

## Appendix 7

### Mobility during construction – Confederation Line West

The construction of facilities required to operate a Transitway detour along Scott Street between Tunney's Pasture Station and Dominion Station will require limited lane reductions, while maintaining at least one lane per direction. This Transitway detour will result in buses operating in general traffic along Scott Street between Churchill Avenue and Tunney's Pasture Station, although an exclusive eastbound transit lane will be provided between Lanark Avenue and Island Park Drive. To limit the impact of the transit detour on nearby residents, the detour is not permitted to enter into service prior to December 2021, and will include enhancements to pedestrian and cycling safety at four signalized intersections. Additionally, the MUP on the north side of Scott Street will be increased in width to four metres. During the Transitway detour, the Westboro Station platforms will be relocated to Scott Street.

West of Churchill Avenue, Scott Street will be extended as a transit-only roadway to Dominion Station. This transit-only roadway will be on the south side of the existing Transitway until a point just east of Roosevelt Avenue, at which point it will cross to the north side of the existing Transitway (south of Workman Avenue) until it meets the Sir John A MacDonald Parkway in the vicinity of existing Dominion Station. The Roosevelt Avenue pedestrian bridge will be removed prior to the beginning of this detour phase, and a temporary bridge for the transit-only roadway will be installed. This temporary bridge will be removed following the removal of the Transitway detours and the pedestrian bridge will be reinstated in its original alignment. During the Transitway detour, pedestrians using the Roosevelt Avenue pedestrian bridge will be detoured to the east or the west (to cross the Transitway at either Churchill Avenue or at the Sir John A MacDonald Parkway).

Transitway service will continue to operate in mixed traffic along the Sir John A Macdonald Parkway between Dominion Station and Lincoln Fields Station.

The Transitway segment between Lincoln Fields Station and Iris Station will remain open and in service at all times during construction until after substantial completion on the Confederation Line West extension. The existing Lincoln Fields Station bus loop will be decommissioned, and will operate in a temporary location until revenue service has been achieved and the ultimate bus loop can be opened in conjunction with LRT service

The Transitway segment between Iris Station and Baseline Station will be closed with a detour provided along Iris Street and Woodroffe Avenue. Woodroffe Avenue will be modified to facilitate the detour. In the northbound direction, a bus-only lane will be provided to supplement the existing two general traffic lanes between Baseline Road and Iris Street. In the southbound direction, one of the three general traffic lanes at the Baseline Road intersection will be re-purposed as a bus-only queue jump lane. In addition, a southbound cycle track and boulevard will be provided on the west side of Woodroffe from north of Iris Street to south of the signalized intersection with the

Pinecrest Creek Pathway. Crossrides in both northbound and southbound directions will also be provided at the intersection of Woodroffe Avenue and Iris Street. After LRT construction is complete and the Transitway detour is removed, a northbound cycle track will be provided on the east side of Woodroffe from the Pinecrest Creek Pathway intersection connecting to the crossride at Iris Street. Similar to Scott Street, lane closures at off-peak periods will be permitted on Woodroffe in order to facilitate the construction of the above-noted facilities.

Queensway Station will remain open and in service at all times during construction until after substantial completion of the Confederation Line West extension, at which point the station will be decommissioned.

Pinecrest Road will be completely closed for one weekend in order to install roadway decking that facilitates keeping all lanes of Pinecrest Road open during construction of the LRT grade separation.

Carling Avenue will be reduced from a 5-lane to a 4-lane cross section for approximately two years during the construction of the LRT bridge in that area; the impact on traffic resulting from this reduction is expected to be moderate.

The Transitway segment between Pinecrest Station and Moodie Station will be closed, and the detour route will primarily be on Highway 417. This routing will, in essence, be a return to the conditions as they existed prior to the extension of the Transitway from Pinecrest Station to Bayshore Station in 2010, and the West Transitway Extension to Moodie Drive in 2017. To improve the service reliability associated with this detour, a new temporary on-ramp will be built at Holly Acres Road to allow direct access to eastbound Highway 417 from the eastbound off ramp; this connection will improve travel times for eastbound buses, some of which will bypass Bayshore Station. To better ensure the performance of this detoured section of Transitway, the southbound-to-eastbound on-ramp from Richmond Road to Highway 417 will be temporarily closed until the Transitway detour has been removed.

At Moodie Drive, the south-west ramp from Moodie to westbound Highway 417 will be closed for a single construction season to allow for the construction of the LRT grade separation required to access the new Moodie LMSF. Lane reductions on Moodie Drive (outside of peak hours) will need to occur as well to allow the construction to proceed.

Additional lane reductions will be required on various roads; however, the impacts are expected to be less significant. The greatest disruptions, aside from those specifically listed above, will be on Richmond Road, where lane reductions will be required for the locations where the tunnel crosses Richmond Road.

