Agenda – Executive Policy Committee – January 18, 2012

Moved by Councillor

That Rule 10(3) of The Procedure By-law No. 50/2007 be suspended in order that the following item, which was received less than 96 hours preceding the committee meeting, be considered by Committee.

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – January 16, 2012

Item No. 4 Preliminary Design - Widening of Route 90 between Taylor Avenue and Ness Avenue

STANDING COMMITTEE RECOMMENDATION:

On January 16, 2012, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submits the following to Council:

1. That the preliminary design for improving Route 90, including widening Kenaston Boulevard on alternating sides be approved as the adopted alignment. This concept proposes widening Kenaston Boulevard to six lanes by widening on the west side south of Tuxedo Boulevard and widening on the east side north of Tuxedo Boulevard along with widening of both of the St. James Bridges.

2. That the Planning, Property and Development Department be authorized to negotiate the acquisition of properties required for the adopted alignment.

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

Agenda – Executive Policy Committee – January 18, 2012

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – January 16, 2012

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On January 16, 2012, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

On June 28, 2011, the Standing Policy Committee on Infrastructure Renewal and Public Works deferred the Preliminary Design for the Widening of Route 90 between Taylor Avenue and Ness Avenue, to be brought back for consideration in conjunction with the Transportation Master Plan.

ADMINISTRATIVE REPORT

Title: Approval of the Preliminary Design for the Widening of Route 90 between Taylor Avenue and Ness Avenue

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works – EPC - COUNCIL

AUTHORIZATION

Author	Department Head	CFO	CAO
L. Escobar, P. Eng., PTOE, Manager of Transportation	B. W. Sacher, P.Eng. Director of Public Works	M. Ruta Deputy CAO/ Chief Financial Officer	P. Sheegl Chief Administrative Officer

RECOMMENDATIONS

1. That the preliminary design for improving Route 90, including widening Kenaston Boulevard on alternating sides be approved as the adopted alignment. This concept proposes widening Kenaston Boulevard to six lanes by widening on the west side south of Tuxedo Boulevard and widening on the east side north of Tuxedo Boulevard along with widening of both of the St. James Bridges.
2. That the Planning, Property and Development Department be authorized to negotiate the acquisition of properties required for the adopted alignment.

REASON FOR THE REPORT

To establish an approved alignment to be used for improving Route 90 between Taylor Avenue and Ness Avenue and to identify property requirements.

Property acquisitions that are not part of an approved capital program require that the need for the acquisition be confirmed by SPC on IR&PW prior to negotiating with affected property owners. Establishing authorization to negotiate will expedite the process of acquisition by eliminating the need to report and seek approval to negotiate on each individual acquisition. To accommodate the timeframe of motivated sellers this would allow for appraisals and negotiations to be undertaken and then reported directly to Council for final approval of the negotiated acquisition.

IMPLICATIONS OF THE RECOMMENDATIONS

An approved alignment will confirm property requirements and will allow for more detailed design of roadways, bridges and underground and overhead utilities to proceed.

An approved alignment will allow residents and businesses within the study area to make more informed decisions with respect to maintaining, renovating and managing their properties.

Authority to negotiate with affected property owners will eliminate the need to seek approval to obtain appraisals and would allow the administration to enter into negotiations with willing sellers.

The negotiated purchase would then proceed directly to SPC on P&D and then to Council for approval.

HISTORY

As part of the 2007 Capital Budget a preliminary design study and public participation program was implemented to study and develop options for improving Route 90 between Taylor Avenue and Ness Avenue. The study area includes Kenaston Boulevard between Taylor and Academy, the St. James Bridges, The Portage Avenue Interchange and Century Street between Portage Avenue and Ness Avenue (see map in APPENDIX.) The study focused on improvements in areas such as safety, vehicular operations, Transit operations, Active Transportation opportunities, capital cost, and reducing neighbourhood and property impacts; such as reducing vehicular emissions, attenuating traffic noise and reducing neighbourhood shortcutting.

Route 90 is a vital north-south transportation corridor linking major residential, employment and commercial areas in the southwest and northwest quadrants of the City. It is a major truck route and is the Winnipeg link in the Mid-Continental Trade Corridor. Already one of Winnipeg's busiest thoroughfares, Route 90's role in the movement of people and goods will expand with developments such as the Waverley West neighbourhoods, the eventual redevelopment of the Kapyong Barracks lands, additional commercial development in the Polo Park and Sterling Lyon areas, and the development of an inland port at James Richardson International Airport.

