DELAWARE ST N	2	Urban	LCB	Storm Sewer		113	L/R	5	440	9.1	8.0	0	0	0	0	72.4	15	8	8	440	486	536	592
6040	SIMCOE AVE	DELAWARE ST N	KOMOKA RD	2	Semi Urban	LCB	Storm Sewer	Gravel	184	L/R	5	238	7.3	6.0	0	0	0	0	67.9	14	8	8	238	263	290	320
6150	SIMCOE CRES	QUEEN ST	SIMCOE PL	2	Semi Urban	LCB	Open Ditch	Earth	78	L/R	5	279	7.8	6.0	0	0	0	0	63.4	13	8	8	279	308	340	375
6140	SIMCOE CRES	SIMCOE PL	SIMCOE CRT	2	Semi Urban	LCB	Open Ditch	Earth	98	L/R	5	214	7.9	6.0	0	0	0	0	63.4	13	8	8	214	236	261	288
6130	SIMCOE CRES	SIMCOE CRT	SPRINGER ST	2	Semi Urban	LCB	Open Ditch	Gravel	65	L/R	6	182	8.3	6.0	0	0	0	0	58.9	12	8	8	182	201	222	245
6120	SIMCOE CRES	SPRINGER ST	SIMCOE AVE	2	Semi Urban	LCB	Open Ditch	Earth	215	L/R	6	184	7.9	6.0	0	0	0	0	58.9	12	8	8	184	203	224	248
6170	SIMCOE CRT	N END	SIMCOE CRES	2	Semi Urban	LCB	Open Ditch	Earth	85	L/R	6	118	7.7	6.0	0	0	0	0	49.9	10	8	7	118	130	144	159
6160	SIMCOE PL	SIMCOE CRES	S END	2	Semi Urban	LCB	Open Ditch	Earth	69	L/R	6	101	7.6	6.0	0	0	0	0	54.4	11	8	7	101	112	123	136
1550	SINCLAIR DR	VANNECK RD	BEAR CREEK RD	2	Rural	Gravel	Open Ditch	Gravel	1098	200	4	138	0	5.0	0	0	0	0		12	7	7	138	152	168	186
1540	SINCLAIR DR	BEAR CREEK RD	NAIRN RD	2	Rural	LCB	Open Ditch	Gravel	2444	200	4	193	9	6.0	0	0	0	0	92.3	18	9	8	193	213	235	260
1530	SINCLAIR DR	NAIRN RD	COLDSTREAM RD	2	Rural	Gravel	Open Ditch	Gravel	2437	100	6	46	0	5.0	0	0	0	0		15	8	8	46	51	56	62
1520	SINCLAIR DR	COLDSTREAM RD	EGREMONT DR	2	Rural	Gravel	Open Ditch	Gravel	345	200	4	115	0	6.0	0	0	0	0		15	8	8	115	127	140	155
1510	SINCLAIR DR	EGREMONT DR	KOMOKA RD	2	Rural	Gravel	Open Ditch	Gravel	2100	200	4	98	0	6.0	0	0	0	0		10	7	7	98	108	119	132
1500	SINCLAIR DR	KOMOKA RD	AMIENS RD	2	Rural	Gravel	Open Ditch	Gravel	2440	200	4	88	0	6.0	0	0	0	0		7	7	7	88	97	107	118
9450	SIR JAMES CRT	E END	SIR ROBERT PL	2	Urban	LCB	Storm Sewer		229	L/R	6	188	0	8.0	0	0	0	0	94.5	19	10	9	188	208	229	253
9480	SIR ROBERT PL	E END	SIR JAMES CRT	2	Urban	LCB	Storm Sewer		528	L/R	6	121	0	8.0	0	0	0	0	94.5	19	10	9	121	134	147	163
9470	SIR ROBERT PL	SIR JAMES CRT	ELGIN ST	2	Urban	LCB	Storm Sewer		46	L/R	6	121	0	8.0	0	0	0	0	99.0	20	10	9	121	134	147	163
2770	SIXTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2	Rural	Gravel	Open Ditch	Gravel	2414	200	4	68	0	5.0	0	0	0	0		16	8	8	68	75	83	92
2760	SIXTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2	Rural	Gravel	Open Ditch	Gravel	2459	200	4	61	0	6.0	0	0	0	0		15	8	8	61	67	74	82
2750	SIXTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2	Rural	Gravel	Open Ditch	Gravel	2456	200	4	78	0	6.0	0	0	0	0		16	8	8	78	86	95	105
2740	SIXTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	Gravel	Open Ditch	Gravel	2457	200	4	127	0	6.0	0	0	0	0		15	8	8	127	140	155	171
2730	SIXTEEN MILE RD	RICHMOND ST	WONDERLAND RD N	2	Rural	Gravel	Open Ditch	Gravel	2457	200	4	87	0	6.0	0	0	0	0		15	8	8	87	96	106	117
2720	SIXTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	Gravel	Open Ditch	Gravel	2467	200	4	85	0	6.0	0	0	0	0		15	8	8	85	94	104	114
2710	SIXTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	Gravel	Open Ditch	Gravel	2462	200	4	127	0	6.0	0	0	0	0		15	8	8	127	140	155	171
2700	SIXTEEN MILE RD	DENFIELD RD	MILL LANE	2	Rural	LCB	Open Ditch	Gravel	1833	200	4	116	7.6	7.0	0	0	0	0	63.7	12	8	7	116	128	141	156
2690	SIXTEEN MILE RD	MILL LANE	VANNECK RD	2	Rural	LCB	Open Ditch	Gravel	426	200	4	116	8.3	7.0	0	0	0	0	63.7	12	8	8	116	128	141	156
30320	SOUTHDEL BRNE	BELLS RD	SOUTHMINSTER BRNE	2	Rural	LCB	Open Ditch	Gravel	531	400	4	669	8.8	7.0	0	0	0	0	92.3	18	9	8	669	739	816	900
30310	SOUTHDEL BRNE	CARRIAGE RD	BELLS RD	2	Rural	LCB	Open Ditch	Gravel	1394	400	4	523	8.8	7.0	0	0	0	0	92.3	18	9	7	523	577	638	704
30300	SOUTHDEL BRNE	BODKIN RD	CARRIAGE RD	2	Rural	LCB	Open Ditch	Gravel	1389	400	4	622	9.2	8.0	0	0	0	0	92.3	18	9	8	622	687	758	837
50040	SOUTHDEL DR	BODKINS RD	FAIRGROUNDS RD	2	Rural	Gravel	Open Ditch	Gravel	1395	200	4	150	0	8.0	0	0	0	0		9	8	7	150	166	183	202
50041	SOUTHDEL DR	FAIRGROUNDS RD	BALL PARK RD	2	Rural	Gravel	Open Ditch	Gravel	1382	200	4	150	0	7.9	0	0	0	0		8	7	7	150	166	183	202
50042	SOUTHDEL DR	BALL PARK RD	RIVER RD	2	Rural	Gravel	Open Ditch	Gravel	646	200	4	150	0	8.0	0	0	0	0		9	7	7	150	166	183	202
50043	SOUTHDEL DR	RIVER RD	END OF ROAD (WEST LIMIT)	2	Rural	Gravel	Open Ditch	Gravel	1934	200	4	150	0	7.2	0	0	0	0		8	7	7	150	166	183	202
890	SPRINGER RD	LONGWOODS RD	WILLIAM ST	2	Urban	LCB	Storm Sewer		275	C/R	5	1259	0	8.0	0	0	0	0	88.3	18	9	8	1259	1390	1535	1694
880	SPRINGER RD	WILLIAM ST	TOWERLINE RD	2	Rural	LCB	Open Ditch	Gravel	94	400	4	822	0	7.0	0	0	0	0	77.2	15	8	8	822	908	1002	1106
870	SPRINGER RD	TOWERLINE RD	MILLER RD	2	Rural	LCB	Open Ditch	Gravel	209	400	5	427	9	6.0	0	0	0	0	72.7	14	8	8	427	471	521	575
860	SPRINGER RD	MILLER RD	HWY 402 W	2	Rural	LCB	Open Ditch	Gravel	907	300	4	373	8.7	7.0	0	0	0	0	59.2	11	8	8	373	412	455	502
850	SPRINGER RD	HWY 402 W	HWY 402 E	2	Rural	LCB	Open Ditch	Gravel	31	300	4	373	8.2	6.0	0	0	0	0	62.1	12	7	7	373	412	455	502
840	SPRINGER RD	HWY 402 E	HEATLY DR	2	Rural	LCB	Open Ditch	Gravel	615	300	4	373	8.2	6.0	0	0	0	0	59.2	11	8	8	373	412	455	502
830	SPRINGER RD	HEATLY DR	SHARON DR	2	Rural	LCB	Open Ditch	Gravel	861	200	4	64	7.9	6.0	0	0	0	0	63.7	12	8	8	64	71	78	86
820	SPRINGER RD	HEATLY DR	SHARON DR	2	Rural	Gravel	Open Ditch	Gravel	904	300	4	267	0	4.0	2	0	1	0		15	8	8	267	295	325	359
6110	SPRINGER ST	SIMCOE CRES	ST LAWRENCE AVE	2	Semi Urban	LCB	Ditch Sewer	Gravel	96	L/R	5	401	6.5	5.0	0	0	0	0	40.9	8	8	7	401	443	489	540
6100	SPRINGER ST	ST LAWRENCE AVE	HURON AVE	2	Semi Urban	LCB	Open Ditch	Earth	127	L/R	6	181	6.9	6.0	0	0	0	0	58.9	12	8	8	181	200	221	244
5770	SPRINGER ST	RAILWAY AVE	ONTARIO AVE	2	Semi Urban	LCB	Open Ditch	Earth	130	L/R	6	117	6.8	6.0	0	0	0	0	54.4	11	8	7	117	129	143	157
5760	SPRINGER ST	ONTARIO AVE	ERIE AVE	2	Semi Urban	LCB	Open Ditch	Earth	132	L/R	6	193	6.9	6.0	0	0	0	0	67.9	14	8	8	193	213	235	260
5750	SPRINGER ST	ERIE AVE	THAMES AVE	2	Semi Urban	LCB	Open Ditch	Gravel	143	L/R	6	182	7.1	6.0	0	0	0	0	54.4	11	8	7	182	201	222	245
5740	SPRINGER ST	THAMES AVE	GLENDON DR	2	Semi Urban	LCB	Open Ditch	Earth	112	L/R	5	208	7.2	6.0	0	0	0	0	49.9	10	8	7	208	230	254	280
7690	SPRINGFIELD WAY	GLENDON DR	DOAN DR	2	Urban	LCB	Storm Sewer		143	L/R	5	812	0	8.0	0	0	0	0	46.8	10	7	7	812	897	990	1093
7692	SPRINGFIELD WAY	DOAN DR	WILLARD CRES	2	Urban	LCB	Storm Sewer		64	L/R	5	603	0	8.0	0	0	0	0	54.4	11	8	8	603	666	735	812
7696	SPRINGFIELD WAY	WILLARD CRES	WILLARD CRES	2	Urban	LCB	Storm Sewer		113	L/R	5	263	0	8.0	0	0	0	0	54.4	11	8	7	263	290	321	354
6030	ST CLAIR AVE	DELAWARE ST N	KOMOKA RD	2	Semi Urban	LCB	Ditch Sewer	Earth	174	L/R	6	136	7.2	6.0	0	0	0	0	37.8	8	7	7	136	150	166	183

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (%)	AADT 2027	AADT 2032	AADT 2037
8920	STONERIDGE CRES	CALVERT DR	CALVERT DR	2	Urban	HCB	Storm Sewer		341	L/R	6	83	0	8.0	0	0	0	0	58.9	12	8	7	83	92	101	112
1205	SUNNINGDALE RD W	1.8 KM EAST OF DENFIELD RD	DENFIELD RD	2	Rural	HCB	Open Ditch	Gravel	678	500	3	1377	9.2	7.0	0	0	0	0	67.3	14	8	8	1377	1520	1679	1853
1200	SUNNINGDALE RD W	DENFIELD RD	VANNECK RD	2	Rural	LCB	Open Ditch	Gravel	2272	500	3	1202	9.6	7.0	0	0	0	0	92.3	18	9	7	1202	1327	1465	1618
30285	SWAMP COLLEGE ROAD	PROSPRECT HILL ROAD	W END	2	Rural	LCB	Open Ditch	Gravel	236	100	6	20	6.8	4.0	0	0	0	0	39.6	7	7	7	20	22	24	27
8240	SYDENHAM DR	LEWIS DR	ASHLEY LANE	2	Urban	HCB	Storm Sewer		316	L/R	5	447	0	8.0	0	0	0	0	63.4	13	8	8	447	494	545	602
1830	TEN MILE RD	PROSPECT HILL RD	CLARKE RD	2	Rural	Gravel	Open Ditch	Gravel	2468	200	4	74	0	6.0	0	0	0	0	17	8	8	8	74	82	90	100
1820	TEN MILE RD	CLARKE RD	HIGHBURY AVE N	2	Rural	Gravel	Open Ditch	Gravel	2469	200	4	101	0	6.0	0	0	0	0	16	8	8	8	101	112	123	136
1810	TEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2	Rural	Gravel	Open Ditch	Gravel	2472	200	4	123	0	6.0	0	0	0	0	14	7	8	8	123	136	150	166
1800	TEN MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	LCB	Open Ditch	Gravel	2377	200	4	181	7.8	7.0	0	0	0	0	63.7	12	8	8	181	200	221	244
1795	TEN MILE RD	RICHMOND ST	220 m WEST OF RICHMOND ST	2	Rural	LCB	Open Ditch	Gravel	220	200	4	86	7	6.0	0	0	0	0	72.7	14	8	8	86	95	105	116
1790	TEN MILE RD	220 m WEST OF RICHMOND ST	WONDERLAND RD N	2	Rural	Gravel	Open Ditch	Gravel	2254	200	4	86	0	6.0	0	0	0	0	15	8	8	8	86	95	105	116
1780	TEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	Gravel	Open Ditch	Gravel	2459	200	4	90	0	7.0	0	0	0	0	15	8	8	8	90	99	110	121
1770	TEN MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	Gravel	Open Ditch	Gravel	2469	200	4	98	0	7.0	0	0	0	0	14	8	8	8	98	108	119	132
1760	TEN MILE RD	DENFIELD RD	VANNECK RD	2	Rural	Gravel	Open Ditch	Gravel	2272	200	4	61	0	6.0	0	0	0	0	15	8	8	8	61	67	74	82
5870	THAMES AVE	SPRINGER ST	DELAWARE ST S	2	Semi Urban	HCB	Open Ditch	Earth	188	L/R	6	101	6.6	6.0	0	0	0	0	54.4	11	8	7	101	112	123	136
5860	THAMES AVE	DELAWARE ST S	KOMOKA RD	2	Semi Urban	HCB	Open Ditch	Earth	185	L/R	6	91	6.8	6.0	0	0	0	0	54.4	11	8	7	91	100	111	122
5290	THAMES ST	ATKINSON CRT	YOUNG ST	2	Urban	HCB	Storm Sewer		266	L/R	6	181	0	7.0	0	0	0	0	54.4	11	8	8	181	200	221	244
8250	THIRLWALL BLVD	CAMPBELL CRES	ILDERTON RD	2	Urban	HCB	Storm Sewer		132	L/R	5	277	0	10.0	0	0	0	0	58.9	12	8	7	277	306	338	373
2270	THIRTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2	Rural	LCB	Open Ditch	Gravel	2421	200	4	191	7.9	7.0	0	0	0	0	63.7	12	8	7	191	211	233	257
2260	THIRTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2	Rural	LCB	Open Ditch	Gravel	2449	300	4	226	7.3	6.0	0	0	0	0	72.7	14	8	8	226	250	275	304
2250	THIRTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2	Rural	LCB	Open Ditch	Gravel	2467	300	4	269	9	7.0	0	0	0	0	59.2	11	8	8	269	297	328	362
2240	THIRTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	LCB	Open Ditch	Gravel	2461	300	4	392	9.1	6.0	0	0	0	0	39.6	7	7	7	392	433	478	528
2230	THIRTEEN MILE RD	RICHMOND ST	GWENDOLYN ST	2	Rural	HCB	Open Ditch	Gravel	159	400	5	410	8.2	7.0	0	0	0	0	88.3	18	9	8	410	453	500	552
2220	THIRTEEN MILE RD	GWENDOLYN ST	SALISBURY DR	2	Rural	HCB	Ditch Sewer	Gravel	197	400	5	410	8.9	7.0	0	0	0	0	94.5	19	10	9	410	453	500	552
2210	THIRTEEN MILE RD	SALISBURY DR	SALISBURY DR	2	Rural	HCB	Ditch Sewer	Gravel	194	400	5	410	8.7	7.0	0	0	0	0	99.0	20	10	9	410	453	500	552
2205	THIRTEEN MILE RD	SALISBURY DR	615 m WEST OF SALISBURY DR	2	Rural	LCB	Open Ditch	Gravel	1902	400	5	410	9.6	7.0	0	0	0	0	86.2	17	8	8	410	453	500	552
2200	THIRTEEN MILE RD	615 m WEST OF SALISBURY DR	WONDERLAND RD N	2	Rural	LCB	Open Ditch	Gravel	1902	400	4	410	9.6	7.0	0	0	0	0	71.1	14	7	8	410	453	500	552
2190	THIRTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	LCB	Open Ditch	Gravel	2455	300	4	291	9.8	7.0	0	0	0	0	35.1	6	7	7	291	321	355	392
2180	THIRTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	LCB	Open Ditch	Gravel	2460	200	4	188	9	7.0	0	0	0	0	45.7	8	8	7	188	208	229	253
2170	THIRTEEN MILE RD	DENFIELD RD	VANNECK RD	2	Rural	LCB	Open Ditch	Gravel	2291	200	4	118	7.6	6.0	0	0	0	0	83.3	16	9	8	118	130	144	159
3490	THODY LANE	VANNECK RD	E END	2	Rural	HCB	Open Ditch	Earth	564	200	5	60	7.5	6.0	1	0	0	0	36.4	7	8	7	60	66	73	81
50075	TIMBERWALK TR	ILDERTON RD	ARROWOOD PATH	0	Urban	HCB	Storm Sewer		339	L/R	5	769	0	8.0	0	0	0	0	99.0	20	10	9	769	849	937	1035
5000	TOWERLINE RD	HIGHLAND RD	SPRINGER RD	2	Urban	HCB	Storm Sewer		235	L/R	6	165	0	8.0	0	0	0	0	94.5	19	10	8	165	182	201	222
9000	TRILLIUM CRT	E END	CALVERT DR	2	Urban	HCB	Storm Sewer		111	L/R	6	65	0	8.0	0	0	0	0	72.4	15	8	8	65	72	79	87
5855	TUNKS LINE	GLENDON DR	229 N OF GLENDON DR	2	Semi Urban	HCB	Open Ditch	Gravel	229	C/R	5	1380	13.6	12.0	0	0	0	0	81.4	17	8	8	1380	1524	1682	1857
5850	TUNKS LINE	229 N OF GLENDON DR	RAILWAY AVE	2	Rural	HCB	Storm Sewer	Gravel	282	500	5	1380	13.6	12.0	0	0	0	0	72.4	15	8	8	1380	1524	1682	1857
2085	TWELVE MILE RD	HIGHBURY AVE N	650 M WEST OF HIGHBURY AVE N	2	Rural	LCB	Open Ditch	Gravel	644	200	4	144	8.1	6.0	0	0	0	0	44.1	8	7	7	144	159	176	194
2080	TWELVE MILE RD	650 M WEST OF HIGHBURY AVE N	ADELAIDE ST N	2	Rural	Gravel	Open Ditch	Gravel	1821	200	4	144	0	6.0	0	0	0	0	12	7	7	7	144	159	176	194
2070	TWELVE MILE RD	ADELAIDE ST N	RICHMOND ST	2	Rural	Gravel	Open Ditch	Gravel	2452	200	4	124	0	6.0	0	0	0	0	15	8	8	8	124	137	151	167
2060	TWELVE MILE RD	RICHMOND ST	WONDERLAND RD N	2	Rural	Gravel	Open Ditch	Gravel	2477	200	4	140	0	6.0	0	0	0	0	15	8	8	8	140	155	171	188
2050	TWELVE MILE RD	WONDERLAND RD N	HYDE PARK RD	2	Rural	Gravel	Open Ditch	Gravel	2469	400	4	461	0	6.0	0	0	0	0	13	7	8	8	461	509	562	620
2040	TWELVE MILE RD	HYDE PARK RD	DENFIELD RD	2	Rural	Gravel	Open Ditch	Gravel	2466	300	4	202	0	6.0	0	0	0	0	15	8	8	8	202	223	246	272
2030	TWELVE MILE RD	DENFIELD RD	VANNECK RD	2	Rural	Gravel	Open Ditch	Gravel	2264	200	4	136	0	6.0	0	0	0	0	16	8	8	8	136	150	166	183
6436	UNION AVE	OXBOW DRIVE	VALLEYVIEW CRES	2	Urban	HCB	Storm Sewer		270	L/R	5	274	0	8.0	0	0	0	0	85.9	18	8	9	274	303	334	369
6434	UNION AVE	VALLEYVIEW CRES	VALLEYVIEW CRES	2	Urban	HCB	Storm Sewer		251	L/R	5	274	0	8.0	0	0	0	0	90.4	19	8	9	274	303	334	369
6432	UNION AVE	VALLEYVIEW CRES	60 m EAST OF PARKVIEW DR	2	Urban	HCB	Storm Sewer		38	L/R	5	395	8.4	7.0	0	0	0	0	99.0	20	10	9	395	436	482	532
6430	UNION AVE	60 m EAST OF PARKVIEW DR	PARKVIEW DR	2	Semi Urban	HCB	Open Ditch	Gravel	60	L/R	5	265	8.4	7.0	0	0	0	0	58.9	12	8	7	265	293	323	357
6420	UNION AVE	PARKVIEW DR	OAKCREST DR	2	Semi Urban	HCB	Open Ditch	Earth	269	L/R	5	285	8.4	7.0	0	0	0	0	54.4	11	8	7	285	315	347	384
6410	UNION AVE	OAKCREST DR	DELAWARE ST N	2	Semi Urban	HCB	Open Ditch	Gravel	115	L/R	5	305	8.4	7.0	0	0	0	0	49.9	10	8	7	305	337	372	410
6405	UNION AVE	DELAWARE ST N	HEATHER PL	2	Urban	HCB	Storm Sewer		103	L/R	5	450	0	8.0	0	0	0	0	88.3	18	9	10	450	497	549	606
6400	UNION AVE	HEATHER PL	KOMOKA RD	2	Urban	HCB	Storm Sewer		79	L/R	5	378	0	8.0	0	0	0	0	88.3	18	9	8	378	417	461	

