# THE CORPORATION OF THE CITY OF WINDSOR OFFICE OF THE CITY ENGINEER- Engineering



#### **MISSION STATEMENT:**

"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together."

LiveLink REPORT #: 17147 MB/5331	Report Date: June 25, 2014 PW#3819-06/25/14:eb
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To:

Mayor and Members of City Council

Subject:

Cabana Road Active Transportation Facilities for the Windsor Loop and CQ28-2013 Feasibility of Constructing a Pilot Segregated Cycle Lane

# 1. RECOMMENDATION: City Wide: X Ward(s):

- I. That Council **SUPPORT** widening the existing pavement on Cabana Road from Northway Avenue to Walker Road for the construction of separated bike lanes including the incorporation of a 0.5m buffer with bollards into the design where appropriate as confirmed by a Consultant peer review as a first project in completing the Windsor LOOP; and
- II. That the estimated cost of \$4,290,000 plus HST to **BE FUNDED** from 007-5410-1790-WLOOP-7111031; and further
- III. That in light of the recent commitment for active transportation on Cabana Road, City Council REQUEST the MTO to extend appropriate connections for the Rt. Hon. Herb Gray Parkway 20 km trail network to the east limits of the MTO jurisdiction at approximately Northway Avenue.

# **EXECUTIVE SUMMARY:**

The Windsor LOOP concept was developed in the Bicycle Use Master Plan (BUMP) adopted by Council on May 14, 2001. A majority of the Loop is in place with the exception of a few key segments. Cabana Road is a vital link in the completion of the Windsor Loop. As per the Cabana/Division Road Corridor Environmental Study Report (EA), Huron Church Road to Walker Road (EA), the public supported bike lanes on the Cabana/Division Road Corridor.

The City of Windsor Community Strategic Plan and Official Plan both support the addition of sidewalks and active transportation facilities.

Administrative Memo "Background Review – CQ29-2012 Multi-Use Trail - Cabana Road Huron Church Road to Provincial Road" was prepared recommending the construction of bike lanes and infilling the existing gaps in the sidewalk. Subsequently, CQ28-2013 requested that Administration investigate the feasibility of a pilot project with segregated bike lanes, similar to the facilities that were completed on Laurier Ave. in the City of Ottawa.

This report addresses the proposed solution for interim active transportation facilities on Cabana Rd, the funding for which was allocated in the 2013 and 2014 enhanced capital budgets; Council respectively endorsed \$1.8 million to construct the Cabana Road cycling facilities and \$5.0 million to complete the Windsor Loop.

On March 27, 2014 a Public Information Centre was held to present two options pertaining to Cabana Rd. interim active transportation facilities. The cost estimate for either option is approximately \$2.6 million exclusive of engineering costs. The Options are as follows:

- Bike lanes on both sides of the road and the completion of sidewalks on both sides
- Multi-use trail on one side of Cabana Road and the completion of sidewalks on the other side

After reviewing comment sheets the following breakdown was determined:

51% favoured bike lanes

40 % favoured multi-use trail

8% disliked both options

1% requested both options

Administration is recommending a combined solution on Cabana Rd. which consists of infilling the gaps in the sidewalk (sidewalk component included in each option) on both sides and a combination of separated bike lanes with a 0.5m buffer and flex bollards, and single direction raised cycle tracks on segments as noted below. The raised cycle track option was also included since there is better delineation for separated spaces and bollards would not be required.

	<b>Conventional</b>	Separated Bike Lanes	Raised
	Bike Lanes	(0.5 m buffer and bollards)	Cycle Track
	Travel Lane 1.5 Byd 3.0 - 3.76 m shadow Varies Source: MMM, 2013	Transl Lene   0.5   1.5	Trevel Line  30-375m  1.5-2.0 m  1.5-2.0 m
Northway to Geraedts		✓	*******
Geraedts to Dominion		✓	
Dominion to Dougall		✓	
Dougall to Howard			✓
Howard to Provincial		✓	
Provincial to Walker		✓	

The physical separation achieved with the recommended combined solution is expected to address some of the feedback received pertaining to comfort level and safety concerns with the conventional bike lane option and the multi-use trail option. The proposed buffer reduces the encroachment of motor vehicles into the bicycle lane and for the remaining modes of active transportation, sidewalks have been provided. Additionally, similar to the EA preferred alternative, the recommended combined solution does not prohibit access to driveways and intersecting streets. With Cabana Road as the only significant east/west artery crossing a large part of the city and a large amount of population and resultant traffic, not common to other areas of the city, this combined solution is considered appropriate to this area.

The engineering cost estimate for the combined interim solution is \$4,290,000 plus HST including engineering costs. The resultant estimated increase in cost includes the construction of an additional 1.0m of pavement width for the both 0.5m buffers, installation of bollards, line marking and hatching, increased stormwater impacts and associated costs, detailed design engineering and a Consultant peer review.

# 2. BACKGROUND:

This report is being prepared in response to the following directions and corresponding funding from Council:

#### **Council Questions:**

Windsor City Council adopted the following resolution at its meeting held August 26, 2013.

M324-2013 That the following Council Question by Councillor Payne BE APPROVED, and that Administration BE DIRECTED to proceed with the necessary actions to respond to the Council Question in the form of a written report, consistent with Council's instructions, and in accordance with Section 17.1 of the Procedure By-law 98-2011:

#### CQ28-2013

Asks for a report on the feasibility of constructing a pilot segregated cycle lane (also known as cycle-track) project similar to the recently completed project on Laurier Avenue in Ottawa which has resulted in increasing bicycle traffic in the downtown area, improved road safety, minimal impact to motor vehicle operations, no impacts to emergency response times and favourable feedback from cyclists and other road users.

At the December 17, 2012 meeting of City Council, Councillor Payne asked the following:

CQ 29-2012

"Asks for a report on the feasibility of constructing a multi-use recreational trail on Cabana Road from Huron Line to Provincial Road and that this matter BE REFERRED to the 2013 budget deliberations."

Administrative Memo "Background Review – CQ29-2012 Multi-Use Trail - Cabana Road Huron Church Road to Provincial Road" has been included in **Appendix A**. The memo recommended constructing bike lanes and infilling the existing gaps in the sidewalk.

The City of Windsor Community Strategic Plan identifies strategic issues facing Windsor, alternatives for dealing with them and a common vision to guide all future planning and decision

planning. In 2010, City Council approved the use of a set of "indicators" to help monitor the City's progress towards the goals.

The indicator "Percentage of Road Length with Bike Facilities" has the goal of increasing the total length of roads and total kilometres of signed bicycles routes, bicycles lanes and sharrows in the City.

The indicator "Percentage of Road Length with Sidewalks" has the goal of increasing the percentage of roads with sidewalks within the City to create a more pedestrian friendly environment. This indicator, as approved by Council, states that" sidewalks are an important part of our City's infrastructure; they make streets safer and more active for everyone".

In keeping with the Strategic Directions, Council's infrastructure goals, as found in the City of Windsor Official Plan Volume 1: The Primary Plan, are to achieve a safe, sustainable, effective and efficient infrastructure that meets the needs of all users in a manner consistent with a healthy environment (O.P. Section 7.1 Goals and Section 7.2 Transportation System).

Council provisions regarding pedestrian network, as found in the City of Windsor Official Plan (Section 7.2.3 Pedestrian Network Policies,) state the following:

Council shall make pedestrian movement safer and more convenient by:

- (a) Requiring the provision of sidewalks in new development as follows:
  - i. On both sides of all Class I and Class II Arterial Roads, Class I and Class II Collector Roads and Scenic Drives

In addition, Council's infrastructure goals are to achieve an environment in which all modes of transportation can plan a balanced role. (Section 7.1.4.)

