To Chair and Members
Committee of the Whole – Operations and Administration

From Russ Loukes, Acting General Manager of Public Works

1.0 Type of Report

Consent Item [ ]
Item For Consideration [X]

2.0 Topic Veterans Memorial Parkway Widening and Extension
– Interim Actions [Financial Implications: None]

3.0 Recommendation

A. That Report 2019-223 titled“ Veterans Memorial Parkway Widening and Extension – Interim Actions”, BE RECEIVED; and

B. THAT Staff BE DIRECTED to present Council with the required by-law amendments on the following recommendations subject to approval of funding from the 2020 operating budget process:
   
   i. Restrict on-street parking on Brant Avenue from Colborne Street West to St. Paul Avenue during 2:00 am to 9:00 am, 4:00 pm to 5:00 pm, Monday through Saturday; and
   
   ii. Restrict southbound left-turn from Brant Avenue to West Street during 8:00 am to 9:00 am, 4:00 pm to 5:00 pm, Monday through Friday, public transit excepted, and
   
   iii. Convert northbound curb lane on Brant Avenue at St Paul Avenue intersection to a dedicated right-turn lane; and

C. THAT Staff BE INSTRUCTED to adjust traffic signal coordination for the weekday morning peak to prioritize progression of traffic from West Brant
to Highway 403 and in the reverse direction during the weekday afternoon peak.

4.0 Purpose and Overview

Subsequent to PW2018-039 report “Feasibility Study for the Veterans Memorial Parkway Widening and Extension” (July 2018), Council directed staff to investigate and report back to Council with interim actions that can be taken to improve travel time between West Brant and Highway 403 interchanges. This report identifies staff recommendations in accordance to Council directions.

5.0 Background

The 2007 and 2014 Transportation Master Plan (TMP) identified Veteran Memorial Parkway (VMP) widening/extension and Oak Park Road extension to accommodate growth in Brantford.

In July 2018, staff reported to Council on the findings of the Feasibility Study for the Veterans Memorial Parkway Widening and Extension (PW2018-039). After discussions on the report, Council directed the following to staff:

- THAT given the time required to implement transportation network expansions to serve the southwest area of Brantford, staff BE DIRECTED to investigate and REPORT BACK as part of the 2019 Capital Budget process with any necessary reports and interim actions that can be taken to improve traffic safety at the intersection of Conklin and Mount Pleasant and recommendations that can improve travel times between West Brant and Highway 403 interchanges.

Council approved the following during its meeting in March 2019:

- THAT staff UNDERTAKE the installation of an All Way Stop at the intersection of Mount Pleasant Road and Conklin Road; and
- THAT staff be DIRECTED to implement additional measures at a cost not exceeding $10,000; and
- THAT staff PREPARE the necessary bylaws to implement an All Way Stop Control and other feasible measures that can be applied prior to April 2019 at the intersection of Mount Pleasant Road and Conklin Road; and
- THAT staff UNDERTAKE the design, construction and operation of temporary traffic signals and necessary roadway modifications required at
the intersection of Mount Pleasant Road and Conklin Road at a cost not to exceed $260,000 funded from the Council Priorities Reserve (RF0558); and

- THAT staff PREPARE the necessary bylaws to implement the temporary traffic signals within approximately six months;

- THAT $6,000 for the annual operating costs for the traffic measures to be installed at this intersection BE ADDED to the 2019 Operating Budget for Operational Services

6.0 Corporate Policy Context

The proposed interim actions align with the following priorities approved in June 2019 as per Report Number 2019-394 “2019-2020 Council Priorities”:

- Road Development - Increase Access to West Brant and Highway 403

7.0 Input From Other Sources

The public was consulted on components of staff proposal where on-street parking would be impacted. A public meeting was held on August 1, 2019 including a presentation to the attendees. A copy of the presentation is provided in Appendix A. Specific feedback from the public are discussed in Section 8 of this report.

