

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON SEPTEMBER 26, 2017</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>TRANSIT REROUTING OFF DUNDAS STREET IN DOWNTOWN</b>

**RECOMMENDATION**

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following report with respect to the planned rerouting of transit buses off Dundas Street in the downtown core **BE RECEIVED** for information.

**PREVIOUS REPORTS PERTINENT TO THIS MATTER**

- Civic Works Committee – October 4, 2016 – Infrastructure Canada Phase One Investments Public Transit Infrastructure Fund
- Civic Works Committee – December 12, 2016 – Dundas Place Environmental Assessment Study Report
- Civic Works Committee – April 24, 2017 – London Transit Commission Buses Off Dundas Street Update
- Strategic Priorities and Policy Committee – May 3, 2017 – Rapid Transit Alternative Corridor Review
- Strategic Priorities and Policy Committee – May 15, 2017 – Rapid Transit Corridors
- Strategic Priorities and Policy Committee – July 24, 2017 – Shift Rapid Transit Master Plan and Business Case

**COUNCIL’S 2015-19 STRATEGIC PLAN**

Municipal Council has recognized the importance of urban regeneration and transit. Dundas Place will invest in London’s downtown by creating a flexible street for shopping, leisure, civic activities, and celebrations. Rerouting of buses off Dundas Street supports mobility and Dundas Place and contributes to Council’s Strategic Plan under the Building a Sustainable City and Growing Our Economy Areas of Focus.

**BACKGROUND**

**Purpose**

On September 13<sup>th</sup> 2016, Council passed a resolution stating “the Civic Administration **BE DIRECTED** to work with the London Transit Commission to move the existing bus routes on the Downtown core section of Dundas Street by September 2017<sup>th</sup>.”

On April 24<sup>th</sup> 2017, the Civic Works Committee received a communication from K. Paleczny, General Manager, London Transit noting that the Commission will be

delaying the rerouting of buses off Dundas Street until April 2018. Buses will remain on Dundas Street throughout this fall and into 2018, with the bus route changes now scheduled to occur on Sunday, April 29, 2018.

This report provides Committee and Council with a preliminary description of the transit planned rerouting of buses off Dundas Street and the proposed infrastructure modifications currently under development to support the initiative. This work is included for Infrastructure Canada funding through Phase 1 of the Public Transit Infrastructure Fund (PTIF).

## DISCUSSION

### **Dundas Place**

This Dundas Place Environmental Assessment (EA) included a traffic and transit study that assessed the influences of the proposed changes to Dundas Street and reviewed the overall functionality of the downtown streets considering the influences of the currently identified downtown projects.

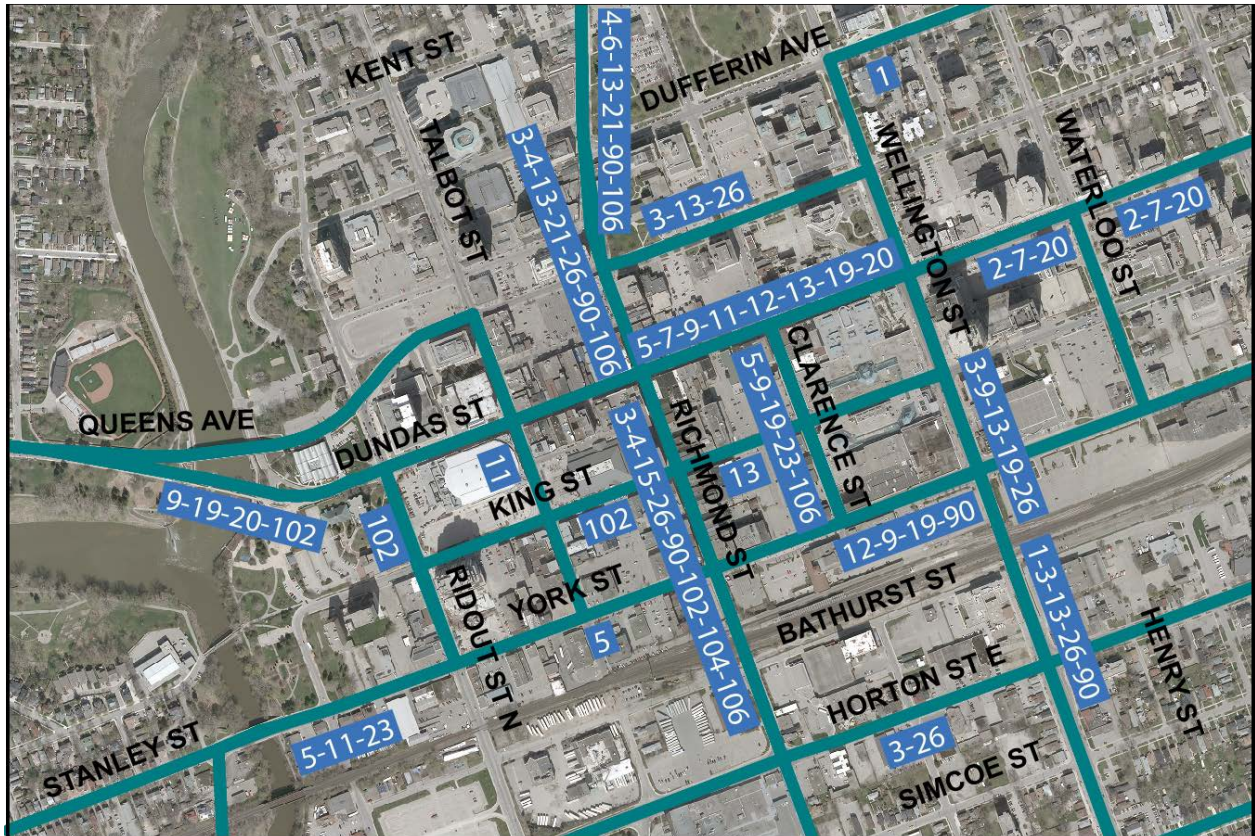
From a transit perspective, the EA recommended alternative includes removing transit routes from Dundas Street and rerouting buses to parallel and intersecting streets to ensure Dundas Place can function as a flexible street that is closed frequently for public events without disruption to transit riders. The EA was approved by Council in December 2016. The design of Dundas Place is underway for construction beginning in 2018.

### **Shift Rapid Transit**

On May 16<sup>th</sup> 2017, Council approved the Shift Bus Rapid Transit Network, with modifications related to the downtown routing as the preferred alternative for the completion of the Rapid Transit Master Plan. A one-way transit couplet on King Street (eastbound) and Queens Avenue (westbound) emerged as the preferred downtown rapid transit corridors. These future rapid transit lines will integrate with the local transit service. Therefore, any infrastructure work required for the creation of new transit stations required for the rerouting off Dundas Street as described herein is temporary until rapid transit implementation and is minimized in terms of the scope of planned work.