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (%)	AADT 2027	AADT 2032	AADT 2037
930	VICTORIA ST	YOUNG ST	WELLINGTON ST	2	Semi Urban	HC	Open Ditch	Gravel	386	L/R	5	363	7	6.0	0	0	0	0	67.9	14	8	8	363	401	442	489
920	VICTORIA ST	WELLINGTON ST	WELLINGTON ST	2	Urban	HC	Storm Sewer		52	C/R	5	1031	0	8.0	0	0	0	0	99.0	20	10	9	1031	1138	1257	1388
910	VICTORIA ST	WELLINGTON ST	PRINCE OF WALES ST	2	Urban	HC	Storm Sewer		121	L/R	5	851	8.5	8.0	0	0	0	0	99.0	20	10	9	851	940	1037	1145
900	VICTORIA ST	PRINCE OF WALES ST	LONGWOODS RD	2	Urban	HC	Storm Sewer		183	L/R	5	998	0	8.0	0	0	0	0	94.5	19	10	9	998	1102	1217	1343
8990	WARBLER CIR	CALVERT DR	W END	2	Urban	HC	Storm Sewer		48	L/R	6	110	0	8.0	0	0	0	0	79.3	16	9	8	110	121	134	148
9430	WELDON AVE	ARVA ST	W END	2	Urban	HC	Storm Sewer		180	L/R	6	148	0	8.0	0	0	0	0	79.3	16	9	8	148	163	180	199
440	WELDON WAY	COOK RD	WESTDEL BRNE	2	Rural	Gravel	Open Ditch	Gravel	913	200	4	65	0	5.0	1	0	0	0		18	8	8	65	72	79	87
5475	WELLINGTON ST	E END	65 M EAST OF MARTIN RD	2	Semi Urban	LCB	Open Ditch	Earth	284	L/R	5	516	5.4	4.0	0	0	0	0	54.7	10	8	8	516	570	629	694
5470	WELLINGTON ST	65 M EAST OF MARTIN ROAD	MARTIN RD	2	Semi Urban	LCB	Ditch Sewer	Earth	66	L/R	5	516	5.4	4.0	0	0	0	0	53.1	10	7	8	516	570	629	694
5460	WELLINGTON ST	MARTIN RD	VICTORIA ST	2	Urban	HC	Storm Sewer		729	L/R	5	345	0	8.0	0	0	0	0	92.8	19	9	8	345	381	421	464
5450	WELLINGTON ST	VICTORIA ST	85 M WEST OF PRINCE ALBERT ST	2	Semi Urban	HC	Ditch Sewer	Earth	118	L/R	5	424	8.5	6.0	0	0	0	0	70.3	14	9	8	424	468	517	571
5435	WELLINGTON ST	85 M WEST OF PRINCE ALBERT ST	PRINCE ALBERT ST	2	Semi Urban	HC	Open Ditch	Earth	87	L/R	6	90	8	6.0	0	0	0	0	67.9	14	8	8	90	99	110	121
5440	WELLINGTON ST	PRINCE ALBERT ST	DAVIS ST	2	Semi Urban	HC	Ditch Sewer	Earth	75	L/R	5	526	7.8	6.0	0	0	0	0	72.4	15	8	8	526	581	641	708
5430	WELLINGTON ST	DAVIS ST	HILLCREST AVE	2	Urban	HC	Storm Sewer		361	L/R	5	484	0	7.0	0	0	1	0	58.9	12	8	8	484	534	590	651
5410	WELLINGTON ST	HILLCREST AVE	YORK ST	2	Urban	HC	Storm Sewer		87	L/R	5	791	0	7.0	0	0	0	0	99.0	20	10	10	791	873	964	1065
5400	WELLINGTON ST	YORK ST	GIDEON DR	2	Semi Urban	HC	No Drainage	Earth	123	L/R	5	261	7.2	6.0	0	0	0	0	99.0	20	10	8	261	288	318	351
5390	WELLINGTON ST	GIDEON DR	W END	2	Semi Urban	HC	Open Ditch	Gravel	71	L/R	6	112	7.8	6.0	0	0	0	0	76.5	15	10	10	112	124	137	151
7470	WESTBROOK CRES	WESTBROOK DR	BLACKBURN CRES	2	Urban	HC	Storm Sewer		307	L/R	5	270	0	8.0	0	0	0	0	88.3	18	9	8	270	298	329	363
7480	WESTBROOK CRES	BLACKBURN CRES	WESTBROOK DR	2	Urban	HC	Storm Sewer		314	L/R	5	452	0	8.0	0	0	0	0	92.8	19	9	8	452	499	551	608
7450	WESTBROOK CRES	WESTBROOK DR	WOODLAND DR	2	Urban	HC	Storm Sewer		120	L/R	5	341	0	8.0	0	0	0	0	99.0	20	10	9	341	376	416	459
7460	WESTBROOK CRES	WOODLAND DR	BIRCHCREST DR	2	Urban	HC	Storm Sewer		124	L/R	5	232	0	9.0	0	0	0	0	99.0	20	10	9	232	256	283	312
7200	WESTBROOK DR	KILWORTH PARK DR	PHEASANT TRAIL	2	Urban	HC	Storm Sewer		95	C/R	5	1304	0	8.0	0	0	0	0	99.0	20	10	9	1304	1440	1590	1755
7190	WESTBROOK DR	PHEASANT TRAIL	WESTBROOK CRES	2	Urban	HC	Storm Sewer		126	C/R	5	1119	0	8.0	0	0	0	0	99.0	20	10	9	1119	1235	1364	1506
7180	WESTBROOK DR	WESTBROOK CRES	WESTBROOK CRES	2	Urban	HC	Storm Sewer		360	L/R	5	866	0	8.0	0	0	0	0	92.8	19	9	9	866	956	1056	1166
7170	WESTBROOK DR	WESTBROOK CRES	JEFFERIES RD	2	Urban	HC	Storm Sewer		227	L/R	5	965	0	8.0	0	0	0	0	99.0	20	10	9	965	1065	1176	1299
7160	WESTBROOK DR	JEFFERIES RD	WINONA RD	2	Urban	HC	Storm Sewer		68	L/R	5	769	0	8.0	0	0	0	0	99.0	20	10	9	769	849	937	1035
7150	WESTBROOK DR	WINONA RD	STEPHEN MOORE DR	2	Urban	HC	Storm Sewer		297	L/R	5	591	0	8.0	0	0	0	0	99.0	20	10	9	591	653	720	795
7140	WESTBROOK DR	STEPHEN MOORE DR	W END	2	Urban	HC	Storm Sewer		52	L/R	5	591	0	8.0	0	0	0	0	83.8	17	9	8	591	653	720	795
270	WESTDEL BRNE	TWP LIMIT	RANGER DR	2	Rural	LCB	Open Ditch	Gravel	700	400	4	702	8.9	7.0	0	0	0	0	72.7	14	8	8	702	775	856	945
260	WESTDEL BRNE	RANGER DR	DECKER DR	2	Rural	LCB	Open Ditch	Gravel	542	400	4	822	9.3	7.0	0	0	0	0	72.7	14	8	8	822	908	1002	1106
250	WESTDEL BRNE	DECKER DR	LITTLEWOOD DR	2	Rural	LCB	Open Ditch	Gravel	1470	400	4	762	9.3	7.0	0	0	0	0	72.7	14	8	8	762	841	929	1026
220	WESTDEL BRNE	LITTLEWOOD DR	LITTLE CHURCH DR	2	Rural	Gravel	Open Ditch	Gravel	1194	200	4	126	0	7.0	0	0	0	0		16	8	8	126	139	154	170
210	WESTDEL BRNE	LITTLE CHURCH DR	WELDON WAY	2	Rural	Gravel	Open Ditch	Gravel	865	200	4	103	0	6.0	0	0	0	0		16	8	8	103	114	126	139
200	WESTDEL BRNE	WELDON WAY	SOUTHMINSTER BRNE	2	Rural	Gravel	Open Ditch	Gravel	1398	200	4	111	0	6.0	0	0	0	0		18	8	8	111	123	135	149
530	WESTMINSTER DR	TWP LIMIT	WOODHULL RD	2	Rural	Gravel	Open Ditch	Gravel	754	200	4	145	7.3	6.0	0	0	0	0		15	8	8	145	160	177	195
520	WESTMINSTER DR	WOODHULL RD	BELLS RD	2	Rural	Gravel	Open Ditch	Gravel	1310	200	4	93	0	5.0	0	0	0	0		15	8	8	93	103	113	125
510	WESTMINSTER DR	BELLS RD	CARRIAGE RD	2	Rural	Gravel	Open Ditch	Gravel	1429	300	4	204	0	5.0	0	0	0	0		15	8	8	204	225	249	275
500	WESTMINSTER DR	CARRIAGE RD	COOKS RD	2	Rural	LCB	Open Ditch	Gravel	948	300	4	204	9	7.0	0	0	0	0	59.2	11	8	8	204	225	249	275
7700	WILLARD CRES	SPRINGFIELD WAY	SPRINGFIELD WAY	2	Urban	HC	Storm Sewer		345	L/R	6	137	0	8.0	0	0	0	0	33.3	7	7	7	137	151	167	184
7705	WILLARD CRES	SPRINGFIELD WAY	W END	2	Urban	HC	Storm Sewer		55	L/R	5	207	0	8.0	0	0	0	0	42.3	9	7	7	207	229	252	279
5030	WILLIAM ST	HIGHLAND RD	BLOSDALE CRES	2	Urban	HC	Storm Sewer		126	L/R	6	112	0	8.0	0	0	0	0	76.9	16	8	8	112	124	137	151
5020	WILLIAM ST	BLOSDALE CRES	SPRINGER RD	2	Urban	HC	Storm Sewer		104	L/R	5	457	0	8.0	0	0	0	0	79.3	16	9	8	457	505	557	615
9090	WILLOW RIDGE RD	ILDERTON RD	MARTIN DR	2	Urban	HC	Storm Sewer		149	C/R	5	1235	0	8.0	0	0	0	0	49.9	10	8	6	1235	1364	1505	1662
9080	WILLOW RIDGE RD	MARTIN DR	WILLOW RIDGE RD	2	Urban	HC	Storm Sewer		205	C/R	5	1235	0	8.0	0	0	0	0	49.9	10	8	6	1235	1364	1505	1662
9070	WILLOW RIDGE RD	WILLOW RIDGE RD	BLUE HERRON DR	2	Urban	HC	Storm Sewer		406	L/R	6	142	0	8.0	0	0	0	0	54.4	11	8	7	142	157	173	191
9100	WILLOW RIDGE RD	BLUE HERRON DR	DOGWOOD TRAIL	2	Urban	HC	Storm Sewer		89	L/R	6	194	0	8.0	0	0	0	0	67.9	14	8	8	194	214	236	261
9110	WILLOW RIDGE RD	DOGWOOD TRAIL	WILLOW RIDGE RD	2	Urban	HC	Storm Sewer		88	L/R	5	346	0	8.0	0	0	0	0	67.9	14	8	8	346	382	422	466
50010	WILLOW RIDGE RD	WILLOW RIDGE RD	DOGWOOD TR	0	Urban	HC	Storm Sewer		87	L/R	6	142	0	8.0	0	0	0	0	63.4	13	8	8	142	157	173	191
50015	WILLOW RIDGE RD	WILLOW RIDGE RD	WILLOW RIDGE RD	0	Urban	HC	Storm Sewer		96	L/R	6	142	0	7.8	0	0	0	0	67.9	14	8	8	142	157	173	191
7130	WINGREEN LANE	WINONA RD	STEPHEN MOORE DR	2	Urban	HC	Storm Sewer		293	L/R	6	90	0	8.0	0	0	0	0	58.9	12	8	8	90	99	110	121
7050	WINONA RD	STEPHEN MOORE DR	CANDLEWOOD LANE	2	Urban	HC	Storm Sewer		115	L/R	5	670	0	8.0	0	0	0	0	58.9	12	8	8	670	740	817	902
7040	WINONA RD	CANDLEWOOD LANE	DAVENTRY WAY	2	Urban	HC	Storm Sewer		112	L/R	5	326	0	8.0	0	0	0	0	58.9	12	8	7	326	360	397	439
7030	WINONA RD	DAVENTRY WAY	WINGREEN LANE	2	Urban	HC	Storm Sewer		112	L/R	5	219	0	8.0	0	0	0	0	54.4	11	8	7	219	242	267	295
7020	WINONA RD	WINGREEN LANE	WESTBROOK DR	2	Urban	HC	Storm Sewer		109	L/R	6	179	0	8.0	0	0	0	0	49.9	10	8	7	179	198	218	241
7510	WISHINGWELL CRT	N END	PIONEER DR	2	Urban	HC	Storm Sewer		42	L/R	6	106	0	8.0	0	0	0	0	99.0	20	10	9	106	117	129	143
4140	WONDERLAND RD N	ELGINFIELD RD	SIXTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1168	700	3	3325	9.5	8.0	0	0	0	0	57.6	11	7	7	3325	3671	4053	4475
4130	WONDERLAND RD N	SIXTEEN MILE RD	FIFTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1432	700	3	3360	10.1	8.0	0	0	0	0	57.6	11	7	7	3360	3710	4096	4522
4120	WONDERLAND RD N	FIFTEEN MILE RD	FOURTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1389	700	3	3317	9.6	8.0	0	0	0	0	63.7	12	8	7	3317	3662	4043	4464
4110	WONDERLAND RD N	FOURTEEN MILE RD	THIRTEEN MILE RD	2	Rural	LCB	Open Ditch	Gravel	1438	700	3	3435	9.4	8.0	0	0	0	0	66.6	13	7	7	3435	3793	4187	4623
4100	WONDERLAND RD N	THIRTEEN MILE RD	TWELVE MILE RD	2	Rural	LCB	Open Ditch																			

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix A: Municipality of Middlesex Centre Road Sections (Inventory)

Table A.1: Inventory

Section	Street	From	To	Lanes	Roadside Environment	Surface Type	Drainage Type	Shoulder Type	Length (m)	Class	MMS Class	AADT 2022 (2%)	Platform Width (m)	Surface Width (m)	Horizontal Curve Deficiency	Horizontal Stopping Sight Distance	Vertical Curve Deficiency	Vertical Stopping Sight Distance	PCI	Structural Adequacy	Ride Quality	Maintenance Demand	AADT 2022 (2%)	AADT 2027	AADT 2032	AADT 2037
7810	WYNFIELD LANE	WYNFIELD GATE	WYNFIELD LANE	2	Urban	HCB	Storm Sewer		212	L/R	5	204	0	8.0	0	0	0	0	99.0	20	10	9	204	225	249	275
7820	WYNFIELD LANE	WYNFIELD LANE	WYNFIELD LANE	2	Urban	HCB	Storm Sewer		577	L/R	6	176	0	8.0	0	0	0	0	99.0	20	10	9	176	194	215	237
7830	WYNFIELD LANE	WYNFIELD LANE	WYNFIELD GATE	2	Urban	HCB	Storm Sewer		520	L/R	5	349	0	8.0	0	0	0	0	99.0	20	10	9	349	385	425	470
5180	YORK ST	MILL CREEK LANE	OSBORNE ST	2	Semi Urban	HCB	Ditch Sewer	Earth	83	L/R	5	675	7.2	6.0	0	0	0	0	88.3	18	9	8	675	745	823	908
5170	YORK ST	OSBORNE ST	YOUNG ST	2	Semi Urban	HCB	Ditch Sewer	Earth	138	L/R	5	606	8.5	7.0	0	0	0	0	83.8	17	9	8	606	669	739	816
5160	YORK ST	YOUNG ST	WELLINGTON ST	2	Semi Urban	HCB	Ditch Sewer	Earth	291	L/R	5	962	8.3	7.0	0	0	0	0	72.4	15	8	8	962	1062	1173	1295
5150	YORK ST	WELLINGTON ST	100 M N OF LONGWOODS RD	2	Urban	HCB	Storm Sewer		76	C/R	5	1455	0	6.0	0	0	0	0	99.0	20	10	10	1455	1606	1774	1958
5145	YORK ST	100 M N OF LONGWOOD RD	LONGWOOD RD	2	Urban	HCB	Storm Sewer		100	L/R	5	462	0	14.0	0	0	0	0	83.8	17	9	8	462	510	563	622
5220	YORKDALE ST	OSBORNE ST	MILL CREEK LANE	2	Semi Urban	LCB	Ditch Sewer	Earth	163	L/R	6	26	6.6	5.0	0	0	0	0	81.7	16	8	8	26	29	32	35
5230	YORKDALE ST	MILL CREEK LANE	W END	2	Semi Urban	LCB	No Drainage	Earth	75	L/R	6	53	6	6.0	0	0	0	0	54.7	10	8	8	53	59	65	71
5320	YOUNG ST	VICTORIA ST	THAMES ST	2	Semi Urban	LCB	Ditch Sewer	Earth	355	L/R	5	626	8.5	7.0	0	0	0	0	86.2	17	8	8	626	691	763	843
5310	YOUNG ST	THAMES ST	ELMVIEW DR	2	Semi Urban	LCB	Ditch Sewer	Gravel	40	L/R	5	626	8.5	6.0	0	0	0	0	87.8	17	9	8	626	691	763	843
5300	YOUNG ST	ELMVIEW DR	YORK ST	2	Semi Urban	LCB	No Drainage	Earth	198	L/R	5	917	8.4	6.0	0	0	0	0	86.2	17	8	8	917	1012	1118	1234
8110	ZAVITZ DR	POPLAR HILL RD	MCKAY ST	2	Semi Urban	HCB	Open Ditch	Earth	131	L/R	6	76	8.7	7.0	0	0	0	0	92.8	19	9	10	76	84	93	102



APPENDIX B

Road Needs and Critical Deficiencies

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table B.1: Multiple Critical Deficiencies

Section	Street	From	To	Width (m)	Length (m)	Area (m ²)	MMS Class	Class	AADT (Current)	PCI	Roadside Environment	Surface Type	Critical Need 1	Critical Need 2	Cost - Need 1	Cost - Needs 2)	Total Cost	Priority
820	SPRINGER RD	SHARON DR	HEATLY DR	4	904	3616	4	300	267	0	Rural	GS	Geometry	Surface Width	\$ 110,250	\$ 203,400	\$ 313,650	9
980	HEATLY DR	1.2 KM WEST OF N. JTN OF SPRIN	SPRINGER DR, SOUTH JUNCTION	5	2445	12225	4	200	73	0	Rural	GS	Geometry	Surface Width	\$ 400,400	\$ 550,125	\$ 950,525	10
3000	COLDSTREAM RD	VANNECK RD	OXBOW DR	7	1485	10395	4	500	1550	36	Rural	HCB	Geometry	Structural Adequacy	N/A - Current Roundabout Project	\$ 334,095	\$ 334,095	8
3450	OLD RIVER RD	GLENDON DR	PULHAM RD	7	1906	13342	5	500	1550	24	Rural	LCB	Geometry	Surface Type / Structural Adequacy	N/A - Current Project	N/A - Current Project	N/A - Current Project	N/A
3600	VANNECK RD	GOLD CREEK DR	SUNNINGDALE RD W	7	1317	9219	3	600	2805	37	Rural	LCB	Surface Type	Structural Adequacy	\$ 352,719		\$ 352,719	2
3710	VANNECK RD	TWELVE MILE RD	NEW ONTARIO RD	7	805	5635	3	500	1539	40	Rural	LCB	Surface Type	Structural Adequacy	\$ 215,595		\$ 215,595	6
3990	HYDE PARK RD	FIFTEEN MILE RD	FOURTEEN MILE RD	8	1392	11136	3	600	2171	40	Rural	LCB	Surface Type	Structural Adequacy	\$ 426,063		\$ 426,063	5
4090	WONDERLAND RD N	TWELVE MILE RD	ILDERTON RD	8	1489	11912	3	800	4092	40	Rural	LCB	Surface Type	Structural Adequacy	\$ 455,753		\$ 455,753	3
4250	ADELAIDE ST N	TWELVE MILE RD	ILDERTON RD	7	1449	10143	3	600	2266	40	Rural	LCB	Surface Type	Structural Adequacy	\$ 388,071		\$ 388,071	4
30285	SWAMP COLLEGE ROAD	PROSPRECT HILL ROAD	W END	4	236	944	6	100	20	40	Rural	LCB	Surface Width	Structural Adequacy	\$ 54,280	\$ 16,237	\$ 70,517	7



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table B.2 - Surface Type Critical Need

Section	Street	From	To	Width	Length	Area	MMS Class	Class	AADT (Current)	PCI	Roadside Environment	Surface Type	Critical Need	Treatment	Cost)	Years to Reach AADT Trigger)	Priority Ranking
4290	ADELAIDE ST N	SIXTEEN MILE RD	FIFTEEN MILE RD	8	1515	12120	3	600	2087	68	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 463,711	0	20
4260	ADELAIDE ST N	THIRTEEN MILE RD	TWELVE MILE RD	7	1384	9688	3	600	2238	49	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 370,663	0	15
30000	AMIENS RD	OXBOW DRIVE	GLENDON DR	7	1364	9548	3	500	1505	62	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 365,306	0	24
30110	BODKIN RD	LITTLE CHURCH DR	SOUTHDEL BRNE	7	1800	12600	4	400	433		Rural	GS	Surface Type - Now	Resurface - LCB	\$ 148,680	0	2
810	CARRIAGE RD	GIDEON DR	HARRIS RD	7	2279	15953	3	600	2171	92	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 610,362	0	3
800	CARRIAGE RD	HARRIS RD	LONGWOODS RD	8	951	7608	3	500	1672	68	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 291,082	0	23
4370	CLARKE RD	NINE MILE RD	EIGHT MILE RD	7	1387	9709	3	500	1367	55	Rural	LCB	Surface Type - 1-5	Resurface - HCB	\$ 371,466	4.7	26
4360	CLARKE RD	EIGHT MILE RD	MEDWAY RD	7	1436	10052	3	600	2299	59	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 384,590	0	12
3090	COLDSTREAM RD	270 M N OF QUAKER LANE	HEDLEY DR	7	819	5733	4	300	323		Rural	GS	Surface Type - 10-15	Resurface - LCB	\$ 67,649	10.8	41
3930	DENFIELD RD	TEN MILE RD	NINE MILE RD	7	1314	9198	4	300	356		Rural	GS	Surface Type - 6-10	Resurface - LCB	\$ 108,536	5.9	28
4010	HYDE PARK RD	ELGINFIELD RD	SIXTEEN MILE RD	8	1225	9800	3	600	2064	58	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 374,948	0	21
4000	HYDE PARK RD	SIXTEEN MILE RD	FIFTEEN MILE RD	8	1425	11400	3	600	2102	44	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 436,164	0	19
3980	HYDE PARK RD	FOURTEEN MILE RD	THIRTEEN MILE RD	8	1439	11512	3	600	2157	50	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 440,449	0	17
1900	ILDERTON RD	EGREMONT DR	AMIENS RD	6	2048	12288	3	600	2231	73	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 470,139	0	16
1090	OXBOW DR	VANNECK RD	NAIRN RD	7	971	6797	4	500	1430	40	Rural	LCB	Surface Type - 1-5	Resurface - HCB	\$ 260,053	2.4	25
1080	OXBOW DR	NAIRN RD	COLDSTREAM RD	7	2546	17822	4	600	2275	49	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 681,870	0	13
1070	OXBOW DR	COLDSTREAM RD	UNION AVE	7	1536	10752	4	600	2604	77	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 411,372	0	11
50029	PROSPECT HILL RD	ELGINFIELD RD	SIXTEEN MILE RD	7	950	6650	3	500	1282	68	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 254,429	7.9	36
50028	PROSPECT HILL RD	SIXTEEN MILE RD	FIFTEEN MILE RD	7.1	1632	11587	3	500	1282	68	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 443,326	7.9	35
50027	PROSPECT HILL RD	FIFTEEN MILE RD	EBENEZER DR	7.1	868	6163	3	500	1282	75	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 235,789	7.9	40
50026	PROSPECT HILL RD	EBENEZER DR	FOURTEEN MILE RD	7	561	3927	3	500	1282	75	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 150,247	7.9	39
50025	PROSPECT HILL RD	FOURTEEN MILE RD	THIRTEEN MILE RD	7	1400	9800	3	500	1282	68	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 374,948	7.9	34
50024	PROSPECT HILL RD	THIRTEEN MILE RD	PLOVER MILLS RD	7.1	1300	9230	3	500	1282	63	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 353,140	7.9	32
30270	PROSPECT HILL RD	PLOVER MILLS ROAD	ILDERTON RD	8	1423	11384	3	500	1245	59	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 435,552	9.4	31
30260	PROSPECT HILL RD	ILDERTON RD	TEN MILE RD	8	1388	11104	3	500	1282	64	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 424,839	7.9	33
30240	PROSPECT HILL RD	TEN MILE ROAD	NINE MILE RD	8	1398	11184	3	500	1319	58	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 427,900	6.5	30
30230	PROSPECT HILL RD	NINE MILE RD	EIGHT MILE RD	8	1379	11032	3	500	1340	68	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 422,084	5.7	37
30220	PROSPECT HILL RD	EIGHT MILE RD	THORNDALE RD	8	592	4736	3	500	1410	68	Rural	LCB	Surface Type - 1-5	Resurface - HCB	\$ 181,199	3.1	27
3470	PULHAM RD	VANNECK RD	OLD RIVER RD	6	378	2268	3	500	1406	92	Rural	LCB	Surface Type - 1-5	Resurface - HCB	\$ 86,774	3.3	29
1200	SUNNINGDALE RD W	DENFIELD RD	VANNECK RD	7	2272	15904	3	500	1202	92	Rural	LCB	Surface Type - 10-15	Resurface - HCB	\$ 608,487	11.2	42
2050	TWELVE MILE RD	HYDE PARK RD	WONDERLAND RD N	6	2469	14814	4	400	461		Rural	GS	Surface Type - Now	Resurface - LCB	\$ 174,805	0	1
3700	VANNECK RD	NEW ONTARIO RD	ATTWOOD LANE	7	311	2177	3	500	1352	73	Rural	LCB	Surface Type - 6-10	Resurface - HCB	\$ 83,292	5.2	38
3610	VANNECK RD	GOLD CREEK DR	MEDWAY RD	7	144	1008	3	600	2110	73	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 38,566	0	18
3585	VANNECK RD	350 m NORTH of WYNFIELD GATE	SUNNINGDALE RD W	7	212	1484	3	600	2805	64	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 56,778	0	10
3580	VANNECK RD	WYNFIELD GATE	MELROSE DR	7	360	2520	4	600	2260	67	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 96,415	0	14
3570	VANNECK RD	EGREMONT DR	WYNFIELD GATE	7	244	1708	3	700	3722	62	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 65,348	0	5
4140	WONDERLAND RD N	ELGINFIELD RD	SIXTEEN MILE RD	8	1168	9344	3	700	3325	58	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 357,501	0	8
4130	WONDERLAND RD N	SIXTEEN MILE RD	FIFTEEN MILE RD	8	1432	11456	3	700	3360	58	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 438,307	0	7
4120	WONDERLAND RD N	FIFTEEN MILE RD	FOURTEEN MILE RD	8	1389	11112	3	700	3317	64	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 425,145	0	9
4110	WONDERLAND RD N	FOURTEEN MILE RD	THIRTEEN MILE RD	8	1438	11504	3	700	3435	67	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 440,143	0	6
4100	WONDERLAND RD N	THIRTEEN MILE RD	TWELVE MILE RD	8	1359	10872	3	600	2015	59	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 415,963	0	22
4090	WONDERLAND RD N	TWELVE MILE RD	ILDERTON RD	8.3	1430	11869	3	800	4092	98	Rural	LCB	Surface Type - Now	Resurface - HCB	\$ 454,108	0	4



