



REPORT

# LRT – PEDESTRIAN CYCLING STAGE 2 CONNECTIVITY STUDY

Ottawa, Ontario

Presented to: RAIL IMPLEMENTATION OFFICE CITY OF OTTAWA

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OLRT SUMMARY

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Minutes – 1 June 24<sup>th</sup>, 2015 Minutes – 2 June 26, 2015 Minutes – 3 August 12, 2015 Minutes – 4 October 14, 2015

#### **TAC Minutes**

TAC Minutes – 1 June 24<sup>th</sup>, 2015 TAC Minutes – 2 June 30<sup>th</sup>, 2015 TAC Minutes – 3 July 22, 2015

#### **APPENDIX 'C' – DETAILS**

Inventory & Analysis – Overhead House Inventory & Analysis – Park and Ride



#### **EXECUTIVE SUMMARY**

The intent of the Stage 2 Ottawa Light Rail Transit Connectivity Study is to integrate the current city planning documents for a comprehensive overview of community connections to the proposed Stage 2 Ottawa Light Rail Transit Stations. Working with the goals of the Transit-Oriented Development Guidelines, the fundamental principle for this study was to ensure that community connections to, and through the stations, as well as through the LRT line, are preserved or enhanced. The OLRT and BRT lines must allow connectivity between the two sides of the corridor to truly create one community.

This study provides the city the opportunity to broaden the analysis of the connectivity for the individual stations, stepping beyond the limits of the individual environmental assessments, and look at both existing, and future, connections. The communities adjacent to the stations were studied to identify opportunities to enhance connections, facilitate pedestrian and cycling connections to the station, and to the City wide Multi Use Pathway system. This will support key Transportation Master Plan goals:

- 1. Promote sustainable transportation choices;
- 2. Enhance pedestrian and cycling mode shares;
- 3. Create a comprehensive network of walking, cycling and transit.

Currently, there are several city initiatives working on both community and transportation planning studies which are integral to the Stage 2 OLRT. To ensure a broad understanding of these current works, a Technical Advisory Committee was struck. This consultation process included a broad range of city departments, from planning, transportation, engineering, OLRT Stage 2, to OC Transpo, and has guided and strengthened the recommendations. The principle planning documents incorporated include:

- 1. Confederation West ESR;
- 2. Trillium Line ESR;
- 3. Ottawa Airport Parkway Widening ESR;
- 4. Baseline Road Rapid Transit Corridor ESR;
- 5. Confederation East ESR;
- 6. Transportation Master Plan Pedestrian and Cycling Plans;
- 7. Community Development Plans.

As a result of the analysis, work beyond the proposed limits of the Stage 2 OLRT corridor, was identified that will expands on the Transportation Master Plan (TMP) Cycling Network and maximize connectivity. To fully integrate this network, the study identifies two implementation opportunities, refer to Appendix A:

- 1. Work to be completed within the Stage 2 Ottawa Light Rail Transit (OLRT) construction program;
- 2. Work to be completed by the City to enhance the connectivity leading to the individual OLRT stations.

The latest TMP (2013) preceded the environmental studies for the Stage 2 ORLT. As such, there are proposed City initiatives includes development of on-road cycling facilities not currently in the TMP, additional MUP locations and realignment of existing facilities to reduce roadway crossings. In addition, as redevelopment continues adjacent to stations, key opportunities have been identified that could be reviewed during site plan and zoning applications.

The study also reviewed the requirements for each station, and developed the guidelines to provide consistency, and comprehensive design solution. Based upon this analysis, definitive direction is provided to the project team for the Stage 2 implementation including Passenger Pick Up and Drop Offs (PPDUDO), Multiuse Pathways (MUP) and sidewalk connections to entry plazas, crosswalk and crossride locations, bicycle parking, pedestrian lighting and local bus stop locations servicing the OLRT station.

The Paid Fare zones to encompass both the OLRT and BRT stations are also currently being studied by OC Transpo. These controlled zones may affect the overall connectivity of the network, and a balance between community connections and the controlled zones is required.

For the majority of the stations, the recommendations of this study include relatively modest modifications that will enhance the connectivity both to the stations, and between adjoining communities. These modifications are addressed within this report. However, as a result of the combination of existing urban developments, transportation infrastructure, land use and zoning, reasonable budgetary expectations, and based upon the accepted standards of 300 m radius for walking and 1.5 km for cycling, there are four (4) stations that will continue to have very limited connectivity:

- 1. Montreal Station;
- 2. Confederation Station;
- 3. Walkley Station;
- 4. Uplands Station.

Similar to the additional planning work that was been completed for the Stage 1 OLRT stations, Transit-Oriented Development (TOD) Plans for the Stage 2 OLRT stations should be considered at these stations to more fully integrate the station within the adjacent city fabric.



#### 1. INTRODUCTION

Stage 2 of the OLRT will significantly expand the light rail transit system in Ottawa. Confederation Line will extend to both the east, Trim Road, and the west, Bayshore Station and Baseline Station, with the Trillium Line extending the current O-Train line south to Bowesville Station. The environmental assessments for this work are currently underway, and have developed the planning for the rail lines, stations and multi-use pathways within the rail corridor. Using these environmental assessments, other planning documents and council approved policies as the foundation, the intent of this study is to further strengthen the community connectivity to provide a more comprehensive pedestrian and cycling network.

In addition, this study reviewed site development for the stations to standardize the design requirements for the Stage 2 OLRT construction.

#### 2. STUDY PARAMETERS

The integration of the Stage 2 OLRT stations is occurring both through the relevant Environmental Study Reports (ESR) for the individual lines, as well as a broad range of City planning documents and policies. Commencing with the information available from the individual ESR's in May 2015, the proposed station locations, and the adjacent community, were studied to understand current community connections, potential gaps/reduced access, and opportunities to maximize the community connections. The limits for the connectivity extended beyond the limits of the individual ESR's, as the proposed station locations and OLRT corridor changes the dynamics of the local community that had not have been anticipated by previous planning documents.

To ensure this study encompasses all the work completed by the city, a Technical Advisory Committee (TAC) was formed. The study team consulted with the TAC to review the overall study goals and the recommendations for the individual stations. Further input was received from meetings with OC Transpo and other committee members to address specific station locations. Please refer to Appendix B for copies of the meeting minutes. A complete list of the documents that were utilized for the creation of this study is listed in Appendix B, with the main input received from:

- 1. Confederation West ESR;
- 2. Trillium Line ESR;
- 3. Ottawa Airport Parkway Widening ESR;
- 4. Baseline Road Rapid Transit Corridor ESR;
- 5. Confederation East ESR;
- 6. Transportation Master Plan Pedestrian Plan;
- 7. Transportation Master Plan Cycling Plans;
- 8. Community Development Plans;
- 9. Transit-Oriented Development Guidelines.

#### 3. STATION PARAMETERS

All stations currently identified within the ESR were studied from a macro to micro scale to address the needs of pedestrians and cyclists. It is anticipated that a cyclist will travel a further distance, up to the 1.5 kilometres from the station, and the pedestrian would travel approximately 300 metres. The Opportunities Mapping also indicates the specific requirements for each station as identified under Section 7, Station Requirements. The following is a breakdown of the rationale for each drawing scale.

#### 3.1.1 Updated Drawings—Community Consultation Feedback

The Updated Drawings include the feedback received during consultations with the public. During these meetings, community members and advocacy groups were asked to provide information on how they would access the stations, areas of opportunities and potential challenges. This feedback was then incorporated in to the original connectivity drawings which are provided at the beginning of each of the following sections. Tenth line was not included in these consultations as it is a potential future station. Uplands and Airport stations were not included as they have limited communities within the 600 metre radius; the airport authority and impacted landowners were consulted with to provide feedback.

#### 3.1.2 Cycling Network (1:6000 scale)

Utilizing the Transit-Oriented Development (TOD) Guidelines, a 1.5 km radius was utilized to study both the current City transportation network and Transportation Master Plan (TMP) cycling routes. This placed the stations within the overall network, and identified opportunities for residents in the adjacent community to commute by bicycle to the station. The existing sidewalks are not identified at this scale, due to the large quantity of sidewalks, as well as it exceeds the walking distance to the stations.

#### 3.1.3 Pedestrian and Cycling Plan (1:2000)

Increasing the scale, and to a 600 metre radius, allowed for greater level of detail to study the existing roadway, sidewalks and community networks and identify further improvements, including:

- Principle sidewalks and MUP locations to facilitate community access to the station;
- Additional on-road cycling facilities to respond to the new station locations.



#### 3.1.4 Site Analysis (1:2000)

A site analysis was also completed at the 600 m radius to review the existing site constraints, current urban development and planning documents, which would guide future intensification, and influence the relevant connectivity requirements to a station.

#### 3.1.5 Site Opportunities (1:1000)

The Site Opportunities Drawings focused on the 300 m pedestrian walking radius, looking key destinations and opportunities for the individual station. At this level, the existing sidewalks and pathways are identified, and the additional linkages are identified. An on-site review at each station was completed to for existing sidewalks, pathways, pedestrian footpaths, potential conflicts and issues, and overall integration of the site within the community. Based upon the site inventory and analysis, recommendations for each station were developed to maximize the community connectivity and enhance the overall experience.

#### 4. CONNECTIVITY OPPORTUNITIES

As discussed, the basis for this study was to integrate additional pedestrian and cycling opportunities within the Stage 2 OLRT construction program. During the course of the study, additional work, beyond the limits of the OLRT, was identified and recommended to be completed. To encapsulate the discussions and recommendations of the study team and TAC, five distinct opportunities were identified:

#### 4.1.1 Stage 2, OLRT Construction

These recommendations are to be integrated within the planning, design and construction for the station. Based within the immediate vicinity of the stations, they will directly affect the passenger experience and increase the ease of access to the individual stations.

#### 4.1.2 City Initiatives 2023

With the development of the OLRT, the stations will become local pedestrian and cyclist commuter destinations. These proposed station locations changes the dynamics of the local communities commuting patterns that could not have been anticipated by the previous council approved policies, such as the TMP (approved in 2013). Several recommendations from the study team and TAC were identified that will assist with one of the key goal City's TMP to provide a comprehensive network of transit, pedestrians and cyclists:



- Roadway improvements to the on-road cycling facilities were identified to provide a more continuous cycling route to the stations and communities;
- A few key missing MUP connections between the community and the stations were identified which will require additional land from adjacent landowners. These stations include:
  - Montreal Station;
  - South Keys Station;
  - Walkley Station;
  - Dominion Station;
  - o Lincoln Fields Station.

#### 4.1.3 City Planning

The stations were reviewed with respect to the current land uses and Community Development Plans (CDP), with many of the lands adjacent to the stations identified for potential future intensification. Additional community connectivity was identified in key locations, and projects submitted to the City for zoning and/or site plan approval should be reviewed to determine feasibility for sidewalks and paths to connect.

#### 4.1.4 Rideau River O-Train Bridge

The O-Train bridge over the Rideau River is situated immediately south of Carleton University. This bridge extends over University Avenue to the north, and the NCC's Rideau River East Pathway to the south. Within this area the TMP identifies three strong east-west multiuse pathway connections: the central spine through Carleton University, the pathway on the north side of Rideau River, and the Rideau River Eastern Pathway, on the south side of the Rideau River. The north-south connections include on-road cycling facilities and sidewalks on Bronson Avenue, and further to the west, the bridge at Hogs Back, connects to multiuse pathways on either side of the Rideau Canal. To the east, the bridge at Bank Street provides the next connection over the river. Both of these bridges are constrained by the existing structure, with reduced widths for the MUP at Hogs Back and on-road shared use lanes and sidewalks at Bank Street. The TMP does indicates a future MUP link over the Rideau River at this location, connecting to the pathway on the north side of the Rideau River to the MUP extending south, along the transit corridor.

The proposed MUP within the Trillium Line environmental assessment extends from Bowesville Station all the way north to Confederation Station, and the Rideau River



East Pathway, creating a strong central corridor for the communities. Extending the MUP over the Rideau River will greatly enhance the pedestrian and cycling connections between Alta Vista, Billings Bridge, Confederation Heights, Riverside Pak, Ellwood and the downtown core and provide a high quality off-road facility for pedestrians and cyclists.

The O-Train Bridge is currently scheduled for rehabilitation work for 2018. During the design of the rehabilitation works, it is recommended that opportunities to include a MUP within the structure be reviewed. This will be consistent with the Transportation Master Plan Cycling Network – Primary Urban Plan as a "Major Pathway".

#### 4.1.5 OLRT Track Alignment

The cross-sectional requirements for the OLRT track alignment is less than the requirements for the existing bus rapid transit alignment, creating residual lands after construction. During the design development for the OLRT, the track alignment should be carefully considered with respect to the adjacent community connections. A modest shift in the alignment will allow for additional sidewalk and MUP opportunities, further strengthening the community connections or enhancing the existing facilities. One example of this occurs at Lincoln Fields Station. The current location of the MUP on the west side of the BRT has three unsignalized roadway crossings, and one signalized crossing. The track alignment should be located to allow the MUP to be realigned, adjacent to the OLRT and east of the Sir John A. MacDonald Parkway and connecting to the existing signalized crossing at the Parkway.

#### 5. LRT and BRT ACCESS

Due to the speed and frequency of the trains, one of the safety requirements identified for the OLRT corridors is fencing along the perimeter to control unauthorized crossings. Therefore all crossings, pedestrian, cyclist and motorist, must be grade separated. This restricts the opportunities for community connections to overpasses and underpasses, and the OLRT has the potential to disconnect, rather than connect, communities. The alignments and stations were reviewed and recommendations made to provide accommodation for sidewalks, MUPs and on-road cycling, for both current and future communities, to accommodate pedestrian and cyclists, as the city continues to grow.

Four stations were noted with restricted connectivity, or an offset from the adjacent community, that would likely have limited pedestrian and cyclist access.

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#### 5.1.1 Montreal Road

Located in the northwest quadrant of Montreal Road and Highway 174, the station is immediately north of Highway 174. Montreal Road is a four lane arterial roadway, with on and off-ramps leading to Highway 174. To the south of the Highway 174 and east, the current zoning is EP- Environmental Protection Zone, to the northeast of Montreal Road, IL – Light Industrial, and on the lands northwest of Montreal Road, AM – Arterial Main Street. The well-established residential community is offset by more than 300 m, with a blend of low and medium density housing, with the Arterial Main Street zoning permitting some increase in intensification.

There are two key recommendations for this station:

**.1** Acquire land, and provide community connections west of the Montreal Road Station, at E. Acres Road.

**.2** Acquire land to provide MUP connections from the adjacent residential complex to the proposed MUP from Loyola Avenue to Shefford Road/Montreal Road intersection.

#### 5.1.2 Confederation Station

There are two locations identified under the Trillium EA for this station: maintain the current location for the initial phase, and, during the redevelopment of Confederation Heights, shift to the north of Heron. Confederation Station is currently located on the south side of Heron Road, between the rail line and the physical plant building for Confederation Heights. The principle buildings for the complex currently sit towards the western portion of the site, offset from the 300 m walking radii. On the east side of the rail line is the northern limits of the Airport Parkway, with the 01, Parks and Open Space zoning. Immediately northeast of the site, framed by Heron, the rail line, and the Airport Parkway, one parcel of land is zoned MC F(2.0), Mixed-use Centre, similar to the lands west of the station.

There is a MUP on the west side of the station, connecting the community to the south to Heron Road, as the MUP system currently terminates at this location. Heron Road has a bus stop, and through the Baseline Road Rapid Transit Corridor ESR, a station is proposed within the Heron Road median. Compounding the offset distance from the office buildings, the station is at grade with the rail line, approximately seven (7) metres below either Heron Road and three (3) metres below the parking lot, limiting visibility to the passengers waiting for a connection. The current configuration will require a significant walk between the two stations, and increase the potential conflict between the pedestrian and cyclist. There are two key recommendations for this station:

**.1** Re-evaluate the location of the station, and construct the proposed OLRT station north of Heron Road. This will provide greater flexibility in access to the station, and provide greater visibility to the station from the adjacent lands.

.2 Re-evaluate the connections between the proposed BRT on Heron Road, and the OLRT to provide a direct vertical connection between the two stations. Bringing the passengers directly from the BRT down to the OLRT platform will greatly enhance the connectivity between the two transit systems and create the opportunity for a covered link. This will create also allow the combined paid fare zone to encapsulate both stations, and reduce the potential conflict between pedestrians and cyclists.

#### 5.1.3 Walkley Station

The current alignment of the O-Train rail line is on the eastern edge of the Airport Parkway. In this section, Walkley Road contains three overpasses: the rail line, the BRT and the Airport Parkway. There is limited pedestrian or cycling connectivity between east-west Walkley Road and the north-south Airport Parkway lands due to the combination of grading, ramp and transit corridor. There is approximately fifty metre offset between the proposed OLRT and existing BRT stations, and passengers must cross a wide intersection at the transit and Airport Parkway ramp. The zoning for the majority of the Airport Parkway is a combination of 01, Parks and Open Space and EP, Environmental Protected areas. To the northeast is a well-established community, with noise attenuation walls along both the transit and roadway perimeters blocking access to the MUP and Walkley Station.

There are two distinct communities to the northeast: the development with access from Walkley, and the mixed density residential development with access from Heron Road. The northern community has one pathway connection at the corner of Brookfield Road and Glenhaven Private, which is approximately 800 metres from the proposed Walkley Station, and up to an additional 600 metres to an individual dwelling. Within the accepted 300 metre walking radii has 101 row homes and 13 single family dwellings. Within the 600 metre distance, there are an additional 141 row units and 142 single family dwellings. These dwellings combine for a total population of 1,087.

There are three key recommendations for this station:

**.1** Provide a MUP on the east side of the OLRT corridor, from the existing Brookfield MUP access to Walkley Road Station.

**.2** Acquire land at Traverse Drive to provide a community connection to the MUP, and reinstate the noise attenuation barrier.

**.3** Provide a community connection from the parkette at Westvalley Private to the MUP and reinstate the noise attenuation barrier.

#### 5.1.4 Uplands Station

This station is located immediately to the north of the Ernest-Young Centre, on lands zoned T1 – Air Transportation Facility Zone. Several planning studies have been completed on these lands, by both the City, including the Ottawa Airport Parkway Widening, the Airport Authority and the National Capital Commission. Through the ESR for the Ottawa Parkway, grade separation for the northbound and southbound lanes, as well as for the OLRT, were identified. Further, there are two northbound lanes, from Uplands Drive, immediately south of the proposed Uplands Station, connecting to the northbound lanes of the Airport Parkway, with an overpass for the southbound lanes. This combination of transportation roadways and overpasses restricts the opportunity for a MUP on the west side of the Airport Parkway connecting directly from Hunt Club south to the station. An additional series of overpasses for the MUP would be required to provide the connection to the Uplands Station. There is a MUP identified through the Trillium Line, on the east side of the OLRT corridor, from north of Hunt Club Road, south to Leitrim Road, located over a significant underground service. This service, in combination with the corridor width, the OLRT rail line location, and construction requirements, restricts the opportunity to provide an overpass from the MUP westerly over the OLRT and to the Uplands Station.

There are two key recommendations for this station:

**.1** Provide on-road cycling facilities and sidewalks on Breadner, and Paul Benoit Driveway.

**.2** Acquire land/negotiate access for sidewalks and on-road cycling facilities on Research Road.

#### 5.1.5 Paid Fare Zones

Integral to the functioning of the transit system is the ability to collect fares, and facilitate the movement of passengers between the rail and bus system. One key



initiative that has developed through the initial stage of the OLRT is a single Paid Fare Zone that captures both BRT and LRT station areas within one controlled site, allowing a free flow of passengers. Key entry control points are developed, and the perimeter of the zone is defined by a combination of station walls and perimeter fencing. This functions well for the transit system, however, can restrict the ability of a person to traverse the transit corridor and connect with other locations within the community.

OC Transpo has begun to study the Trillium Line to determine the optimum location for this zone, and it is anticipated that this work will extend to include all the Stage 2 OLRT stations.

Additional coordination is required to ensure that the community connectivity to, and through, the stations, are maintained.