### **Description of Bus Rerouting**

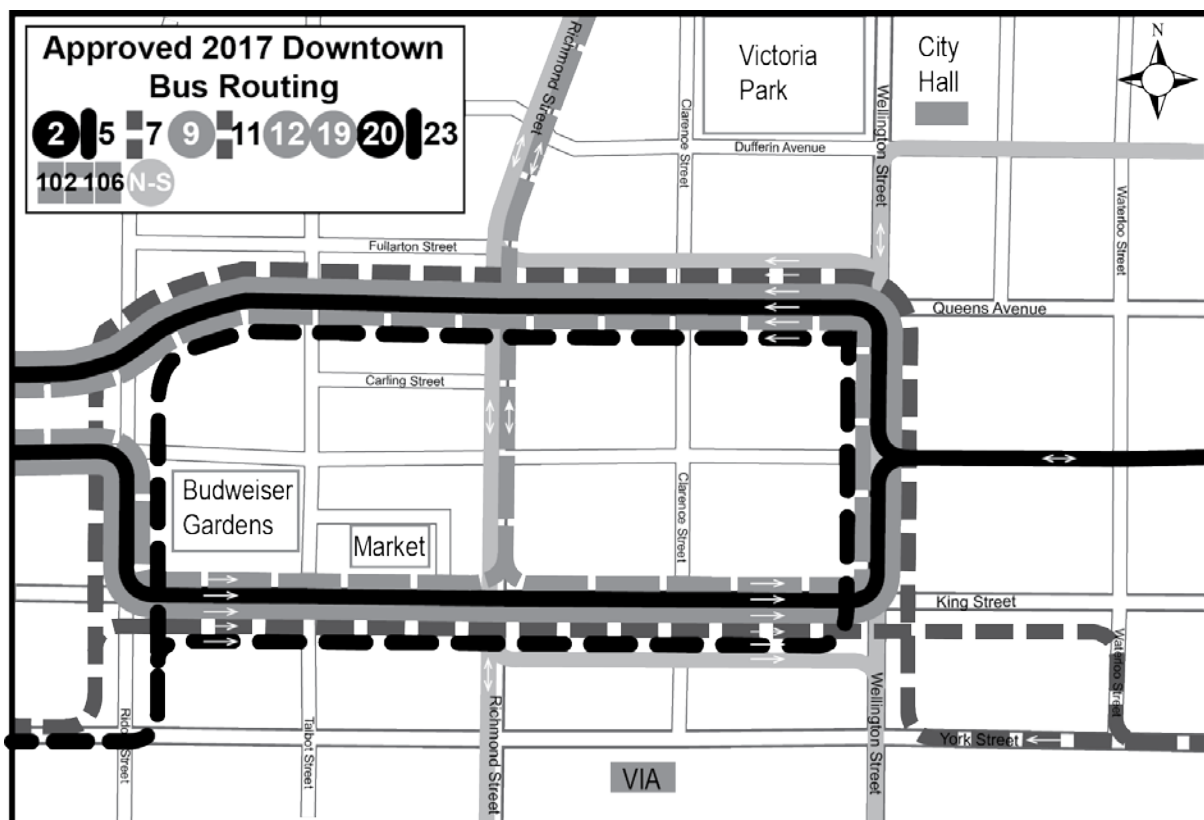
The removal of all bus service from Dundas Street between Wellington Street and Ridout Street involves the realignment of 10 routes (2, 5, 7, 9, 11, 12, 19, 20, 23, &102) which currently use Dundas Street in the downtown area. The existing bus routes on Dundas Street are illustrated in the figure below.



**Existing Bus Routes on Dundas Street**

Generally LTC's planned rerouting proposes that all eastbound buses will operate along King Street and all westbound buses will operate along Queens Avenue. Routes 5, 7, 9, 12, 19 and 23 which generally utilize downtown as a turn-around location, will utilize King Street to Wellington Street to Queens Avenue. As a result of this re-routing, King Street will carry approximately 1 eastbound bus every 1 to 2 minutes during peak hours with the same occurring with westbound buses on Queens Avenue. Further refinements may be made by LTC to these routes as appropriate.

The LTC's re-routing concept is shown below, with the changes scheduled to come into effect on Sunday April 29<sup>th</sup> 2018.



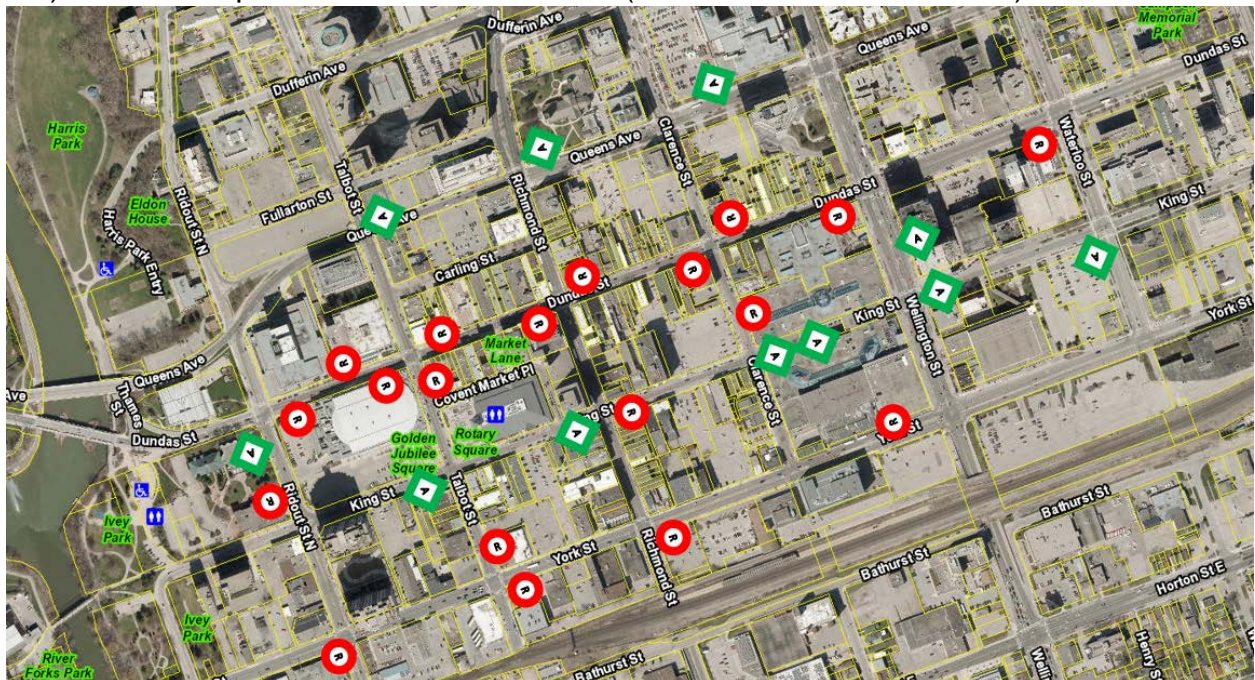
**LTC Proposed Downtown Routing Concept**

## Infrastructure Requirements

Administration has been working with London Transit Commission as directed by Council on route reconfigurations in coordination with Shift Rapid Transit, to move the existing bus routes off the Downtown core section of Dundas Street.

