



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Halifax Regional Council
November 20, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

A handwritten signature in cursive script, appearing to read "Cathie O'Toole".

SUBMITTED BY: _____
Cathie O'Toole, CGA - Director, Infrastructure & Asset Management

DATE: November 6, 2007

SUBJECT: **Chebucto Road Reversing Lane Project**

INFORMATION REPORT

ORIGIN

- May 11, 2004: Roadway Network Optimization Plan (including Chebucto Road) approved;
- May 9, 2006: Councillor Fougere requested an information report on the Chebucto Road Reversing Lane project;
- May 23, 2006: Councillor Mosher asked staff to prepare a report discussing the options to the Chebucto Road project;
- May 30, 2006: Chebucto Neighbourhood Association made presentation to Regional Council expressing opposition to the project;
- June 13, 2006: staff submitted a report indicating that an independent consultant would be retained to review the process HRM used to determine the need for the Chebucto Road Reversing Lane project, and to meet with the Chebucto Neighbourhood Association to understand their proposed alternatives;
- June 27, 2006: Councillors Mosher and Adams present petitions supporting the Chebucto Road project;
- March 20, 2007: a motion was passed directing staff to bring a report on the Chebucto Road reversing lane project to Council for discussion; and
- March 27, 2007: a motion was passed endorsing the Chebucto Road Reversing Lane Project

BACKGROUND

The Roadway Network Optimization Plan, approved by Regional Council in 2004 included five fundamental upgrades to the existing roadway network and that these would be the basis upon which a regional transportation strategy would be built. Three of those five projects have since been constructed. The two remaining projects are the Chebucto Road Reversing Lane and the Lacewood Drive four-lane project. The Lacewood Drive project has been initiated.

Upon approval of initial funding for the Chebucto Road project in the 2006-07 Capital Budget, staff initiated engineering design work, as well as property acquisition discussions with individual residents. As a result of this work, petitions opposing the project were initiated and an independent review of the project was undertaken by a consultant, including consideration of alternatives proposed by the Chebucto Neighbourhood Association.

The independent review, conducted by an expert in the field of transportation demand management, concluded that the Chebucto Road reversing lane project is an appropriate response to future transportation demands. The findings of this review were presented at a public meeting held on February 15, 2007. On March 27, 2007, Regional Council endorsed the project.

DISCUSSION

Following the Regional Council meeting, staff engaged in an integrated process of engineering design, land acquisition negotiation, and public consultation with the affected residents of Chebucto Road.

Design plans shown at the February 2007 public meeting showed all of the widening taking place on the south side of the street (see Attachment A). This plan required the partial taking of property from eleven (11) residential properties ranging from 2 to 16 feet. It also required the acquisition of the residential property at Civic 6886, and a partial taking of property from the St Agnes Catholic church. This design is referred to as Option 1.

There was considerable opposition to this plan because of the degree of impact to the properties on the south side. In May 2007, staff met with the Chebucto Neighborhood Association and presented a second design option which would minimize the degree of impact. (see Attachment B). This plan required the partial taking of property from seventeen (17) residential properties on both sides of the street ranging from 4 to 9 feet. It also required a partial taking of property from St Agnes Catholic church but spared the residential property at Civic 6886. This design is referred to as Option 2.

At that meeting, the Chebucto Neighborhood Association was asked to consult with other residents on the street and provide feedback on the second option. Staff did not receive any comments. To ensure that all residents who may be physically affected by the project were informed of both options, a second resident's meeting was held on September 12th.

A letter was sent to the residents on September 20, 2007 providing information on both design options and requesting feedback on both design options. Staff received one phone call from the owners of Civic 2760 William Hunt Avenue, and one letter from St Agnes Catholic Church (see Attachment C).