#### 6. STATION LOCATIONS

As the individual environmental assessments are finalized and approved by Council, there may be changes in station locations or a reduction in the quantity of stations. The design of the adjacent stations shall include:

- Reallocation of the features, such as PPUDO's and bicycle parking;
- Installation of community pathways, MUPs and sidewalks identified.

#### 7. STATION REQUIRMENTS

The standards that have been developed for the Stage 1 OLRT will extend through to the Stage 2 works. The City standards for accessibility (Accessibility Design Standards), bus stops, CTPED, sidewalk and multi-use pathway construction, lighting, bicycle parking shall all apply to the Stage 2 construction.

To maximize passenger comfort, the following shall also be included in the site development of the stations:

#### 7.1 Station Plaza

- **7.1.1** Each station shall have an entry plaza, across the façade of all passenger entry points to the station, large enough to accommodate the peak flows identified.
- **7.1.2** There shall be an accessible route for pedestrians from the city sidewalk, PPUDO or pathway leading directly to the station entry plaza.
- **7.1.3** There shall be a minimum of three (3) metres offset from the station entry façade to a cycle lane, or multi-use pathway to provide a clear zone for passenger egress to the entry of the station.



- **7.1.4** There shall be a clear delineation of the station plaza from the adjacent sidewalks with paving materials and/or patterns.
- **7.1.5** Wayfinding for the visually impaired shall be integrated with the station plaza to meet current City and AODA Standards. Wayfinding shall commence at the edge of the plaza and lead to the front entrance of the station.

#### 7.2 Community Wayfinding

- **7.2.1** Wayfinding signage throughout the OLRT corridors is required to direct the community along the MUP's and sidewalks to the station.
- **7.2.2** At each station, wayfinding signage will be provided at the MUP directing the community to each adjacent station. Signage shall also be provided at the MUP junctions with wayfinding signage indicating the next station location in either direction.

#### 7.3 Pedestrian Connections

**7.3.1** Sidewalks shall be provided in all park and ride facilities to provide a separate facility from the adjacent MUP, and provide direct access from the park and ride facility to the station plaza.

#### 7.4 Passenger Pick-Up And Drop-Off

- **7.4.1** Each passenger pick-up and drop-off (PPUDO) lay-by on a roadway shall be a minimum of three car lengths. Refer to Station Opportunities Drawings for locations.
- **7.4.2** There shall be a sidewalk, with a minimum width of two (2) metres, from each PPUDO to the station plaza. The final sidewalk width to be determined by the projected passenger egressing the station.
- 7.4.3 Each PPUDO and sidewalk leading to the station plaza will be lit.

#### 7.5 Multi-Use Pathways

**7.5.1** Multi-use Pathways (MUPs) shall have four (4) rumble strips, prior to entering the station plaza, to identify a chance of use and diverse movement pattern of pedestrians. Refer to the standard plaza schematic in the drawings for further details.



- **7.5.2** The MUP shall be designed minimize any conflicts with sidewalks and pedestrians accessing the stations.
- **7.5.3** Any proposed MUP underpasses shall be a minimum of nine (9) meters in width. All retaining walls leading to the underpass shall have a minimum of 45° angles, with clear lines of sight from the MUP. There shall be a minimum of six (6) meters clear prior to an alignment shift of the MUP entering an underpass or overpass.
- **7.5.4** A MUP in a shared underpass with the OLRT rail line or other transportation facility shall have a clear width of three (3) metres.
- **7.5.5** All MUPs adjacent to a retaining wall or built structure shall have a minimum of 0.5 metre asphalt shoulder between the active travel path and the structure. Where the MUP is directly adjacent to a sidewalk, there shall be a paved delineator strip, with raised texture, to demarcate the uses or a minimum of 900 mm turf.

#### 7.6 Bicycle Parking

- **7.6.1** Bicycle parking, with a minimum of 70% covered, shall be located adjacent to the station plaza. The use of the station roof line for the covered bicycle parking is acceptable.
- **7.6.2** The bicycle parking shall be located on both sides of the station plaza, adjacent to the cycle access point, MUP or on-road facility, to minimize conflict between the pedestrian and the cyclist.
- **7.6.3** There shall be equivalent space to accommodate additional bicycle facilities, such as storage, lockers and/or bicycle sharing facilities for future demands at each station. During the initial design, this location can be soft landscape.

#### 7.7 CCTV

- **7.7.1** There shall be complete CCTV coverage on all the station entry plazas.
- **7.7.2** There shall be CCTV coverage from the PPUDO to the station entry plaza.

#### 7.8 Lighting

- **7.8.1** All station plazas must be lit to OC Transpo stations with pedestrian height poles and meet the requirements of the City lighting policy.
- **7.8.2** All lights must be LED, with full cut offs. To minimize light spill onto the adjacent lands.



**7.8.4** All emergency exit pathways, from the station, to the adjacent roadway sidewalk, must be lit.

#### 7.9 Construction Phasing

7.8.3

The construction of the OLRT will cause disruption to both pedestrians and cyclists. To ensure the community connectivity during the construction, the following shall be completed during construction.

- **7.9.1** Should a sidewalk, MUP or overpass be closed to accommodate station construction, the facility shall be rerouted in a direct and continuous manner prior to the closure of the existing MUP.
- **7.9.2** All sidewalk and MUP rerouting must occur on paved surfaces.
- **7.9.3** The existing pathway overpass, south of Lincoln Fields shall be built prior to the decommissioning of the existing overpass.
- **7.9.4** All sidewalks and MUPS identified for installation under Stage 2, and beyond the construction limits for the stations, and OLRT track, shall be completed during the initial works. Examples of this include: sidewalk on the north side of Queensview Drive, the MUP and bridge at Bilberry Creek and the sidewalk on the south side of Baxter Road.
- **7.9.5** All temporary sidewalks and MUP's built under this contract must be maintained throughout the year, including snow removal, as required.

#### 8. PEDESTRIAN/CYCLING PLANS AT STATIONS

#### 8.1 TRILLIUM LINE

The Trillium Line consists of the current O-Train, from Bayview to South Keys Station, and continuing south to Bowesville Station, with a spur connecting to the Ottawa MacDonald-Cartier International Airport. There are eleven (11) stations on this line:

#### Main Line

- Bowesville Station
- Leitrim Station
- South Keys Station
- Greenboro Station
- Walkley Station
- Confederation Station
- Carleton Station
- Carling Station
- Gladstone Station

Ottawa International Airport Connection

- Uplands Station
- Airport Station





Ottawa Light Rail



Station Plan AUGUST 31, 2015

# TRILLIUM LINE OTTAWA LIGHT RAIL TRANSIT

#### 8.1.1 Bowesville Station

#### .1 Station Context

Bowesville Station is a new station, and will terminate the Trillium Line of the OLRT Stage 2. The BRT will extend from this location, westerly through Riverside South and to Barrhaven South. This station will be located to the east of the Riverside South Town Centre. There is limited development occurring at this station, with the principle adjacent lands having a rural character. Currently Bowesville Road has a rural cross-section, with one lane of traffic in both directions, and gravel shoulders.

#### .2 Existing Pedestrian and Cycling Connections

The residential development is offset from the proposed station location, no current pedestrian connections from the community leading to, or adjacent to the station occur.

#### .3 Proposed Sidewalks and Pathways

In addition to the station, the main feature proposed for this location is a Park and Ride, immediately to the south of the station. The configuration of the Park and Ride shall include a sidewalk on the north perimeter of the facility to provide a route for pedestrians. Recommendations:

- A PPUDO will be developed adjacent to the sidewalk, offset from the station plaza;
- Pedestrian lighting will be provided as required for the sidewalk;
- Parking lot layouts must meet City Zoning Section 110;
- A proposed MUP commences at Bowesville Road, and connects to the station, and continues north towards Leitrim Station. The MUP shall be separated from the sidewalk and be lit as required from Bowesville Road to the station plaza.
- Covered bicycle parking will occur on the west side of the plaza.

#### .4 Entry Plaza

The entry plaza is proposed for the south side of the station and shall be shared by the BRT and the OLRT.





**BOWESVILLE STATION** OTTAWA LIGHT RAIL TRANSIT

🔰 Ottawa Light Rail

**Cycling Network** JANUARY 2017



< **Ottawa Light Rail**  **BOWESVILLE STATION** OTTAWA LIGHT RAIL TRANSIT

Pedestrain and Cycling Plan JANUARY 2017



**DECEMBER 14, 2015** 



**Ottawa Light Rail** 

**BOWESVILLE STATION** OTTAWA LIGHT RAIL TRANSIT



N.T.S.



PROPOSED LIGHT RAIL TRANSIT (LRT)

PROPOSED LRT STATION

PROPOSED BICYCLE PARKING

LRT MUP

STUDY PROPOSED FACILITY

TMP PROPOSED ON-ROAD BICYCLE FACILITY

EXISTING ON-ROAD BICYCLE FACILITY

STUDY PROPOSED SIDEWALK

PROPOSED PATHWAY

CCTV / EMERGENCY STATION

PROPOSED PASSANGER DROP OFF AREA

TRAFFIC CONTROL SIGNAL



**Site Opportunities** JANUARY 2017

#### 8.1.2 Leitrim Station

#### .1 Station Context

Leitrim Station is a new station, proposed on the extension of the current O-Train Line. It is located to the southwest of Leitrim Road and Albion Road, at the perimeter of the National Capital Commission (NCC) Greenbelt lands, with industrial lands immediately to the east. On the east side of Albion Road is the residential development of Findlay Creek. This is a developing area, with primarily residential development occurring.

The on-road cycling facilities on Albion Road are paved shoulders, with a combination of gravel and paved shoulders on Leitrim Road.

#### .2 Existing Pedestrian and Cycling Connections

The residential development is offset from the proposed station location, no current pedestrian connections from the community leading to, or adjacent to the station occur.

The station currently has covered parking for 12 bicycles.

#### .3 Proposed Sidewalks and Pathways

In addition to the station, the main feature proposed for this location is a Park and Ride, immediately to the south of the station. A PPUDO will be developed adjacent to the sidewalk, offset from the station plaza. Pedestrian lighting will be provided as required for the sidewalk.

A proposed MUP commences extends south from Bowesville Road, and connects to the station, and continues north towards the downtown. The MUP shall be separated from the sidewalk and located adjacent to the OLRT corridor. Further north, the MUP extends under the Leitrim Road overpass, paralleling the OLRT corridor. A MUP connection from Gilligan Road, combined with the on-road cycling facilities on Gilligan, Leitrim, and Albion will provide a cycling connection to the Findlay Creek community. Recommendations:

- The configuration of the Park and Ride shall include a sidewalk on the north perimeter of the facility to provide a route for pedestrians.
- A PPUDO will be developed adjacent to the sidewalk, offset from the station plaza;

- Pedestrian lighting will be provided as required for the sidewalk;
- Parking lot layouts must meet City Zoning Section 110;
- The MUP will connect to the Gilligan Road;
- Covered bicycle parking will occur on the west side of the plaza.

#### .4 Entry Plaza

The entry plaza is proposed for the east side of the station and shall be shared by the BRT and the OLRT.







LEGEND	
	1500 METER RADIUS LRT STATION STUDY AREA
	1500 METER RADIUS ADJACENT LRT STATIONS STUDY ARE/
	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
>	PROPOSED ON-ROAD BICYCLE FACILITY
	EXISTING ON-ROAD BICYCLE FACILITY
>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
7	EXISTING PATHWAY
	EXISTING NCC TRAIL SYSTEM
>	STUDY PROPOSED MU
>	PROPOSED BRT

Cycling Network JANUARY 2017



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LEITRIM STATION OTTAWA LIGHT RAIL TRANSIT

LEGEND	
	600 METER RADIUS STUDY AREA
	300 METER RADIUS STUDY AREA
~	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
~	PROPOSED LRT 3.0M WIDE MULTI-USE PATHWAY
>	TMP PROPOSED ON-ROAD BICYCLE FACILTY
~	EXISTING ON-ROAD BICYCLE FACILITY
>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
$\rightarrow$	EXISTING PATHWAY
	STUDY PROPOSED FACILITY
	TRAFFIC CONTROL SIGNAL
NORTH	

Pedestrian & Cycling Plan JANUARY 2017



🔰 Ottawa Light Rail

LEITRIM STATION OTTAWA LIGHT RAIL TRANSIT

RESTRICTED / POOR VIEWS

Site Analysis **DECEMBER 14, 2015** 



**Ottawa Light Rail** 

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LEITRIM STATION OTTAWA LIGHT RAIL TRANSIT



N.T.S.









PROPOSED LIGHT RAIL TRANSIT (LRT)

PROPOSED LRT STATION

PROPOSED BICYCLE

EXISTING ON-ROAD BICYCLE FACILITY

TMP PROPOSED ON-ROAD BICYCLE FACILITY

STUDY PROPOSED SIDEWALK

STUDY PROPOSED FACILITY

PROPOSED PATHWAY

CCTV / EMERGENCY STATION

PROPOSED PASSANGER DROP OFF AREA

TRAFFIC CONTROL SIGNAL



**Site Opportunities** JANUARY 2017

#### 8.1.3 South Keys Station

#### .1 Station Context

South Keys is an existing O-Train station, located at the southern portion of the South Keys shopping complex, north of Hunt Club Road West and on the eastern edge of the Airport Parkway corridor. This will be a combined BRT/OLRT station, with the termination of the Southeast Transitway connecting to Hunt Club to the south. There is a six (6) metre pedestrian underpass connecting to the station entries and the pathway system within Sawmill Creek and the MUP overpass at the Airport Parkway, currently with a Parks and Open Space zoning.

Access to the station is through the shopping complex parking lot, with a generous pedestrian corridor connecting the station to the internal roadway network, through to Daze Street, a local connector, and Bank Street and Hunt Club Road. There is no defined cycling route within the shopping complex to the station. The adjacent roads have sidewalks, with additional on-road cycling facilities proposed for the future. A well- developed community is on the east side of Bank, with a blend of low to high rise residential dwellings. To the west, the MUP connection to the adjacent residential community is approximately 400 metres, with primarily detached homes.

There is an informal PPUDO occurring both immediately to the east of the station entry, and to the south, in the shopping complex parking lot.

#### .2 Existing Pedestrian and Cycling Connections

The MUP connecting the station to the community west of the Airport Parkway is heavily used, both to access the stations and for recreational uses. This pathway is lit from the station to the community.

The station currently has uncovered parking for 8 bicycles.

#### .3 Proposed Sidewalks and Pathways

Within the Environmental Assessment, there is a proposed MUP underpass of the OLRT south of the station, and an overpass at Hunt Club Road that will further increase the connectivity between the communities. South of Hunt Club Road West, there is an existing provision for a MUP from Millstream Way to the west. Recommendations:



- Acquire land from the Millstream Way to the OLRT MUP, crossing Mac Street, and build a MUP to enhance the community connection from the southeast of Hunt Club Road west to the South Keys Station.
- Provide covered bicycle parking on both north and south sides of the station.

#### .4 Entry Plaza

The current six metre underpass will be a shared use for the community connectivity to the ease and west of the OLRT corridor, as well as for the entry to the OLRT station. Care is required to maintain the six metre clear to facilitate the connectivity, and the entrance plaza, and limits of the Paid Fare Zone should be offset a minimum of three (3) metres.





N.T.S.

**Cycling Network** JANUARY 2017



Pedestrian & Cycling Plan **JANUARY 2017** 



**DECEMBER 14, 2015**




N.T.S.



**Site Opportunities** JANUARY 2017

CSW

## 8.1.4 Greenboro Station

## .1 Station Context

The current O-Train station is located immediately west of the Greenboro Southeast Transitway BRT Station and is part of one Paid Fare Zone currently under design by OC Transpo. It is located on the east side of the Airport Parkway corridor, a combined transportation and parks and open space. It is situated at the north end of the South Keys shopping complex, with a large park and ride facility located to the north-east. Bank Street is to the east, and a well-developed residential community further east. The Southeast BRT is proposed to continue south of the station to Hunt Club Road.

Bank Street has sidewalks on both sides of the roadway, with additional on-road cycling facilities identified within the TMP. A signalized intersection occurs at Bank Street and Johnston Road, with a blend of sidewalks, pathways and cycling facilities on Johnston Road. There is a MUP system within the Airport Parkway lands, connecting to Walkley Road to the north, with the recreational facilities to the south.

There is a formal PPUDO directly in front of the station access, with a more active, informal PPUDO occurring in the bus turn around to the south of the station.

# .2 Existing Pedestrian and Cycling Connections

The existing MUP on the east side of the OLRT corridor is heavily used by both pedestrians and cyclists and provides recreational opportunities as well as a dedicated bridge over the Airport Parkway roadway, linking the east and west communities. There is no pathway connection between residential community to the east to these MUPs at this location, with access at Walkley Road or South Keys Station.

The station currently has covered parking for 28 bicycles on the north end of the entry plaza to the station.

# **Proposed Sidewalks and Pathways**

Modifications to the station entry by OC Transpo prior to the construction of this phase of work will address a Paid Fare entry point to the combined station, the PPUDO and the covered bicycle parking. Recommendations:

- The signalized intersection at Bank and Johnston Road to be modified to include both a crosswalk and crossride.
- Connect the intersection to the station entry with a MUP on the north side of the roadway.



# **Entry Plaza**

The entry plaza to be reviewed, and design modifications identified, that will implement the accessibility and wayfinding standards for all the OLRT stations.



N.T.S.

**Cycling Network** JANUARY 2017



Pedestrian & Cycling Plan **JANUARY 2017** 

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OTTAWA LIGHT RAIL TRANSIT

**DECEMBER 14, 2015** 



JANUARY 2017

#### 8.1.5 Walkley Station

### .1 Station Context

Walkley Station is a new station, proposed immediately south of the Walkley Road, east of the Airport Parkway, the existing Southeast Transitway, and the BRT station. Separating the BRT and OLRT stations are the access ramps to the BRT and the Ottawa Airport Parkway. Currently there is only sidewalk access to BRT Walkley Station, with no local bus stops on Walkley Road, and no on-road cycling facilities. The OLRT is on the eastern edge of the Airport Parkway lands, a combined transportation and recreational corridor, with a Parks and Open Space zoning. There is a maintenance access route, from the Southeast BRT to the OLRT, north of Walkley, with a portion of the route on the east side of the track line.

To the east, the lands are currently under redevelopment, the Bank Street forming the western edge of the well-developed residential community. To the northeast, there is a small community with direct access to the Walkley Road, and to the OLRT station. Immediately north is a well-established residential community with a blend of low and medium density housing, and limited access to either Walkley Station or to the north Confederation Station. The housing development to the north of Walkley Road has a noise wall between the community and the OLRT and BRT alignments.

Both Walkley Road and Bank Street have sidewalks on both sides, with the residential streets with curbs, and no sidewalks. Within the Airport Parkway corridor there is a well-established recreational facility, with trails, pathways, sports facilities, interspersed with woodlots. As indicated under 5.1.3, Walkley Station has limited pedestrian connections to the adjacent communities. The principle residential community has an average walking distance of approximately 1.5 kilometers to Walkley Station.

## .2 Existing Pedestrian and Cycling Connections

There is an existing MUP within the open space of the Airport Parkway, east of Sawmill Creek, connecting the south community to the both the recreational lands, and the downtown core. The Airport Parkway has on-road (paved shoulder) bicycling facility, with a posted speed limit of up to 80 km/hour. There is limited east-west connectivity, with the sidewalks on Walkley Road providing the direct connection, and future on-road cycling facilities planned for Walkley Road.

The combination of transportation corridors through this section significantly restricts opportunities for east-west community connections.

## .3 Proposed Sidewalks and Pathways

The narrow right of way, urban cross section, noise walls and existing infrastructure limits opportunities for the connectivity. The community must take the local streets to access Walkley Road, and then to the station creating significant walking distances. To provide greater access to the Station from the community to the northeast, it is recommended that additional study be completed to:

- Determine the feasibility of acquiring sufficient land from one, or two adjacent, homeowners on Traverse Drive, near the south intersection of Needham Crescent to provide a direct connection to a MUP on the east side of the OLRT;
- Determine the feasibility of providing a MUP connection from the park at Westvalley Private;
- Install a crosswalk and crossride at the intersection of Notting Hill Avenue and Bank Street shall be installed, with a lit MUP developed between the intersection and the pathway system on the east side of the OLRT corridor.
- A PPUDO to be located on the north and south sides of Walkley at the signalized intersection, to service both the OLRT and BRT;
- Bicycle parking shall be included on the east and west side of the station entry plaza.