Council shall require all proposed developments and infrastructure undertakings to provide facilities for cycling movement and parking wherever appropriate. (Section 7.2.4.1)

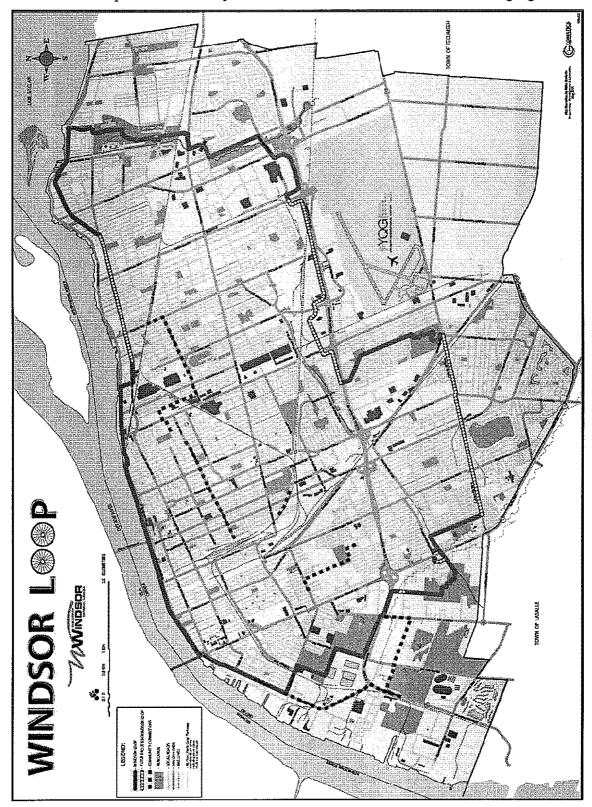
Active transportation (AT) facilities on Cabana Road would provide a valuable connection for the City of Windsor's cycling network as supported by the Bicycle Use Master Plan and the Cabana/Division Road Corridor Environmental Assessment and will connect to the Rt. Hon. Herb Gray Parkway 20 km trail network. The MTO plans do not currently bring the trail network connection to the City Limit nor effectively connect proposed active transportation facilities in the bordering communities across the Parkway corridor at this location.

#### **Previous Studies:**

The Windsor LOOP concept was developed in the **Bicycle Use Master Plan (BUMP)** adopted by Council on May 14, 2001. The Windsor Loop is a 42.5 km (26.4 miles) circular loop that connects the city around its perimeter, joining city neighbourhoods and providing access to the Trans Canada Trail. A majority of the Loop is in place with the exception of a few key segments. Cabana Road is a vital link in the completion of the Windsor Loop.

In addition to complete the remaining 12.4 km (7.7 miles) gaps in the Windsor Loop, funding is allocated to construct 17.8 km (11.1 miles) of planned cycling facilities to connect currently low-serviced neighbourhoods.

The Windsor Loop and Community Connections are illustrated in the following figure:



The Cabana/Division Road Corridor Environmental Study Report (EA), Huron Church Road to Walker Road (EA) was submitted to the Ministry of the Environment on December 05, 2005 and approved with conditions by the Minister of the Environment on September 15, 2008. As noted in the study Executive Summary, the public supported bike lanes on the Cabana/Division Road Corridor. Additional details regarding the EA are contained in Appendix B.

On March 02, 2009, Council rendered the following resolution respecting Report 13913 Cabana/Division Road Corridor Environmental Study Report, Huron Church Road to Walker Road—Ministers Decision regarding the Part II Order Requests:

CR65/2009 That Council REFER consideration of funding of the intersection improvements only to the Capital Budget deliberations as outlined in the report of the General Manager of Public Works dated January 19, 2009 entitled "Cabana/Division Road Corridor Environmental Study Report, Huron Church Road to Walker Road —Ministers Decision regarding the Part II Order Requests" with the first order of business being the intersection at Provincial Road followed by consideration of intersections at Glenwood, Dominion and in the area of Southwood School and, that subsequent to completion of the intersection improvements, that traffic studies BE COMPLETED to afford City Administration and the Minister to consider a three lane option for Cabana Road, and further that residents BE ENGAGED in the design process at each phase, and that Council REITERATES the policy or its intent that Cabana Road remains off limits to truck traffic.

It is important to note that the Provincial Rd./Cabana Rd. intersection was recently reconstructed to the EA preferred design and can be observed as an example of the Cabana Road Corridor as proposed in the Environmental Assessment.

The Estimated construction cost to implement the remainder of the Cabana/Division Road EA as identified in the 2014 Capital Budget is \$48,000,000 exclusive of utility relocates and land acquisition costs. This is a high level estimate as detailed design has yet to be completed.

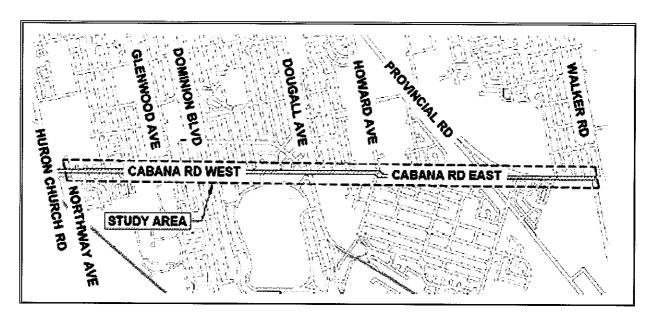
# **Enhanced Capital Funding:**

During the 2013 Capital Budget Meeting and in accordance with B26-2013, \$1.8 million was approved in the 2013 Enhanced Capital Plan for Cabana Road active transportation. Subsequently, B38-2013 approved \$5 million for the Windsor LOOP Bicycle Trail which includes, as previously noted, infilling the existing gaps and constructing additional community connections. Therefore, a total of \$6.8 million has been set aside for the projects identified to implement the Windsor LOOP and associated community connections.

# 3. <u>DISCUSSION</u>:

Prior to moving forward with active transportation for the Cabana Road Corridor, Ward 1 and Ward 9 Councillors advised Administration of public interest and support for a multi-use trail option. Administration developed concepts for bike lanes and a multi-use trail and presented the two alternative solutions to the public for consultation.

On March 27, 2014, a Public Information Centre (PIC) was held at the Roseland Golf and Curling Club to present the two active transportation facility options for Cabana Rd. from Northway Avenue to Walker Rd.



The Public Information Centre (PIC) Notice is available in **Appendix C**. The two options presented at the PIC included:

#### Option A (Shown in Image 1)

- Conventional bike lanes on both sides of the roadway
- Completion of the missing sidewalk sections on both sides
- Approximate cost of \$2,600,000 exclusive of engineering costs.

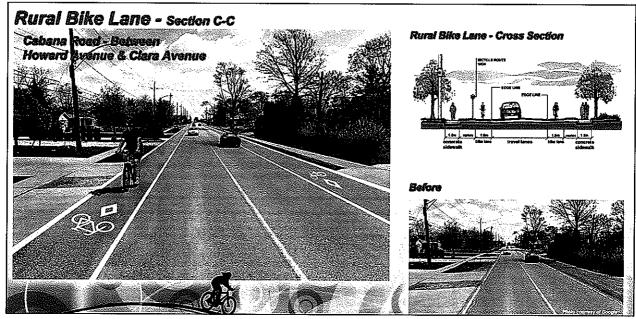


Image 1

#### **Option B** (Shown in Image 2)

- Multi-use trail on one side
- Completion of the missing sidewalk sections on other side
- Approximate cost of \$2,620,000 exclusive of engineering costs.

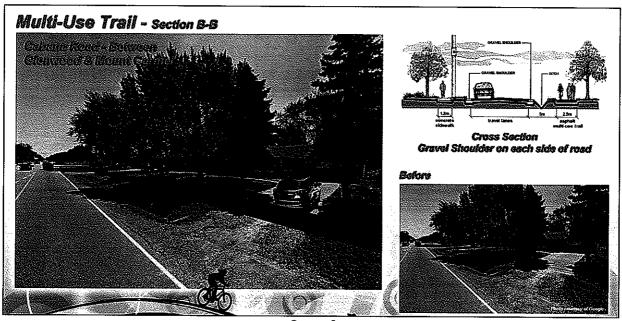


Image 2

Cost estimates were nearly identical at approximately \$2.6 million exclusive of engineering costs and both options included the costs to complete the gaps in the sidewalk. The largest difference between the two options is how cyclists will be accommodated.

There were approximately 130 residents/stakeholders present at the PIC. The Mayor, CAO and 4 Councillors were also in attendance. Administration was present to assist and respond to questions.

An additional stakeholder meeting was held in the Public Works building boardroom on the evening of April 8, 2014 to discuss the two proposed options. Six members of Bike Friendly Windsor Essex and Councillor Halberstadt were in attendance. Administration was present to assist and respond to questions.

The comment sheets were made available at the public and stakeholder meetings, distributed to directly affected property owners, and on the project website (www.cyclewindsor.ca) beginning on March 25, 2014. The PIC Panels have been made available and have been maintained since March 28, 2014 on the project website. The public was encouraged to identify their preferred alternative and comments were collected until April 11, 2014. The Comment Sheet can be found in **Appendix D**.

