

**3. MODIFICATIONS TO MERIVALE ROAD FROM FALLOWFIELD ROAD TO OLD HIGHWAY 16 TO ACCOMMODATE THE GROWTH WITHIN THE SOUTH MERIVALE BUSINESS PARK - PUBLIC HEARING**

**COMMITTEE RECOMMENDATIONS**

**Having held a public hearing, that Council approve:**

- 1. The installation of traffic control signals at the intersections of Merivale Road and Leikin Drive, and Merivale Road and Old Highway 16 along with the construction of roadway modifications on Merivale Road from a point approximately 100 m. north of Fallowfield Road to Old Highway 16 as described in the report, and;**
- 2. The proposed road works be jointly funded by the City of Nepean and the Region of Ottawa-Carleton as outlined in the report.**

**DOCUMENTATION**

1. Director, Mobility Services and Corporate Fleet Services report dated 18 April 2000 is immediately attached.
2. Rideau Glen Ratepayer's Association letter dated 3 May 2000 immediately follows the report.
3. Extract of Draft Minute, Transportation Committee, 3 May 2000, will be distributed prior to Council and will include a record of the vote.

REGION OF OTTAWA-CARLETON  
RÉGION D'OTTAWA-CARLETON

REPORT  
RAPPORT

Our File/N/Réf.                   **50 23-00-R017-B**  
Your File/V/Réf.

DATE                               18 April 2000

TO/DEST.                         Co-ordinator Transportation Committee

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

SUBJECT/OBJET                 **MODIFICATIONS TO MERIVALE ROAD (REGIONAL ROAD  
17) FROM FALLOWFIELD ROAD (REGIONAL ROAD 12) TO  
OLD HIGHWAY 16 (REGIONAL ROAD 73) TO  
ACCOMMODATE GROWTH WITHIN THE SOUTH MERIVALE  
BUSINESS PARK**

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**DEPARTMENTAL RECOMMENDATIONS**

**That the Transportation Committee recommend Council approve:**

- 1. the installation of traffic control signals at the intersections of Merivale Road and Leikin Drive, and Merivale Road and Old Highway 16 along with the construction of roadway modifications on Merivale Road from a point approximately 100 m. north of Fallowfield Road to Old Highway 16 as described in the report, and;**
- 2. the proposed road works be jointly funded by the City of Nepean and the Region of Ottawa-Carleton as outlined in the report.**

**BACKGROUND**

In October 1998, the City of Nepean approved the staged development of the JDS Uniphase (Fitel) to be located on 54 acres in the South Merivale Business Park bounded by Fallowfield Road to the north, Merivale Road to the east, Old Highway 16 to the south, and the Davidson Heights subdivision/NCC lands to the west. From the creation of the park in the early 1990s to the initial stage of the JDS Uniphase development, there were no occupants in the business park so it was expected that the existing transportation infrastructure would be adequate for some time to come. The unexpected growth from JDS Uniphase greatly exceeded earlier traffic volume projections. Recent traffic surveys

and observations completed in January 2000 confirm that this rapid expansion is the main cause for the increased collision frequencies and excessive traffic delays at the intersections.

JDS Uniphase is in the process of completing its third phase and will soon proceed toward the final phase of development. At build out, the development will generate approximately double the current number of shift employees destined for this site. This development, the South Merivale Business Park and the portion of Merivale Road in question, are shown in an area context as Annex A.

It must be emphasized that these roadway modifications alone will not accommodate the future traffic volumes at the business park's build out and cannot be seen as a replacement for full road reconstruction. The main reason why the current roadway geometry has been adequate up until recently can be credited to the excellent transit service provided to the employees of JDS Uniphase. These proposed intersection modifications described in the following paragraphs are intended as an interim treatment that, when combined with the necessary transit service, will be sufficient for the immediate and short-term future.

### EXISTING CONDITIONS

This portion of Merivale Road maintains a two-lane, rural cross-section through to Old Highway 16 except at the intersections with Fallowfield Road and with Leikin Drive where a southbound right-turn lane is provided. Ditches of varying widths and depths exist on both sides of this roadway. At Fallowfield Road and Merivale Road, left-turn lanes are provided on the eastbound and westbound approaches to this signalized intersection. The speed limit for both Merivale Road and Fallowfield Road through this area of south Nepean is 80 km./h.

#### Pedestrians

Currently, there are no sidewalks on either side of Merivale Road or Fallowfield Road in this area.