# .4 Entry Plaza

The entry plaza, and pedestrian connection to the Walkley BRT station should be enhanced. Wide sidewalks, with a minimum of three (3) metres in width and pedestrian priority signals at the intersection of Walkley and the Airport Parkway shall be integrated into the design.







N.T.S.

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WALKLEY STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017

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WALKLEY STATION OTTAWA LIGHT RAIL TRANSIT





**Site Opportunities** JANUARY 2017

### 8.1.6 Confederation Station

#### .1 Station Context

The existing Confederation Station is located south of Heron Road, at the eastern perimeter of the Confederation Heights government complex. The OLRT line is located on the western edge of the Ottawa Airport Parkway, a combination of a transportation, recreation and green corridor, linking the downtown core to the Ottawa Macdonald-Cartier International Airport. The main office complex for Confederation Heights is located towards the central and western portion of the campus, near the intersection of Riverside Drive and Heron Road. North of the site is the Rideau River and the NCC's Rideau River Eastern Pathway. Confederation Heights is managed by Public Works and Government Services Canada (PWGSC), and additional intensification for the site has been identified.

There are a combination of on-road cycling and sidewalks that service the Confederation Heights complex including sidewalks on adjacent city streets, some internal sidewalks connecting the parking to the office buildings, with on-road cycling facilities on Heron Road, and the Airport Parkway. There is a MUP leading from the community to the south, to the station, and further north connecting to the on-road facilities on the east side of the complex. On the south side of the Rideau River, there is an east-west MUP, however, all north-south pedestrian and cycling facilities occur on Bronson Avenue arterial roadway.

There are bus stops located on Heron Road, with sidewalk connections to the station, and under the EA for the Baseline Road BRT improvements, increased pedestrian movements are anticipated between the BRT and OLRT. The existing O-Train station is proposed to remain in the current location, until such time as Confederation Heights is redeveloped. As part of the redevelopment, it is proposed that the station be relocated to the north side of Heron Road.

The closest residential community is on the east side of the Southeast Transit corridor, with a distance of approximately 800 metres to enter the first residential street.



## .2 Existing Pedestrian and Cycling Connections

The MUP adjacent to the station services is heavily used as both a pedestrian connection from the station to the office complex and bus stops on Heron Road, and as a cycling commuter route to the downtown core during the peak periods. This shared use, in combination with the current configuration of pathways and stairs, has been observed to create conflicts between the cyclists and pedestrians. It is anticipated that these uses will continue to increase, as the BRT station is developed at Heron Road and the OLRT extends further south.

# .3 Proposed Sidewalks and Pathways

To the north of Heron Road, the MUP shall be installed from the Rideau River Bridge to the Heron Road underpass, immediately west of the OLRT corridor. Recommendations for this station:

- Realign MUP from adjacent to rail line, to east side of central road within Confederation Heights between Brookfield and Heron Road;
- Extend the MUP from Heron Road to the Rideau River Bridge, west side of the rail line;
- Review the configuration of Confederation Station to north of Heron Road;
- Review the configuration of the BRT on Heron Road to provide a direct vertical link to the OLRT station;

# .4 Entry Plaza - 2023

As discussed, OC Transpo is proposing to develop a Paid Fare zone, with controlled access to the platform prior to the completion of Stage 2. The MUP shall be offset a minimum of three (3) metres from the edge of the paid fare zone to allow for passenger entry to the station. Bicycle parking shall be offset to the south of the entry plaza.



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CONFEDERATION STATION (PHASE 2 OLRT) OTTAWA LIGHT RAIL TRANSIT



**Cycling Network JANUARY 2017** 



CONFEDERATION STATION (PHASE 2 OLRT) OTTAWA LIGHT RAIL TRANSIT



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Pedestrian & Cycling Plan **JANUARY 2017** 

150

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N.T.S.



🔍 Ottawa Light Rail

CONFEDERATION STATION (PHASE 2 OLRT) OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



ttawa

STUDY PROPOSED FACILITY

**Site Opportunities** JANUARY 2017

## 8.1.7 Carleton Station

## .1 Station Context

Carleton Station is located in the centre of Carleton University, with the main bus stop located on the west side Campus Avenue, adjacent to the Academic Precinct. The existing O-Train Station is proposed to be redeveloped to accommodate the OLRT. The campus is subject to Carleton University's Master Plan, which is currently under review. There is a main east-west pathway immediately to the south of the station, with a three (3) metre wide underpass. Further west is Colonel By Drive, with the NCC recreational pathway system, and a pathway connection over Hartwell Locks to the Experimental Farm and Prince of Wales Drive. To the east the pathway extends to Bronson Avenue, and additional community pathways and roadways.

Campus Avenue and University Avenue have sidewalks on either side of the roadway, with a well-developed pathway system through the interior campus connecting the buildings. All the pedestrian walkways are lit, and the principle routes have a raised crosswalk at roadway crossings.

# .2 Existing Pedestrian and Cycling Connections

The campus pathway system is heavily used by faculty, staff and students of the University and the underpass south of the station is one of the two underpasses connecting the east and west portions of the campus. There is one additional overpass near the north end of the campus, with sidewalks on both sides of the bridge. At the south end, the rail bridge over University Drive, with a narrow pathway offset from the roadway, adjacent to the River. The underpass near the station also provides a connection for the local community between the MUP facilities on Colonel By Drive, Hartwell Locks and the Experimental Farm.

# .3 Proposed Sidewalks and Pathways

The internal pathway system for the campus is well used, however, the current width of the underpass south of the OLRT station is three metres, significantly less than the other crossings of the rail corridor on the campus and restricts the free flow of pedestrian and cyclists. Recommendations:

• Review widening of this underpass to nine (9) metres, (to be coordinated with the University) during the track closure for OLRT improvements to provide benefit to both Carleton University and the city.

• Extend the MUP on the east side of the OLRT alignment, connecting from the Rideau River Bridge to the east-west pathway system south of the station. This shall include modifications to pathway overpass at the south end of the campus.

# .4 Entry Plaza

The current entry plaza is well developed, with covered bicycle parking provided adjacent to the entry plaza on the west side, adjacent to Campus Avenue.







N.T.S.





OTTAWA LIGHT RAIL TRANSIT

**Cycling Network** JANUARY 2017



Ottawa Light Rail ŧ U

CARLETON STATION OTTAWA LIGHT RAIL TRANSIT



N.T.S.

LEGEND	
	600 METER RADIUS STUDY AREA
	300 METER RADIUS STUDY AREA
~	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
->	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
	TMP PROPOSED ON-ROAD BICYCLE FACILITY
-	EXISTING ON-ROAD BICYCLE FACILITY
7	TMP PROPOSED MULTI-USE PATHWAY (MUP)
7	EXISTING PATHWAY
	TRAFFIC CONTROL SIGNAL



Pedestrian & Cycling Plan JANUARY 2017



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N.T.S.

PROPOSED LIGHT RAIL TRANSIT (LRT)

PROPOSED LRT STATION

PEDESTRIAN / CYCLE CONFLICT

RESTRICTED / POOR VIEWS

TOPOGRAPHY

TRAFFIC CONTROL SIGNAL

DENSE VEGETATION



Site Analysis **DECEMBER 14, 2015** 



**Ottawa Light Rail** 

CARLETON STATION OTTAWA LIGHT RAIL TRANSIT



N.T.S.







**Site Opportunities** JANUARY 2017

## 8.1.8 Carling Avenue Station

## .1 Station Context

Carling Avenue O-Train Station shall remain in its current location, and there are no anticipated works for the station to be completed under the Stage 2 OLRT program.

# .2 Existing Pedestrian and Cycling Connections

There is a well-developed MUP and sidewalk network at this location. Currently there is a stonedust path on the south side of the OLRT corridor, and a proposed MUP on the north side. Both MUPs have been identified in several planning documents, and as the redevelopment of the lands occurs, the MUP is being installed and/or updated to current city standards. Installed under a separate program, a signalized crossing will strengthen the connectivity of the MUP system. East of Carling Avenue, the stonedust pathway continues to Prince of Wales Drive.

There is a signalized intersection on Prince of Wales Drive that provides a connection from the Experimental Farm, and to Carleton University to the southeast, with MUP along the OLRT corridor.

The station currently has uncovered parking for 6 bicycles.

# .3 Proposed Sidewalks and Pathways

The existing pathway system is well defined, with some minor modifications greatly enhancing the connectivity. Recommendations:

- The stonedust pathways along the corridor from Yonge Street to Prince of Wales Drive shall be upgraded to the current City standards for a MUP.
- Extend the MUP on the west side of Prince of Wales Drive, to the existing lights south, and north to Preston Street, to complete this integral section of the overall pathway network.







N.T.S.

**Cycling Network JANUARY 2017** 



e	LEGEND	
JEENSV		600 METER RADIUS STUDY AREA
VAY		300 METER RADIUS STUDY AREA
123	~	PROPOSED LIGHT RAIL TRANSIT (LRT)
- Aller and a second		PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)
autorite to	0	PROPOSED LRT STATION
1	~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
>	>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
de.	$\nearrow$	EXISTING ON-ROAD BICYCLE FACILITY
1		TMP PROPOSED MULTI-USE PATHWAY (MUP)
H	>	EXISTING PATHWAY
and	>	EXISTING NCC TRAIL SYSTEM
	>	STUDY PROPOSED MUP
		TRAFFIC CONTROL SIGNAL
in a		
1	NORTH	

Pedestrian & Cycling Plan JANUARY 2017



🔍 Ottawa Light Rail

CARLING STATION- NIC INFORMATION ONLY OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



CARLING STATION- NIC INFORMATION ONLY OTTAWA LIGHT RAIL TRANSIT











STUDY PROPOSED FACILITY

**Site Opportunities JANUARY 2017** 

## 8.1.9 Gladstone Station

### .1 Station Context

Gladstone Station is a proposed OLRT station located immediately north of Gladstone Avenue within existing O-Train corridor. The current urban fabric is a mix of residential, industrial and commercial. The lands to the northeast have been recently cleared of previous development, allowing for re-development as per the Community Development Plan. There is a good community connection on the north south axis with a lit MUP on the east side of the OLRT corridor, providing a continuous connection from Bayview Station, south to Carling Station.

Gladstone Avenue is a local arterial, with one lane of traffic in each direction, connecting to Preston Street to the east. There are sidewalks on either side of Gladstone, as well as many of the adjacent side streets.

## .2 Existing Pedestrian and Cycling Connections

The existing MUP is heavily used by both pedestrians and cyclists and provides a direct connection to the Bayview Station, on the West Transitway corridor and the east-west pathway system; however, there are no crosswalks or crossrides provided at this location. Gladstone Avenue is one of the City's suggested cycling routes, with no designated on-road cycling facilities. There are sidewalks on either side of Gladstone, with the majority of the adjacent streets curbed with sidewalks.

## .3 Proposed Sidewalks and Pathways

There is one north south MUP located on the east side of the OLRT corridor. There are two key proposed MUP connections: one MUP on the west side of the corridor, between Young Street and Gladstone and a pedestrian bridge over the OLRT corridor reconnecting the Laurel Street. The bridge rehabilitation proposed by MTO will accommodate the MUP, and the MUP between Young Street and Gladstone to be completed under this contract. Additional MUP routes and connections are to be completed during the redevelopment of the adjacent lands. Recommendations:

- Provide a crosswalk/crossride for the existing MUP on the east side of the LRT line.
- Provide covered bicycle parking.

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# .4 Entry Plaza

There is an entry plaza proposed on the north side of Gladstone Avenue to access the LRT station. Offset from the plaza, on both the north and south side shall be covered bicycle parking. The bicycle parking shall be located between the MUP and the entry plaza, with the MUP offset to the east of the parking.

Under the current EA for the Trillium Line, the development of the entry plaza is under review.





**GLADSTONE STATION** OTTAWA LIGHT RAIL TRANSIT



N.T.S.

LEGEND	
	1500 METER RADIUS LRT STATION STUDY AREA
	1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA
	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
	EXISTING LIGHT RAIL TRANSIT (LRT)
0	EXISTING LRT STATION
	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
	EXISTING ON-ROAD BICYCLE FACILTY
>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
7	EXISTING PATHWAY
->	EXISTING NCC TRAIL SYSTEM
NORTH	200 200 400
1 10 100 2	00 300 400

Cycling Network JANUARY 2017

CSW





LEGEND	
	600 METER RADIUS STUDY AREA
	300 METER RADIUS STUDY AREA
~	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
~	EXISTING ON-ROAD BICYCLE FACILITY
>	TMP PROPOSED MULTI-USE PATHWAY (TMP)
~	EXISTING PATHWAY
>	STUDY PROPOSED MUP
	TRAFFIC CONTROL SIGNAL
NORTH	
0 50	100 150

Pedestrian & Cycling Plan JANUARY 2017



RESTRICTED / POOR VIEWS

Site Analysis **DECEMBER 14, 2015** 

OTTAWA LIGHT RAIL TRANSIT





N.T.S.

TMP PROPOSED MULTI-USE PATHWAY (MUP)

TRAFFIC CONTROL SIGNAL

**Site Opportunities JANUARY 2017**
#### 8.1.10 Uplands Station

#### .1 Station Context

Uplands Station is a proposed station, located immediately north of the Ernst Young Centre, east of Uplands Drive. Currently, there is limited development adjacent to the proposed station with the lands designated for future development through the Ottawa Airport Authority. The Ottawa Airport Parkway Widening ESR has identified the need for a northbound on-ramp from Uplands Drive to the Airport Parkway. The requirements for the Airport Parkway, and the OLRT rail line, will require grade separated facilities for the two systems.

# .2 Existing Pedestrian and Cycling Connections

There is limited pedestrian connectivity to the general station location. Sidewalks on the east side of Uplands Drive have been constructed as part of the Ernst Young Centre, and terminate at the limits of the site. For cyclists, paved shoulders occur on Uplands Drive and are used for an on-road facility.

### .3 Proposed Sidewalks and Pathways

As this a proposed station, there are the following recommendations:

- Provide a MUP connecting the station plaza to the signalized intersection of Uplands and Research Road;
- Integrate a crossride within the intersection.
- Create sidewalks on Research Road and Paul Benoit Driveway.
- Create sidewalks and on-road cycling facilities on Breadner Boulevard, Research Road and Paul Benoit Driveway.

# .4 Entry Plaza

Pedestrian connection from the entry plaza to the front entrance of the Ernst Young Centre will be provided, with bicycle parking located at the west side of the plaza.





OTTAWA LIGHT RAIL TRANSIT



AREA

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1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA

1500 METER RADIUS LRT STATION STUDY

PROPOSED LIGHT RAIL TRANSIT (LRT)

PROPOSED LRT STATION

PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY

TMP PROPOSED ON-ROAD BICYCLE FACILITY

EXISTING ON-ROAD BICYCLE FACILITY

STUDY PROPOSED FACILITY

TMP PROPOSED MULTI-USE PATHWAY (MUP)

EXISTING PATHWAY

EXISTING NCC TRAIL SYSTEM



Cycling Network **DECEMBER 14, 2015** 



UPLANDS STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan **DECEMBER 14, 2015** 



UPLANDS STATION OTTAWA LIGHT RAIL TRANSIT

Site Analysis DECEMBER 14,2015



**DECEMBER 14, 2015** 

### 8.1.11 Airport Station

### .1 Station Context

The Airport Station is a proposed station, located on the main entrance forecourt to the facility. The existing internal roadway system is well utilized by a combination of OC Transpo, taxis, and private vehicles. The proposed OLRT station will enter the Airport at the Departures Level. The remainder of the site is heavily programmed with the requirements of the Airport Authority.

# .2 Existing Pedestrian and Cycling Connections

Due to the programming requirements for the Airport, there is limited pedestrian connectivity to the station location. Sidewalks connect between the terminal building and the adjacent on-site parking for both visitors and staff. No designated on-road facilities occur for cyclists.

# .3 Proposed Sidewalks and Pathways

Under the Trillium Line EA, it is proposed that a MUP be integrated within the OLRT rail structure that brings the passengers to the departure level at the Ottawa International Airport. To integrate the on-road facilities of Breadner Boulevard, Paul Benoit Driveway, and Research Road, within the overall pedestrian and cycling network, an at-grade MUP and bicycle parking facility is proposed. Recommendations:

- The bicycle parking is accommodated adjacent to the existing staff parking, with the existing sidewalks providing connections to the first floor front entrance.
- On-road cycling facilities from Paul Benoit Driveway to the bicycle parking.

# .4 Entry Plaza

No additional works are required for the entry plaza.









AIRPORT STATION OTTAWA LIGHT RAIL TRANSIT



Site Analysis **DECEMBER 14, 2015** 



AIRPORT STATION OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities DECEMBER 14, 2015** 

### 8.2 CONFEDERATION LINE EAST

The Confederation Line East is the extension of the Confederation Line from Blair Station to Trim Road. There are five stations on this line:

- Montreal Station
- Jeanne D'arc Station
- Orleans Station
- Place D'Orleans Station
- Tenth Line Station
- Trim Station







CONFEDERATION LINE EAST



Station Plan AUGUST 31, 2015

# OTTAWA LIGHT RAIL TRANSIT

#### 8.2.1 Montreal Station

#### .1 Station Context

Montreal Station is a proposed station, located immediately north of Highway 174, west of Montreal Road. The adjacent lands are well developed, with a residential to the northwest and light industrial immediately to the northeast. The residential community has noise attenuation walls on the limit of the roadway corridor. The current Confederation East ESR has redeveloped the roadway network at this location to accommodate the OLRT rail line and station.

Further to the east, and south, of the station area is the NCC Greenbelt lands, and the Greens Creek corridor.

### .2 Existing Pedestrian and Cycling Connections

Montreal Road has sidewalks on north side of the roadway and a paved shoulder on the south. There is an existing pathway connection between Rainbow Street and Montreal Road, however no sidewalks exist on Rainbow. There is a pedestrian footpath created through Loyola Park, connecting the residential community to the Shefford and Montreal Road intersection.

# .3 Proposed Sidewalks and Pathways

Under the Confederation Line East EA, a MUP is recommended on the north side of the OLRT corridor, connecting Blair Station, to the west. To further strengthen the community connections, the following is recommended:

- A MUP shall be provided from Loyola Avenue to the intersection of Shefford Road and Montreal Road, and the intersection modified to include a crosswalk and crossride.
- This MUP shall extend on the south side of Montreal Road to the station entry plaza.
- At Rainbow Street, sidewalks on either side the roadway from the bulb out to Canotek Road.
- Two MUPs connections to be provided at the OLRT corridor: one at the south end of Shefford Road, and a second, at E Acres Road, at the western limit of the existing noise attenuation wall.

The entry plaza is proposed for the north side of the station, with the bicycle parking provided at the west end.



MONTREAL STATION OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities** JANUARY 2017



MONTREAL STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017



OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



MONTREAL STATION OTTAWA LIGHT RAIL TRANSIT

**Cycling Network** JANUARY 2017

#### 8.2.2 Jeanne d'Arc Station

### .1 Station Context

The OLRT rail line is proposed to be located in the centre median between the east and westbound lanes of Highway 174. Centred on the OLRT line, Jeanne d'Arc Station is located at grade, with the station entry at the Jeanne d'Arc overpass. The community is well-established, with residential to the northwest, northeast, and southeast. To the southwest is a blend of commercial developments and city facilities, including an OC Transpo Park and Ride facility.

Jeanne d'Arc Boulevard is a four lane city arterial roadway, with sidewalks on both sides. The right of way is quite wide, and appears to have sufficient width for an additional lane of traffic in either direction. Youville Drive, servicing the commercial developments, has a continuous sidewalk on the south side of the roadway, with a sidewalk on the eastern end at the north side. The residential streets have an urban cross section, with sidewalks occurring on the principle collector streets.

