Agenda – Council – July 26, 2006

Report - Standing Policy Committee on Property and Development – July 13, 2006

Item No. 2 Amendment to DASSF 545/99 - Traffic Control Signals to Service Proposed Commercial Development - west side of Osborne Street, south of Mulvey Avenue
DASSF 545/99

STANDING COMMITTEE RECOMMENDATION:

On July 19, 2006, the Executive Policy Committee concurred in the recommendations of the Standing Policy Committee on Property and Development and the Standing Policy Committee on Infrastructure Renewal and Public Works, as amended, and submits the following to Council:

1. That the Plan of Subdivision under File DASSF 545/99 approved by the Standing Policy Committee on Property and Development on January 4, 2000, and amended on February 1, 2000, be further amended as follows, namely:

    A. That traffic control signals be approved for installation at the bi-directional approach serving the commercial development on the west side of Osborne Street, south of Mulvey Avenue, and that the Developer enter into a Servicing Agreement to:

        i. pay the full cost of the installation of traffic control signals and all related works, including, but not necessarily limited to pedestrian and vehicular actuation, interconnection to adjacent traffic control signals and audible pedestrian signals at the bi-directional approach serving the commercial development on the west side of Osborne Street and the bi-directional approach serving 360 Osborne Street on the east side of Osborne Street, south of Mulvey Avenue, as determined by the Director of Public Works.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report - Standing Policy Committee on Property and Development – July 13, 2006

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 19, 2006, the Executive Policy Committee concurred in the recommendations of the Standing Policy Committee on Property and Development and the Standing Policy Committee on Infrastructure Renewal and Public Works, as amended, and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On July 13, 2006, the Standing Policy Committee on Property and Development concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works, with the following amendment, namely:

- That Recommendation No. 1 be amended by deleting the words "only on the conditions that northbound and southbound left turn storage lanes are constructed on Osborne Street at the approach" in the third and fourth lines thereof,

and submitted the matter to the Executive Policy Committee and Council.

On July 11, 2006, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the administrative recommendation contained in the report from the Director of Public Works dated June 30, 2006, with the following amendment, namely:

- That Recommendation 1. B. be deleted,

and submitted its recommendation to the Standing Policy Committee on Property and Development.

On October 11, 2005, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred with the recommendation that the Administration do all things necessary to issue the building permit(s) required for the proposed commercial development located on the west side of Osborne Street, south of Mulvey Avenue, subject to the developer posting a bank letter of credit to cover the cost of traffic control signals on Osborne Street at the bi-directional private approach should the City of Winnipeg determine the need for the installation of traffic control signals.

Report - Standing Policy Committee on Property and Development – July 13, 2006

DECISION MAKING HISTORY (continued):

STANDING COMMITTEE RECOMMENDATION (continued):

On February 1, 2000, the Standing Policy Committee on Property and Development concurred in the recommendation of the City Centre Community Committee to delete the requirement for a Servicing Agreement and substituted the following condition, namely:

1. That building permits for the proposed Lot 2 be withheld until the issue of the need for traffic signals on Osborne Street at the access to the lot is resolved and any development conditions/requirements are identified and approved to the satisfaction of the Standing Policy Committee on Public Works.

RE: Traffic Control Signals to Serve the Proposed Commercial Development on the West Side of Osborne Street, South of Mulvey Avenue

FOR SUBMISSION TO: Standing Policy Committee on Infrastructure Renewal and Public Works

ORIGINAL REPORT SIGNED BY: L. S. W. Larkin, P. Eng., Director of Public Works

REPORT DATE: June 30, 2006

RECOMMENDATION:

That traffic control signals be approved for installation at the bi-directional approach serving the commercial development on the west side of Osborne Street, south of Mulvey Avenue only on the conditions that northbound and southbound left turn storage lanes are constructed on Osborne Street at the approach and that the Developer enter into a Servicing Agreement to:

a) pay the full cost of the installation of traffic control signals and all related works, including, but not necessarily limited to pedestrian and vehicular actuation, interconnection to adjacent traffic control signals and audible pedestrian signals at the bi-directional approach serving the commercial development on the west side of Osborne Street and the bi-directional approach serving 360 Osborne Street on the east side of Osborne Street, south of Mulvey Avenue, as determined by the Director of Public Works; and

b) construct, at no expense to the City, a Portland cement concrete pavement widening on Osborne Street to the north and south of the proposed traffic control signal to provide a centre median to accommodate northbound and southbound left turn storage lanes on Osborne Street at the bi-directional approach serving the commercial development on the west side of Osborne Street and the bi-directional approach serving 360 Osborne Street on the east side of Osborne Street, south of Mulvey Avenue, and all related works, including, but not necessarily limited to property acquisition, sidewalk construction, centre median construction, curb construction, boulevard restoration and any necessary land drainage modifications, all as determined by and to the satisfaction of the Director of Public Works.