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table B.3 - Surface Width Critical Need

Section	Street	From	To	Width	Length	Area	MMS Class	Class	AADT (Current)	PCI	Roadside Environment	Surface Type	Critical Need	Treatment	Cost)	Priority Ranking
50	BELLS RD	N END	SHARON DR	5	624	3120	4	200	61	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 140,400	20
390	BODKIN RD	TWP LIMIT	JONES DRIVE	5	1000	5000	4	200	62	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 225,000	18
310	COOK RD	LITTLEWOOD DR	WELDON WAY	5	1737	8685	4	200	76	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 390,825	12
3870	DENFIELD RD	GAINESBOROUGH	S END	5	497	2485	4	200	85	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 111,825	11
750	ELVIAGE DR	BRIGHAM RD	W END	4	697	2788	4	200	70	73	Rural	LCB	Surface Width	Widen Rural PST	\$ 160,310	13
2640	FIFTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	5	2462	12310	4	200	66	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 553,950	15
2430	FOURTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	5	2466	12330	4	200	62	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 554,850	19
1210	GOLD CREEK DR	KOMOKA RD	AMIENS RD	5	2438	12190	4	200	131	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 548,550	6
1990	HEDLEY DR	BEAR CREEK RD	NAIRN RD	5	2446	12230	4	200	65	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 550,350	16
1750	IVAN DR	VANNECK RD	BEAR CREEK RD	5	1715	8575	4	200	122	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 385,875	7
1330	LAMONT DR	NAIRN RD	EGREMONT DR	5	1535	7675	4	200	115	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 345,375	8
7900	LOBO LANE	GOLD CREEK DR	EGREMONT DR	5	213	1065	4	200	140	73	Rural	LCB	Surface Width	Widen Rural PST	\$ 48,990	4
3820	MILL LANE	SIXTEEN MILE RD	FIFTEEN MILE RD	4	1403	5612	4	200	53	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 315,675	21
1550	SINCLAIR DR	VANNECK RD	BEAR CREEK RD	5	1098	5490	4	200	138	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 247,050	5
2770	SIXTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	5	2414	12070	4	200	68	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 543,150	14
440	WELDON WAY	COOK RD	WESTDEL BRNE	5	913	4565	4	200	65	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 205,425	17
5475	WELLINGTON ST	E END	65 M EAST OF MARTIN RD	4	284	1136	5	L/R	516	55	Semi Urban	LCB	Surface Width	Recon Local	\$ 178,920	2
5470	WELLINGTON ST	65 M EAST OF MARTINROAD	MARTIN RD	4	66	264	5	L/R	516	53	Semi Urban	LCB	Surface Width	Recon Local	\$ 41,580	1
520	WESTMINSTER DR	WOODHULL RD	BELLS RD	5	1310	6550	4	200	93	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 294,750	9
510	WESTMINSTER DR	BELLS RD	CARRIAGE RD	5	1429	7145	4	300	204	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 321,525	3
110	WOODHULL RD	LITTLEWOOD DR	LITTLE CHURCH DR	5	1811	9055	4	200	90	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 407,475	10
100	WOODHULL RD	LITTLE CHURCH DR	SOUTHMINSTER BRNE	5	1841	9205	4	200	53	0	Rural	GS	Surface Width	Widen Rural Gravel	\$ 414,225	22



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table B.4 - Structural Adequacy Critical Need

Section	Street	From	To	Width	Length	Area	MMS Class	Class	AADT (Current)	PCI	Roadside Environment	Surface Type	Critical Need	Treatment	Cost)	Priority Ranking
4300	ADELAIDE ST N	ELGINFIELD RD	SIXTEEN MILE RD	7	1075	7525	3	600	2031	18	Rural	LCB	Structural Adequacy	Pulv +2 OL	\$ 241,854	1
50060	AMIENS RD	SINCLAIR DR	LAMONT DR	7	1393	9751	3	500	1105	54	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 83,859	3
30040	AMIENS RD	GOLD CREEK DRIVE	MELROSE DR	7	1131	7917	3	500	1105	38	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 68,086	4
8210	ASHLEY LANE	ILDERTON RD	S END	8	262	2096	6	L/R	96	36	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 64,431	38
5270	ATKINSON CRT	THAMES ST	MILL CREEK LANE	7	176	1232	5	L/R	387	36	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 37,872	16
7240	BEECHNUT PL	ELMHURST ST	BEECHNUT ST	5	128	640	6	L/R	46	36	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 20,570	43
7290	BEECHNUT ST	BEECHNUT PL	ELMHURST ST	6	294	1764	6	L/R	150	33	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 56,695	28
7280	BEECHNUT ST	ELMHURST ST	BLACKBURN CRES	5	179	895	6	L/R	129	15	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 28,765	35
7560	BLACKBURN CRES	KILWORTH PARK DR	BEECHNUT ST	5	302	1510	6	L/R	167	29	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 48,531	26
7540	BLACKBURN CRES	KILWORTH PARK DR	BLACKBURN PL	6	132	792	6	L/R	165	36	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 25,455	27
7525	BLACKBURN CRES	55 m WEST of BLACKBURN PL	PIONEER DR	6	288	1728	5	L/R	296	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 53,119	19
7580	BLACKBURN PL	N END	BLACKBURN CRES	6	49	294	6	L/R	42	14	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 9,449	44
8940	CALVERT DR	STONERIDGE CRES	STONERIDGE CRES	8	168	1344	5	L/R	785	29	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 41,315	9
8270	CAMPBELL CRES	LEWIS DR	THIRLWALL BLVD	8	290	2320	6	L/R	135	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 71,317	31
8260	CAMPBELL CRES	THIRLWALL BLVD	LEWIS DR	8	236	1888	6	L/R	78	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 58,037	40
8080	CURRIE CRT	PARK CRES	JAMES ST	5	108	540	6	L/R	117	36	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 17,356	36
8070	CURRIE CRT	JAMES ST	S END	6	158	948	6	L/R	38	36	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 30,469	45
6070	DELAWARE ST N	HURON AVE	ST LAWRENCE AVE	6	132	792	6	L/R	98	33	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 25,455	37
7270	ELMHURST ST	GLENDON DR	PARKLAND PL	5	209	1045	5	L/R	382	15	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 33,586	18
7260	ELMHURST ST	PARKLAND PL	BEECHNUT PL	5	129	645	5	L/R	232	18	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 20,730	24
50050	FAIRGROUND RD	LITTLEWOOD DR	620 m SOUTH OF LITTLEWOOD DR	7.2	620	4464	4	200	130	38	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 38,390	34
1263	GOLD CREEK DR	NAIRN RD	LOBO LANE	7.3	95	694	4	400	856	36	Rural	LCB	Structural Adequacy	Pulv +2 OL	\$ 22,289	8
8610	HERITAGE DR	MILL ST	HERITAGE PL	8	118	944	5	L/R	263	36	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 29,019	23
8640	HERITAGE PL	HERITAGE DR	MILL ST	8	447	3576	6	L/R	139	36	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 109,926	29
5990	HURON AVE	SPRINGER ST	DELAWARE ST N	5	187	935	5	L/R	290	33	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 30,051	21
1920	ILDERTON RD	PROSPECT HILL RD	CLARKE RD	7	2457	17199	4	300	398	35	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 147,911	14
1910	ILDERTON RD	CLARKE RD	HIGHBURY AVE N	7	2451	17157	4	400	596	37	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 147,550	11
7320	KILWORTH PARK DR	50M NORTH OF BLACKBURN CRES	LINNELL CRES	6	246	1476	5	L/R	265	20	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 47,439	22
4605	LANSDOWNE PARK CRES	END OF CURBS	OXBOW DR	8	364	2912	5	200	130	29	Rural	LCB	Structural Adequacy	Pulv +2 OL	\$ 93,592	32
4600	LANSDOWNE PARK CRES	OXBOW DR	END OF CURBS	8	1043	8344	5	L/R	130	20	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 256,495	33
8305	LEWIS DR	E END	ABERDEEN DR	8	82	656	6	L/R	38	36	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 20,165	47
8280	LEWIS DR	70M WEST OF CAMPBELL CRES	CAMPBELL CRES	8	75	600	6	L/R	38	18	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 18,444	46
8660	MILL ST	MARGARET ST	HERITAGE PL	8	222	1776	5	L/R	225	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 54,594	25
3380	NEW ONTARIO RD	GREYSTEAD DR	CHARLTON DR	7	1370	9590	4	400	884	28	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 82,474	7
3360	NEW ONTARIO RD	HEDLEY DR	VANNECK RD	7	1083	7581	4	400	919	40	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 65,197	6
1580	NINE MILE RD	WONDERLAND RD N	HYDE PARK RD	7	2482	17374	4	400	607	41	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 149,416	10
1090	OXBOW DR	VANNECK RD	NAIRN RD	7	971	6797	4	500	1430	40	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 58,454	2
1020	OXBOW DR	KOMOKA RD	LANSDOWNE PARK CRES	7	1390	9730	4	500	1039	40	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 83,678	5
6370	PARKVIEW DR	OAKCREST DR	DELAWARE ST N	6	235	1410	6	L/R	83	36	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 45,317	39
8720	ROBERT ST	KENNEDY AVE	ROBERT CRT	8	113	904	5	L/R	463	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 27,789	12
6010	ST LAWRENCE AVE	DELAWARE ST N	KOMOKA RD	6	176	1056	5	L/R	385	33	Semi Urban	LCB	Structural Adequacy	Pulv +2 OL	\$ 33,940	17
9220	STATION ST	DENFIELD RD	E END	7	333	2331	6	L/R	63	26	Semi Urban	LCB	Structural Adequacy	Pulv + PST	\$ 20,047	41
2240	THIRTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	6	2461	14766	4	300	392	40	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 126,988	15
2190	THIRTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	7	2455	17185	4	300	291	35	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 147,791	20
3490	THODY LANE	VANNECK RD	E END	6	564	3384	5	200	60	36	Rural	LCB	Structural Adequacy	Pulv +2 OL	\$ 108,762	42
7700	WILLARD CRES	SPRINGFIELD WAY	SPRINGFIELD WAY	8	345	2760	6	L/R	137	33	Urban	LCB	Structural Adequacy	RMV + RPLC	\$ 84,842	30
160	WOODHULL RD	SHARON DR	HWY 402 W	6	653	3918	4	400	423	40	Rural	LCB	Structural Adequacy	Pulv + PST	\$ 33,695	13



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table: B.5 - Geometric Critical Need

Section	Street	From	To	Width	Length	Area	AADT (Current)	PCI	Roadside Environment	Vertical Curves	Horizontal Curves	Surface Type	Critical Need	Treatment	Comments	cost (\$)	Priority Ranking
670	BRIGHAM RD	LONGWOODS RD	SHARON DR	7	3262	22834	143	86	Rural	0	2	LCB	Geometry	2 Curve Corrections, 270 m and 420 m, plus a new bridge	Idue to the Low volume and relatively good condition of the roadway it may not be worth correct the geometric deficiency at this time, Assumed \$1.5M for new bridge.	\$ 1,830,875	4
3290	DUNCRIEF RD	CHARLTON DR	HEDLEY DR	5	1516	7580	15	0	Rural	0	2	GS	Geometry	2 Curve Corrections, 1 Alignment (430 m)	AADT of 15 no treatment necessary, Based on configuration no through traffic only local traffic will use, minimal liability based on traffic and use. Correcting the curves would be difficult based on the houses in the area, would involve a cul de sac for the one house access	\$ 286,875	3
980	HEATLY DR	1.2 KM WEST OF N. JTN OF SPRIN	SPRINGER DR, SOUTH JUNCTION	5	2445	12225	73	0	Rural	1	3	GS	Geometry	3 Horizontal Curves and 1 Vertical that overlaps with one of the horizontal curves, 1 Horizontal Curve requires an entrance to be extended	The North curve requires expropriating farm land and the extension of the trail access, the southern curve is through forested area and farm land down into the gully of the river, AADT is 73, All local traffic, not a good candidate for correction	\$ 400,400	2
3000	COLDSTREAM RD	VANNECK RD	OXBOW DR	7	1485	10395	1550	36	Rural	2	4	HCB	Geometry	N/A	Geometric Deficiencies will be corrected during the Glendon / Jeffries / Vanneck / Coldstream roundabout and intersection improvements project	N/A	N/A
3450	OLD RIVER RD	GLENDON DR	PULHAM RD	7	1906	13342	1550	24	Rural	2	2	LCB	Geometry	N/A	Old River Road is up for reconstruction due to slope failure of the pavement, geotric deficiencies unlikely to be corrected due to the limit options available	N/A	N/A
820	SPRINGER RD	SHARON DR	HEATLY DR	4	904	3616	267	0	Rural	1	2	GS	Geometry	Curve Correction with gade correction to correct the issue	Alternative option would be to increase the number of warning signs at the approach to the curve in both directions. AADT of 267 seems high for this section, no through traffic all local residents, best action would be to leave as is	\$ 110,250	1



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix B: Road Needs and Critical Deficiencies

Table B.6: Drainage Critical Need

Section ID	Street	From	To	Description	Solution	Comments	Cost	Priority
3240	BEAR CREEK RD	ILDERTON RD	HEDLEY DR	Flat ground slight grade changes, assumed flooding at a low lying area just north of Ilderton Road, water flows from both directions	Ditching could help fix the issue but need to outlet the water somewhere, difficult to determine what the issue is without knowing for sure the flooding location and what all the grades of the ditches are in the area, could potentially ditch to the south	May require a Municipal Drain, would require a more detailed study to determine optimal solution	N/A - Requires Further Investigation	12
980	HEATY DRIVE	1.2 KM WEST OF N. JTN OF SPRIN	SPRINGER DR, SOUTH JUNCTION	Gravel Road, drainage issues noted at the 90 degree bend just west of the bridge, water flows from the higher ground on the west side of the road, erosion observed on the gravel road on the west side	Ditch along the west Side of the Road, ditch already outlets at the south end to a low lying area near the river, no need for culvert or anything like that	Would require removing several trees to ditch it correctly, Ditch 200 m in length	\$12,000	11
3980	HYDE PARK RD	THIRTEEN MILE RD	FOURTEEN MILE RD	There's a ditch drain with a culvert that appears to be blocked just north of thirteen mile road on the west side, standing water in ditch	Fix drain / culvert and ditch to the south to ensure drainage		\$ 25,800	2
1580	NINE MILE RD	HYDE PARK RD	WONDERLAND RD N	Water generally drains east to west towards the Bridge at the west end of the section, there is a low lying area towards the east side. Ditches generally sufficient and don't appear to be the issue. It is assumed that the flooding occurs at the low lying area on the east side at the crossing culvert, Culvert may be undersized, low lying area may also not be transporting the water away from the road quick enough and causing the flooding even if the culvert is adequate	Assumed Culvert replacement, ditch cleanout after the culvert to drain the water faster	Detailed Hydrology Study would be required for the reconstruction to determine the best solution for drainage. Could be issues with trying clean out the drainage ditch if it's considered a water course, may not be able to clean that out	\$ 36,000	6
1570	NINE MILE RD	DENFIELD RD	HYDE PARK RD	Clear evidence of flooding at the intersection with Denfield Road, there is a cemetery on the NE corner, no ditches, no crossing culverts, water flows east to west across the road here	Ditch along the north side of Nine Mile Road and at the intersection in the SE quadrant and install two culverts at the intersection		\$ 25,400	7
3450	OLD RIVER RD	GLENDON DR	PULHAM RD	Road is along the Thames, there is noticeable slope failure, I believe this project is already being reconstructed, it is assumed that drainage will be fixed during reconstruction	Will be Corrected During Reconstruction		N/A - Being Dealt with on Existing Project	3
30230	PROSPECT HILL RD	EIGHT MILE RD	NINE MILE RD	Field on the East Side is at a higher elevation than the road, everything drains toward the road, the west side looks good, problem is definitely water coming from the east side, the ditches (where present) slope towards the concrete box culvert near eight mile, box culvert is definitely large enough, not the issue, need to ditch the east side and provide sufficient culverts at entrances to transport the water towards the stream	Ditch and provide large culverts at the two houses on the east side of the road just north of Eight Mile Road	Residents at those two houses may not want their culverts replaced and entrances altered, one is paved	\$ 64,304	4
620	SHARON DR	BELLS RD	HWY 402 E	Deep Ditches on both sides of the road, there is a culvert that transports the water from the south to the north, the culvert leads to a stream that drains through a field into a pond west of bells road, confusing as to why this area would flood, Culvert possibly under sized	Replace Culvert with Larger sized culvert	Should have a hydrology study to determine appropriate culvert size and even if this should be replaced or not	\$ 15,000	5
2700	SIXTEEN MILE RD	MILL LANE	DENFIELD RD	Low Lying Area at Mill Lane, Water Drains towards the area from both directions	Ditch along Sixteen Mile Road in the Area of Mill Lane, add a culvert crossing to Mill Lane and ditch along Mill lane to the municipal drain	Low volume road, may not be worth the effort and expense to correct the issue	\$ 48,480	9
2730	SIXTEEN MILE RD	WONDERLAND RD N	RICHMOND ST	Flat road drains to low area half way between Wonderland Road and Richmond Street, high water table, nearby pond is at an elevation close to the road elevation.	Municipal drain would be required to drain the area properly.	May require a Municipal Drain, would require a more detailed study to determine optimal solution	N/A - Requires Further Investigation	10
2205	THIRTEEN MILE RD	WONDERLAND RD N	SALISBURY DR	Large Box Culvert was fixed / installed in 2013, Water potentially not flowing on the south side to the municipal drain, potentially backing up and flooding	Ditch to municipal drain	Should confirm flooding location	\$9,000	8
4140	WONDERLAND ROAD	SIXTEEN MILE RD	ELGINFIELD RD	Low Lying area just north of Sixteen Mile Road, evidence of flooding, ditch to sixteen mile road, and drain to the west, install culvert across Wonderland Road to Sixteen Mile	Ditch and install culvert at the intersection	Survey and hydrology study would be required to ensure the elevations work for the ditching and culvert	\$ 30,700	1



