



Municipality of Port Hope

Staff Report

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Report Title: Walton Street Reconstruction and Streetscape Improvements, Pine Street to Mill Street

Report to: Works & Engineering Committee

Date of meeting: June 22, 2022

Report Author:

Mike van den Broek, Manager, Engineering

Department responsible:

Works & Engineering

Report Number: WE-20-22

Recommendation:

That the Works and Engineering Committee select a preferred design from those options presented for each of the specific (key) locations listed below and direct staff to present a resolution to Council with the preferred design options for consideration at their next regular meeting in order to proceed with detailed design of Walton Street from Pine Street to Mill Street

1. Walton Street (Pine Street to Brown Street)

Option 1: Neck-down type bump outs on both sides of the road for traffic calming. On-street parking on both sides of the road; or

Option 2: Replace as is.

2. Walton Street and Ontario Street

Option 1: Bump outs east and west of Ontario Street (north side) and an elongated curb extension at John Street to 30m east of Ontario Street (97m total length) which creates an 'urban plaza' type space at Lent Lane. Results in the loss of the eastbound dedicated left-turn lane and the westbound right-turn lane at Ontario Street; or

Option 2: An elongated curb extension at John Street to 30m east of Ontario Street (97m total length) which creates an 'urban plaza' type space at Lent Lane and allows for the retention of a dedicated eastbound left-turn lane. Results in the loss of the westbound right-turn lane at Ontario Street; or

Option 3: Replace as is.

3. Walton Street and Cavan Street

Option 1: Improved bump outs on the west side of the intersection (north and south side), similar to existing conditions; or

Option 2: Remove bump outs.

4. Heritage District Gateway Sign

Option 1: Include 'Port Hope Heritage District' sign at the intersection of Walton Street and Mill Street; or

Option 2: Replace as is.

5. Cochingomink Trail

Option 1: Provide a formalized connection of the Cochingomink Trail that utilizes the existing pedestrian crossing at Queen Street; or

Option 2: Replace as is.

Highlights:

- Based on input received following the second round of community engagement and consultation it is recommended that Council select a preferred design option of those presented herein for each of the key locations to allow staff to proceed with the detailed design for the reconstruction of Walton Street from Pine Street to Mill Street.

Background:

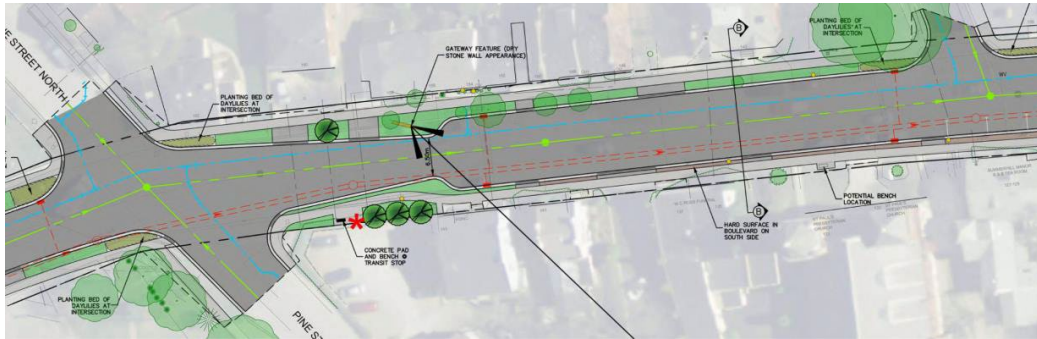
To address growing deficiencies related to aging underground infrastructure, the Municipality began the necessary design work to have infrastructure replaced on Walton Street from Mill Street to Church Street in 2020.

An initial design concept was developed in 2020 – spring 2021 through consultation with stakeholder groups including representatives from the HBIA, Chamber of Commerce, ACO and the film industry as well as committees of Council including the former Tree Advisory Committee, Parks Recreation and Culture Advisory Committee, Accessibility Advisory Committee and Heritage Port Hope Advisory Committee.

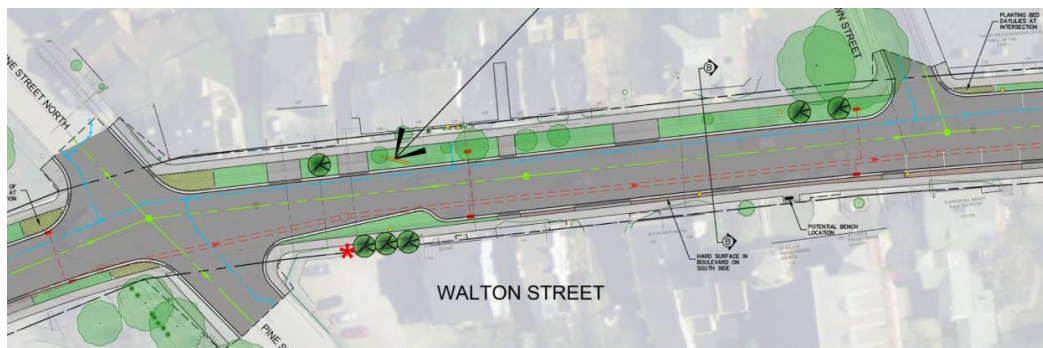
Based on the input from stakeholder groups the design concept was further refined in 2021 into a preliminary design that included several options for infrastructure replacement for key locations along Walton Street. These options were presented to the Public at a virtual Public Information Centre (PIC) held via Zoom on April 22, 2021 and include the following:

Walton Street (Pine Street to Brown Street)

Option 1: Installation of neck-down type bump outs on both sides to allow for traffic calming. On street parking remains. Allows for a gateway feature. Preservation of existing trees, limited opportunities for additional tree planting.



