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DateMay 25, 2023Report No. 2023-240ToChair and Members
Vision Zero Road Safety CommitteeSecond Safety CommitteeFromMark Jacklyn

Director of Operational Services, Public Works Commission

1.0 Type of Report

Consent Item [] Item For Consideration [X]

2.0 Topic Lane Designation at Intersections [Financial Impact – None]

3.0 Recommendation

- A. THAT report no. 2023-240 regarding "Lane Designation at Intersections" BE RECEIVED; and
- B. THAT "Lane Designation" BE APPROVED on Dalhousie Street at Clarence Street, Elgin Street at Stanley Street, Market Street South at Icomm Drive, Ontario Street at Eagle Avenue, Mount Pleasant Street at Gilkison Street and Bedford Street at William Street as outlined in Appendix "A" of this report; and
- C. THAT the necessary by-law BE PRESENTED to City Council for adoption.

4.0 Background

Lane designation signs must be used when permitted movement in one or more lanes is contrary to the normal unsigned rules of the road.

Lane designation signs are considered regulatory signs, such as traffic control and speed regulation signage, under the Ontario Highway Traffic Act. When Lane Designation signs are installed they are required to be by-lawed by the municipality.

Staff identified six (6) intersections where Lane Designation signage is required to enhance existing vehicle movements and pavement markings.

5.0 Analysis

Lane designation signs use single or multiple arrow symbols to show the permitted movements as the lane approaches an intersection.

Staff recommend the following Lane Designation signage be installed and bylawed by City Council:

5.1 Dalhousie Street at Clarence Street

Dalhousie Street has four (4) westbound lanes east of Clarence Street. The two middle lanes continue straight through the intersection and the curb lanes end at Clarence Street. Lane 1 (north curb lane), is marked as a right turn lane and lane 4 (south curb lane), is marked as a left turn lane.

Lane designation signs must be installed to direct motorists that left turns from lane 4 and right turns from lane 1 are the only permitted movements. The proposed lane designation is illustrated in Figure 1 below:



Figure 1 - Lane Designation on Dalhousie St. at Clarence St.

5.2 Elgin Street at Stanley Street

Elgin Street between Rawdon Street and Stanley Street, was reconstructed in 2017. The street was reconfigured to one travel lane in each direction and parking lanes on both sides. The westbound curb lane east of Stanley Street became a right turn only lane.

A lane designation sign must be installed to direct motorists that right turns from lane 1 is the only permitted movement. The proposed lane designation is illustrated in Figure 2 below:



Figure 2 - Lane Designation on Elgin St. at Stanley St.

5.3 Market Street South at Icomm Drive

The northbound approach on Market Street South, south of Icomm Drive, is presently delineated with a right arrow in the curb lane and left arrow in the inside lane. These markings cause confusion for motorists intending to travel straight through the intersection to enter the Market Centre Parkade. The curb lane should be signed as a straight through-right turn lane.

Lane designation signs must be installed to indicate that left turns from lane 2 is the only permitted movement and that straight through and right turns from lane 1 are permitted movements from the curb lane. The proposed lane designations are illustrated in Figure 3 below:

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- Figure 3 Lane Designation on Market St. S. at Icomm Dr.

5.4 Ontario Street at Eagle Avenue

The southbound approach on Ontario Street, north of Eagle Avenue, has two lanes. The inside lane is intended for vehicles travelling straight and turning right, and the second lane is marked as a left turn lane and terminates at Eagle Avenue.

Lane designation signs must be installed to indicate that left turns from lane 2 is the only permitted movement and that straight through and right turns from lane 1 are permitted movements from the curb lane. The proposed lane designations are illustrated in Figure 4 below:



Figure 4 - Lane Designation on Ontario St. at Eagle Ave.

5.5 Mount Pleasant Street at Gilkison Street

The southbound approach on Mount Pleasant Street, north of Gilkison Street, has two lanes. The inside or curb lane is intended for vehicles travelling straight on Mount Pleasant Street, and the second lane is marked as a left turn lane and terminates at Gilkison Street.