Operational Services were consulted regarding potential implications to road maintenance and cost estimates.

Fleet and Transit Services were consulted to minimize direct impacts to transit service.

8.0 Analysis

In response to Council directions, staff identified five interim options to improve travel time between West Brant and Highway 403 access. Each option is discussed in the following sections.

8.1 Brant Avenue On-Street Parking Amendments

Brant Avenue is one of the key corridors linking West Brant and Highway 403. On-street parking is currently permitted during peak periods, Monday to Saturday, at various locations along Brant Avenue. This often results in unnecessary congestions during commuting hours. Travel time from West
Brant to Highway 403 could be improved by strategically restricting on-street parking on Brant Avenue during weekdays between St Paul Avenue and Colborne Street West within morning and afternoon peak hours. The intent is to maximize capacity for motorists during the busiest time while minimizing impact on businesses and surrounding neighborhood.

### 8.1.1 Area Context

Staff has reviewed traffic volumes, travel patterns, existing parking by-law, on-street parking utilization, business hours, off street parking, and road maintenance considerations.

It was found that automobile traffic on Brant Avenue between St Paul Avenue and Colborne Street West is busiest during 8-9 AM and 4-5 PM on weekdays. The peak volume in each direction is on the verge of requiring two travel lanes per direction.

Currently, parking regulation on Brant Avenue is inconsistent along the corridor and has a significant variation. On the east side, overnight parking is restricted during 2 to 6 AM, 7 days a week, and also during 3:30 to 5:30 PM, Monday to Saturday. Parking is generally allowed during the morning peak period. On the west side, parking is restricted during 2 to 9 AM Monday to Saturday. Parking is generally allowed in the afternoon peak period north of Waterloo Street. Time limit restrictions and loading zones are in place on both sides of the street at select locations.

On-street parking utilization is low during 8 to 9 AM on weekdays and only marginally higher during 4 to 5 PM on weekdays. The majority of business opens after 9AM; some opens earlier but they have on-site parking.

### 8.1.2 Public Feedback

The City received feedback before, during and after a public meeting on August 1, 2019.

Prior to the public meeting, 17 responses were received, among which 5 support, 7 against, and 5 mixed feedback. Those who support are pleased with congestion relief, and suggest more parking restrictions. Those who oppose are worried about:

- parking infiltration to neighborhood streets, particularly Ada Avenue and Palmerston Avenue
• speeding and safety concerns
• enforcement of parking restrictions
• inconvenience for customers and employees, particular for businesses with no or little off street parking
• negative effect on property values

During and after the public meeting, concerns similar to the above were expressed, plus the following:

• many homes in the area do not have off street parking, and businesses on Brant Avenue rely on on-street parking. Proposed Brant Avenue restrictions will worsen on-street parking deficiency on the adjacent streets
• business owners on Brant Avenue are not eligible for on-street time exemption permit on adjacent streets
• the parking lot at a medical center charges a fee, and staff park on neighborhood streets all day
• parking permit only applies to immediate street front, permit owner cannot park on other streets
• proposed parking restrictions will worsen speeding on Brant Avenue
• pedestrian crossing concerns
• Brant Avenue should not be used as a major thoroughfare

8.1.3 Findings

Restricting parking during morning and afternoon peak hours as recommended in this report would lower travel time between West Brant and Highway 403, while minimizing impact on area businesses and neighborhood.
8.2 Restrict Southbound Left-Turn at Brant Avenue and West Street Intersection

It was identified that southbound left-turn movements at the intersection of Brant Avenue and West Street often cause congestions due to lack of dedicated left-turn lane.

Restricting southbound left-turn at West Street/Brant Avenue intersection during 8 to 9 AM and 4 to 5 PM (Monday to Friday) would improve travel time between Highway 403 and West Brant. The impact to vehicles using the movement is expected to be minimal as there are other left-turn options throughout the Brant Avenue corridor.