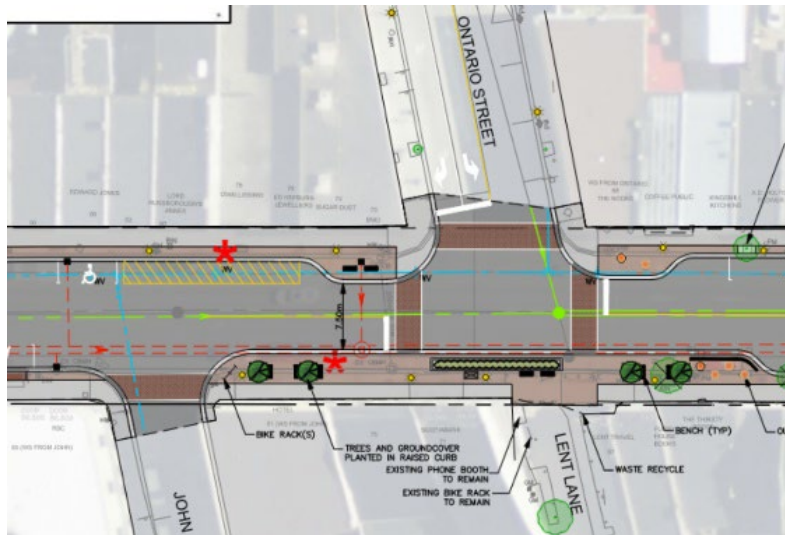
Option 2: Widened north boulevard with parking eliminated on north side of the road. North boulevard widened to provide additional green space. Narrower road will assist with traffic calming.



This design concept has been eliminated from further consideration for the Walton Street Reconstruction project given comments received and concern heard for loss of parking on Walton Street as well as the understood, frequent use of parking spaces on the south side of Walton Street by the Ross Funeral Chapel.

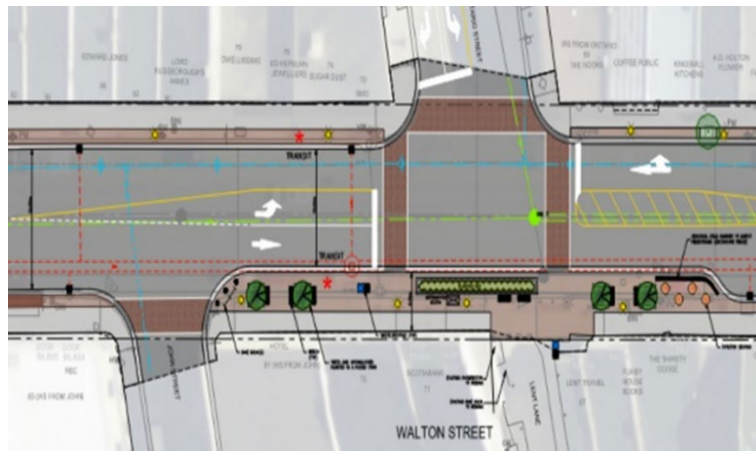
Walton Street and Ontario Street Intersection

Option 1: Bump outs east and west of Ontario Street (north side), and an elongated curb extension at John Street to 30 m east of Ontario Street (97 m total length) which creates an 'urban plaza' type space at Lent Lane but results in loss of the eastbound dedicated left-turn lane and the westbound right-turn lane at Ontario Street.



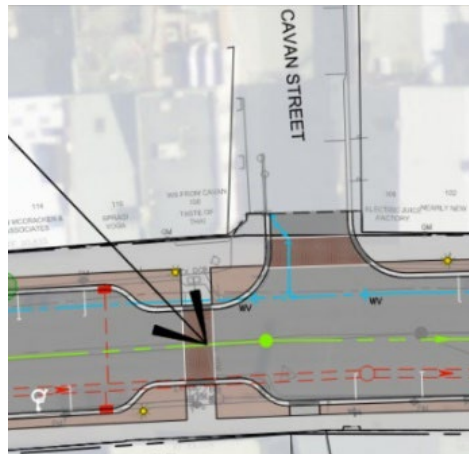
Prior to presentation of the above preliminary design concept traffic count numbers were analyzed by the Design Team and the scenario of the left turn lane being removed modeled, showing no significant adverse effects to the intersection's level of service.

Option 2: An elongated curb extension at John Street to 30 m east of Ontario Street (97 m total length) which creates an 'urban plaza' type space at Lent Lane and allows for the retention of a dedicated eastbound left-turn lane but requires removing the dedicated westbound right turn lane.