At present, pedestrian traffic on Merivale Road is almost non-existent. According to an eight-hour traffic volume survey carried out on a Tuesday in June 1999 at the intersection of Merivale Road and Fallowfield Road, only three pedestrians were recorded. The same survey was completed on a Wednesday in January 2000 and no pedestrians were counted.

Pedestrian crossings are assisted at Fallowfield and Merivale Road with the provision of push-buttons that actuate a pedestrian phase in the traffic signal cycle.

#### Bicycles

This section of Merivale Road is identified in the Transportation Master Plan as a route for on-road cycling facilities, although currently no special accommodations have been provided for cyclists. Marked, two metre cycling lanes are provided for eastbound and westbound cyclists travelling on Fallowfield Road in this area.

Over an eight-hour period in June 1999, 20 cyclists were counted on Merivale Road comprised of 15 travelling northbound and 5 travelling southbound.

### Transit

Currently there is no regular transit service along this section off Merivale Road; however, OC Transpo provides a special route #171 that directly serves JDS Uniphase employees. This route travels between the Baseline Road Station of the Transitway and coincides with the shift changes at JDS Uniphase. The success of this route has been unparalleled from the perspective of ridership to a suburban business park. It is estimated that 40% of the shift employees take the bus.

Since this special route travels directly to the JDS Uniphase site, no bus stops are provided along Merivale Road in this area.

Operational difficulties have been reported by OC Transpo at the intersection of Leikin Drive and Merivale Road. Often eastbound motorists illegally turn left along the outside of the left-turning bus, leading to frequent hazardous situations. A solution to this difficulty will be discussed further in the design proposal.

### Automobiles

As previously mentioned, Merivale Road maintains a rural cross-section throughout this area with auxiliary lanes at the following intersections:

1. Fallowfield and Merivale - southbound right-turn lane, eastbound and westbound left-turn lanes;
2. Leikin Drive and Merivale - southbound right-turn lane; and,
3. Merivale and Old Highway 16 - northbound left-turn lane.

The speed limit along this section of Merivale Road is 80 km/h.

Traffic volume surveys carried out in January 2000 indicate that approximately 5,500 motorists comprising 2,600 southbound and 2,900 northbound travel along this section of Merivale Road over an 8-hour period on weekdays. These volumes represent an increase of 40% for southbound traffic and 30% for northbound traffic when compared to the same survey conducted at this location seven months earlier in June 1999. It must be noted that during current peak volume periods, the intersection of Fallowfield and Merivale Road does not have the capacity to service the traffic demand which causes excessive delays, motorist frustration and a reduced level of safety as well as neighbourhood infiltration.

About 5% of the total vehicular volume consists of heavy trucks.

## DESIGN PROPOSAL

The modifications outlined in the following paragraphs are relatively modest in cost, but will be far outweighed by the immediate to short term benefits of improved safety and traffic operations along this section of Merivale Road. Annexes B, C, D and E illustrate the proposed modifications.

### Traffic Control Signal Installation

Traffic control signals are proposed for the intersections of Leikin Drive and Merivale Road, and Merivale Road and Old Highway 16. Projected traffic volumes indicate that these locations will soon satisfy the Ministry of Transportation of Ontario traffic signal warrants; however, more importantly, because of the rural character and the higher vehicle speeds, they are necessary for safety purposes.

### Roadway Widening

To improve traffic operations, the following intersections will require road widening in the form of additional lanes:

1. Merivale Road and Fallowfield Road - provide an eastbound right-turn lane and a northbound/southbound left-turn lane;
2. Merivale Road and Beckstead Road - provide a northbound left-turn lane; and,
3. Merivale Road and Old Highway 16 - provide a southbound, channelized right-turn lane from Old Highway 16 to northbound Merivale Road.

### Pedestrians

As mentioned earlier, pedestrian activity along Merivale Road in this area is extremely light. No sidewalks are planned; however pedestrians will be able to take advantage of the new traffic signals to safely cross the roadway. As with the installation at Fallowfield and Merivale, pedestrian crossings will be assisted with the provision of push-buttons that actuate a pedestrian phase in the traffic signal cycle. Audible signals will also be installed.

### Bicycles

As with pedestrians and motorized vehicles, the new traffic signal locations will provide cyclists with protected crossings. At the intersection of Fallowfield and Merivale, the existing bicycle lanes on Fallowfield will be continued around the corners and tapered out.

## Transit

Current transit operations will be greatly enhanced by the proposed roadway modifications. The addition of turning lanes at Fallowfield and Merivale will improve traffic operations which, in turn, will reduce the delay for buses.

