

REPORT NO. 169 of the
ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY
STANDING COMMITTEE
of its meeting held November 20, 2013

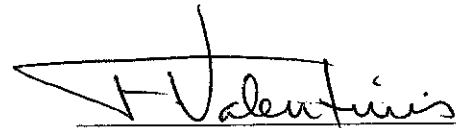
Present:
Councillor J. Gignac
Councillor A. Halberstadt
Councillor R. Jones
Councillor H. Payne
Councillor F. Valentinis, Chair

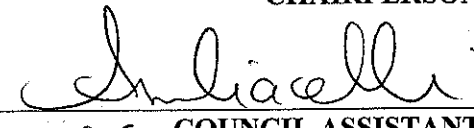
That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED:**

Moved by Councillor Jones, seconded by Councillor Gignac,
THAT the Traffic By-law 9148 **BE AMENDED** as listed and attached in Appendix B of this report, and
THAT the City Solicitor **PREPARE** the necessary documents to amend the By-law.
Carried.

Liveline #1616816813, ST8523

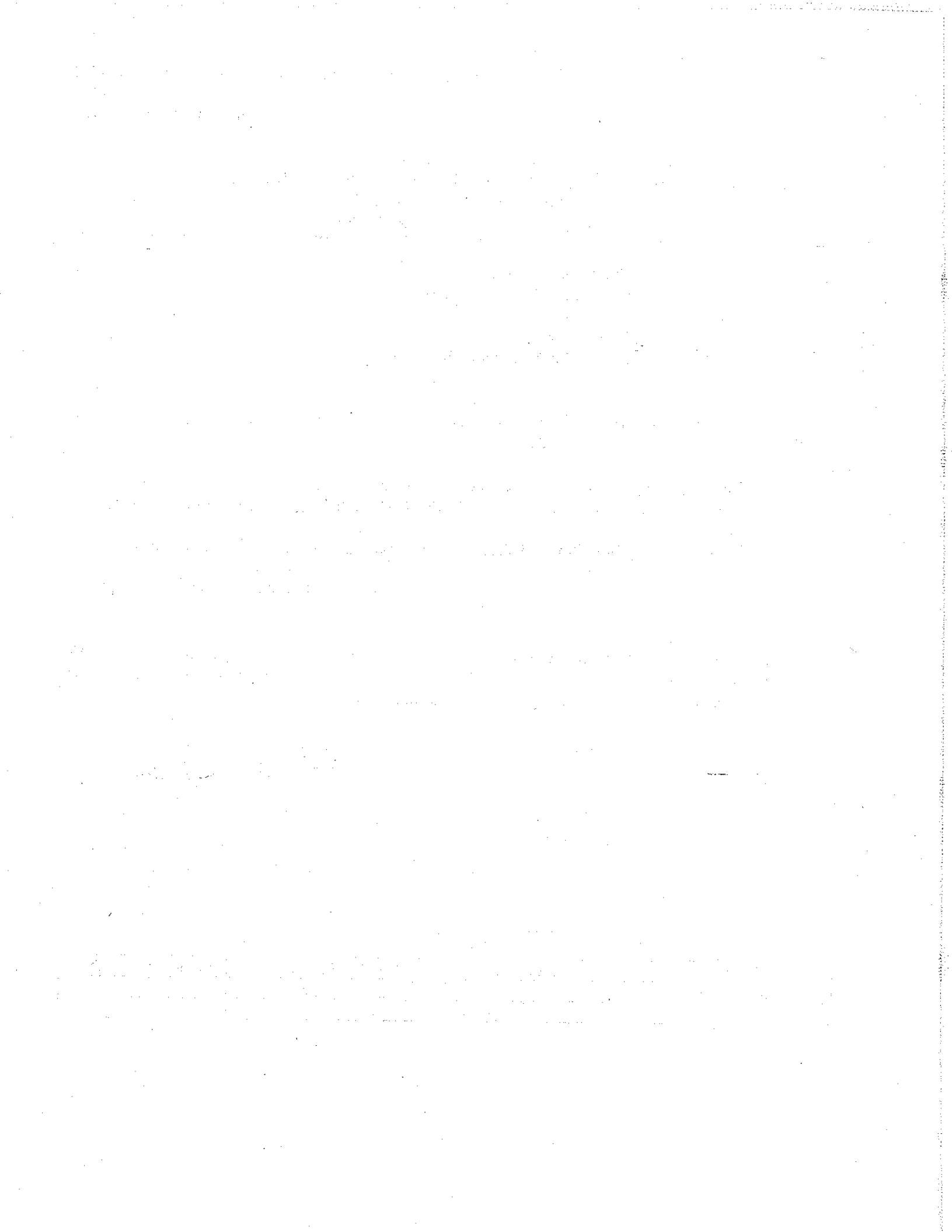
Clerk's Note: The administrative report authored by the Policy Analyst dated November 4, 2013 entitled "*Intersection Control Reviews – West of Mount Royal Drive, Villa Maria Boulevard north to Mitchell Crescent*" is **attached** as background information.



