
Our File/N/Réf. **50 23-98-R012**
Your File/V/Réf.

DATE 8 July 1998

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services
Environment and Transportation Department

SUBJECT/OBJET **FALLOWFIELD ROAD FROM WOODROFFE AVENUE TO A
POINT 155 M WEST OF WOODROFFE AVENUE - PROPOSED
MEDIAN**

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee and Council approve:

- 1. The construction of a median on Fallowfield Road between Woodroffe Avenue and a point 155 m west of Woodroffe Avenue as illustrated in Annex B, subject to the RMO and the Long Farm Developments Incorporated;**
 - a) each participating to the extent of 50% in the funding of the median construction costs limited to a maximum Regional contribution of \$40,000;**
 - b) executing a legal agreement with respect to the above;**
 - c) the encumbrance of funds in the amount of \$40,000 from the Safety Improvement Programme (91-30708);**
- 2. The initiation of the public hearing process as required by Sections 297 and 300 of the *Ontario Municipal Act*.**

BACKGROUND

Long Farm Developments Incorporated proposes the development of a fast food retail facility on the south side of Fallowfield Road located west of Woodroffe Avenue and east of the CN Railway crossing. Roadway modifications are proposed to be developed in concert with the development which would involve the construction of a concrete median along the length of Fallowfield Road, from Woodroffe Avenue to a point west of the proposed site access. Not only

would this modification benefit access to this development, it would also have the added effect of significantly enhancing traffic safety along this section of Fallowfield Road.

The developer had maintained that the largest portion of the median fronts on the lands located east of the proposed site. A median would provide a solution for the existing collision location opposite the Petro-Canada site and offer direct benefits to the overall traffic safety beyond the limits of the proposed development. As well, the developer has maintained that without some form of cost-sharing, the costs associated with the length of this median would jeopardise the viability of the proposed development.

The development of the median was reviewed by Regional staff and analysis was undertaken to assess the impact that the proposed median would have on traffic collision frequencies in this area of Fallowfield Road. The construction of the median would require that the existing pavement markings be removed and subsequently replaced and could also involve a slight narrowing of the bike lanes on Fallowfield Road. As well, it was determined that the median would indeed provide an overall safety and economic benefit to the people of Ottawa-Carleton. Recognizing this benefit, staff now requests Council approval to participate, to a limited degree, with the developer in the funding of this modification.

EXISTING CONDITIONS

Fallowfield Road is generally characterized by a two-lane, undivided rural cross-section with localized widenings adjacent to accesses. This arterial roadway will likely continue to serve as the major east-west arterial serving the Barrhaven Community.

Pedestrians

Pedestrian activity at the Fallowfield Road and Woodroffe Avenue intersection is negligible in that the areas to the north and east of this intersection have little or no development.

Cycling

Fallowfield Road serves as a Regional “primary” cycling facility with cycling lanes on either side of the roadway. Cycling traffic over an eight-hour period on Fallowfield Road was recorded as 50 bicycles in 1997, 30 bicycles in 1996 and 35 bicycles in 1995.

Transit

Transit service consists of routes 70, 73, 76, 170, 173 and 188 serving Fallowfield Road and routes 77 and 177 serving Woodroffe Avenue. The transit routes serve the Barrhaven, Davidson Heights and Longfields communities of Nepean.

Automobiles

Peak hour directional traffic on Fallowfield Road west of Woodroffe Avenue is approximately 1,110 vehicles per hour. Peak hour traffic on Woodroffe Avenue south of Fallowfield Road is approximately 1,280 vehicles per hour. Heavy vehicle traffic (inclusive of buses) on Fallowfield Road in front of the site comprises approximately 5 percent of the traffic during both the morning and afternoon peak hours of traffic demand.

DESIGN PROPOSAL

The proposed roadway modifications involve the construction of a concrete median along the length of Fallowfield Road, from Woodroffe Avenue to a point west of the proposed site access. A functional design of these proposed roadway modifications is attached as Annex C. The existing automobile lane configuration would be preserved. Access to the adjacent Petro-Canada site would, however, be restricted to right-in, right-out movement. It should be noted that should the median be constructed, the Petro-Canada site would continue to maintain all-directional access for their patrons travelling from the east and west by utilizing the site's all-movement access to Woodroffe Avenue.

Pedestrians

The proposed median would have virtually no effect on existing pedestrian travel in this area of Fallowfield Road.

Bicycles

The proposal may require the existing 2 m bicycle lanes to be narrowed slightly to 1.75 m. It is anticipated that this will not affect the existing bicycle operations on this section of Fallowfield Road.

Transit

This proposed roadway modification will have no effect on the existing transit operations in this area of Fallowfield Road.