Along with the proposed traffic signals at Merivale and Leikin, a “bus queue jump with signal priority” feature will be provided so that eastbound left-turning buses will be able to bypass the queue of stopped traffic. This innovation will significantly improve travel times and solve the previously mentioned operational difficulty of illegal eastbound double left-turn traffic.

As development proceeds in this area, additional transit service will be provided where demand warrants.

## Automobiles

The proposed addition of the turning lanes and the new traffic signals at the intersections along this section of Merivale Road are designed primarily to improve traffic safety and operational efficiency. Intersections that are currently failing during the peak traffic periods will hopefully operate at a Level of Service E after the proposed modifications and signalization have been completed.

## 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 following design features.

1. The addition of new traffic signals provides safe crossing opportunities for pedestrians which conforms to section 2.2.2. of the TMP.
2. The provision of a “bus queue jump with signal priority” to the proposed traffic signals at Merivale road and Leikin Drive directly conforms to the Transit Priority principles outlined in section 2.4.3 of the TMP.

## FINANCIAL COMMENTS

On 22 December 1999, Regional Council approved the allocation of \$250,000 in the 2000 budget to partner with the City of Nepean who will be contributing \$425,000, for a total estimated project cost of \$675,000. It should be mentioned, however, that at the time of the writing of this report, the Transition Board has yet to approve this Capital project.

Cost Estimates

The following preliminary cost estimates are based on the functional design details for the roadway modifications and are provided solely for the information of the Transportation Committee and Regional Council.

<u>Item</u>	<u>Cost Estimate</u>
Construction	\$330,000.00
Traffic Control Signals	\$200,000.00
Engineering	\$ 75,000.00
Utilities	\$ 10,000.00
Contingencies	<u>\$ 15,000.00</u>
Total Cost before G.S.T	\$630,000.00
G.S.T. @ 7%	\$ 45,000.00
TOTAL ESTIMATED COST	<u>\$675,000.00</u>