#### Mobility during construction – Confederation Line East

In order to undertake construction on the Confederation Line East extension, OR 174 is required to be fully closed between Blair Road and Montreal Road for one weekend to

allow the Transitway “flyover” bridge demolition and removal. The City and DB Co will strategically deploy portable variable message signs (PVMS) to direct traffic to alternative routes, as well as sign a primary detour route, likely to be via Montreal Road and Ogilvie Road.

In addition to this full weekend closure, there will be major construction projects taking place along OR 174; none of these projects will cause any peak hour lane closures, although off peak lane closures will be permitted. The replacements of the OR 174 overpasses of Montreal Road will also require weekend closures of Montreal Road and OR 174, with PVMS employed to direct traffic to alternate routes in addition to the signed primary detour route.

Peak period impacts on transit are expected to be minimal with respect to the Confederation Line East extension, with only one major routing change between Blair Station and access to and from OR 174. The existing Transitway flyover ramp is to be decommissioned, and buses are to be re-routed as follows:

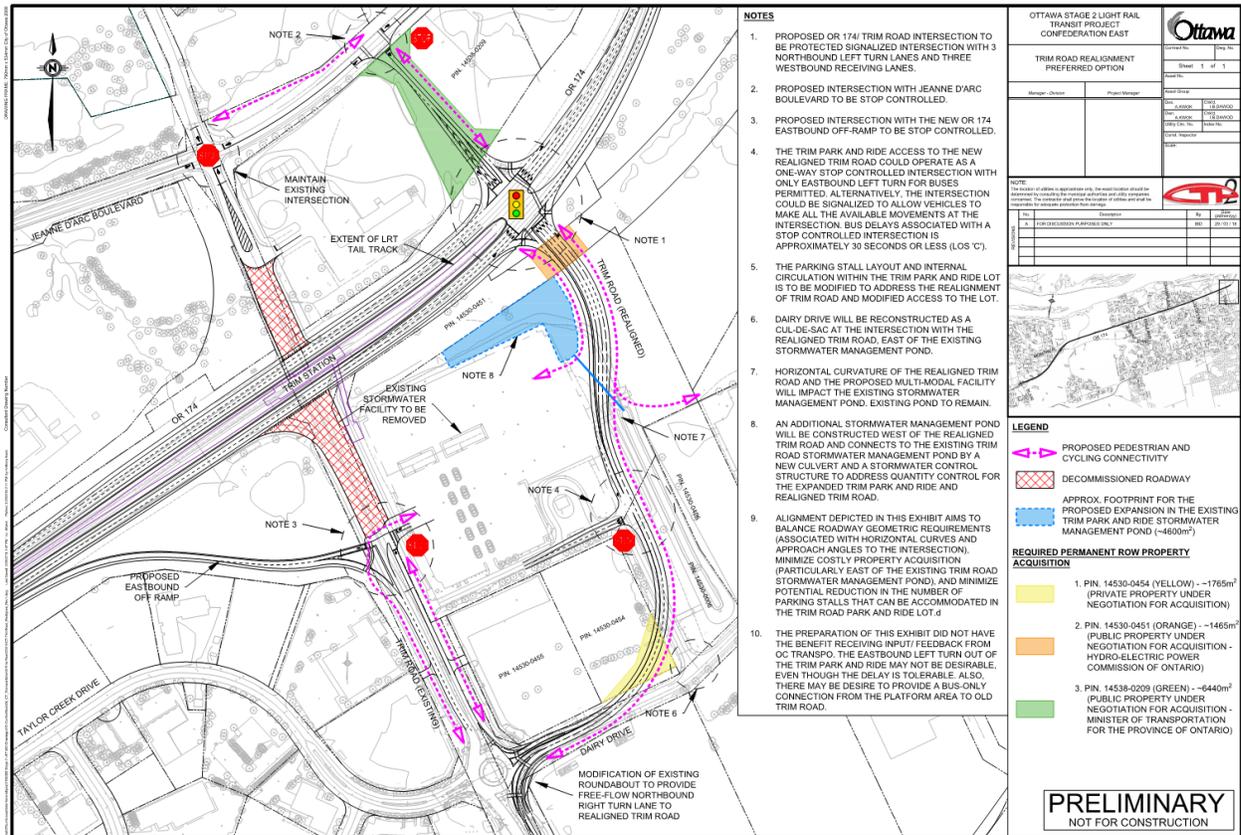
- Heading east: Blair Station to Blair Road southbound to the existing north/south to east on-ramp from Blair to OR 174 eastbound.
- The intersection of Blair Road and the OR 174 eastbound on-ramp is to be modified to create a dedicated left turn lane from southbound Blair Road.
- Heading west: OR 174 westbound to the existing westbound off-ramp to Blair Station.
  - This ramp is to be modified to connect the existing transit lane on OR 174 westbound to the off ramp, and a second westbound through lane will be provided at the signalized intersection with Blair Road.