Based on the feedback received, staff conducted a review of the two design options which considered the number of properties affected, the degree of impact to each property, loss of street trees, and loss of parking to the church. A decision was made to proceed with Option 1. A modified design plan was prepared which requires the partial taking of property from seven (7) residential properties ranging from 2 to 10 feet. (See Attachment D) The residential property at Civic 6886 is avoided, and there is also a partial taking of property from St Agnes Catholic church. This design is referred to as Option 1A.

Staff are proceeding with the detailed design and property negotiations for this design option. Following the acquisition of the property, the project will be tendered and construction will commence in Spring 2008/09, as had been initially planned.

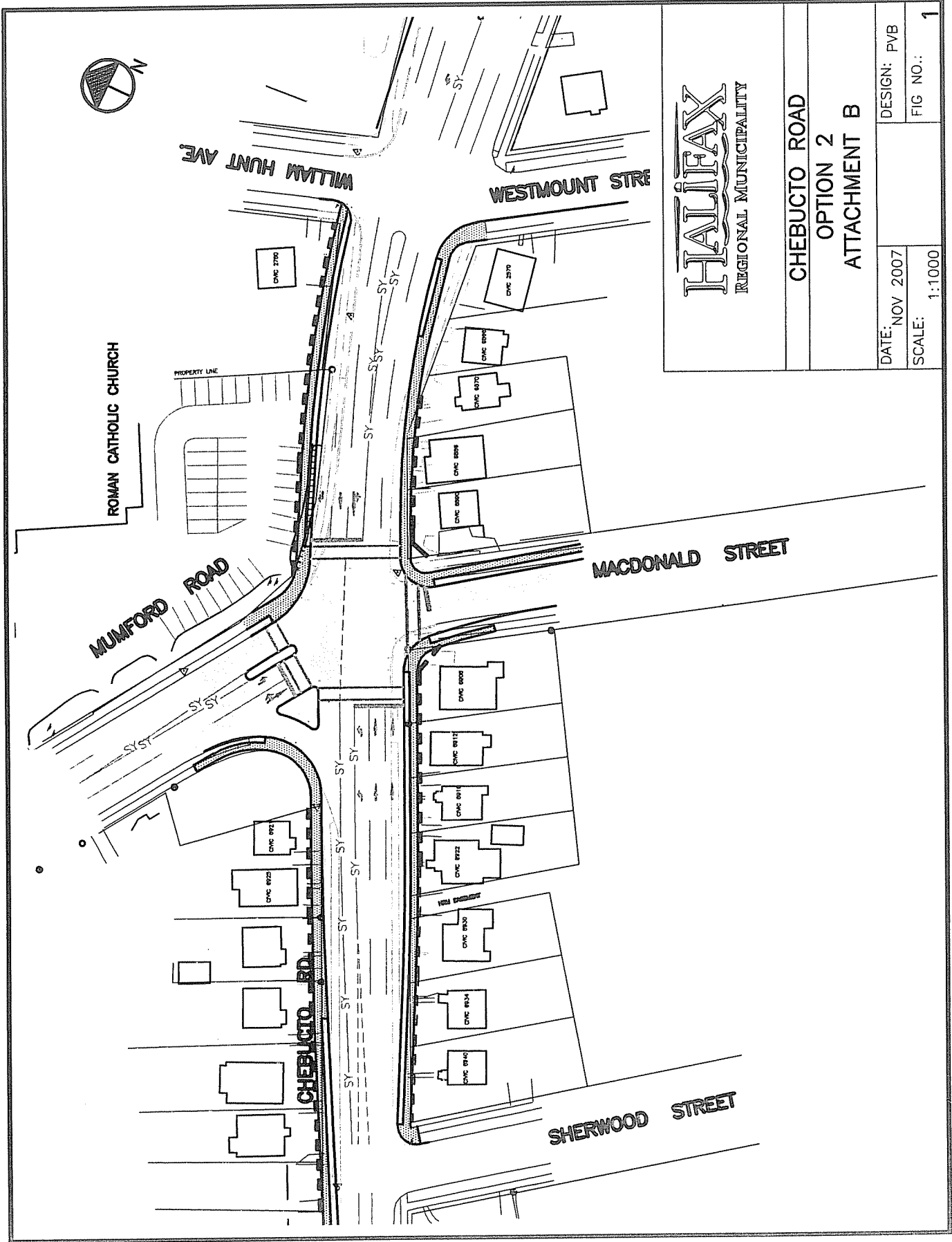
Attachment E contains answers to some "Frequently Asked Questions" about the Chebucto Road Reversing Lane Project. This information resource is available on HRM's website. The information contained in the answers is consistent with all plans and information previously presented to Council on this topic, but may contain a finer level of detail than some of the information that has been presented to Council to date.