CHAIRPERSON


for COUNCIL ASSISTANT

NOTIFICATION:				
Name	Address	Email Address	Phone	FAX
Donna Mailloux		donna_22@sympatico.ca		



THE CORPORATION OF THE CITY OF WINDSOR
Environment, Transportation & Public Safety Standing Committee –
Admin Report – Environment Transportation

**MISSION STATEMENT:**

"The City of Windsor, with the involvement of its citizens, will deliver effective and responsive municipal services, and will mobilize innovative community partnerships"

LiveLink REPORT #: 16816 ST2013	Report Date: November 4, 2013 (PW#3699-11/05/13:eb)
Author's Name: Jeff Hagan	Date to Committee: November 20, 2013
Author's Phone: (519) 255-6247 ext. 6003	Classification #:
Author's E-mail: jhagan@city.windsor.on.ca	

To: Environment, Transportation & Public Safety Standing Committee

Subject: Intersection Control Reviews – West of Mount Royal Drive, Villa Maria Boulevard North to Mitchell Crescent

1. RECOMMENDATION: City Wide: ____ Ward(s): 1

A. That Traffic By-Law 9148 **BE AMENDED** as listed and attached in Appendix "B" of this report, and

B. That the City Solicitor **PREPARE** the necessary documents to amend the by-law.

EXECUTIVE SUMMARY:

N/A

2. BACKGROUND:

Residents in the vicinity of Mitchell Crescent have expressed concerns to Administration regarding a lack of stop controls on Mitchell Crescent. The root concern identified was speeding. A speed study was completed and a review of the area intersections was carried out.

In the area generally bounded by Villa Maria Boulevard North, Mitchell Crescent, and Mount Royal Drive, there are currently several uncontrolled intersections (i.e. intersections with no stop signs, yield signs, or other devices to assign right-of-way). A map of these uncontrolled intersections is given as Appendix A.

3. DISCUSSION:

Speed

A radar speed survey was conducted for eastbound traffic on Mitchell Crescent west of Mount Sinai Crescent from October 7 to 10, 2013. The results of the survey were as follows:

Measure	Value
Speed Limit	50 km/h
Average Speed	29 km/h
85 th Percentile Speed	39 km/h
Percent Compliance with the Speed Limit	97%
Average Daily Traffic (eastbound)	138 vehicles per day

As noted above, the 85th percentile speed (i.e. the speed at or below below which 85% of vehicles travel) is 11 km/h lower than the speed limit and the average daily traffic volume is very low, indicating that the function of Mitchell Crescent is in keeping with its classification as a local street.

Intersection Control

The Highway Traffic Act (HTA) allows for uncontrolled intersections; however, the Transportation Association of Canada *Geometric Design Guide for Canadian Roads* provides recommendations for when uncontrolled operation should be considered appropriate based on the following factors:

- Intersection traffic volumes,
- Collision history, and
- Available sight lines.

These factors are discussed individually below.

Traffic Volumes

Traffic volumes in the area are generally low and would be appropriate for uncontrolled intersection operation provided the other criteria are met.