Automobiles

As mentioned earlier, the proposed median will prevent westbound and northbound motorists from turning left into and out of the Petro-Canada site which, in turn, will significantly improve traffic safety at this location. In addition, the median will provide the added benefits of separating the eastbound left-turn lane at Fallowfield and Woodroffe and narrowing the vehicle lanes.

The RMOC has recognized the need to widen Fallowfield Road; however the RMOC Transportation Master Plan, (February 1997) did not address the need to widen this facility as either a first (by approximately 2001) or second (by approximately 2006) priority indicating that major improvements to Fallowfield Road are not anticipated within the 10 year horizon. Preliminary or conceptual plans prepared by the RMOC indicate the desire to grade separate the CN Rail crossing such that Fallowfield Road would pass under the rail crossing.

DISCUSSION

Attached as Annex A is a summary of the background and analysis that this Department feels clearly illustrates the potential for safety improvements that justify the Region's financial participation in this proposed roadway modification project. Estimates of the total cost required to design and construct the median has been determined to be approximately \$80,000 including G.S.T. The Region's portion would be 50% of the total construction cost to a maximum of \$40,000. If construction costs exceed \$80,000, the Regional contribution would remain at \$40,000.

It will be necessary to enter into an agreement with Long Farm Developments Incorporated for this work.

CONFORMITY TO THE TRANSPORTATION MASTER PLAN

The guiding principle from the Transportation Master Plan (TMP) is the provision of a modal hierarchy with the emphasis on walking, cycling and transit usage. This principle is reflected in the current design of Fallowfield Road through the recent provision of bicycle lanes which will be maintained with this proposed modification.

FINANCIAL COMMENT

Should Regional Council approve the proposed roadway modification and related works, the owner, Long Farm Developments Incorporated in participation with the RMOC, will be responsible for 100 percent of all costs.

The following cost estimates, which have been developed by the engineer for Long Farm Developments Incorporated, are at a conceptual stage and may vary after further analysis. These estimates relate only to the roadway modifications identified in the Regional right-of-way and are provided solely for the information of the Transportation Committee and Regional Council:

<u>Item</u>	<u>Cost Estimate</u>
Construction	\$55,000
Engineering	\$20,000
Contingencies	<u>\$ 5,000</u>
Total Estimated Cost	\$80,000

EXPENDITURE JUSTIFICATION

Motorists travelling along this portion of Fallowfield Road currently experience a greater risk of being involved in a traffic collision when compared to similar road sections throughout Ottawa-Carleton. It is estimated that if the proposed road works were completed, the collision frequency on this section of roadway would be reduced by as much as 45%. In economic terms, the savings to society through collision reduction has been conservatively estimated to be \$13,000 annually and at least \$80,000 (10% annual discount) over a 10 year period (assumed service life of the safety improvements).

Although the Environment and Transportation Department has long-term plans to rehabilitate this section of Fallowfield Road through upgrading and/or widening, no plans are in place for the next five years. In view of this, the prospects for road improvements to the south side of Fallowfield Road are fairly remote in the short to mid-term; therefore, this would appear to be an ideal opportunity to provide a substantial enhancement to traffic safety at a minimum cost to the taxpayers of Ottawa-Carleton. If the RMOC participated with the developer up to a maximum of \$40,000 in the funding of these roadway safety improvements, over the space of 10 years the people of Ottawa-Carleton would recoup more than twice their investment through collision reduction alone.

FINANCIAL STATEMENT

Funds are available in the 1998 Capital Budget, Account No. 912-30708, Safety Improvement Programme (reference page 133).

CONSULTATION

The opportunity for comment from the general public will be provided via the public hearing process.

COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP

This report will be presented to (RCAG) at their meeting of 11 August 1998. Although this report is being considered by the Transportation Committee on 21 July 1998, RCAG will have ample opportunity for input through the public hearing process should they have any concerns with any of the proposals in this report.

Approved by
Doug Brousseau
WJ/js

ANNEX A
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ECONOMIC ANALYSIS AND BENEFIT-COST CONSIDERATIONS FOR FALLOWFIELD ROAD SAFETY IMPROVEMENTS ALONG THE FRONTAGE OF THE PROPOSED RETAIL DEVELOPMENT

Of the 16 collisions reported along the frontage of this proposed development, 6 (45%) are categorized as treatable primarily by physically preventing left turns into and out of the existing access (#3320 Fallowfield Road - Petro Canada Site). This measure is considered to be a very effective treatment in the reduction of mid-block left-turn related traffic collisions.

There is an inherent cost to society with every traffic collision, which according to current figures developed by Transport Canada, amounts to a Canada-wide average of \$3,880.00 for a collision involving only property damage and an average of \$15,730.00 for each collision involving an injury and/or fatality.