BUDGET IMPLICATIONS

There are no budget implications.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

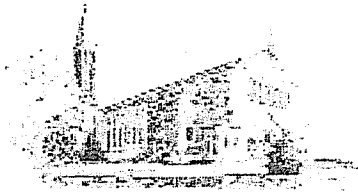
This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.



HALIFAX
REGIONAL MUNICIPALITY

**CHEBUCTO ROAD
OPTION 2
ATTACHMENT B**

DATE: NOV 2007	DESIGN: PVB
SCALE: 1:1000	FIG NO.: 1



St. Agnes Church

6903 Mumford Road, Halifax, Nova Scotia B3L 2H4

Phone: 902-454-8200 Fax: 902-455-3831

Email: stagnes@hfx.eastlink.ca

October 25, 2007

Mr Paul Burgess, M. Eng , P. Eng
Capital Transportation Project Engineer
Halifax Regional Municipality
P O Box 1749
Halifax NS B3J 3A5

Dear Mr. Burgess

This is in response to your invitation to property owners impacted by the proposed Chebucto Road widening to comment on the draft proposals.

St. Agnes Parish has considerable sympathy for the residents who will, if the project proceeds, lose a portion or perhaps all of their land. Major world cities are now taking active steps to reduce the flow of traffic into their central business areas rather than spend scarce tax dollars to increase the traffic. Perhaps this proposed project may serve as the spark which will induce our municipal government to accelerate those parts of the Municipal Planning Strategy which place increased emphasis on forms of transportation other than the private automobile.

While the loss to the residents will have a greater personal impact than on the church, there will in fact be many more people affected by the loss of parking which will result from the taking of the church land. Our parish serves of 600 families and is used by countless others for social and community programs. We regularly host special liturgies for members of the police force and others who are attracted to our parish in part because parking is available.

All of the proposals put forward over the past few years have called for the loss of some parking. Like other affected property owners we would like to see traffic handled in ways that is least disruptive. Ideally, that would be by maintaining the status quo which is always an option. Failing that, we would ask for the imposition of the least amount of disruption possible which appears to be a plan that was presented a year or so ago, which called for the loss of just 2 parking spaces.

The two "options" presented at the recent meeting call for the loss of up to 7 spaces, which when combined with the loss of 3 on street parking places on Chebucto Road, will have a considerable impact on our ability to serve those who use our property. If the project must proceed, then we would hope that it is designed in such a way as to reduce the amount of land required.

Paul Burgess
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Some of the standard features included in street projects could be modified without causing any safety concerns. We would hope that the lanes be made as narrow as possible, that no grass median be placed between the curb and the sidewalk, that the

sidewalk be as narrow as safety will allow and that no land be reserved between the sidewalk and the church lands. Due to the limitations on the design of the parking spaces imposed by the shape of the church property even a few feet can have a major impact.

At the meeting the justification put forward for the project proceeding at this time, was that traffic modeling programs employed by municipal staff showed that the changes to the rotary would put more traffic on Chebucto Road. It was acknowledged that while models are always a useful planning tool, they do not always predict perfectly what happens in the real world. We now have an opportunity to improve the planning process by observing for a period of time the actual impact on Chebucto Road and then make decisions based on actual experience, rather than theoretical modeling and it would be our hope that Regional Council would see fit to delay for a planning cycle of one year, the decisions which remain to be made before the project can proceed.