The recommended plan to reroute buses off Dundas Street includes the relocation or removal of existing bus stops and stop amenities, removal of some on-street parking, removal or relocation of parking metres and pay stations, relocation of concrete curbs, as well as new pavement marking and signage. Space requirements at some existing transit stops are increased to accommodate increased projected transit volumes as established based on input from LTC.

The creation of new parking spots to offset removals is included where space will become available by the relocation or removal of bus stops. Several areas for new parking spots will become available on adjacent streets once the re-routing takes place. The figure below shows existing bus stops that will be removed (identified as a circular “R”) and bus stops to be added or modified (identified as a diamond “A”).

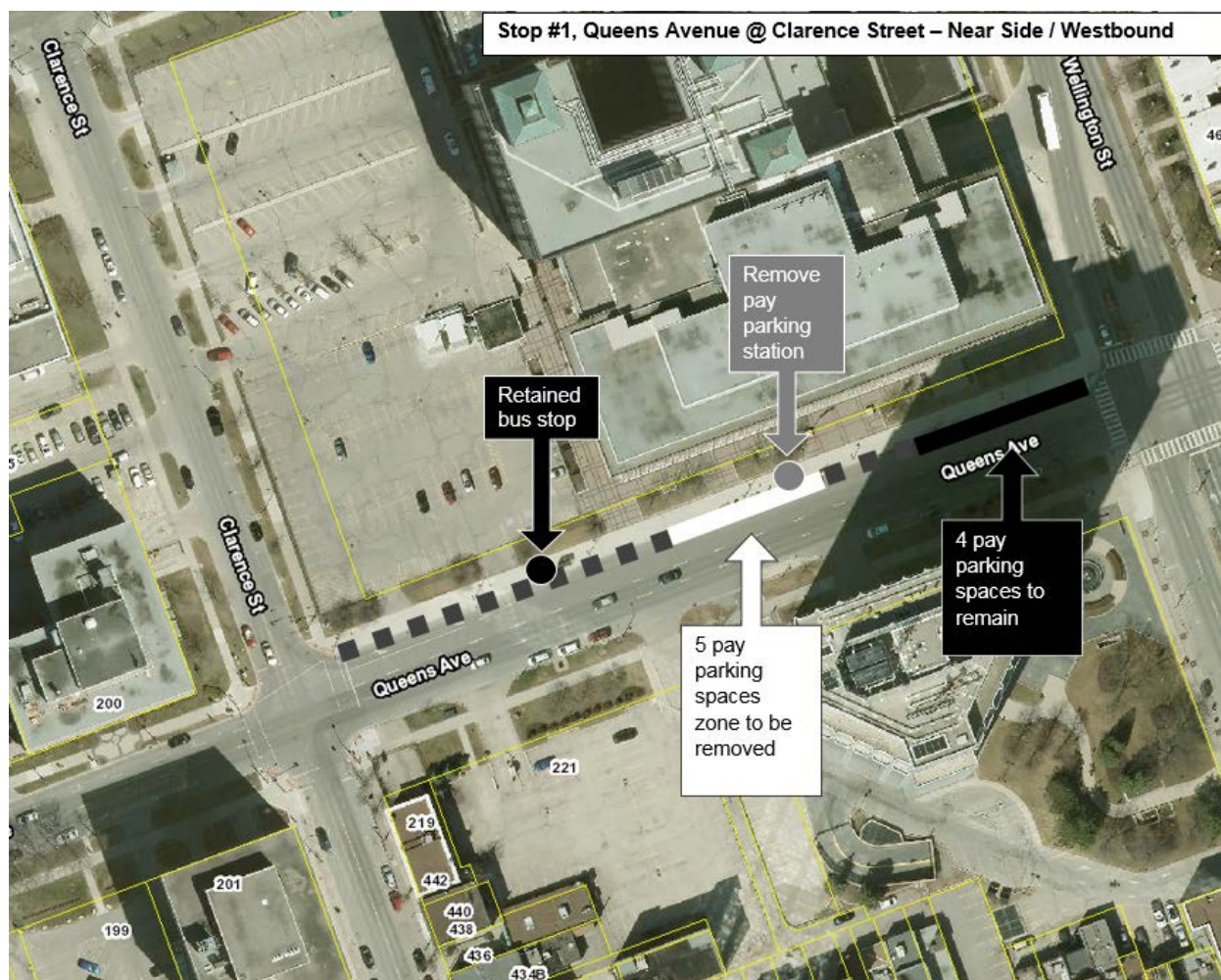


**Proposed Added and Removed Bus Stops**

The bus stop modifications and associated impacts of the new bus stops are described in more detail as follows:

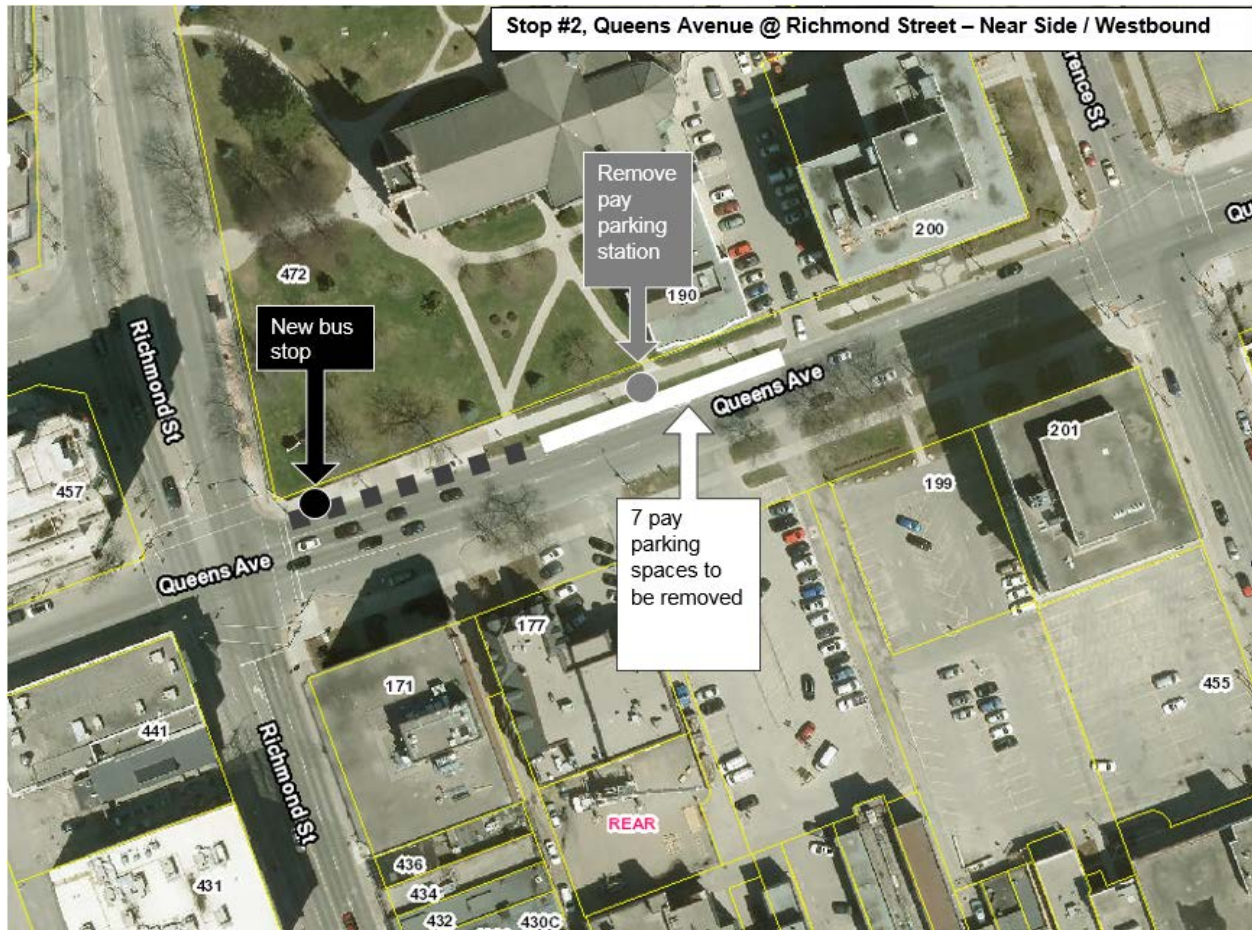
## Queens Avenue - Wellington Street to Ridout Street:

### Stop #1, Queens Avenue @ Clarence Street: Near Side / Westbound



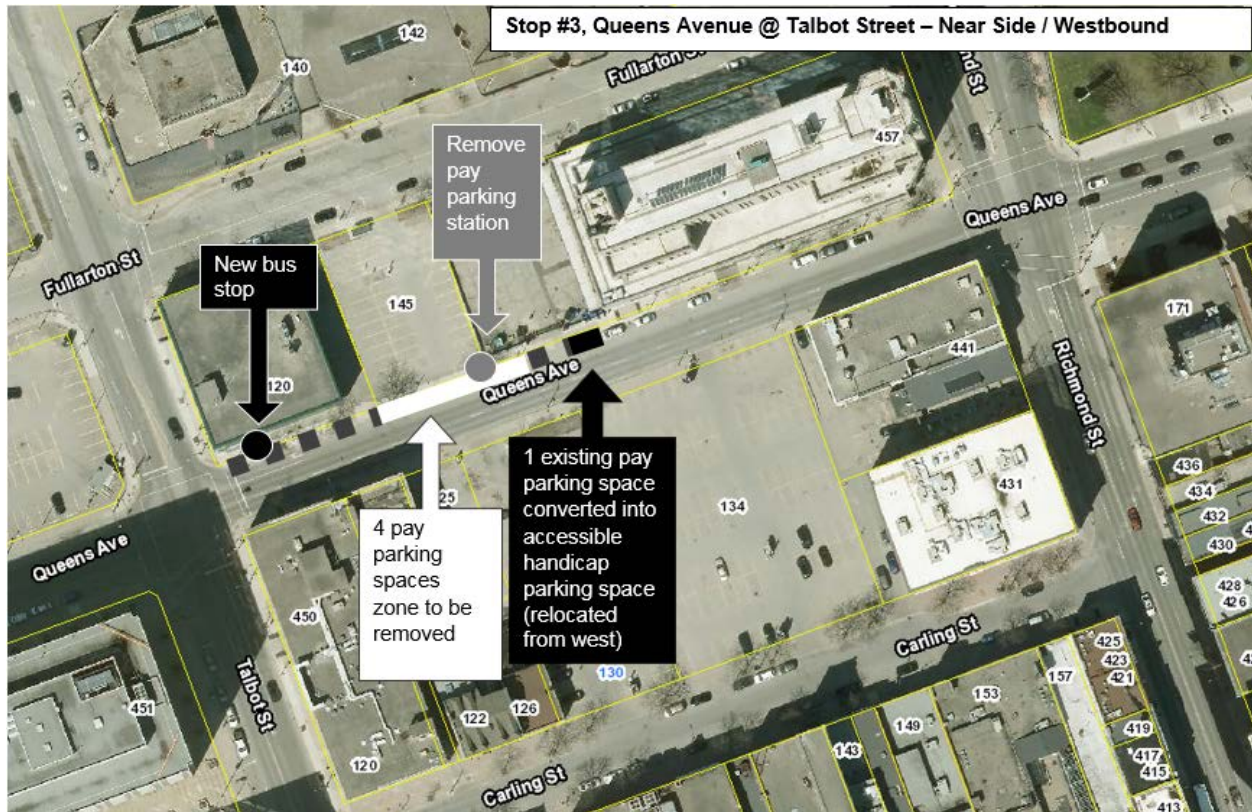
- Existing transit stop located 45 metres east of Clarence Street
- The transit stop's storage length will be lengthened to the east in order to accommodate up to 3 buses (2 standard and 1 articulated)
- The existing bus shelter will be retained
- Removal of 5 pay parking spaces on the north side of Queens Avenue
- Westbound right turn lane to northbound Clarence Street retained

## Stop #2, Queens Avenue @ Richmond Street: Near Side / Westbound



- New bus stop
- Bus Stop ID pole located 16 m east of stop bar with Richmond Street. Before the Bus Stop ID pole, there would be 74 m of bus storage plus 15 m to allow buses to taper into traffic (89 m total)
- The transit stop will be able to accommodate up to 4 buses (3 standard and 1 articulated)
- Removal of 7 pay parking spaces on the north side of Queens Avenue east of Richmond Street
- Retention of parking for up to 5 vehicles on Sunday only
- Addition of 3 boulevard trees (5 total) with new tree grates
- Relocation of 1 accessible parking space