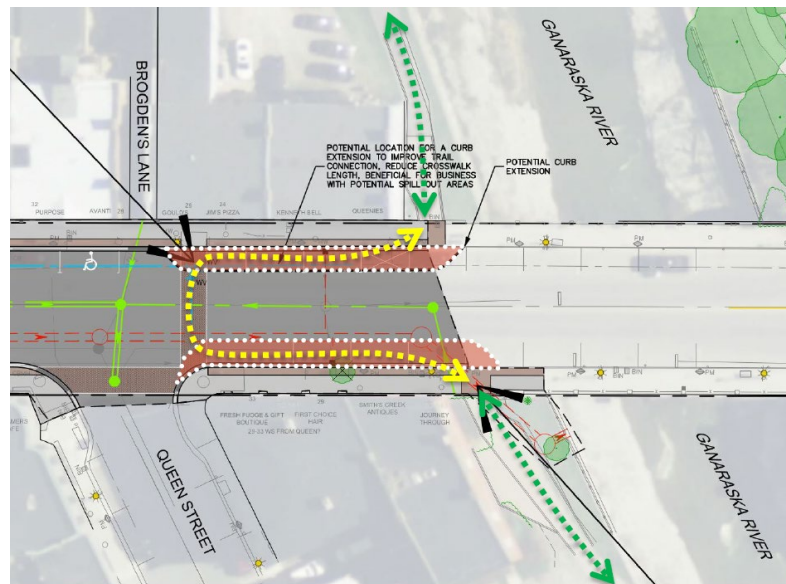
Walton Street and Cavan Street Intersection

Option 1: Reinstatement of bump outs on the west side of Cavan Street (north and south side) with improved geometry to encourage traffic calming and provide shorter crossing distance for pedestrians improving the intersection's level of safety.



Cochingomink Trail Connection

Option 1: Additional bump outs / curb extensions to provide a formalized connection of the Cochingomink Trail that utilizes the existing pedestrian crossing at Queen Street.



Heritage District Gateway Sign

Option 1: Installation of a low gateway feature labeled 'Port Hope Heritage District' on the existing median at the Mill Street and Walton Street intersection.



Feedback from Public

Following the PIC, presentation materials were made available through the Walton Street Reconstruction project page on myporthope.ca and a comment form was uploaded to allow the Public to submit feedback.

With consideration of the diverse and, in some cases, opposing views received through the public engagement, mainly dealing with the section of the project from Pine Street to Mill Street, and some of the feedback staff had received from Council relating to their vision for the project, staff previously recommended further public and stakeholder engagement be completed before moving forward with the detailed design of Walton Street east of Pine Street. In doing this, staff would be able to garner additional public, business owner, and other stakeholder input to assist in finalizing the engineering and streetscape design which would then be presented to Council for endorsement prior to construction.

Public feedback received following the PIC showed no clear consensus for a preferred design direction for Walton Street from Pine Street to Mill Street. The major areas of interest identified through review of the public feedback received were:

1. Turn Lanes at Ontario Street and Walton Street – Varying views on the Options provided for the Ontario Street and Walton Street intersection. Responses both in-favour and against the removal of the existing eastbound left turn lane.
2. Bump Out(s) / Increased Pedestrian Space – Responses both in favour of some or all of the proposed bump-outs designed, and a similar number of responses opposed to the same.
3. Parking – Responses supporting the removal of on-street parking for the improvement of pedestrian space. Similar number of responses indicating need for additional parking or retention of existing spaces.

For the section of Walton Street from Church Street to Pine Street there were not very many concerns raised following the April PIC, other than some desire amongst

residents for the burying of existing overhead utilities. This was determined to be a significant expense where money could be better spent by the Municipality on other Municipal Infrastructure needs. As such, staff recommended that the detailed design for this section of Walton Street be moved forward such that it could be reconstructed in 2022, excluding the burying of overhead utilities. This allowed for part of the project to move forward which achieves the goal of staging the work over several years.

Walton Street between Pine Street and Church Street is now under construction.. The balance of the Walton Street Reconstruction project (Pine Street to Mill Street) requires further Council direction.

Discussion:

To address varying views from the public identified in the first round of Community Engagement surrounding the future status of the eastbound left turn lane at the intersection of Walton Street and Ontario Street, analyze real-time traffic impacts, and encourage additional stakeholder engagement, the Municipality conducted a traffic simulation from September 9, 2021 – September 14, 2021, that included the following modifications to the existing intersection:

- Closure of the eastbound through lane (southern most lane) on Walton Street between John Street and Ontario Street to simulate proposed bump out design providing increased pedestrian space in the area of Lent Lane as well as a shorter crossing distance for pedestrians on Walton Street on the west side of Ontario Street;
- Combination of eastbound through and left turning traffic in the existing eastbound left turn lane on Walton Street at Ontario Street; and
- Closure of the westbound right turn lane on Walton Street at Ontario Street to simulate a bump out which would provide for a shorter crossing distance for pedestrians on Walton Street on the east side of Ontario Street.

