



## MEMO / NOTE DE SERVICE

To / Destinataire Mayor and Members of Council

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From / Expéditeur Michael Morgan  
Director, Rail Construction Program  
Transit Services Department

Subject / Objet O-Train Stage 2 Light Rail Transit Project  
Quarterly Update (Q1 2022)

Date: June 3, 2022

The following memo outlines the progress made during Q1 2022 on the Stage 2 Confederation Line and Trillium Line extension projects and provides an overview of the planned work for Q2 2022.

### **Stage 2 Confederation Line Project**

#### **Schedule**

- The City is working closely with East West Connectors (EWC) to maintain the Confederation Line extension schedule. The project is on the original timeline in the east for handover in May 2024 but there are significant schedule pressures on the western segment of up to a year.

#### **Design**

- The Stage 2 Confederation Line east and west extensions design is expected to be completed by Q2 2022.
- In Q1 2022, City staff continued their review of EWC's designs of specific Confederation Line extension elements, including stations, trackwork, utility expansion works, bridge structures, systems design packages and Highway 417 interchanges.
- In Q2 2022, staff will continue the review of design documents for stations and remaining roads packages. The review of other works that will be completed following Substantial Completion, including the Richmond Road Complete Streets and the decommissioning of portions of the Transitway, will continue in 2022.

#### **Construction – Highlights**

- Construction work is underway at all Confederation Line extension stations, with significant progress being made at Lincoln Fields Station and Carling Avenue where structural steel has been installed over the platforms and the first escalators have been installed.

- Significant progress has been made on structures in the east, including the Blair Road flyover bridge work with the pouring of the bridge deck. The construction of the highway bridges at the Montreal Interchange continued, including the completion of 6 overhead catenary system bases, north approach slabs, bridge decks, and parapets.
- The Greens Creek pedestrian bridge was constructed and is now ready for bridge placement early in Q2 2022.
- Noise walls installation on the north side of the highway 174 continued and are expected to be completed in Q2 2022.
- Approximately 9km out of 23km of guideway barrier walls have been completed to-date in the east.
- Rail has been delivered and is stockpiled east of the highway 174 Montreal Road interchange and Champlain Street.
- The construction of the MUP on the North side of Scott is scheduled to begin in Q2 2022 in anticipation for the Transitway detour which will begin in late June 2022.
- Along the SJAM, the focus has been on making progress on the excavation of the cut-and-cover Parkway Tunnel. Excavation and drilling has also continued at the western sections of the Parkway cut-and-cover tunnel with significant progress being made at Sherbourne and New Orchard stations.
- Advancements were also made at Iris Street, where girders and precast deck panels were erected at the new Iris Street bridge and guideway excavation has started south of the new bridge.
- At the Moodie Interchange, significant progress has been made on the guideway excavation and the alignments permanent retaining walls.
- At the western end of the project, progress has been made at the Moodie Light MSF, with structural steel erected for the train storage shed building.

## **Stage 2 Trillium Line Project**

### **Schedule**

- The Trillium Line schedule is tracking towards a Substantial Completion and handover to the City in summer 2023. The City will continue to closely monitor the Trillium Line schedule and provide updates as further milestones are achieved.

### **Design**

- Design work and review is winding down. Staff worked with TransitNEXT in Q1 2022 to resolve open comments from design reviews for the Trillium Line stations and Maintenance and Storage Facility (MSF).

- Staff also reviewed IFC drawings for the Hunt Club Rail Bridge and the final design submissions for the operational modelling of the system, communication systems design for the Walkley Yard MSF and the retrofit of the existing Alstom LINT vehicles.
- In Q2 2022, staff will continue to review CD submissions for final common elements submissions for items such as architecture, wayfinding and signage and landscaping that are applicable to all stations and guideways.

### **Construction – Highlights**

- Construction of all Trillium Line stations continued, including platform works, watermain works, and structural steel installation throughout the alignment.
- Works progressed at the new Walkley Yard maintenance and storage facility (MSF), including the installation of the overhead cranes.
- Trackwork in the MSF yard for train testing was also completed and the test track installation between the MSF yard and north Leitrim rail bridge was completed at the beginning of Q1 2022.
- The new Rideau River pedestrian bridge foundation works continued during the quarter and the remedial works for the existing Rideau River rail bridge are ongoing.
- Testing and commissioning began on the test track between Walkley and Leitrim Stations.
- These activities will continue in Q2 2022.

### **Stage 2 Project Vehicles**

- RTG is providing 38 additional Alstom Citadis Spirit light rail vehicles to ensure that the expanded Stage 2 Confederation Line operates as a single, uniform service. To date, seven Stage 2 vehicles have been accepted and are in use as part of the operating fleet.
- TransitNEXT will supply seven Stadler FLIRT vehicles for the expanded Trillium Line. The first four Stadler vehicles have been delivered to Ottawa. The three remaining vehicles are expected to be delivered in spring 2022.