#### **Public Feedback**

The survey results are summarized as follows:

Facility Type	# of Residents/ Stakeholders
Bike Lanes	56
Multi Use Trail	43
Neither	9
Both	1
Total	109

#### Additional comment feedback included the following:

#### Pertaining to the Multi-Use Trail

- Concerned with pedestrian-cyclist conflicts on a multi-use trail
- Concerned with the length of "Dismount and Walk" proposed for the multi-use trail
- Concerned that the speed limit of 20 km/hr on a multi-use trail is too low
- Concerned with number of driveway conflicts crossing the multi-use trail
- Concerned that e-bikes are not accommodated with a multi-use trail
- Concerned with cycling against vehicular traffic on a multi-use trail
- Prefer a multi-use trail on both sides of the road
- Concerned with the separation between the road and the multi-use trail

#### Pertaining to Bike Lanes

- Preferred segregated bike lanes
- Suggested constructing the approved Environmental Assessment cross-section
- Suggest more education about bike lanes
- Lower comfort level for some cyclists

#### <u>Other</u>

- Suggested constructing a center turning lane
- Concerned with property acquisition

#### Comparison of Alternatives & Recommendation

	Conventional Bike Lanes (1 lane per direction/sidewalks on both sides)	Multi-use Trail (Trail on one side/sidewalks on the opposite side)
Cost \$2.6M	<b>√</b>	<b>√</b>
Infill Sidewalk Gaps	✓	✓
Accommodates Cyclists	On-road	With other Active users
Continuous Facility	Provide Sharrows at some intersection locations	Provide Sidewalk (dismount and walk - approximately 1.3km)
Accommodates E-bikes	E-bikes are allowed in Bike Lanes	E-bikes share the road with vehicles/not allowed on trail
Continuous Facility during Staged Construction of the EA	✓	X
Meets Design Guidelines	<b>✓</b>	Not all guidelines are achieved  o Exceeds recommended max. number of conflict points/km  o Below min. recommended distance separation to edge of pavement
Driver Expectations	Cyclists travel in the same direction as vehicles	Cyclists travel in both directions on one side/ sometimes against traffic flow (similar to cycling on the sidewalk)
Maintenance	Bike lanes are not cleared as a part of regular winter maintenance Arterial Roads swept 6 times/year	Separate plowing and sweeping would be required
Parking Impact	Parking loss is minimal (Kathleen to Sunrise only)	Driveway parking will be reduced on the side with the trail and may affect existing parking
Permanency of Work	Either option is an interim solution until the EA preferred alternative cross section is constructed	

	Conventional Bike Lanes (1 lane per direction/sidewalks on both sides)	Multi-use Trail (Trail on one side/sidewalks on the opposite side)
Town of LaSalle - (Todd Lane from Tenth Street westerly)	(1 lane per direc	entional Bike Lanes ction) and proposed th side (2015 construction)
Rt. Hon. Herb Gray Parkway	Connection to 20km Rt. Hon. Herb ( extended to limits of MTO jurisdict included across the Parkway corridor	Grey Parkway trail network not currently ion/City Limit. On-road bike lanes not at any road crossings.
County Road 42 –(Walker Road to the East City Limits) Preferred Alternative as per the Lauzon Parkway EA – County Rd. 42 -Walker Rd. to City/County Boundary	Proposed Bike La (1 lane per directio	nes with 1.0m Buffer n and Multi- Use Trail idewalks on south side

The Public Information Centre (PIC) Panel of the Town of LaSalle is found in Appendix E.

The Rt. Hon. Herb Gray Parkway active transportation facilities for Cabana Rd. are found in Appendix F.

NOTE: The multi-use trail is not currently proposed to extend to the City limits nor effectively connect the planned active transportation facilities in the bordering communities across this location.

The EA preferred active transportation option of Bike Lanes with completed sidewalks continues to be recommended for the Cabana/Division Road Corridor based on:

- Reconfirmed community support based on the feedback received, and
- Technical merits as supported by the EA (as outlined in the preceding table and highlighted below)
  - o The 1.5m bike lanes can be constructed in accordance with the Transportation Association of Canada (TAC) Guidelines;
  - o The bike lanes and sidewalks remain continuous during the staged construction of the EA preferred alternative;
  - o E-bikes are accommodated:
  - o The recommended maximum number of conflict points/km is exceeded for the multi-use trail option (conflict points include driveways and intersecting streets):
    - 12 conflict points/km max. recommended
    - 27.8 existing conflict points/km on Cabana Road
    - 6.7 conflict points/km on Ganatchio trail (provided for comparison purposes only);
  - 5yr Collision Data identified 11 collisions involving cyclists on the Cabana Road Corridor
    - 67% involving cyclists on the sidewalk; and
      - 75% of which were cycling against traffic
  - o The multi-use trail option is below the recommended minimum distance separation to the edge of pavement
    - 2m min. separation recommended
    - 415m along Cabana below the minimum
    - 7m-40m separation achieved on the existing Ganatchio Trail (provided for comparison purposes only);

- o The multi-use trail option requires cyclists to "dismount and walk" in sections with insufficient width amounting to approximately 1.3km
- O Annual Average Daily Traffic (AADT) Volumes on Cabana Road range from 11,600 to 19,000. "Separation of cyclists and motor vehicles becomes increasingly more important as traffic volumes and operating speeds increase."

  OTM Book 18 p25
- o The City Standard minimum multi-use trail width is not maintained throughout

### Proposed Options to Enhance the Bike Lane Alternative

Since the completion of the EA, the Ontario Traffic Manual (OTM) Book 18 Cycling Facilities has been published providing "information and guidance for transportation practitioners, and to promote uniformity of treatment in the design, application and operation of traffic control devices and systems across Ontario. The objective is safe driving behaviour, achieved by a predictable roadway environment through the consistent, appropriate application of traffic control devices."

OTM Book 18 provides guidelines for "a variety of bicycle facilities with different degrees of separation between motorists and cyclists" p25 including conventional bicycle lanes, separated / segregated bike lanes and cycle tracks. "Separation of cyclists and motor vehicles becomes increasingly more important as traffic volumes and operating speeds increase." p25

#### 1. <u>Separated / Segregated Bike Lanes</u>

As per OTM Book 18, a <u>separated bike lane</u> "is a portion of a roadway which has been designated for the exclusive use of cyclists by signage along with a physical or marked buffer. This facility type provides additional spatial or physical separation between motorists and cyclists." Pg.18.

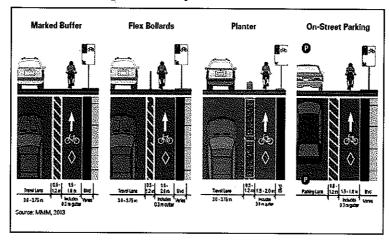
"A separated bicycle lane, also sometimes referred to as a 'segregated bicycle lane' may be separated by a buffer with hatched pavement markings or by a physical barrier such as a line of bollards, a median or parked vehicles. Physical separation restricts the encroachment of motor vehicle traffic into the separated bicycle lane, and is perceived to create a more secure and comfortable environment for cyclists. It may, however, restrict a cyclist's ability to manoeuvre into or out of the lane midblock. Where a roadway allows on-street parking, the separated bicycle lane may be positioned between the parking lane and the curb. A separated bicycle lane is typically used for utilitarian purposes." Pg.18

An Example of a Separated Bicycle Lane



Elston Avenue protected bike lane, south of Division Street. (Photo: Bike Walk Lincoln Park, City of Chicago) (Source: http://www.bikewalklincolnpark.com/2012/08/new-nearby-bike-lanes-on-halsted-elston.html)

# Cross-Sections of Separated Bicycle Lanes with Buffers as Indicated



CQ28-2013 references the feasibility of constructing a pilot segregated cycle lane similar to the recently completed project on Laurier Avenue in the City of Ottawa. Additional information pertaining to the Ottawa project can be found in **Appendix G**.

The interim solution for active transportation facilities on the Cabana/Division Road Corridor provides an excellent opportunity to pilot cycling facilities that include additional separation. Based on cost and available space, a  $0.5 \, \mathrm{m}^1$  buffered bike lanes/paved shoulders designed with flex bollards, both with and without cross hatching as appropriate are recommended for consideration.

<sup>1</sup> As per Ontario Traffic Manual Book 18 Cycling Facilities, Figure 4.5.4 – Cross-Sections of Separated Bicycle Lanes with Buffers as Indicated (page 89). 0.5m to 1.2m is specified for a buffer with flex bollards.