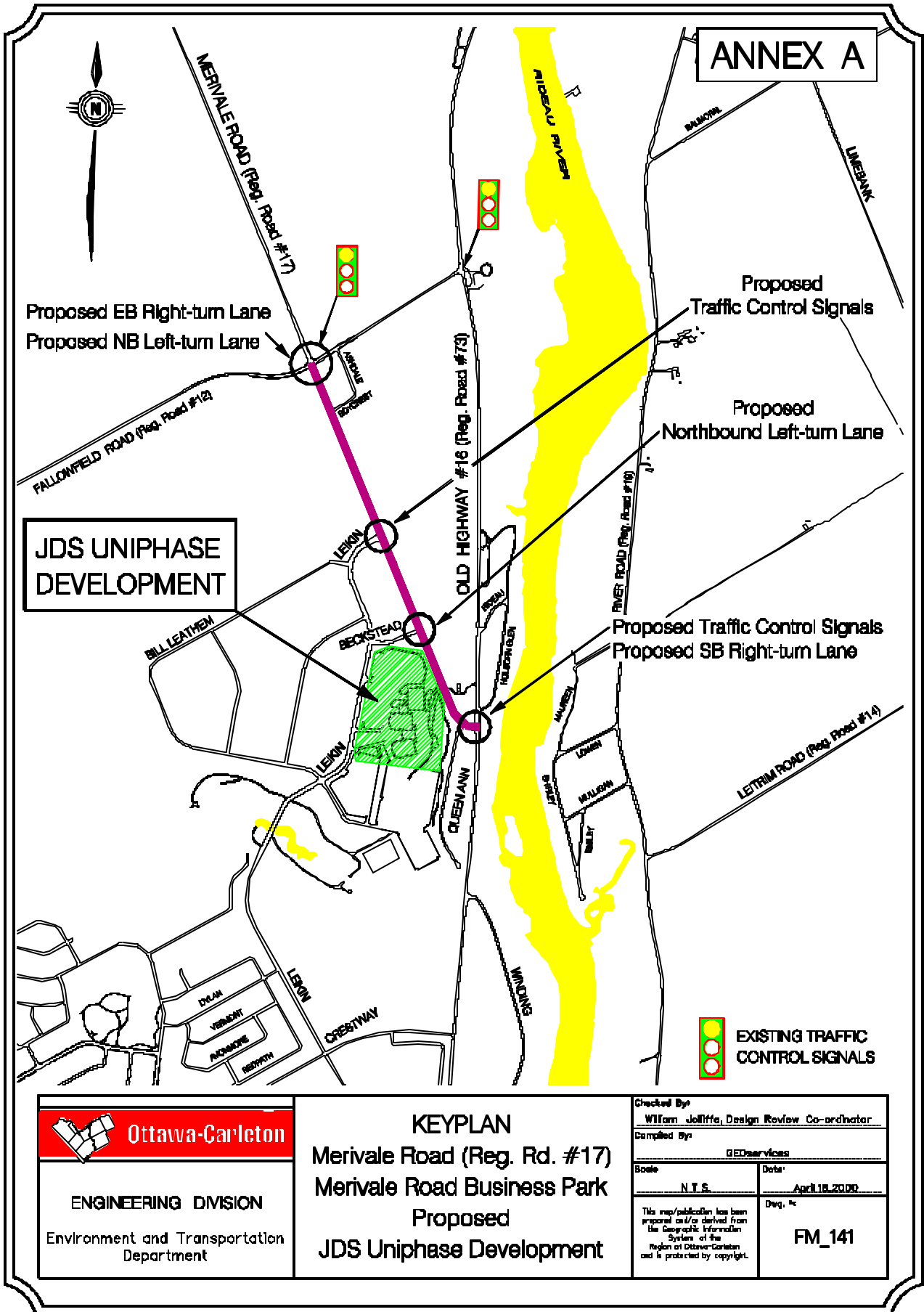
CONSULTATION

Notice of the proposed modifications on Merivale Road to better accommodate the South Merivale Business Park and the expansion of JDS Uniphase has been placed in Le Droit, the Ottawa Citizen and the Ottawa Sun once a week for four consecutive weeks. Sketches of these proposed road works were on display at the Woodroffe Avenue Environmental Study open house held at St. Luke Elementary School in the Barrhaven community on Tuesday, 11 April 2000.

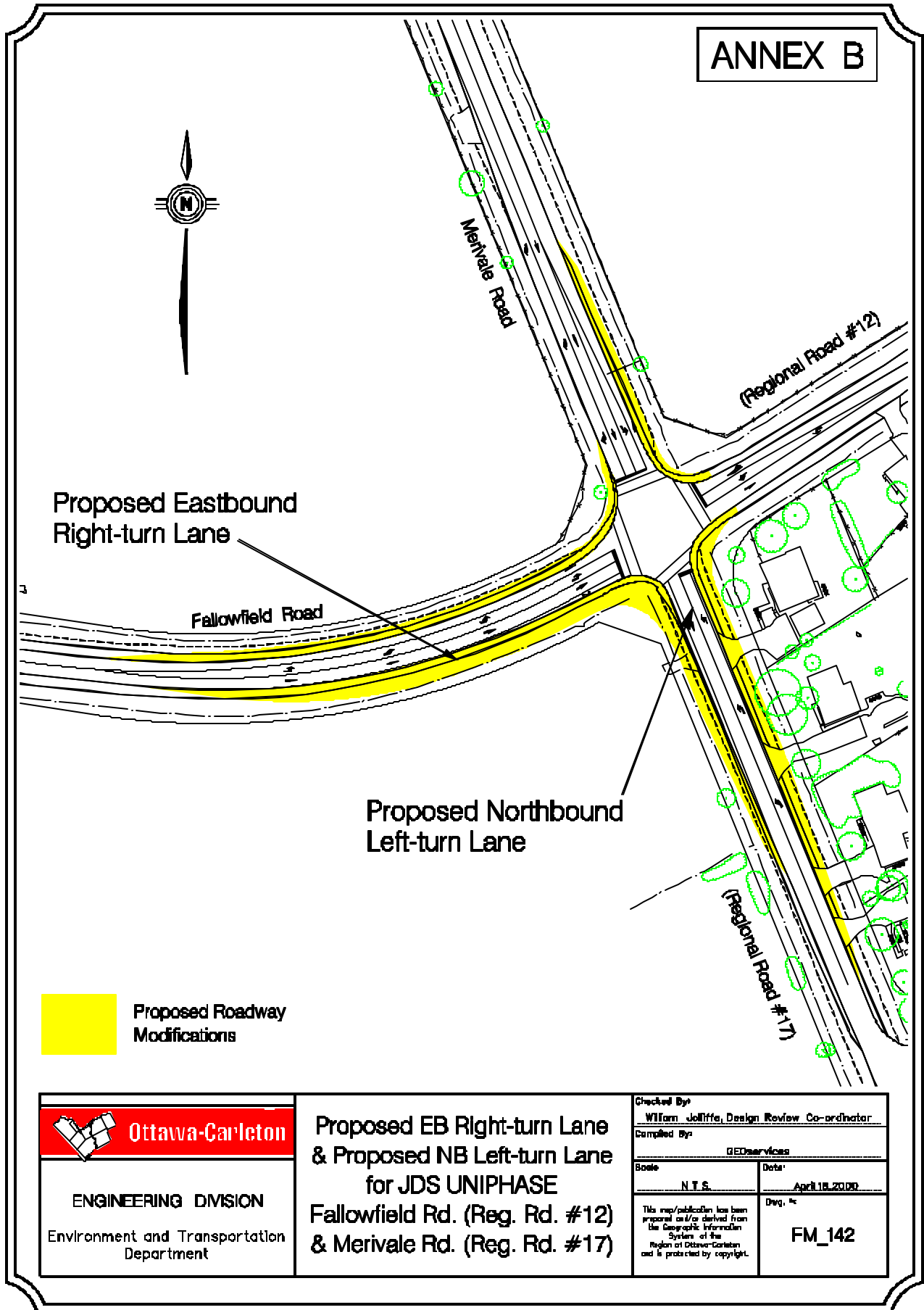
COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP

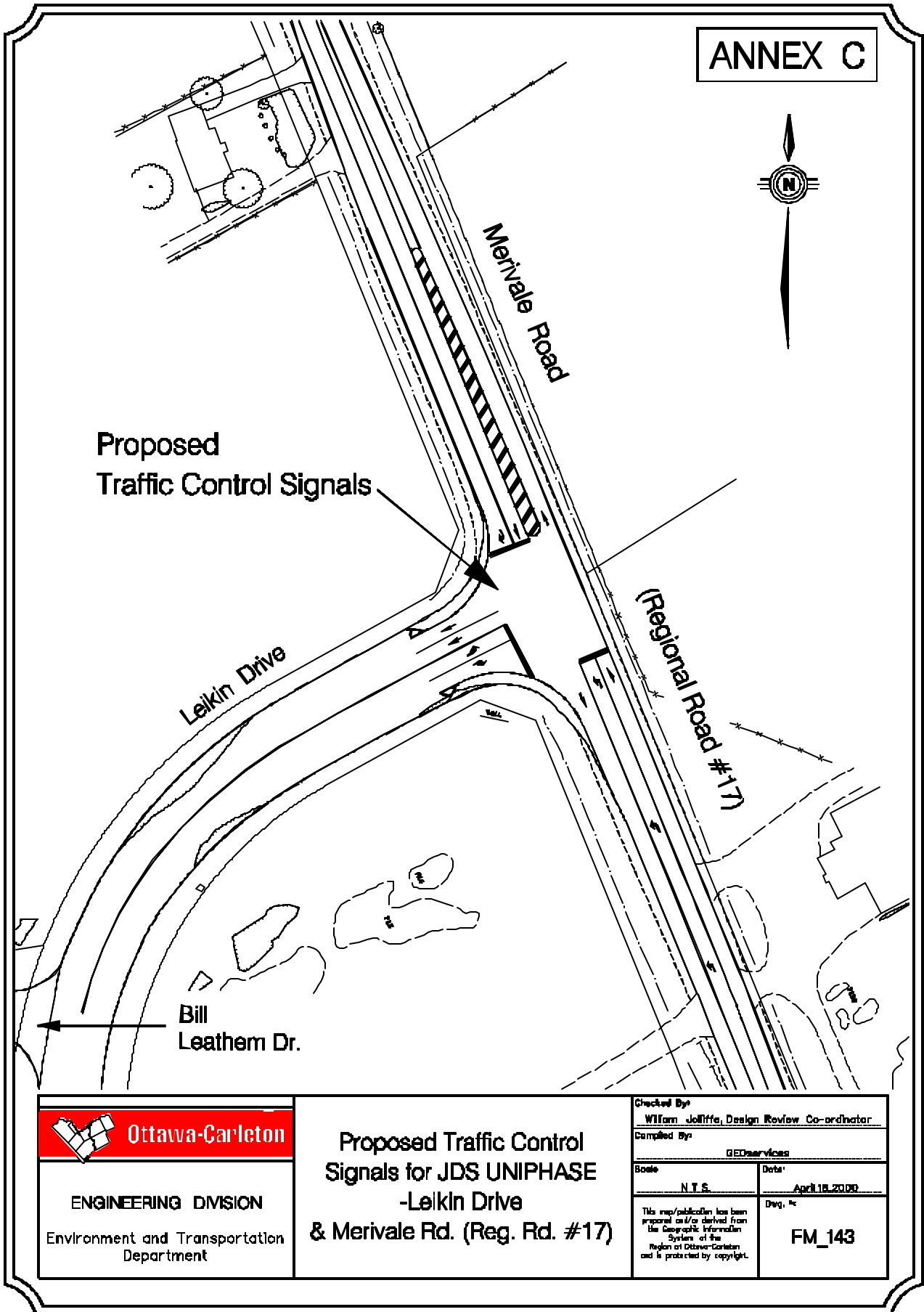
On 20 April 2000, a draft report containing a conceptual drawing of the proposed roadway modifications will be directed to the Regional Cycling Advisory Group for their consideration. Staff has requested that their comments be made available for the Transportation Committee meeting.