APPENDIX C

Time of Need

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
8230	ABERDEEN DR	ASHLEY LANE	LEWIS DR	302	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
4300	ADELAIDE ST N	ELGINFIELD RD	SIXTEEN MILE RD	1075	3	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
4290	ADELAIDE ST N	SIXTEEN MILE RD	FIFTEEN MILE RD	1515	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
4280	ADELAIDE ST N	FIFTEEN MILE RD	FOURTEEN MILE RD	1387	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4270	ADELAIDE ST N	FOURTEEN MILE RD	THIRTEEN MILE RD	1423	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4260	ADELAIDE ST N	THIRTEEN MILE RD	TWELVE MILE RD	1384	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
4250	ADELAIDE ST N	TWELVE MILE RD	ILDERTON RD	1449	3	LCB	ADEQ	NOW	ADEQ	NOW	ADEQ	ADEQ	NOW
50064	AMIENS RD	WOOD RD	HEDLEY DR	1007	3	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
50063	AMIENS RD	HEDLEY DR	ILDERTON RD	1365	3	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
50062	AMIENS RD	ILDERTON RD	IVAN DR	1365	3	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
50061	AMIENS RD	IVAN DR	SINCLAIR DR	1356	3	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
50060	AMIENS RD	SINCLAIR DR	LAMONT DR	1393	3	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
30060	AMIENS RD	LAMONT DR	GOLD CREEK DR	1359	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
30040	AMIENS RD	GOLD CREEK DRIVE	MELROSE DR	1131	3	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
30020	AMIENS RD	MELROSE DRIVE	OXBOW DRIVE	1586	3	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
30000	AMIENS RD	OXBOW DRIVE	GLENDON DR	1364	3	LCB	ADEQ	NOW	ADEQ	6-10	6-10	ADEQ	NOW
6450	ARTHUR ST	N END	DUKE ST	146	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6440	ARTHUR ST	DUKE ST	HAMILTON ST	139	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9420	ARVA ST	MEDWAY RD	WELDON AVE	126	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9410	ARVA ST	WELDON AVE	ST JOHN	116	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8220	ASHLEY LANE	ABERDEEN DR	ILDERTON RD	91	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8210	ASHLEY LANE	ILDERTON RD	S END	262	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
9640	ASHWOOD CRES	MAPLEWOOD LANE	MAPLEWOOD LANE	400	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5280	ATKINSON CRT	E END	THAMES ST	265	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
5270	ATKINSON CRT	THAMES ST	MILL CREEK LANE	176	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
3350	ATTWOOD LANE	VANNECK RD	ILDERTON RD	768	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ
7060	AYLESFORD CRT	N END	STEPHEN MOORE DR	64	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8010	BARCLAY BLVD	E END	POPLAR HILL RD	317	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ
8000	BARCLAY BLVD	POPLAR HILL RD	W END	371	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
7680	BARON CR	EARLSCOURT TERRACE	WOODLAND DR	545	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3280	BEAR CREEK RD	FERNHILL DR	MCEWEN DR	1366	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3270	BEAR CREEK RD	MCEWEN DR	GREYSTEAD DR	1340	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3260	BEAR CREEK RD	GREYSTEAD DR	CHARLTON DR	1376	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ
3250	BEAR CREEK RD	CHARLTON DR	HEDLEY DR	1359	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3240	BEAR CREEK RD	HEDLEY DR	ILDERTON RD	1370	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3230	BEAR CREEK RD	ILDERTON RD	IVAN DR	1363	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3220	BEAR CREEK RD	IVAN DR	SINCLAIR DR	1367	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
3210	BEAR CREEK RD	SINCLAIR DR	LAMONT DR	1366	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3200	BEAR CREEK RD	LAMONT DR	VANNECK RD	1090	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7240	BEECHNUT PL	ELMHURST ST	BEECHNUT ST	128	6	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	ADEQ
7300	BEECHNUT ST	PARKLAND PL	BEECHNUT PL	131	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
7290	BEECHNUT ST	BEECHNUT PL	ELMHURST ST	294	6	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
7280	BEECHNUT ST	ELMHURST ST	BLACKBURN CRES	179	6	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
50	BELLS RD	N END	SHARON DR	624	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
40	BELLS RD	SHARON DR	WESTMINSTER DR	1225	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30	BELLS RD	WESTMINSTER DR	LITTLEWOOD DR	3737	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
20	BELLS RD	LITTLEWOOD DR	LITTLE CHURCH DR	1798	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
10	BELLS RD	LITTLE CHURCH DR	SOUTHDEL BRNE	1840	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7410	BIRCHCREST DR	KILWORTH PARK DR	EARLSCOURT TERRACE	120	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7405	BIRCHCREST DR	EARLSCOURT TERRACE	WESTBROOK CRES	402	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7400	BIRCHCREST DR	WESTBROOK CRES	WOODLAND DR	160	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7560	BLACKBURN CRES	KILWORTH PARK DR	BEECHNUT ST	302	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7550	BLACKBURN CRES	BEECHNUT ST	KILWORTH PARK DR	146	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7540	BLACKBURN CRES	KILWORTH PARK DR	BLACKBURN PL	132	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7530	BLACKBURN CRES	PIONEER DR	WESTBROOK CRES	126	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7525	BLACKBURN CRES	55 m WEST of BLACKBURN PL	PIONEER DR	288	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7520	BLACKBURN CRES	BLACKBURN PL	55 m WEST OF BLACKBURN PL	110	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7580	BLACKBURN PL	N END	BLACKBURN CRES	49	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ
5060	BLOSDALE CRES	N END	ELIZABETH ST	80	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5050	BLOSDALE CRES	ELIZABETH ST	WILLIAM ST	102	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9050	BLUE HERRON DR	WILLOW RIDGE RD	CALVERT DR	144	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9040	BLUE HERRON DR	CALVERT DR	MARTIN DR	2379	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50035	BODKIN RD	LITTLEWOOD DR	LITTLE CHURCH DR	1846	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30120	BODKIN RD	JONES DR	LITTLEWOOD DR	1500	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
30110	BODKIN RD	LITTLE CHURCH DR	SOUTHDEL BRNE	1800	4	GS	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
390	BODKIN RD	TWP LIMIT	JONES DRIVE	1000	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
1100	BOSTON DR	EGREMONT DR	VANNECK RD	1257	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8200	BOWLING GREEN	ILDERTON RD	S END	162	6	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
690	BRIGHAM RD	GIDEON DR	ELVIAGE DR	434	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
680	BRIGHAM RD	ELVIAGE DR	LONGWOODS RD	3283	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
670	BRIGHAM RD	LONGWOODS RD	SHARON DR	3262	4	LCB	NOW	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	NOW
9200	BROOKFIELD ST	STATION ST	S END	414	6	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
4500	BURTON AVE	MEDWAY RD	TWP LIMIT	299	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ
8980	CALVERT DR	MARTIN DR	BLUE HERRON DR	132	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8970	CALVERT DR	BLUE HERRON DR	MARTIN DR	129	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8960	CALVERT DR	MARTIN DR	TRILLIUM CRT	125	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8950	CALVERT DR	TRILLIUM CRT	STONERIDGE CRES	83	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8940	CALVERT DR	STONERIDGE CRES	STONERIDGE CRES	168	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8930	CALVERT DR	STONERIDGE CRES	MEADOWCREEK DR	58	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8270	CAMPBELL CRES	LEWIS DR	THIRLWALL BLVD	290	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8260	CAMPBELL CRES	THIRLWALL BLVD	LEWIS DR	236	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7120	CANDLEWOOD LANE	WINONA RD	DAVENTRY WAY	267	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
810	CARRIAGE RD	GIDEON DR	HARRIS RD	2279	3	LCB	NOW	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
800	CARRIAGE RD	HARRIS RD	LONGWOODS RD	951	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
70	CARRIAGE RD	LITTLEWOOD DR	LITTLE CHURCH DR	1836	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
60	CARRIAGE RD	LITTLE CHURCH DR	SOUTHDEL BRNE	1807	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6536	CAVERHILL CRES	EAST END	PRINCE ST	72	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6534	CAVERHILL CRES	PRINCE ST	DUKE ST	477	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6530	CAVERHILL CRES	HAMILTON ST	DUKE ST	355	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8040	CHARLES ST	ILDERTON RD	PARK CRES	119	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2160	CHARLTON DR	VANNECK RD	NEW ONTARIO RD	1112	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2150	CHARLTON DR	NEW ONTARIO RD	DUNCRIEF RD	1610	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
2140	CHARLTON DR	DUNCRIEF RD	BEAR CREEK RD	823	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2130	CHARLTON DR	BEAR CREEK RD	NAIRN RD	2444	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2120	CHARLTON DR	NAIRN RD	COLDSTREAM RD	2441	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2110	CHARLTON DR	COLDSTREAM RD	POPLAR HILL RD	2445	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2100	CHARLTON DR	POPLAR HILL RD	WOOD RD	2437	4	GS	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
4450	CLARKE RD	ELGINFIELD RD	SIXTEEN MILE RD	976	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4440	CLARKE RD	SIXTEEN MILE RD	FIFTEEN MILE RD	1595	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4430	CLARKE RD	FIFTEEN MILE RD	FOURTEEN MILE RD	1380	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4420	CLARKE RD	FOURTEEN MILE RD	THIRTEEN MILE RD	1417	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
4410	CLARKE RD	THIRTEEN MILE RD	PLOVER MILLS RD	1428	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4400	CLARKE RD	PLOVER MILLS RD	ILDERTON RD	1359	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4390	CLARKE RD	ILDERTON RD	TEN MILE RD	1399	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4380	CLARKE RD	TEN MILE RD	NINE MILE RD	1391	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
4370	CLARKE RD	NINE MILE RD	EIGHT MILE RD	1387	3	LCB	ADEQ	1-5	ADEQ	1-5	ADEQ	ADEQ	1-5
4360	CLARKE RD	EIGHT MILE RD	MEDWAY RD	1436	3	LCB	ADEQ	NOW	ADEQ	1-5	6-10	ADEQ	NOW
3130	COLDSTREAM RD	MCEWEN DR	FERNHILL DR	1361	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3120	COLDSTREAM RD	GREYSTEAD DR	MCEWEN DR	1369	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3110	COLDSTREAM RD	CHARLTON DR	GREYSTEAD DR	1374	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3100	COLDSTREAM RD	HEDLEY DR	CHARLTON DR	1359	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3090	COLDSTREAM RD	270 M N OF QUAKER LANE	HEDLEY DR	819	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3080	COLDSTREAM RD	ILDERTON RD	QUAKER LANE	274	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3070	COLDSTREAM RD	IVAN DR	ILDERTON RD	1373	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3060	COLDSTREAM RD	SINCLAIR DR	IVAN DR	1356	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3050	COLDSTREAM RD	EGREMONT DR	SINCLAIR DR	400	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3040	COLDSTREAM RD	LAMONT DR	EGREMONT DR	990	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3030	COLDSTREAM RD	GOLD CREEK DR	LAMONT DR	1356	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3020	COLDSTREAM RD	MELROSE DR	GOLD CREEK DR	1371	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3010	COLDSTREAM RD	OXBOW DR	MELROSE DR	1357	3	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3000	COLDSTREAM RD	VANNECK RD	OXBOW DR	1485	4	LCB	NOW	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
340	COOK RD	TWP LIMIT	DECKER DR	1148	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
330	COOK RD	DECKER DR	DECKER DR	116	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
320	COOK RD	DECKER DR	LITTLEWOOD DR	2075	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
310	COOK RD	LITTLEWOOD DR	WELDON WAY	1737	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
6610	CRESTVIEW DR	N END	RIVERS EDGE LANE	40	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6600	CRESTVIEW DR	RIVERS EDGE LANE	S END	130	6	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9520	CROYDON DR	RICHMOND ST	CROYDON PL	88	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9510	CROYDON DR	CROYDON PL	N END	654	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9530	CROYDON PL	CROYDON DR	W END	46	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8080	CURRIE CRT	PARK CRES	JAMES ST	108	6	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
8070	CURRIE CRT	JAMES ST	S END	158	6	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	ADEQ
9820	DAUSETT DR	PEREGRINE AVE	JEFFRIES RD	175	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7110	DAVENTRY WAY	WINONA RD	CANDLEWOOD LANE	214	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	ADEQ
7100	DAVENTRY WAY	CANDLEWOOD LANE	STEPHEN MOORE DR	87	6	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7090	DAVENTRY WAY	STEPHEN MOORE DR	W END	43	6	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
5550	DAVIS ST	N END	WELLINGTON ST	344	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
480	DECKER DR	E LIMIT	COOK RD	1013	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
470	DECKER DR	COOK RD	WESTDEL BRNE	991	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6330	DELAWARE ST N	UNION AVE	PARKVIEW DR	241	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6320	DELAWARE ST N	PARKVIEW DR	PRINCESS AVE	96	6	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6310	DELAWARE ST N	PRINCESS AVE	OXBOW DR	152	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6300	DELAWARE ST N	OXBOW DR	FIELDSTONE CRES N	86	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6090	DELAWARE ST N	ST CLAIR AVE	SIMCOE AVE	139	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6080	DELAWARE ST N	ST LAWRENCE AVE	ST CLAIR AVE	125	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6070	DELAWARE ST N	HURON AVE	ST LAWRENCE AVE	132	6	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
5730	DELAWARE ST S	RAILWAY AVE	ONTARIO AVE	131	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ
5720	DELAWARE ST S	ONTARIO AVE	ERIE AVE	130	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5710	DELAWARE ST S	ERIE AVE	THAMES AVE	133	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5700	DELAWARE ST S	THAMES AVE	GLENDON DR	122	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3940	DENFIELD RD	ILDERTON RD	TEN MILE RD	1470	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3930	DENFIELD RD	TEN MILE RD	NINE MILE RD	1314	4	GS	ADEQ	6-10	ADEQ	ADEQ	ADEQ	ADEQ	6-10
3920	DENFIELD RD	NINE MILE RD	EIGHT MILE RD	1427	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3910	DENFIELD RD	EIGHT MILE RD	MEDWAY RD	1360	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3900	DENFIELD RD	MEDWAY RD	SUNNINGDALE RD W	1462	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3890	DENFIELD RD	SUNNINGDALE RD W	EGREMONT DR	1381	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3880	DENFIELD RD	EGREMONT DR	GAINESBOROUGH	1379	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3870	DENFIELD RD	GAINESBOROUGH	S END	497	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
7715	DOAN DR	CURVE	SPRINGFIELD WAY	232	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7710	DOAN DR	ENTERPRISE DRIVE	CURVE	140	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9060	DOGWOOD TRAIL	N END	WILLOW RIDGE RD	161	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6520	DUKE ST	PRINCE ST	CAVERHILL CRES	86	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6510	DUKE ST	KOMOKA RD	ARTHUR ST	120	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6500	DUKE ST	ARTHUR ST	PRINCE ST	121	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
3290	DUNCRIEF RD	CHARLTON DR	HEDLEY DR	1516	6	GS	NOW	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9810	EARLSCOURT TERRACE	PEREGRINE AVE	WOODLAND DR	206	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7677	EARLSCOURT TERRACE	BIRCHCREST DR	BARON CRES	103	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7675	EARLSCOURT TERRACE	BARON CRES	PEREGRINE AVE	425	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1430	EIGHT MILE RD	PROSPECT HILL RD	CLARKE RD	2379	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1420	EIGHT MILE RD	CLARKE RD	HIGHBURY AVE N	2489	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1410	EIGHT MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2466	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1400	EIGHT MILE RD	ADELAIDE ST N	RICHMOND ST	2451	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1390	EIGHT MILE RD	RICHMOND ST	WONDERLAND RD N	2469	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1380	EIGHT MILE RD	WONDERLAND RD N	HYDE PARK RD	2469	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
1370	EIGHT MILE RD	HYDE PARK RD	DENFIELD RD	2476	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1360	EIGHT MILE RD	DENFIELD RD	VANNECK RD	2256	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9460	ELGIN ST	ELGIN ST	RICHMOND ST	117	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9440	ELGIN ST	ELGIN ST	MEDWAY RD	169	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5040	ELIZABETH ST	HIGHLAND RD	BLOSDALE CRES	123	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7270	ELMHURST ST	GLENDON DR	PARKLAND PL	209	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7260	ELMHURST ST	PARKLAND PL	BEECHNUT PL	129	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7250	ELMHURST ST	BEECHNUT PL	BEECHNUT ST	370	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
5380	ELMVIEW DR	YOUNG ST	S END	119	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
760	ELVIAGE DR	TWP LIMIT	BRIGHAM RD	752	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
750	ELVIAGE DR	BRIGHAM RD	W END	697	4	LCB	ADEQ	ADEQ	NOW	6-10	6-10	ADEQ	NOW
7670	ENTERPRISE DR	DOAN DR	W END	232	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7660	ENTERPRISE DR	JEFFERIES RD	DOAN DR	176	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5890	ERIE AVE	SPRINGER ST	DELAWARE ST S	186	6	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5880	ERIE AVE	DELAWARE ST S	KOMOKA RD	184	6	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
50050	FAIRGROUND RD	LITTLEWOOD DR	620 m SOUTH OF LITTLEWOOD DR	620	4	GS	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
9620	FERNHILL DR	NAIRN RD	COLDSTREAM RD	2400	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9610	FERNHILL DR	COLDSTREAM RD	POPLAR HILL RD	2400	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9600	FERNHILL DR	POPLAR HILL RD	WOOD RD	2400	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6200	FIELDRUN DR	OXBOW DR	FIELDSTONE CRES N	79	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6190	FIELDRUN DR	FIELDSTONE CRES N	FIELDSTONE CRES S	121	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6180	FIELDRUN DR	FIELDSTONE CRES S	SIMCOE AVE	112	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6230	FIELDSTONE CRES N	FIELDRUN DR	FIELDRUN DR	139	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6220	FIELDSTONE CRES N	DELAWARE ST N	FIELDRUN DR	184	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6210	FIELDSTONE CRES N	FIELDSTONE CRES S	DELAWARE ST N	115	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6260	FIELDSTONE CRES S	FIELDSTONE GATE	FIELDRUN DR	245	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6250	FIELDSTONE CRES S	FIELDRUN DR	DELAWARE ST N	179	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2640	FIFTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2462	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
2630	FIFTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2461	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2620	FIFTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2459	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2610	FIFTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2425	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2600	FIFTEEN MILE RD	RICHMOND ST	WONDERLAND RD N	2460	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2590	FIFTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2459	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2580	FIFTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2456	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2570	FIFTEEN MILE RD	DENFIELD RD	MILL LANE	1831	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2560	FIFTEEN MILE RD	MILL LANE	VANNECK RD	447	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2430	FOURTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2466	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
2420	FOURTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2466	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2410	FOURTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2466	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2400	FOURTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2402	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2390	FOURTEEN MILE RD	RICHMOND ST	WONDERLAND RD N	2464	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2380	FOURTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2468	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2370	FOURTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2467	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2360	FOURTEEN MILE RD	DENFIELD RD	VANNECK RD	2259	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5560	GARDEN AVE	WELLINGTON ST	S END	278	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8440	GEORGE ST	E END	KING ST	63	6	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	ADEQ
8430	GEORGE ST	KING ST	W END	99	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
1263	GOLD CREEK DR	NAIRN RD	LOBO LANE	95	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1260	GOLD CREEK DR	VANNECK RD	NAIRN RD	2307	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
1240	GOLD CREEK DR	LOBO LANE	EGREMONT DR	200	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1230	GOLD CREEK DR	EGREMONT DR	COLDSTREAM RD	2145	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1220	GOLD CREEK DR	COLDSTREAM RD	KOMOKA RD	2442	4	GS	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
1210	GOLD CREEK DR	KOMOKA RD	AMIENS RD	2438	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
2350	GREYSTEAD DR	VANNECK RD	NEW ONTARIO RD	1718	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2340	GREYSTEAD DR	NEW ONTARIO RD	BEAR CREEK RD	2435	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2330	GREYSTEAD DR	BEAR CREEK RD	NAIRN RD	2443	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
2320	GREYSTEAD DR	NAIRN RD	COLDSTREAM RD	2441	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2310	GREYSTEAD DR	COLDSTREAM RD	POPLAR HILL RD	2444	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2300	GREYSTEAD DR	POPLAR HILL RD	WOOD RD	2440	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9300	GWENDOLYN ST	THIRTEEN MILE RD	S END	265	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
6490	HAMILTON ST	KOMOKA RD	ARTHUR ST	118	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6480	HAMILTON ST	ARTHUR ST	PRINCE ST	104	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5360	HARRIS RD	CARRIAGE RD	MARTIN RD	794	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5350	HARRIS RD	MARTIN RD	HOGS BACK CS	715	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5340	HARRIS RD	HOGS BACK CS	VICTORIA ST	19	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
9660	HAVENWOOD LANE	S END	STONEFIELD GATE	80	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9670	HAVENWOOD ST	S END	STONEFIELD GATE	80	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6550	HEATHER PLACE	S END	UNION AVE	165	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
980	HEATLY DR	1.2 KM WEST OF N. JTN OF SPRIN	SPRINGER DR, SOUTH JUNCTION	2445	4	GS	NOW	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
970	HEATLY DR	SPRINGER RD	1.2 KM WEST OF SPRINGER RD	1271	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2020	HEDLEY DR	VANNECK RD	NEW ONTARIO RD	502	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2010	HEDLEY DR	NEW ONTARIO RD	DUNCRIEF RD	1825	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2000	HEDLEY DR	DUNCRIEF RD	BEAR CREEK RD	621	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1990	HEDLEY DR	BEAR CREEK RD	NAIRN RD	2446	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
1980	HEDLEY DR	NAIRN RD	COLDSTREAM RD	2441	4	GS	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1970	HEDLEY DR	COLDSTREAM RD	POPLAR HILL RD	2444	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1960	HEDLEY DR	POPLAR HILL RD	EGREMONT DR	1589	4	GS	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1950	HEDLEY DR	EGREMONT DR	AMIENS RD	843	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8630	HERITAGE DR	HYDE PARK RD	ROBERT ST	154	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8620	HERITAGE DR	ROBERT ST	MILL ST	124	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8610	HERITAGE DR	MILL ST	HERITAGE PL	118	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8600	HERITAGE DR	HERITAGE PL	S END	60	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8640	HERITAGE PL	HERITAGE DR	MILL ST	447	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
5100	HIGHLAND RD	N END	ELIZABETH ST	29	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5090	HIGHLAND RD	ELIZABETH ST	WILLIAM ST	102	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5080	HIGHLAND RD	WILLIAM ST	TOWERLINE RD	92	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5070	HIGHLAND RD	TOWERLINE RD	S END	27	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5580	HILLCREST AVE	N END	HILLCREST AVE	41	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5570	HILLCREST AVE	HILLCREST AVE	WELLINGTON ST	108	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5370	HOGS BACK CS	N END	HARRIS RD	106	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6000	HURON AVE	QUEEN ST	SPRINGER ST	262	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5990	HURON AVE	SPRINGER ST	DELAWARE ST N	187	5	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
5980	HURON AVE	DELAWARE ST N	KOMOKA RD	178	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
4010	HYDE PARK RD	ELGINFIELD RD	SIXTEEN MILE RD	1225	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
4000	HYDE PARK RD	SIXTEEN MILE RD	FIFTEEN MILE RD	1425	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
3990	HYDE PARK RD	FIFTEEN MILE RD	FOURTEEN MILE RD	1392	3	LCB	ADEQ	NOW	ADEQ	NOW	ADEQ	ADEQ	NOW
3980	HYDE PARK RD	FOURTEEN MILE RD	THIRTEEN MILE RD	1439	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
3970	HYDE PARK RD	THIRTEEN MILE RD	TWELVE MILE RD	1373	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3960	HYDE PARK RD	TWELVE MILE RD	N. LIMITS OF ILBERTON	734	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3953	HYDE PARK RD	N. LIMITS OF ILBERTON	MAPLEWOOD LANE	200	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3952	HYDE PARK RD	MAPLEWOOD LANE	STONE FIELD LANE	2693	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3950	HYDE PARK RD	STONE FIELD LANE	ILBERTON RD	253	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
1920	ILDERTON RD	PROSPECT HILL RD	CLARKE RD	2457	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1910	ILDERTON RD	CLARKE RD	HIGHBURY AVE N	2451	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1900	ILDERTON RD	EGREMONT DR	AMIENS RD	2048	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
8450	ILDERTON ST	N END	ILDERTON RD	116	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1750	IVAN DR	VANNECK RD	BEAR CREEK RD	1715	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
1740	IVAN DR	BEAR CREEK RD	NAIRN RD	2433	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1730	IVAN DR	NAIRN RD	COLDSTREAM RD	2441	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1720	IVAN DR	COLDSTREAM RD	EGREMONT DR	1590	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1710	IVAN DR	EGREMONT DR	KOMOKA RD	855	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1700	IVAN DR	KOMOKA RD	AMIENS RD	2444	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8060	JAMES ST	E END	CURRIE CRT	196	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7640	JEFFERIES RD	ENTERPRISE DR	GLENDON DR	258	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7635	JEFFERIES RD	PEREGRINE AVE	ENTERPRISE DR	103	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7630	JEFFERIES RD	STEPHEN MOORE DR	PEREGRINE AVE	102	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7610	JEFFERIES RD	WESTBROOK DR	STEPHEN MOORE DR	447	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7600	JEFFERIES RD	PIONEER DR	WESTBROOK DR	141	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5140	JOHN ST	LONGWOODS RD	PLEASANT ST	95	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
450	JONES DR	CARRIAGE RD	BODKIN RD	1371	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
3140	JURY RD	NAIRN RD	VANNECK RD	1294	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8770	KENNEDY AVE	E END	VINTAGE WAY S	37	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8760	KENNEDY AVE	VINTAGE WAY S	ROBERT ST	78	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8750	KENNEDY CRT	W END	ROBERT ST	42	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7360	KILWORTH PARK DR	GLENDON DR	BIRCHCREST DR	153	4	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7350	KILWORTH PARK DR	BIRCHCREST DR	WESTBROOK DR	141	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7340	KILWORTH PARK DR	WESTBROOK DR	PARKLAND PL	91	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7330	KILWORTH PARK DR	PARKLAND PL	50M NORTH OF BLACKBURN CRES	243	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7320	KILWORTH PARK DR	50M NORTH OF BLACKBURN CRES	LINNELL CRES	246	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
7310	KILWORTH PARK DR	LINNELL CRES	BLACKBURN CRES	124	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7305	KILWORTH PARK DR	SOUTH TO END	BLACKBURN CRES	75	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9680	KING ST	N END	KING ST	189	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
8420	KING ST	N END	ILDERTON RD	440	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8410	KING ST	ILDERTON RD	GEORGE ST	110	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8400	KING ST	GEORGE ST	S END	195	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7070	KRISTEN CRT	N END	STEPHEN MOORE DR	65	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1350	LAMONT DR	VANNECK RD	BEAR CREEK RD	487	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1340	LAMONT DR	BEAR CREEK RD	NAIRN RD	2442	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1330	LAMONT DR	NAIRN RD	EGREMONT DR	1535	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
1320	LAMONT DR	EGREMONT DR	COLDSTREAM RD	916	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1310	LAMONT DR	COLDSTREAM RD	KOMOKA RD	2444	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1300	LAMONT DR	KOMOKA RD	AMIENS RD	2428	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4605	LANSDOWNE PARK CRES	END OF CURBS	OXBOW DR	364	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
4600	LANSDOWNE PARK CRES	OXBOW DR	END OF CURBS	1043	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8305	LEWIS DR	E END	ABERDEEN DR	82	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ
8300	LEWIS DR	ABERDEEN DR	SYDENHAM DR	146	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	ADEQ
8290	LEWIS DR	SYDENHAM DR	70M WEST OF CAMPBELL CRES	218	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8280	LEWIS DR	70M WEST OF CAMPBELL CRES	CAMPBELL CRES	75	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
7570	LINNELL CRES	KILWORTH PARK DR	KILWORTH PARK DR	327	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
430	LITTLE CHURCH DR	WESTDEL BRNE	WOODHULL RD	1551	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
420	LITTLE CHURCH DR	WOODHULL RD	BELLS RD	1239	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
410	LITTLE CHURCH DR	BELLS RD	CARRIAGE RD	1389	6	GS	ADEQ	ADEQ	1-5	ADEQ	ADEQ	ADEQ	ADEQ
400	LITTLE CHURCH DR	CARRIAGE RD	BODKIN RD	1371	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50090	LITTLEWOOD DR	BODKINS RD	FAIRGROUNDS RD	1382	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7900	LOBO LANE	GOLD CREEK DR	EGREMONT DR	213	4	LCB	ADEQ	ADEQ	NOW	6-10	ADEQ	ADEQ	NOW
9630	MAPLEWOOD LANE	HYDE PARK ROAD	W END	453	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8680	MARGARET ST	ROBERT ST	MILL ST	95	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8320	MARSH LANE	N END	ILDERTON RD	184	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
9014	MARTIN DR	WILLOW RIDGE RD	CALVERT DR	218	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9012	MARTIN DR	CALVERT DR	BLUE HERRON DR	353	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9010	MARTIN DR	BLUE HERRON DR	CALVERT DR	243	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5490	MARTIN RD	HARRIS RD	WELLINGTON ST	472	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5480	MARTIN RD	WELLINGTON ST	LONGWOODS RD	307	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7080	MAXINE CRT	N END	STEPHEN MOORE DR	66	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2550	MCEWEN DR	VANNECK RD	NEW ONTARIO RD	2308	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2540	MCEWEN DR	NEW ONTARIO RD	BEAR CREEK RD	2443	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2530	MCEWEN DR	BEAR CREEK RD	NAIRN RD	2445	6	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2520	MCEWEN DR	NAIRN RD	COLDSTREAM RD	2439	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2510	MCEWEN DR	COLDSTREAM RD	POPLAR HILL RD	2443	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2500	MCEWEN DR	POPLAR HILL RD	WOOD RD	2443	4	GS	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