Based upon accepted transportation engineering standards and methods for measuring intersection capacity and delay the existing facility is operating far below acceptable levels of service. With current traffic volumes of over 50,000 vehicles per day it has exceeded the general warrant of 35,000 vpd for widening to 6-lanes. The resulting levels of congestion negatively impact all vehicular modes including transit service and the narrow right-of-way poorly addresses the needs of pedestrians and active transportation users. Current capacity issues continue to negatively impact adjacent residential neighbourhoods through increased vehicle emissions, and traffic noise and by encouraging the use of local residential streets for short-cutting. With current and proposed development projects in south-west Winnipeg, traffic volumes on Kenaston Boulevard are expected to increase to 70,000 vehicles per day by 2030.

Study Process

The study was initiated with public opinion surveys which revealed a widespread recognition of the importance of Route 90 as a critical transportation corridor (91% of respondents). Similarly, there was high recognition that improvements are needed (71% of respondents) with the majority (68% of respondents) mentioning the need to add additional travel lanes. The next highest mentioned improvements were to improve traffic signals, to add cycle facilities, and to increase the speed limit.

Five conceptual alternatives for widening Route 90 were developed by the project consultant team and an interdepartmental project steering committee. These options were presented to the public at a two day open house event in January 2009. These options included the following:

Option 1 - Widen Kenaston on the west side
Option 2 - Widen Kenaston on the east side
Option 3 - Widen Kenaston on both sides
Option 4 - Widen Kenaston on alternating sides

EVALUATION MATRIX

CRITERIA	OPTIONS		
	1 (Widen West)	4 (Widen Alternating)	5 (One-way Pair)
Traffic Safety	◐	◐	●
Property Acquisition	○	◐	○
Traffic Performance	●	●	◐
Neighbourhood Impacts	●	◐	○
Transit Opportunities/ Facilities	●	●	◐
Pedestrian/Cyclist Facilities	●	●	◐
Construction Costs	◐	◐	○
Ease of Construction & Staging	◐	◐	●
Design Suitability	◐	●	○
Landscaping Opportunities	◐	●	○
OVERALL RANKING	2	1	3

HIGHEST RANKING ● ◐ ○ LOWEST RANKING

Option 5 - One-Way Pair using the former Oak Point Rail line for northbound lanes

Detailed images of the five preliminary options, the recommended alternative and the Open House displays are posted on the project website: http://www.winnipeg.ca/publicworks/MajorProjects/Route90/

The three highest rated alternatives (Options 1, 4, and 5) underwent preliminary design and further assessment taking into account comments received during the initial Open House event. The resulting preliminary designs were then presented to the public at a second Open House event held in November 2009.

At both Open House events Option 4 (Widening on alternating sides) received the highest rating by the public and by the project steering committee and was therefore selected as the recommended widening option.

The most significant disadvantages of the other 4 options are as follows:

Option 1 Widen West - This option was the second most preferred option, however, it requires land from the Manitoba Youth Centre and results in a poor alignment with the St. James Bridges.

Option 2 Widen East. - This option was considered infeasible due to the substantial negative impact upon commercial and condominium properties. It requires the acquisition of developed properties on the east side for the full length of Kenaston Boulevard including all privately owned homes on the east side of Kenaston Boulevard.

Option 3 Widen on Both Sides. - The property acquisitions necessary for this alternative are the highest of the 5 options. It requires removal of all homes on both sides of Kenaston Boulevard, yet offers no operational improvement compared to the preferred option 4.

Option 5 One Way Pair - While this option performs nearly as well as the other 4 options it creates an island effect, surrounding a pocket of homes and Carpathia School with high traffic volumes and introduces high traffic volumes into areas that currently carry only moderate residential traffic volumes. It also separates northbound and southbound transit movements making transferring more difficult. Due to recent building projects within the former Oak Point rail right-of-way the property acquisition costs for this alternative could be as much as $15M higher than the recommended alignment. By separating the northbound and southbound lanes, this option would also double the number of individual signalized intersections between Taylor Avenue and Academy Road.

St. James Bridges and Portage Avenue Interchange

Several alternatives for increasing capacity and improving safety of the St. James Bridges and the Portage Avenue interchange were investigated. The recommended improvements to these facilities are common to all options with the exception of slightly realigned northbound approach ramps required for Option 5 the one-way pair option.