# 2. Raised Cycle Track

As per OTM Book 18, a <u>raised cycle track</u> "is a bicycle facility adjacent to but vertically separated from motor vehicle travel lanes. A raised cycle track is designated for exclusive use by cyclists, and is distinct from the sidewalk." Pg.18

"A raised cycle track is typically implemented on high volume urban arterial or collector roadways with high bicycle traffic volumes. Raised cycle tracks are typically curb separated to the level of the adjacent sidewalk or an intermediate level between that and the roadway." Pg. 18

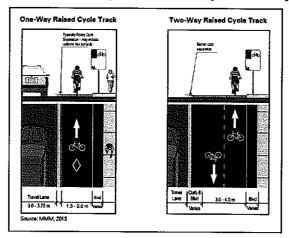
"The raised cycle track may be designed for one-way or two-way travel. Raised cycle tracks are typically used by both experienced and casual cyclists for utilitarian purposes." Pe 18

Raised Cycle Track in Toronto



Note: A raised cycle track is typically implemented on high volume urban arterial or collector roadways with high bicycle traffic volumes Credit: MMM, 2013

# Cross-Sections of One-Way and Two-Way Raised Cycle Tracks



The two-way raised cycle track would experience similar conflicts as a bi-directional multi-use trail; however the cycle track travelling in the same direction as the adjacent vehicle lane operates similarly to a conventional bike lane with vertical/curb separation.

Most of the 5.3km Cabana Road corridor is a rural cross section (without curb and gutter). There may be an opportunity to introduce a few blocks of raised cycle track on the segment between Dougall Ave and Howard Ave. utilizing the existing mountable curbs for separation. Utility poles, sidewalk placement, tree locations and transitions at intersections require more detailed review if this enhancement is supported.

A raised cycle track cannot be effectively implemented in other locations on Cabana Road based on the existing stormwater drainage and driveway frequency.

Administration is recommending a combined solution on Cabana Rd. which consists of infilling the gaps in the sidewalk (sidewalk component included in each option) on both sides and a combination of separated bike lanes with a 0.5m buffer and flex bollards, and single direction raised cycle tracks on segments as noted below:

	Conventional Bike Lanes	Separated Bike Lanes (0.5 m buffer and bollards)	Raised Cycle Track
	Travellare  15.m Bird  3.0 - 3.75 m existence Varies  Source: MMM, 2012	Travel Lane 13.5 Bbd 23.m gater varies 3.0 - 3.75 m 2.3 m gater varies 3.0 m gate	Travel Lane  3.9-3.75 m 1.5-2.0 m vale  Source MMM, 2013
Northway to		✓	OSCIONINA, 25.0
Geraedts		·	
Geraedts to Dominion	}	✓	
Dominion to Dougall		✓	
Dougall to Howard			<b>√</b>
Howard to Provincial		✓	
Provincial to Walker		✓	

The physical separation achieved with the recommended combined solution is expected to address some of the feedback received pertaining to comfort level and safety concerns with the conventional bike lane option and the multi-use trail option. The proposed buffer reduces the encroachment of motor vehicles into the bicycle lane and for the remaining modes of active transportation, sidewalks have been provided. Additionally, similar to the EA preferred alternative, the recommended combined solution does not prohibit access to driveways and intersecting streets.

The Engineering Cost Estimate to include a 0.5m buffered bike lanes/paved shoulders designed with flex bollards, both with and without cross hatching as appropriate is an additional \$1,430,000 including engineering costs. Options to create a one-way cycle track for both sides of the roadway along approximately 390m of Cabana Road have been incorporated into this estimate.

As a first project, success is additionally important and Administration is further recommending that a Consultant be retained to undertake a peer review of the detailed design, particularly transitioning through the conflict points and the existing improved and original intersections.

The Municipal Class EA (MCEA) applies to municipal infrastructure projects including roads, water and wastewater projects. Since projects undertaken by municipalities can vary in their environmental impact, such projects are classified in this Class EA in terms of schedules. In 2007, Municipal Engineers Association (MEA) introduced Schedule A+. These projects are pre-approved, however the public is to be advised prior to project implementation. <sup>1</sup> The proposed 2014 amendments have not been adopted to date.

<sup>1</sup>Source: Municipal Class Environmental Assessment, October2000, as amended in 2007 & 2011, page EX-2.

All of the options presented would be considered as construction of bike lanes or a multi-use trail within the existing public right-of-way. The preferred alternative identified in the Cabana/Division Road Corridor EA included bike lanes and therefore the recommended bike lane with sidewalks interim solution more closely maintains the contents of the Cabana/Division Road Corridor EA approved by the Minister of the Environment.

The Council Decision is a public process that would constitute at a minimum advising the public prior to project implementation. The project Notification and Comment Sheet have included opportunities to request receipt of information on project progress. Those who have requested progress information will be provided the Council Decision which will also be posted on the project website (as identified on the notification letter and comment sheet) at www.cyclewindsor.ca.

# 4. RISK ANALYSIS:

Adding bike lanes and sidewalks would improve segregation between modes of transportation and reduce risk for conflicts of these modes. The identified preferred alternative cross-section in the Cabana/Division Road Corridor EA is not in the current 5-year capital budget timeframe and therefore, this work would have a positive impact in the study area and in the City as an interim solution.

The 5yr Collision Data identified 11 collisions involving cyclists on the Cabana Road Corridor:

- 67% involving cyclists on the sidewalk; and
- 75% of which were cycling against traffic

The existing conditions result in the multi-use trail option exceeding the recommended maximum number of conflict points/km and allows bi-directional cycling on a single side of the roadway (similar to cycling on a sidewalk). Based on collision history and guidelines, this option may result in additional safety risk for cyclists. The multi-use trail option maintains status quo for the e-bike riders.

When the preferred design from the EA is implemented sufficient Right-of-Way (ROW) width may not be available to accommodate separated bike lanes without additional property acquisition (beyond what had been identified in the Approved EA). Additionally, the buffered/separated bike lanes have not been constructed in the intersection portions that have already been built. These issues may result in public disappointment or the requirement for additional future property acquisitions.

Implementation of the interim active transportation solution will be incorporated to other related contracts to reduce staff resource impacts and to benefit from combined project pricing.

The project costs exceed original estimates for this Cabana Road section and could result in additional funding requirements for the full implementation of the Windsor LOOP and related community connections as originally identified in the enhanced capital budgets.

# 5. FINANCIAL MATTERS:

As part of the 2013 Enhanced Capital Budget, Council approved a \$1.8 million placeholder to construct the Cabana Road cycling facilities, with B26/2013. Subsequently, as part of the 2014 Enhanced Capital Budget, a \$5.0 million placeholder received Council approval via B38/2013, to complete the Windsor Loop.

Allocation of these funds, totalling \$6.8 million, was approved by Council with CR89/2014 and will be allocated to Project 7111031 (Bikeways Development).

The engineering cost estimate for the recommended combined interim solution (installation of separated bike lanes and cycle tracks at the appropriate locations) is \$4,290,000 (\$4,365,513 including non-recoverable HST) including the construction of an additional 1.0m of pavement width for the buffer, installation of bollards, line marking and hatching, increased stormwater impacts and associated costs, detailed design engineering and a Consultant peer review.

Essentially, most of the budget allocated for the Windsor LOOP and associated community connections would be required to construct the Cabana Road combined solution as recommended herein. The cost estimates for the other options (including infilling the existing gaps in the sidewalk and exclusive of Engineering costs and non-recoverable HST) not currently being recommended are as follows:

- 1. \$2.6 million Conventional bike lanes (Option A)
- 2. \$2.6 million Multi-use Trail (Option B)
- 3. The cost of the recommended interim solution could be reduced to \$3.2 million if separated bike lanes were replaced with conventional bike lanes (no buffer) from Northway to Dominion.

# Additional Estimated Costs Pertaining to Maintenance

#### **Snow Plowing**

The annual cost for winter maintenance for the recommended combination of separated bike lanes and cycle track is approximately \$8,800.

The following were assumed to calculate the cost for snow plowing the buffered bike lanes:

- 10 winter storms annually need clearing
- 8 hours to plow both sides of Cabana Rd. at \$110/hr (Contractor price for the sidewalk machine)

As per the Operations Department, the bike lanes are not plowed and sidewalks are maintained by the abutting residents as per Council's current direction. Additional funding is required in order to plow the bike lanes during the winter months.

Pursuant to By-law 8544 – Removal of Ice and Snow, snow removal on existing and infill sidewalks is the responsibility of the abutting homeowner. The current level of service for winter maintenance does not include snow removal in the bike lanes.

#### Street Sweeping

Arterial Roads are swept six times per year. Sweeping will only occur when the temperature is greater than zero degrees Celsius. A contractor would need to be hired to sweep the separated bike lane since the current machine is too wide and there is a possibility of damaging the bollards.