Report Summary

Key Issues:

- Without providing separate north-south left turn storage lanes on Osborne Street, the volume of traffic to be accommodated through the intersection by the traffic control signal is well above the intersection's capacity and consequently, it is likely to

experience an unacceptably poor level of service, characterized by frequent stoppages and delays in excess of one signal cycle.

- An alternative which would minimize the negative impact on northbound Osborne Street associated with a traffic control signal at this location, making it possible to provide a positive recommendation prior to the provision of left turn storage lanes would be to arrange the proposed call centre's shift changes such that they not occur during the morning peak traffic period (07:00 – 09:00 Monday to Friday). However, the developer has indicated that it would not be possible to schedule the shift changes in this way. (It is noted that the proposed call centre's shift change schedule is not within the City's jurisdiction and any agreement with the developer and his client in this regard would be strictly voluntary.)

- If the traffic control signal is approved without the left turn storage lanes, it would be necessary to prohibit the northbound left turn at the intersection during 07:00 – 09:00 Monday to Friday to minimize the negative impact on traffic flows on northbound Osborne Street. It is noted this would have some impact on the other commercial properties on the west side of Osborne Street (McDonalds and Co-op Gas Station) that rely on this approach for access from the south. However, from the consultant's study of existing traffic levels at the site, it would appear this impact to existing commercial properties would be minimal. (There were approximately 10 northbound left turns into the approach counted during the a.m. peak hour. The proposed commercial development is projected to add 150 northbound left turning vehicles into the site during the a.m. peak hour.)

- If the Committee does not approve the traffic control signal, it will be necessary to: (i) prohibit the northbound left turn at the approach during 07:00 – 09:00 Monday to Friday and (ii) restrict egress out of the approach to an eastbound "right turn only" during 07:00 – 09:00 and 15:30 – 17:30 Monday to Friday. These restrictions would have some impact on the other commercial developments using this approach as noted above. However, based on the consultant's study, it would appear this impact to existing commercial properties would be minimal. (The northbound left turns during the a.m. peak hour are noted above. There were approximately 5 (a.m. peak hour) and 15 (p.m. peak hour) eastbound left turning vehicles counted at the existing approach. Eastbound through volumes were zero. Eastbound left turn volumes are projected to increase to 30 (a.m. peak hour) and 175 vehicles (p.m. peak hour) with the proposed commercial development. Eastbound through volumes are expected to remain negligible.)

Implications of the Recommendation(s):

General Implications:

x None

For the organization overall and/or other departments
For the community and/or organizations external to the City
Involves a multi-year contract

Comments:

Policy Implications:

x No
Yes

Comments:

Regulatory Implications

x None
Eliminates or reduces regulatory impact
Proposes regulatory impact

Comment(s):

Environmental Implications:

x No
Yes

Comments:

Human Resource Implications:

x No
Yes

Comments:

Financial Implications:

Within approved current and/or capital budget
x Current and/or capital budget adjustment needed

Comments: If the signal is approved, the developer would be responsible for all costs associated with installation of this traffic control signal including costs to remove the pedestrian corridor located at Mulvey Avenue and any costs associated with widening Osborne Street to accommodate northbound and southbound left turn storage lanes (including property acquisition costs). The annual operating costs of the traffic control signal is estimated to be $6,000 (2006 dollars) per year. This would be an ongoing cost to the City, requiring a corresponding increase in the Department's annual operating budget.