8090	MCKAY ST	ZAVITZ DR	ILDERTON RD	437	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8910	MEADOWCREEK DR	E END	CALVERT DR	283	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8900	MEADOWCREEK DR	CALVERT DR	HYDE PARK RD	162	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8520	MEADOWSWEET CRES	STONE FIELD LANE	STONE FIELD LANE	311	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
1275	MEDWAY RD	HYDE PARK	DENFIELD RD	2474	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1270	MEDWAY RD	DENFIELD RD	VANNECK RD	2329	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1190	MELROSE DR	VANNECK RD	EGREMONT DR	732	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1180	MELROSE DR	EGREMONT DR	NAIRN RD	246	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1170	MELROSE DR	NAIRN RD	COLDSTREAM RD	2444	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1160	MELROSE DR	COLDSTREAM RD	KOMOKA RD	2462	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1150	MELROSE DR	KOMOKA RD	AMIENS RD	2430	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8470	MEREDITH DR	N END	STONE FIELD LANE	298	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8460	MEREDITH DR	STONE FIELD LANE	ILDERTON RD	252	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5260	MILL CREEK LANE	ATKINSON CRT	88 M EAST OF YORK ST	56	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5255	MILL CREEK LANE	88 M EAST OF YORK ST	YORK ST	88	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5250	MILL CREEK LANE	YORK ST	YORKDALE ST	213	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5240	MILL CREEK LANE	YORKDALE ST	GIDEON DR	134	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3820	MILL LANE	SIXTEEN MILE RD	FIFTEEN MILE RD	1403	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
8670	MILL ST	ILDERTON RD	MARGARET ST	357	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8660	MILL ST	MARGARET ST	HERITAGE PL	222	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8650	MILL ST	HERITAGE PL	HERITAGE DR	354	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
280	MILLER RD	W END	SPRINGER ROAD	1902	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5530	MILLMANOR PL	W END	PRINCE ALBERT ST	308	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3400	NEW ONTARIO RD	FERNHILL DR	MCEWEN DR	1365	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
3390	NEW ONTARIO RD	MCEWEN DR	GREYSTEAD DR	1331	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3380	NEW ONTARIO RD	GREYSTEAD DR	CHARLTON DR	1370	4	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
3370	NEW ONTARIO RD	CHARLTON DR	HEDLEY DR	1368	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3360	NEW ONTARIO RD	HEDLEY DR	VANNECK RD	1083	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
1630	NINE MILE RD	PROSPECT HILL RD	CLARKE RD	2399	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1620	NINE MILE RD	CLARKE RD	HIGHBURY AVE N	2458	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1610	NINE MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2472	4	LCB	NOW	ADEQ	ADEQ	ADEQ	6-10	ADEQ	NOW
1600	NINE MILE RD	ADELAIDE ST N	RICHMOND ST	2452	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
1590	NINE MILE RD	RICHMOND ST	WONDERLAND RD N	2447	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
1580	NINE MILE RD	WONDERLAND RD N	HYDE PARK RD	2482	4	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
1570	NINE MILE RD	HYDE PARK RD	DENFIELD RD	2418	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
1560	NINE MILE RD	DENFIELD RD	VANNECK RD	2322	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
6340	OAKCREST DR	PARKVIEW DR	UNION AVE	330	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
8585	OAKMONT GDNS	OAKMONT GDNS	OAKMONT GDNS	214	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8580	OAKMONT GDNS	STONE FIELD LANE	S LOOP	111	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30200	OLALONDO RD	MEDWAY RD	S END	429	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	ADEQ
3450	OLD RIVER RD	GLENDON DR	PULHAM RD	1906	5	LCB	NOW	NOW	ADEQ	NOW	6-10	ADEQ	NOW
5920	ONTARIO AVE	QUEEN ST	SPRINGER ST	264	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5910	ONTARIO AVE	SPRINGER ST	DELAWARE ST S	186	6	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
5900	ONTARIO AVE	DELAWARE ST S	KOMOKA RD	187	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5210	OSBORNE ST	YORK ST	YORKDALE ST	135	5	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5200	OSBORNE ST	YORKDALE ST	GIDEON DR	131	5	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
1090	OXBOW DR	VANNECK RD	NAIRN RD	971	4	LCB	ADEQ	1-5	ADEQ	NOW	ADEQ	ADEQ	NOW
1080	OXBOW DR	NAIRN RD	COLDSTREAM RD	2546	4	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
1070	OXBOW DR	COLDSTREAM RD	UNION AVE	1536	4	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
1060	OXBOW DR	VALLEYVIEW DR	QUEEN ST	61	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1050	OXBOW DR	QUEEN ST	FIELDRUN DR	143	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1040	OXBOW DR	FIELDRUN DR	DELAWARE ST N	180	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1030	OXBOW DR	DELAWARE ST N	KOMOKA RD	178	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1020	OXBOW DR	KOMOKA RD	LANSLOWNE PARK CRES	1390	4	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
1010	OXBOW DR	LANSLOWNE PARK CRES	LANSLOWNE PARK CRES	319	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
1000	OXBOW DR	LANSLOWNE PARK CRES	AMIENS RD	738	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1067	OXBOW DRIVE	UNION AVENUE	END OF CURBS	251	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1065	OXBOW DRIVE	END OF CURBS	VALLEYVIEW DRIVE	96	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8030	PARK CRES	N END	CURRIE CRT	48	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8020	PARK CRES	CURRIE CRT	POPLAR HILL RD	105	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
7230	PARKLAND PL	ELMHURST ST	BEECHNUT ST	128	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
7220	PARKLAND PL	BEECHNUT ST	KILWORTH PARK DR	132	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6390	PARKVIEW DR	UNION AVE	VALLEYVIEW DR	201	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6380	PARKVIEW DR	VALLEYVIEW DR	OAKCREST DR	93	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6370	PARKVIEW DR	OAKCREST DR	DELAWARE ST N	235	6	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
9835	PEREGRINE AVE	EARLSCOURT TERRACE	DAUSETT DR	132	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9830	PEREGRINE AVE	JEFFERIES RD	DAUSETT DR	115	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8570	PERRIWINKLE DR	WOOD LILY LANE	RED CLOVER CRT	211	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7210	PHEASANT TRAIL	WESTBROOK DR	W END	204	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7500	PIONEER DR	BLACKBURN CRES	WISHINGWELL CRT	350	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
7490	PIONEER DR	WISHINGWELL CRT	JEFFERIES RD	107	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5130	PLEASANT ST	E END	JOHN ST	160	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5125	PLEASANT ST	BRIDGE STREET	LONGWOODS RD	29	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5120	PLEASANT ST	JOHN ST	BRIDGE STREET	246	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5110	PLEASANT ST	PLEASANT ST	LONGWOODS RD	39	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2950	POPLAR HILL RD	MCEWEN DR	FERNHILL DR	1365	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2940	POPLAR HILL RD	GREYSTEAD DR	MCEWEN DR	1372	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2930	POPLAR HILL RD	CHARLTON DR	GREYSTEAD DR	1364	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2920	POPLAR HILL RD	HEDLEY DR	CHARLTON DR	1364	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2910	POPLAR HILL RD	ZAVITZ DR	HEDLEY DR	928	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2900	POPLAR HILL RD	ILDERTON RD	ZAVITZ DR	434	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5520	PRINCE ALBERT ST	WELLINGTON ST	PRINCE OF WALES ST	189	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5510	PRINCE ALBERT ST	PRINCE OF WALES ST	MILLMANOR PL	60	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5500	PRINCE ALBERT ST	MILLMANOR PL	LONGWOODS RD	114	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5540	PRINCE OF WALES ST	VICTORIA ST	PRINCE ALBERT ST	120	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6470	PRINCE ST	N END	DUKE ST	264	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6460	PRINCE ST	DUKE ST	HAMILTON ST	142	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6455	PRINCE ST	HAMILTON ST	CAVERHILL CRES	67	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6360	PRINCESS AVE	DELAWARE ST N	KOMOKA RD	177	6	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
50029	PROSPECT HILL RD	ELGINFIELD RD	SIXTEEN MILE RD	950	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
50028	PROSPECT HILL RD	SIXTEEN MILE RD	FIFTEEN MILE RD	1632	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
50027	PROSPECT HILL RD	FIFTEEN MILE RD	EBENEZER DR	868	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
50026	PROSPECT HILL RD	EBENEZER DR	FOURTEEN MILE RD	561	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
50025	PROSPECT HILL RD	FOURTEEN MILE RD	THIRTEEN MILE RD	1400	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
50024	PROSPECT HILL RD	THIRTEEN MILE RD	PLOVER MILLS RD	1300	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
30270	PROSPECT HILL RD	PLOVER MILLS ROAD	ILDERTON RD	1423	3	LCB	ADEQ	6-10	ADEQ	1-5	ADEQ	ADEQ	1-5
30260	PROSPECT HILL RD	ILDERTON RD	TEN MILE RD	1388	3	LCB	ADEQ	6-10	ADEQ	6-10	ADEQ	ADEQ	6-10
30240	PROSPECT HILL RD	TEN MILE ROAD	NINE MILE RD	1398	3	LCB	ADEQ	6-10	ADEQ	1-5	6-10	ADEQ	1-5
30230	PROSPECT HILL RD	NINE MILE RD	EIGHT MILE RD	1379	3	LCB	ADEQ	6-10	ADEQ	6-10	6-10	ADEQ	6-10
30220	PROSPECT HILL RD	EIGHT MILE RD	THORNDALE RD	592	3	LCB	ADEQ	1-5	ADEQ	6-10	ADEQ	ADEQ	1-5
3470	PULHAM RD	VANNECK RD	OLD RIVER RD	378	3	LCB	ADEQ	6-10	ADEQ	ADEQ	6-10	ADEQ	6-10
3460	PULHAM RD	OLD RIVER RD	S END	474	6	LCB	ADEQ	ADEQ	6-10	ADEQ	6-10	ADEQ	ADEQ
8310	QUAKER LANE	COLDSTREAM RD	ILDERTON RD	1410	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5840	QUEEN ST	FIELDSTONE GATE	OXBOW DR	102	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5830	QUEEN ST	SIMCOE AVE	FIELDSTONE GATE	222	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5820	QUEEN ST	SIMCOE CRES	SIMCOE AVE	185	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5810	QUEEN ST	HURON AVE	SIMCOE CRES	204	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5800	QUEEN ST	RAILWAY AVE	HURON AVE	169	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5790	QUEEN ST	ONTARIO AVE	RAILWAY AVE	129	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5780	QUEEN ST	GLENDON DR	ONTARIO AVE	386	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5960	RAILWAY AVE	TUNKS LINE	QUEEN ST	372	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5950	RAILWAY AVE	QUEEN ST	SPRINGER ST	265	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5940	RAILWAY AVE	SPRINGER ST	DELAWARE ST S	184	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5930	RAILWAY AVE	DELAWARE ST S	KOMOKA RD	185	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
460	RANGER DR	WESTDEL BRNE	WOODHULL RD	1510	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8550	RED CLOVER CRT	N END	WOOD LILY LANE	73	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
8540	RED CLOVER CRT	WOOD LILY LANE	PERRIWINKLE DR	90	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8530	RED CLOVER CRT	PERRIWINKLE DR	STONE FIELD LANE	89	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6630	RIVERS EDGE LANE	STEPHEN MOORE DR	E END	103	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6620	RIVERS EDGE LANE	CRESTVIEW DR	STEPHEN MOORE DR	71	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8740	ROBERT CRT	ROBERT ST	W END	35	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8730	ROBERT ST	ILDERTON RD	KENNEDY AVE	101	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8720	ROBERT ST	KENNEDY AVE	ROBERT CRT	113	5	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
8710	ROBERT ST	ROBERT CRT	MARGARET ST	99	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8700	ROBERT ST	MARGARET ST	WINSOME AVE	190	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8690	ROBERT ST	WINSOME AVE	HERITAGE DR	245	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9340	SALISBURY DR	SALISBURY PL	THIRTEEN MILE RD	164	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9330	SALISBURY DR	THIRTEEN MILE RD	SALISBURY PL	168	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9320	SALISBURY DR	SALISBURY PL	SALISBURY PL	566	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9310	SALISBURY PL	SALISBURY DR	SALISBURY DR	199	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
660	SHARON DR	TWP LIMIT	WOODHULL RD	728	3	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
650	SHARON DR	WOODHULL RD	BRIGHAM RD	341	3	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
640	SHARON DR	BRIGHAM RD	HWY 402 W	377	3	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
620	SHARON DR	HWY 402 E	BELLS RD	594	3	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
610	SHARON DR	BELLS RD	CARRIAGE RD	1338	4	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
600	SHARON DR	CARRIAGE RD	SPRINGER RD	1417	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2680	SIDDALL RD	VANNECK RD	FERNHILL DR	831	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6060	SIMCOE AVE	QUEEN ST	SIMCOE CRES	332	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6050	SIMCOE AVE	SIMCOE CRES	DELAWARE ST N	113	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
6040	SIMCOE AVE	DELAWARE ST N	KOMOKA RD	184	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6150	SIMCOE CRES	QUEEN ST	SIMCOE PL	78	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6140	SIMCOE CRES	SIMCOE PL	SIMCOE CRT	98	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6130	SIMCOE CRES	SIMCOE CRT	SPRINGER ST	65	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6120	SIMCOE CRES	SPRINGER ST	SIMCOE AVE	215	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6170	SIMCOE CRT	N END	SIMCOE CRES	85	6	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6160	SIMCOE PL	SIMCOE CRES	S END	69	6	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
1550	SINCLAIR DR	VANNECK RD	BEAR CREEK RD	1098	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
1540	SINCLAIR DR	BEAR CREEK RD	NAIRN RD	2444	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1530	SINCLAIR DR	NAIRN RD	COLDSTREAM RD	2437	6	GS	ADEQ	ADEQ	1-5	ADEQ	ADEQ	ADEQ	ADEQ
1520	SINCLAIR DR	COLDSTREAM RD	EGREMONT DR	345	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1510	SINCLAIR DR	EGREMONT DR	KOMOKA RD	2100	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1500	SINCLAIR DR	KOMOKA RD	AMIENS RD	2440	4	GS	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
9450	SIR JAMES CRT	E END	SIR ROBERT PL	229	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9480	SIR ROBERT PL	E END	SIR JAMES CRT	528	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9470	SIR ROBERT PL	SIR JAMES CRT	ELGIN ST	46	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2770	SIXTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2414	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
2760	SIXTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2459	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2750	SIXTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2456	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2740	SIXTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2457	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2730	SIXTEEN MILE RD	RICHMOND ST	WONDERLAND RD N	2457	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2720	SIXTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2467	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2710	SIXTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2462	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
2700	SIXTEEN MILE RD	DENFIELD RD	MILL LANE	1833	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
2690	SIXTEEN MILE RD	MILL LANE	VANNECK RD	426	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
30320	SOUTHDEL BRNE	BELLS RD	SOUTHMINSTER BRNE	531	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30310	SOUTHDEL BRNE	CARRIAGE RD	BELLS RD	1394	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30300	SOUTHDEL BRNE	BODKIN RD	CARRIAGE RD	1389	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50043	SOUTHDEL DR	RIVER RD	END OF ROAD (WEST LIMIT)	1934	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
50042	SOUTHDEL DR	BALL PARK RD	RIVER RD	646	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
50041	SOUTHDEL DR	FAIRGROUNDS RD	BALL PARK RD	1382	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
50040	SOUTHDEL DR	BODKINS RD	FAIRGROUNDS RD	1395	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
890	SPRINGER RD	LONGWOODS RD	WILLIAM ST	275	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
880	SPRINGER RD	WILLIAM ST	TOWERLINE RD	94	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
870	SPRINGER RD	TOWERLINE RD	MILLER RD	209	5	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
860	SPRINGER RD	MILLER RD	HWY 402 W	907	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
850	SPRINGER RD	HWY 402 W	HWY 402 E	31	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
840	SPRINGER RD	HWY 402 E	HEATLY DR	615	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
830	SPRINGER RD	HEATLY DR	SHARON DR	861	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
820	SPRINGER RD	SHARON DR	HEATLY DR	904	4	GS	NOW	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
6110	SPRINGER ST	SIMCOE CRES	ST LAWRENCE AVE	96	5	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6100	SPRINGER ST	ST LAWRENCE AVE	HURON AVE	127	6	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5770	SPRINGER ST	RAILWAY AVE	ONTARIO AVE	130	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5760	SPRINGER ST	ONTARIO AVE	ERIE AVE	132	6	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5750	SPRINGER ST	ERIE AVE	THAMES AVE	143	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5740	SPRINGER ST	THAMES AVE	GLENDON DR	112	5	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
7696	SPRINGFIELD WAY	WILLARD CRES	WILLARD CRES	113	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7692	SPRINGFIELD WAY	DOAN DR	WILLARD CRES	64	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7690	SPRINGFIELD WAY	GLENDON DR	DOAN DR	143	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
6030	ST CLAIR AVE	DELAWARE ST N	KOMOKA RD	174	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
9405	ST JOHNS DR	PARK ENTRANCE	ARVA ST	238	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6020	ST LAWRENCE AVE	SPRINGER ST	DELAWARE ST N	185	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6010	ST LAWRENCE AVE	DELAWARE ST N	KOMOKA RD	176	5	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
9220	STATION ST	DENFIELD RD	E END	333	6	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
9210	STATION ST	BROOKFIELD ST	DENFIELD RD	105	6	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
7010	STEPHEN MOORE DR	JEFFERIES RD	AYLESFORD CRT	51	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7000	STEPHEN MOORE DR	AYLESFORD CRT	WINONA RD	20	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6690	STEPHEN MOORE DR	WINONA RD	KRISTEN CRT	72	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6680	STEPHEN MOORE DR	KRISTEN CRT	MAXINE CRT	90	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6670	STEPHEN MOORE DR	MAXINE CRT	DAVENTRY WAY	260	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
6660	STEPHEN MOORE DR	DAVENTRY WAY	WINGREEN LANE	142	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
6650	STEPHEN MOORE DR	WINGREEN LANE	WESTBROOK DR	122	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
6640	STEPHEN MOORE DR	WESTBROOK DR	RIVERS EDGE LANE	144	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
8510	STONE FIELD LANE	HYDE PARK ROAD	OAKMONT GARDENS	101	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8500	STONE FIELD LANE	OAKMONT GARDENS	MEADOWSWEET CRES	126	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8490	STONE FIELD LANE	MEADOWSWEET CRES	RED CLOVER CRT	86	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8480	STONE FIELD LANE	RED CLOVER CRT	MEREDITH DR	89	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9656	STONEFIELD GATE	MEREDITH DRIVE	HAVENWOOD LN	91	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9654	STONEFIELD GATE	HAVENWOOD LN	HAVENWOOD ST	87	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
9652	STONEFIELD GATE	HAVENWOOD ST	KING ST	173	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8920	STONERIDGE CRES	CALVERT DR	CALVERT DR	341	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1205	SUNNINGDALE RD W	1.8 KM EAST OF DENFIELD RD	DENFIELD RD	678	3	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1200	SUNNINGDALE RD W	DENFIELD RD	VANNECK RD	2272	3	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
30285	SWAMP COLLEGE ROAD	PROSPRECT HILL ROAD	W END	236	6	LCB	ADEQ	ADEQ	NOW	NOW	ADEQ	ADEQ	ADEQ
8240	SYDENHAM DR	LEWIS DR	ASHLEY LANE	316	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1830	TEN MILE RD	PROSPECT HILL RD	CLARKE RD	2468	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1820	TEN MILE RD	CLARKE RD	HIGHBURY AVE N	2469	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1810	TEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2472	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1800	TEN MILE RD	ADELAIDE ST N	RICHMOND ST	2377	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1795	TEN MILE RD	RICHMOND ST	220 m WEST OF RICHMOND ST	220	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
1790	TEN MILE RD	220 m WEST OF RICHMOND ST	WONDERLAND RD N	2254	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1780	TEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2459	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1770	TEN MILE RD	HYDE PARK RD	DENFIELD RD	2469	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
1760	TEN MILE RD	DENFIELD RD	VANNECK RD	2272	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5870	THAMES AVE	SPRINGER ST	DELAWARE ST S	188	6	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5860	THAMES AVE	DELAWARE ST S	KOMOKA RD	185	6	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5290	THAMES ST	ATKINSON CRT	YOUNG ST	266	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
8250	THIRLWALL BLVD	CAMPBELL CRES	ILDERTON RD	132	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
2270	THIRTEEN MILE RD	PROSPECT HILL RD	CLARKE RD	2421	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
2260	THIRTEEN MILE RD	CLARKE RD	HIGHBURY AVE N	2449	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
2250	THIRTEEN MILE RD	HIGHBURY AVE N	ADELAIDE ST N	2467	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
2240	THIRTEEN MILE RD	ADELAIDE ST N	RICHMOND ST	2461	4	LCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
2230	THIRTEEN MILE RD	RICHMOND ST	GWENDOLYN ST	159	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2220	THIRTEEN MILE RD	GWENDOLYN ST	SALISBURY DR	197	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2210	THIRTEEN MILE RD	SALISBURY DR	SALISBURY DR	194	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2205	THIRTEEN MILE RD	SALISBURY DR	615 m WEST OF SALISBURY DR	1902	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2200	THIRTEEN MILE RD	615 m WEST OF SALISBURY DR	WONDERLAND RD N	1902	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
2190	THIRTEEN MILE RD	WONDERLAND RD N	HYDE PARK RD	2455	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
2180	THIRTEEN MILE RD	HYDE PARK RD	DENFIELD RD	2460	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
2170	THIRTEEN MILE RD	DENFIELD RD	VANNECK RD	2291	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3490	THODY LANE	VANNECK RD	E END	564	5	HCB	ADEQ	ADEQ	ADEQ	NOW	6-10	ADEQ	NOW
50075	TIMBERWALK TR	ILDERTON RD	ARROWOOD PATH	339	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5000	TOWERLINE RD	HIGHLAND RD	SPRINGER RD	235	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9000	TRILLIUM CRT	E END	CALVERT DR	111	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5855	TUNKS LINE	GLENDON DR	229 N OF GLENDON DR	229	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5850	TUNKS LINE	229 N OF GLENDON DR	RAILWAY AVE	282	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2085	TWELVE MILE RD	HIGHBURY AVE N	650 M WEST OF HIGHBURY AVE N	644	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
2080	TWELVE MILE RD	650 M WEST OF HIGHBURY AVE N	ADELAIDE ST N	1821	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
2070	TWELVE MILE RD	ADELAIDE ST N	RICHMOND ST	2452	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2060	TWELVE MILE RD	RICHMOND ST	WONDERLAND RD N	2477	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2050	TWELVE MILE RD	WONDERLAND RD N	HYDE PARK RD	2469	4	GS	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
2040	TWELVE MILE RD	HYDE PARK RD	DENFIELD RD	2466	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
2030	TWELVE MILE RD	DENFIELD RD	VANNECK RD	2264	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6436	UNION AVE	OXBOW DRIVE	VALLEYVIEW CRES	270	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6434	UNION AVE	VALLEYVIEW CRES	VALLEYVIEW CRES	251	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
6432	UNION AVE	VALLEYVIEW CRES	60 m EAST of PARKVIEW DR	38	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6430	UNION AVE	60 m EAST of PARKVIEW DR	PARKVIEW DR	60	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
6420	UNION AVE	PARKVIEW DR	OAKCREST DR	269	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6410	UNION AVE	OAKCREST DR	DELAWARE ST N	115	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
6405	UNION AVE	DELAWARE ST N	HEATHER PL	103	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6400	UNION AVE	HEATHER PL	KOMOKA RD	79	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6540	VALLEYVIEW CES	UNION AVE	UNION AVE	303	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
6350	VALLEYVIEW DR	OXBOW DR	PARKVIEW DR	270	5	HCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
3810	VANNECK RD	ELGINFIELD RD	FERNHILL DR	686	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3800	VANNECK RD	FERNHILL DR	SIXTEEN MILE RD	704	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3790	VANNECK RD	SIXTEEN MILE RD	MCEWEN DR	800	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
3780	VANNECK RD	MCEWEN DR	FIFTEEN MILE RD	595	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3770	VANNECK RD	FIFTEEN MILE RD	GREYSTEAD DR	863	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3760	VANNECK RD	GREYSTEAD DR	FOURTEEN MILE RD	557	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3750	VANNECK RD	FOURTEEN MILE RD	CHARLTON DR	958	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3740	VANNECK RD	CHARLTON DR	THIRTEEN MILE RD	490	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
3730	VANNECK RD	THIRTEEN MILE RD	HEDLEY DR	1013	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
3720	VANNECK RD	HEDLEY DR	TWELVE MILE RD	384	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
3710	VANNECK RD	TWELVE MILE RD	NEW ONTARIO RD	805	3	LCB	ADEQ	NOW	ADEQ	NOW	ADEQ	ADEQ	NOW
3700	VANNECK RD	NEW ONTARIO RD	ATTWOOD LANE	311	3	LCB	ADEQ	6-10	ADEQ	6-10	ADEQ	ADEQ	6-10
3690	VANNECK RD	ATTWOOD LANE	ILDERTON RD	286	3	LCB	ADEQ	NOW	ADEQ	ADEQ	6-10	ADEQ	6-10
3680	VANNECK RD	ILDERTON RD	IVAN DR	1215	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3670	VANNECK RD	IVAN DR	TEN MILE RD	275	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3660	VANNECK RD	TEN MILE RD	SINCLAIR DR	1227	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3650	VANNECK RD	SINCLAIR DR	NINE MILE RD	85	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3640	VANNECK RD	NINE MILE RD	EIGHT MILE RD	1423	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3630	VANNECK RD	EIGHT MILE RD	BEAR CREEK RD	1191	3	LCB	ADEQ	6-10	ADEQ	ADEQ	ADEQ	ADEQ	6-10
3620	VANNECK RD	BEAR CREEK RD	MEDWAY RD	165	3	LCB	ADEQ	NOW	ADEQ	ADEQ	ADEQ	ADEQ	NOW
3610	VANNECK RD	MEDWAY RD	GOLD CREEK DR	144	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
3600	VANNECK RD	GOLD CREEK DR	SUNNINGDALE RD W	1317	3	LCB	ADEQ	NOW	ADEQ	NOW	ADEQ	ADEQ	NOW
3585	VANNECK RD	SUNNINGDALE RD W	350 m NORTH of WYNFIELD GATE	212	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
3580	VANNECK RD	350 m NORTH of WYNFIELD GATE	WYNFIELD GATE	360	4	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
3570	VANNECK RD	WYNFIELD GATE	EGREMONT DR	244	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
5330	VICTORIA ST	HOGS BACK CS	YOUNG ST	27	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
930	VICTORIA ST	YOUNG ST	WELLINGTON ST	386	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
920	VICTORIA ST	WELLINGTON ST	WELLINGTON ST	52	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
910	VICTORIA ST	WELLINGTON ST	PRINCE OF WALES ST	121	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
900	VICTORIA ST	PRINCE OF WALES ST	LONGWOODS RD	183	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8990	WARBLER CIR	CALVERT DR	W END	48	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
9430	WELDON AVE	ARVA ST	W END	180	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
440	WELDON WAY	COOK RD	WESTDEL BRNE	913	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
5475	WELLINGTON ST	E END	65 M EAST OF MARTIN RD	284	5	LCB	ADEQ	ADEQ	NOW	1-5	6-10	ADEQ	NOW
5470	WELLINGTON ST	65 M EAST OF MARTIN ROAD	MARTIN RD	66	5	LCB	ADEQ	ADEQ	NOW	1-5	ADEQ	ADEQ	NOW
5460	WELLINGTON ST	MARTIN RD	VICTORIA ST	729	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5450	WELLINGTON ST	VICTORIA ST	85 M WEST OF PRINCE ALBERT ST	118	5	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5440	WELLINGTON ST	PRINCE ALBERT ST	DAVIS ST	75	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
5435	WELLINGTON ST	85 M WEST OF PRINCE ALBERT ST	PRINCE ALBERT ST	87	6	HCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
5430	WELLINGTON ST	DAVIS ST	HILLCREST AVE	361	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
5410	WELLINGTON ST	HILLCREST AVE	YORK ST	87	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5400	WELLINGTON ST	YORK ST	GIDEON DR	123	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5390	WELLINGTON ST	GIDEON DR	W END	71	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7480	WESTBROOK CRES	BLACKBURN CRES	WESTBROOK DR	314	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7470	WESTBROOK CRES	WESTBROOK DR	BLACKBURN CRES	307	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7460	WESTBROOK CRES	WOODLAND DR	BIRCHCREST DR	124	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7450	WESTBROOK CRES	WESTBROOK DR	WOODLAND DR	120	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7200	WESTBROOK DR	KILWORTH PARK DR	PHEASANT TRAIL	95	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7190	WESTBROOK DR	PHEASANT TRAIL	WESTBROOK CRES	126	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7180	WESTBROOK DR	WESTBROOK CRES	WESTBROOK CRES	360	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7170	WESTBROOK DR	WESTBROOK CRES	JEFFERIES RD	227	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7160	WESTBROOK DR	JEFFERIES RD	WINONA RD	68	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7150	WESTBROOK DR	WINONA RD	STEPHEN MOORE DR	297	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7140	WESTBROOK DR	STEPHEN MOORE DR	W END	52	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
270	WESTDEL BRNE	TWP LIMIT	RANGER DR	700	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
260	WESTDEL BRNE	RANGER DR	DECKER DR	542	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
250	WESTDEL BRNE	DECKER DR	LITTLEWOOD DR	1470	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
220	WESTDEL BRNE	LITTLEWOOD DR	LITTLE CHURCH DR	1194	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
210	WESTDEL BRNE	LITTLE CHURCH DR	WELDON WAY	865	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
200	WESTDEL BRNE	WELDON WAY	SOUTHMINSTER BRNE	1398	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
530	WESTMINSTER DR	TWP LIMIT	WOODHULL RD	754	4	GS	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
520	WESTMINSTER DR	WOODHULL RD	BELLS RD	1310	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
510	WESTMINSTER DR	BELLS RD	CARRIAGE RD	1429	4	GS	ADEQ	ADEQ	NOW	ADEQ	6-10	ADEQ	NOW
500	WESTMINSTER DR	CARRIAGE RD	COOKS RD	948	4	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
7705	WILLARD CRES	SPRINGFIELD WAY	W END	55	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7700	WILLARD CRES	SPRINGFIELD WAY	SPRINGFIELD WAY	345	6	HCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
5030	WILLIAM ST	HIGHLAND RD	BLOSDALE CRES	126	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5020	WILLIAM ST	BLOSDALE CRES	SPRINGER RD	104	5	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50015	WILLOW RIDGE RD	WILLOW RIDGE RD	WILLOW RIDGE RD	96	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
50010	WILLOW RIDGE RD	WILLOW RIDGE RD	DOGWOOD TR	87	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9110	WILLOW RIDGE RD	DOGWOOD TRAIL	WILLOW RIDGE RD	88	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9100	WILLOW RIDGE RD	BLUE HERRON DR	DOGWOOD TRAIL	89	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
9090	WILLOW RIDGE RD	ILDERTON RD	MARTIN DR	149	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9080	WILLOW RIDGE RD	MARTIN DR	WILLOW RIDGE RD	205	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
9070	WILLOW RIDGE RD	WILLOW RIDGE RD	BLUE HERRON DR	406	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7130	WINGREEN LANE	WINONA RD	STEPHEN MOORE DR	293	6	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7050	WINONA RD	STEPHEN MOORE DR	CANDLEWOOD LANE	115	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7040	WINONA RD	CANDLEWOOD LANE	DAVENTRY WAY	112	5	HCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
7030	WINONA RD	DAVENTRY WAY	WINGREEN LANE	112	5	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7020	WINONA RD	WINGREEN LANE	WESTBROOK DR	109	6	HCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7510	WISHINGWELL CRT	N END	PIONEER DR	42	6	HCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
4140	WONDERLAND RD N	ELGINFIELD RD	SIXTEEN MILE RD	1168	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
4130	WONDERLAND RD N	SIXTEEN MILE RD	FIFTEEN MILE RD	1432	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
4120	WONDERLAND RD N	FIFTEEN MILE RD	FOURTEEN MILE RD	1389	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix C: Time of Need