The proposed bridge improvements are shown on the attached drawing set “Preferred Alignment” and include the following:

- Removal of the Academy Road exit ramp to Northbound Route 90 and conversion to a signalized right-turn cut-off.
- Widening of the Northbound Bridge, addition of a deceleration/exit lane to Kintyre Street and Portage Avenue and a realignment of Kintyre Street.
- Widening on the inside of the sharp curve at the end of the Southbound Bridge to improve the radius and sightlines in this collision-prone area.
- Widening of the southbound bridge to accommodate 3 through lanes and the addition of a left side exit lane to Academy Road.

Recommended Alignment Details

Details of the preferred option are included in the appendix.

FINANCIAL IMPACT

Financial Impact Statement

Date: June 14, 2011

Project Name:

Approval of the Preliminary Design for the Widening of Route 90 Between Taylor Avenue and Ness Avenue

First Year of Program **2011**

	2011	2012	2013	2014	2015
Capital					
Capital Expenditures Required	$ 300,000	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	300,000	-	-	-	-
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	$ -	$ 2,850	$ 2,850	$ 2,850	$ 2,850
Less: Incremental Revenue/Recovery	8,738	-	-	-	-
Net Cost/(Benefit)	$ (8,738)	$ 2,850	$ 2,850	$ 2,850	$ 2,850
Less: Existing Budget Amounts	(8,738)	2,850	2,850	2,850	2,850
Net Budget Adjustment Required	$ (0)	$ -	$ -	$ -	$ -

Additional Comments: Included in the Public Works Department's 2011 adopted capital budget is $300,000 for Land Acquisition- Transportation Right of Way which will be used for the initial properties identied for acquisition for this project. The project budget for the Widening of Route 90 between Taylor Avenue and Ness Avenue has not yet been included in any capital budget as the project timeframes have not yet been determined and estimated costs are only preliminary at this time.

"Original Signed by D. Stewart, CA"
D. Stewart CA
Manager of Finance & Administration

CONSULTATION

In preparing this report there was consultation with:

Planning, Property and Development Department
Winnipeg Transit
Active Transportation Advisory Committee
Public Consultation – stakeholder meetings and open houses

SUBMITTED BY

Department: Public Works Department
Division: Transportation
Prepared by: Neil Myska, Transportation Facilities Planning Engineer
Date: June 16, 2011
File No.

Attachments:

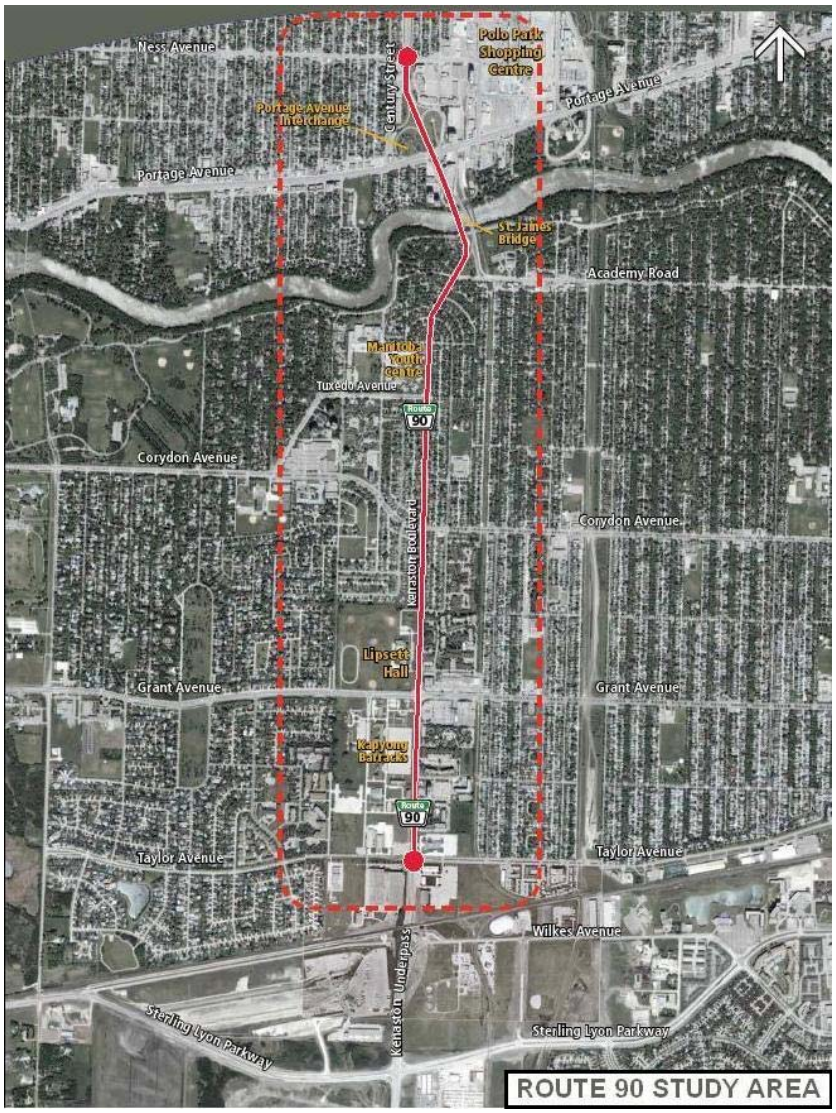
1. Sample images showing conceptual cross-section of widening on alternating sides