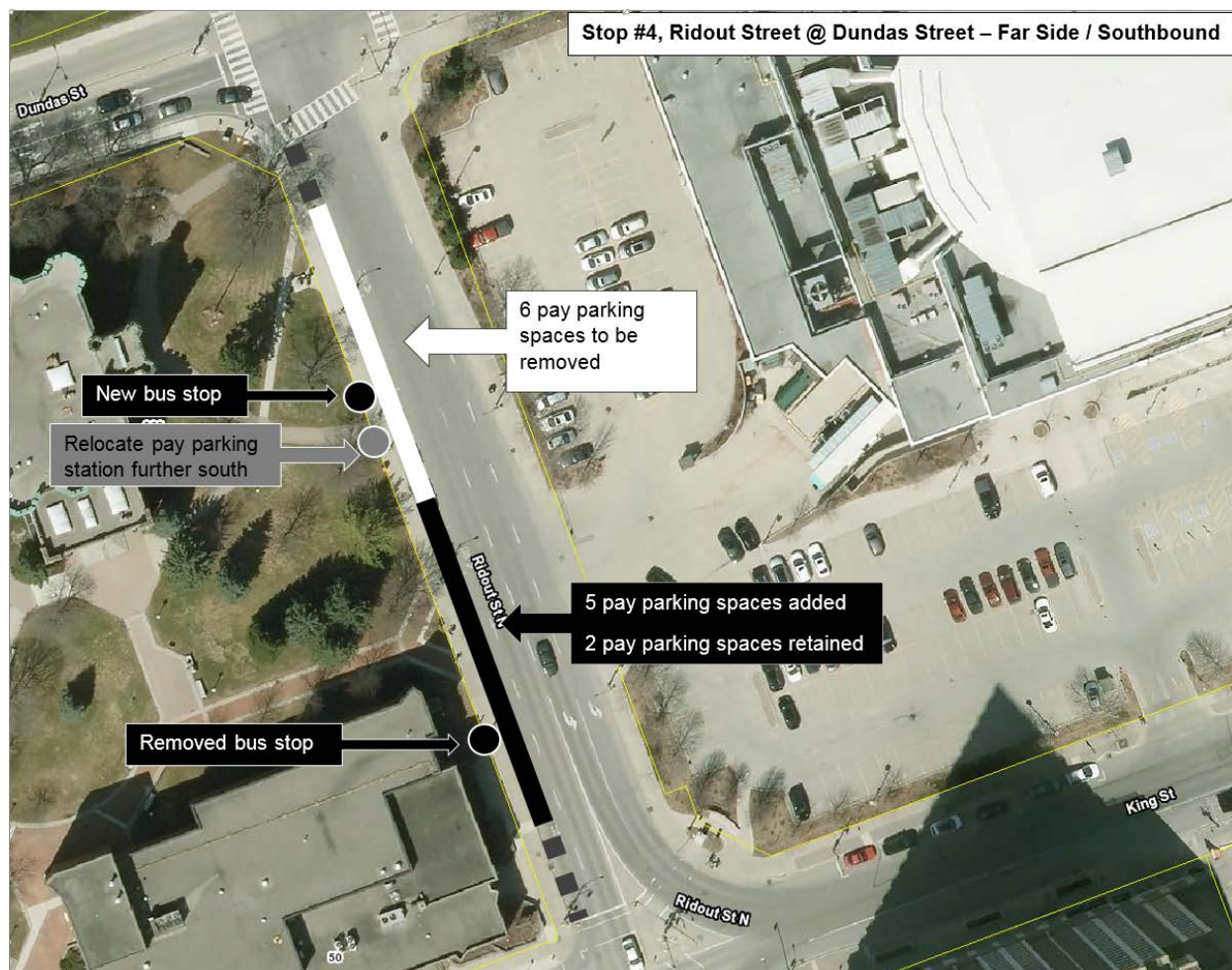
### Stop #3, Queens Avenue @ Talbot Street: Near Side / Westbound



- New bus stop
- Bus Stop ID pole located 3 m east of stop bar with Talbot Street. Before the Bus Stop ID pole there would be approximately 60m of bus storage plus 15m to allow buses to taper into the bus storage area (75 m total).
- Removal of 1 boulevard tree
- New tree grates surrounding remaining 4 boulevard trees
- Removal of 5 pay parking spaces on the north side of Queens Avenue
- Relocation of 1 accessible parking space

## Ridout Street - Queens Avenue to King Street:

### Stop #4, Ridout Street @ Dundas Street: Far Side / Southbound

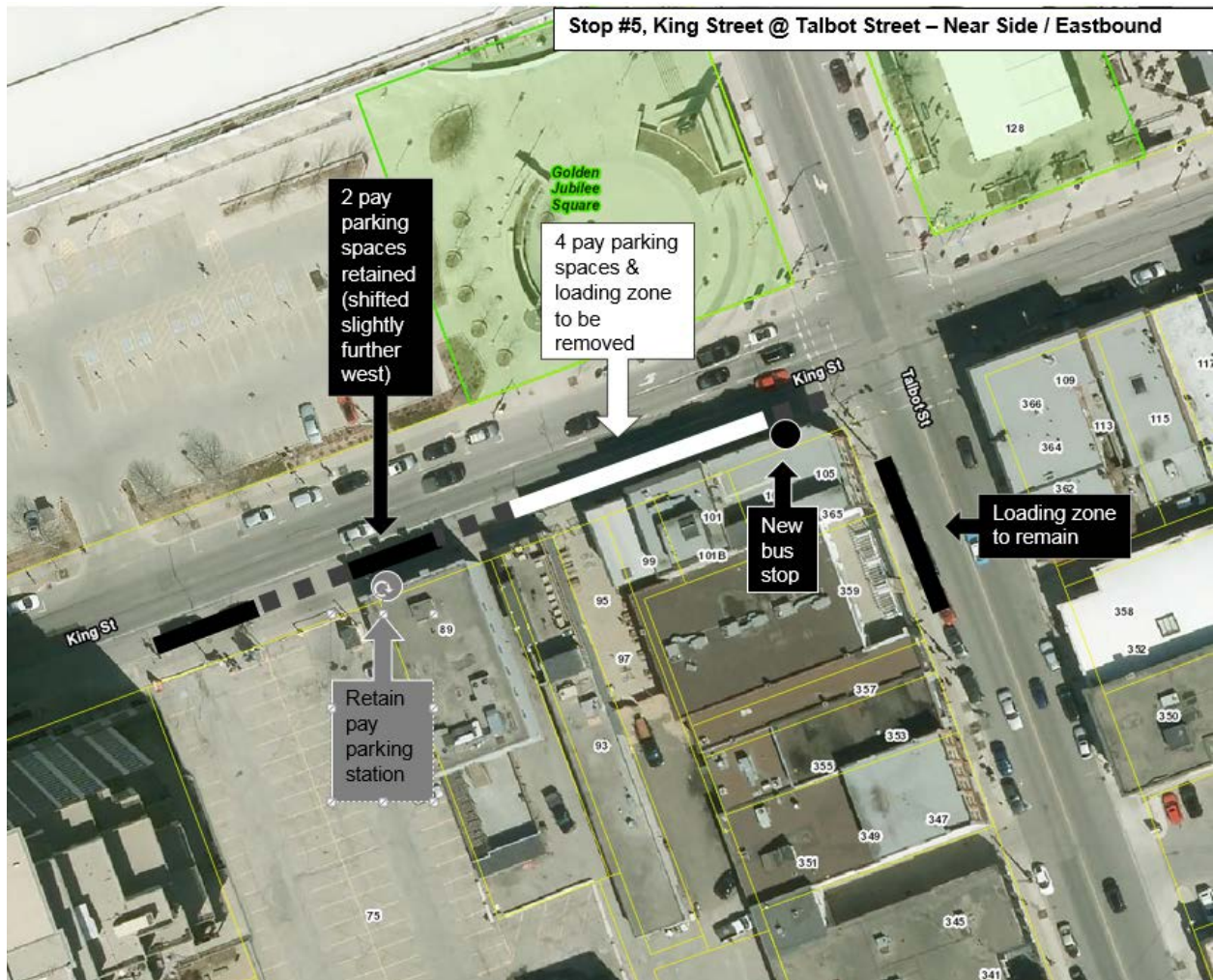


- Relocation of existing stop currently found near-side of King Street
- Bus Stop ID pole located 36 m south of Dundas Street intersection (33 m bus storage + 3 m clearance). Past the Bus Stop ID pole, there would be 15 m to allow buses to taper back into traffic (51 m total)
- The transit stop will be able to accommodate 2 buses (1 standard and 1 articulated)
- Removal of 6 pay parking spaces on the west side of Ridout Street
- Relocation of pay parking station
- Addition of 5 pay parking spaces at the existing bus stop location
- Net loss of 1 pay parking space