Table C.1: Time of Need

Section ID	Street	From	To	Length	MMS	Surface Type (m)	Time of Need						
							Geometry	Surface	Width	Structural Adequacy	Drainage	Capacity	Overall
4110	WONDERLAND RD N	FOURTEEN MILE RD	THIRTEEN MILE RD	1438	3	LCB	ADEQ	NOW	ADEQ	6-10	ADEQ	ADEQ	NOW
4100	WONDERLAND RD N	THIRTEEN MILE RD	TWELVE MILE RD	1359	3	LCB	ADEQ	NOW	ADEQ	1-5	ADEQ	ADEQ	NOW
4090	WONDERLAND RD N	TWELVE MILE RD	ILDERTON RD	1489	3	LCB	ADEQ	NOW	ADEQ	NOW	ADEQ	ADEQ	NOW
8590	WOOD LILY LANE	PERRIWINKLE DR	STONE FIELD LANE	84	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
8560	WOOD LILY LANE	RED CLOVER CRT	PERRIWINKLE DR	374	6	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
50033	WOOD RD	FERNHILL DR	MCEWEN DR	1371	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50032	WOOD RD	MCEWEN DR	GREYSTEAD DR	1360	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50031	WOOD RD	GREYSTEAD DR	CHARLTON DR	1365	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
50030	WOOD RD	CHARLTON DR	HIGHWAY 22	399	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
175	WOODHULL RD	NORTH LIMITS	LONGWOODS ROAD	1139	5	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
170	WOODHULL RD	LONGWOODS RD	SHARON DR	2435	4	LCB	ADEQ	ADEQ	ADEQ	6-10	6-10	ADEQ	6-10
160	WOODHULL RD	SHARON DR	HWY 402 W	653	4	LCB	ADEQ	ADEQ	ADEQ	NOW	ADEQ	ADEQ	NOW
140	WOODHULL RD	HWY 402 E	WESTMINSTER DR	593	4	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
130	WOODHULL RD	WESTMINSTER DR	RANGER DR	1829	4	LCB	ADEQ	ADEQ	ADEQ	6-10	ADEQ	ADEQ	6-10
120	WOODHULL RD	RANGER DR	LITTLEWOOD DR	1825	4	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
110	WOODHULL RD	LITTLEWOOD DR	LITTLE CHURCH DR	1811	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
100	WOODHULL RD	LITTLE CHURCH DR	SOUTHMINSTER BRNE	1841	4	GS	ADEQ	ADEQ	NOW	ADEQ	ADEQ	ADEQ	NOW
7390	WOODLAND DR	BIRCHCREST DR	WESTBROOK CRES	273	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7385	WOODLAND DR	BARON CRES	BIRCHCREST DR	107	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7380	WOODLAND DR	ERLSCOURT TERRACE	BARON CRES	101	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7800	WYNFIELD GATE	WYNFIELD LANE	VANNECK RD	237	5	LCB	ADEQ	ADEQ	ADEQ	1-5	ADEQ	ADEQ	1-5
7830	WYNFIELD LANE	WYNFIELD LANE	WYNFIELD GATE	520	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7820	WYNFIELD LANE	WYNFIELD LANE	WYNFIELD LANE	577	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
7810	WYNFIELD LANE	WYNFIELD GATE	WYNFIELD LANE	212	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5180	YORK ST	MILL CREEK LANE	OSBORNE ST	83	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5170	YORK ST	OSBORNE ST	YOUNG ST	138	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5160	YORK ST	YOUNG ST	WELLINGTON ST	291	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5150	YORK ST	WELLINGTON ST	100 M N OF LONGWOODS RD	76	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5145	YORK ST	100 M N OF LONGWOOD RD	LONGWOOD RD	100	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5230	YORKDALE ST	MILL CREEK LANE	W END	75	6	LCB	ADEQ	ADEQ	ADEQ	1-5	6-10	ADEQ	1-5
5220	YORKDALE ST	OSBORNE ST	MILL CREEK LANE	163	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5320	YOUNG ST	VICTORIA ST	THAMES ST	355	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
5310	YOUNG ST	THAMES ST	ELMVIEW DR	40	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ
5300	YOUNG ST	ELMVIEW DR	YORK ST	198	5	LCB	ADEQ	ADEQ	ADEQ	ADEQ	6-10	ADEQ	6-10
8110	ZAVITZ DR	POPLAR HILL RD	MCKAY ST	131	6	LCB	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ	ADEQ



APPENDIX D

10 Year Recommended Work Program

MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
4290	ADELAIDE ST N	FIFTEEN MILE RD-SIXTEEN MILE RD	1515	Surface Treated	2023	Single Surface Treatment	\$ 33,902
4300	ADELAIDE ST N	SIXTEEN MILE RD-ELGINFIELD RD	1075	Hot Mix	2023	Pulverize + 90 mm OL	\$ 256,227
4270	ADELAIDE ST N	THIRTEEN MILE RD-FOURTEEN MILE RD	1423	Hot Mix	2023	Crack Sealing (HMAC)	\$ 23,424
7405	BIRCHCREST DR	WESTBROOK CRES-EARLSCOURT TERRACE	402	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 103,092
8930	CALVERT LN	MEADOWCREEK DR-STONERIDGE CRES	58	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 14,881
4360	CLARKE RD	MEDWAY RD-EIGHT MILE RD	1436	Surface Treated	2023	Single Surface Treatment	\$ 30,098
3000	COLDSTREAM RD	VANNECK RD-OXBOW DR	1485	Hot Mix	2023	Pulverize + 90 mm OL	\$ 349,051
6500	DUKE ST	PRINCE ST-ARTHUR ST	121	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 21,467
1263	GOLD CREEK DR	Nairn Rd-Lobo Lane	95	Hot Mix	2023	Pulverize + 90 mm OL	\$ 22,974
5340	HARRIS RD	VICTORIA ST-HOGS BACK CS	19	Hot Mix	2023	Crack Sealing (HMAC)	\$ 352
4010	HYDE PARK RD	SIXTEEN MILE RD-ELGINFIELD RD	1225	Surface Treated	2023	Single Surface Treatment	\$ 27,758
1900	ILDERTON RD	AMIENS RD-EGREMONT DR	2048	Surface Treated	2023	Single Surface Treatment	\$ 34,806
7630	JEFFERIES RD	STEPHEN MOORE DR-PEREGRINE AVE	102	Hot Mix	2023	Crack Sealing (HMAC)	\$ 1,915
7635	JEFFERIES RD	PEREGRINE AVE-ENTERPRISE DR	103	Hot Mix	2023	Crack Sealing (HMAC)	\$ 1,934
7640	JEFFERIES RD	ENTERPRISE DR-GLENDON DR	258	Hot Mix	2023	Crack Sealing (HMAC)	\$ 4,846
7350	KILWORTH PARK DR	WESTBROOK DR-BIRCHCREST DR	141	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 35,715
7360	KILWORTH PARK DR	BIRCHCREST DR-GLENDON DR	153	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 39,229
1070	OXBOW DR	UNION AVE-COLDSTREAM RD	1536	Surface Treated	2023	Single Surface Treatment	\$ 30,019
1067	OXBOW DR	END OF CURBS-UNION AVE	251	Hot Mix	2023	Crack Sealing (HMAC)	\$ 4,190
50024	PROSPECT HILL RD	PLOVER MILLS RD-THIRTEEN MILE RD	1300	Surface Treated	2023	Single Surface Treatment	\$ 26,144
50025	PROSPECT HILL RD	THIRTEEN MILE RD-FOURTEEN MILE RD	1400	Surface Treated	2023	Single Surface Treatment	\$ 27,758
50026	PROSPECT HILL RD	FOURTEEN MILE RD-EBENEZER DR	561	Surface Treated	2023	Single Surface Treatment	\$ 11,123
50027	PROSPECT HILL RD	EBENEZER DR-FIFTEEN MILE RD	868	Surface Treated	2023	Single Surface Treatment	\$ 17,457
50028	PROSPECT HILL RD	FIFTEEN MILE RD-SIXTEEN MILE RD	1632	Surface Treated	2023	Single Surface Treatment	\$ 32,820
50029	PROSPECT HILL RD	SIXTEEN MILE RD-ELGINFIELD RD	950	Surface Treated	2023	Single Surface Treatment	\$ 18,836
5810	QUEEN ST	HURON AVE-SIMCOE CRES	204	Hot Mix	2023	Crack Sealing (HMAC)	\$ 3,265
660	SHARON DR	WOODHULL RD-TWP LIMIT	728	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 163,662
850	SPRINGER RD	HWY 402 E-HWY 402 W	31	Surface Treated	2023	Single Surface Treatment	\$ 527
880	SPRINGER RD	TOWERLINE RD-WILLIAM ST	94	Surface Treated	2023	Single Surface Treatment	\$ 1,889
3570	VANNECK RD	EGREMONT DR-WYNFIELD GATE	244	Surface Treated	2023	Single Surface Treatment	\$ 4,977
3580	VANNECK RD	WYNFIELD GATE-SUNNINGDALE RD W	360	Surface Treated	2023	Single Surface Treatment	\$ 7,342
3585	VANNECK RD	start of HCB-SUNNINGDALE RD W	212	Surface Treated	2023	Single Surface Treatment	\$ 4,385
3600	VANNECK RD	SUNNINGDALE RD W-GOLD CREEK DR	1317	Surface Treated	2023	Pulverize and Surface Treat	\$ 85,161
3610	VANNECK RD	GOLD CREEK DR-MEDWAY RD	144	Surface Treated	2023	Single Surface Treatment	\$ 2,895
3710	VANNECK RD	NEW ONTARIO RD-TWELVE MILE RD	805	Surface Treated	2023	Pulverize and Surface Treat	\$ 52,058
9080	WILLOW RIDGE RD	WILLOW RIDGE RD-MARTIN DR	205	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 53,889
9090	WILLOW RIDGE RD	MARTIN DR-ILDERTON RD	149	Hot Mix	2023	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 39,166
4100	WONDERLAND RD N	TWELVE MILE RD-THIRTEEN MILE RD	1359	Surface Treated	2023	Single Surface Treatment	\$ 29,639
4110	WONDERLAND RD N	THIRTEEN MILE RD-FOURTEEN MILE RD	1438	Surface Treated	2023	Single Surface Treatment	\$ 31,364
4120	WONDERLAND RD N	FOURTEEN MILE RD-FIFTEEN MILE RD	1389	Surface Treated	2023	Single Surface Treatment	\$ 30,687
4130	WONDERLAND RD N	FIFTEEN MILE RD-SIXTEEN MILE RD	1432	Surface Treated	2023	Single Surface Treatment	\$ 32,044
4140	WONDERLAND RD N	SIXTEEN MILE RD-ELGINFIELD RD	1168	Surface Treated	2023	Single Surface Treatment	\$ 24,813
Total Cost 2023							\$ 1,737,781
4250	ADELAIDE ST N	ILDERTON RD-TWELVE MILE RD	1449	Surface Treated	2024	Pulverize and Surface Treat	\$ 95,188
4280	ADELAIDE ST N	FOURTEEN MILE RD-FIFTEEN MILE RD	1387	Hot Mix	2024	Crack Sealing (HMAC)	\$ 24,512
50061	AMIENS RD	SINCLAIR DR-IVAN DR	1356	Surface Treated	2024	Single Surface Treatment	\$ 28,089