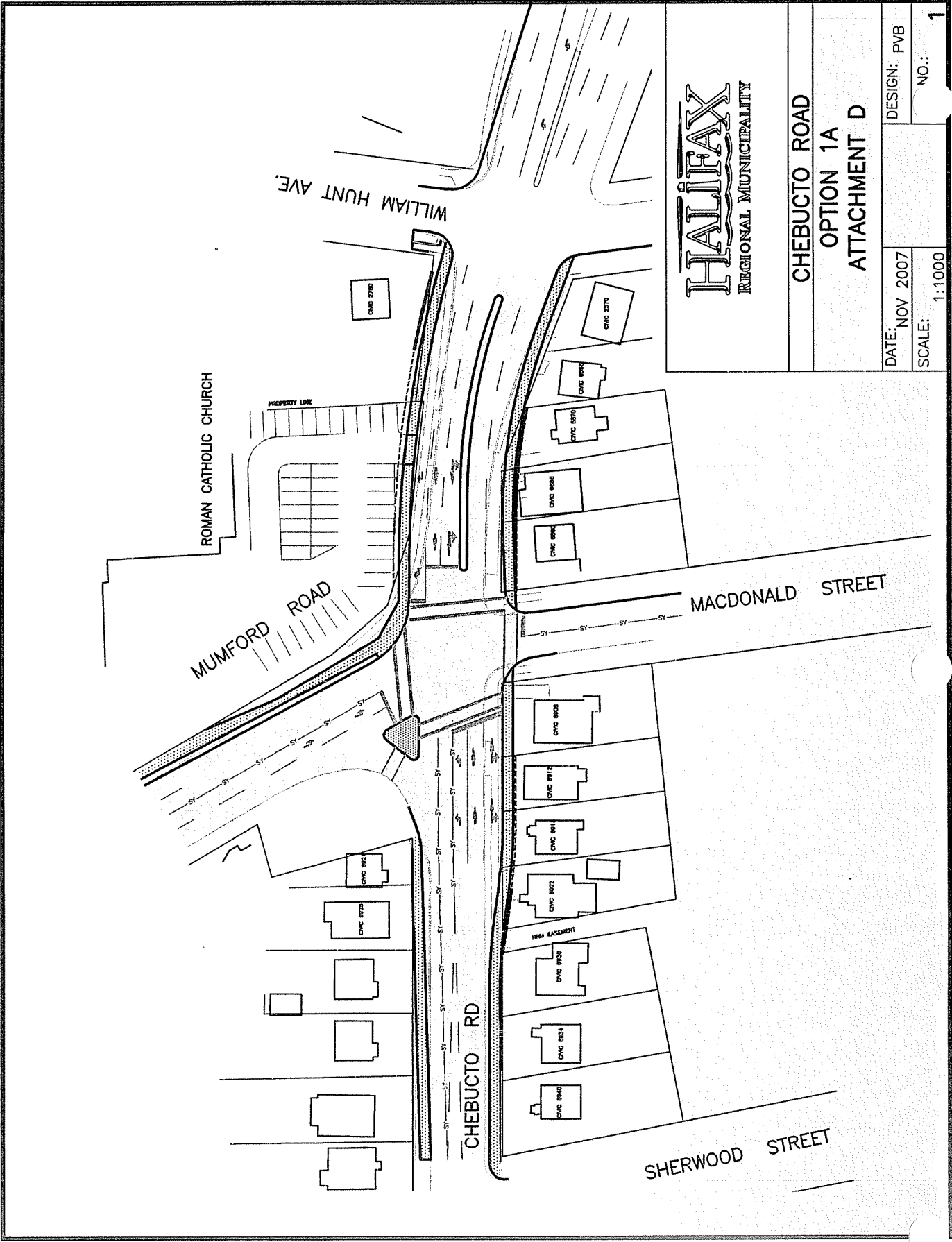
Thank you for the opportunity to comment, and we trust that we will be kept advised of further developments.

