



## MEMO / NOTE DE SERVICE

To / Destinataire	Mayor and Members of Council	File/N° de fichier:
From / Expéditeur	Director, O-Train Construction Director, O-Train Planning Transportation Services Department	
Subject / Objet	O-Train Confederation Line Quarterly Update (Q1 – 2018)	Date: May 10, 2018

As part of the ongoing commitment to keep Council apprised of the progress of the O-Train Confederation Line Stage 1 and Stage 2 projects, this memo outlines the milestones achieved in Q1 2018, and provides an overview of the planned work for Q2 2018. In addition, it provides information that addresses the most common questions received by staff from Members of Council. This is the first memo where staff have combined updates on both Stage 1 and Stage 2 project progress, and moving forward, this memo will continue to provide updates on both projects.

### **Stage 1 Light Rail Transit (LRT) Project Update**

#### Civil Works Completed in Q1 2018

- Tunney's Pasture Station escalator and elevator installations and structural steel completed, permanent power connected and energized;
- Bayview Station ancillary buildings fit up and elevators completed, permanent power connected and energized;
- Pimisi Station porcelain and composite panels and elevator installation substantially complete, and permanent power connected and energized;
- Lyon Station work for final finishes, mechanical and electrical, systems and ventilation, and elevators and escalator work continues;
- Parliament Station steel erection for mid-entrance structure substantially complete; west / mid-entrance site backfill substantially complete; rock excavation for West Tunnel Vent Shaft (TVS) completed; mechanical and electrical, fire protection and heating, ventilation and air conditioning (HVAC), elevators and escalators progressed throughout station and entrances;
- Rideau Station West Entrance structural lining, excavation and breakthrough of west TVS, mid-entrance elevator adit structural lining, station platform and track slab concrete pours, and installation of west bound track work all completed;
- uOttawa Station framing for wood ceiling, structure for the accessible access ramp, elevator testing, and pre-cast stair finishes were completed;
- Lees Station full height glazing mullion installations complete, elevator machine and cab installations substantially complete, and platforms concrete topping slabs were poured;
- Hurdman Station platforms and lower concourse topping slabs are complete. Installation of composite metal panels and windscreen glazing progressed. Elevator is tested and

escalator work resumed. Communications, electrical fit-ups, wiring for the cameras and PA system, and Building Automation System continued;

- Installation of glazed curtain wall, wood ceilings and fare gate entrances continued at Tremblay, Cyrville, St-Laurent, and Blair Stations;
- Rail installation for the trackwork in the westbound direction is complete from Tunney's Pasture to Blair;
- In the tunnel, 80% of track slab is complete with rail installed for 50% of the length in the eastbound direction, westbound track complete;
- Switch heater and switch machines installed for the remaining turnouts; and,
- Ballerina fencing installed on overpasses along the alignment.

#### Power, Systems, and Vehicle Work Completed in Q1 2018

- The Overhead Catenary System (OCS) rigid rail hangers installed on west bound track throughout tunnel;
- Traction Power Sub Station (TPSS) 3 installed at Rideau Station (this is the last TPSS to be installed);
- Yard Control Centre (YCC) /Backup Control Centre are functioning as control centres for MSF and mainline. Equipment racks and workstations installed at Transit Operations Control Centre;
- Train Control System integration testing continuing east of uOttawa;
- Communication system installation continuing at eastern above ground stations;
- Vehicle tests continuing with multi-vehicle type testing and dynamic testing with the Computer Based Train Control on board; and,
- Assembly of Light Rail Vehicles (LRV) 24 to 27.

#### Preparations for Operations Completed in Q1 2018

- Emergency Responder Instructor training;
- On the job development for Light Rail Vehicle Instructors continuing;
- On the job development for Controllers continuing;
- Training for Electric Rail Operators continuing;
- Security Tabletop Exercise held in February; and,
- Meetings held with the RCMP, OPP, and Parliamentary Security Services on integrated Emergency Responder response.