The attached table provides a summary of the present value calculation used in this analysis in order to derive the annual traffic collision costs to society along this portion of Fallowfield Road. In addition, the table illustrates how much can be invested now in collision treatment with an eventual recuperation of this investment in 10 years. Assuming a 10 year service life after the installation of these proposed collision countermeasures, and a very conservative annual discount rate of 10%, it is estimated that the minimum present value (1998 dollars) of the economic benefit to society totals approximately \$80,000.00.

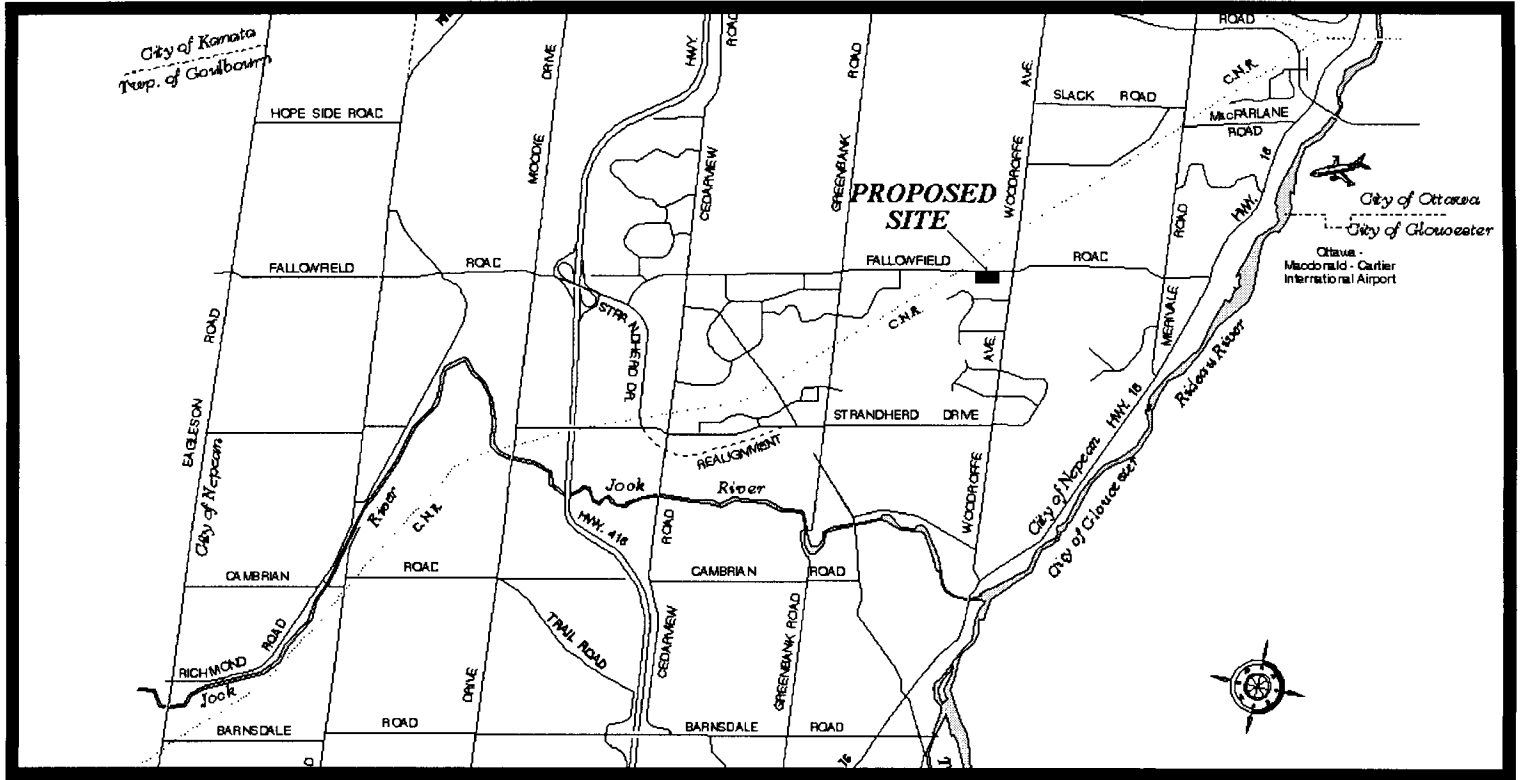
Not only do these roadway modifications aid the developer in providing a safe access to the proposed site, the median would provide a net benefit to all motorists travelling on this section of Fallowfield Road. If the RMOC is willing to participate with the developer and invest \$40,000.00 to improve the safety of this road, in the space of 10 years the people of Ottawa-Carleton would recoup more than twice their investment through collision reduction.