Collision History

The *Geometric Design Guide* recommends that uncontrolled operation should not be considered appropriate for intersections with more than two right angle collisions per year. The collision history for the subject intersections was reviewed for the five-year period of 2008 through 2012, as well collision reports received to date for 2013. The intersections met the criteria for uncontrolled intersection operation provided the other criteria are met.

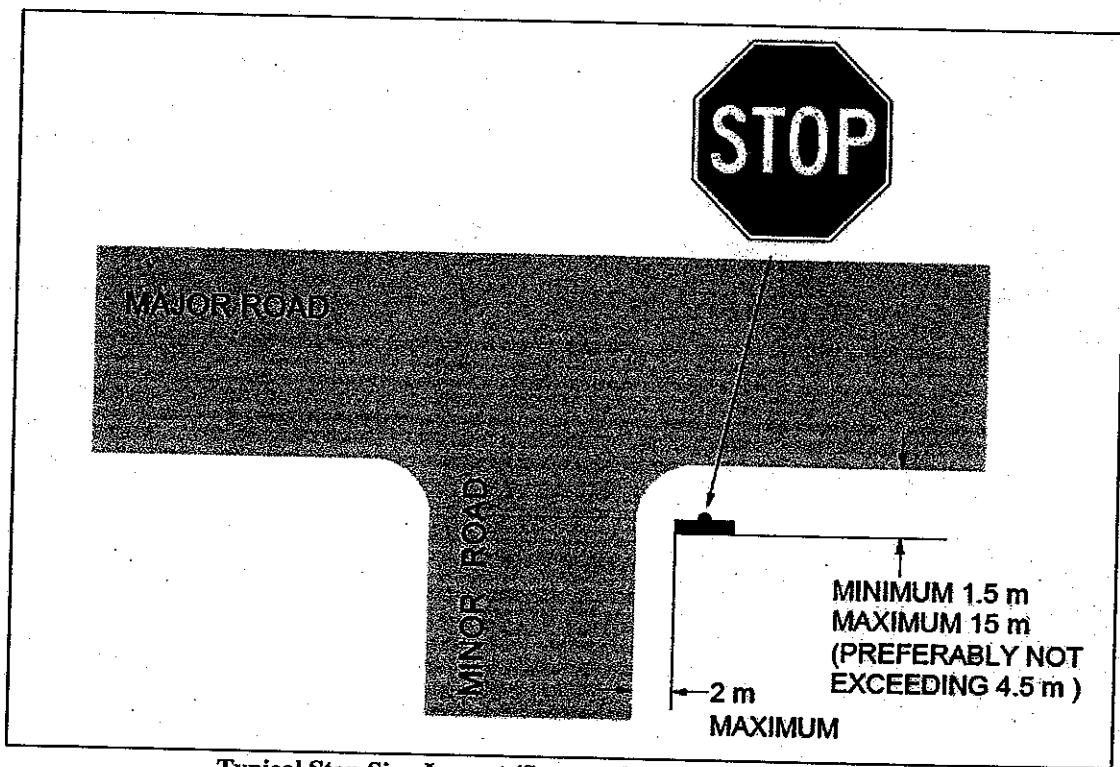
Sight Lines

Sight line requirements for an intersection are determined by vehicle speeds (either the speed limit or operating speed) and the type of control. Based on the 50 km/h speed limit on all streets in the study area, the dimensions of the recommended intersection sight triangle were established and used to evaluate the subject intersections.

A field review on September 30 and October 18, 2013 found that the recommended sight triangle for uncontrolled operation or yield control is **not provided** at any of the subject intersections. In the majority of cases, the sight line obstruction is a structure on private property and is therefore not removable.

Since the recommended sight triangle for uncontrolled operation or yield control is not provided, **Administration recommends that stop signs be installed on the minor legs of all uncontrolled intersections in the study area.** Additionally, in urban areas, drivers are accustomed to positive forms of traffic control such as yield and/or stop signs as is prevalent within the City of Windsor.