The ESR has identified modifications to the on and off ramps at Jeanne d'Arc and Highway 174, reducing the overall footprint of the transportation network requirements.

# .2 Existing Pedestrian and Cycling Connections

The Orleans Community has a well-developed internal pathway system that links the community through a series of parks and green spaces. There is a narrow sidewalk offset from the roadway on Jeanne d'Arc Boulevard, north of Highway 174, and sidewalks adjacent to the roadway to the south. Further to the north, along the Ottawa River, is the Ottawa River Pathway, a MUP linking the community west to the downtown core and east to Petrie Island.

There is currently covered parking for 24 bicycles at the intersection of Jeanne d'Arc and the on ramp to the 174 westbound.

# .3 Proposed Sidewalks and Pathways

Fortune Drive and Vineyard Drive are the two residential collector streets to the north of the proposed station that will provide access to the proposed station. Recommendations:



- Create on-road cycling facilities on Fortune Drive and Vineyard Drive;
- Provide crosswalk and crossride at the intersection of Jeanne d'Arc and Fortune Drive;
- Create a MUP on the east side of Jeanne d'Arc Boulevard, north towards Highway 174;
- Bicycle parking shall be provided at the termination of the MUP, with a sidewalk connection from the bicycle parking to the plaza entry.

# .4 Entry Plaza

The entry plaza must accommodate the pedestrians accessing the station from the bicycle parking to the north, the park and ride to the south, and the community. There will be a bus stop located in proximity to the station, for local buses.





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Ottawa Light Rail

JEANNE D'ARC STATION OTTAWA LIGHT RAIL TRANSIT

**Cycling Network** JANUARY 2017



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JEANNE D'ARC STATION OTTAWA LIGHT RAIL TRANSIT

LEGEND	
	600 METER RADIUS STUDY AREA
	300 METER RADIUS STUDY AREA
~	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
7	TMP PROPOSED ON-ROAD BICYCLE FACILITY
7	STUDY PROPOSED FACILITY
7	EXISTING PATHWAY
	TRAFFIC CONTROL SIGNAL
NORTH	

Pedestrian & Cycling Plan

JANUARY 2017



JEANNE D'ARC STATION

OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



JEANNE D'ARC STATION OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities** JANUARY 2017

### 8.2.3 Orleans Boulevard Station

### .1 Station Context

The OLRT rail line will continue in the centre median between the east and westbound lanes of Highway 174. Similarly to Jeanne d'Arc Station, Orleans Boulevard Station will be located at grade, with the station entry at the Orleans Boulevard overpass. On all four quadrants is a well-established residential community with a blend of detached and semi-detached homes.

East of the proposed station is Bilberry Creek, with a combined Parks and Open Space and Environmental Protected areas.

# .2 Existing Pedestrian and Cycling Connections

The Orleans Community has a well-developed internal pathway system that links the community through a series of parks and green spaces. There is a narrow sidewalk offset from the roadway on Orleans Boulevard, both north and south of Highway 174. At the north end of Orleans Boulevard, the roadway links to the Ottawa River Pathway, a MUP linking the community west to the downtown core and east to Petrie Island.

Commencing on the east side of Orleans Boulevard, on the south side of Highway 174 is a pathway system that extends easterly to Place d'Orleans, a regional shopping centre, and the current BRT station. This pathway is a blend of stonedust and asphalt. On the north side of the highway, the pathway system is interrupted by Bilberry Creek, which effectively blocks any east-west community connections.

# .3 Proposed Sidewalks and Pathways

Fortune Drive continues to be one of the community collectors between Jeanne d'Arc and Orleans Boulevard. East of Orleans Boulevard, it becomes Sugar Creek Way, which terminates at the Bilberry Creek corridor. Recommendations:

- Extend the on-road cycling facilities proposed for Fortune Drive east, and continue through Sugar Creek Way.
- Create a crosswalk and crossride at the intersection of Orleans Boulevard and Fortune Drive;
- Develop a MUP on the east side of Orleans Boulevard, through to the existing pathway connection south of the overpass;
- Create a MUP from Sugar Creek Way, over the Bilberry Creek corridor, through to the existing pathway on the east side of the creek.

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# .4 Entry Plaza

A PPUDO shall be located on both the east and west sides of roadway, immediately adjacent to the station entry plaza. The MUP will extend on the east side of the roadway.



**ORLEANS BOULEVARD STATION** OTTAWA LIGHT RAIL TRANSIT



**Cycling Network** JANUARY 2017



**ORLEANS BOULEVARD STATION** 

**Ottawa Light Rail** 

LEGEND	
	600 METER RADIUS STUDY AREA
	300 METER RADIUS STUDY AREA
-	PROPOSED LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
7	TMP PROPOSED ON-ROAD BICYCLE FACILITY
7	STUDY PROPOSED FACILITY
>	TMP PROPOSED MULTI-USE PATHWAY (MUP)

OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017





**ORLEANS BOULEVARD STATION** OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



**ORLEANS BOULEVARD STATION** OTTAWA LIGHT RAIL TRANSIT

**Ottawa Light Rail** ŧ

**Site Opportunities** JANUARY 2017

#### 8.2.4 Place d'Orleans Station

### .1 Station Context

Place d'Orleans is an existing BRT station that will be modified to accommodate the OLRT line. Currently it is located on the south side of Highway 174, adjacent to the Place d'Orleans Shopping Centre and immediately east of Champlain Street. A local station, and Park and Ride, are on the north side of the roadway, with a covered pedestrian bridge extending from the local station, connecting to the BRT station and through to the shopping centre. The proposed OLRT station will be located in the centre median of Highway 174, and will utilize the existing pedestrian overpass to connect to the adjacent communities. The community is well-developed to both the north and south, with primarily residential to the north, and mixed use to the south. There is one parcel of land immediately to the north that is currently undeveloped with a mixed use zoning.

# .2 Existing Pedestrian and Cycling Connections

Bilberry Creek is integrated within a large north south naturalized corridor that segregates the east and west communities north of Highway 174, with Jeanne d'Arc Boulevard providing one crossing. There are several smaller internal greenways with pathways linking the community. There is a narrow sidewalk offset from the roadway on Orleans Boulevard, both north and south of Highway 174. At the north end of Orleans Boulevard, the roadway links to the Ottawa River Pathway, a MUP linking the community west to the downtown core and east to Petrie Island.

There is a footpath on both the north and south side of Highway 174 leading to Place d'Orleans BRT. On the north side, this pathway extends from Bilberry Creek easterly, with connections to the community to the north. There is an additional footpath leading from the Park and Ride north to Bilberry Drive. Northeast of the Park and Ride there is an asphalt pathway leading from Champlain Street to Alpine, and further east to Borland Drive.

The Park and Ride currently has covered parking for 28 bicycles.

# .3 Proposed Sidewalks and Pathways

Formalizing the existing community footpaths, to Bilberry Drive, and along the north side of Highway 174 into MUPs with greatly enhance the community connectivity. To this end, the following are the recommendations:

- Upgrade the east-west MUP, along the north perimeter of the Highway 174 corridor, including community connections, to current city standards;
- Upgrade the asphalt pathway to a MUP between Champlain Street to Alpine, and Willow to Borland Drive;
- Formalize the footpath to a MUP from the Park and Ride to Bilberry Drive, including pedestrian lighting.

# .4 Entry Plaza

An entry plaza shall be developed on both the north and south pedestrian access points to the overpass. Adjacent to each entry plaza shall be bicycle parking, with a PPUDO developed within the Park and Ride.





PLACE D'ORLEANS STATION OTTAWA LIGHT RAIL TRANSIT

**Cycling Network** JANUARY 2017



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PLACE D'ORLEANS STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017



OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



PLACE D'ORLEANS STATION OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities JANUARY 2017**
### 8.2.5 Tenth Line Station

### .1 Station Context

The OLRT rail line will continue in the centre median between the east and westbound lanes of Highway 174, just west of the Tenth Line Road interchange. Similarly to Orleans Boulevard Station, Tenth Line Station will be located at grade, with the station entry occurring with an overpass. At this location, the urban development is on-going, with a blend of detached and semi-detached homes, backing onto Highway 174. Development is occurring to the south of the station, with residential west of Tenth Line, and commercial/office to the east. There is some development occurring to the northeast, offset from the roadways, orientated toward Jeanne D'Arc Boulevard. St. Joseph Boulevard is to the south of the station, with a significant escarpment to the south, separating the residential community of Orleans Queenswood Heights from the development adjacent to the station.

Continuing on the south side of Highway 174 is the hydro corridor that extends from Montreal Road to the eastern limits of the study, at Trim Road.

# .2 Existing Pedestrian and Cycling Connections

On the north side of the highway, there are several smaller internal greenways with pathways linking the community. Immediately north of the residential community, at the end of Tenth Line, the roadway links to the Ottawa River Pathway, the MUP linking the community, west to the downtown core and east to Petrie Island. There are two (2) pedestrian pathways connecting from Lawler Crescent, north of Highway 174, leading to the future development lands adjacent to the highway.

St. Joseph Boulevard is identified for future on-lane cycling facilities, and the sidewalks consist of a blend of concrete and asphalt paving, and less than the 1.8 current city standard. Jeanne D'Arc Boulevard transitions from a sidewalk on both sides, to a sidewalk on the south side, with proposed city on-road cycling facilities. Tenth Line is also identified for future on-road cycling facilities.

## .3 Proposed Sidewalks and Pathways

As the lands adjacent to the proposed station continue to develop, there are few key recommendations for increased connectivity:

• Extend the east-west MUP, within the Hydro corridor, along the south perimeter of the Highway 174 corridor, including community connections;



- Provide a MUP on Tenth Line, from the existing Ottawa River Pathway to the east-west MUP along Highway 174;
- Extend the existing pathway connections on Lawler Crescent through to the pedestrian overpass to Tenth Line Station;
- Improve the pathways and connections from Brookridge Crescent to Old Tenth Line Road/St. Joseph Boulevard intersection;
- Review the opportunity to reconfigure Tenth Line Bridge overpass to accommodate cycling lanes and/or a MUP.

# .4 Entry Plaza

An entry plaza shall be developed on both the north and south pedestrian access points to the overpass. Adjacent to each entry plaza shall be bicycle parking, with a PPUDO adjacent to the station.





TENTH LINE STATION OTTAWA LIGHT RAIL TRANSIT

Cycling Network **DECEMBER 14, 2015** 



TENTH LINE STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan **DECEMBER 14, 2015** 



OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



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OTTAWA LIGHT RAIL TRANSIT

Site Opportunities **DECEMBER 14, 2015** 

#### 8.2.6 Trim Station

#### .1 Station Context

Trim Station is a proposed station, at the eastern limits of the OLRT, and similar to the stations to the west, located in the median, at the intersection of Trim and Highway 174. Trim Road is proposed as an overpass at this location, with access to at-grade station from the overpass bridge. The adjacent lands are a blend of industrial, institutional and reserve development lands. The majority of the existing development is southwest of the station, with some development to the east. The existing residential development is south of St. Joseph Boulevard/Old Montreal Road.

To the southeast of the intersection of Trim is the existing OC Transpo Park and Ride, and to the northwest is the La Cite's Campus Alphonse-Desjardins, servicing approximately 350 students, with access from Jean D'Arc Boulevard. Further north is the Ottawa River, and the major recreational destination of Petrie Island.

#### .2 Existing Pedestrian and Cycling Connections

The main MUP is located on the north side of Jeanne D'Arc Boulevard, and connects to the on-road cycling facilities leading to Petrie Island. There are on-road cycling facilities identified for Trim, St. Joseph/Old Montreal Road.

The current station has covered parking for 12 bicycles.

## .3 Proposed Sidewalks and Pathways

As this portion of City is currently under development, it is anticipated that through the Site Plan Approval process, pedestrian and cycling connections from the developments to the pathway system connecting to the station will be completed, and assist in strengthening the overall network. To this end, the following are the recommendations:

- Identify this station for review for community connections with any upcoming development plans;
- Extend the MUP from Tenth Line to Trim Road within the Hydro corridor on the south side of Highway 174;
- Create a MUP between the La Cite campus and the OLRT station.

## .4 Entry Plaza

An entry plaza shall be developed on both the north and south pedestrian access points to the overpass. Adjacent to each entry plaza shall be bicycle parking, with a PPUDO developed within the Park and Ride.



TRIM ROAD STATION OTTAWA LIGHT RAIL TRANSIT

**Cycling Network JANUARY 2017** 



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TRIM ROAD STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017



TRIM ROAD STATION OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities** JANUARY 2017

### 8.3 CONFEDERATION LINE WEST

The Confederation Line West is an extension from the Stage 1 OLRT, from Tunney's Pasture Station west to Bayshore Station, with a spur connecting to Baseline Station from Lincoln Fields Station. There are eleven (11) stations on this line:

Main Line

- Westboro Station
- Dominion Station
- Cleary Station
- New Orchard Station
- Lincoln Fields Station
- Queensview Station
- Pinecrest Station
- Baseline Station

#### South Spur

- Iris Station
- Baseline Station



### 8.3.1 Westboro Station

## .1 Station Context:

Westboro Station is located on Scott Street, bridging between the mixed use lands to north and Richmond Road to the south. The existing BRT will be redeveloped to accommodate the OLRT, with a local bus station retained at the upper plaza level, accessing the station from the north side. The adjacent lands are well developed, with several high rise residential buildings to the north east and mature residential to the northwest. One office tower is located directly to the north of the station. To the south, the redevelopment of the lands on McCrae is on-going, with additional intensification identified.

Scott Street currently has the MUP on the north side of the roadway, and limited sidewalks on either the north or south side of the roadway. In proximity to the station, there is only one section of sidewalk between McCrae Street and Clifton Street. The side streets leading to Scott Street have curbs with no sidewalks, with the exception of McCrae Street, with a sidewalk on the east of the roadway, leading from Scott to Richmond Road. There are three pathway connections on the north side of the station, from both the east and west, with an additional connection to the office complex to the north.

There is a PPUDO located on the north side of Scott, directly in front of the station, with informal PPUDO occurring on the paved shoulder on the south side. There are two pedestrian activated signals: one at each the east and west ends of the station. Existing covered bicycle parking occurs at the east end of the station plaza.

# .2 Existing Pedestrian and Cycling Connections:

The existing MUP is heavily used by both pedestrians and cyclists and provides a direct connection from the community to the downtown core. In addition, there is an on road cycling facility on Scott Street. There is a well-used pedestrian connection currently between the BRT and Richmond Road, and it is anticipated that this movement will continue.

The station currently has covered parking for 12 bicycles.

## .3 Proposed Sidewalks and Pathways:

Westboro Station is within a well-developed community, and the following recommendations will further enhance the connectivity:



- Formalize the PPUDO on the south side of Scott Street, west of the pedestrian intersection;
- Relocate the PPUDO on the north side of Scott Street to the east side of the pedestrian crossing.
- Provide concrete sidewalks are to be built on both the north and south side of Scott Street to provide a continuous connection across the face of the PPUDO to the station plaza.
- Extend the sidewalk on the south side of Scott Street shall extend to McCrae Street.
- Improve the existing pathway to the northwest of the station, leading to Lanark Avenue, to City MUP standards and ensure the pedestrian lighting meets standards.
- Provide a cross walk/cross ride is to be constructed at Lanark Avenue to connect to the existing sidewalk on the north side of Lanark Avenue.
- This MUP shall be extended south at Westboro Station to provide a direct connection to the existing MUP on Scott Street.

# .4 Entry Plazas:

There shall be an entry plaza on both the north and south side of the station to accommodate bus transfers and community connections. The existing retaining wall on the north side of the station shall be reduced as much as possible to provide greater visual connectivity between the station and the community.





WESTBORO STATION OTTAWA LIGHT RAIL TRANSIT

**Cycling Network JANUARY 2017** 



WESTBORO STATION OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan JANUARY 2017



WESTBORO STATION OTTAWA LIGHT RAIL TRANSIT

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Site Analysis **DECEMBER 14, 2015** 



WESTBORO STATION OTTAWA LIGHT RAIL TRANSIT

🔍 Ottawa Light Rail

**Site Opportunities JANUARY 2017** 

### 8.3.2 Dominion Station

## .1 Station Context:

The OLRT station is shifting from the current BRT site, near the interface with the Sir John A. MacDonald Parkway, further east to align with Dominion Street. On either side of the OLRT corridor is residential housing, with high rise residential occurring to the southwest of the site. The neighbourhood is relatively developed with some opportunity for additional intensification identified east of Roosevelt Street. To the south, on Richmond Road, is the western limit of Westboro Village.

The streets to both the north and south are a combination of urban and rural cross section, with no sidewalks, and a pedestrian bridge over the OLRT corridor connecting the community to the east. There is a MUP on the south side of the OLRT corridor that connects the NCC Parkway path system to the downtown core to the east, with one additional connection to the NCC path system to the north of the OLRT corridor at Workman Avenue.

An informal PPUDO occurs on the north side of Dominion Station, on the gravel shoulder.

# .2 Existing Pedestrian and Cycling Connections

The existing MUP is heavily used by both pedestrians and cyclists and provides a direct line from the community to the downtown core. The intersection of the MUP and the pedestrian overpass is quite tight, with existing planting further reducing the visibility from the MUP towards the overpass. Pedestrian access to the station occurs on both north and south side of the current station, with access from Workman Avenue and Dominion Avenue.

The station currently provides a mix of covered and uncovered parking for 24 bicycles and is located within the Dominion Street right of way, offset from the current Dominion Station.

## .3 Proposed Sidewalks and Pathways

Under the EA, it has been identified that the formal PPUDO should be developed on the north side of Dominion Street and this will be offset on the west side of the station entry plaza. Further, a concrete sidewalk, to city standards are to be built on the north side of Dominion, from the PPUDO to the station plaza, with a sidewalk constructed on Royal Avenue to provide a pedestrian connection between Richmond



Road and the station. The location of the sidewalk to be confirmed through the EA process. Additional recommendations include:

- The MUP shall be shifted south towards Dominion Street, providing an offset between the line of travel on the MUP and the station entry.
- The MUP alignment will continue easterly, along the south limit of the city lands, to maximize the distance between the pedestrian overpass and the MUP, and as required provide a route for emergency vehicles.
- On the north side of the station, a MUP will be developed, connecting the station entry to Workman Avenue. Commencing at, and including the pedestrian overpass, west to the station entry, the MUP on both the north and south side of the corridor shall be lit.

Additional MUP requirements west of the station are identified in Confederation West Environmental Study.

# .4 Entry Plaza

There shall be an entry plaza on both the north and south side of the station and shall extend from the station to Dominion Avenue on the south. 75% of the bicycle parking will be developed on the south side of the station, immediately adjacent to the MUP, and offset from the station entry.





OTTAWA LIGHT RAIL TRANSIT

**Cycling Network JANUARY 2017** 



OTTAWA LIGHT RAIL TRANSIT

Pedestrian & Cycling Plan **JANUARY 2017** 



DOMINION STATION OTTAWA LIGHT RAIL TRANSIT

	PROPOSED LIGHT RAIL TRANSIT (LRT)
•••••	PROPOSED SUB-GRADE LIGHT RAIL TRANSIT
c==0	EXISTING BRT STATION
	PROPOSED LRT STATION
*	PEDESTRIAN / CYCLE CONFLICT
~	VIEWS
M	RESTRICTED / POOR VIEWS
	WIND EXPOSURE
	DESIRE LINE
	TRAFFIC CONTROL SIGNAL
$\bigcirc$	DENSE VEGETATION
NORTH	

Site Analysis **DECEMBER 14, 2015** 



OTTAWA LIGHT RAIL TRANSIT

JANUARY 2017

#### 8.3.3 Cleary Station

#### .1 Station Context

Cleary Station is a new station on the Confederation West line, and will be located north of Richmond Road, immediately east of Cleary Avenue, on the south perimeter of the Sir John A MacDonald Parkway. The existing community is a blend of residential, institutional, with some commercial. There is an existing signalized intersection at Cleary and Richmond, with local bus stops slightly offset to the east and west. Immediately south of Richmond Road is the Byron Linear Park, with an asphalt pathway. Further south is a well-developed residential community, with high density residential to the southwest and west.