#### New/Ongoing Civil Work in Q2 2018:

- Tunney's Pasture Station envelope work for roof and ceilings to be completed, precast stair treads and concrete topping slabs to be completed, and glazing installation to start;
- Bayview Station envelope work for roof and ceilings to be completed, concrete topping slabs on platforms to be completed, and glazing installation to start;
- Pimisi Station installation of W5 glazing, wood ceiling, pumping station installation, and Public Art to commence;
- Lyon Station final finishes, mechanical and electrical, systems and ventilation, and elevators and escalator work continues;
- Parliament Station east & west Tunnel Vent Shafts (TVS) and installation of mid-entrance elevators will be underway, and work on mechanical and electrical, fire protection and HVAC, elevators and escalator work will continue;

- Rideau Station work will include staircase concrete pours and escalator installation at west entrance, concrete structural lining of west TVS shaft, mid-entrance elevator installation, completion of east entrance structural lining, elevator and escalator installation between concourse and platform levels, and station service rooms construction and equipment installation;
- uOttawa Station final platform topping slabs and exterior stairs to be completed, composite metal and ceramic panel installations will continue on both levels of the station, wood ceiling installation to start, landscaping to resume and Public Art to be installed. Fit-ups of fire detection, miscellaneous electrical items, communication and building automation system will continue;
- Lees Station roof framing, wood ceiling, glass glazing, porcelain panels and hand rail installations continues; completion of multi-use pathway (MUP) access stairs to uOttawa Lees Campus and water and sewer servicing connections are underway;
- Hurdman Station finishes including wood ceiling and tall wall glazing will continue, building electrical, communication and management systems to be completed, Fare Vending Machines and Gate array to be installed, landscaping and MUP around the station and BRT access will resume;
- Tremblay Station glass curtain wall system and wood ceiling finish panel installation, completion is scheduled as well as testing/commissioning of elevators;
- St-Laurent Station full height glass installation to be completed, station entrance lanterns installation and, TVS equipment testing and commissioning are underway;
- Cyrville Station installation of glass curtain wall systems, signage band devices and labeling graphics and wood ceiling finish panel, and commissioning of elevators;
- Blair Station stair glass balustrades and handrail installation completed, installation of wood ceiling finish panel and platform furnishing, and commissioning of escalators and elevators;
- MUP lighting installation to commence located adjacent to guideway from uOttawa to Hurdman station;
- Completion of trackwork installation;
- Completion of Trillium Line trackwork extension works.

#### New/Ongoing Work on Power, Systems and Vehicles in Q2 2018

- Work on Power Supply & Distribution systems continues;
- “Loop test” to demonstrate multiple vehicle operation in Automatic Train Operation mode;
- Base Transmission Site installation for P25 radios at West Portal and system installation at underground stations and Maintenance and Storage Facility (MSF);
- Testing and commissioning activities will continue;
- Continuing assembly and testing of LRVs at the Belfast Yard;
- Assembly of vehicle 34, the final vehicle, begins;
- Communications systems installation at all stations followed by testing and commissioning and system integration; and,
- Completion of Train Control system installation, testing and commissioning, and system integration will commence.

#### New/Ongoing Preparation for Operations:

- On the job training for Instructors, Controllers and Operators continues;
- Security Tabletop Exercise scheduled for Q2 2018;
- Planning and Development of Full Scale Exercise for emergency responders;

- On-going coordination with RCMP, OPP and Parliamentary Security Services on Emergency Responders integrated response; and,
- RTG and the City continue meetings with the Ottawa and District Labour Council.

## Budget

March 31, 2018				
Project Description	Authority	Actual Expenditures	Contractual Obligations/ Contingency Draws	Unspent/ Uncommitted Balance
Confederation Line	2,130,000,000	1,541,114,585	576,967,073	11,918,342
Confederation Line Contingency	100,000,000	36,529,048	62,495,356	975,596
LRT 417 Widening	226,000,000	223,844,453	379,894	1,775,653

The Confederation Line Contingency fund is \$100M. Of this amount, \$36.5M has been spent to date. The remaining funds are earmarked for potential future changes primarily related to property requirements and transit priorities.