In addition to the lane configuration modifications for the simulation period, signal timing was modified to accommodate the reduction in travelled lanes and maintain an acceptable level of service.

Figure 1 below demonstrates the implemented closures on Walton Street during the traffic simulation period from September 9, 2021 – September 14, 2021.

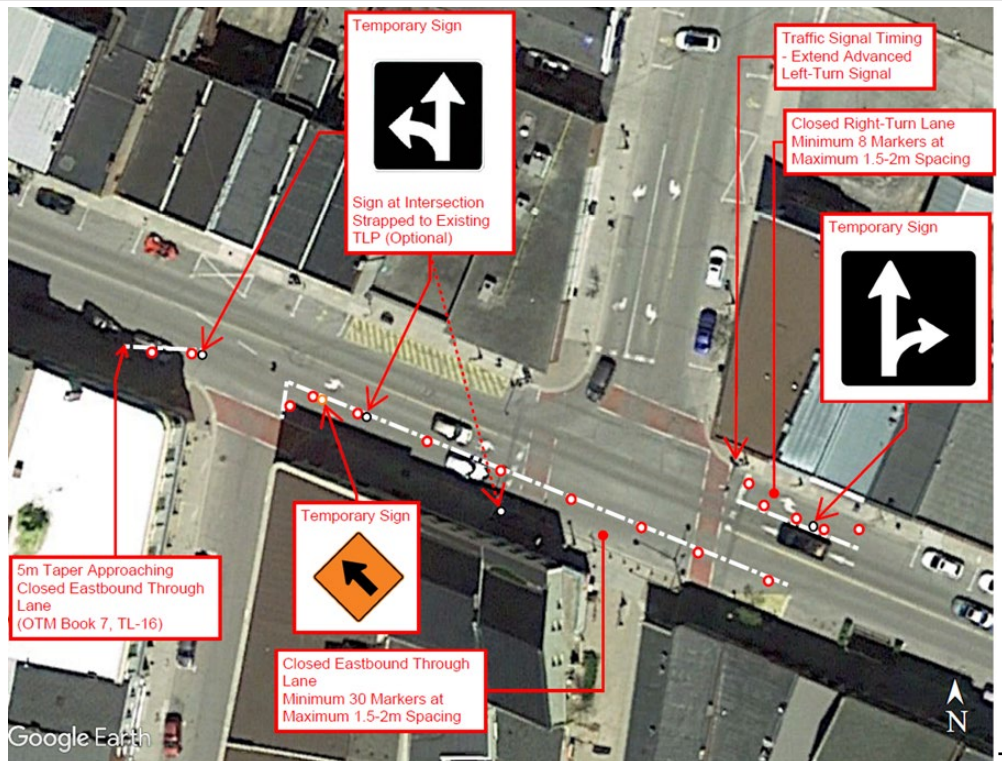


Figure 1: Temporary Lane Modification to Simulate Left Turn Lane Removal

Simulation Results

Review of recorded data from the traffic simulation period showed on average a queue of 3 to 4 vehicles on Walton Street in the combined eastbound left-turn / through lane at Walton Street and Ontario Street. There were very few instances where the queue in the eastbound approach leg on Walton Street did not clear in a single green-light cycle and those that did not, cleared on the next cycle. Figure 2 demonstrates the average length of queue / most common conditions observed in the eastbound left-turn / through lane at the end of a red-light cycle.

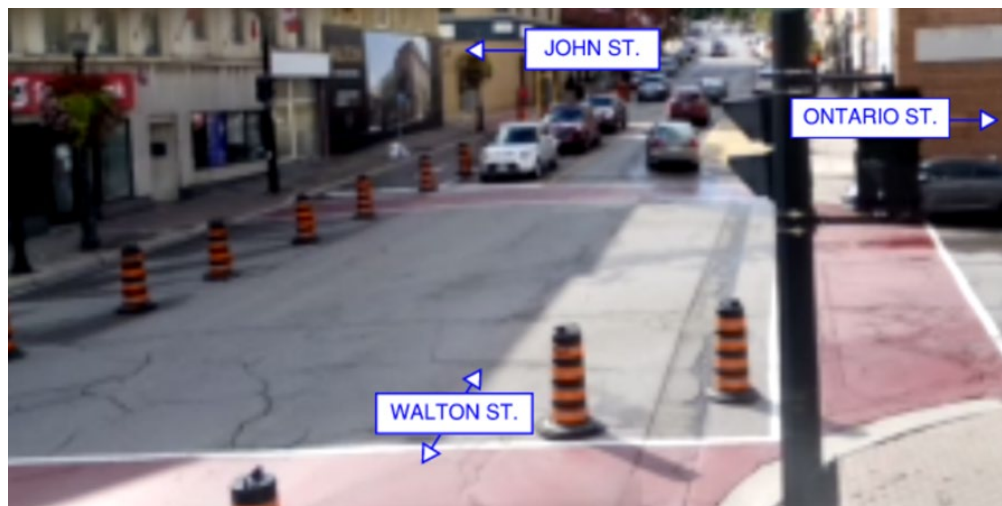


Figure 2: Average Length of Queue During Traffic Simulation at Walton Street / Ontario Street

In general, traffic moved smoothly through the Walton Street / Ontario Street intersection over the duration of the simulation period. When congestion occurred, it was when the following movements were made concurrently:

- A vehicle was in the eastbound approach lane on Walton Street waiting to make a left-turn movement onto Ontario Street building a queue on the eastbound approach blocking westbound vehicles wanting to make a left-turn to go southbound at John Street.
- A vehicle was in the westbound through lane on Walton Street waiting to make a left-turn movement onto John Street building a queue in the westbound lane, through the Walton Street / Ontario Street intersection, blocking eastbound traffic wanting to make a left-turn at Ontario Street.