Richmond Road has a sidewalk on the north side, with the pathway in Byron Linear Park providing the pedestrian route on the south side. Cleary Street and the institutional complex to the west of the proposed station have limited sidewalks, and delineated pedestrian routes. South of the park is Byron Road, with a rural cross section, and on street parking on the north side of the roadway.

### .2 Existing Pedestrian and Cycling Connections

The Linear Park is well used by pedestrians, with the eastern limit connecting to the western end of Westboro Village. The MUPs both the north and south side of the Sir John A. Macdonald Parkway are used by cycling commuters in season, however, are not winter maintained.

#### .3 Proposed Sidewalks and Pathways

The Richmond Road right of way is quite narrow at this location, and there is limited opportunity to provide a PPUDO within this corridor. Recommendations:

- PPUDO will be located on both the north and the south side of Byron Avenue to service Cleary Station.
- Concrete sidewalks will be developed along the full face of each PPUDO and provide continuous connection to the Cleary and Richmond Road signalized intersection.
- At the intersection of Redwood Avenue and Byron Avenue, cross walks and cross rides will be developed to accommodate the community to the south of Byron access to Cleary Station.



#### .4 Entry Plaza

The principle entry plaza will be located on the southwest side of Cleary Avenue and provide a high level of visibility from Cleary Avenue to the station entry. The covered bicycle parking will be located on the south side of the station, adjacent to the MUP at Cleary Avenue.





OTTAWA LIGHT RAIL TRANSIT



**Cycling Network** JANUARY 2017





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Pedestrian & Cycling Plan **JANUARY 2017** 





**CLEARY STATION** OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



**CLEARY STATION** OTTAWA LIGHT RAIL TRANSIT



**Site Opportunities JANUARY 2017** 

### 8.3.4 New Orchard Station

## .1 Station Context

New Orchard Station is a new station, and will be located between Richmond Road and Byron Road, east of New Orchard Drive. One key community that will be served by this station is the high rise residential complex on Ambleside Drive, northwest of the station. Immediately north of the station is a commercial, with intensification identified for lands to the northeast. To the south of the station is a well-established residential community.

Byron Avenue Linear Park terminates to the west of the station, with the existing park pathway ending at New Orchard Avenue. The residential streets to the south of Byron are a blend of urban and rural cross-sections, with limited sidewalks. At this location, Richmond Road has a sidewalk on both the north and south side of the roadway, leading to the local bus stops on Richmond Road.

Further north, the New Orchard Avenue are the MUPs on the Sir John A. MacDonald Parkway, with an existing pedestrian underpass connecting to the north and south sides of the parkway.

## .2 Existing Pedestrian and Cycling Connections

There are existing well used pathway connections between the high rise residential Ambleside community to Richmond Road and the local bus stops. These pathways are a combination of narrow asphalt paths, some with stairs, to accommodate the grade change. There are pathway connections crossing Byron Linear Park, connecting the south community to the local bus stops on Richmond Road.

## .3 Proposed Sidewalks and Pathways

There is a significant quantity of residential towers to the northwest of the station, and enhancing the pedestrian connections between the Ambleside community and the New Orchard Station will increase connectivity. Recommendations:

- A new lit MUP connection between Ambleside Drive and Richmond Road, at the east end of the residential block;
- Develop a crosswalk, cross ride at Ambleside Drive;
- Widen the sidewalk between the MUP and New Orchard Avenue on Richmond Road to meet current city standards,
- Provide a MUP connection between the intersections, connecting to the new station plaza.

## .4 Entry Plaza

With the location of the proposed station within the Bryon Linear Park, the PPUDO has been identified to be located on the north side of Byron Avenue, directly east of the entry plaza. The covered bicycle parking shall be located to the west of the entry plaza, with direct access provided from the on-road cycling facilities from Richmond Road, as well as from the community to the south. On the north side of the station, the existing pathway shall be realigned to provide a minimum of three (3) metre offset from the station, and terminate at the New Orchard Avenue intersection.





**NEW ORCHARD STATION** OTTAWA LIGHT RAIL TRANSIT



N.T.S.

	LEGEND	
		1500 METER RADIUS LRT STATION STUDY AREA
1		1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA
/	-	PROPOSED LIGHT RAIL TRANSIT (LRT)
		PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)
	0	PROPOSED LRT STATION
2		STUDY PROPOSED FACILITY
		EXISTING ON-ROAD BICYCLE FACILITY
	>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
	>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
	~	EXISTING PATHWAY
	~	EXISTING NCC TRAIL
	~	PROPOSED 3.0m WIDE LRT MULTI-USE PATHWAY
X		
	NORTH	
	0 100 2	CO 300 400 CSW

Cycling Network JANUARY 2017





**NEW ORCHARD STATION** OTTAWA LIGHT RAIL TRANSIT



Pedestrian & Cycling Plan **JANUARY 2017**


NEW ORCHARD STATION

RESTRICTED / POOR VIEWS

TRAFFIC CONTROL SIGNAL

OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



tawa

**NEW ORCHARD STATION** OTTAWA LIGHT RAIL TRANSIT



**Site Opportunities JANUARY 2017** 

#### 8.3.5 Lincoln Fields Station

#### .1 Station Context

The existing station has two components: a BRT aligned on the north-south axis of the Transitway, with a local platform on the east side, perpendicular to the station. In addition, there is a pedestrian bridge linking Carling Avenue to both the local station, and the BRT station. The OLRT station will shift south of the existing BRT alignment, providing a direct connection to Carling Avenue, with the local platform remaining as is. Carling Avenue has local bus stops on both the north and south side of the roadway, with the north stop directly adjacent to the pedestrian overpass. The south side stop, with no direct connection to the BRT, has a well-developed pedestrian desire line down the overpass embankment to the east side MUP.

This station is situated in the middle of the transportation corridor, with the local community offset to both the east and west. Carling Avenue, a major six lane arterial roadway runs east-west and Sir John A. MacDonald Parkway/transit corridor running north-south. To the northwest and southeast are high rise residential, with a commercial plaza to the west, and primarily low density residential to the east. There are existing MUPS on both the east and west side of the station, extending from the south towards Highway 417 and north to the Sir John A. MacDonald Parkway.

There is a PPUDO located at the east end of the local platform, with direct access from a signalized intersection on Carling Avenue. The community to the northwest has a well-developed informal connection through the high-rise development to the crosswalk at the signalized intersection on the Parkway.

### .2 Existing Pedestrian and Cycling Connections

The existing MUP is well used by both the community to connect to the BRT, adjacent high school, as well as for recreational uses. There is well-defined pedestrian footpath from the residential community to the northwest to the BRT station, leading to the signalized intersection. South of Carling Avenue is an existing pedestrian overpass, connecting the communities to the east and west of the BRT corridor and providing a community link to the BRT station.

The station currently has a mix of covered and uncovered parking for 36 bicycles.



### .3 Proposed Sidewalks and Pathways

With the OLRT station located in the centre of the major east-west, north-south transportation corridor, maintaining and enhancing the pedestrian and cycling connections is important. There is a significant pedestrian movement from the high density residential community northwest of the station to the BRT. It is anticipated that this movement will continue. Recommendations:

- Provide a direct MUP connection from the signalized intersection at the Parkway to the OLRT station;
- Modify the Sir John A MacDonald Parkway intersection to include a cross ride;
- Realign the MUP on the west side of the OLRT alignment from the current location to adjacent to the OLRT alignment, eliminating the roadway crossings.
- In the southeast quadrant, the existing footpath shall be formalized to a city standard MUP;
- Create a MUP connection from pathways on the east side of the OLRT to the signalized intersection of Edgeworth and Richmond Road;
- Provide a cross ride at the signalized intersection.

The proposed pedestrian overpass identified within the EA will continue to link communities on either side of the transit corridor and must be installed prior to the removal of the existing overpass. The connections between the north-south MUPs and the east-west overpass shall be designed to ensure clear lines of sight and reduce conflict. The existing MUPs will be realigned to maintain the same linkages, with the MUP adjacent to the local platform reviewed and approved by the City prior to final design.

# .4 Entry Plazas

The station entry plaza will be located on Carling Avenue. Bicycle parking shall be provided on the south side of Carling Avenue, offset from the plaza to accommodate cyclists from the MUPs on either side of the OLRT alignment. The PPUDO will continue in the same location, with a lit sidewalk connection between the PPUDO and the entry to the OLRT station and the local platform.





LINCOLN FIELDS STATION OTTAWA LIGHT RAIL TRANSIT



LEGEND 1500 METER RADIUS LRT STATION STUDY AREA 1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA PROPOSED LIGHT RAIL TRANSIT (LRT) PROPOSED SUB-GRADE (LRT) PROPOSED LRT STATION STUDY PROPOSED FACILITY TMP PROPOSED ON-ROAD BICYCLE FACILITY EXISTING ON-ROAD BICYCLE FACILITY TMP PROPOSED MULTI-USE PATHWAY (MUP) EXISTING PATHWAY EXISTING NCC TRAIL SYSTEM STUDY PROPOSED FACILITY



**Cycling Network** JANUARY 2017



OTTAWA LIGHT RAIL TRANSIT



**JANUARY 2017** 



LINCOLN FIELDS STATION OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 



LINCOLN FIELDS STATION OTTAWA LIGHT RAIL TRANSIT



#### LEGEND





**Site Opportunities JANUARY 2017** 

CSW

#### 8.3.6 Queensview Station

#### .1 Station Context

Queensview Station is a new station, proposed on the north side of Highway 417, towards the eastern end of the Light Industrial zoning on Queensview Drive. Currently there is commercial land uses immediately to the north, with a well-developed residential community, offset north of Queensview Drive. Similarly, on the south side of Highway 417, there are commercial land uses adjacent to the 417, with a well-developed residential community further south. Further east of the station is the main LRT line, with Iris Station to the south, and Lincoln Fields Station to the north.

Queensview Drive has a sidewalk on the south side of the roadway, and no connections to the residential community further north. Baxter Road, on the south of Highway 417 is curbed, with no sidewalks on either side of the roadway.

### .2 Existing Pedestrian and Cycling Connections

There are no existing facilities in the station area, with all the sidewalks and MUPs proposed through the station design and pedestrian overpass.

### .3 Proposed Sidewalks and Pathways

There is a bulb-out terminating both Queensview Drive and Baxter Road that can accommodate vehicles accessing a PPUDO for both the east and west directional movements of passengers on the OLRT. Further modifications to the existing roadways will enhance connectivity and provide routes to the station. Recommendations:

- A PPUDO shall be developed at the Queensview Drive bulb-out and at the base of the MUP connecting to the pedestrian overpass.
- There shall be a minimum of six (6) metres from the base of the ramp leading to the overpass to any MUP connections.
- Sidewalks are to be included on the south side of Queensview Drive, and on the east and west side of Baxter Road, to connect to the existing facilities.
- On-road cycling facilities are proposed for both Baxter Road and Queensview Drive to facilitate cycling.

MUP connections from the station to connect to the existing MUP east of the Pinecrest Creek to be developed.



## .4 Entry Plaza

The entry plaza shall be offset from the main north south route from the overpass from the front face of the station entry. Bicycle parking shall be provided, on the north side of the entry plaza.



QUEENSVIEW STATION OTTAWA LIGHT RAIL TRANSIT



N.T.S.

LEGEND	
	1500 METER RADIUS LRT STATION STUDY AREA
	1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA
	PROPOSED LIGHT RAIL TRANSIT (LRT)
)	PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)
0	PROPOSED LRT STATION
)	STUDY PROPOSED FACILITY
>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
	EXISTING ON-ROAD BICYCLE FACILITY
>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
7	EXISTING PATHWAY
	EXISTING NCC TRAIL SYSTEM
~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
NODTU	

NORTH 0 100 200 300 400 CSW

**Cycling Network** JANUARY 2017



QUEENSVIEW STATION OTTAWA LIGHT RAIL TRANSIT



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Pedestrian & Cycling Plan **JANUARY 2017** 



QUEENSVIEW STATION OTTAWA LIGHT RAIL TRANSIT



N.T.S.

LEGEND







Site Analysis **DECEMBER 14, 2015** 



OTTAWA LIGHT RAIL TRANSIT

**Ottawa Light Rail** 





PROPOSED SIDEWALK

TMP PROPOSED MULTI-USE PATHWAY (TMP)

TRAFFIC CONTROL SIGNAL

**Site Opportunities JANUARY 2017** 

### 8.3.7 Pinecrest Station

## .1 Station Context

The Pinecrest Station will be reconfigured. Currently located north of Highway 417, with an at-grade intersection at Pinecrest Road, the station will be shifted north, with the LRT rail alignment paralleling the 417 and underpasses at the both the off and on-ramps of the highway, as well as at Pinecrest Road. To the northwest is a well - developed transit orientated community, a recreational complex to the north, and the commercial/institutional lands on Queensview Crescent. South of the highway are commercial lands on both sides of Pinecrest.

Pinecrest Road has sidewalks on both sides of the roadway, with signalized intersections at Highway 417 off-ramp, Queensview Drive and Dumaurier Avenue. Dumaurier Avenue has sidewalks on both sides of the roadway, with a current pedestrian connection to the existing station location. There are local bus stops on Pinecrest Avenue, with access to the station at the signalized intersections.

# .2 Existing Pedestrian and Cycling Connections

Currently, there is an east-west pedestrian connection between Dumaurier Avenue and Pinecrest Avenue. There are several private, internal pathway connections within the residential complex west of Dumaurier Avenue.

The station currently has covered parking for 12 bicycles.

# .3 Proposed Sidewalks and Pathways

The entry to the station will be approximately at grade with Dumaurier Avenue and Pinecrest Avenue, providing the opportunity for a direct MUP connection between the roadways and the station entry. Recommendations:

- The MUP at Dumaurier Avenue shall terminate with a cross walk and cross ride, aligning with the internal pathway leading to the community.
- A PPUDO shall be located to the south of the MUP, on the east side of Dumaurier Avenue, with a lit pathway connection to the entry plaza.
- The MUP shall continue easterly, connecting to the signalized intersection at the Highway 417 off-ramp.
- The MUP shall be lit on the east side of Pinecrest Road from the intersection to the station.
- This intersection shall have crosswalks, and the local bus stops, to provide a clear connection between the bus and the LRT station.

• The MUP shall continue north, to the Queensview Drive intersection, and provide both cross walks and cross rides.

On-road cycling facilities are recommended throughout Dumaurier Avenue, linking to the on-road cycling facilities on Queensview Drive.

# .4 Entry Plaza

There shall be an entry plaza on the north side of the station, with covered bicycle parking on both the east and west sides of the plaza. The MUP will be offset a minimum of nine (9) metres from the front face of the station entry, with a plaza extending from the station to the MUP.





OTTAWA LIGHT RAIL TRANSIT



JANUARY 2017



PINECREST STATION OTTAWA LIGHT RAIL TRANSIT



Pedestrian & Cycling Plan **JANUARY 2017** 





PINECREST STATION OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 





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PINECREST STATION OTTAWA LIGHT RAIL TRANSIT

**Site Opportunities** 

**JANUARY 2017** 

CSW

### 8.3.8 Bayshore Station

## .1 Station Context

Bayshore Station is located immediately west of Bayshore Shopping Centre, north of Highway 417. The existing station will be converted to the LRT, and this is the western limit of the Stage 2 of the OLRT. The West Transitway BRT station will be located immediately to the north of the OLRT station. Bayshore Shopping Centre is a regional shopping centre, with well-developed high density housing to the north and west. To the south is Highway 417 and the NCC Greenbelt lands.

Woodridge Crescent is a local residential street, connecting to Bayshore Drive, with are sidewalks on either side of the roadway. There is a direct pedestrian connection between the station and Bayshore Shopping Centre, with a proposed MUP connecting Holly Acres Road and further west to the NCC and regional pathway system. Within the residential community to the north of the station, there is a strong internal east-west pathway system. There is one path leading from the north to this pathway system, however does not extend south to the Woodridge/Bayshore parking lot entrance. To the east of the station roadway access is a signalized intersection accommodating pedestrian and cycling from the north side of Woodridge to the station, further east, at one of the entry points to the parking structure. At the Woodridge intersection leading to the station, there is no pedestrian crossing.

# .2 Existing Pedestrian and Cycling Connections

There is one pedestrian connection, leading from Richmond Road to the southeast entry to the shopping complex. The intersection for the Transitway and parking lot is not signalized or provides any crosswalk or cross ride. The West Transitway MUP will enhance the community connection to the western community.

The station currently has covered parking on the east end of the local station for 24 bicycles.

# .3 Proposed Sidewalks and Pathways

There are two pathway improvements for this station. Recommendations:

- Design the alignment of the LRT main line to be shifted slightly to the south to accommodate a MUP from the base of the pathway connection from Richmond Road.
- The MUP shall extend from the pathway along the alignment, and north, on the west side of the roadway access to Woodridge Crescent.
- At the Woodridge Crescent, a crosswalk and crossride to be installed.

- A PPUDO shall be installed to the west of the MUP at Woodridge. The pathway connection, along the PPUDO, to the station entry, shall be lit.
- Additional covered bicycle parking shall be located at the intersection of the West Transit MUP with the north-south MUP.

# .4 Entry Plaza

The Bayshore LRT Station shall be accessed through the BRT station, and no additional station entry plaza is required.





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**BAYSHORE STATION** OTTAWA LIGHT RAIL TRANSIT



**Cycling Network** JANUARY 2017



OTTAWA LIGHT RAIL TRANSIT



Pedestrian & Cycling Plan **JANUARY 2017** 



**BAYSHORE STATION** OTTAWA LIGHT RAIL TRANSIT

Site Analysis **DECEMBER 14, 2015** 







Cttawa Light Rail

**BAYSHORE STATION OTTAWA LIGHT RAIL TRANSIT** 





TMP PROPOSED MULTI-USE

TMP PROPOSED ON-ROAD BICYCLE FACILITY

Site Opportunities JANUARY 2017

### 8.3.9 Iris Station

## .1 Station Context

Iris Station will be shifted slightly south of the current location straddling the intersection of Iris and the current BRT corridor, with an overpass for Iris Street. Currently, it is an at-grade signalized intersection, with the existing BRT located to the north and south, and local stops on Iris Street. The adjacent lands are well-developed low density residential. The alignment is centred in a landscaped corridor, containing Pinecrest creek and a MUP on the east side.

Iris Street has a sidewalk on the north side of the roadway, with the side streets leading to Iris having a combination of curbs, and rural cross-section, with no sidewalks. There is signalized intersection at Iris and the BRT, addressing both the Transitway and the MUP crossing.

# .2 Existing Pedestrian and Cycling Connections

The roadway is well used by cyclists, and further east, Iris Street intersects with the NCC pathway system. The existing MUP is heavily used and provides a link between the communities to the south towards the Sir John A. MacDonald Parkway to the north, and the downtown business core.

The station currently provides covered parking for 12 bicycles.

# .3 Proposed Sidewalks and Pathways

This proposed grade separation for the OLRT track will change the dynamics of the pedestrian and cycling at this location. Under the EA, the existing MUP is relocated to the west side of the OLRT alignment, to provide access from Iris Street, as well as a significant north-south pathway corridor. Recommendations:

- Shift the local bus stop on Iris will be shifted to the west, to accommodate for a direct, visible at-grade connection between the local stop and the LRT station.
- Signalize the intersection, and provide a cross walk and cross-ride to provide a north south connection for the community to the OLRT station;
- The MUP alignment shall be provide a priority for the connection between the local station on Iris and the OLRT station. Rumble strips, traffic control signage and clear lines of sight between the two pathways will be integrated into the design;
- The Iris Street overpass shall be sufficient to accommodate the MUP and required offsets.

### .4 Entry Plaza

There shall be the main entry plaza on the west side of the station, providing a direct connection between the local stations and the LRT entry. The proposed MUP shall be located to the west of the plaza entry, with the priority pathway connection to Iris Street.



OTTAWA LIGHT RAIL TRANSIT



N.T.S.