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
50063	AMIENS RD	ILDERTON RD-HEDLEY DR	1365	Surface Treated	2024	Pulverize and Surface Treat	\$ 87,177
7300	BEECHNUT ST	BEECHNUT PL-PARKLAND PL	131	Hot Mix	2024	Pulverize + 90 mm OL	\$ 23,664
7410	BIRCHCREST DR	EARLSCOURT TERRACE-KILWORTH PARK DR	120	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,699
7520	BLACKBURN CRES	BLACKBURN PL-START OF CURB	110	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 20,089
8940	CALVERT LN	STONERIDGE CRES-STONERIDGE CRES	168	Hot Mix	2024	Replace Asphalt with Granular Base Repairs	\$ 59,892
8970	CALVERT LN	MARTIN DR-BLUE HERRON DR	129	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 33,656
330	COOK RD	DECKER DR-DECKER DR	116	Surface Treated	2024	Single Surface Treatment	\$ 2,031
7710	DOAN DR	SPRINGFIELD WAY-CURVE	140	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 36,982
7715	DOAN DR	CURVE-Springfield Way	232	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 61,278
7260	ELMHURST ST	BEECHNUT PL-PARKLAND PL	129	Hot Mix	2024	Pulverize + 90 mm OL	\$ 23,766
7270	ELMHURST ST	PARKLAND PL-GLENDON DR	209	Hot Mix	2024	Pulverize + 90 mm OL	\$ 38,496
5980	HURON AVE	KOMOKA RD-DELAWARE ST N	178	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 34,830
5990	HURON AVE	DELAWARE ST N-SPRINGER ST	187	Hot Mix	2024	Pulverize + 90 mm OL	\$ 33,790
3990	HYDE PARK RD	FOURTEEN MILE RD-FIFTEEN MILE RD	1392	Surface Treated	2024	Pulverize and Surface Treat	\$ 99,066
8760	KENNEDY AVE	ROBERT ST-VINTAGE WAY S	78	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 19,600
7320	KILWORTH PARK DR	BLACKBURN CRES-END OF CURBS	246	Hot Mix	2024	Pulverize + 90 mm OL	\$ 51,180
8400	KING ST	NEW DEVELOPMENT-GEORGE ST	195	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 50,875
8420	KING ST	ILDERTON RD-STONEFIELD GATE	440	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 117,664
9680	KING ST	STONEFIELD GATE-NORTH TO END	189	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 47,451
5250	MILL CREEK LN	YORKDALE ST-YORK ST	213	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 40,993
1090	OXBOW DR	NAIRN RD-VANNECK RD	971	Surface Treated	2024	Pulverize and Surface Treat	\$ 61,129
1065	OXBOW DR	VALLEYVIEW DRIVE-END OF CURBS	96	Hot Mix	2024	Crack Sealing (HMAC)	\$ 1,858
30270	PROSPECT HILL RD	ILDERTON RD-PLOVER MILLS ROAD	1423	Surface Treated	2024	Single Surface Treatment	\$ 31,138
5800	QUEEN ST	RAILWAY AVE-HURON AVE	169	Hot Mix	2024	Crack Sealing (HMAC)	\$ 2,906
5820	QUEEN ST	SIMCOE CRES-SIMCOE AVE	185	Hot Mix	2024	Crack Sealing (HMAC)	\$ 3,093
8720	ROBERT ST	KENNEDY AVE-ROBERT CRT	113	Hot Mix	2024	Replace Asphalt with Granular Base Repairs	\$ 40,266
5740	SPRINGER ST	GLENDON DR-THAMES AVE	112	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 21,198
7690	SPRINGFIELD WAY	Glendon Drive-Doan Drive	143	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 38,254
7692	SPRINGFIELD WAY	Doan Drive-Willard Crescent	64	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 17,121
6010	ST LAWRENCE AVE	KOMOKA RD-DELAWARE ST N	176	Hot Mix	2024	Pulverize + 90 mm OL	\$ 33,006
6670	STEPHEN MOORE DR	DAVENTRY WAY-MAXINE CRT	260	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 78,008
5855	TUNKS LN	END 3 LANES-RAILWAY AVE	229	Hot Mix	2024	Crack Sealing (HMAC)	\$ 3,446
6410	UNION AVE	DELAWARE ST N-OAKCREST DR	115	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 24,753
6350	VALLEYVIEW DR	OXBOW DR-PARKVIEW DR	270	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 56,354
3700	VANNECK RD	ATTWOOD LANE-NEW ONTARIO RD	311	Surface Treated	2024	Single Surface Treatment	\$ 6,623
5330	VICTORIA ST	YOUNG ST-HOGS BACK CS	27	Hot Mix	2024	Crack Sealing (HMAC)	\$ 444
50001	WILLOW RIDGE RD	ILDERTON RD-MARTIN DR	180.7	Hot Mix	2024	Crack Sealing (HMAC)	\$ 3,365
4090	WONDERLAND RD N	ILDERTON RD-TWELVE MILE RD	1489	Surface Treated	2024	Pulverize and Surface Treat	\$ 105,963
50030	WOOD RD	HIGHWAY 22-CHARLTON DR	399	Surface Treated	2024	Single Surface Treatment	\$ 10,477
50031	WOOD RD	CHARLTON DR-GREYSTEAD DR	1365	Surface Treated	2024	Single Surface Treatment	\$ 35,841
50033	WOOD RD	MCEWEN DR-FERNHILL DR	1371	Surface Treated	2024	Single Surface Treatment	\$ 35,999
7800	WYNFIELD GATE	VANNECK RD-WYNFIELD LANE	237	Hot Mix	2024	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 61,050
5310	YOUNG ST	ELMVIEW DR-THAMES ST	40	Surface Treated	2024	Single Surface Treatment	\$ 700
Total Cost 2024							\$ 1,734,960
30040	AMIENS RD	MELROSE DR-GOLD CREEK DRIVE	1131	Surface Treated	2025	Pulverize and Surface Treat	\$ 74,400
50060	AMIENS RD	LAMONT DR-SINCLAIR DR	1393	Surface Treated	2025	Pad + Surface Treatment	\$ 58,603



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
50062	AMIENS RD	IVAN DR-ILDERTON RD	1365	Surface Treated	2025	Pulverize and Surface Treat	\$ 91,080
50064	AMIENS RD	HEDLEY DR-WOOD RD	1007	Surface Treated	2025	Pulverize and Surface Treat	\$ 66,243
5270	ATKINSON CRT	MILL CREEK LANE-THAMES ST	176	Hot Mix	2025	Replace Asphalt with Granular Base Repairs	\$ 59,015
7290	BEECHNUT ST	ELMHURST ST-BEECHNUT PL	294	Hot Mix	2025	Pulverize + 90 mm OL	\$ 56,789
7525	BLACKBURN CRES	START OF CURB-PIONEER DR	288	Hot Mix	2025	Replace Asphalt with Granular Base Repairs	\$ 94,007
7530	BLACKBURN CRES	PIONEER DR-WESTBROOK CRES	126	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 34,296
7560	BLACKBURN CRES	BEECHNUT ST-KILWORTH PARK DR	302	Hot Mix	2025	Pulverize + 90 mm OL	\$ 54,085
9050	BLUE HERRON DR	CALVERT DR-WILLOW RIDGE RD	144	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 39,166
690	BRIGHAM RD	ELVIAGE DR-GIDEON DR	434	Surface Treated	2025	Single Surface Treatment	\$ 8,606
8960	CALVERT LN	TRILLIUM CRT-MARTIN DR	125	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 34,027
3020	COLDSTREAM RD	MELROSE DR-GOLD CREEK DR	1371	Surface Treated	2025	Single Surface Treatment	\$ 30,074
6310	DELAWARE ST N	OXBOW DR-PRINCESS AVE	152	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 28,082
6320	DELAWARE ST N	PRINCESS AVE-PARKVIEW DR	96	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 18,374
9460	ELGIN ST	RICHMOND ST-ELGIN ST	117	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,441
6180	FIELDRUN DR	SIMCOE AVE-FIELDSTONE CRES S	112	Hot Mix	2025	Crack Sealing (HMAC)	\$ 2,204
6490	HAMILTON ST	ARTHUR ST-KOMOKA RD	118	Hot Mix	2025	Microsurfacing	\$ 4,780
8600	HERITAGE DR	S END-HERITAGE PL	60	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 16,526
4000	HYDE PARK RD	FIFTEEN MILE RD-SIXTEEN MILE RD	1425	Surface Treated	2025	Pulverize and Surface Treat	\$ 109,809
7600	JEFFERIES RD	PIONEER DR-WESTBROOK DR	141	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 37,890
9014	MARTIN DR	WILLOW RIDGE ROAD-CALVERT LANE	218	Hot Mix	2025	Crack Sealing (HMAC)	\$ 4,344
5260	MILL CREEK LN	START OF CRUB-ATKINSON CRT	56	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 13,537
8670	MILL ST	ILDERTON RD-MARGARET ST	357	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 93,549
5920	ONTARIO AVE	SPRINGER ST-QUEEN ST	264	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 49,647
1000	OXBOW DR	AMIENS RD-LANSDOWNE PARK CRES	738	Surface Treated	2025	Single Surface Treatment	\$ 15,079
1020	OXBOW DR	LANSDOWNE PARK CRES-KOMOKA RD	1390	Surface Treated	2025	Pulverize and Surface Treat	\$ 90,131
8020	PARK CRES	POPLAR HILL RD-CURRIE CRT	105	Surface Treated	2025	Single Surface Treatment	\$ 2,209
9835	PEREGRINE AVE	EARLSCOURT TERRACE-DAUSETT DRIVE	132	Hot Mix	2025	Crack Sealing (HMAC)	\$ 2,661
7210	PHEASANT TRAIL	W END-WESTBROOK DR	204	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 55,491
6455	PRINCE ST	HAMILTON ST-CAVERHILL CRES	67	Hot Mix	2025	Crack Sealing (HMAC)	\$ 1,318
3470	PULHAM RD	OLD RIVER RD-VANNECK RD	378	Surface Treated	2025	Single Surface Treatment	\$ 7,383
5780	QUEEN ST	GLENDON DR-ONTARIO AVE	386	Hot Mix	2025	Crack Sealing (HMAC)	\$ 6,742
6620	RIVERS EDGE LN	CRESTVIEW DR-STEPHEN MOORE DR	71	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 19,314
870	SPRINGER RD	MILLER RD-TOWERLINE RD	209	Surface Treated	2025	Single Surface Treatment	\$ 3,958
890	SPRINGER RD	WILLIAM ST-LONGWOODS RD	275	Hot Mix	2025	Crack Sealing (HMAC)	\$ 5,547
5750	SPRINGER ST	THAMES AVE-ERIE AVE	143	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,436
6100	SPRINGER ST	HURON AVE-ST LAWRENCE AVE	127	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 24,319
7696	SPRINGFIELD WAY	Willard Crescent-Willard Crescent	113	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,735
6640	STEPHEN MOORE DR	RIVERS EDGE LANE-WESTBROOK DR	144	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 45,481
8510	STONE FIELD LINE	OAKMONT GARDENS-HYDE PARK ROAD	101	Hot Mix	2025	Microsurfacing	\$ 6,098
6420	UNION AVE	OAKCREST DR-PARKVIEW DR	269	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 61,437
6430	UNION AVE	PARKVIEW DR-START OF CURBS	60	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 13,302
5430	WELLINGTON ST	GARDEN AVE-END OF CURBS	361	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 83,674
7705	WILLARD CRES	SPRINGFIELD WAY-WEST END	55	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 14,981
7040	WINONA RD	DAVENTRY WAY-CANDLEWOOD LANE	112	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,836
7050	WINONA RD	CANDLEWOOD LANE-STEPHEN MOORE DR	115	Hot Mix	2025	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,676
50032	WOOD RD	GREYSTEAD DR-MCEWEN DR	1360	Surface Treated	2025	Single Surface Treatment	\$ 36,781



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
5160	YORK ST	WELLINGTON ST-YOUNG ST	291	Hot Mix	2025	Crack Sealing (HMAC)	\$ 4,797
5180	YORK ST	OSBORNE ST-MILL CREEK LANE	83	Hot Mix	2025	Crack Sealing (HMAC)	\$ 1,286
5300	YOUNG ST	York St-Thames St	198	Surface Treated	2025	Single Surface Treatment	\$ 3,867
Total Cost 2025							\$ 1,736,113
4260	ADELAIDE ST N	TWELVE MILE RD-THIRTEEN MILE RD	1384	Surface Treated	2026	Pulverize and Surface Treat	\$ 96,455
8220	ASHLEY LN	ILDERTON RD-ABERDEEN DR	91	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 25,499
5280	ATKINSON CRT	THAMES ST-E END	265	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 67,847
7280	BEECHNUT ST	BLACKBURN CRES-ELMHURST ST	179	Hot Mix	2026	Pulverize + 90 mm OL	\$ 30,422
7400	BIRCHCREST DR	WOODLAND DR-WESTBROOK CRES	160	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 44,286
7540	BLACKBURN CRES	BLACKBURN PL-KILWORTH PARK DR	132	Hot Mix	2026	Pulverize + 90 mm OL	\$ 30,567
7550	BLACKBURN CRES	KILWORTH PARK DR-BEECHNUT ST	146	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,260
9200	BROOKFIELD ST	S END-STATION ST	414	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 106,009
810	CARRIAGE RD	HARRIS RD-GIDEON DR	2279	Surface Treated	2026	Single Surface Treatment	\$ 50,083
3010	COLDSTREAM RD	OXBOW DR-MELROSE DR	1357	Surface Treated	2026	Single Surface Treatment	\$ 31,081
6600	CRESTVIEW DR	S END-RIVERS EDGE LANE	130	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 35,982
8080	CURRIE CRT	JAMES ST-PARK CRES	108	Hot Mix	2026	Pulverize + 90 mm OL	\$ 19,136
7250	ELMHURST ST	BEECHNUT ST-BEECHNUT PL	370	Hot Mix	2026	Pulverize + 90 mm OL	\$ 70,937
5880	ERIE AVE	KOMOKA RD-DELAWARE ST S	184	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 35,013
8610	HERITAGE DR	HERITAGE PL-MILL ST	118	Hot Mix	2026	Replace Asphalt with Granular Base Repairs	\$ 45,192
3980	HYDE PARK RD	THIRTEEN MILE RD-FOURTEEN MILE RD	1439	Surface Treated	2026	Pulverize and Surface Treat	\$ 104,470
7070	KRISTEN CRT	STEPHEN MOORE DR-N END	65	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 18,233
8660	MILL ST	MARGARET ST-HERITAGE PL	222	Hot Mix	2026	Replace Asphalt with Granular Base Repairs	\$ 82,915
3360	NEW ONTARIO RD	VANNECK RD-HEDLEY DR	1083	Surface Treated	2026	Pulverize and Surface Treat	\$ 76,525
5200	OSBORNE ST	GIDEON DR-YORKDALE ST	131	Hot Mix	2026	Pulverize + 90 mm OL	\$ 28,433
5210	OSBORNE ST	YORKDALE ST-YORK ST	135	Hot Mix	2026	Pulverize + 90 mm OL	\$ 32,737
1080	OXBOW DR	COLDSTREAM RD-NAIRN RD	2546	Surface Treated	2026	Pulverize and Surface Treat	\$ 174,974
5500	PRINCE ALBERT ST	LONGWOODS RD-MILLMANOR PL	114	Hot Mix	2026	Crack Sealing (HMAC)	\$ 1,877
620	SHARON DR	BELLS RD-HWY 402 E	594	Hot Mix	2026	Microsurfacing	\$ 32,893
6110	SPRINGER ST	ST LAWRENCE AVE-SIMCOE CRES	96	Hot Mix	2026	Pulverize + 90 mm OL	\$ 18,738
6030	ST CLAIR AVE	KOMOKA RD-DELAWARE ST N	174	Hot Mix	2026	Pulverize + 90 mm OL	\$ 39,647
6020	ST LAWRENCE AVE	DELAWARE ST N-SPRINGER ST	185	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 43,524
6660	STEPHEN MOORE DR	WINGREEN LANE-DAVENTRY WAY	142	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 46,189
6690	STEPHEN MOORE DR	AYLESFORD CRT-KRISTEN CRT	72	Hot Mix	2026	Crack Sealing (HMAC)	\$ 1,751
1200	SUNNINGDALE RD W	VANNECK RD-DENFIELD RD	2272	Surface Treated	2026	Single Surface Treatment	\$ 52,039
5290	THAMES ST	YOUNG ST-ATKINSON CRT	266	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 68,089
8250	THIRLWALL BLVD	ILDERTON RD-CAMPBELL CRES	132	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 44,286
5475	WELLINGTON ST	65 M EAST OF MARTIN RD-E END	284	Surface Treated	2026	Pulverize and Surface Treat	\$ 10,996
5470	WELLINGTON ST	MARTIN RD-END	66	Surface Treated	2026	Pulverize and Surface Treat	\$ 2,681
7140	WESTBROOK DR	W END-STEPHEN MOORE DR	52	Hot Mix	2026	Crack Sealing (HMAC)	\$ 1,067
7030	WINONA RD	WINGREEN LANE-DAVENTRY WAY	112	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,000
8820	WINSOME AVE	ROBERT ST-ILDERBROOK CIR	92	Hot Mix	2026	Replace Asphalt with Granular Base Repairs	\$ 35,201
7390	WOODLAND DR	BIRCHCREST DR-WESTBROOK CRES	273	Hot Mix	2026	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 73,659
5170	YORK ST	YOUNG ST-OSBORNE ST	138	Hot Mix	2026	Crack Sealing (HMAC)	\$ 2,308
Total Cost 2026							\$ 1,739,001
30020	AMIENS RD	OXBOW DRIVE-MELROSE DRIVE	1586	Surface Treated	2027	Pulverize and Surface Treat	\$ 115,430
30060	AMIENS RD	GOLD CREEK DR-LAMONT DR	1359	Surface Treated	2027	Pulverize and Surface Treat	\$ 93,486



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
6440	ARTHUR ST	HAMILTON ST-DUKE ST	139	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,725
7060	AYLESFORD CRT	STEPHEN MOORE DR-N END	64	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 20,526
8980	CALVERT DR	BLUE HERRON DR-MARTIN DR	132	Hot Mix	2027	Crack Sealing (HMAC)	\$ 2,756
8950	CALVERT LN	STONERIDGE CRES-TRILLIUM CRT	83	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 23,947
4370	CLARKE RD	EIGHT MILE RD-NINE MILE RD	1387	Surface Treated	2027	Pulverize and Surface Treat	\$ 102,330
6510	DUKE ST	ARTHUR ST-KOMOKA RD	120	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 24,375
7675	EARLSCOURT TERR	BARON CRES-PEREGRINE AVE	425	Hot Mix	2027	Crack Sealing (HMAC)	\$ 8,872
7677	EARLSCOURT TERRACE	BIRCHCREST DR-BARON CR	103	Hot Mix	2027	Microsurfacing	\$ 7,243
760	ELVIAGE DR	BRIGHAM RD-TWP LIMIT	752	Surface Treated	2027	Pulverize and Surface Treat	\$ 52,481
6480	HAMILTON ST	PRINCE ST-ARTHUR ST	104	Hot Mix	2027	Microsurfacing	\$ 5,118
5570	HILLCREST CRT	WELLINGTON ST-HILLCREST AVE	108	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 25,409
8060	JAMES ST	CURRIE CRT-END	196	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 38,416
7610	JEFFERIES RD	WESTBROOK DR-STEPHEN MOORE DR	447	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 129,038
7330	KILWORTH PARK DR	END OF CURBS-PARKLAND PL	243	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 70,132
7340	KILWORTH PARK DR	PARKLAND PL-WESTBROOK DR	91	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,264
7570	LINNELL CRES	KILWORTH PARK DR-BLACKBURN CRES	327	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 57,089
8910	MEADOWCREEK DR	CALVERT DR-E END	283	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 81,678
3390	NEW ONTARIO RD	GREYSTEAD DR-MCEWEN DR	1331	Surface Treated	2027	Single Surface Treatment	\$ 29,279
1010	OXBOW DR	LANSDOWNE PARK CRES-LANSDOWNE PARK CRES	319	Surface Treated	2027	Pulverize and Surface Treat	\$ 21,943
6390	PARKVIEW DR	VALLEYVIEW DR-UNION AVE	201	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 44,403
30240	PROSPECT HILL RD	NINE MILE RD-TEN MILE ROAD	1398	Surface Treated	2027	Pulverize and Surface Treat	\$ 108,710
8530	RED CLOVER CRT	STONE FIELD LANE-PERRIWINKLE DR	89	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 25,694
8540	RED CLOVER CRT	PERRIWINKLE DR-WOOD LILY LANE	90	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 25,979
8550	RED CLOVER CRT	WOOD LILY LANE-N END	73	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 21,061
8700	ROBERT ST	MARGARET ST-WINSOME AVE	190	Hot Mix	2027	Crack Sealing (HMAC)	\$ 4,016
650	SHARON DR	BRIGHAM RD-WOODHULL RD	341	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 85,063
5770	SPRINGER ST	ONTARIO AVE-RAILWAY AVE	130	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,406
9405	ST JOHN'S DR	ARVA ST-PARK ENTRANCE	238	Hot Mix	2027	Crack Sealing (HMAC)	\$ 4,843
6650	STEPHEN MOORE DR	WESTBROOK DR-WINGREEN LANE	122	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 40,875
1205	SUNNINGDALE RD W	DENFIELD RD-County Limit	678	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 178,786
8240	SYDENHAM DR	ASHLEY LANE-LEWIS DR	316	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 91,228
2230	THIRTEEN MILE RD	GWENDOLYN ST-RICHMOND ST	159	Hot Mix	2027	Crack Sealing (HMAC)	\$ 2,863
6405	UNION AVE	HEATHER PL-DELAWARE ST N	103	Hot Mix	2027	Crack Sealing (HMAC)	\$ 2,176
6400	UNION AVE	KOMOKA RD-HEATHER PL	79	Hot Mix	2027	Crack Sealing (HMAC)	\$ 1,670
3730	VANNECK RD	HEDLEY DR-THIRTEEN MILE RD	1013	Surface Treated	2027	Pulverize and Surface Treat	\$ 71,702
7020	WINONA RD	WESTBROOK DR-WINGREEN LANE	109	Hot Mix	2027	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,683
5230	YORKDALE ST	MILL CREEK LANE-N END	75	Surface Treated	2027	Pulverize and Surface Treat	\$ 4,118
Total Cost 2027							\$ 1,733,813
30000	AMIENS RD	GLENDON DR-OXBOW DRIVE	1364	Surface Treated	2028	Recon - Surface Treated	\$ 192,906
3030	COLDSTREAM RD	GOLD CREEK DR-LAMONT DR	1356	Surface Treated	2028	Single Surface Treatment	\$ 30,278
6610	CRESTVIEW DR	RIVERS EDGE LANE-N END	40	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 8,956
6070	DELAWARE ST N	HURON AVE-ST LAWRENCE AVE	132	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,125
6190	FIELDRUN DR	FIELDSTONE CRES S-FIELDSTONE CRES N	121	Hot Mix	2028	Crack Sealing (HMAC)	\$ 2,570
1260	GOLD CREEK DR	NAIRN RD-VANNECK RD	2307	Hot Mix	2028	Pulverize + 90 mm OL	\$ 619,748
5350	HARRIS RD	HOGS BACK CS-START OF CURB	715	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 141,719
8410	KING ST	GEORGE ST-ILDERTON RD	110	Surface Treated	2028	Pulverize and Surface Treat	\$ 12,086