Since all nine subject intersections are "T" intersections with low traffic volumes, the minor approach (i.e. the approach where the stop control should be placed) would be the non-through street as illustrated in the following figure:



Typical Stop Sign Layout (Source: Ontario Traffic Manual)

4. RISK ANALYSIS:

Uncontrolled intersections are not typically found in urban areas. These uncontrolled intersections may create the potential for drivers who are unfamiliar with the area to misinterpret the right-of-way. Further, as noted previously, none of the subject intersections meet the recommended sight line requirements for uncontrolled operation or yield control. Providing stop signs at these intersections will meet driver expectations, is consistent with recommended practice, and will provide a higher level of safety. If the stop signs are not provided, this benefit will not be realized.

5. FINANCIAL MATTERS:


The cost to supply and install the nine stop signs required, including stanchions and hardware, is \$1,800. This would be funded from the Traffic Operations signs and markings budget. Since this expenditure was not budgeted, it may result in a variance.

6. CONSULTATIONS:

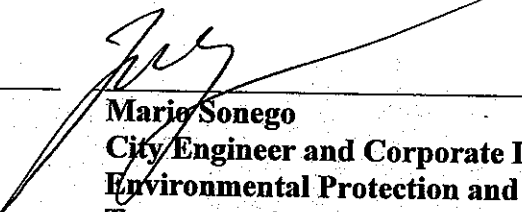
John Wolf, Traffic Operations
Roberto Peticca, Signs and Markings

7. CONCLUSION:

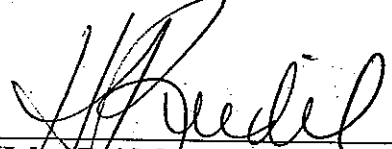
Based on the findings of the sight line review, Administration recommends that stop signs be installed at the intersections noted and that Traffic By-Law 9148 be amended accordingly as per Appendix "B".



Jeff Hagan
Policy Analyst



Mario Sonego
City Engineer and Corporate Leader
Environmental Protection and
Transportation



Helga Reidel
Chief Administrative Officer

JH

APPENDICES:
A – Map of Uncontrolled Intersections
B – Proposed Amendments to Traffic By-Law 9148

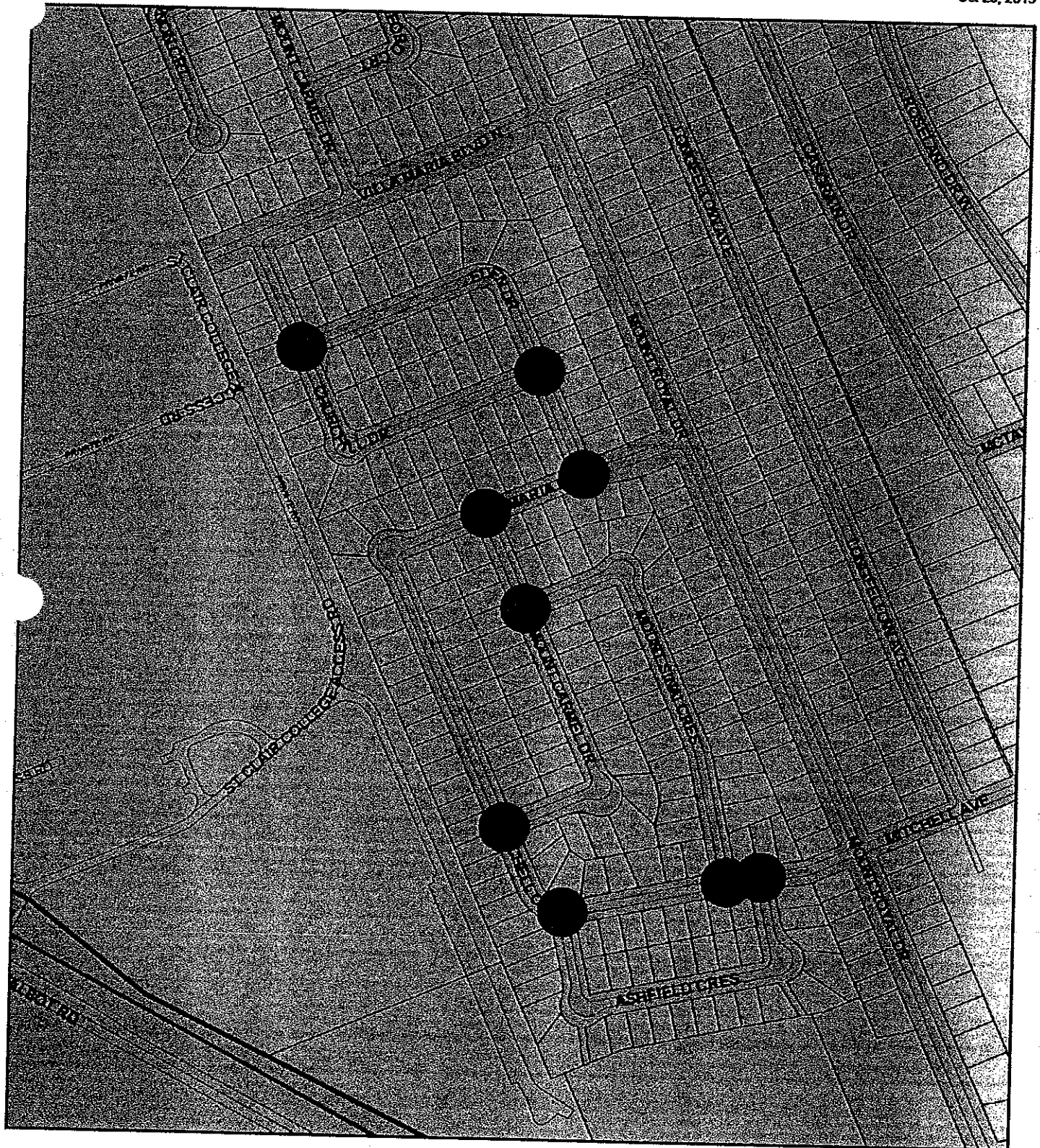
DEPARTMENTS/OTHERS CONSULTED:
Name:
Phone #: 519 ext.