1500 METER RADIUS LRT STATION STUDY AREA 1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA PROPOSED LIGHT RAIL TRANSIT (LRT) PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT) PROPOSED LRT STATION PROPOSED LRT STATION PROPOSED LRT STATION PROPOSED LRT STATION DN-ROAD BICYCLE FACILITY EXISTING ON-ROAD BICYCLE FACILITY TMP PROPOSED MULTI-USE PATHWAY (MUP) EXISTING NCC TRAIL SYSTEM STUDY PROPOSED FACILITY PROPOSED LRT SUDY PROPOSED FACILITY PROPOSED LRT SUDY PROPOSED FACILITY NORTH O 100 200 300 400	LE	GEND	
1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA   PROPOSED LIGHT RAIL TRANSIT (LRT)   PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)   PROPOSED LIGHT RAIL TRANSIT (LRT)   PROPOSED LRT STATION   TMP PROPOSED ON-ROAD BICYCLE FACILITY   TMP PROPOSED MULTI-USE PATHWAY (MUP)   EXISTING NCC TRAIL SYSTEM   STUDY PROPOSED FACILITY   PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY   PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY			1500 METER RADIUS LRT STATION STUDY AREA
NORTH   NORTH   NORTH   PROPOSED LIGHT RAIL TRANSIT (LRT)   PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)   PROPOSED LRT STATION   PROPOSED LRT STUDY PROPOSED FACILITY   PROPOSED LRT SUDY PROPOSED FACILITY   PROPOSED LRT SUDY			1500 METER RADIUS ADJACENT LRT STATIONS STUDY AREA
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NORTH   NORTH   NORTH   EXISTING ON-ROAD BICYCLE FACILITY   FXISTING ON-ROAD BICYCLE FACILITY   TMP PROPOSED MULTI-USE PATHWAY (MUP)   EXISTING PATHWAY   EXISTING NCC TRAIL SYSTEM   STUDY PROPOSED FACILITY   PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY		>	TMP PROPOSED ON-ROAD BICYCLE FACILITY
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EXISTING PATHWAY EXISTING NCC TRAIL SYSTEM STUDY PROPOSED FACILITY PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY		>	TMP PROPOSED MULTI-USE PATHWAY (MUP)
EXISTING NCC TRAIL SYSTEM STUDY PROPOSED FACILITY PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY NORTH		~	EXISTING PATHWAY
NORTH		~	EXISTING NCC TRAIL SYSTEM
NORTH		>	STUDY PROPOSED FACILITY
NORTH		~	PROPOSED LRT 3.0m WIDE MULTI-USE PATHWAY
NORTH			
NORTH			
		NORTH	00 300 400

Cycling Network JANUARY 2017



**IRIS STATION** OTTAWA LIGHT RAIL TRANSIT



Pedestrian & Cycling Plan **JANUARY 2017** 



Site Analysis **DECEMBER 14, 2015** 



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**IRIS STATION** OTTAWA LIGHT RAIL TRANSIT



TMP PROPOSED MULTI-USE PATHWAY (MUP)

STUDY PROPOSED FACILITY

TRAFFIC CONTROL SIGNAL

**Site Opportunities** JANUARY 2017

#### 8.3.10 Baseline Station

#### .1 Station Context

The configuration for Baseline Station had begun with earlier completion of the tunnel and relocation of the BRT station, immediately west of the Algonquin College's ACCE Building. The OLRT station will be in the existing tunnel, with the principle access at the south end of the tunnel, combined with the BRT station at grade. The adjacent lands are a subject of intensification studies, with the current land uses for office and institutional. The transportation corridor, commencing at Lincoln Fields, continues through the station location, extending south beyond the station limits.

Algonquin College is to the east of the LRT corridor, with the majority of the campus located to the east of Woodroffe Avenue. There is a Park and Ride located to the south of the proposed station, with an existing MUP extending west, and connecting to the MUP along the transit corridor heading north to the Sir John A. MacDonald Parkway pathway system.

To the northeast of the station is a large, primarily commercial, complex. This location is subject to intensification with time, and is zoned for a blend of mixed use development.

There is a PPUDO located at the north end of the Park and Ride.

# .2 Existing Pedestrian and Cycling Connections

The existing MUP is heavily used by both pedestrians and cyclists to connect to the station, and the larger pathway system of both the city and the NCC. The east west MUP is lit from the station, westerly to the Craig Henry community. Two pedestrian connections are provided at Woodroffe Avenue: one at the signalized intersection at College Avenue and the pedestrian overpass between the ACCE Building and the main Algonquin campus at Building B.

The main streets adjacent to the station location have sidewalks on at least one side, with sidewalks on both sides of Woodroffe Avenue. There are several strong pedestrian destinations from the station, both to the west and the east, and these are all accommodated within the existing sidewalks, pathway and intersections.

The station currently provides a mix of covered and uncovered parking for 36 bicycles located adjacent to the south end of the current BRT platforms.

At the present time, the Park and Ride, and therefore the PPUDO, is anticipated to remain in the current location. The pedestrian connection between this facility and the entry to the BRT/OLRT station shall be provided by concrete sidewalks. Recommendations for the proposed facilities:

- The east-west MUP shall be extended to the station entry plaza, with an articulated intersection, signalized as required by OC Transpo, complete with cross walk, cross ride;
- The MUP shall continue westerly and connect to College Avenue;
- The north-south MUP shall be relocated easterly to connect with the OLRT south entrance, and continue south of the station at Tallwood Drive, and north to MUP connecting to Iris Station.

# .4 Entry Plaza

.3

The entry plaza shall of sufficient size to accommodate both the BRT and OLRT requirements. The covered bicycle parking shall be located to the west of the plaza, adjacent to the MUP. It is anticipated that the local stations will still continue to use the BRT station for the immediate future, and a direct pedestrian connection shall be provided. Crosswalks will be provided at all roadway crossings.





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**BASELINE STATION** OTTAWA LIGHT RAIL TRANSIT



**Cycling Network** JANUARY 2017



**BASELINE STATION** OTTAWA LIGHT RAIL TRANSIT

**Ottawa Light Rail** ŧ



N.T.S.



Pedestrian & Cycling Plan JANUARY 2017


**Ottawa Light Rail** 

**BASELINE STATION** OTTAWA LIGHT RAIL TRANSIT



N.T.S.

LEGEND

M. K.







Site Analysis **DECEMBER 14, 2015** 



**BASELINE STATION** OTTAWA LIGHT RAIL TRANSIT



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Jana Barag





































N.T.S.

LEGEND

PROPOSED LIGHT RAIL TRANSIT (LRT)

PROPOSED SUB-GRADE LIGHT RAIL TRANSIT (LRT)

PROPOSED LRT STATION

PROPOSED BICYCLE PARKING

EXISTING MUP

TMP PROPOSED MULTI-USE PATHWAY (MUP)

TMP PROPOSED ON-ROAD BICYCLE FACILITY

EXISTING ON-ROAD BICYCLE FACILITY

PROPOSED SIDEWALK

EXISTING SIDEWALK

PROPOSED LRT 3.0m WIDE MULTIUSE PATHWAY

STUDY PROPOSED FACILITY

PROPOSED PATHWAY

CCTV / EMERGENCY STATION

PROPOSED PASSANGER DROP OFF AREA

TRAFFIC CONTROL SIGNAL

BRT STATION



**Site Opportunities JANUARY 2017**  **APPENDIX 'A'** 

Station	ORLT - Phase 2 Works	City of Ottawa Works (2023)	City of Ottawa (Future)	ССТV	Bicycle Parking	<b>Construction Phasing</b>	PF
Westboro	Provide cross walk and cross ride at Lanark Avenue	Provide sidewalk on south side of Scott Street, east of station		Along MUP from station to Lanark Avenue	20	Maintain north/south pathway connection over transit corridor throughout	North and s Scott Stree
	Provide MUP conection between new MUP and existing MUP on Scott Street	Widen northwest pathway to MUP standards and light				construction	
	Provide lit sidewalks from PPUDO to Station entry plaza						
Dominion	Offset MUP to south side of ROW at ped bridge	Provide sidewalk on south side of Workman Avenue from pedestrian bridge to Churchill	Protect MUP offset during redevelopment of 335 Roosevelt	From station plaza to Workman Avenue	40	Provide MUP from Sir John A MacDonald Parkway to Workman Avenue prior to decommissioning BRT Dominion Station	North side Avenue
	Provide sidewalk on Berkley, from Richmond Road to PPUDO Provide MUP and light from entry plaza to Workman Avenue, east and west	3				Maintain pedestrian/cycling connectiong over bridge	
Cleary	Provide cross walk and cross ride at Richmond Road and Byron Avenue		Review Byron Linear Park pathway widths	From PPUDO to station plaza	20	Complete cross walk and cross ride at Richmond Road and Byron Avenue	North and s Byron Aver
	Provide sidewalks on south side of Byron Avenue, west of Cleary, for LRT construction Provide MUP connection to north and south sides of SJAM Parkway						
New Orchard	Provide sidewalk on south side of Bryon Avenue Provide cross walk and cross ride at New Orchard Avenue	Provide sidewalk on New Orchard Avenue On road cycling faclities on Ambleside Dirve and New Orchard Avenue	Land expropriation required west end of car lot Develop lit MUP from Ambleside Drive to Richmond Road	From Richmond Road to station plaza From Station Plaza to Byron	20		North side Avenue
			Provide cross walk and cross ride at MUP and Ambleside Avenue	t			
Lincoln Fields	Provide lit MUP on west side of OLRT, east of Sir John A MacDonald Parkway to traffic signals		Provide 2 MUP connections from community to signalized intersection	Provide CCTV from PPUDO to station entry (east side), CCTV from signalized intersection to station	40	Provide new pedestrian bridge and reinstate MUP connections to community prior to decommissioning existing pedestrian bridge	RE-establis with access signalized i for buses
	Provide station access from signalized intersection on Sir John A MacDonald Parkwav Provide a MUP connection from Edgeworth to the north-south MUP on the east side of the LRT			entru		Maintain the existing ped bridge accessing the BRT from the north side of Carling Avenue as long as possible. Provide direct alternate ped access route to the BRT from Carling Avenue after the decommissioning of the existing ped	
	Maintain MUP connections on the east and west side of the Station, from the relocated ped overpass south of Carling to Richmond Road Install a pedestrian signalized crosswalk on Carling, to connect the MUP on the south side of Carling with					hridøe	
Ομεροχνίουν	the station entry plaza Provide MUP and lights from	Provide on-road cycling facilities on	Create MIIP connecting Connaught	From Baxter Road to			Ομεροχίου
QUEENSVIEW	pedestrian bridge to Queensview Drive	Queensview Drive	Ave to Queensview Drive	Queenview Drive, including ped bridge	30		out

# PUDO

l south side of et

e of Dominion 335 Roosevelt Zoning Application

south side of nue

e of Byron

ish a PPUDO ss at the intersection

ew drive bulb-

Station	ORLT - Phase 2 Works	City of Ottawa Works (2023)	City of Ottawa (Future)	ССТV	Bicycle Parking	Construction Phasing	PP
		Provide on-road cycling facilities on Baxter Road					Base of MU to pedestria
	Provide sidewalk on north and west side of Baxter Road to existing sidewalk	Provide sidewalk on south side of Queensview Drive					·
Pinecrest	Provide MUP and lights from station to Dumaurier Avenue Provide cross walk and cross ride at Queenview/Pinecrest intersection	Review Pinecrest overpass to integrate cycling facilities	Provide facilities on Iris Street	From station plaza to Dumaurier Avenue	30		East side of
	Extend MUP from station to Queensview intersection Relocate local bus stops to 417 off- ramp signalized intersection Light the MUP on the east side of Pinecrest Road leading from the intersection to the station.						
Bayshore Station	Provide MUP from Richmond Road/417 off-ramp intersection to station and Woodridge Crescent along OLRT corridor, widen existing pathway	Provide on-road cycling facilities on Woodridge, from Bayshore Drive to Station access road	Provide MUP through community north of Woodridge Crescent	From station plaza to Woodridge Crescent	40	Maintain MUP connection between Holly Acres Drive and station, on the north side of the Transitway	
	Realign median at Richmond Road/417 offramp to accommodate MUP to intersection Provide cross walk and cross ride at Woodridge Crescent and station access	i					
Iris Station	Provide crosswalk and crossride at local station, west of the embankment	Provide on-road cycling facilities on Iris Street, Pinecrest to Navaho Drive		From Iris to station plaza	40	Maintain north/south MUP throughout construction	North and s immediatel
	Extend MUP under Iris overpass to connect to existing MUP	Provide cross ride at Iris and Woodroffe				Provide continuous MUP within Pinecrest Creek corridor during construction	bus stops
	Lit MUPs east and west of station to street Provide MUP on west side of LRT alignment to meet existing NCC Trail						
Baseline Station	n Extend MUP from Baseline Station south to Epsilon Way			From Park and Ride to Station South Plaza, Central Plaza and connecting sidewalk	60	Maintain MUP within corridor, and connections to existing east/west MUP	Existing PPL and Ride to maintained

New Page - Trillium Line

Gladstone	Provide crosswalk and cross ride at	Provide pedestrian bridge over	20	NA
Station	existng MUP on Gladstone	Laurel		
	Provide MUP on west side of OLRT	Provide on-road facilities on		
	corridor to Beech Street	Bayswater Avenue		
		Provide MUP from Laurel to station		

JP connecting an overpass

f Dumaurier

south side, ly west of local

UDO in Park o be d

Gladstone PDP

Station	ORLT - Phase 2 Works	City of Ottawa Works (2023)	City of Ottawa (Future)	ССТV	Bicycle Parking	<b>Construction Phasing</b>	PF
			Provide on-road facilities on Gladstone Provide on-road facilities on Booth Street		-		
Carling Avenue	Provide MUP on north side of Prince of Wales to traffic lights at Queen Elizabeth Drive and Experimental Farm access				20		
Carleton University	Provide MUP on west side of OLRT corridor from Rideau River Bridge to underpass Widen underpass to 9.0 metres		Proivde MUP facility during Rideau River Bridge rehabilitiation (2018)	Between BRT and OLRT	20 M th	laintain one ped underpass open proughout construction	NA
Confederation Heights	Provide MUP from BRT station to station Provide MUP on west side of OLRT corridor from station to Rideau River Bridge		Provide on-road facilities on Brookfield Road Provide MUP from Heron to Bronson on north side of Riverside Drive		20 Pr cc	rovide alternate north-south MUP during onstruction	NA
Walkley Station	Provide MUP from Traverse Drive to OLRT corridor	Identify MUP location on Traverse Drive for MUP connection	Provide on-road facilities on Walkley Road		20		
	Provide MUP from Traverse Drive to station Widen sidewalk to 3.6 metres between BRT and LRT station entries		MUP on south side of Airport Parkway Provide cross walk and cross ride at Bank and Nottinghill intersection - traffic lights?	:			
Greenboro Station	Extend MUP from Bank Street to station entry	Duravida an road facilitica an	Provide MUP from Albion Road to Bank Street, on north side of Johnston Road	From PPUDO to both OLRT and BRT stations	40		
	Provide cross ride at Bank Street and Johnston Road	Provide on-road facilities on					
South Keys Station	Provide MUP connection between Mac Street and OLRT MUP Provide 9.0 metre underpass south of station	Land exporpriation required for MUF at Mac Street	<ul> <li>Provide on-road facilities on Daze</li> <li>Street</li> <li>provide on-road facilities on Bank</li> <li>Street</li> </ul>	Underpass south of South Keys Station	30		
Leitrim Station	Provide sufficient width of bridge for 9 metre underpass Provide separate MUP and sidewalk facilities leading to station plaza		MUP connecting Findlay Creek and Blossom Park to LRT station		30		North of pl to sidewalk
Bowesville Station	Provide separate MUP and sidewalk facilities leading to station plaza Light MUP from Bowesville to station			From Bowesville Road to station	40		South of pl to sidewalk
Uplands Station	Provide cross ride at Uplands and Research Road	Create on-road cycling facilities on Paul Benoit Driveway, Breadner Boulevard and Research Road					
Airport Station	Provide MUP on the north side of Research Road to Airport staff parking lot Provide MUP on north side of Lester Road to main north-south MUP on the east side of the Trillium Line						

Carleton University Master Plan

South Keys CDP

## Airport Parkway Environmental Assessment

olaza, adjacent Ik

olaza, adjacent lk

Connect on road facility to Osgoode Link Pathway

Station	ORLT - Phase 2 Works	City of Ottawa Works (2023)	City of Ottawa (Future)	ССТУ	Bicycle Parking	Construction Phasing	РР
	New Page - Confed East						
Montreal			Provide sidewalks on either side of				
Station	Provide MUP on south side of		Rainbow Street roadway to				North of pla
	Montreal Road to station		Canotek		20		Rainbow Ro
	Provide MUP from Blair Road to						
	Montreal Road on north side of 174						
	Provide MUP on north side of 174 to						
	Sir George Etaine Driveway						
	Provide sidewalk facilities leading to						
	station plaza		Provide MUP on Shefford				
Jeanne d'Arc	Provide MUP on the south side of HWY		Create on-road facilities on Fortune				within exist
Station	174 to Orleans Blvd		and Vineyard Drives		40		ride
	Provide MUP from Fortune/Vineyard		Provide on read facilities on				
	Drive to bike parking immediately						
	north of 174		Jeanne d'Arc				
Orleans Blvd	Provide separate MUP and sidewalk		Provide on-road facilities on				Fast and W
Station	facilities leading to station plaza		Orleans Blvd		20		roadway
	Brovida MUD from Joanna D'arc to				20		roddwdy
	Place d'Orleans Station, south side of						
	the 174 including community						
	connections						
Place d'Orlean	IS						
Station			Provide on-road facilities on St				
	Provide MUP from St. Pierre to station		Joseph Blvd		40		Within the
							Adjust Place
							parking lot
	Provide MUP from Park and Ride to Du		Provide MUP between Bilberry				accommoda
	Bois Avenue, within 174 corridor		Drive and Park and Ride				and taxi sta
	Provide MUP from Place d'Orleans to						
	Trim, on the south side of the 174		Provide on-road facilities on Place				
			d'Orleans Drive				
	Light pathway from Park and Ride to						
	Alpine Street, and Borland Drive						
	Provide MUP from Place d'Orleans to		Provide on-road facilities on North				
Trim	Trim on south side of HWY 174		Service Road		40		Within the
	Maintain MUP from Cardinal Creek						
	community toBRT Station						
	Provide sidewalks and cycle tracks						
	Trom Jeanne D'arc north to Dairy Drive						
	on Trim Drive						

## PUDO

aza, end of oad

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est sides of

e Park and Ride ce D'Orleans t to date PPUDO cand

Park and Ride

**APPENDIX 'B'** 



Project:	Phase	e 2 Pedestrian and Cycling Study	Work Phase:	Review				
Meeting L	ocatio	n: On-site	MTG No. 1	Date:	June 24,2015	Writer: M. Lus	sh	
Present:	Marc Zlatko	Magierowicz, City of Ottawa 9 Krstulic, City of Ottawa	Martha Lush, Patrick Gauvr	Martha Lush, CSW Patrick Gauvreau, CSW				
Item:	Description						Action By:	
1.0	A me the fe	A meeting was held to review the individual stations for the proposed OLRT Phase 2, with the following discussed:						
1.1	Gen	eral Parameters:						
	.1	Information						
	.2	The study is based upon the curr the starting point for the work of	ent EA's unde f this study.	rway for	the OLRT. Thi	s is considered	Information	
	.3 The study is based upon the same parameters of the Phase 1 study: 1.5 km cycling, 600 and 300 metres walking radius. This does not account for the actual travel routes and measurements, however provides a general capture area.						Information	
	.4 The study is utilizing all the current council approved documentation, including the Transportation Master Plan, Community Secondary Plans and planning studies.						Information	
	.5 There is an identification of both on road cycling facilities and multi-use pathways (MUPs) within the documentation.						Information	
	.6	The work of the study is based u incorporating any pathways and sites, identifying any additional within the station site.	pon reviewing MUPs identifi connections re	the curre ied in the quired, an	ent community of EA's, reviewin nd integrating a	connections, g the proposed ny works	Information	
	.7 Lighting will be proposed on direct primary connections between the community and the station. Should good access be available along city streets, secondary pathways and MUPs will not be recommended to be lit.						Information	
	.8 The work of this study is focused upon providing infrastructure improvements for the pedestrians and cyclists at the proposed LRT stations and immediate vicinity. Additional work may be identified that could be incorporated at a future date by others. This may include work such as additional MUPs, roadway modifications, etc.						Information	
	.9	Should a proposed section of a M termination should be identified roadway.	AUP terminate if there is not	at a mid- a clear op	block of a road portunity to saf	way, the fely cross the	Information	