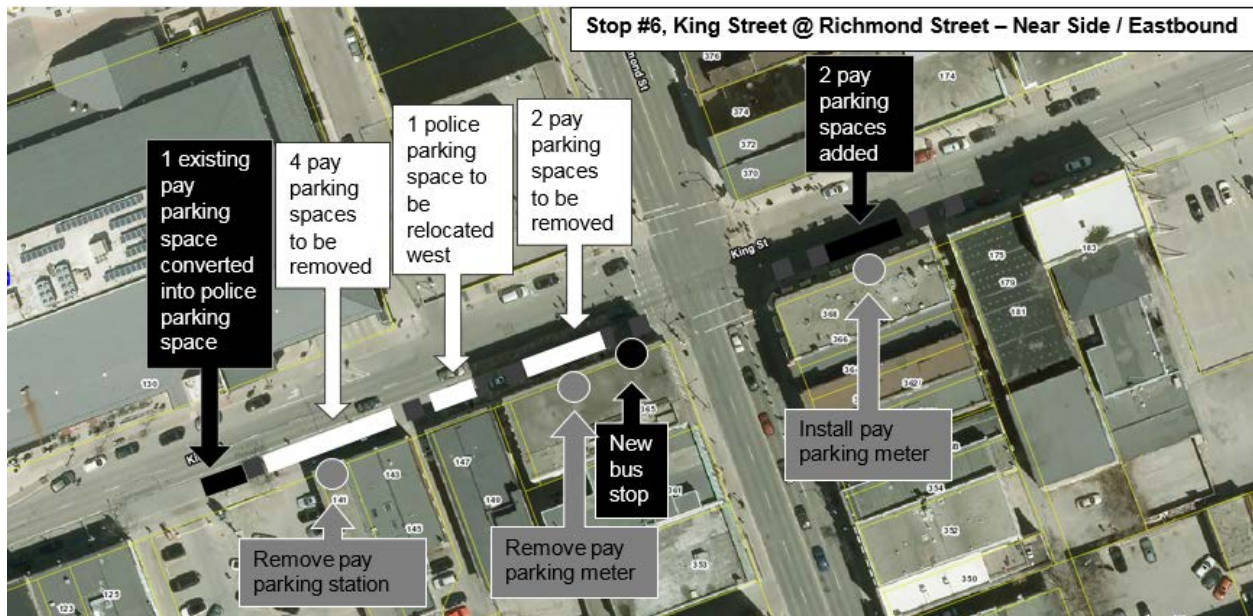
## King Street - Ridout Street to Wellington Street:

### Stop #5, King Street @ Talbot Street: Near Side / Eastbound



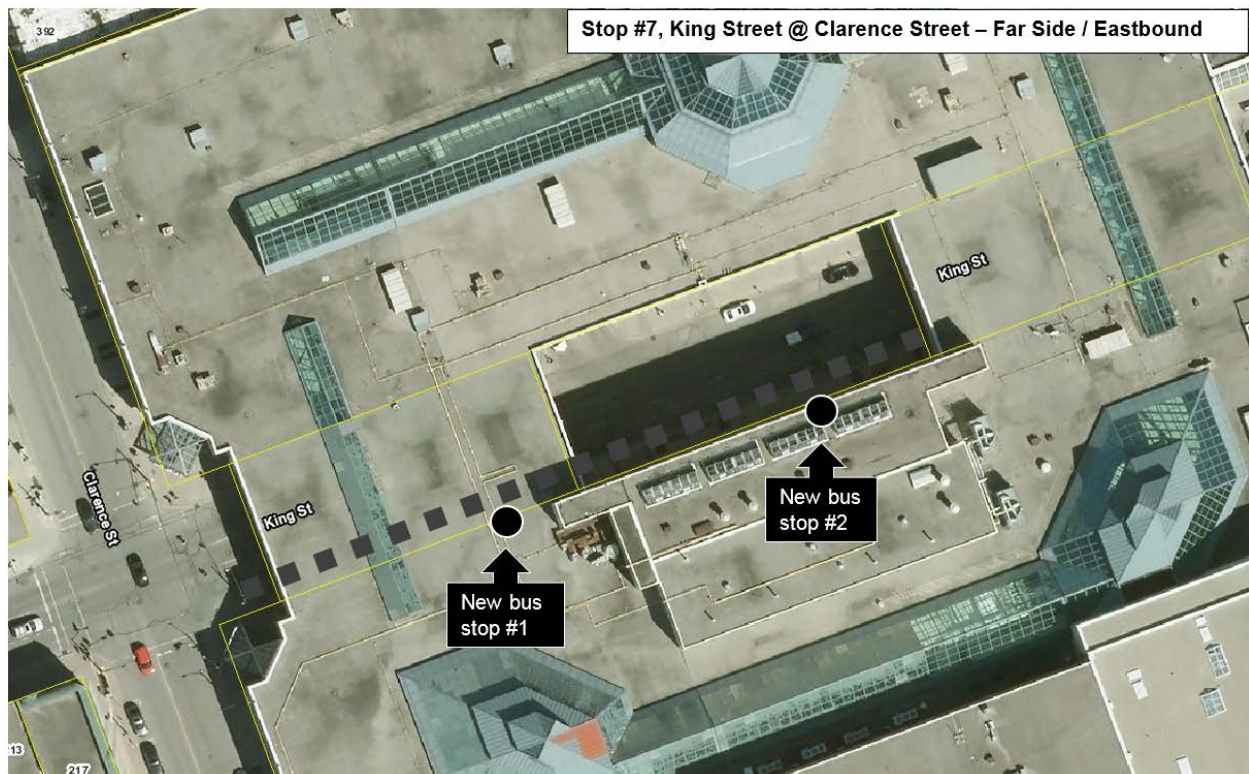
- New bus stop
- Bus Stop ID pole located 5 m west of stop bar with Talbot Street. Before the bus Stop ID pole, there would be 33 m of bus storage plus 15 m to allow buses to taper into traffic (53 m total)
- The transit stop will be able to accommodate 2 buses (1 standard and 1 articulated)
- Removal of 4 pay parking spaces and loading zone on King Street
- Due to the removal of transit from Talbot Street, a total of 3 pay parking spaces will be added along the east side of Talbot Street north of York Street
- Loading zone to remain on Talbot Street

