Info#1



P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

## Harbour East Community Council December 2, 2010

TO:

Chair and Members of Harbour East Community Council

SUBMITTED BY:

Ken Reashor, P.Eng., Director, Transportation and Public Works

DATE:

November 10, 2010

SUBJECT:

Traffic Light Adjustment - Lancaster Drive/Woodland Avenue

## **INFORMATION REPORT**

### **ORIGIN**

Item 12.1 raised at the October 7, 2010 Harbour East Community Council meeting.

#### **BACKGROUND**

Motion passed for a staff report requesting that the lights at Lancaster Drive and Woodland Avenue be adjusted so that there is always a left turn signal arrow when turning left off Woodland Avenue onto Lancaster Drive. Councillor Smith added that it is too dangerous to turn left unless the arrow is present as oncoming traffic sight lines are blocked.

#### **DISCUSSION**

A protected left turn phase may be warranted at intersections where there is a significant left turn volume which results in delay. Typically, motorists feel safer making a left turn only when there is an arrow because it lessens the conflict with opposing traffic. However, it's not practical to install this at every intersection as it results in unnecessary stops, vehicular delay and increased fuel consumption. The time required for the arrow display must be subtracted from the much heavier opposing through traffic, and the result is an increase in the overall intersection delay. This increase in delay would have a negative effect on the capacity at the intersection leading to further safety issues.

If warranted, left turns may be protected only or protected/permissive. When protected, only the left turns can only be made when the arrow is displayed. Protective/permissive operation allows for left turns to be made on the arrow display, as well as on the solid green ball display when there is a safe gap in opposing traffic.

The existing traffic signals at Woodland Avenue/Micmac Boulevard/Lancaster Drive are fully actuated, with a protected/permissive left turn operation providing for left turn advance arrows on Woodland Avenue for both directions if the left turn demand is there. There is a vehicle detector located at the stop bar which will detect when a vehicle is waiting to turn left. Depending on when the vehicle arrives during the cycle the call may not be registered in time and the motorist either proceeds on the solid green display when there is a safe gap in traffic or waits until the next cycle to proceed on the left turn arrow. A recent field check indicated this detector was intermittently failing to detect a vehicle which could explain why, on occasion, the arrow was not being displayed. Adjustments have been made to rectify this and the operation will continue to be monitored.

While we agree this left turn may be difficult due to the heavier inbound flow, observations at this intersection show the east bound left turns are clearing either during the green time or on the amber/all red signal at the end of the cycle. This is an acceptable practice at all intersections. A protected, left turn only phase would not be warranted.

## **BUDGET IMPLICATIONS**

There are no budget implications at this time.

# FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

# COMMUNITY ENGAGEMENT

Not applicable.

A copy of this report can be obtained online at <a href="http://www.halifax.ca/commcoun/cc.html">http://www.halifax.ca/commcoun/cc.html</a> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:

Karen MacQuarrie/Traffic Analyst - Eastern, 490-4859

Report Approved by:

Taso Koutroulakis, P.Eng., Acting Manager, Traffic & Right of Way, 490-4816