While this situation did occur, it was proven to be infrequent and cleared relatively quickly. Congestion caused by the movements listed above is represented in the figures below, taken during the mid-day peak period on Thursday, September 9, 2021.

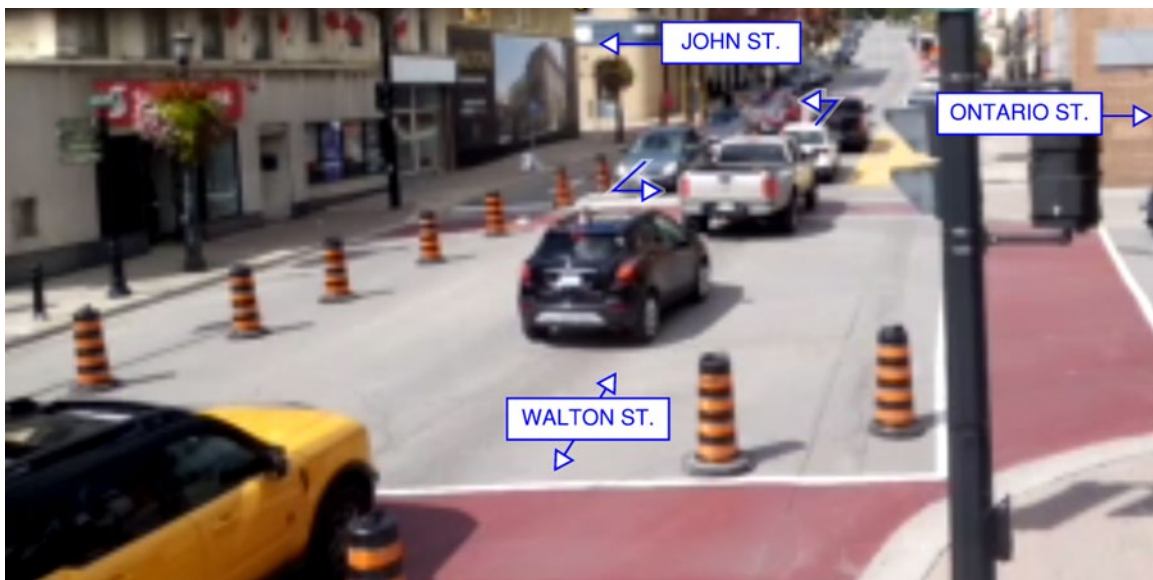


Figure 3: Walton Street and Ontario Street Intersection Looking West – Congestion Due to Left Turning Vehicles at John Street and Ontario Street (1)