Stop #6, King Street @ Richmond Street: Near Side / Eastbound



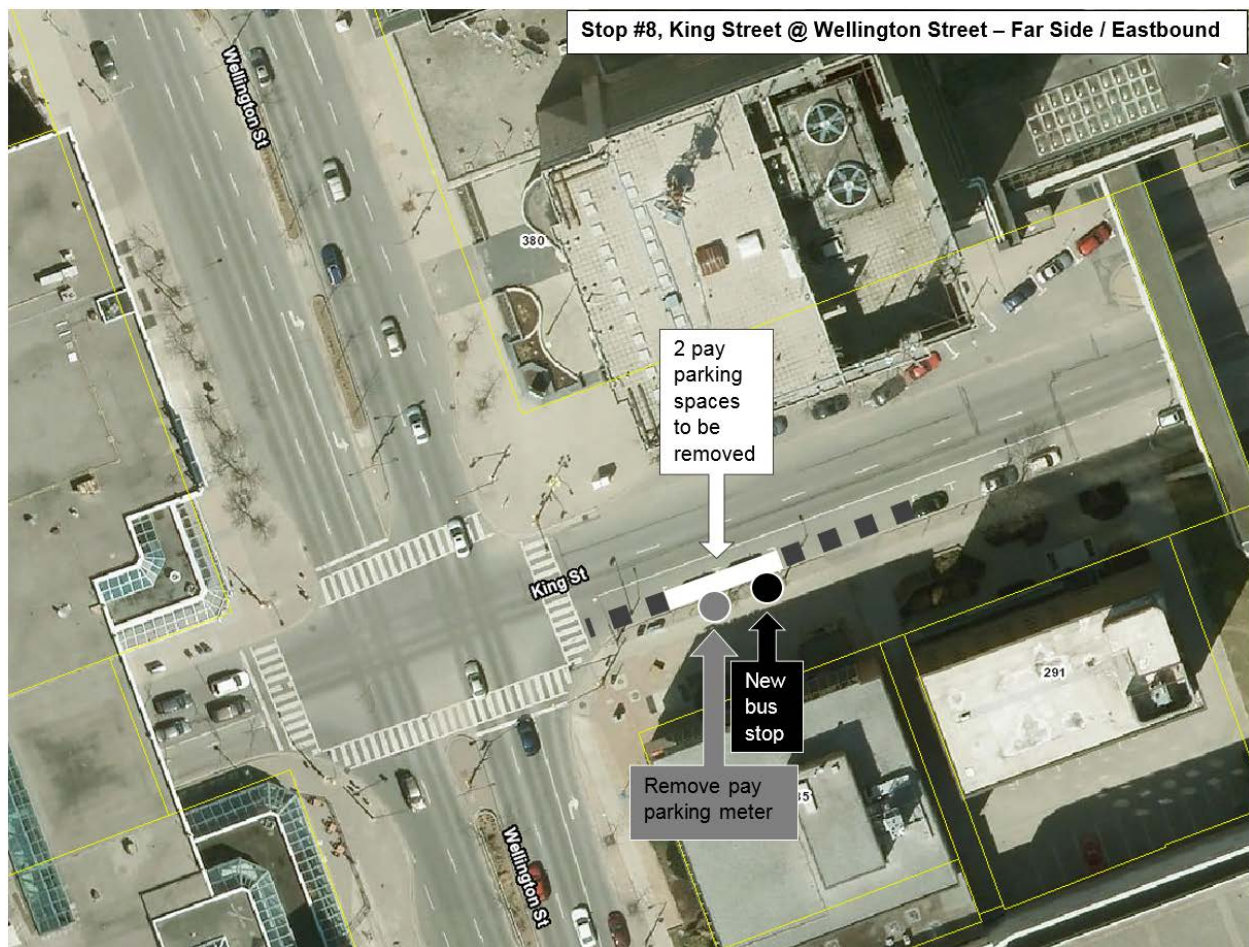
- New bus stop (Existing far-side stop to be removed)
- Bus Stop ID pole located 5 m west of stop bar with Richmond Street. Before the Bus Stop ID pole, there would be 51 m of bus storage plus 15 m to allow buses to taper into traffic (72 m total)
- The transit stop will be able to accommodate 3 buses (2 standard and 1 articulated)
- Relocation of police parking space and removal of 7 pay parking spaces on the south side of King Street west of Richmond Street
- Addition of 2 pay parking spaces on the south side of King Street east of Richmond Street where the existing bus stop will be removed.

## Stop #7, King Street @ Clarence Street: Far Side / Eastbound



- Existing bus stop (modified) underneath Citi Plaza structure
- Two separate bus stops / layovers, one near-side the mall's loading entrance, one far-side the loading door
- Both stops would have space to accommodate 1 standard and 1 articulated bus (2 standard + 2 articulated in total)
- First stop to have Bus Stop ID pole located 36 m east of Clarence Street intersection with 33 m bus storage + 3 m clearance beyond intersection
- Second stop to have Bus Stop ID pole located 36 m east of loading door with 33 m bus storage + 3 m clearance beyond loading door
- No parking impact
- Due to the removal of transit from Clarence Street, a total of 5 pay parking spaces will be added along the east side of Clarence Street immediately north of King Street.
- "Hatched" pavement marking in front of Citi Plaza's loading entrance to ensure buses don't block this area

## Stop #8, King Street @ Wellington Street: Far Side / Eastbound



- New bus stop
- Bus stop ID pole located 18 m (15 m bus storage + 3 m clearance beyond intersection) east of Wellington Street. Past the Bus Stop pole, there would be 15.0m to allow buses to taper back into traffic (33 m total)
- The transit stop will be able to accommodate 1 standard bus
- Removal of 2 pay parking spaces on the south side of King Street east of Wellington Street
- Removal of the pay parking meter