Lane designation signs must be installed to indicate that left turns from lane 2 is the only permitted movement and that vehicles travelling straight in lane 1 is the only permitted movement from the curb lane. The proposed lane designations are illustrated in Figure 5 below:





5.6 Bedford Street at William Street

The westbound approach on Bedford Street, east of William Street, presently has two westbound lanes (one-way). The curb lane is for vehicles travelling straight through and turning right, and the second lane is marked as a left turn lane that terminates at William Street.

At a public meeting held May 10, 2023, residents indicated they frequently observe eastbound vehicles travelling the wrong-way on Bedford Street, east of William Street. Staff recommend installation of a curb extension on the south east corner of the intersection to address the wrong-way travel concern, and reduce Bedford Street to one lane westbound. All westbound straight through and turning movements will be permitted from the curb lane. The proposed curb extension and lane ends warning sign are illustrated in Figure 6 below:



Figure 6 - Bedford St. at William St. Left Lane Ends

6.0 **Financial Implications**

The cost to install "Lane Designation" signage, flexible bollards and improve pavement markings is approximately \$3,000. The work will be funded from the Operational Services operating budget.

7.0 Climate and Environmental Implications

There are no climate and environmental implications resulting from this report.

8.0 Conclusion

The recommended Lane Designation signage must be by-lawed and installed to illustrate the permitted movement(s) in accordance with the Ontario Highway Traffic Act.

Mark Jacklin

Mark Jacklyn **V** Director of Operational Services, Public Works Commission

Prepared By: Rob Smith, C.E.T., Supervisor of Transportation Services In adopting this report, is a by-law or agreement required? If so, it should be referenced in the recommendation section.

| By-law required | [X] yes [] no |
|--|---------------|
| Agreement(s) or other documents to be signed by Mayor and/or City Clerk | [] yes [X] no |
| Is the necessary by-law or agreement being sent concurrently to Council? | [X] yes [] no |

APPENDIX "A"

Lane Designation at Intersections

a) RECOMMEND that Schedule "5" of Traffic By-law 37-83 which pertains to "Lane Designation" BE AMENDED to provide the following:

| Column 1 <u>Street</u> | Column 2 Location | Column 3 <u>Lane</u> | Column 4 <u>Direction</u> |
|---------------------------|--|-------------------------|--|
| Dalhousie Street | From Clarence Street to a point 50 metres east thereof | One | Westerly: Right turn only |
| Dalhousie Street | From Clarence Street to a point 35 metres east thereof | Four | Westerly: Left turn only |
| Elgin Street | From Stanley Street to a point 55 metres east thereof | One | Westerly: Right turn only |
| Market Street South | From Icomm Drive to a point 40 metres south thereof | One | Northerly: Straight through or right turn only |
| Market Street South | From Icomm Drive to a point 40 metres south thereof | Тwo | Northerly: Left turn only |
| Mount Pleasant Street | From Gilkison Street to a point 145 metres north thereof | One | Southerly: Straight through only |
| Mount Pleasant Street | From Gilkison Street to a point 145 metres north thereof | Тwo | Southerly: Left turn only |
| Ontario Street | From Eagle Avenue to a point 117 metres north thereof | One | Southerly: Straight through or right turn only |
| Ontario Street | From Eagle Avenue to a point 117 metres north thereof | Тwo | Southerly: Left turn only |

b) RECOMMEND that Schedule "5" of Traffic By-law 37-83 which pertains to "Lane Designation" BE REPEALED as follows:

| Column 1 | Column 2 | Column 3 | Column 4 |
|-----------------------------------|---|-------------|--------------------------|
| <u>Street</u> | Location | <u>Lane</u> | Direction |
| Bedford Street By-law 199-2019 | From William Street to a point 40 metres east thereof | Two | Westerly: Left turn only |