Report

REASON FOR THE REPORT and HISTORY:

On February 1, 2000, the Standing Policy Committee on Property and Development concurred in the recommendation of the City Centre Community Committee that the following condition approved by the Standing Policy Committee on Property and Development on January 4, 2000, relative to the plan of subdivision under File DASSF 545/99, be rescinded, namely:

1. The Developer be required to enter into a Servicing Agreement with the City containing the following requirements:

    a) That the owner shall pay, on demand, all costs for the installation of traffic signals on Osborne Street at the bi-directional private approach from proposed Lot 2, if and when required by the Standing Policy Committee on Infrastructure Renewal and Public Works, and to the satisfaction of the Director of Public Works;

    b) That the owner shall provide, prior to the release of the mylars for registration, security in an amount and form satisfactory to the City to guarantee the installation of the signals;

and be replaced with the following condition, namely:

1. That building permits for the proposed Lot 2 be withheld until the issue of the need for traffic signals on Osborne Street at the access to the lot is resolved and any development conditions/requirements are identified and approved to the satisfaction of the Standing Policy Committee on Infrastructure Renewal and Public Works.

On October 11, 2005, the Developer appeared before the Standing Policy Committee on Public Works. The Standing Policy Committee on Public Works recommended that "the Administration do all things necessary to issue the building permit(s) required for the proposed commercial development located on the west side of Osborne Street, south of Mulvey Avenue, subject to the developer posting a bank letter of credit to cover the cost of traffic control signals on Osborne Street at the bi-directional private approach should the City of Winnipeg determine the need for the installation of traffic control signals.

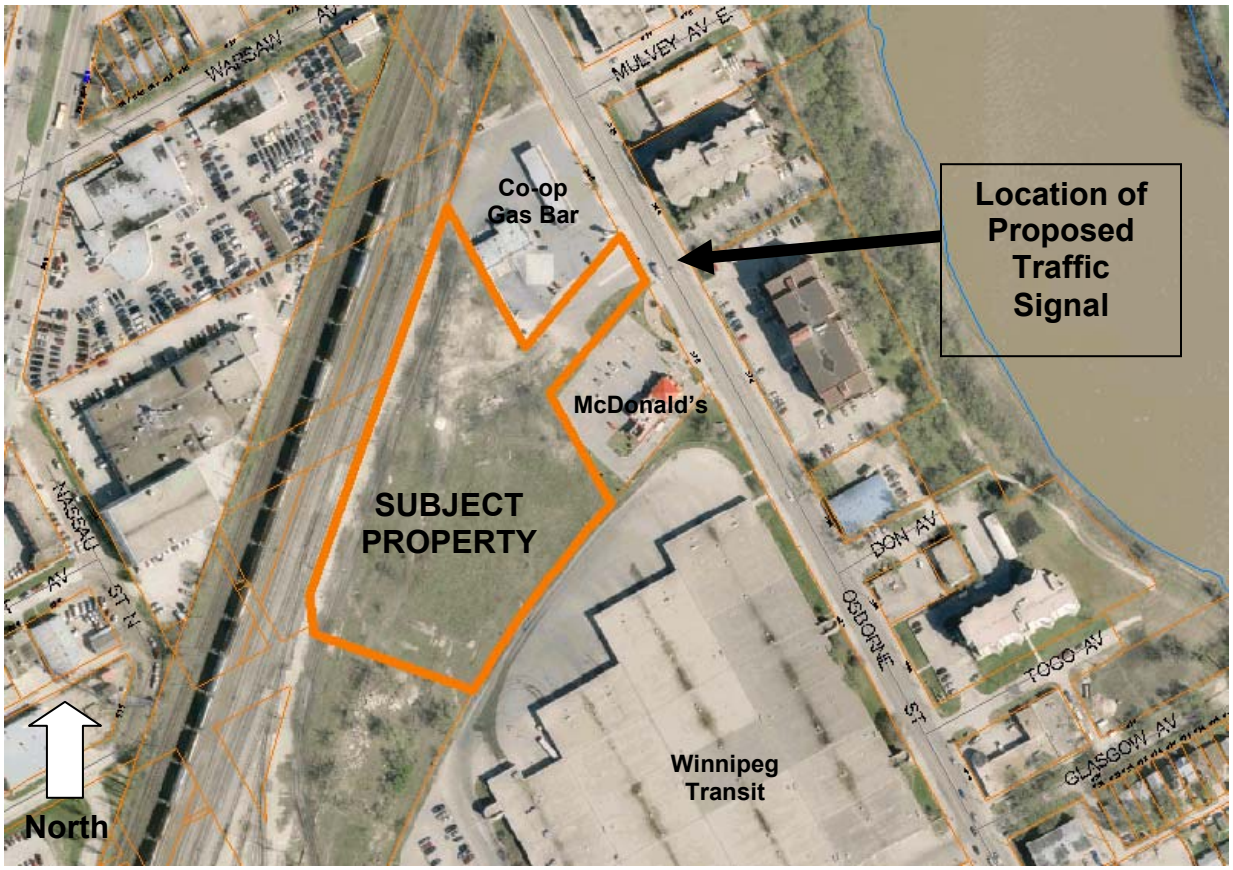
The Developer of the subject property has submitted a report and an addendum report by his transportation engineering consultant to the Public Works Department regarding the need for the installation of traffic control signals at the bi-directional private