When funds are reserved for contract variations, the upset limit for the variation is typically used and upon completion of the work, any unspent monies are returned to the Contingency Fund. For this reason, the funds reserved figure is likely to be higher than the actual amount spent.

Funds that are reserved for potential future changes have no contractual obligations, but are reserved for risk mitigation purposes, and to cover any potential future claims. As the project draws closer to completion, some of these risks are expected to drop off and the funds reservation will be released.

### Light Rail Vehicle at Tunney's Pasture Station

On Saturday April 14, 2018, a Light Rail Vehicle (LRV) successfully travelled west from uOttawa Station, through the tunnel, passing Rideau, Parliament and Lyon Stations, and emerging from the west portal to stop at Tunney's Pasture Station. This marks the first trip of an LRV through the downtown tunnel and signals the beginning of vehicle, track, and system testing on the western portion of the alignment.

### Public Safety Message Regarding Overhead Catenary System

The Overhead Catenary System is now energized from west of uOttawa Station to Tunney's Pasture Station, and train testing will begin on this portion of the alignment in Q2 2018.

As safety is our top priority, the City has provided safety messaging to affected Ward Councillors, public schools, and community associations. To avoid electrocution, or being in the path of a moving light rail vehicle, residents should be aware of the following information:

- Never try to reach the wires or throw items at them. Do not fly kites or any other airborne object near the LRT corridor. Stay clear of the corridor at all times to avoid the risk of electrocution;
- Stay away from the tracks at all times;
- Parents should educate their children about rail and electrical safety, and discourage them from going near the LRT corridor at all times.

### Updates to Finance and Economic Development Committee

On February 6, 2018, staff advised the Finance and Economic Development Committee (FEDCo) that Rideau Transit Group (RTG) provided a new schedule indicating a Revenue Service Availability (RSA) date of November 2, 2018, subject to the resolution of contractual matters. These contractual matters include Delay Claims submitted by RTG for the June 2016 sinkhole, the change in ceiling material at stations, and the weather protection of fare control equipment. The City has rejected these delay claims, in writing, and they remain a matter of dispute between the parties. The City will continue to negotiate these matters with RTG, and will exercise all rights under the Project Agreement to recover costs and any lost revenues. In Q1, in addition to the February 6 presentation to FEDCo, an update was also provided on March 6. Staff continue to keep Council informed of progress on this project through monthly updates to FEDCo.

### Communications

The O-Train Confederation Line construction project is a multi-year project, with numerous construction sites across the city, resulting in both localized and citywide impacts. As part of the Project Agreement, the City is the lead for the management and sharing of public information.

The City has divided communications efforts into two streams:

- Stakeholder Relations: focuses on local residents, businesses, and other stakeholders directly affected by the construction;
- Citywide Communications: ensures that communications on the overall project, as well as traffic and mobility impacts are shared with the public in a timely and consistent manner. This information is integrated with traffic and mobility impacts resulting from other construction projects as well as planned and unplanned events.

The Stakeholder Relations group continues to meet with Councillors, stakeholders and community representatives affected by the O-Train Confederation Line project to provide information about upcoming work, mitigate risks, and coordinate activities as required.

Examples of these outreach efforts include:

- Weekly construction project updates sent to a subscriber list and posted on [Ottawa.ca/confederationline](http://Ottawa.ca/confederationline);
- Regular monthly meetings and presentations to key stakeholders, including the Canadian Broadcasting Corporation (CBC), uOttawa, and Public Services Procurement Canada (PSPC);
- Sharing information through meetings and communication documents with property owners at key locations, including Queen Street, Rideau Street, and Waller Street alignments;
- Regular design and construction meetings with all integrated station partners;
- Sharing information through presentations, and communication documents with local residents and businesses regarding the construction stations;
- Sharing information through regular monthly Councillor-led community meetings ;
- Information booths at various City events and outreach activities; and,
- Project presentations to multiple internal and external organizations and departments (including industry associations, community associations, business groups, international delegations, and business improvement areas).