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Project:	Phase	e 2 Ped	estrian and Cycling Study	Job No:	1768-05	Work Phase:	Review		
	.10	The s Indiv	study team will be meeting widual land-owners, will hav ss through the normal public	with key st e opportur consultat	takeholders, s nities to reviev ion process.	uch as OC Tra w the station d	nspo and NCC. esigns and	Information	
1.2	West	West Confederation Line (Westboro to Bayshore and Baseline Station)							
	.1	The sopport of the second seco	individual stations along the rtunities for improved ped nmendations for enhancing	e West Co estrian an connectio	onfederation L ad cycling co ons that are do	ine were disc nnectivity. E eveloped on th	ussed, including Each station has ne Opportunities	Information	
1.3	In ac be co	In addition, the following was discussed to be included as recommendations in the study, to be completed by others:							
	.1	Poter	ntial improvements to the ov	verall cycli	ing network w	with respect to	the stations,		
	a. Adding on-road facilities along Iris Street, to connect the community to both Iris Station and Queensway Station;							Information	
	b. Adding on-road facilities along Queensview Drive, to connect the community to Queensway Station;						Information		
	c. Adding on road facilities along Navaho Drive to connect the community to Baseline Station.						Information		
		d.	Adding on-road facilitie Shopping Centre.	s to Woo	odridge Cres	cent, west of	f the Bayshore	Information	
	.2	Ident static	ification of the MUP and tron at Lincoln Fields, as there	affic ramp are four o	os to be studio one-way ramp	ed at the west ocrossings.	side of the LRT	Information	
	.3	Study has a	y of the MUP termination a four lane cross-section, and	t Richmoi l limited c	nd Road, east onnectivity oj	of Fraser, as portunities.	Richmond Road	Information	
	.4	Revie to th and s	ew the location of the pedes e proposed head-house loca south side of the Queensway	strian over ation and	pass at the Q the destination	ueensway Stat n locations or	ion with respect a both the north	Information	
Copies	All Pr	resent							



Meeting Location: On-site       MTG No. 2       Date: June 26,2015       Writer: M. Lush         Present: Marc Magierowicz, City of Ottawa Zlatko Krstulic, City of Ottawa       Martha Lush, CSW       Image: Comparison of C	<b>Project:</b> <i>Phase 2 Pedestrian and Cycling Study</i>	Job No: 1768-05 Work Phase:	Review
Present:       Marc Magierowicz, City of Ottawa       Martha Lush, CSW         Zlatko Krstulic, City of Ottawa       Image: Comparison of Ottawa       Image: Comparison of Ottawa	Meeting Location: On-site	MTG No. 2 Date: June 26,2015	Writer: M. Lush
	Present: Marc Magierowicz, City of Ottawa Zlatko Krstulic, City of Ottawa	Martha Lush, CSW	

Item:		Action By:		
2.1	A se discu	cond n ussed:	neeting to review the connectivity to the stations was held, and the following	Information
2.2	To c docu	larify ıments	the previous studies and documents reviewed for the stations, key relevant s, such as specific CDP's to be identified in the legend.	Information
2.3	Unde	erpasse	es	
	.1	Information		
		a.	A discussion was held on the existing and proposed underpasses at various locations within the City of Ottawa. As it can be anticipated that as the OLRT stations are within the City urban boundary and increased densification is projected adjacent to the stations, the proposed underpasses should be constructed to accommodate this growth.	Information
		b.	<b>Recommendation:</b> Proposed underpass width to be a consistent nine (9) metre width. The City to review the maintenance and access requirements for the proposed height.	Information
	.2 I	Lightin	ıg	
		a.	Underpasses occur in a variety of locations, some with lit pathway connections, and others that are part of a non-lit corridor. There should be a consistency of lighting with the adjacent multiuse pathway.	Information
		b.	<b>Recommendation:</b> Proposed underpasses should be lit to the same level as the multi-use pathway accessing the underpass	Information
		c.	<b>Note:</b> further discussion to be held internally at the city to determine the viability of low level lighting of the corridor to reduce the contrast of sunlight to shadow during daylight hours	Information
2.4	Pass	enger	Pick Up and Drop Off (PPUDO)	
	.1	Locat such to the	tions for PPUDO's to be identified for each station. In highly urbanized areas, as Gladstone, Carleton and Carling, the PPUDO would not be required, similar e Downtown, Rideau and uOttawa Stations from Phase 1.	Information
	I			1

C S W

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Project:	Phase 2 Pedestrian and Cycling Study	Job No: 1768-05	Work Phase: Review				
2.5	Standard Guidelines						
	.1 Standard guideline recommendati The Park and Ride Stations at Boy multiuse pathway and the pedestr the station. CSW to provide reco- main entry plaza.	.1 Standard guideline recommendations are being developed for inclusion in the report The Park and Ride Stations at Bowesville and Letrim were reviewed with respect to the multiuse pathway and the pedestrian sidewalks between the park and ride facility and the station. CSW to provide recommendations to delineate the walking/cycling and the main entry plaza.					
	.2 It is anticipated that there will be the local bus station. These will be the study.	a Paid Fare Zone at each be reviewed with OC Tra	n station, and may encapsulate anspo during the next phase of	Information			
2.6	A review of the Trillium Line was work required:	completed, and the f	ollowing additional items of	Information			
2.7	Bowesville and Letrim						
	.1 To ensure sufficient connectivity Magierowicz to provide current so the stations. A review of the Airp	between the east and econdary plans for the f ort lands redevelopment	west side of the station, M. uture development adjacent to to be completed as well.	M. Magierowicz			
2.8	Airport and Uplands Station						
	.1 A principle area of residential hou which is Uplands Station. A comb explored.	ising to be provided accerbination of on-road and b	ess to the closest station, multiuse pathways to be	Information			
	.2 The Airport Station to be reviewed road facilities.	d to determine the oppor	tunities for on-road and off	Information			
2.9	South Keys Station						
	.1 There is a CDP underway for the r City of Ottawa leading the study.	redevelopment of the So M. Magierowicz to prov	uth Keys area, Chris Brower, vide the report for review.	M. Magierowicz			
	.2 This study to identify on-road faci Internal cycling routes to be comp	lities to signalized inters leted during the CDP.	ection at Daze Avenue.	Information			
	.3 The existing underpass at South K ME model for cycling. M. Lush I review of the overall numbers to b	Leys Station is six (6) me has the anticipated board be completed.	etres. Z. Krstulic to provide lings to the station, and a	Z. Krstulic, M. Lush			
	.4 The detailed design of the station t conflict in the tunnel.	to review the door locati	ons and swings to eliminate				
				Information			

C S W

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Project:	Pha	se 2 Pedestrian and Cycling Study	Job No:	1768-05	Work Phase:	Review	
2.10	Wa	Ikley Station					
	.1	The northeast community is isolated south and west perimeters. M. Lus provide the following input.	d from the sh to revie	e Walkley Sta w the commu	tion, with a no inity and the st	ise wall on the ation, and	M. Lush
		a. Population: to be based upon 2 and 1.2/apartment	2.2 people	/single detach	ed, 1.8 people	/townhomes	Information
		b. Connections: Options to provid the Walkley/OLRT intersection	de commu 1.	unity connecti	ons from the c	ommunity to	Information
	.2	The alignment of the OLRT Station offset on the west side. M Magiero determine greater connectivity betw	is paralle wicz to re veen the C	el with the rail eview the cont DLRT and the	l corridor and t figuration of th BRT.	he BRT is e station to	M Magierowicz
2.11	Co	nfederation Station					
	.1	Recommended changes to the Trill	ium Line	EA:			Information
		a. Shift the MUP from the east to the MUP on the south side of H	the west t Ieron Roa	to accommoda id.	ate the propose	d changes to	Information
		b. Shift the MUP westerly, from i along the central spine of the be	mmediate uilding co	ely adjacent to omplex.	the rail line to	the boulevard	Information
		c. Include the recommendation to add the MUP to the bridge at Rideau River. The bridge is anticipated to require repairs in 2118, prior to the completion of Phase 2 OLRT construction. Z. Krstulic to confirm bridge improvements to accommodate the MUP.					Z. Krstulic
		d. Modify the station design to include a barrier free route to the	clude the provident the provident of the provident content of the provident of the providen	plaza on the e ouilding.	ast side of the	rail line, and	Information
2.12	Ca	rleton Station					
	.1	A MUP paralleling the Rail line un diesel train and complexity of access of tunnel, and therefore alternatives Experimental Farm, to Prince of W access over Hartwell Locks is not b NCC and Parks Canada.	der Dow's ss with ex s were rev ales Drive parrier-free	s Lake, is not isting rock cu iewed. The r e, is the prefer e. Alternative	a viable optior at at both north oute through the tred alternative es should be ex	and ue to length, and south side the however the plored with the	Information
	.2	2 The existing underpass at the rail line immediately south of the station is three (3) metres wide. This is not a City facility however, an opportunity exists to work with Carleton University to enhance their pathway system when the rail line is non-operational during the Rideau River Bridge works or OLRT Phase 2 works.					
	.3	City to request Carleton to allow traconditions	affic coun	ts at the unde	rpass to unders	tand current	Information



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Project:	Phase 2 Pedestrian and Cycling Study	Job No: 1768-05	Work Phase: Review	
2.13	Carling Station			
	.1 Current enhancements to the MUR MUP/Carling intersection.	P system includes signal	ized intersection at the	Information
	.2 Current roadway modifications un the signalized intersection at Princ Elizabeth Drive. Z. Krstulic to re- use by future MUP.	derway on Prince of Wa e of Wales, south of Pre view opportunity to retain	ales Drive may be eliminating eston/Prince of Wales/Queen n signalized intersection for	Z. Krstulic
	.3 Recommended changes to the Tril	lium Line EA:		
	a. Extend the MUP on the west s intersections on Prince of Wal	side of Prince of Wales, les Drive.	between the two signalized	Information
2.14	Gladstone Station			
	.1 The Gladstone CDP will indicate Magierowicz to provide.	pedestrian connections to	o the Station. M.	M. Magierowicz
2.15	A review of Confederation Line Eas	t was completed, and t	he following discussed:	
2.16	Place D'Orleans Station			
	.1 The proposed EA indicates a MUI well-developed trail system along lines and gates in the existing sour Park and Ride Facility.	P along the north side of this route, with a combi nd wall that extends betw	Highway 174. There is a nation of pathways, desire veen Bilberry Creek and the	Information
	.2 The existing rows are quite generor and Orleans Boulevard.	ous, with sufficient space	e for a MUP on Jean D'Arc	Information
	.3 On the north side, the existing rest Orleans/Highway 417 are semi-de pathway connections leading to th 174.	idential development on tached, and on the south e existing pathway along	the roads abutting side, there are two existing g the south side of Highway	Information
	.4 Recommendation:			
	a. In addition to the current EA of provide greater community corroad bike facilities on the loca and Jean D'Arc Boulevard.	configuration for the MU nnection to the Orleans l streets and including a	JP, review the opportunity to Station by enhancing the on- MUP on Orleans Boulevard	Information
Copies	b. CSW to review feasibility of I All Present and Peter Schwartzentruber	MUP connections with re	espect to grading.	CSW



Project:	et: Phase 2 Pedestrian and Cycling Study Job No: 1768-05 Work Phase: Review								
Meeting L	ocatio	n: OC Transpo	MTG No.	3	Date:	Aug 12,2015	Writer: M. Lus	h	
Present:	Marc Colle Geny	Magierowicz, City of Ottawa en Connelly, OC Transpo a Stefanoff, OC Transpo	Martha Li	ush, C	CSW				
Item:			Descrip	otion				Action By:	
3.0	A re	view of the Station Opportunitie	s Plans we	ere re	viewed a	nd the followin	ig noted:		
3.1	Gen	General							
	.1	The purpose of this study is to to the LRT Stations from the lo	o review th ocal comm	e op unity	portuniti ′.	es to enhance t	he connectivity	Information	
	.2	The current EA's for Trillium the basis for the study.	Line, Con	fedeı	ation Ea	st and Confede	ration West are	Information	
	.3	There are locations where there have been vetted through the a	e are reco ppropriate	mme stud	Information				
	.4	OC Transpo was also referring (FEDCO) submission Stage 2 some variations between the E	g to Finan 2 Light Ra A alignme	ce an ail Tr nts a	CSW				
	.5	Proposed underpasses to be nin	ne (9) metr	es in	width.			Information	
	.6	A minimum of three (3) metric station entry to allow a buffer cyclist has been identified.	res offset r between	betw the	een a M station p	UP and the from a second the from a second term of the second term of term o	ont face of the a cross flow of	Information	
	.7	Bicycle parking to be located is accommodate cyclists disemba	in proximi rking prior	ty to r to e	a station intering t	entry plaza, ar he station plaza	nd both sides to	Information	
	.8	OC Transpo is working toward the Trillium Line is under rev CSW.	ds creating view. OC	g paio Tra	fare zo	nes for each sta forward design	ation. Currently alternatives to	OC Transpo	
	.9	Passenger Pick Up and Drop ( with walking, cycling and loca	Offs are no 1 buses util	ntown stations,	Information				
3.2	Tril	lium Line							
	.1	Bowesville Station							
		a. Ensure the MUP connects and section for the Park an	to the entr d Ride Sta	y pla tions	za. CSW	to forward the	e proposed plan	CSW	



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Project:	Phase	e 2 P	edestrian and Cycling Study	Job No:	1768-05	Work Phase:	Review	
		b.	The realignment of the side final configuration of the p free parking spots identifie	ewalks and arking lot d on the E	d MUP will re to maintain th A drawings.	quire an adjust ne current num	tment to the ber of barrier	Information
	.2	Lei	trim Station					
		a.	There is a bus staging area area at Bowesville. OC Tra- stations and confirm wheth	at Leitrim anspo to re er the bus	that may be over the stage of t	luplicating the ging requireme e deleted at Le	bus staging nts for the two eitrim.	OC Transpo
		b.	The MUP crosses the bus a is acceptable.	ccess rout	tes at two loca	tions rather the	an three. This	Information
	.3	<u>Soi</u>	uth Keys Station					Information
		a.	One (1) additional MUP is leading from the pedestrian Wyman Crescent. This will community to the southwes respect to the Airport Parky	proposed a bridge to Il provide st and the way Wide	on the west si signalized in an improved station. The f ning.	de of the Airpo tersection, and connectivity be funding to be re	ort Parkway, further south to etween the eviewed with	Information
	b. A MUP connection from Mac Street to the proposed MUP on the east side of the OLRT corridor to provide greater connectivity between the community to the southwest and the station.						Information	
	.4	Gre	eenboro Station					
		a.	OC Transpo is currently re- to the station. OC Transpo	designing to forwar	the PPUDO, d design to C	parking lot and SW.	l station entry	OC Transpo
		b.	This modification to the sta plaza, eliminating the poter overpass as part of the link	ation will on tial for the between t	create a paid f le MUP conne the east and w	are zone startine are zone startine ction to utilize est side of the	ng at the entry the pedestrian transit corridor.	Information
		c.	One enhancement identifie from Bank Street to the sta Johnston Road. OC Transp linkage.	d during the tion to acc to to revie	he study was commodate th cw with the cu	the developme e proposed mo rrent design to	nt of a MUP difications to integrate the	OC Transpo
		d.	A cross ride is proposed un between Johnston Road and	der the Ol d Greenbo	LRT Connect pro Station.	ivity Study wh	ich will connect	Information
		e.	The shopping centre to the destination from both the lo	south of C ocal and tr	Greenboro wa ansit users.	s noted as a ma	ajor passenger	Information



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Project:	Pha	se 2 P	edestrian and Cycling Study	Job No:	1768-05	Work Phase:	Review		
	.5	Walk	tley Station						
		a.	There was a general discus the OLRT stations, with a o two.	sion conce desire to in	erning the disc ncrease the pa	connect betwee ssenger comfo	n the BRT and rt between the	Information	
		b.	There is a large community the station. The report is re MUP connection between 7 Station.	to the sor ecomment Traverse a	utheast of Wa ding reviewing and Needham	kley with rem g opportunities and the OLRT	ote access to to provide a Walkley	Information	
	.6	Conf	ederation Station						
		a.	There are two station location location for the immediate redevelopment of Confeder	ions propo future, and ration Hei	osed for Confe d north of Her ghts.	deration Static on, for the lon	on: the current g term, with the	Information	
	b. There is a BRT planned for the centre of Heron Road, to accommodate the Rapid Bus Lane on Heron.							Information	
		c.	The connectivity study antibetween the BRT and the L the current location of the s intersection, at Heron and t overpass. This provides on passengers to walk across a station entry plaza.	onnectivity study anticipated a stair/elevator to provide direct access een the BRT and the LRT and create a paid fare zone. Under the BRT EA, urrent location of the station is located immediately west of the signalized ection, at Heron and the Airport Parkway off-ramp, and east of the rail bass. This provides only surface access between the two stations, requiring ngers to walk across at the signalized intersection and down to the OLRT n entry plaza.					
		d.	The paid fare zone will affect currently has tight corners, movements. Relocating the however isolates the station station to the ultimate locat	ect the cur and there e MUP to n. The Cit ion.	rent alignmen are potential the final solut ty to review th	t of the MUP. conflicts with t ion will resolv e potential to r	The MUP he pedestrian e the conflicts, nove the	City of Ottawa	
	.7	<u>Ride</u>	au River Bridge						
	a. The Rideau River Bridge, between Confederation Station and Carleton Station, is scheduled for rehabilitation, potentially in 2018. During this rehabilitation, it is recommended that modifications be made to accommodate a MUP and provide the connectivity between the north and south side of the river.							Information	
	.8	<u>Carle</u>	eton Station						
		a. N	No additional modifications	or comme	ents.			Information	



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Project:	Phas	e 2 Pedestrian and Cycling Study	Job No:	1768-05	Work Phase: Review		
	.9	Carling Station					
		a. OC Transpo is looking at the locations.	paid fare z	zone in this lo	ocation, and bicycle parking	OC Transpo	
		b. As per the study recommendates station to the MUP, and the beand south of the entry plaza.	ations, ther icycle parl	e currently is king should b	s sufficient offset from the e located to both the north	Information	
	.10	Gladstone Station					
		a. The EA is currently working Gladstone.	on the plaz	za connection	between the station and	Information	
		b. The 417 rehabilitation of the connecting the community to	overpass w the southy	vill leave suff west of the O	icient space for a MUP LRT/417 to the station.	Information	
	.11						
		Information					
	.12						
		a. No additional modifications of	or commen	nts.		Information	
3.3	Cor	ifederation East					
	.1						
		a. With the development of the discontinued.	With the development of the OLRT, the current bus only lanes on the 174 will be discontinued.				
	.2	Jeanne D'Arc Station					
		a. The bridge cross section is presented as a section of Booth Street, and w	oposed to vill be incl	meet and man uded as a typ	tch the alignment cross ical in the report.	Information	
		b. There will be a significant nu providing a potential conflict station is to be treated as an u	mber of lo between a rban static	cal buses acc PPUDO and on, with no Pl	essing Jeanne D'arc Station, the buses, and therefore this PUDO.	Information	
		Information					
	.3	Orleans Boulevard Station					
	a. This station has a lower anticipated quantity of local buses accessing the station, and has well developed residential community on all four quadrants. A PPUDO should be located adjacent to the station plaza, with the local bus stop aligned with the plaza.						