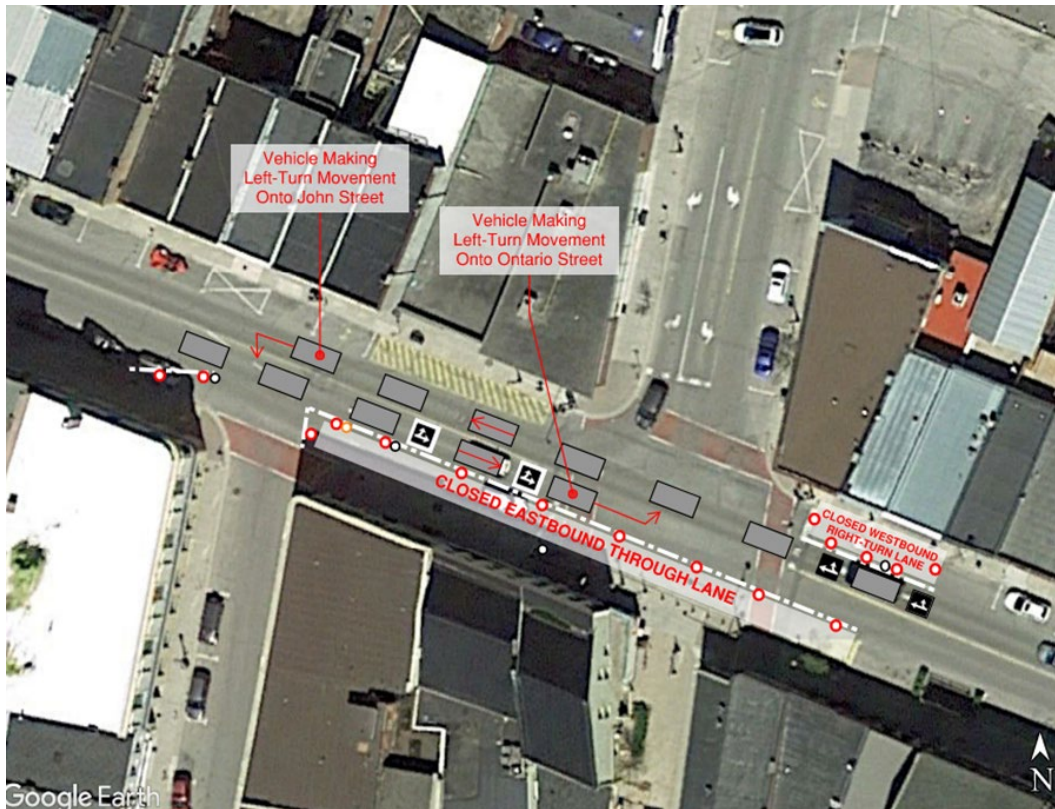


Figure 5: Schematic Plan View of Congestion Due to Left Turning Vehicles at John Street and Ontario Street

Of the five days studied, Thursday, September 9, 2021 had the highest combined total count of vehicles approaching the Walton Street / Ontario Street intersection in the eastbound and westbound directions (3,365 vehicles with Peak Hour Volume of 642 vehicles).

Queues in the eastbound approach leg did often extend through the intersection at Walton Street and John Street, however drivers generally were conscious of this and left space enough for vehicles to make the left-turn movement off Walton Street onto John Street without interference.

While there were a few observed back up issues during the simulation, generally the intersection continued to operate without issue. An analysis of the traffic data captured during the simulation showed that the intersection continues to operate at an acceptable level of service. Additional improvements to signage and signal timing modifications could be made to further mitigate the infrequent congestion that did occur.

Comment Form Results

Following the traffic simulation, additional consultation (referred to as 'Round 2 community engagement') was completed seeking further input on the key design elements presented in the April PIC (see Background) specific to Walton Street from Pine Street to Mill Street. The comment form included opportunities for the public to:

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- Select responses to structured questions related to alternative design concepts presented as part of the preliminary design at the April PIC; and
 - Provide their own comments

The comment period ran from September 15 to October 22 (38 days). A total of 184 unique responses were received along with two (2) comments submitted to the Design Team by e-mail. This compares to 79 responses received during the first round of community engagement.

The responses to four (4) structured questions included in the comment form are illustrated in **Attachment C**. The Round 2 comment form questions included a 'Do Nothing and Replace as Is' alternative for the key locations of Walton Street from Pine Street to Mill Street which was not included as an option for selection in the comment form following the April PIC.

The Cochingomink Trail that crosses Walton Street between Queen Street and Mill Street was the only structured question that respondents did not discuss further in comment submissions. 53.6% of respondents indicated they did not support the trail connection, while 33.9% were in support, and 12.6% had no preference. This area is identified as a high priority relating to safety and connectivity and identified as a downtown Trail head as part of future branding of the Riverwalk.

The narrative comments received through form/email submissions following the Simulation were reviewed by the project team and organized around the following key themes:

- **Parking:** Opposing views expressing desire to retain existing on-street parking versus improving the pedestrian space with larger sidewalk areas/bump outs. Other notable input related to parking included changing the approach to parking metering and utilizing/evaluating parking areas for the downtown beyond Walton Street.
- **Road Closure:** Suggestions for a permanent closure of Walton Street to vehicular traffic in the downtown core were limited but this issue was raised.
- **Crosswalks:** Responses noting issues with clarity of right-of-way at existing pedestrian crossings resulting in improper use and therefore, disruption of the flow of traffic and safety concerns.
- **Sightline Issues:** Responses suggesting improvement of sightlines at both the Walton Street / Pine Street and Walton Street / Queen Street intersections. Respondents noted safety concerns when travelling north, turning onto Walton Street at both intersections.
- **Trees:** Responses indicating a desire to add more trees and minimize tree loss, countered by approximately 50% fewer responses opposed to tree plantings in the downtown area.

Round 2 community engagement garnered narrative feedback as well as survey feedback related to the design options presented in the April PIC (see Background) for which no clear design decision was identified:

Walton and Ontario Intersection

Many survey respondents preferred the “Do Nothing, Replace as Is” or don’t change the street configuration alternative, however there were an equal amount or, close to an equal amount, of respondents that did want to see some change on Walton Street at Ontario Street.

Majority of narrative comments indicated lack of support for removal of existing turn lanes noting potential negative impacts such as, restriction to traffic flow, additional congestion, impedance of pedestrian traffic due to longer vehicle queues, and increased traffic on side streets.

Bump Outs

Structured questions showed 24.6% of survey respondents supported bump outs as presented, 20.1% supported adding additional bump outs, 28.5% supported reconstruing the road as is, and 26.8% supported removing existing bump outs.

Majority of respondents that provided additional comments on bump outs expressed lack of support for some or all of the proposed. Some additional verbal input was received by staff noting a concern with truck turning movements at the intersections if bump outs are implemented. This represents comment input over and above the structured survey questions which had 47 respondents opposed to bump outs and 131 interested in some number of bump outs on Walton Street.