*Approved by  
Doug Brousseau*









 **Ottawa-Carleton**

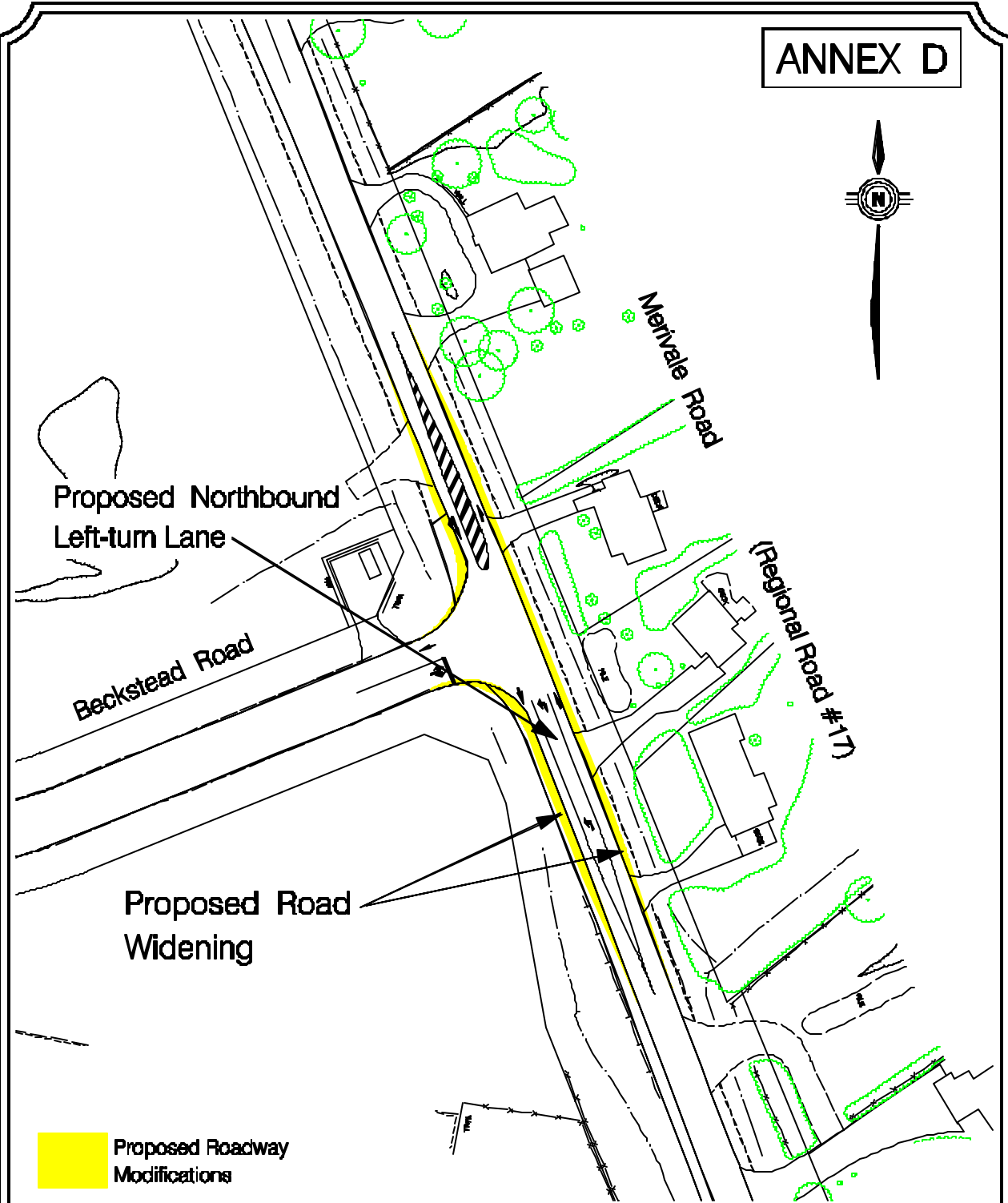
**ENGINEERING DIVISION**

Environment and Transportation  
Department


**Proposed Traffic Control  
Signals for JDS UNIPHASE  
-Leikin Drive  
& Merivale Rd. (Reg. Rd. #17)**

Checked By: William Joffe, Design Review Co-ordinator	
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Scale: N.T.S.	Date: April 18, 2000
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**ANNEX D**