Montreal Road will be reduced to a single lane in each direction under OR 174 in order to demolish the existing bridge piers and construct new ones; this reduction will only be permitted during the summer months (June - August). There will be other impacts to Montreal Road outside the summer months due to other construction stages, but they will be significantly less impactful than the long-term lane reduction.

A new signalized intersection on OR 174 will be built east of the existing Trim Road intersection. This new intersection will be located just east of the tail tracks, and east of the Trim Road Park and Ride replacing the existing Trim Road / OR 174 intersection. Trim Road will be realigned between OR 174 and the roundabout at the Taylor Creek Drive/Dairy Drive intersection. It will extend from the eastern leg of the roundabout, run along the south and east sides of the proposed Trim Road Park and Ride facility, intersect at-grade with OR 174 at a new location east of the existing Trim Road / OR 174 intersection, and terminate at an intersection with Jeanne d’Arc Boulevard North, north of OR 174, as shown in the figure below. The existing intersection shall remain operational until the new intersection has been built. Before closing the existing intersection, a new eastbound off ramp will be built and commissioned to serve the traffic demand destined for southbound Trim Road. The relocated at-grade intersection

will include pedestrian crosswalks and bi-directional cycling crossside facilities on both the east and south legs. The Trim Road Park and Ride Facility will be modified to include a new bus loop, bus lay-bys, and bus station Platforms.

Figure 1 – Trim Road Interchange



**Mobility during construction – Trillium Line**

In order to extend and expand the existing Trillium Line a shut-down period will be required from May 3, 2020, until project completion in 2022. OC Transpo Route R2 (previously Route 107) be in service to replace the train service. Route R2 will follow its established routing, with increased frequency in order to provide similar capacity to the Trillium Line. As an enhancement to the Trillium Line detour and bus service to Carleton University in general, OC Transpo and Infrastructure Services will build a new permanent road segment extending Carleton’s Raven Road to intersect with Bronson Avenue south of Brewer Way, reducing bus travel time within Carleton’s campus. Additionally, OC Transpo and Infrastructure Services will construct a northbound queue jump lane on Bronson Avenue at Holmwood Avenue, providing buses with the ability to bypass the long queues at the Holmwood Avenue signal, particularly in the morning peak hours. The queue jump is intended to be left in place until future reconstruction of Bronson Avenue occurs. As these two enhancements are being constructed by

Infrastructure Services for OC Transpo, they will not be managed through the Rail Construction Program.

Hunt Club Road will see significant impacts near the Airport Parkway ramps. While daytime and peak hour lane closures will not be permitted, lanes will be narrowed in both directions to facilitate bridge construction, and nighttime lane closures are anticipated.

At Leitrim Road, Bowesville Road, and Earl Armstrong Road, the LRT tracks will be grade separated by raising the Trillium Line over the roadways. This grade-separation technique substantially reduces transportation impacts, as the vast majority of the required construction takes place off the roadway, and bridge girders can be erected with short-term overnight road closures.

At Limebank Road, the LRT tracks will be grade separated by raising Limebank Road over the Trillium Line. This will require that Limebank Road be closed between Earl Armstrong Road and a point south of the Trillium Line. Prior to closing the roadway for construction, the contractor will construct a detour roadway in the lands west of Limebank Road, ensuring that the transportation link is maintained at all times. Traffic patterns at the intersection of Limebank Road and Earl Armstrong Road will be altered during this closure, but all traffic movements will be maintained.

The intersection of Bowesville Road and Earl Armstrong Road will undergo substantial reconstruction as well. The existing misalignment of Earl Armstrong Road through the intersection will be eliminated, and auxiliary turning lanes will be added on all approaches. All traffic movements can be maintained during construction; however, some additional delay is expected.

All impacted areas will be monitored throughout the construction period by both City staff and the preferred proponents' staff. Should any traffic issues arise as a result of these impacts, they will be mitigated to the extent possible in cooperation with the contractors and various City branches under the Transportation Services Department. Further, City staff will be conducting periodic site visits to ensure that impacts to road users are minimal and temporary traffic control plans have been implemented.

Staff will also work with Infrastructure Services to coordinate construction projects that are not related to Stage 2 to ensure that there is a coordinated approach to planning and constructing these projects so as to minimize traffic impacts. This means that some projects outside Stage 2 may be advanced or delayed (for example, Bronson Avenue rehabilitation will be delayed to post-2022 so as to not impact bus detour when Line 2 is not in service).