The small mechanical sweeper cost is \$100/hr and it would take approximately 2 hours to sweep Cabana Rd. with an estimated yearly cost of \$1200.

#### Surface Maintenance:

Annual painting is required for line marking, hatching, and bicycle symbols. Related signage is replaced approximately every five (5) years as required. Crack sealing is required on a 5yr basis at a cost of \$4/linear foot and pot hole filling will be as required.

The construction of the infill sidewalks will result in standard ongoing repair and maintenance over the lifespan of the facility.

The ongoing maintenance costs for winter maintenance, surface maintenance, maintenance/replacement of the bollards, additional line marking for hatching and street sweeping are not included in the current operating budgets. If funds are not provided in the future Operating Budgets, a variance will be realized.

# 6. <u>CONSULTATIONS</u>:

Engineering Department
Parks & Facilities Department
Public Works Operations Department
Traffic Operations Department
Legal Department
Finance Department

# 7. CONCLUSION:

City Administration is recommending bike lanes and continuous sidewalks on both sides of the roadway for the interim active transportation facilities on Cabana Road between Northway Avenue and Walker Road.

Enhancement opportunities to incorporate the installation of 0.5m buffered bike lanes/paved shoulders designed with flex bollards with hatching at appropriate locations and investigating options to create a pilot section of one-way cycle tracks for both sides of the roadway along approximately 390m of Cabana Road are further recommended.

The estimated cost to construct the recommended active transportation facilities with enhancements where achievable, including engaging a Consultant for peer design review is estimated at \$4,290,000 plus HST including engineering costs.

Jennifer Leitzinger

**Transportation Planning Engineer** 

Mayio Sonego

ity Engineer and Corporate Leader

**Environmental Protection and Transportation** 

Onorto Colucci

Chief Financial Officer/City Treasurer and

Corporate Leader Finance and Technology

Helga/Reidel

Chief Administrative Officer

#### APPENDICES:

Appendix A - Administrative Memo "Background Review – CQ29-2012 Multi-Use Trail - Cabana Road Huron Church Road to Provincial Road"

Appendix B - Cabana/Division Road Corridor Environmental Study Report Additional Info

Appendix C - Public Information Centre (PIC) Notice

Appendix D - Comment Sheet Form

Appendix E - Town of LaSalle - Todd Lane Active Transportation Facilities

Appendix F - The Rt. Hon. Herb Gray Active Transportation Facilities for Cabana Rd.

Appendix G – City of Ottawa – Segregated Bike Lane Pilot Project

11x17 colour copies of the Windsor LOOP concept drawing have been provided for the Mayor and Members of

Council

#### **DEPARTMENTS/OTHERS CONSULTED:**

Name:

Phone #: 519

ext.

<b>NOTIFICATION:</b>			· -		
Name	Address	Email Address	Telephone	FAX	
All residents on study mailing list.					

# Appendix 'A' – Administrative Memo "Background Review – CQ29-2012 Multi-Use Trail - Cabana Road Huron Church Road to Provincial Road"



#### THE CORPORATION OF THE CITY OF WINDSOR

#### Memo

To:

Mario Sonego, Wes Hicks, Josette Eugeni

From:

Laura Ash

Date:

February 12, 2013

Subject:

Background Review - CQ29-2012 Multi-Use Trail

Cabana Road Huron Church Road to Provincial Road

The following information has been prepared to provide a background review for the following CQ requested at the December 17, 2012 meeting of City Council: CQ 29-2012

"Asks for a report on the feasibility of constructing a multi-use recreational trail on Cabana Road from Huron Line to Provincial Road and that this matter BE REFERRED to the 2013 budget deliberations."

An Environmental Study Report (ESR) for Cabana Road/Division Road, from Huron Church to Walker Road (Cabana EA), was completed and approved by the Minister of Environment in September 2008. In response to Report 13913 Cabana/Division Road Corridor Environmental Study Report – Huron Church Road to Walker Road – Minister's Decision Regarding the Part II Order Requests, Council provided the following resolution:

#### CR65/2009

That Council **REFER** consideration of funding of the intersection improvements only to the Capital Budget deliberations as outlined in the report of the General Manager of Public Works dated January 19,2009 entitled "Cabana/Division Road Corridor Environmental Study Report Huron Church Road to Walker Road — Minister's Decision regarding the Part II Order Requests" with the first order of business being the intersection at Provincial Road followed by consideration of intersections at Glenwood, Dominion and in the area of Southwood School and,

that subsequent to completion of the intersection improvements, that traffic studies **BE COMPLETED** to afford City Administration and the Minister to consider a three lane option for Cabana Road,

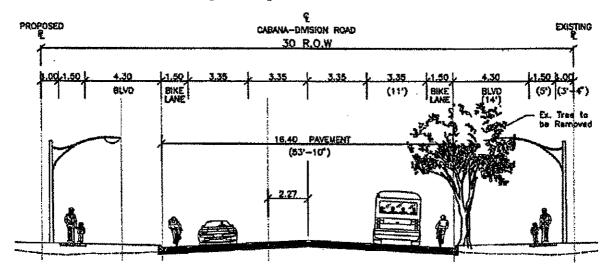
and further, that residents BE ENGAGED in the design process at each phase,

and that Council **REITERATES** the policy or its intent that Cabana Road remains off limits to truck traffic.

The preferred alternative identified in the Cabana EA represents a balanced solution between the technically optimal alternative of five lanes and the three lane alternative supported by many residents along Cabana Road. Some of the key components of the approved alternative are:

- Widen Cabana/Division to four (4) lanes with turning lanes at signalized intersections along the corridor (with the exceptions of the intersections which have already been reconstructed – Dougall Ave., Howard Ave. and Provincial Rd.)
- Bike lanes throughout the corridor
- Curbs and gutters to replace existing ditches
- Sidewalks on both sides of the street; and
- Preserve existing significant trees wherever possible.

The following cross section depicts the preferred cross-section from the ESR:



Cabana/Division Road Corridor - Huron Church Road to Walker Road ESR; Figure 10.1

To achieve these objectives, the cross section is fairly congested within the proposed 30m right-of-way. It was recommended to meander the sidewalks around mature trees and utility poles where possible as confirmed during the detailed design stages.

The Cabana/Provincial intersection is being completed to reflect the cross section recommended in the Cabana EA complete with sidewalks on both sides and on-street bicycle lanes from Sunrise Court to just west of Sixth Concession Road.

As part of the Cabana EA, a Stage 1 Archaeological Assessment was completed, which identified four areas of archaeological potential. A Stage 2 Archaeological Assessment will be required prior to any work being completed within those four areas (identified in Appendix A).

# **Existing Conditions**

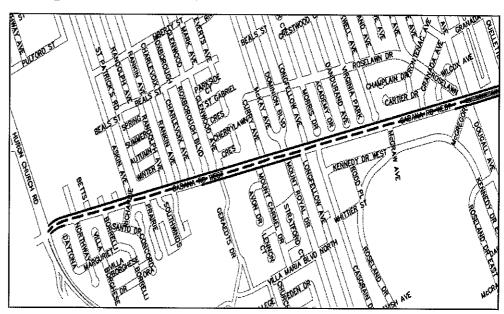
Cabana Road is classified as a Class II Arterial road in the City of Windsor's Official Plan. There are currently two continuous lanes of travel with auxiliary/turning lanes at major intersections (Huron Church Road, Glenwood Avenue/Geraedts Drive, Dominion Boulevard/Mount Royal Drive, Dougall Avenue, Howard Avenue, Provincial Road, Devonwood Avenue and Walker Road).

There is a continuous 1.2 m wide concrete sidewalk along the entire north side from Huron Church Road to Provincial Road, and discontinuous sidewalk on the south side as illustrated in Figure 1.

There are intermittent urban (curb and gutter) and rural (gravel shoulder) pavement cross sections also as shown in Figure 1.

As noted, bicycle lanes have been constructed in the vicinity of the Provincial/Cabana intersection (along Cabana - between 6<sup>th</sup> Concession Rd and Sunrise Crt.) as per the Cabana EA.

