Agenda - Executive Policy Committee - December 10, 2003

REPORTS

Item No. 11 Street Widening Project - Plessis Road from Victoria Avenue West to Kildare Avenue West
Files SC-3.11(33), FC-1(2004-2008)

STANDING COMMITTEE RECOMMENDATION:

On November 28, 2003, the Standing Policy Committee on Public Works concurred in the recommendation of the East Kildonan-Transcona Community Committee, and recommended that the sum of $1,700,000.00 be included in the year 2009 in the 2005 to 2009 Five Year Capital Forecast for the widening of Plessis Road from Victoria Avenue West to Kildare Avenue West.

Further, the Standing Policy Committee on Public Works requested the Director of Public Works to provide a list of the street widening projects proposed for the 2005 to 2009 Five-Year Forecast to the Executive Policy Committee, for its meeting scheduled for December 10, 2003.

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On November 28, 2003, the Standing Policy Committee on Public Works concurred in the recommendation of the East Kildonan-Transcona Community Committee, and recommended that the sum of $1,700,000.00 be included in the year 2009 in the 2005 to 2009 Five Year Capital Forecast for the widening of Plessis Road from Victoria Avenue West to Kildare Avenue West.

Further, the Standing Policy Committee on Public Works requested the Director of Public Works to provide a list of the street widening projects proposed for the 2005 to 2009 Five-Year Forecast to the Executive Policy Committee, for its meeting scheduled for December 10, 2003.

On June 10, 2003, the Standing Policy Committee on Public Works referred the matter to the Five Year Capital Budget deliberations.

COMMUNITY COMMITTEE RECOMMENDATION:

On May 20, 2003, the East Kildonan-Transcona Community Committee recommended to the Standing Policy Committee on Public Works that the cost of widening Plessis Road from Victoria Avenue West to Kildare Avenue East, in the amount of $1,700,000.00, be included in Year 2004 of the 2004 - 2008 Five Year Capital Budget.

Further, the East Kildonan-Transcona Community Committee requested the Administration to report back on the following:

1. Contact with the River East-Transcona School Division and schools in the vicinity regarding implications, if any, of the removal of the four-way stop control at Plessis Road and Ravelston Avenue West.

2. The installation of a crosswalk at the subject location in place of the four-way stop control at Plessis Road and Ravelston Avenue West.

3. The cost of a left lane collector at Plessis Road and Kildonan Meadow Drive.

4. Construction of geometric changes that will create a larger radius to allow eastbound right turning vehicles to bypass an eastbound left turning vehicle at Plessis Road and Kildonan Meadow Drive.

On April 22, 2003, the East Kildonan-Transcona Community Committee laid consideration of the matter over to the meeting of Community Committee to be held on May 20, 2003.

DECISION MAKING HISTORY (continued):

On January 21, 2003, the East Kildonan-Transcona Community Committee requested the Administration to report back on the following:

- eligibility for traffic control signal installation at the intersection of Plessis Road and Ravelston Avenue West, where the four-way stop control currently exists.
- feasibility of installing left turn lanes in and out of the intersection located at Plessis Road and Kildonan Meadow Drive for the traffic northbound on Plessis Road.

TO:	Inga Skundberg, Clerk III East Kildonan-Transcona Community Committee	FROM:	Andrew T. Chimko, P. Eng. Traffic Management Engineer
FILE NO.	E-09		
REF:	ST-5(33)(vol.5)	DATE:	2003 03 18

RE: INTERSECTIONS OF PLESSIS ROAD AND RAVELSTON AVENUE WEST & PLESSIS ROAD AND KILDONAN MEADOW DRIVE

On January 21, 2003, the East Kildonan-Transcona Community Committee requested a report on the following two items.

1. The warrant for traffic control signals at the intersection of Plessis Road and Ravelston Avenue West.

The traffic characteristics at this intersection during an 8-hour period on October 16th (14:00-18:00) and October 17th (07:00-11:00), 2001 are as follows:

- 1,000 eastbound and 475 westbound vehicles on Ravelston Avenue West
- 3,400 northbound and 4,200 southbound vehicles on Plessis Road
- 18 pedestrians crossed Plessis Road

In the 3-year period ending November 30, 2002, there were 7 reported collisions at this intersection, including 3 right-angle (side-impact) collisions. None involved a pedestrian. In comparison, the signalized intersection of Plessis Road and Kildare Avenue experienced 12 reported collisions during this same period, including 4 right-angle collisions.