approach serving the development on the west side of Osborne Street, south of Mulvey Avenue.

DISCUSSION:

As indicated in the report prepared by ND Lea, Inc. for the developer, 3908706 Manitoba Ltd., the proposed development will consist of a two storey call centre located on the west side of Osborne Street adjacent to the C.N.R. Fort Rouge Yards. The call centre will have three shifts per day and operate 24 hours per day, seven days per week, employing approximately 900 employees. The primary shift changes will take place between 07:30 – 08:30 and between 16:30 – 17:30. Figure 1 provides a location plan of the proposed site.

Figure 1: Location Plan



Traffic Impacts

The Public Works Department, Transportation Division has reviewed the report and the addendum report prepared by ND Lea, Inc. regarding the need for the installation of

traffic control signals at the bi-directional private approach serving the development and has the following comments.

Osborne Street is a 4 lane undivided arterial street. Parking is permitted on both sides of Osborne Street between Corydon Avenue and Brandon Avenue except during the A.M. and P.M. peak periods. Left turning vehicles stopped in the left hand through traffic lane can significantly reduce the traffic-carrying capacity of this street. A delayed left turning vehicle can obstruct the left-hand through traffic lane, requiring through motorists to use the right-hand curb lane, which currently accommodates parked vehicles during the non-peak periods. Left turning volumes of 50 vph or more normally justify separate left turn storage lanes on median divided arterials. A median is a minimum design standard on new streets classified as arterial. The traffic generated by the new development (150 northbound left turning vehicles into the site during the A.M. peak hour, with a shift change occurring within this time frame) justifies the need for left turn storage lanes in order to maintain the existing level of service on Osborne Street. The estimated left turn volume, 150 vph in the A.M. peak hour, is significantly higher than any other existing intersection along Osborne Street between Jubilee Avenue and Corydon Avenue. Frequent northbound left-turning vehicles would increase lane changes and the potential for rear-end and sideswipe collisions on this section of Osborne Street.

The Consultant's report shows that the projected traffic volume at the proposed signalized access on opening day will be <u>well above</u> the intersection's capacity during the A.M. peak period.

Consequently, is likely to experience an <u>unacceptably</u> poor level of service, characteristic of frequent stoppages and delays in excess of one signal cycle. Separate north-south left turn storage lanes on Osborne Street would result in an acceptable level of service during the A.M. peak hour.

Currently, the intersections of Osborne/Corydon/McMillan operate at a poor level of service. These intersections will be adversely affected by additional development traffic.

A recent traffic study showed there were approximately 2,000 vehicles per hour traveling northbound on Osborne Street in the vicinity of the subject private approach during the A.M. peak traffic period (and there were approximately 500 vehicles per hour southbound). As noted above, unless a left turn storage lane were provided, a traffic signal installed at the development's private approach would effectively reduce northbound Osborne Street to one lane during the A.M. peak hour due to the high volume of northbound left turns into the development. Typically, when lane utilization exceeds approximately 600 vehicles per hour on this type of roadway, an additional lane is recommended. As such, effectively reducing northbound Osborne Street to one lane would result in significant congestion and delay. It is noted that the A.M. peak period is particularly sensitive as it is the period during which the majority of citizens

must travel to their places of employment. Significant and regular traffic delays, especially during the A.M. peak period, have a negative economic impact. Also, Osborne Street serves as one of the primary routes into the downtown area from south Winnipeg. Furthermore, the added delay will not only impact motorists traveling by car but will also negatively impact Transit's travel times for routes on Osborne Street.

It is recognized that the proposed signal will facilitate entry and particularly, egress, to/from the development site. To balance the needs of the development with the need to maintain an acceptable level of service for the public using Osborne Street either by automobile or Transit, a traffic control signal should only be installed at this private approach on condition that left turn storage lanes are provided. Alternatively, a traffic control signal could function until such time as left turn storage lanes are constructed, if the proposed call centre does not have a shift change occur during 07:00 – 09:00 Monday to Friday.