### **Stage 1 and Stage 2 Contingency Funds**

The Stage 1 Confederation Line Contingency Fund is \$115 million. To date, \$97.2 million from the total fund has been spent. Remaining funds are earmarked for potential future changes, primarily related to property requirements and transit priorities.

The Stage 2 Contingency fund is approximately \$152 million. To date, roughly \$135 million has been allocated to a variety of contract changes including upgrades to gas switch heaters on the Confederation Line, enhancements to station connectivity on the Confederation Line and Trillium Line, upgrades to noise mitigations in various locations on the Confederation Line, improvements

to road configurations at Corkstown Road and Trim Road, increase in P25 radio infrastructure costs, additional expenditures on utility relocations and utility rework, and a series of safety, accessibility, and operational upgrades on both the Trillium Line and the Confederation Line. The utility budget, including for relocation of telecommunication services, protection and relocation of gas services, and protection and relocation of a variety of other utilities (electricity distribution, electricity transmission, City wet utilities) is under pressure due to a variety of commercial and technical issues.

When funds are reserved for contract variations, the upper cost limit for the variation is used and upon completion of the work, unspent monies are returned to the Contingency Fund. For this reason, the funds reserved figure is an estimate that may be higher than the actual amount spent.

## **Stage 2 Capital Budget**

In keeping with Council's approved 2017 Stage 2 Report (ACS2017- TSD-OTP-0001) and 2019 Stage 2 Report (ACS2019-TSD-OTP-0001), approximately \$2.161 billion has been spent as of March 31, 2022 and relates to the RTG MOU for Belfast Yard and vehicle assembly mobilization (\$380.9M), Confederation Line extension mobilization and construction period payments (\$1.003B), Trillium Line extension construction period payments and financial close for the Revenue Vehicle Supply Contract (\$426.8M), and contingency (\$14.6M).

<b>March 31, 2022</b>				
Project Description	Authority	Actual Expenditures	Funds Reserved/Committed	Unspent/Uncommitted
<b>Stage 1</b>				
Confederation Line Program	2,130,000,000	2,127,964,800	2,035,200	-
Contingency	115,000,000	97,191,901	17,808,099	-
Total Stage 1	2,245,000,000	2,225,156,701	19,843,299	-
<b>Stage 2</b>				
Confederation Line Extensions DBF Contract	2,680,832,113	1,003,012,243	1,677,819,870	-
Trillium Line Extension DBFM Contract	810,159,585	426,794,250	244,843,345	-
Deferred Equity (Maintenance Term Repayment)	0	0	138,521,990	-
RTG Stage 2 MOU (includes 38 Alstom vehicles)	516,184,423	380,894,673	134,911,395	378,355
City Costs (includes planning, procurement, property acquisitions, City retained scope, and delivery oversight)	497,629,108	336,049,226	46,690,179	114,889,703
Contingency	152,640,000	14,573,388	120,481,581	17,585,031
Total Stage 2	4,657,445,229	2,161,323,779	2,363,268,361	132,853,089

## **Stage 1 Maintenance Payments**

Further to the payment information provided in previous updates, the City made payments in December 2021 and January 2022, reflecting the system performance in November and December 2021, less deductions, as required by the Project Agreement.

The City continues to work through an invoice review to ensure that we meet all of our contractual obligations under the Project Agreement. Invoices under review include the period for October 2019 to January 2020, reflecting system performance from September 2019 to December 2019 and February 2020 to April 2020, reflecting the system performance of January 2020 to March 2020. The City continues to review and issue payments on other contractual matters pursuant to the Project Agreement.

### **Communications and Stakeholder Relations**

- In January, the Stadler FLIRT vehicles met a major milestone with the start of testing and commissioning on the test track between Walkley and Leirrim Stations. Residents can see the start of vehicle testing by watching [this video](#).
- In Q1 2022, the Stage 2 stakeholder relations and communications team issued:
  - 22 public notices
  - 13 e-newsletters
  - 13 social media posts
  - 6 web articles
  - 1 educational video
- In 2022, the Stage 2 LRT project will continue to focus on stakeholder relations and communications strategies to educate, excite, and spread awareness on the LRT project.
- Residents are encouraged to subscribe to the Stage 2 LRT newsletter to receive monthly progress updates, construction photos and videos and area specific notifications regarding upcoming works. Residents can subscribe to the electronic newsletters by visiting [ottawa.ca/Stage2Connect](http://ottawa.ca/Stage2Connect).

Should you have any questions about the information provided in this memo, please do not hesitate to contact me at extension 52718.

*Original signed by  
Michael Morgan*

c.c. Senior Leadership Team  
Transit Services Departmental Leadership Team  
Director, Public Information and Media Relations