While some of the input received related to bump outs suggested none should be added, bump outs would provide several benefits to address some of the other concerns raised such as safety of existing crosswalks. Bump outs can provide the ability to reduce crossing distances for pedestrians by up to 50% (if applied to both sides of the street) reducing exposure to travelling vehicles. Additionally, bump outs can allow for the repositioning of stop bars closer to the center of the crossing road improving site lines for stopped vehicles. While there may be a small loss of parking with introduction of bump outs it is felt that the safety benefits outweigh this loss.

Design Recommendations for Council’s Consideration and Approval

With consideration for the simulation results and narrative comments presented in the Sections above, structured question responses provided in **Attachment C**, and the fact that preliminary streetscape design elements were developed based on guidance from prior planning documents, staff would look to Council to provide further direction to the project team on how to proceed with detailed design of Walton Street from Pine Street to Mill Street. In particular, staff would look to Council to select one of the alternative options presented for each key location as presented below:

Walton Street (Pine Street to Brown Street)

Option 1: Neck-down type bump outs on both sides of the road for traffic calming. On-street parking on both sides of the road. Option 1 as presented in the Background section herein; or

Option 2: Replace as is.

Ontario Street and Walton Street

Option 1: Bump outs east and west of Ontario Street (north side), and an elongated curb extension at John Street to 30 m east of Ontario Street (97 m total length) which creates an 'urban plaza' type space at Lent Lane but results in loss of the eastbound dedicated left-turn lane and the westbound right-turn lane at Ontario Street. Option 1 as presented in the Background section herein; or

Option 2: An elongated curb extension at John Street to 30 m east of Ontario Street (97 m total length) which creates an 'urban plaza' type space at Lent Lane and allows for the retention of a dedicated eastbound left-turn lane but requires removing the dedicated westbound right turn lane. Option 2 as presented in the Background section herein; or

Option 3: Replace as is.

Should the Municipality proceed with Option 1 that involves the removal of the eastbound left-turn lane at Ontario Street, provision of signage west of John Street for approaching eastbound traffic and east of Ontario Street for approaching westbound traffic that requires drivers refrain from blocking the intersection should be incorporated to help ensure flow of traffic through the intersections is maintained. Additionally, further modification to signal timing can be provided to allow for a longer advanced eastbound green to ensure vehicles are cleared from the Walton Street queue reducing the likelihood of a John Street blockage.

Walton Street is a business and shopping destination for Port Hope residents and visitors. The goal of Walton Street should not be maximizing the number of vehicles that can be moved through the area, rather the goal should be creating a safe, walkable public realm that provides easy access to businesses and prioritizes pedestrians. A reasonable amount of congestion for an environment like Walton Street is desirable as vehicle speeds are reduced and the result is an area that feels more inviting to pedestrians. The safety benefits of providing curb extensions/bump outs coupled with the increased pedestrian space and reduced vehicle speeds contributes to achieving the pedestrian focused goal.

Cavan Street and Walton Street

Option 1: Improved bump outs on the west side of the intersection (north and south side) as presented in the Background section herein; or

Option 2: Remove bump outs.

Heritage District Gateway Sign

Option 1: Include 'Port Hope Heritage District' sign at the intersection of Walton Street and Mill Street as presented in the Background section herein; or

Option 2: Replace as is.

Cochingomink Trail Connection

Option 1: Provide a formalized connection of the Cochingomink Trail: or

Option 2: Replace as is.

The proximity of Queen Street to the riverside trail complicates options to create a formal crossing. There is an opportunity to consider additional bump outs to create more pedestrian space and encourage trail users to circulate through downtown.

Staging Recommendations for Council's Information and Future Consideration

It is understood that Council is interested in staging options for the future phases of the Walton Street Reconstruction. Comments received through public engagement show additional interest and concern amongst the public for planned staging approach and the local business impact as a result of construction. As such, options for staging have been presented below for Council's information only. As detailed design is advanced, the design team will engage the HBIA, businesses, and other key stakeholders to select the preferred approach. It is not necessary for Council to determine which option to select with respect to staging at this time.

Option 1

Given the scope of work required for the second phase of the Walton Street Reconstruction, it is expected the construction period would extend over two (2) years. Staging Option 1 considers that construction would be progressed from Mill Street as far west as achievable during the construction season with no clear, defined limit for Year 1.

Considering that the sanitary sewer, watermain, storm sewer and the road base will all be replaced throughout the entire length for Phase 2 of the Walton Street Reconstruction, it will be very difficult to maintain through traffic on the street during construction. In order to reduce the disruption to vehicle access during construction the work can be staged with sections of Walton Street being closed at different times.

For the staging of the road closures only sections of the road would be closed at one time. Based on the side street connections and access to Walton Street the following is one potential staging sequence in which the underground work would be completed, and the road base built up to final gravel grade of base asphalt:

Mill Street to east side of Queen Street

East side of Queen Street to east side of Ontario Street

East side of Ontario Street to east side of Cavan Street

East side of Cavan Street to Brown Street

Brown Street to west side of Pine Street

Detour routing for each of the stages would be updated to provide a clear way into the downtown and around the closed sections of Walton Street.