It is also noted that the City has no authority to place restrictions on the proposed call centre's shift change schedule and therefore, any agreement in this regard would be on a voluntary basis and would not be enforceable. However, by scheduling their shift change outside of the morning peak hour, the signal timing during the shift change could be coordinated to better serve the private approach traffic since traffic volumes on Osborne Street would be significantly less than during the morning peak hours. As such, access and egress from the site would be improved over conditions which would be experienced if the shift change were to occur during the morning peak hours.

ND Lea Inc. has advised on behalf of the developer that scheduling the shift change such that it not occur during 07:00 -09:00 Monday to Friday will not be possible for reasons not described.

Additional Considerations

There is also an existing private approach on the east side of Osborne Street that serves 360 Osborne Street located directly opposite the main private approach to the proposed development. Motorists exiting 360 Osborne Street must stop and wait for an opportunity to enter Osborne Street. Due to the high volume of bi-directional traffic on this four lane undivided street, there is limited opportunity to turn left onto Osborne Street during busier periods of the day.

The installation of traffic control signals at this location will change the traffic flow characteristics such that drivers exiting 360 Osborne Street will likely use the opportunity to enter Osborne Street as created by the traffic signal. When north-south vehicular traffic is stopped here for a red signal indication, drivers will try to take advantage of this time to turn left onto Osborne Street. However, if this approach is not included in the traffic control signal, this maneuver is expected to be more difficult and hazardous. The driver would have to observe the signal indications for north-south vehicular traffic and also contend with vehicular traffic exiting the private approach on

the west side of Osborne Street as well as pedestrians crossing in the south crosswalk. It is, therefore necessary that this approach be traffic signal controlled as well to make it safer for an exiting left turning driver.

The cost of including this fourth leg of the intersection in the traffic control signal would be the responsibility of the developer as there is no means for the City to recover a share from the development on the east side of Osborne Street and the City does not contribute to the cost of traffic control signals to serve private developments.

Estimated Costs

The estimated cost of the installation of traffic control signals at the approach is $215,750.00 including interconnection to the adjacent traffic control signal at Corydon Avenue and Osborne Street. This cost would be borne by the developer should the Committee decide that traffic control signals should be installed. The annual operating cost of the traffic control signal is estimated to be $6,000.00 (in 2006 dollars). This would become an ongoing cost to the City.

The cost for widening Osborne Street and constructing northbound and southbound left turn storage lanes is estimated at $685,000 exclusive of property acquisition costs. A preliminary estimate for property acquisition costs is approximately $160,000. Since these left turn storage lanes are only required as a result of the proposed signal to serve the subject development, it is recommended that the developer be responsible for all costs associated with their installation.

CONCLUSION:

In conclusion, it is recommended that traffic control signals be installed at the bi-directional approach serving the commercial development on the west side of Osborne Street, south of Mulvey Avenue on condition that northbound and southbound left turn storage lanes are constructed on Osborne Street at the approach.

The requirement for left turn storage lanes is in order to maintain an acceptable level of service for motorists on Osborne Street, particularly considering the significant volume of northbound left turns into the approach during the morning peak traffic period. If the shift change could be arranged to not occur during the morning peak traffic period (i.e. 07:00 – 09:00 Monday to Friday), then a positive recommendation could be made for the installation of the traffic control signal in advance of the construction of northbound and southbound left turn storage lanes.

If it is the Committee's decision to approve the installation of traffic control signals at the requested location, it is recommended that the developer be responsible for the full cost of installing the traffic control signal for the four-legged intersection which includes the private approach on the east side of Osborne Street opposite the main approach to the

development as well as the costs for constructing northbound and southbound left turn storage lanes.