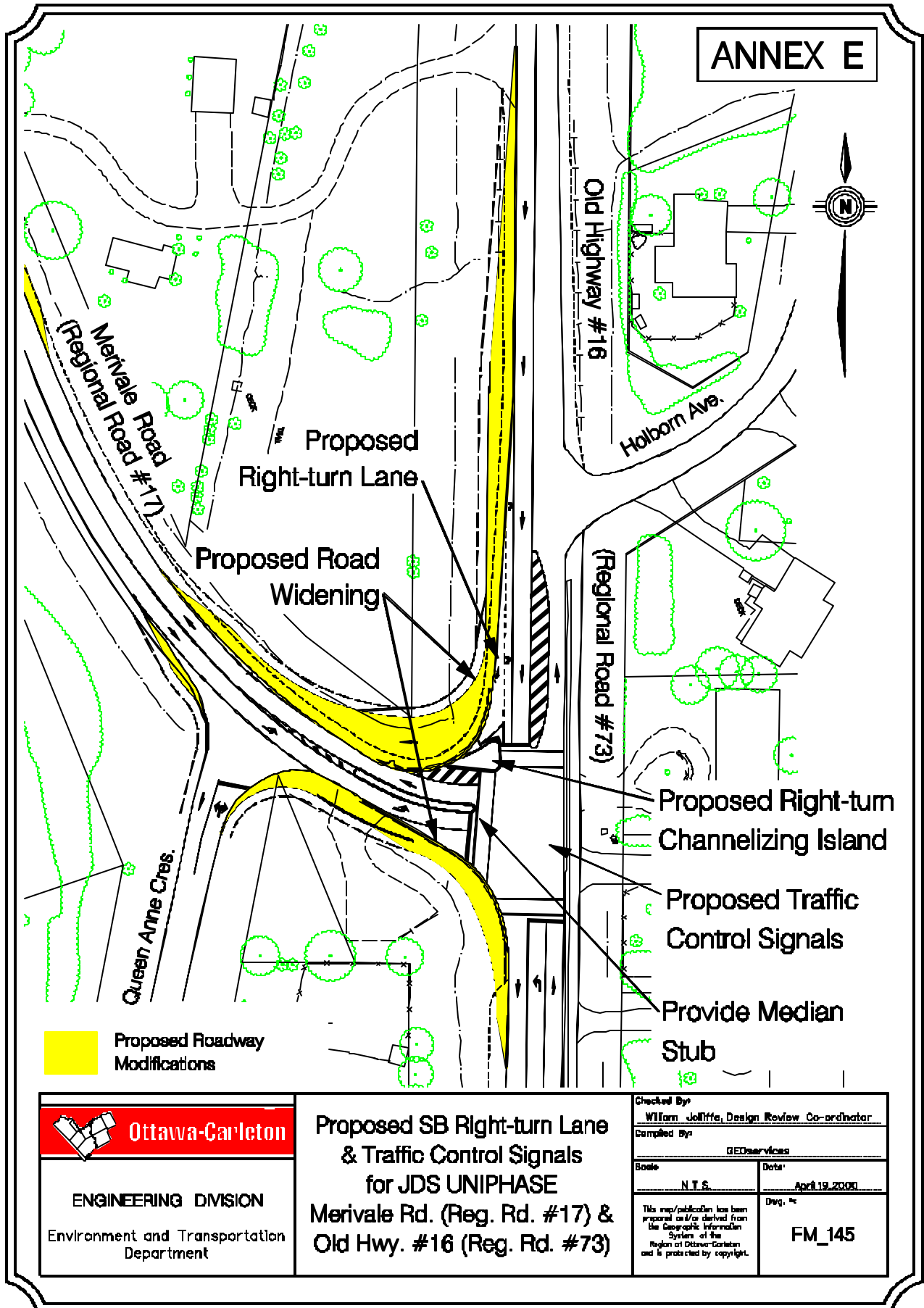


**Proposed Roadway Modifications**

 <p><b>Ottawa-Carleton</b></p>
<p><b>ENGINEERING DIVISION</b></p> <p>Environment and Transportation Department</p>