While road closures to vehicle access will be required, these closures will be structured to ensure that pedestrian access to businesses will be maintained throughout the construction period. This can be achieved by providing safety fencing between the road and the buildings along the existing sidewalks. When sidewalk bays need to be removed to replace individual services there would be a temporary sidewalk closure at that location and then the sidewalk replaced with temporary gravel or asphalt. At some point in the construction period the existing sidewalk would be removed and replaced. This would be timed to be outside of most business hours to reduce impact. During the initial curing time temporary ramps over the fresh concrete sidewalk may be required before the new sidewalk can be used.

Option 2

Another approach for the staging could be to span the work over two (2) years, similar to Option 1, splitting the project roughly in half at a defined location that would reduce traffic impacts during the second stage of the work. This location could vary but with the goal of providing improved access to the area completed in the first year, the west side of John Street from the Ganaraska River could provide for better traffic movement in Year 2. Stipulating the phase location will give all involved a clear limit of work as opposed to working towards a weather window. This approach could be staged similar to Option 1 within each year of construction, or in the interest of improved schedule, the entire length closed to through traffic.

This Option would require either the provision of temporary works between phases to allow for continued operation of existing sewers and watermain west of the transition area or alternatively the design could be modified to align with the phasing boundary, but this would still need some temporary connections to be made.

Similar to Option 1 pedestrian access to the downtown businesses would be maintained throughout the construction. While still disruptive it would be for a shortened period in each of the 2 years.

Staging Options 1 and 2 would also include mitigative measures to reduce the impacts of the closed road sections such as a parking and wayfinding (signage) plans to assist those coming to the downtown to get to the Walton Street businesses.

While this infrastructure renewal in the downtown is required and once complete should serve the downtown for another 75 to 100 years it will be disruptive while the work is completed. The Municipality may want to work with the HBIA, economic development staff and other stakeholders to promote the reconstruction as an attraction to draw people downtown to see the construction work and ultimately to visit the shops and businesses in the downtown. The work could even be branded to assist with the promotion such as "Historic Downtown Port Hope's BIG DIG". This initiative could be

coupled with other promotions from the HBIA with discount incentives or extended hours.

The Municipality could consider removing parking fees in the area parking lot and on street to further incent people to still come downtown. Additional initiatives such as keeping updated parking location mapping and potentially working with private landowners, HBIA and other stakeholders to develop temporary parking lots in areas of their private lands that are not being fully utilized, such as the Bell parking lot.

One other effort that may assist during construction is to appoint a Construction Ambassador for the project who would be the go-to person to address questions from the public, follow up with business's enquiries, bring various concerns or issues to the attention of the Municipality and/or the Contract Administrator.

Financial Considerations:

There are no significant resource implications associated with the recommended approach. Currently the design efforts are on budget and can be re-evaluated prior to finalization of the 2022 or 2023 Capital Budget depending on the timing for completion of the detailed design. The current expense was included in the 2021 Budget.

Communication and Public Engagement:

The second round of community engagement and consultation activities related to the Walton Street Reconstruction project are summarized below and illustrated graphically on **Attachment A**. **Attachment A** also illustrates the various media channels used to elevate public awareness of the project and the opportunities to be involved.

Consultation Activity

July 6, 2021

Results of first round of public consultation presented to Council and recommendation to proceed with additional public consultation to support the detailed design of Walton Street between Pine Street and Mill Street approved by Council.

Sept 8, 2021

Notified public of the Traffic Simulation planned for the Walton Street and Ontario Street Intersection.

Sept 9-14, 2021

Conducted Traffic Simulation at Walton Street and Ontario Street

Sept 15, 2021

Launched Feedback Comment Form Through myPortHope.ca

Oct 22, 2021

Closed Comment Form Through myPortHope.ca

Conclusion:

It is staff's position and opinion that the opportunity to enhance the public realm of downtown Port Hope is now. Disruption to the existing right-of-way required to facilitate underground infrastructure improvements provides an opportunity for the Municipality to implement the concepts developed through prior planning documents and create a safe, pedestrian-focused environment that will enhance the area and draw additional residents and visitors in and promote downtown Port Hope as a business and shopping destination.

Based on the input and guidance from Council received to date, the detailed design for Walton Street from Church Street to Pine Street has been completed and will be reconstructed in 2022. This will allow for part of the project to move forward which achieves the goal of staging the works over several years.

Based on input received following the second round of community engagement and consultation it is recommended that Council select a preferred design alternative of those presented herein for each of the specific (key) locations listed and direct staff to proceed with detailed design of Walton Street from Pine Street to Mill Street in accordance with the selected concepts.

Attachments:

Attachment A – Community Engagement Timeline

Attachment B1 – Key Themes from Narrative Comments, PIC 1 Feedback

Attachment B2 - Key Themes from Narrative Comments, Round 2 Feedback

Attachment C – September 9 – 14, 2021 Structured Survey Question Responses

Appendix D – Turning Movement Counts from Simulation Period