In this regard, it is further recommended that the Developer enter into a Servicing Agreement to:

a) pay the full cost of the installation of traffic control signals and all related works, including, but not necessarily limited to pedestrian and vehicular actuation, interconnection to adjacent traffic control signals and audible pedestrian signals at the bi-directional approach serving the commercial development on the west side of Osborne Street and the bi-directional approach serving 360 Osborne Street on the east side of Osborne Street, south of Mulvey Avenue, as determined by the Director of Public Works; and

b) construct, at no expense to the City, a Portland cement concrete pavement widening on Osborne Street to the north and south of the proposed traffic control signal to provide a centre median to accommodate northbound and southbound left turn storage lanes on Osborne Street at the bi-directional approach serving the commercial development on the west side of Osborne Street and the bi-directional approach serving 360 Osborne Street on the east side of Osborne Street, south of Mulvey Avenue, and all related works, including, but not necessarily limited to property acquisition, sidewalk construction, centre median construction, curb construction, boulevard restoration and any necessary land drainage modifications, all as determined by and to the satisfaction of the Director of Public Works.

If the Committee decides to approve the traffic control signal without installation of left turn storage lanes, in order to minimize the negative impact to traffic flows on northbound Osborne Street associated with a traffic control signal at this location, it would be necessary to prohibit the northbound left turn at the intersection during 07:00 – 09:00 Monday to Friday. However, it is noted that prohibiting the northbound left turn during the morning peak period would have some impact to the other commercial developments on the west side of Osborne Street which also use this approach for access from the south (i.e. McDonalds and Co-op Gas Station). However, from the consultant's study of existing traffic levels at the site, it would appear this impact to existing commercial properties would be minimal. (The consultant's report showed there were approximately 10 northbound left turns into the approach during the a.m. peak hour. The proposed commercial development is projected to add 150 northbound left turning vehicles into the site during the a.m. peak hour.)

If the Committee does not approve the traffic control signal, it will be necessary to: (i) prohibit the northbound left turn at the approach during 07:00 – 09:00 Monday to Friday and (ii) restrict egress out of the approach to an eastbound "right turn only" during 07:00 – 09:00 and 15:30 - 17:30 Monday to Friday. This is to address the poor level of service

expected under unsignalized conditions as noted in the consultant's report as well as the expected difficulties in exiting the approach turning left or going through. These turn restrictions will also have some impact on the other commercial developments using this approach as noted above. However, based on the consultant's study, it would appear this impact to existing commercial properties would be minimal. (The northbound left turns during the a.m. peak hour are noted above. There were approximately 5 (a.m. peak hour) and 15 (p.m. peak hour) eastbound left turning vehicles counted at the existing approach. Eastbound through volumes were zero. Eastbound left turn volumes are projected to increase to 30 (a.m. peak hour) and 175 vehicles (p.m. peak hour) with the proposed commercial development. Eastbound through volumes are expected to remain negligible.)

Financial Impact Statement

Date: May 31, 2006

Project Name:

First Year of Program 2006

Traffic Control Signals to Serve the Proposed Commercial Development on the West Side of Osborne Street, South of Mulvey Avenue

	2006	2007	2008	2009	2010
Capital					
Capital Expenditures Required					
Less: Existing Budgeted Costs					
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal					
Debt - External					
Grants (Enter Description Here)					
Reserves, Equity, Surplus					
Other - Enter Description Here					
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 6,000	$ 6,120	$ 6,242	$ 6,367	$ 6,495
Less: Incremental Revenue/Recovery					
Net Cost/(Benefit)	$ 6,000	$ 6,120	$ 6,242	$ 6,367	$ 6,495
Less: Existing Budget Amounts					
Net Budget Adjustment Required	$ 6,000	$ 6,120	$ 6,242	$ 6,367	$ 6,495

Additional Comments:

There is no financial impact concerning installation as the developer would be responsible for all costs associated with installation of this traffic control signal including all costs to remove the pedestrian corridor located at Mulvey Avenue. The costs to construct the storage lanes as well as the cost of property acquisition will also be the responsibility of the developer. Were a traffic control signal to be approved the City would incur an operating cost of $6,000 per annum plus adjustments for inflation. The operating costs would require additional budget dollars. Inflation for this exercise is estimated at 2% per year.

"Original signed by Darcy Stewart, CA"

Manager of Finance & Administration

IN PREPARING THIS REPORT THERE WAS:

Internal Consultation With and Concurrence By: Planning, Property and Development Department, Winnipeg Transit, Corporate Services, and Corporate Finance.

External Consultation With: ND Lea, Inc.

THIS REPORT SUBMITTED BY:

Department: Public Works
Division: Transportation
Prepared by: R. J. Hartmann, P. Eng./D. Emerson, P. Eng., MCIP
Processed by: Carol Kawaza, Transportation Clerk
File No. C/C, C/J