**Waterloo Street - Just south of King Street:**

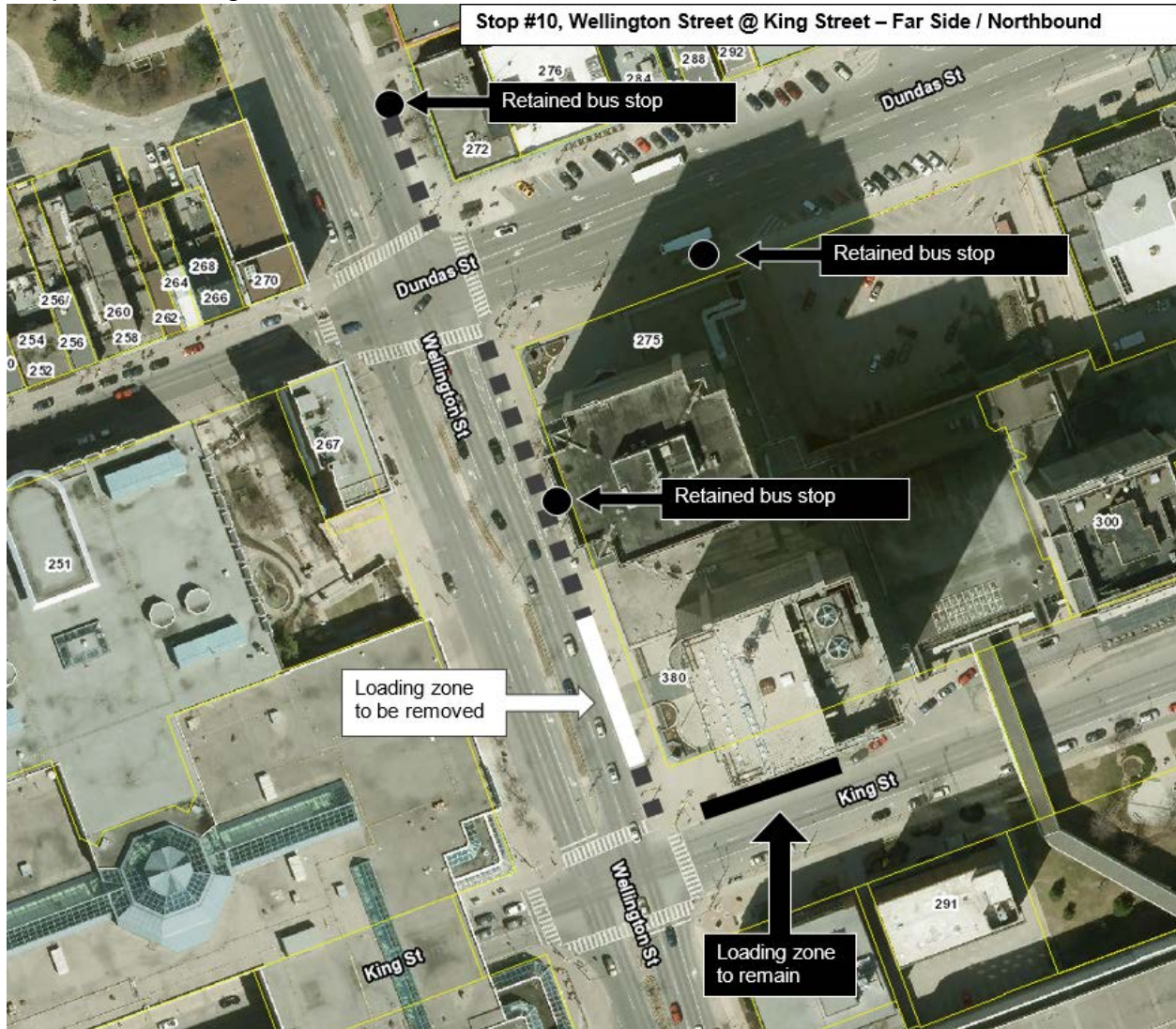
**Stop #9, Waterloo Street @ King Street: Far Side / Southbound**



- New bus stop
- Bus stop ID pole located 18 m (15 m bus storage + 3 m clearance beyond intersection) south of King Street. Past the Bus Stop pole, there would be 12 m to allow buses to taper back into traffic (30 m total)
- The transit stop will be able to accommodate 1 standard bus
- New 15 m long concrete pad between curb and sidewalk adjacent to bus storage area
- Removal of 3 pay parking spaces
- Retention of 2 pay parking spaces south of new stop
- Removal and relocation of pay parking meters
- This stop will come into service in fall 2017, serving the #7 route. The bylaw amendment to support the parking changes for this new bus stop was approved at the September 5, 2017 Council Meeting

## Wellington Street – From King Street to Queens Avenue:

### Stop #10, Wellington Street @ Dundas Street: Near Side / Northbound



- Existing bus stop located south of Dundas Street
- Bus stop ID pole located 40 m south of Dundas Street. Before the Bus Stop ID pole, there would be 55 m of bus storage to accommodate 1 articulated bus and up to 3 standard buses. North of the bus stop, the right lane converts into a 40 m long right turn lane
- Removal of loading zone on Wellington Street just north of King Street to extend the bus storage length
- Retention of loading zone on King Street just east of Wellington Street
- No changes to on-street parking
- Maintain the northbound far side bus stop on Wellington Street at Dundas Street
- Maintain the eastbound far side bus stop on Dundas Street at Wellington Street

## Parking Impact

The creation of new bus stops requires the removal of on-street parking. Where opportunities present, new spaces are added to mitigate. The impacts are summarized below:

	Removed Parking	Added Parking	Net Parking Impact
Queens Avenue*	17	0	-17
Ridout Street	6	5	-1
King Street	13	2	-11
Waterloo Street	3	0	-3
Wellington Street	0	0	0
Clarence Street	0	5	+5
Talbot Street	0	3	+3

*\* Space for the parking of up to 5 vehicles on Queens Avenue east of Richmond will be provided on Sundays only*

The net parking loss in downtown as a result of the rerouting of buses off Dundas Street is 24 parking spaces. Business owners fronting the specific areas will be notified of the changes. A total of 8 additional on-street parking spaces will be added along Clarence Street and Talbot Street due to the removal of transit from those streets. Some of these spaces may transitionally serve as business loading zones to be coordinated with the closure of Dundas Street during construction of the Dundas Place project.

The associated parking impacts are being incorporated into the Downtown Parking Strategy which will bring forth recommendations to manage both on and off-street parking demands.

## Financial Considerations

The works needed to move the bus stops onto the new routes were included in an Infrastructure Canada funding application under the PTIF. The PTIF supports investments that meet immediate public transit priorities including capital projects for the rehabilitation, optimization and modernization of public transit infrastructure. PTIF provides an opportunity to implement the infrastructure modifications with federal funding of 50% of the project costs.

A request value of \$300,000 was identified in the PTIF application for the rerouting of buses off Dundas Street, which was approved and formalized earlier in 2017. Considering that integration with the Queens Avenue Cycle Track is no longer necessary, the final cost to implement the rerouting is anticipated to be well beneath this estimate given the majority of the works consist of changes to pavement marking and signage, rather than major civil works. The majority of the new stops are occurring on roads where Bus Rapid Transit is planned, meaning the majority of these changes will only be temporary, and ultimately reconfigured through the construction of Bus Rapid Transit.

## Implementation Timing

The new transit stations are required to be operational by April 2018 subject to coordination with Dundas Place construction. In order to meet this target, the minor civil

works to support the April 2018 implementation are occurring in late summer / early fall 2017 due to weather requirements for the work.

Changes to pavement markings, parking signage, and pay parking stations in order to support the on-street parking changes will occur in March and April 2018, in the weeks surrounding the bus route changes in the downtown.

The necessary amendments to the Traffic By-law in order to support these changes will be brought forward to the Committee in March 2018 for endorsement.

<b>CONCLUSION</b>
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The transitioning of buses off Dundas Street in the downtown core requires the completion of infrastructure modifications on the parallel routes. Infrastructure upgrades are required to ensure pedestrian safety and proper transit operation.

The infrastructure work to facilitate the rerouting of buses off Dundas Street has been approved for PTIF funding as an opportunity to support investments that meet immediate public transit priorities.

Notification will be sent to businesses and property owners that front these specific areas. While some minor civil work is already occurring, the majority of the work of pavement marking and signage to support the parking and bus stop changes will occur in March and April and to be completed by April 29, 2018 subject to weather conditions.

### **Acknowledgements**

This report was prepared by Maged Elmadhoon, Traffic & Transportation Engineer with assistance from Tim Kooistra, Transportation Technologist of the Transportation Planning & Design Division as well as input from Katie Burns, London Transit Commission.

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