C S W

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Project:	Pha	ise 2	Pedestrian and Cycling Study	Job No:	1768-05	Work Phase:	Review		
		b.	This bridge provides opportulocal communities, and a MU accommodate this movement	nity for co JP is ident t.	onnectivity to tified on the ea	the station, as ast side of the b	well as the pridge to	Information	
	.4	<u>Pla</u>	ce D' Orleans Station						
		a.	The final configuration of the point until the extension of the	e local bus ne OLRT f	s station, as th further east.	is is potentially	a termination	Information	
		b.	The location station on the no parking, and this is to be con	orth side o firmed wit	of the 174 has th the final bu	been identified s routes and sto	l for bicycle ops.	Information	
3.4	Co	onfeo	leration Line West						
	.1	We	estboro Station						
		a. There has been some discussion of the final location of the station, and a potential for a pocket track immediately west of the station. CSW to confirm the status.							
		b.	OC Transpo						
	.2	Do	minion Station						
		a.	There was a discussion at the PPUDO causing a concern w design team.	Public In ith the loc	formation Ce cal community	ntres about the 7. CSW to revi	potential lew with the	CSW	
	.3	<u>Cle</u>	eary Station						
		a.	No additional comments.					Information	
	.4	Ne	w Orchard Station						
		a.	No additional comments.					Information	
	.5	Lir	ncoln Fields Station						
		a.	The location of the MUP, wir side of the OLRT, the curren important link for the commu OC Transpo requirements.	th respect t local pla inity, and	to OC Transp tform, is unde final location	o requirements or review. The may vary depe	s on the east MUP is an ending upon	Information	
		b.	The realignment of the MUP between the community to the	on the we e northwe	est side will prest and the LR	ovide a direct T station.	connection	Information	
		c.	OC Transpo to review the rot be retained on Carling Avenu	utes and fi ie.	requency to de	etermine if the	local stops can	OC Transpo	
		d.	The PPUDO on the east end	of the loca	al station platf	form will likely	remain as is.	Information	



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Project:	Phase 2 Pedestrian and Cycling Study Job No: 1	1768-05 Work Phase: Review				
	.6 <u>Queensview Station</u>					
	a. CSW to confirm the location of the pede station.	strian overpass to the east or west of t	the CSW			
	.7 <u>Pinecrest Station</u>					
	a. A PPUDO to be added on Dumaurier Av the station.	enue, adjacent to the MUP connection	n to Information			
	b. A review of the MUP on the east side of be completed by OC Transpo. Relocation intersection, and providing a MUP from for sight lines from the street along the M	ss to OC Transpo				
	.8 <u>Bayshore Station</u>					
	a. No additional comments.	Information				
	.9 <u>Iris Station</u>					
	a. The local bus stops to be located west of sidewalk to the station plaza entry. This cross walk.	the station, with access provided by a will require a signalized intersection	a Information and			
	.10 Baseline Station					
	a. CSW to confirm configuration of BRT strequirements.	ation and the termination of the BRT	CSW			
Copies	All Present					
	P. Schwartzentruber C. Simpson, City of Ottawa A. Taylor, City of Ottawa N. Edwards, City of Ottawa					



Project:	t: Phase 2 Pedestrian and Cycling Study Job No: 1768-05 Work Phase: Review									
Meeting L	ocatio	n: City of Ottawa	MTG No. 4	Date:	Oct 14, 2015	Writer: M. Lus	h			
Present:	Marc Angel	Magierowicz, City of Ottawa la Taylor, City of Ottawa	Martha Lush,	CSW						
Item:			Description				Action By:			
4.0	A rev follo	view of the Tenth Line Station a wing was discussed:	nd Trim Road	Station	was completed	l, and the				
4.1	Gen	eral								
	.1	.1 There is a proposed station at Orleans Town Centre. This has not been identified Information by the OLRT Stage 2 team for part of this study, and therefore has not been analyzed.								
	.2 The two stations identified are Tenth Line Station and Trim Road Station. Inform									
4.2	Tent									
	.1	The proposed location of the with the future mixed use ze proposed location	station is easone lands. Th	t of Te ne plans	nth Line overp to be updated	ass, and aligns l to reflect the	Information			
	.2	The zoning for the adjacent lar Highway 174, and a blend of r reserve lands to the north	nds is General nixed use, ope	Mixed n space	Use on the sout , residential and	h side of l development	Information			
	.3	The MUP on the south side, w continuous route from Trim to	ithin the Hydr Montreal Stat	o Ontar ion	io corridor wou	ld provide a	Information			
	.4	There should be a cross walk/c on-ramp to Highway 174	cross ride at St	. Joseph	Boulevard and	the east bound	Information			
	.5	An underpass/overpass for the	MUP at the or	n-ramp	to be explored		Information			
	.6	There appears to be sufficient accommodate a MUP, if the la	width on the Tanes and media	Fenth Langue	ine Road overpa reconfigured.	ass to	Information			
4.3	Trin	n Station								
	.1 1	The prime facility in proximity t on the southeast quadrant of the	to the proposed intersection.	l statior	is the Park and	l Ride, located	Information			



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Project:	Phase 2 Pedestrian and Cycling Study	Job No: 1768-05	Work Phase: Review	
	.2 There is an existing stormwater restricts opportunities for land of management requirements for the maximize the development pote	Information		
	.3 La Cite may have future expans connections between the college	Information		
	.4 The MUP proposed to extend o station to Trim Road Station pe	Information		
	.5 There has been a preliminary re connectivity between the BRT a the design team.	Information		
	.6 The reconfiguration of the on a	nd off ramps to be revie	ewed.	Information
Copies	All Present			



Project:	Phase	2 Pedestrian and Cycling Study	Job No: 176	68-05	Work Phase:	Review					
Meeting L	ocatio	n: On-site	MTG No. 1	Date:	June 24,2015	Writer: M. Lus	sh				
Present:	Marc Zlatko	Magierowicz, City of Ottawa Krstulic, City of Ottawa	Martha Lush, ( Patrick Gauvre	CSW eau, CSW							
Item:		Description									
1.0	A me the fo	A meeting was held to review the individual stations for the proposed OLRT Phase 2, with the following discussed:									
1.1	Gene	eral Parameters:									
	.1	The intent of this review is to enable documents are included in the str	sure that currenudy.	nt city ini	tiatives, studies	and planning	Information				
	.2	The study is based upon the current the starting point for the work of	ent EA's under this study.	rway for	the OLRT. Thi	s is considered	Information				
	.3	Information									
	.4	The study is utilizing all the curr Transportation Master Plan, Com	ent council app nmunity Secon	proved do dary Plai	ocumentation, in ns and planning	ncluding the studies.	Information				
	.5	There is an identification of both (MUPs) within the documentation	on road cyclir	ng faciliti	es and multi-us	e pathways	Information				
	.6	The work of the study is based u incorporating any pathways and sites, identifying any additional o within the station site.	pon reviewing MUPs identific connections rea	the curre ed in the quired, ar	nt community of EA's, reviewing ad integrating an	connections, g the proposed ny works	Information				
	.7	Lighting will be proposed on direct the station. Should good access and MUPs will not be recommer	ect primary con be available al nded to be lit.	nnections ong city :	between the costreets, seconda	ommunity and ry pathways	Information				
	.8	Information									
	.9	Should a proposed section of a M termination should be identified roadway.	IUP terminate if there is not a	at a mid- a clear op	block of a road portunity to saf	way, the ely cross the	Information				



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Project:	Phase	2 Pedestrian and Cycling Study	Job No:	1768-05	Work Phase:	Review				
	.10	The study team will be meeting Individual land-owners, will hav access through the normal public	with key st e opporture c consultat	takeholders, s nities to reviev ion process.	uch as OC Tra w the station de	nspo and NCC. esigns and	Information			
1.2	West	Confederation Line (Westboro to	Bayshore	and Baseline	Station)					
	.1	The individual stations along the opportunities for improved per recommendations for enhancing Plan.	e West Co lestrian an connectio	onfederation L ad cycling co ons that are de	Line were discunnectivity. E eveloped on th	ussed, including each station has le Opportunities	Information			
1.3	In ad be co	dition, the following was discuss ompleted by others:	ed to be in	cluded as reco	ommendations	in the study, to				
	.1	.1 Potential improvements to the overall cycling network with respect to the stations,								
		a. Adding on-road facilities a Iris Station and Queenswa	Information							
		b. Adding on-road facilities along Queensview Drive, to connect the community to Queensway Station;								
		Information								
		d. Adding on-road facilitie Shopping Centre.	s to Woo	odridge Cres	cent, west of	the Bayshore	Information			
	.2	Identification of the MUP and t station at Lincoln Fields, as ther	raffic ramp e are four o	os to be studie one-way ramp	ed at the west a crossings.	side of the LRT	Information			
	.3	Study of the MUP termination a has a four lane cross-section, and	t Richmon l limited c	nd Road, east onnectivity of	of Fraser, as l oportunities.	Richmond Road	Information			
	.4	Review the location of the pede to the proposed head-house loc and south side of the Queensway	strian over ation and 7.	pass at the Qu the destination	ueensway Stat: on locations on	ion with respect both the north	Information			
Copies	All Pr	esent								

Project:	ct:Phase 2 Connectivity StudyJob No:1768-05Work Phase			Work Phase:	Review					
Meeting L	ocatio	on: Algonquir	n Room, RIO	MTG No.	2	Date:	June 30, 2015	Writer:	M. Lus	sh
Present:	P. Sch G. Wi M. M C. Sw N. Ea	hwartzentruber, . ilson, City of Otta agierowicz, City vail, RIO (partial wards, City of O	RIO 1wa of Ottawa (partial) ) ttawa	D. Herweyer, City of Ottawa S. Deiaco, City of Ottawa P. Edens, City of Ottawa T. ,City of Ottawa Martha Lush, CSW						
Item:				Description				Action By:		
2.0	The Cont	TAC was held federation West	to review the curre Phase 2 line, with	nt status o the follov	f the oving d	Connect liscussed	ivity Study for 1:	the		
2.1	Gen	eral Paramete	rs:							
	.1	.1 The foundation for the study are the current City Council approved policies and plans, including the TMP, relevant CDP's, zoning, and the current Environmental Assessment.								Information
	<ul> <li>.2 There are two main deliverables from this study:</li> <li>.1 Work to be completed by the Phase 2 LRT contract.</li> <li>.2 Work to be completed by others, outside of the contract.</li> </ul>							Information		
	.3	The delineation station. Work may be identi	on for the work unc , such as extending fied, and will be co	ler the LR g sidewalk onsidered a	T incl s, MU as wor	ludes dii JP or cro rk to be	ect connectivity ossings beyond completed by o	y to the the static thers.	on,	Information
	.4	The specific s CDP, that infl	tation drawings wi uenced the study.	ll identify	any a	dditiona	l specific docu	ments, su	ch as	Information
	.5	Pedestrian L	ighting							Information
	.1 The intent of the pedestrian lighting will be to provide the principle route directly from the community to the station. Off-peak connectivity, if provided by the roadway sidewalks and lighting, while more indirect than a secondary MUP or pathway, would not be lit.							Information		
	.2 There may be locations where it may be desirable to light a MUP, however, this would require additional input from the City and the community, and would be considered beyond the scope of this study.							Information		



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Project:	Phase 2 Connectivity StudyJob No: 1768-05Work Phase: Review							
	.6	PXO .1 Ontario government recentl crosswalks. There is some implications, and the City is	y passed discussion s to seek c	legislation cor n as to the ped clarification.	ncerning signal lestrian and cyc	ized cling	City of Ottawa	
2.2	West	boro Station						
	.1	There is a requirement for the limiting the opportunity to remo CSW to review requirements with	buses to ove the en th OC Tra	access the no xisting retaini unspo.	rth side of We ng wall and cl	estboro Station, hain link fence.	CSW/ OC Transpo	
	.2	.2 The study to include the future sidewalk requirements on the south side of Scott Street, and both sides of McCrae.						
2.3	Dom	inion Station						
	.1	The MUP to be combined with corridor.	the emerg	gency vehicle	route on the se	outh side of the	Information	
	.2	The EA is proposing a sidewalk to determine the side of the stree	EA					
	.3	There was a discussion concerning lighting the MUP westerly to the development underway by Minto. At the present, as there is an alternate lit route by the sidewalks, this is not recommended.						
2.4	Clea	ry Station						
	.1	There is insufficient room for a alignment.	formalize	d PPUDO wi	th the current I	Richmond Road	Information	
2.5	New	Orchard Station						
	.1	There has been discussion throu Byron Linear Park. The wid community.	gh the EA Ith of thi	A with respect is pathway s	to the current hould be revi	pathway in the ewed with the	Information	
	.2	Sidewalks will be required on l with a cross ride at signalized Ne	ooth sides ew Orchar	s of Richmonord intersection	d Road leading	g to the station,	Information	
2.6	Linc	coln Field Station						
	.1	Future exploration should be conconnections from the communi Parkway to the LRT station. redevelops with time.	npleted to ty on the This may	o review oppo west side of y include fut	rtunities to imp f the Sir John ure opportunit	A. Macdonald ies as the area	Information	
	.2	There is a significant amount of the west side of the LRT should	pedestria be accom	n movement t modated.	o the station, a	nd the access to	Information	



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Project:	Phase 2 Connectivity Study	Job No: 1768-05	Work Phase: Review				
2.7	Queensview Station						
	.1 There is no proposed MUP p Bayshore. CSW to explore opp- corridor.	CSW					
	.2 The pedestrian overpass will pro-	ovide a direct connectior	to the proposed LRT station.	Information			
2.8	Pinecrest Station						
	.1 Alternatives for greater connect Hwy 417 was discussed. The pedestrian connection over the h	Information					
	.2 The LRT EA team to review the on and off ramp requirements to facilitate pedestrian and cycling movements along Pinecrest Road.						
2.9	<b>Bayshore Station</b>						
	.1 There is very limited opportun Bayshore and Pinecrest, and the visibility from Highway 417, recommended that a MUP be alternatives to enhance the conn	CSW					
2.10	Iris Station						
	.1 The study is recommending Iris provides connection to both the This street currently has on-st currently designing a new sidew City to review the right of way w	City of Ottawa					
2.11	1 Baseline Station						
	.1 The stormwater facility previously planned for the southwest corner of Baseline and Woodroffe is now planned for a larger pond in the northeast corner, providing greater opportunity for a MUP on the east side of the LRT corridor.						
2.12	CSW to upload the Opportunities draw by the members of the TAC.	CSW					
Copies	All Present						

## PLEASE REPORT ANY ERRORS OR OMISSIONS TO THE WRITER

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Project:	OLRT	Phase 2 Connectivity Study	Job No: 1768	8-05	Work Phase:	Review	
Meeting Location: RIO, 160 Elgin Street		MTG No. 3	Date:	July 22, 2015	Writer: M. Lush		
Present:	K. Ma A. Tay C. Sin G. Wi	urten, ISD, City of Ottawa ylor, TP, City of Ottawa npson, PGM, City of Ottawa ilson, PGM TSP, City of Ottawa	P. Schwartzentruber, RIO T. Siitam , CPUD, City of Ottawa M. Magierowicz, City of Ottawa G. Stefanoff, OC Transpo			Martha Lush, CSW P. Gauvreau, CSW	
Item:	Description						Action By:
3.0	The TAC meeting was held to review the East Confederation Line and Trillium Line for the OLRT Phase 2 Connectivity Study, and the following was discussed :						
3.1	Gen	eral Parameters:					
	.1	1 A review of the parameters for the study was completed.					
	.2	Pathway Lighting: The current of non-lit direct pathways linking c	city policy is to pommunities.	Information			
	.3	All the Opportunities panels will proposed Affordable Pedestrian	include the Exi Network (OPP)	Information			
	.4	Park and Ride Stations: the study sidewalks to the entry plaza of the Ride. The MUP should be offset metres to allow the passenger ex- cyclist crossing the plaza.	y has developed the stations, with t from the front iting the station	g MUP and to the Park and y by three (3) teen by the	Information		
3.2	East	Confederation Line					
	.1 There was a discussion concerning level of effort in the EA, and level of effort for the Connectivity Study. It is anticipated that the EA will identify the MUP locations and this study will look at additional community connections to the station.						Information
	.2	Blair Station was not included in the Phase 1 OLRT program.	Information				
	.3 The two additional stations east of Place D'Orleans Station are not part of Phase 2 works, and therefore have not been included in the study.						
	Note	: CSW has received the proposed will be incorporating this inform	MUP configura ation onto the d	tion fro rawings	m the EA desig	n team, and	CSW



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Project:	OLR	T Phase 2 Connectivity Study	Job No:	1768-05	Work Phase:	Review	
	<ul> <li>.4 Montreal Road:</li> <li>a. The one community to the northeast of Shefford Road and Canotek Drive, while just outside the 300 m radius would greatly benefit from a MUP leading between the community and the intersection to enhance connectivity.</li> </ul>						Information
	.5	<ul> <li>Jean D'Arc Station:</li> <li>a. Future linkages from the adj through the city TOD plans a additional MUP's and pathw do not exist.</li> <li>b. The station design will not p connections.</li> </ul>	acent com and will ne vays throug reclude th	munities to th ot be shown in gh current res e opportunity	e Station will b n this study. Th idential homes for additional o	e developed his may include where linkages community	Information
3.3	Tril	lium Line					
	.1	<ul> <li>There are three portions for the T</li> <li>Existing stations (Gladstone, Carling Avenue to be identifistudy. Carleton and Confederesult of the study;</li> <li>Proposed/modified stations: Bowesville;</li> <li>Ottawa Airport and Uplands</li> </ul>	Frillium L , Carling, ied as Not eration ha Walkley,	ine: Carleton and ( t In Contract ( ve some modi Greenboro, S	Confederation): NIC) for the pu fication require outh Keys, Lei	; Gladstone and proses of this ements as a trim,	Information
	.2	Gladstone Station: a. It is unclear as to how the s Gladstone Avenue. The C.	tation head Simpson	d-house will o to confirm wi	operate, as it is s th the EA team.	set back from	PGM City of Ottawa
	.3	<ul><li>Carling Avenue Station:</li><li>a. Retain the MUP on the west recommendation).</li></ul>	side of Pr	ince of Wales	Drive (study		Information
	.4	<ul> <li>Carleton Station:</li> <li>a. Recommendation to relocate accommodate the connectivities</li> <li>b. It has been identified that the rehabilitated. This would be over the Rideau River, and with Carleton University to it</li> </ul>	the MUP ty to the v rail bridg the opport vould created station is ncrease the	on the west s vest MUP thro ge over the Rig rtune time to i te a more con 3.0 m and it he width to 9.0	ide of the OLR ough the Experi deau River need nclude provisio tinuous system is recommende ) metres.	T track to imental Farm. ds to be on for a MUP d to review	Information
	.5	<b>Confederation Station:</b> a. There is a concurrent EA stur recommendation for a station should be co-ordinated with pedestrian and cycling conne	dying the n in the ce the Conne ections.	BRT on Base ntre median a ectivity Study	line Road, with t Confederatior and EA to stren	a a a Station. This agthen the	Information



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Project:	OLRT Phase 2 Connectivity Study		Job No: 1768-05 Work Phase: <i>Review</i>		Review		
3.4	Walkley Station						
	.1 The location of the OLRT station is offset from the existing BRT station, and there is the Walkley Road off-ramp from the Airport Parkway, as well as access to the BRT. This does not allow the opportunity to connect the two stations together.						Information
	.2	CSW					
3.5	Greenboro Station						
	.1	Information					
3.6	Sout	hkeys Stations					
	.1 This is the final station of the BRT, with the transit extension extending to Hunt Club Road.						Information
3.7	Uplands Station/Airport Station						
	.1 The connections to the stations to be reviewed with the Airport Parkway widening EA.						Information
3.8	Next	Step					
	.1	CSW to upload the revised plans	to the ftp	site for Frida	y July 31 <sup>st</sup> .		CSW
	.2	A meeting to be held with OC 7 requirements.	Franspo to	o review the s	tations with re	spect to the bus	OC Transpo
Copies	All Pr	resent					

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**APPENDIX 'C'** 





MUP AND SIDEWALK AT PARK & RIDE OTTAWA LIGHT RAIL TRANSIT

🔍 Ottawa Light Rail

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# Detail 2 31, AUGUST 2015





ttawa 🔍 Ottawa Light Rail

MUP AND SIDEWALK AT PARK & RIDE OTTAWA LIGHT RAIL TRANSIT



SCALE 1 : 20



Detail 1 31, AUGUST 2015