There would be no impact on transit services as transit vehicles would be exempted from the left-turn restriction.

8.3 Lane reconfiguration at Brant Avenue/St Paul Avenue intersection

One of the key routes from West Brant to Highway 403 is to head north on Brant Avenue, turn right at St. Paul Avenue and proceed to King George Road. The northbound traffic volume on Brant Avenue turning right at St. Paul Avenue is high. Due to sightline issue at the intersection, northbound right turn on red is prohibited. Furthermore, the curb lane is shared with the through movement; therefore right-turn on red is not possible if a through vehicle is ahead of the queue. This results in right turn motorists movements only during northbound green phase while yielding to conflicting pedestrians crossing St. Paul Avenue on the east side.

Staff proposes to convert the through/right turn lane to dedicated right turn lane, and impose an overlap green phase for the turn. Right turn capacity will considerably increase and congestion will be eased, with minimum impact on the capacity of other movements at the intersection. While northbound through movements can no longer use the curb lane, the remaining through lane will have sufficient capacity.

8.4 Signal coordination

Traffic signal timing are maintained and monitored by the City. Signal timings are coordinated (progressed) in a manner that green lights "cascade" (progress) in sequence so that platoons of vehicles can proceed through a continuous series of green lights. Timing can be
optimized to favor certain direction of travel. While desirable, optimizing all travel directions is often difficult, if not impractical, due to various technical requirements such as capacity and delay considerations.

There are two major routes between West Brant and Highway 403, namely Brant Avenue/St Paul Avenue/King George Road and Colborne Street/Dalhousie Street/Wayne Gretzky Parkway. Traffic on both routes during both the morning and afternoon peaks are approximately the same, slightly higher outbound towards Highway 403 in the morning and inbound in the afternoon. Currently, the signals are programmed to balance progression of traffic in both directions during both morning and afternoon peaks.

It is industry best practice to program signal coordination slightly in favour of the heavier volume direction, in order to decrease travel time of road users at large. In order to benefit residents in West Brant (as well as residents along the route), staff recommends adjusting the signal coordination to improve progression of outbound traffic during the morning peak, and inbound traffic during the afternoon peak. As a result, travel time from West Brant to Highway 403 in the morning and from Highway 403 to West Brant in the afternoon on the two routes will improve. Figure 1 shows the signals to be re-coordinated along the two routes.
8.5 Signalization of Conklin Road/Mount Pleasant Road intersection

Currently the Conklin Road/Mount Pleasant Road intersection is stop controlled on Conklin Road. Signalizing this intersection will make left turns onto Conklin Road easier and safer, and improve access between West Brant and Highway 403 via County Road 18/Garden Avenue. It is an alternative to driving through central Brantford, in the event of disruption of bridges across Grand River.

The signalization is already approved by Council; construction is expected be finished by end of year.

9.0 Financial Implications

The following Unmet Need for “Interim Measures to Improve Traffic Flow to/from Highway 403 and West Brantford” in the amount of $14,000 has been included
in the 2020 Operating Budget requests as an unmet need for Operational Services department:

- Implementation of signage for parking restriction modifications on Brant Avenue at an estimated of $8,000

- Implementation of signage for southbound left turn prohibition at West Street/Brant Avenue intersection at an estimated of $1,000. This will include the new signage as well as relocating and modifying existing signage.

- Implementation of signage and pavement markings for lane reconfiguration at St. Paul Avenue/Brant Avenue intersection at an estimated cost of $5,000.

10.0 Conclusion

Subsequent to Report PW2018-039 (July 2018), Council directed staff to investigate and report back to Council with interim actions that can be taken to improve travel time between West Brant and Highway 403 interchanges.

Approval of the recommendations in this report will improve travel time between West Brant and Highway 403 interchanges.

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Attachments:

Appendix A: Presentation deck to the public on proposed parking restriction modifications on Brant Avenue (Aug 1, 2019)

Copy to:

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? [ ] yes [X] no