The current traffic characteristics at the intersection of Plessis Road and Ravelston Avenue West represent 54 priority points for signalization. This value reflects the relatively low frequency of collisions and the low volume of vehicles entering from Ravelston Avenue West. Normally 100 priority points are required to warrant the installation of traffic control signals. Citywide, this location ranks 67th with respect to the relative need for the installation of traffic control signals.

This intersection is controlled by four-way stop signs. Stopping all the vehicular traffic on Plessis Road, which carries 83% of the intersection volume, causes lengthy vehicle queues and excessive motorists' delay during the morning and afternoon peak periods.

The installation of traffic control signals without changes to the existing geometry would create inefficient signal operation due to left turning vehicle(s) blocking the single traffic lane in each direction and the offset roadways on Ravelston Avenue West which would not allow east/west movements to safely occur under the same signal phase. Furthermore, this intersection is unfavourably spaced from the existing signalized intersections at Regent Avenue and at Kildare Avenue to establish desirable bi-directional progression (i.e., the uninterrupted movement of vehicles through a series of green signal indications) on Plessis Road. Consequently, replacing the four-way stop control with traffic control signals at Ravelston Avenue West would continue to have a disruptive affect on the north/south through traffic movement on Plessis Road.

The two-lane non-divided section of Plessis Road between Victoria Avenue and Kildare Avenue is approximately 350 metres in length. This section of Plessis Road, a Regional Street, warrants reconstruction to a four-lane divided cross-section. In addition, Ravelston Avenue west of Plessis Road should be re-aligned to intersect Plessis Road at a 90-degree angle and directly opposite the roadway east of Plessis Road. The timing of such a major project depends on project priorities and funding availability. Currently, Plessis Road between Victoria Avenue and Kildare Avenue is a high priority amongst two-lane roadways that could be widened but is not included in the latest Five Year Capital Forecast.

Removing the north-south stop signs would reduce north-south congestion and delays. However, during the P.M. peak hour, the current volume of eastbound vehicles on Ravelston Avenue West would experience lengthy delays due to a steady flow of northbound and southbound vehicles on Plessis Road. With a four-lane divided cross-section on Plessis Road, it is feasible to consider removing the north-south stop signs. An analysis indicates that east-west delays would be reduced and that traffic control signals would not be necessary.

In view of the above circumstances, I do not recommend the installation of traffic control signals at Plessis Road and Ravelston Avenue West at this time.

2. The feasibility of constructing left turn storage lanes at the T-intersection of Plessis Road and Kildonan Meadow Drive.

Plessis Road at Kildonan Meadow Drive contains a two-lane roadway and carries approximately 11,000 vehicles in a typical 12-hour weekday period. Approximately 800 of the 6,000 northbound vehicles turn left from Plessis Road onto Kildonan Meadow Drive during the same period. Northbound left turning vehicles must yield to southbound vehicular traffic and may temporarily obstruct the single northbound traffic lane. During a recent P.M. peak hour observation, there was minimal delay created by northbound left turning vehicles on Plessis Road. Approximately 80 of the 1,000 eastbound vehicles turn left from Kildonan Meadow Drive onto Plessis Road. Eastbound vehicular traffic is required to stop before entering Plessis Road. Eastbound

left turning vehicles must wait for an opportunity within both the southbound and northbound traffic flows and may temporarily obstruct eastbound right turning vehicles.

In the 3-year period ending November 30, 2002, there were 5 reported collisions at this intersection including 4 northbound rear end collisions and 1 eastbound rear end collision.

The long-range plan proposes that the section of Plessis Road between Kildare Avenue and Gunn Road be constructed to a four-lane divided facility. The additional lanes and median on Plessis Road will increase eastbound left turning and northbound left turning opportunities at Kildonan Meadow Drive and reduce motorists' delay. The construction of a northbound left turning storage lane within the proposed median will reduce the rear end collision potential. However, such a major project is currently not included in the latest Five Year Capital Forecast.

In the interim, a larger radius may be constructed to allow eastbound right turning vehicles to bypass an eastbound left turning vehicle. Plessis Road may be widened on the east side from a point approximately 50 metres south of Kildonan Meadow Drive to a point approximately 10 metres north of Kildonan Meadow Drive to provide a loading bay for northbound Transit buses and also to allow northbound traffic to bypass a delayed northbound left turning vehicle. Such geometric changes will be considered as part of future annual Traffic Engineering Improvements Program subject to priority of need and available funding.

Original signed by Andrew T. Chimko

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