Figure 1: Cabana Road, Huron Church Road to Walker Road



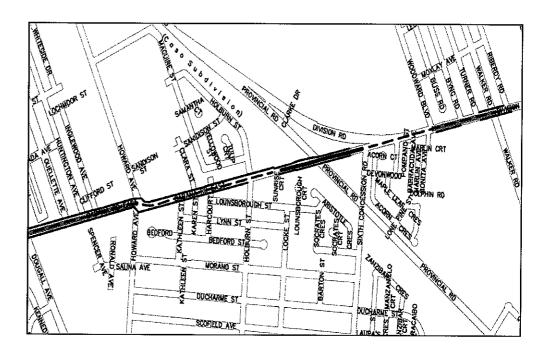
#### LEGEND:

EXISTING BIKE LANES

-- FUTURE BIKE LANES

- EXISTING SIDEWALKS

EXISTING CURB & GUTTER



# **Planned Cycling Facilities**

The City of Windsor's Bicycle Use Master Plan (BUMP) was adopted by Council on May 14, 2001, through CR 554/2001. The BUMP recommends bicycle lanes on Cabana Road from Huron Church Road to Walker Road for implementation within 0 - 5 years (see Figure 2). This section of Cabana Road was also identified as part of the "Windsor loop" in the BUMP.

Figure 2: Bicycle Use Master Plan (BUMP)



# Review of Cycling Facility Options

#### 1) Multi-Use Trail:

Multi-use boulevard trails are typically constructed parallel to motor vehicle travel lanes, within the right-of-way and separate from the roadway.

Two criteria must be considered for a multi-use trail along an arterial roadway:

- width of available right-of-way, and
- number of conflict points including street and driveway intersections.

#### 1) Width of Available Right-of-Way:

The following space needs are recommended in the BUMP for a multi-use trail:

- 0.6m horizontal / 2.5m vertical clearance from obstructions
- 3.0m minimum trail width for bi-directional flow
- 2.0m buffer between the multi-use trail and the roadway

Transportation Association of Canada (TAC) Guidelines caution "...boulevard paths are most suitable for relatively short trips at low speeds and should only be used under exceptional circumstances when no alternate routes or options are available."

TAC Guidelines further recommend providing separation that meets clear zone widths. Based on a design speed of 60km/hr or less and an ADT greater than 6,000 – 4.5m to 5.0m of clear zone separation is recommended.

# 2) Maximum Number of Conflict Points Per Kilometre of Trail:

Residential driveways, commercial accesses and intersections create points of potential conflict. The industry guidelines for determining the appropriateness of a boulevard multi-use path with respect to the number of "conflict points" suggests between 4 to 6 /km. Cabana Road has been reviewed segment by segment and a multi-use trail is not recommended due to the increased risk of exposure.

A multi-use trail is not consistent with the preferred alternative identified in the Cabana EA and the number of conflict points along Cabana Road do not support a multi-use trail alternative.

# 2) On-Street Cycling Facilities:

Bicycle lanes are recommended in the City of Windsor's Bicycle Use Master Plan and the Cabana EA (Huron Church Road and Walker Road).

The Cabana EA cross section recommended 1.5m bike lanes, the width for which may be refined at the detailed design stage. Bicycle lanes are typically incorporated as part of a road rehabilitation or reconstruction project to maximize resources as has been done at the Cabana/Provincial intersection.

Capital funding for implementing the Cabana EA has been prioritized as directed with CR65/2009:

"...with the first order of business being the intersection at Provincial Road followed by consideration of intersections at Glenwood, Dominion and in the area of Southwood School..."

As an interim solution for cycling facilities, the existing pavement structure can be widened on rural sections of Cabana Road. For bicycle lanes, sufficient shoulder width beyond the bike lane is typically recommended however Cabana Road, unlike most rural roadways is an urban setting where shoulder use is not essential.

Costs are estimated for bike lanes on the rural sections as follows (costs reflect modifications needed where ditches exist/conflict):

Section of Cabana Road	Length	Cost Estimate
Northway St to Dougall Ave	2.46 km	\$525,000
Howard Ave. to Sunrise Crt.	0.87 km	\$185,000
Sixth Concession Rd. to Walker Rd.	0.83 km	\$180,000
Total	4.16 km	\$890,000

There are two segments along this 5.5km section of Cabana Road where bike lanes do not already exist and require removing and replacing the curb and gutter. These sections are as follows:

Section of Cabana Road	Length	Cost Estimate
Dougall Ave. to Howard Ave.	0.71 km	\$206,000
Woodward Blvd. to Walker Rd.	0.38 km	\$110,000
Total	1.09 km	\$316,000

#### Sidewalks:

The construction of continuous concrete sidewalks on the south side of Cabana Road could be considered for active transportation other than cyclists. Based on road classification and as identified in the Cabana EA, sidewalk is recommended on both sides. The EA cross section identifies its location as 1m from the property line. Acquisitions are minimal and therefore the sidewalk could be constructed in its final location minimizing throw away costs. The following sections of sidewalk are needed (costs reflect modifications needed where ditches exist/conflict):

Section of Cabana Road	Length	Cost Estimate
Northway St. to Roxborough Blvd.	0.83 km	\$193,000
Longfellow Ave. to Dougall Ave.	1.0 km	122,000
Holburn St. to Sunrise Crt.	0.16 km	\$19,000
Sixth Concession Rd. to Woodward Ave.	0.53 km	\$245,000
Byng Rd. to Turner Rd.	0.15 km	\$21,000
Total	2.67 km	\$600,000

#### Preliminary cost estimates do not include:

- Relocation of landscape features, fences, etc.
- Detailed tree survey for removal/replanting trees
- Detailed utility survey for relocations
- Property acquisition
- Detailed storm sewer or drainage design
- Stage 2 Archaeological Assessment
- Adjustment of manholes/catch basins/valve boxes/etc.

# **RISK ANALYSIS:**

Adding bike lanes and/or sidewalks would improve segregation between modes of transportation and reduce risk for conflicts of these modes. The completion of the ultimate Cabana cross-section is not seen within the 5-year timeframe and therefore, this work would have a positive impact in the area and the City.

# **FINANCIAL MATTERS:**

To 2013 Budget Deliberations. Costing for the options are noted in the Discussion section.

Should Council wish to pursue this initiative, it should be noted that the costs and funding are not currently identified within the 5-year recommended capital plan. If this project is deemed a high priority and a decision is made to proceed, then Council would need to identify which project(s) currently within the 5-year capital plan that are funded will need to be moved/deferred to accommodate this request.

# **CONCLUSION:**

The installation of bicycle facilities on Cabana Road between Huron Church and Walker Road would provide a valuable connection for the City of Windsor's cycling network as supported by the Bicycle Use Master Plan and the Cabana Road Environmental Assessment. Bike lanes were recently constructed in the vicinity of the Cabana/Provincial intersection reconstruction. Opportunities exist to widen the existing pavement to provide bike lanes along the approximately 4.2km of rural sections of Cabana Road and to reconstruct 1.1km to include bike lanes along the remaining urban sections.

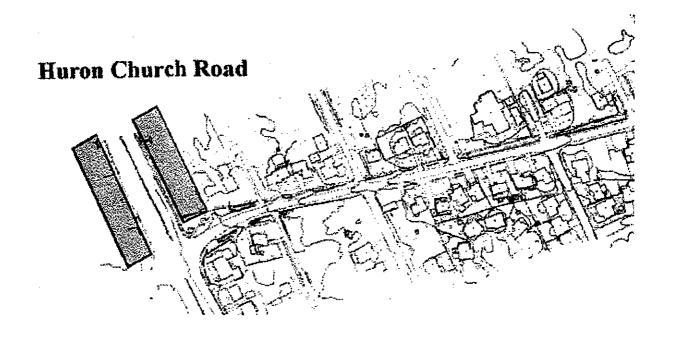
Although a multi-use trail would accommodate a wide variety of users, the existing conditions of the Cabana Road right-of-way do not support a multi-use trail in the boulevard.

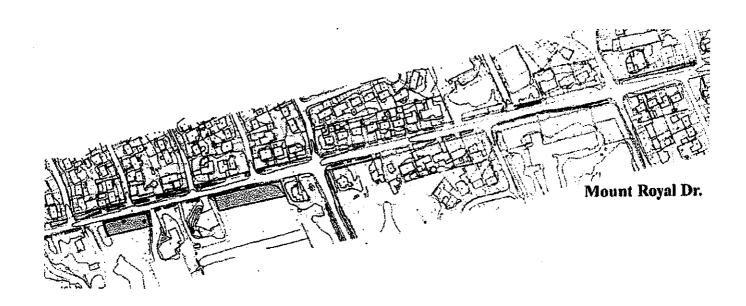
Existing sidewalks on Cabana Road are continuous along the north side of the street. Opportunities exist to construct the missing sidewalk sections along the south side of Cabana Road to improve service to other active transportation modes.