ANNEX A
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Annual Average Cost of Collisions Treatable by the Installation of a Median on Fallowfield Road (Regional Road 12) from Woodroffe Avenue (Regional Road 15) to a Point 155 m West of the Proposed Retail Development

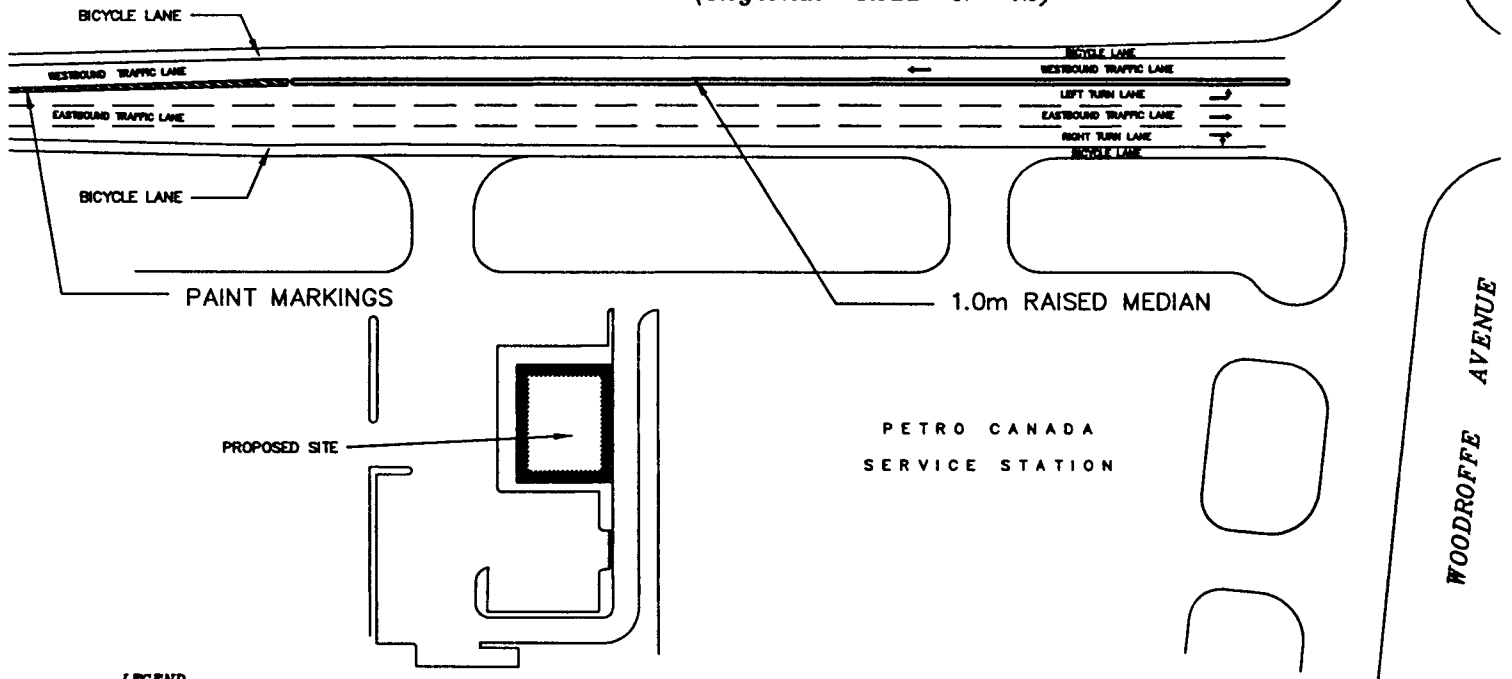
	Type of Collision		
	Property Damage Only	Injury	Total
No of Collisions	6	1	7
Period over which Collisions Occurred (years)	3	3	3
Average No. of Collisions per period	2	0.3333	2.3333
Average Cost per Collision (\$)	\$3,880	\$15,730	
Annual Cost of Collisions (\$)	\$7,760	\$5,243	\$13,003
Period over which Benefits Accrue (years)	10		
Total Value of Collision Avoidance over Benefit Period	\$130,033		
Annual Discount Rate	10%		
Present Value of Treatable Collisions (Nearest \$1,000)	\$80,000		

General Location of Proposed Site





FALLOWFIELD ROAD (Regional Road N° 12)



LEGEND

- PROPOSED 1.0m MEDIAN
- LANE MARKINGS

<p>ANNEX C</p> <p>PROPOSED PLAZA - FALLOWFIELD ROAD</p> <p>SCHEMATIC DRAWING DETAILING PROPOSED ROADWAY LANE CONFIGURATION</p>		DESIGN: D.G.
		DRAWN: D.G.
<p>SCALE: AS-SHOWN</p> <p>DATE: JUNE 09/98</p>		REVIEWED: A.E.G.
		DRAWING No.: ANNEX-C