Sample Images

2. Preferred alignment with cross-hatching on affected properties.
   - Double hatching represents a full acquisition.
   - Single hatching represents an acquisition where the structure does not need to be removed


Preferred Alignment & Prop. Req.

APPENDIX



Recommended Alignment Details

The recommended alignment of widening on alternating sides was found to best meet the project objectives. The details of this alignment are as follows:

Property Impacts

Through widening on alternating sides the recommended alignment minimizes the impact upon privately owned residential properties. This option will require a widening into the Kapyong Lands and PMQ housing on the west side of Kenaston Boulevard. Proceeding north, through the Tuxedo Boulevard intersection the widening shifts to the east side. This accommodates the security requirements of the Manitoba Youth Centre and avoids impacting the Canada Post property. Shifting to the east side allows for a better alignment with the St. James Bridges and in particular allows for the abrupt curve at the south end of the southbound bridge to be improved substantially. Should the Manitoba Youth Centre property

become available, a portion of that property could be utilized to further reduce the number of privately-owned residential properties required.

Vehicular benefits

The additional lanes and improved intersections will result in significant and immediate operational improvements, such as reduced travel times, improved fuel economy and lower vehicle emissions. For the design year of 2029 compared to how the existing 4-lane facility would perform, the additional lanes will significantly improve the level of service. In the middle of the study area the level of service will improve from level F in the a.m. and p.m. to levels C and D respectively. In general terms the length of delay encountered at each intersection during peak flow conditions will be less that one quarter of what it would be without the additional lanes.

Transit improvements

Potential improvements for Transit operations include queue-jump lanes, transit priority signals, upgraded centralized transit stops and real-time scheduling information displays. The location and specific types of improvements for each intersection would be determined at the detailed design stage.

Active Transportation Facilities

The proposed design includes separated facilities for pedestrians and cyclists within the boulevard, separated from vehicular traffic. Connections to east-west Active Transportation routes are also proposed. In order to address concerns for pedestrians, cyclists, and school children crossing at Lockston Avenue a pedestrian overpass is recommended. This will eliminate the need for crossing guards at this location and will improve traffic flow by eliminating the existing half-signal.

Traffic Noise Attenuation

In order to reduce traffic noise levels, sound attenuation walls are proposed. The walls would range in height from 2.4m in rear or side yards to 1.2m in front yards. Removal of the local street and lane connections to Kenaston Boulevard will allow for longer continuous sections and more effective sound attenuation.

Neighbourhood Traffic Improvements.

The recommended alignment includes the removal of several direct connections to Kenaston Boulevard from local streets and back lanes between Academy Road and Willow Avenue. It is neither appropriate nor desirable to have local street and lane connections to a Major Arterial roadway and eliminating these connections will improve safety, reduce neighbourhood shortcutting and allow for effective sound attenuation.

In the Boulton Bay area residents of the condominiums have expressed increasing difficulty entering and exiting the complexes on the east side of Kenaston between Taylor Avenue and Grant Avenue. A service road behind these properties is proposed to allow direct access to Taylor Avenue. This would improve access due to the lower traffic volumes on Taylor Avenue at which point they would be able to access Kenaston Boulevard at a signalized intersection or proceed east without having to access Kenaston Boulevard.

Construction and Property Estimates

The Class 4 estimated cost of construction is $129 Million. This includes $96M in bridge modifications, roadway construction and sound attenuation works, $11M in drainage upgrading, and $22M in property acquisitions.

Costs assume that the project will proceed in stages while maintaining traffic flow in both directions.

In addition to the estimated $22M cost of private property acquisition stated above, there may be additional costs associated with the acquisition of Federal lands. These include the acquisition of a widening into the Kapyong Barracks lands and acquisition of a row of the PMQ housing. It may be possible to acquire some or all of the land required for the purpose of street right-of-way as dedication through redevelopment, however, it would likely depend upon the nature and the ultimate timing of the redevelopment.