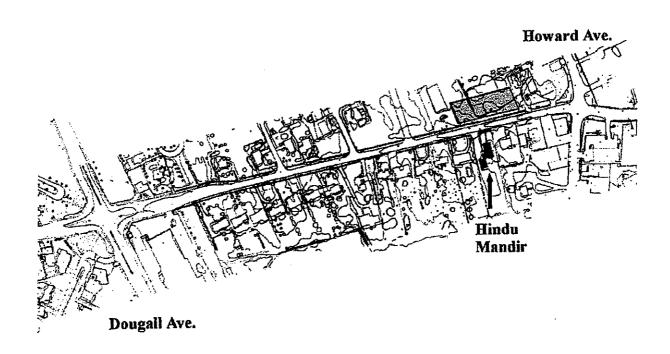
# APPENDIX A - Stage 1 Archaeology Assessment - Areas of Potential

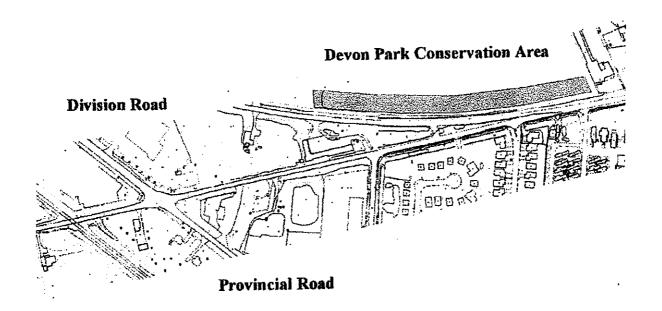
Disturbed

Area of Potential









# Appendix 'B' - Cabana/Division Road Corridor Environmental Study Report Additional Info

The Cabana/Division Road Corridor Environmental Study Report, Huron Church Road to Walker Road (EA) was submitted to the Ministry of the Environment on December 05, 2005 and approved by the Minister of the Environment on September 15, 2008 subject to the following:

- There are four areas of archaeological potential where remains area concern for the Walpole Island First Nation (WIFN) that warrant further attention, as identified in the Stage 1 Archaeological Assessment. In the Environmental Study Report (ESR) the City committed to conducting a Stage 2 Archaeological Assessment if any of the four identified sites are disturbed by the project. Furthermore, the City is required to contact both the Ministry of Culture (MCL) and the WIFN if anything is found.
- The City committed to addressing the issues raised by the MOE technical review regarding the Noise Impact Study (NIS) and will submit a revised NIS to the MOE for review and approval prior to commencing the project.
- Any other permits or approvals required and inclusive of all mitigating measures and environmental and other provisions as set out in the Environmental Study Report (ESR).

As per Section A.2.8.1 of the Municipal Class EA document, the Minister's or delegate's decision is final.

As per the Archaeological Assessment (Stage 1) Cabana Road Corridor, Walker Road to Huron Church Road, City of Windsor, Essex County, Ontario (Archaeologix Inc, July 2001) there are four areas in the study area that retain archaeological potential and a Stage 2 assessment is required if these areas will be impacted.

These include the following two areas with potential for precontact Aboriginal resources:

- The area of Devon Park Conservation area at the east end of the corridor
- An area of grass (vacant field and institutional lawn) on the south side of the corridor, at the west end, adjacent to an existing fire station and church

There are also two areas that appear to retain historic archaeological potential:

- An area at the intersection of Cabana Road and Huron Church Road
- A small section of woodlot on the north side of the corridor, just west of Howard Ave.

Appendix A contains the Figures for the Stage 1 Archaeology Assessment – Areas of Potential.

The Hindu Mandir Religious Centre located at 315 Cabana Rd. E., is of cultural significance to the local Hindu community and is included in the Heritage Properties Inventory.

The following excerpt is from the study Executive Summary:

#### The Preferred Design

The study team was required to carefully weigh the projected transportation demands of the corridor with social impacts and the prevailing character of the neighbourhood. In so doing, the preferred design was identified as having four-lanes with bike lanes plus curbs and gutters despite the preference of some of the residents that live along Cabana Road for a three-lane cross-section.

It should be recognized that the optimal technical solution is the five-lane cross section. The study team weighed the public input and technical considerations ensuing from the PIC's and concluded the following:

- A four-lane cross section is required to accommodate the projected traffic demands of this corridor, and to mitigate the impacts of motorists that slow traffic when making left turns onto the various driveways and side streets along the corridor.
- After PIC #2, which indicated that the public supported the City's plans to provide bike lanes on the Cabana-Division Road corridor, the provision for bike lanes were never removed from the tailored solutions during the technical re-examination of the design solutions.
- Curbs and gutters were chosen to replace ditches for two primary reasons: to improve drainage by removing open ditches, and to provide a visible and well defined edge to the road to emphasize that further road widening in the future was not contemplated.
- Public preference for a reduced pavement width was also met. It should be noted that there is only 2.4m in the width of pavement between the three-lane and four lane cross sections.

Therefore the preferred design was found to be a four-lane cross section with bike lanes, curbs and gutters.

# Appendix 'C' - Public Information Centre Notice

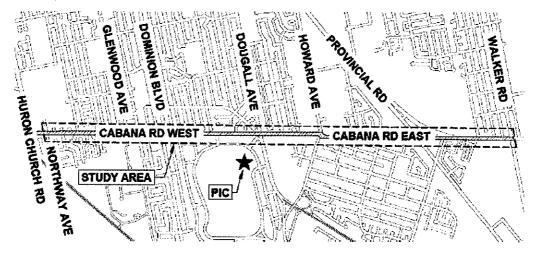


### Notice

PUBLIC INFORMATION CENTRE (PIC)

#### <u>Active Transportation Facilities – Cabana Road between Northway</u> <u>Avenue and Walker Road</u>

The City of Windsor has approved funding to construct pedestrian and cycling facilities on Cabana Road in the study area identified (below). Administration has considered two options: bike lanes with complete sidewalks on both sides, or a multi-use trail on one side with complete sidewalks on the other side.



#### **PUBLIC INPUT**

A Public Information Centre (PIC) is scheduled for Thursday, March 27, 2014 to present the two options to the public and gather input. All interested stakeholders are Date: Thursday, March 27, 2014
Time: 4:00 p.m. to 8:00 p.m.
Location: Roseland Golf and Curling Club
455 Kennedy Drive West

invited to attend this drop-in style open house to meet the Project Team, become informed about the project and provide comments. Comments and input gathered from the public and agencies will be taken into consideration during subsequent planning and design activities.

#### **STUDY CONTACT**

If you are unable to attend the PIC or would like to obtain more information, please contact Laura Ash in the Transportation Planning Division: (519) 255-6247 ext. 6101; fax (519) 973-5476; email <a href="mailto:lash@city.windsor.on.ca">lash@city.windsor.on.ca</a>.

#### COMMENT SHEET

#### **ACTIVE TRANSPORTATION FACILITIES** CABANA ROAD - NORTHWAY AVENUE TO WALKER ROAD

The City of Windsor is interested in hearing the referenced project. Please take a few minutes carefully consider all comments/feedback in final gauging neighbourhood support.	to complete this brief c	omment sheet. The Project Team will
Please identify which blocks are of primary interest to you:		☐ All (Northway to Walker)
☐ Northway to Glenwood ☐ Glenwood	to Dominion/Mt. Royal	☐ Dominion/Mt. Royal to Dougall
☐ Dougall to Howard ☐ Howard to	Provincial	☐ Provincial to Walker
Which of the two options presented do you support	ort? 🔲 Bike lanes	☐ Multi-use trail
Please provide any additional comments, concern	is or feedback below:	
PLEASE PROVIDE YOUR NAME, AD		
*Name and address are required for Admin	istration to gauge neigh	bowhood support.
* Name:	Telephone	e#:
* Address:	E-mai	1:
Please check this box if you would li to the Standing Committee and/or C		
Please return this Comment Sheet to staff at mail, fax or e-mail on or before Friday, Ap	t the Registration Table oril 11, 2014, to the add	during the PIC, or submit it by ress below:
City of Windsor, Transportation Plann		e: (519) 255-6247 ext. 6101
Attn: Laura Ash, Engineer I	Fax:	(519) 973-5476
1266 McDougall Ave, Windsor, ON. N	IBX 3M7 E-mai	: lash@city.windsor.on.ca

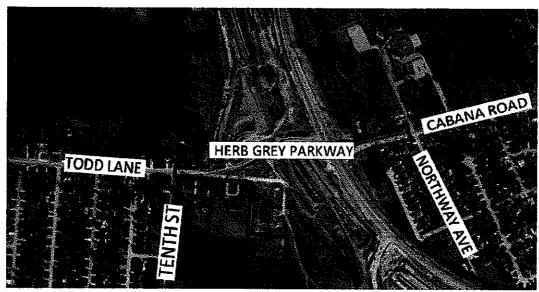
#### Thank you for your participation!