**Proposed NB Left-turn Lane  
for JDS UNIPHASE  
-Beckstead Road  
& Merivale Rd. (Reg. Rd. #17)**


<p>Checked By: <b>William Joffe, Design Review Co-ordinator</b></p>	
<p>Compiled By: <b>GEOservices</b></p>	
<p>Scale: <b>N.T.S.</b></p>	<p>Date: <b>April 19, 2000</b></p>
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**ANNEX E**



 Proposed Roadway Modifications

 <p><b>Ottawa-Carlton</b></p>
<p><b>ENGINEERING DIVISION</b></p> <p>Environment and Transportation Department</p>

**Proposed SB Right-turn Lane  
& Traffic Control Signals  
for JDS UNIPHASE  
Merivale Rd. (Reg. Rd. #17) &  
Old Hwy. #16 (Reg. Rd. #73)**

Checked By: William Joffe, Design Review Co-ordinator	
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Dwg. No. <b>FM_145</b>	

# ***Rideau Glen Ratepayers' Association***

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c/o 209 Winding Way  
Nepean, Ontario.  
K2C 3H2.  
May 3, 2000.

Ms. Rosemary Nelson  
Committee Coordinator  
Transportation Committee  
Region of Ottawa-Carleton  
111 Lisgar Street  
Ottawa, Ontario.  
K2P 2L7.

**Re: Modifications to Merivale Road from Fallowfield Road  
to Old Highway 16 - File 50 23-00-R017-B**

Dear Ms. Nelson:

On behalf of the Rideau Glen Ratepayers' Association, I would like to offer our community's concerns regarding the proposed modifications to Merivale Road. The modifications are being proposed by the Region of Ottawa-Carleton to accommodate the rapid growth within the South Merivale Business Park. While our Association is supportive of transportation measures to accommodate the increased growth of the South Merivale Business Park, local residents have expressed concern regarding the impact of the proposed changes upon their homes directly.

At a meeting of local residents with Regional Councillor Molly McGoldrick-Larsen on 1 May 2000, residents of our community expressed concern that:

- \* The widening of Merivale Road on both sides reduces the area of residents' properties and brings the traffic on Merivale Road closer to their homes. To reduce the negative impact upon their homes, local residents are hopeful that the widening of Merivale Road be conducted on the west side only. By moving the proposed roadwork to the west side of Merivale Road only, the negative impact of the road modifications on the existing homeowners could be reduced.
- \* The posted vehicular speeds on Old Highway 16 and Merivale Road from Fallowfield Road to the Old Highway 16/Merivale Road intersection are 80 kph. Residents were concerned that the proposed changes to Merivale Road outlined in Transportation Report 50 23-00-R017-B will not improve the safety of the traffic on these roads unless the posted speeds are reduced.

- \* To minimize the negative impact of the proposed road modifications on the existing local homeowners, natural screening barriers could be installed to reduce the sound and visibility of the high traffic volumes on Merivale Road and Old Highway 16. Landscaping barriers, such as large conical coniferous trees, could be placed in front of the affected existing homes on Old Highway 16, Queen Anne Crescent, and Merivale Road. Such screening would reduce the sound and visual impact of the increased traffic volumes. Individual homeowners could be approached regarding the placement of such landscaping.
- \* Even if such enhancements to the proposed road improvements were conducted, residents have noted that the increased traffic volumes on Merivale Road and Old Highway 16 and the road widenings in general will reduce the property values of their homes. As well, homeowners may experience problems exiting and entering their homes due to the increased traffic. Particularly, such problems could be experienced by homeowners near the Merivale Road/Fallowfield Road intersection, on Queen Anne Crescent, and near the Old Highway 16/Merivale Road intersection.

The residents of the existing community are appreciative that road improvements are being conducted to accommodate the rapid development of the South Merivale Business Park. However, residents are hopeful that changes to the proposed modifications can be conducted to minimize the negative impact upon existing homeowners in the vicinity. Through continued cooperation with the local residents regarding siting and screening of the proposed road improvements, such negative impact upon local homeowners could be reduced.

The Rideau Glen Ratepayers' Association is appreciative of the opportunity to present our concerns to the Transportation Committee of the Region of Ottawa-Carleton.

Sincerely,



Rosemary Merritt  
President.

c.c.: Molly McGoldrick-Larsen  
Regional Councillor.