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
8320	MARSH LN	ILDERTON RD-N END	184	Surface Treated	2028	Pulverize and Surface Treat	\$ 8,883
3370	NEW ONTARIO RD	HEDLEY DR-CHARLTON DR	1368	Surface Treated	2028	Pulverize and Surface Treat	\$ 102,545
3380	NEW ONTARIO RD	CHARLTON DR-GREYSTEAD DR	1370	Surface Treated	2028	Pulverize and Surface Treat	\$ 99,885
5910	ONTARIO AVE	DELAWARE ST S-SPRINGER ST	186	Hot Mix	2028	Pulverize + 90 mm OL	\$ 39,260
5510	PRINCE ALBERT ST	MILLMANOR PL-PRINCE OF WALES ST	60	Hot Mix	2028	Crack Sealing (HMAC)	\$ 1,048
6470	PRINCE ST	DUKE ST-CAVERHILL CRES	264	Hot Mix	2028	Crack Sealing (HMAC)	\$ 5,747
30260	PROSPECT HILL RD	TEN MILE RD-ILDERTON RD	1388	Surface Treated	2028	Pulverize and Surface Treat	\$ 111,171
8740	ROBERT CRT	W END-ROBERT ST	35	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 10,277
640	SHARON DR	HWY 402 W-BRIGHAM RD	377	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 96,865
6060	SIMCOE AVE	SIMCOE CRES-QUEEN ST	332	Hot Mix	2028	Microsurfacing	\$ 21,906
6160	SIMCOE PL	S END-SIMCOE CRES	69	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 15,196
30320	SOUTHDEL BRNE	BELLS RD-SOUTHMINSTER BRNE	531	Surface Treated	2028	Single Surface Treatment	\$ 12,901
8500	STONE FIELD LINE	MEADOWSWEET CRES-OAKMONT GARDENS	126	Hot Mix	2028	Microsurfacing	\$ 8,313
3720	VANNECK RD	TWELVE MILE RD-HEDLEY DR	384	Surface Treated	2028	Pulverize and Surface Treat	\$ 27,993
50010	WILLOW RIDGE RD	DOGWOOD TR-WILLOW RIDGE RD	87	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 25,547
8560	WOODLILY LN	RED CLOVER CRT-PERRIWINKLE DR	374	Hot Mix	2028	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 111,180
Total Cost 2028							\$ 1,734,105
4290	ADELAIDE ST N	FIFTEEN MILE RD-SIXTEEN MILE RD	1515	Surface Treated	2029	Single Surface Treatment	\$ 40,481
4270	ADELAIDE ST N	THIRTEEN MILE RD-FOURTEEN MILE RD	1423	Hot Mix	2029	Crack Sealing (HMAC)	\$ 27,970
8270	CAMPBELL CRES	LEWIS DR-THIRLWALL BLVD	290	Hot Mix	2029	Replace Asphalt with Granular Base Repairs	\$ 119,835
4360	CLARKE RD	MEDWAY RD-EIGHT MILE RD	1436	Surface Treated	2029	Single Surface Treatment	\$ 35,939
5380	ELMVIEW DR	S END-YOUNG ST	119	Hot Mix	2029	Replace Asphalt with Granular Base Repairs	\$ 43,720
5890	ERIE AVE	DELAWARE ST S-SPRINGER ST	186	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 37,958
5340	HARRIS RD	VICTORIA ST-HOGS BACK CS	19	Hot Mix	2029	Crack Sealing (HMAC)	\$ 421
8640	HERITAGE PL	MILL ST-HERITAGE DR	447	Hot Mix	2029	Replace Asphalt with Granular Base Repairs	\$ 184,726
4010	HYDE PARK RD	SIXTEEN MILE RD-ELGINFIELD RD	1225	Surface Treated	2029	Single Surface Treatment	\$ 33,145
1900	ILDERTON RD	AMIENS RD-EGREMONT DR	2048	Surface Treated	2029	Single Surface Treatment	\$ 41,560
7630	JEFFERIES RD	STEPHEN MOORE DR-PEREGRINE AVE	102	Hot Mix	2029	Crack Sealing (HMAC)	\$ 2,287
7635	JEFFERIES RD	PEREGRINE AVE-ENTERPRISE DR	103	Hot Mix	2029	Crack Sealing (HMAC)	\$ 2,309
7640	JEFFERIES RD	ENTERPRISE DR-GLENDON DR	258	Hot Mix	2029	Crack Sealing (HMAC)	\$ 5,786
8750	KENNEDY CRT	W END-ROBERT ST	42	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 13,194
4605	LANDSDOWNE PARK CRESCENT	End of Curb-OXBOW DRIVE	364	Hot Mix	2029	Pulverize + 90 mm OL	\$ 115,106
6340	OAKCREST DR	PARKVIEW DR-UNION AVE	330	Hot Mix	2029	Pulverize + 90 mm OL	\$ 73,048
1070	OXBOW DR	UNION AVE-COLDSTREAM RD	1536	Surface Treated	2029	Single Surface Treatment	\$ 35,844
6370	PARKVIEW DR	DELAWARE ST N-OAKCREST DR	235	Hot Mix	2029	Pulverize + 90 mm OL	\$ 51,110
5110	PLEASANT ST	39 m SOUTH OF LONGWOODS RD-PLEASANT ST	39	Hot Mix	2029	Crack Sealing (HMAC)	\$ 756
30220	PROSPECT HILL RD	THORNDALE RD-EIGHT MILE RD	592	Surface Treated	2029	Pulverize and Surface Treat	\$ 48,844
50024	PROSPECT HILL RD	PLOVER MILLS RD-THIRTEEN MILE RD	1300	Surface Treated	2029	Single Surface Treatment	\$ 31,217
50025	PROSPECT HILL RD	THIRTEEN MILE RD-FOURTEEN MILE RD	1400	Surface Treated	2029	Single Surface Treatment	\$ 33,145
50026	PROSPECT HILL RD	FOURTEEN MILE RD-EBENEZER DR	561	Surface Treated	2029	Single Surface Treatment	\$ 13,282
50027	PROSPECT HILL RD	EBENEZER DR-FIFTEEN MILE RD	868	Surface Treated	2029	Single Surface Treatment	\$ 20,844
50028	PROSPECT HILL RD	FIFTEEN MILE RD-SIXTEEN MILE RD	1632	Surface Treated	2029	Single Surface Treatment	\$ 39,189
50029	PROSPECT HILL RD	SIXTEEN MILE RD-ELGINFIELD RD	950	Surface Treated	2029	Single Surface Treatment	\$ 22,491
880	SPRINGER RD	TOWERLINE RD-WILLIAM ST	94	Surface Treated	2029	Single Surface Treatment	\$ 2,256
5760	SPRINGER ST	ERIE AVE-ONTARIO AVE	132	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,447
8510	STONE FIELD LINE	OAKMONT GARDENS-HYDE PARK ROAD	101	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,304



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
5850	TUNKS LN	GLENDONE DR-END 3 LANES	282	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 124,723
3570	VANNECK RD	EGREMONT DR-WYNFIELD GATE	244	Surface Treated	2029	Single Surface Treatment	\$ 5,942
3580	VANNECK RD	WYNFIELD GATE-SUNNINGDALE RD W	360	Surface Treated	2029	Single Surface Treatment	\$ 8,767
3585	VANNECK RD	start of HCB-SUNNINGDALE RD W	212	Surface Treated	2029	Single Surface Treatment	\$ 5,236
3610	VANNECK RD	GOLD CREEK DR-MEDWAY RD	144	Surface Treated	2029	Single Surface Treatment	\$ 3,457
7700	WILLARD CRES	SPRINGFIELD WAY-SPRINGFIELD WAY	345	Hot Mix	2029	Replace Asphalt with Granular Base Repairs	\$ 144,322
9070	WILLOW RIDGE RD	BLUE HERRON DR-WILLOW RIDGE RD	406	Hot Mix	2029	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 124,345
4100	WONDERLAND RD N	TWELVE MILE RD-THIRTEEN MILE RD	1359	Surface Treated	2029	Single Surface Treatment	\$ 35,391
4110	WONDERLAND RD N	THIRTEEN MILE RD-FOURTEEN MILE RD	1438	Surface Treated	2029	Single Surface Treatment	\$ 37,451
4120	WONDERLAND RD N	FOURTEEN MILE RD-FIFTEEN MILE RD	1389	Surface Treated	2029	Single Surface Treatment	\$ 36,642
4130	WONDERLAND RD N	FIFTEEN MILE RD-SIXTEEN MILE RD	1432	Surface Treated	2029	Single Surface Treatment	\$ 38,262
4140	WONDERLAND RD N	SIXTEEN MILE RD-ELGINFIELD RD	1168	Surface Treated	2029	Single Surface Treatment	\$ 29,628
Total Cost 2029							\$ 1,729,380
4280	ADELAIDE ST N	FOURTEEN MILE RD-FIFTEEN MILE RD	1387	Hot Mix	2030	Crack Sealing (HMAC)	\$ 29,268
50061	AMIENS RD	SINCLAIR DR-IVAN DR	1356	Surface Treated	2030	Single Surface Treatment	\$ 33,540
800	CARRIAGE RD	LONGWOODS RD-HARRIS RD	951	Surface Treated	2030	Pulverize and Surface Treat	\$ 77,708
3040	COLDSTREAM RD	LAMONT DR-EGREMONT DR	990	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 281,423
330	COOK RD	DECKER DR-DECKER DR	116	Surface Treated	2030	Single Surface Treatment	\$ 2,425
9520	CROYDON DR	RICHMOND ST-CROYDON PL	88	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,765
9440	ELGIN ST	MEDWAY RD-ELGIN ST	169	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 52,648
5355	HARRIS RD	START OF CURB-MARTIN ROAD	443	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 139,719
5360	HARRIS RD	MARTIN RD-CARRIAGE RD	794	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 207,164
5580	HILLCREST AVE	HILLCREST AVE-N END	41	Hot Mix	2030	Crack Sealing (HMAC)	\$ 947
8900	MEADOWCREEK DR	HYDE PARK RD-CALVERT DR	162	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 51,090
1067	OXBOW DR	END OF CURBS-UNION AVE	251	Hot Mix	2030	Crack Sealing (HMAC)	\$ 5,153
30230	PROSPECT HILL RD	EIGHT MILE RD-NINE MILE RD	1379	Surface Treated	2030	Pulverize and Surface Treat	\$ 117,178
30270	PROSPECT HILL RD	ILDERTON RD-PLOVER MILLS ROAD	1423	Surface Treated	2030	Single Surface Treatment	\$ 37,181
5810	QUEEN ST	HURON AVE-SIMCOE CRES	204	Hot Mix	2030	Crack Sealing (HMAC)	\$ 4,015
5940	RAILWAY AVE	DELAWARE ST S-SPRINGER ST	184	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 47,274
5960	RAILWAY AVE	QUEEN ST-TUNKS LINE	372	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 94,158
8730	ROBERT ST	ILDERTON RD-KENNEDY AVE	101	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 31,853
6040	SIMCOE AVE	KOMOKA RD-DELAWARE ST N	184	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 45,872
3600	VANNECK RD	SUNNINGDALE RD W-GOLD CREEK DR	1317	Surface Treated	2030	Single Surface Treatment	\$ 33,492
3710	VANNECK RD	NEW ONTARIO RD-TWELVE MILE RD	805	Surface Treated	2030	Single Surface Treatment	\$ 20,473
930	VICTORIA ST	WELLINGTON ST-YOUNG ST	386	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 85,669
5330	VICTORIA ST	YOUNG ST-HOGS BACK CS	27	Hot Mix	2030	Crack Sealing (HMAC)	\$ 530
260	WESTDEL BRNE	DECKER DR-RANGER DR	542	Surface Treated	2030	Pulverize and Surface Treat	\$ 40,744
270	WESTDEL BRNE	RANGER DR-TWP LIMIT	700	Surface Treated	2030	Pulverize and Surface Treat	\$ 53,382
9110	WILLOW RIDGE RD	WILLOW RIDGE RD-DOGWOOD TRAIL	88	Hot Mix	2030	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,765
50030	WOOD RD	HIGHWAY 22-CHARLTON DR	399	Surface Treated	2030	Single Surface Treatment	\$ 12,510
50031	WOOD RD	CHARLTON DR-GREYSTEAD DR	1365	Surface Treated	2030	Single Surface Treatment	\$ 42,796
50033	WOOD RD	MCEWEN DR-FERNHILL DR	1371	Surface Treated	2030	Single Surface Treatment	\$ 42,984
175	WOODHULL RD	LONGWOODS ROAD-NORTH LIMITS	1139	Surface Treated	2030	Pulverize and Surface Treat	\$ 84,376
5310	YOUNG ST	ELMVIEW DR-THAMES ST	40	Surface Treated	2030	Single Surface Treatment	\$ 836
Total Cost 2030							\$ 1,731,938
4250	ADELAIDE ST N	ILDERTON RD-TWELVE MILE RD	1449	Surface Treated	2031	Single Surface Treatment	\$ 37,435



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
50060	AMIENS RD	LAMONT DR-SINCLAIR DR	1393	Surface Treated	2031	Single Surface Treatment	\$ 34,988
50063	AMIENS RD	ILDERTON RD-HEDLEY DR	1365	Surface Treated	2031	Single Surface Treatment	\$ 34,285
9410	ARVA ST	ST JOHN'S DR-WELDON AVE	116	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 37,702
8000	BARCLAY BLVD	W END-POPLAR HILL RD	371	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 83,346
5050	BLOSDALE CRES	WILLIAM ST-ELIZABETH ST	102	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 33,130
690	BRIGHAM RD	ELVIAGE DR-GIDEON DR	434	Surface Treated	2031	Single Surface Treatment	\$ 10,276
3020	COLDSTREAM RD	MELROSE DR-GOLD CREEK DR	1371	Surface Treated	2031	Single Surface Treatment	\$ 35,910
5550	DAVIS ST	WELLINGTON ST-N END	344	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 110,379
9060	DOGWOOD TRAIL	WILLOW RIDGE RD-N END	161	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 52,944
6180	FIELDRUN DR	SIMCOE AVE-FIELDSTONE CRES S	112	Hot Mix	2031	Crack Sealing (HMAC)	\$ 2,632
1240	GOLD CREEK DR	EGREMONT DR-NAIRN RD	200	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 64,174
6480	HAMILTON ST	PRINCE ST-ARTHUR ST	104	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,271
6490	HAMILTON ST	ARTHUR ST-KOMOKA RD	118	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,031
3990	HYDE PARK RD	FOURTEEN MILE RD-FIFTEEN MILE RD	1392	Surface Treated	2031	Single Surface Treatment	\$ 38,960
7305	KILWORTH PARK DR	BLACKBURN CRES-LINNELL CRES	75	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 19,252
7310	KILWORTH PARK DR	BLACKBURN CRES-LINNELL CRES	124	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,844
7900	LOBO LANE	EGREMONT DR-GOLD CREEK DR	213	Surface Treated	2031	Pulverize and Surface Treat	\$ 11,950
8680	MARGARET ST	MILL ST-ROBERT ST	95	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,884
5255	MILL CREEK LN	YORK ST-START OF CRUB	88	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 21,899
5530	MILLMANOR PL	W END-PRINCE ALBERT ST	308	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 83,988
1620	NINE MILE RD	HIGHBURY AVE N-CLARKE RD	2458	Surface Treated	2031	Pulverize and Surface Treat	\$ 184,799
1090	OXBOW DR	NAIRN RD-VANNECK RD	971	Surface Treated	2031	Single Surface Treatment	\$ 24,040
8020	PARK CRES	POPLAR HILL RD-CURRIE CRT	105	Surface Treated	2031	Single Surface Treatment	\$ 2,637
9835	PEREGRINE AVE	EARLSCOURT TERRACE-DAUSETT DRIVE	132	Hot Mix	2031	Crack Sealing (HMAC)	\$ 3,178
8570	PERRIWINKLE DR	RED CLOVER CRT-WOOD LILY LANE	211	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 68,546
5125	PLEASANT ST	LONGWOODS ROAD-PLEASANT ST	29	Hot Mix	2031	Crack Sealing (HMAC)	\$ 502
5540	PRINCE OF WALES ST	PRINCE ALBERT ST-VICTORIA ST	120	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 27,916
3470	PULHAM RD	OLD RIVER RD-VANNECK RD	378	Surface Treated	2031	Single Surface Treatment	\$ 8,816
5780	QUEEN ST	GLENDON DR-ONTARIO AVE	386	Hot Mix	2031	Crack Sealing (HMAC)	\$ 8,051
5800	QUEEN ST	RAILWAY AVE-HURON AVE	169	Hot Mix	2031	Crack Sealing (HMAC)	\$ 3,574
5820	QUEEN ST	SIMCOE CRES-SIMCOE AVE	185	Hot Mix	2031	Crack Sealing (HMAC)	\$ 3,804
5950	RAILWAY AVE	SPRINGER ST-QUEEN ST	265	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 69,107
6050	SIMCOE AVE	DELAWARE ST N-SIMCOE CRES	113	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 35,817
6060	SIMCOE AVE	SIMCOE CRES-QUEEN ST	332	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 109,176
6170	SIMCOE CRT	SIMCOE CRES-N END	85	Hot Mix	2031	Pulverize + 90 mm OL	\$ 22,100
890	SPRINGER RD	WILLIAM ST-LONGWOODS RD	275	Hot Mix	2031	Crack Sealing (HMAC)	\$ 6,623
8500	STONE FIELD LINE	MEADOWSWEET CRES-OAKMONT GARDENS	126	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 41,432
3750	VANNECK RD	CHARLTON DR-FOURTEEN MILE RD	958	Surface Treated	2031	Pulverize and Surface Treat	\$ 79,546
5440	WELLINGTON ST	DAVIS ST-PRINCE ALBERT ST	75	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 19,252
5450	WELLINGTON ST	PRINCE ALBERT ST-VICTORIA ST	118	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 28,397
9100	WILLOW RIDGE RD	DOGWOOD TRAIL-BLUE HERRON DR	89	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 28,918
50001	WILLOW RIDGE RD	ILDERTON RD-MARTIN DR	180.7	Hot Mix	2031	Crack Sealing (HMAC)	\$ 4,138
4090	WONDERLAND RD N	ILDERTON RD-TWELVE MILE RD	1489	Surface Treated	2031	Single Surface Treatment	\$ 41,672
8590	WOOD LILY LANE	STONE FIELD LANE-PERRIWINKLE DR	84	Hot Mix	2031	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,953
50032	WOOD RD	GREYSTEAD DR-MCEWEN DR	1360	Surface Treated	2031	Single Surface Treatment	\$ 43,919
5160	YORK ST	WELLINGTON ST-YOUNG ST	291	Hot Mix	2031	Crack Sealing (HMAC)	\$ 5,727



MUNICIPALITY OF MIDDLESEX CENTRE - ROADS NEEDS STUDY – FINAL REPORT

Appendix D: 10-Year Recommended Work Program

Table D.1: 10 Year Program

Section ID	Street	Limits	length (m)	Pavetype	Implementation Year	Rehab	Rehab (\$)
5180	YORK ST	OSBORNE ST-MILL CREEK LANE	83	Hot Mix	2031	Crack Sealing (HMAC)	\$ 1,536
5300	YOUNG ST	York St-Thames St	198	Surface Treated	2031	Single Surface Treatment	\$ 4,618
Total Cost 2031							\$ 1,732,074
8230	ABERDEEN DR	ASHLEY LANE-LEWIS DR	302	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 101,049
30040	AMIENS RD	MELROSE DR-GOLD CREEK DRIVE	1131	Surface Treated	2032	Single Surface Treatment	\$ 29,259
50062	AMIENS RD	IVAN DR-ILDERTON RD	1365	Surface Treated	2032	Single Surface Treatment	\$ 35,819
50064	AMIENS RD	HEDLEY DR-WOOD RD	1007	Surface Treated	2032	Single Surface Treatment	\$ 26,051
9420	ARVA ST	WELDON AVE-MEDWAY RD	126	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 42,675
7680	BARON CR	WOODLAND DR-EARLSCOURT TERRACE	545	Hot Mix	2032	Crack Sealing (HMAC)	\$ 13,356
7580	BLACKBURN PL	BLACKBURN CRES-N END	49	Hot Mix	2032	Pulverize + 90 mm OL	\$ 12,051
5060	BLOSDALE CRES	ELIZABETH ST-N END	80	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 26,770
810	CARRIAGE RD	HARRIS RD-GIDEON DR	2279	Surface Treated	2032	Single Surface Treatment	\$ 59,801
3010	COLDSTREAM RD	OXBOW DR-MELROSE DR	1357	Surface Treated	2032	Single Surface Treatment	\$ 37,113
9530	CROYDON PL	W END-CROYDON DR	46	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 15,575
7090	DAVENTRY WAY	W END-STEPHEN MOORE DR	43	Hot Mix	2032	Replace Asphalt with Granular Base Repairs	\$ 18,954
9810	EARLSCOURT TERR	PEREGRINE AVE-WOODLAND DR	206	Hot Mix	2032	Crack Sealing (HMAC)	\$ 5,049
9300	GWENDOLYN ST	S END-THIRTEEN MILE RD	265	Hot Mix	2032	Replace Asphalt with Granular Base Repairs	\$ 129,999
6490	HAMILTON ST	ARTHUR ST-KOMOKA RD	118	Hot Mix	2032	Microsurfacing	\$ 5,879
5370	HOGS BACK CS	HARRIS RD-N END	106	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 33,711
4000	HYDE PARK RD	FIFTEEN MILE RD-SIXTEEN MILE RD	1425	Surface Treated	2032	Single Surface Treatment	\$ 43,185
4600	LANDSDOWNE PARK CRESCENT	OXBOW DRIVE-End of Curb	1043	Hot Mix	2032	Replace Asphalt with Granular Base Repairs	\$ 470,939
9014	MARTIN DR	WILLOW RIDGE ROAD-CALVERT LANE	218	Hot Mix	2032	Crack Sealing (HMAC)	\$ 5,342
8580	OAKMONT GDNS	STONE FIELD LANE-OAKMONT GDNS	111	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 37,594
8585	OAKMONT GDNS	OAKMONT GDNS-OAKMONT GDNS	214	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 72,503
1020	OXBOW DR	LANSLOWNE PARK CRES-KOMOKA RD	1390	Surface Treated	2032	Single Surface Treatment	\$ 35,446
5130	PLEASANT ST	JOHN ST-EAST END	160	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 45,608
2900	POPLAR HILL RD	ILDERTON RD-ZAVITZ DR	434	Surface Treated	2032	Pulverize and Surface Treat	\$ 35,112
5500	PRINCE ALBERT ST	LONGWOODS RD-MILLMANOR PL	114	Hot Mix	2032	Crack Sealing (HMAC)	\$ 2,242
6455	PRINCE ST	HAMILTON ST-CAVERHILL CRES	67	Hot Mix	2032	Crack Sealing (HMAC)	\$ 1,621
6630	RIVERS EDGE LN	STEPHEN MOORE DR-E END	103	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 34,454
850	SPRINGER RD	HWY 402 E-HWY 402 W	31	Surface Treated	2032	Pulverize and Surface Treat	\$ 2,150
6690	STEPHEN MOORE DR	AYLESFORD CRT-KRISTEN CRT	72	Hot Mix	2032	Crack Sealing (HMAC)	\$ 2,090
1200	SUNNINGDALE RD W	VANNECK RD-DENFIELD RD	2272	Surface Treated	2032	Single Surface Treatment	\$ 62,137
3740	VANNECK RD	THIRTEEN MILE RD-CHARLTON DR	490	Surface Treated	2032	Pulverize and Surface Treat	\$ 41,908
3770	VANNECK RD	GREYSTEAD DR-FIFTEEN MILE RD	863	Surface Treated	2032	Pulverize and Surface Treat	\$ 70,814
5435	WELLINGTON ST	END OF CURBS-DAVIS ST	87	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 21,565
7140	WESTBROOK DR	W END-STEPHEN MOORE DR	52	Hot Mix	2032	Crack Sealing (HMAC)	\$ 1,274
250	WESTDEL BRNE	LITTLEWOOD DR-DECKER DR	1470	Surface Treated	2032	Pulverize and Surface Treat	\$ 118,929
50015	WILLOW RIDGE RD	WILLOW RIDGE RD-WILLOW RIDGE RD	96	Hot Mix	2032	Mill 50 Pave 50 - 15% AC Base Repairs	\$ 30,943
5170	YORK ST	YOUNG ST-OSBORNE ST	138	Hot Mix	2032	Crack Sealing (HMAC)	\$ 2,756
Total Cost 2032							\$ 1,731,723