The PIC displays and information will be available on the City of Windsor's website following the PIC: cyclewindsor.ca

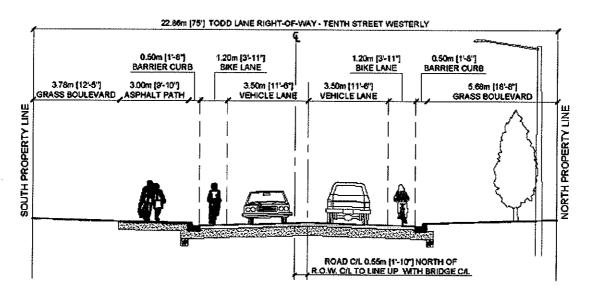
COLLECTION NOTICE
Your personal information and views collected on this form are authorized under section 10, Municipal Act, 2001. This information will be used to enable the Corporation of the City of Windsor to make its decision on the matter. Please note that this information will become part of the public record, unless you expressly request removal of your personal identity information. Questions about the collection of this information may be directed to Jeff Hagan, Policy Analyst, at (519) 255-5247, e-mail: jhagan@city.windsor.oru.ca.

# **TOWN OF LASALLE**

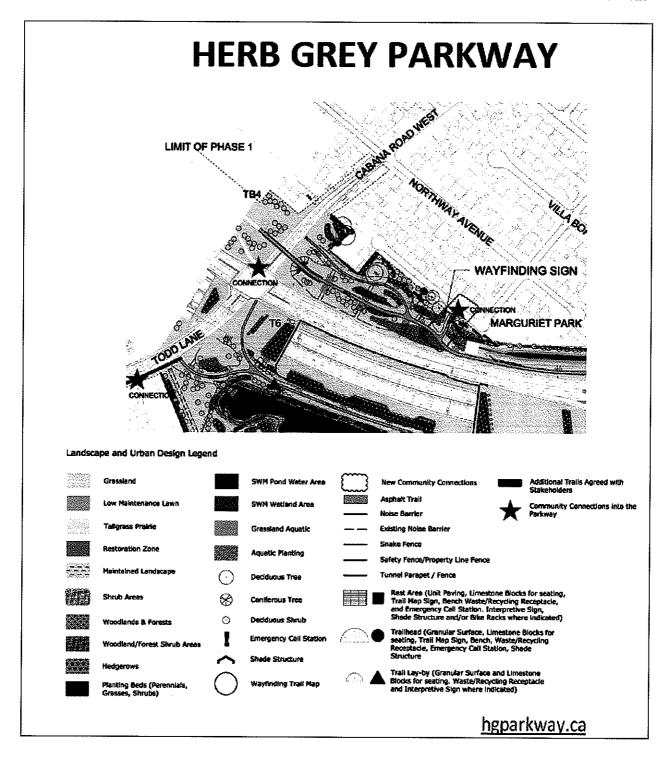
Bike Lanes and a Multi-Use Trail on the south side of Todd Lane, from Tenth Street westerly.



MTO-Assumed Right of Way



# Appendix 'F' The Rt. Hon. Herb Gray Active Transportation Facilities for Cabana Rd.



# Appendix 'G' - City of Ottawa - Segregated Bike Lane Pilot Project

The City of Ottawa conducted a feasibility and planning study for a bike lane project in partnership with McCormick Rankin Corporation and Velo Quebec. The study looked at which east-west downtown streets were best suited for a pilot project and what type of facility was most appropriate.

After review it was determined that the segregated bike lanes were best suited for Laurier Ave., and they would be installed on both the north and south side of the roadway, as per the City of Ottawa East-West Segregated Bike Lane Pilot Project Report from January 2011 (McCormick Rankin Corporation).

"Automobile travel would be limited to one eastbound lane and one westbound lane along the entire corridor, whereas current conditions provide two eastbound and two westbound lanes from Elgin St. to Lyon St. during peak periods. Right turning on red would be prohibited at every intersection along the corridor, in order to protect the safety of cyclists using the pilot facility. Intersections and traffic signal timings would be adjusted to minimize the impact on automobile traffic." Pg iii

"At each intersection along the corridor an advanced green arrow will give priority to east-west pedestrians and cyclists prior to turning automobile traffic. This will increase the visibility of cyclists and reduce collision risk at intersections. To facilitate this advanced green signal, new signal heads with straight through green arrows are proposed at all intersections along the Laurier Avenue corridor." Pg iii

"The proposed segregated bike lane would be separated from automobile traffic by precast concrete buffer curbs topped with delineators, as shown in Figure E-1. In Para Transpo $^1$  zones and loading zones, the lane is proposed to be banked by delineators only, to allow easy access to the sidewalk."  $_{Pg\;iii}$ 

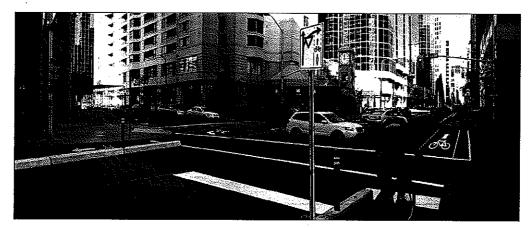


Figure E- 1: Depiction of Proposed Segregated Bike Lane Pilot Project

<sup>1</sup>Para Transpo is a door to door transportation service for persons with disabilities, which prevent them from being able to use OC Transpo's regular, fixed-route transit service. It is funded by the City of Ottawa and administered by OC Transpo.

A report was submitted by Nancy Schepers, Deputy City Manager, Planning and Infrastructure (City of Ottawa) to the Transportation Committee and Council on June 28, 2013 pertaining to the Laurier Avenue Segregated Bicycle Lanes Pilot Project.

The following is from the Executive Summary in the report referenced.

"This report summarizes the monitoring program and results for the two-year segregated bicycle lane pilot project that was implemented July 10, 2011 on Laurier Avenue West. It also provides recommendations for various design improvements that should be implemented over the immediate (2013), short-term (2014-2018) and long term (post-2018) horizons."  $P_{\rm S,1}$ 

#### **Assumptions and Analysis**

"The results of the monitoring program indicate that the bicycle lanes have achieved their main objectives of significantly increasing bicycle traffic and cycling mode shares within the downtown area. Other key indicators include: improved road safety with fewer reported collisions and fewer near-collisions; minimal impact to motor vehicle operations; parking and loading mitigation opportunities; no impacts to emergency response times; and feedback from cyclists, residents, businesses and other road users.

The immediate (2013) recommendations include minor pavement markings and signage adjustments, particularly between Bronson Avenue and Bay Street to provide 22 additional on-street public parking spaces.

The short-term (2014-2018) recommendations include constructing a raised cycle track in 2014 on the north side of Laurier Avenue between Bronson Avenue and Bay Street as part of the already approved East-West Bikeway project that will also see a new multiuse pathway constructed through the Ottawa-Carleton District School Board lands. Staff will also review the use of cycling signal lens at intersections along Laurier Avenue and a voluntary signage program for interested private property owners along the corridor.

The long-term (post-2018) recommendations include converting the remaining segregated bicycle lanes to a raised cycle track when Laurier Avenue is reconstructed sometime post-2018 after the Confederation LRT Line opens for revenue service. The reconstruction of the street provides the most cost-effective opportunity for the conversion as numerous catch basins and iron works would be coordinated with underground pipes and utilities.

#### Financial Implications

The segregated bicycle lane pilot project was approved by Council in 2011 as part of 2011 Cycling Initiatives Capital Budget (Project#905929) of \$2M. Remaining funds are sufficient to cover the proposed design enhancements to 2018. The incremental operating impacts of the project have been found to be minimal as the costs with maintaining a four-lane street without bicycle lanes are comparable to a two-lane street with bicycle lanes.

The total annual net Public Works operating budget impact is approximately \$9,000. The budget impacts will be included in the 2014 draft operating budget for consideration." $_{Pg,\ 2}$ 

#### Public Consultation/Input

"Extensive public consultation included a survey, and on-going opportunities for public input through the project website, email and 311. A Public Advisory Committee (PAC) was also established and met several times which included representatives from every block of Laurier Avenue West, including all of the residential condominium associations east of Lyon Street and employees who work on Laurier Avenue West. Additional PAC members included local Community Associations, Business Improvement Areas, City

Advisory Committee, and other related organized groups (Citizens for Safe Cycling, Bay/Bronson Residents' Action Group for Fair Access to the Road)." Pg. 2-3