Sincerely,



Rev. John Williams, Pastor

Cc: Sheila Fougere, Councilor, District 14
Peter Browne, Archdiocese of Halifax
St. Agnes Parish Council



**CHEBUCTO ROAD
OPTION 1A
ATTACHMENT D**


DATE: NOV 2007	DESIGN: PVB
SCALE: 1:1000	NO.: 1

ATTACHMENTS

- Attachment A - Design Option 1
- Attachment B - Design Option 2
- Attachment C - Letter from St. Agnes Catholic Church
- Attachment D - Design Option 1A
- Attachment E - Chebucto Reversing Lane Project - Frequently Asked Question

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Paul V. Burgess, M.Eng., P.Eng., Project Engineer, Regional Transportation Planning
490-5578

Approved by : 
Dave McCusker, P.Eng., Manager, Regional Transportation Planning
490-6696

ATTACHMENT E

Frequently Asked Questions Chebucto Road Reversing Lanes Project November 14, 2007

1. What is the total cost of the project ?

The estimated cost of the Chebucto Road Reversing Lanes project is \$1,700,000. More accurate costs will not be known until the engineering design work is completed.

2. What problem does this project intended to solve?

Traffic studies have indicated that inbound traffic volumes on Chebucto Road during the morning rush hour period are at or near capacity. Queues extending back from the Chebucto/Mumford intersection cause traffic to back up into the Armdale Rotary. This affects the traffic flow on St. Margaret's Bay Road, Herring Cove Road, and Joseph Howe Drive.

The HRM Regional Plan has identified where future settlement is to occur, how many trips will be generated, how many of those trips will be captured by enhanced transit service, and how much additional vehicle demand will be created. It was determined that additional capacity is required through the Armdale Rotary, and a conversion to a modern roundabout design will achieve this, provided the roadways connecting to it have sufficient capacity to receive the traffic exiting the roundabout.

Creating a reversible lane on Chebucto Road, between the Roundabout and Mumford Road, will increase the inbound capacity to accept the increased flow of traffic through the Roundabout. Overall, the increased flow is projected to be 300 vehicles per hour in the peak. This capacity also ensures that traffic queues will not back into the roundabout.

3. Has the city looked at any alternatives ?

The HRM Regional Plan manages future trip demands through a number of means other than vehicle trips. The plan includes transit enhancement, active transportation and development of transportation demand measures such as carpooling, and road pricing policies.

There are alternative ways of adding vehicle capacity onto and off of the peninsula. The Fairview interchange is already identified as a project for added capacity. Adding capacity to Bayers Road, Mumford Road and Quinpool Road is far more expensive and

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intrusive because widening of the full corridor length is necessary. Adding capacity to the Chebucto corridor is most cost-effective, as only a short section of roadway needs to be widened to realize the value of existing, unutilized capacity.

4. Does this project contradict the Regional Plan ?

This project is an integral part of the Regional Plan and has appeared as a project in every draft of the plan. Although the plan focuses on transit, active transportation and transportation demand management measures to handle the additional trips produced by future growth, modeling has indicated that even aggressive measures are not enough to handle all of the future growth.

5. Several numbers have been quoted 100 more cars per hour, 1400 additional cars per hour at the intersection, 900 cars per hour - What is the predicted increase in traffic in this corridor, in terms of capacity, after completion of the reversing lane, measured in vehicles per hour ?

The capacity of Chebucto Road in the one direction is currently 900 vehicles per hour and this will increase to about 1600 vehicles per hour. Not all of this added capacity can be utilized, however, as the Armdale roundabout conversion is only capable of handling an additional 300 vehicles per hour to and from Chebucto Road. Therefore, the maximum increase in traffic is expected to be 300 vehicles per hour, although this volume is not antiexpected to be reached immediately.