NOTIFICATION :

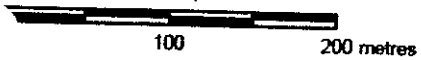
Name	Address	Email Address	Telephone	FAX
Councillor Dilkens		ddilkens@city.windsor.on.ca		
Area property owners				

Appendix 'A' – Map of Uncontrolled Intersections

Oct 28, 2013



Scale 1:4,000



WINDSOR

Appendix 'B' – Proposed Amendments to Traffic By-law 9148

AMENDMENTS TO TRAFFIC BY-LAW 9148

ITEM	REGULATION	SECTION	HIGHWAY	FROM THE	TO THE	REASON
1	Schedule "A" Through Highways ADD	N/A	Mitchell Crescent	West side of Mount Royal Drive	North side of Villa Maria Boulevard S	Based on Field Review
2	Schedule "A" Through Highways ADD	N/A	Churchill Drive	West side of Eden Drive	South side of Villa Maria Boulevard N	Based on Field Review
3	Schedule "A" Through Highways DELETE	N/A	Villa Maria Boulevard	East side of Mount Royal Drive	East side of Eden Drive	Based on Field Review
4	Schedule "A" Through Highways ADD	N/A	Villa Maria Boulevard S	East side of Mount Royal Drive	West side of Mount Carmel Drive	Based on Field Review
5	Schedule "A" Through Highways ADD	N/A	Mount Carmel Drive	South side of Villa Maria Blvd S	East side of Mitchell Crescent	Based on Field Review
6	Schedule "A" Through Highways ADD	N/A	Eden Drive	North side of Villa Maria Blvd S	North side of Churchill Drive	Based on Field Review
7	Schedule "A" Through Highways ADD	N/A	Mount Royal Drive	South side of Cousineau Road	South side of Villa Maria Boulevard S	Based on Field Review
8	Schedule "A" Through Highways ADD	N/A	Mount Royal Drive	North side of Villa Maria Boulevard S	South side of Cabana Road	Based on Field Review
9	Schedule "A" Through Highways DELETE	N/A	Mount Royal Drive	South side of Cousineau Road	North side of Cabana Road	Based on Field Review