With respect to citywide communications, the City has increased communications efforts around all construction-related projects to provide timely, accurate, and reliable information to help the public plan how to move around the city. The public is also kept informed and engaged on construction milestones. Examples of citywide communications efforts include:

- Regular Public Service Announcements related to the O-Train Confederation Line projects;
- Weekly updates to the O-Train Confederation Line project website;
- Daily Traffic Updates are shared with local traffic reporters;
- Real-time commuter delays are shared with the public via Twitter at @Ottawacity, @Ottawa\_Traffic and @OCTranspo;
- The Ottawa Nav mobile app is available for motorists, cyclists, and pedestrians to plan routes in real-time;
- Construction and variable message signs are installed near construction sites alerting commuters to current or planned works;
- Information about construction and traffic impacts are posted on Ottawa.ca and weekly updates on the Confederation Line are included on Ottawa.ca/confederationline;
- Notifications are issued prior to the start of any construction project;
- Unplanned traffic impacts are shared with the public via Twitter and on the landing page of Ottawa.ca; and,
- Milestones and interesting facts about the project are highlighted via the City's social media channels.

### **Stage 2 Light Rail Transit (LRT) Project Update**

The following outlines the Stage 2 LRT project milestones achieved in Q1 2018 and provides an overview of the planned work for Q2 2018. The O-Train Planning (OTP) Office has achieved several Stage 2 LRT Project planning, procurement, funding, and implementation milestones in Q1 2018.

#### Planning

The City has progressed on formal approvals required through the Provincial and Federal environmental assessment (EA) processes. Many milestones have been achieved in Q1 2018 with respect to Stage 2 environmental approvals:

- Bayshore to Moodie Bus Rapid Transit (BRT) Conversion to Light Rail Transit (LRT) EA;
- Baseline/Woodroffe Stormwater Management Pond Municipal Class EA and Functional Design Part II order dismissed – project approved; and,
- Federal Environmental Effects Evaluation (EEE) filed March 26, 2018.

Two EAs remain underway and are nearing completion. The Maitland Avenue Highway 417 Bridge Cycling Improvements EA will be finalized in late spring 2018. The Trillium Line EA Project Addendum Report is also nearing completion; however, City staff still need to confirm an appropriate schedule with the Ministry of Ontario Environment and Climate Change (MOECC) to coordinate a timely approval as per the Transit Project Assessment Process (TPAP).

## Procurement

As communicated to Council on March 12, 2018, the procurement timeline has been updated for both the Trillium and Confederation Line procurements. The Stage 2 team continues to engage with proponents and finalize procurement documents. A recommendation to Committee and Council regarding contract award is expected in Q4 2018.

## Funding

The City continues to work with the federal and provincial governments to finalize the Transfer Payment Agreements that will outline the terms and conditions of their contribution to the Stage 2 Project. It is anticipated that these Agreements will be ready for execution in Q4 2018.

## Implementation

Construction is currently underway for the expansion of the Belfast Yard Maintenance and Storage Facility (MSF) in preparation for the assembly of vehicles required to support Stage 2 LRT extensions. In total, 38 Stage 2 vehicles will be assembled on site as part of the Council approved Memorandum of Understanding (MOU) with Rideau Transit Group (RTG). Substantial completion of construction activities is anticipated in late 2018.

The Byron Linear Park Tree Transplant and Renewal Project is currently underway to relocate transplantable trees impacted by construction. In collaboration with City Councillors and the City's Public Works and Environmental Services Department, the Stage 2 office will be relocating transplantable trees to nearby parks and eligible private properties upon request. Transplant activities are anticipated to take place in two separate phases during the spring and fall of 2018. Target locations will be determined by appropriate species, age, soils, and surrounding environments.

The Stage 2 team has engaged a wide range of stakeholders in 2017, at more than 60 community meetings across the city, and will continue to do so in 2018. For more information on the Stage 2 project, please visit [stage2lrt.ca](http://stage2lrt.ca).

Should you have any questions, please do not hesitate to contact Steve Cripps at extension 16623 or Chris Swail at extension 12408.

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