6. Has there been any traffic modelling to support this ?

A QRSII model has been used since 1995 to project traffic and transit demand region-wide based on population and employment patterns. A SYNCHRO model is used to simulate traffic along the Chebucto corridor and Rodel and VISSUM models were used for roundabout analysis.

7. Will this solve the problem identified ? Has there been any traffic modelling to support this ?

With the completion of the reversing lane project, the Chebucto Road corridor will have sufficient capacity to handle additional traffic volumes from the Armdale Roundabout conversion.

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8. What will be the actual effect of not completing the project ?

While HRM's Regional Plan attempts to slow and manage traffic demand growth through a series of policies encouraging other modes of transportation, the traffic studies completed for the Plan projected that traffic demand to and from the Peninsula would continue to grow over the next 20 years.

If the project is not completed, traffic congestion going onto and off of the peninsula will worsen significantly, and more motorists will likely choose side streets as a means of shortcutting and avoiding the traffic congestion.

Although it could be argued that high levels of traffic congestion are beneficial in forcing commuters to choose other modes, it also harms commercial operations that rely on the roadway network as well as transit operation. The Regional Plan has set the objective of maintaining overall congestion systemwide at their current levels.

9. Can this project be designed to accommodate adequate snow storage and proper width of sidewalk. ?

Sidewalk widths will be the same as they are now. Snow storage near the Mumford Road intersection will be reduced but will be sufficient for snow removal crews to manage.

10. How many street trees will be removed ? Will they be replaced ?

The exact number of street trees that will be removed will not be known until the detailed design is completed. From the preliminary design plans, approximately 8 trees would be removed. Any street trees that will be removed will be replaced.

11. How many properties will be affected by having HRM purchase a piece of their property?

The number of properties affected cannot be confirmed until after the detailed design has been completed. Preliminary design plans indicate that 9 to 12 properties could be affected.

12. What is the extent of land purchases in terms of area from least to most area ?

The exact extent of land purchases will not be known until the detailed design is completed. From the preliminary design plans, the extent of land purchases range from 60 to 1350 square feet. Since the area of property acquisition tapers from the existing

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street width to its maximum right at the Mumford intersection, the amount of property varies. For some properties, the extend of acquisition is two to three feet and for others its about 15 feet.

- 13. Are there future plans to further remove any other Chebucto Road bottlenecks ? (For example: where Chebucto Road reduces to a single eastbound lane was of Connaught Avenue, where Chebucto Road reduces to one eastbound and one westbound lane, east of North Street, the intersection of Chebucto Road and Windsor.) If so, what is the time line?**

There are no immediate short term plans (1 to 4 years) to further remove any other Chebucto Road bottlenecks. Longer term opportunities to create a second inbound lane from Connaught as far as the North Street split will be considered to balance the existing two lanes outbound, although creation of a reversing centre lane may be considered here as well. The Regional Plan is intended to identify all of the road corridor projects required over the twenty-five year life of the plan and does not identify anything further for the Chebucto corridor.

- 14. Can you demonstrate with actual data that traffic disperses in several directions at Connaught Avenue ?**

Traffic volume data taken from May 2005 indicates that during the morning rush period, approximately 45 percent of all eastbound vehicles continue travelling on Chebucto Road, approximately 20 percent of all eastbound vehicles turn right onto Connaught Avenue, and 35 percent of all vehicles turn left onto Connaught Avenue.

- 15. What is the proposed distance measurement of the pedestrian crossing on Chebucto Road between Mumford Road and MacDonald Street ?**

The existing pedestrian crossing distance on the west side of Chebucto Road is approximately 13.8 metres. The existing pedestrian crossing distance on the east side of Chebucto Road is approximately 16.2 metres.

The proposed pedestrian crossing distance on the west side of Chebucto Road is approximately 19.6 metres. The proposed pedestrian crossing distance on the east side of Chebucto Road is approximately 19.7 metres. These figures will be confirmed after the detailed design is complete.

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- 16. How does the proposed pedestrian crossing distance at the intersection (above) compare to other intersections that have no boulevard or pedestrian refuge, and how ill this affect the timing of the lights ?**

The following intersections have at least one marked crosswalk where the pedestrian crossing distance exceeds the proposed pedestrian crossing distance for Chebucto Road:

*Bedford Highway (several intersections north of Dartmouth Road)
Portland Street (several intersections east of Baker Drive)
Bayers Road at Joseph Howe Drive
Chebucto Road at Connaught Avenue
Mumford Road at Halifax Shopping Centre Entrance
Bayers Road-Young Street at Windsor Street*

None of these crosswalks have abnormal collision rates. The timing of the lights will be changed so that more time is given to pedestrians crossing Chebucto Road.

- 17. How many overhead lane markers will there be, and where will they be placed in relation to peoples properties ?**

The exact number of overhead lane signals cannot be confirmed until after the detailed design is complete. Based on the preliminary plans, staff estimate the need for 7 overhead lane control signals between the Roundabout and Sherwood Street. Poles for the signals will be placed in the grass area between the sidewalk and the curb. The exact location will be based on visibility requirements. Wherever possible, the poles will be placed to minimize the inconvenience to adjacent property owners.

- 18. What if the same money is used for transit instead?**

Previous growth modeling exercises identified a substantial deficiency in road capacity which would continue to escalate if our growth and infrastructure priorities stayed as they had in the past. This would result in a major investment in road capacity projects. To avoid this, the plan put forward substantial funding to bolster existing transit service and create new types of transit service such as MetroLink, rural express transit, and high speed ferry. Although this increase in transit investment is projected to result in meaningful shifts from vehicle trips to transit trips, it can not realistically capture all of the future projections for trip-making within the region. Other measures like high occupancy vehicle lanes, ridesharing programs, and bicycle network expansion are also factored into the regional plan model. Although road capacity projects have been dramatically reduced from previous planning exercises, they can not fully be eliminated.

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19. Shouldn't the broader community have been consulted?

Development of the HRM Regional Plan involved consultation with hundreds of residents from across the region interested in a future vision for the region. The workshops that were held included a broad range of focused discussion in a number of areas, including transportation. In discussing the issue of accommodating more trips onto the peninsula, some participants felt no additional vehicle traffic should be allowed, while others thought that road projects more extensive than those proposed in the plan should be included. Overall, most people accepted that the plan's strong focus on transit investment to minimize roadway expansion projects was a good middle ground.

20. Can the project be delayed for a year to allow more options to be considered?

The regional plan has already modeled a wide variety of options including greatly expanded transit services, ridesharing, HOV lanes, bike lanes, parking management and other demand management measures. Even with very optimistic projections for success of these alternatives, there were continued demands on our roadway network, including Chebucto Road.

In October 2006, an independent expert in transportation demand management was hired to meet with the Chebucto residents to go over their alternatives with them. In his report, the consultant confirmed the validity of the regional plan assumptions and identified a number of obstacles to implementing the alternative plans suggested.

It has been suggested that the moratorium would allow time to view the effect of the changes to the roundabout on traffic patterns. Firstly, the Chebucto/Roundabout project is intended not only for current loading, but for future loading resulting from already-approved development off the peninsula. Secondly, the effects of the roundabout changes are already evident. As predicted by the computer simulation, lack of capacity on Chebucto Road chronically causes morning queues to back into the circle. Although queuing in the circle was tolerable with rotary rules, it causes significant breakdown in a roundabout because it allows vehicles to force their way into the backlog from an approach when they don't have right of way. In other words, the roundabout can't work properly if queues back into it, and queues will always back into it from Chebucto Road if a reversing lane system is not implemented.

