



To: Metrolinx Board of Directors

From: Jack J. Collins
Chief Capital Officer, Capital Projects Group

Date: December 3, 2015

Re: **Capital Projects Group Quarterly Report – December 2015**

RECOMMENDATION

That this report be received for information.

EXECUTIVE SUMMARY

The two tunnel boring machines, named Don and Humber, tunnelling the eastern portion of the Eglinton Crosstown Light Rail Transit (LRT) were launched on September 29 and October 6 and have tunnelled approximately 500 metres towards Yonge Street.

The Request for Qualifications (RFQ) for the Finch West LRT project closed in November and the team is currently evaluating the submissions. The shortlisted proponents will then be qualified to bid on the Request for Proposals (RFP) for the design-build-finance-maintain (DBFM) contract, which is expected to be released in January 2016.

The Highway 7 East rapidway corridor has been selected by Roads & Bridges Magazine as the second best road in its 2015 Roads & Bridges Top 10 Roads list. The Highway 7 East project was recognized as a multi-modal, “complete street” thoroughway, with the trade magazine noting the transit operations technology, the red-pigmented pavement, bike lanes and sidewalk landscaping.

The Highway 7 West rapidway project reached commercial and financial close in mid-September. The preferred proponent, EDCO, a joint venture of EllisDon and Coco Paving, will design, build and finance the line.

Construction of the Davis Drive Rapidway reached substantial completion and went into service on November 27, 2015. An event opening the Davis Drive segment was celebrated with the Minister of Transportation and other regional and local officials. The opening of this segment represents over 8 kilometres of in-service rapidway in York Region.

On October 27, Brampton City Council voted to remove the Transit Project Assessment Process (TPAP) approved LRT alignment on Main Street from north of Steeles Avenue to Brampton GO station. Moving forward, Metrolinx will continue to work with the cities of Mississauga and Brampton on implementing the project and identify any necessary adjustments and amendments required as a result of this decision.

The Master Plan for the Port Credit station area was completed in October 2015 by the City of Mississauga. This work is being done in coordination with the Hurontario LRT project and enabled the release of the RFP for the planned joint development parking structure west of Hurontario Street in November. This design-build contract will be procured through Infrastructure Ontario.

A layover facility at Shirley Street in Kitchener is currently under construction. The new facility will offer additional transit storage and will also support the increase in train service on the Kitchener Corridor.

Construction to increase capacity at the Milton GO Train Layover Facility began in November 2015. The new capacity will increase train storage from 8 to 10 trains and allow additional peak train service on the corridor. The project is scheduled to be complete in the fall of 2016.

RAPID TRANSIT UPDATE

Light Rail Transit (LRT)

Eglinton Crosstown LRT – 19 km

Following commercial and finance close of the Eglinton Crosstown Light Rail Transit (LRT) Design-Build-Finance-Maintain (DBFM) procurement in July, Metrolinx and Crosslinx are working together to form a unified project team. The team has been briefing the TTC and the City of Toronto on the design review process in preparation for the 30% design submissions which will be submitted to Metrolinx in December 2015 and must be completed before starting construction in March 2016. In addition, Crosslinx is completing various project management plans, including a communications plan, an environmental management plan and a quality management plan.

Construction on the east and west tunnels continues to progress. In the west, the tunnel boring machines (TBMs) passed Chaplin station in November and are expected to reach Avenue station in the new year. In the east, the two TBMs, named Don and Humber, were launched on September 29 and October 6 and have already tunnelled approximately 500 metres towards Yonge Street.

Finch West LRT – 11 km

The Request for Qualifications (RFQ) for the Finch West LRT closed in November 2015 and the team is currently evaluating the submissions. The shortlisted proponents will then be qualified to bid on the Request for Proposals (RFP) for the DBFM contract, which is expected to be released in January 2016.

Hurontario LRT – 20 km

Following the provincial funding announcement in April, Metrolinx is moving the Hurontario LRT project forward with the procurement for technical advisory services to advance the technical design and specifications in preparation for the Alternative Financing and Procurement (AFP), subject to a positive value for money assessment. The RFP for these services was released in November 2015 and contract award is expected in March 2016.

On October 27, Brampton City Council voted to remove the Transit Project Assessment Process (TPAP)-approved LRT alignment on Main Street from north of Steeles Avenue to the Brampton GO station. Moving forward, Metrolinx will continue to work with the cities of Mississauga and Brampton on implementing the project and identify any necessary adjustments and amendments required as a result of this decision.

Hamilton LRT– 11 km

Following the provincial funding announcement in May, the City of Hamilton engaged Steer Davies Gleave to complete additional design work required for the Environmental Assessment (EA) amendment. Metrolinx also completed a communications plan and a Memorandum of Understanding (MOU) with the City of Hamilton.

Bus Rapid Transit (BRT)

Yonge Street – Viva Bundle – Richmond Hill to Newmarket – 8.9 km

York RapidLINK Constructors, the design-build (DB) team led by Aecon and Dufferin, has completed and submitted the 90% design packages for all segments and design review is underway. Various site investigation and utility relocations are underway along the corridor to support upcoming construction activities. Project completion is scheduled for the end of 2018.

Highway 7 East – Richmond Hill Centre to Warden Avenue (H3) – 6.0 km

The Highway 7 East rapidway corridor has been selected by *Roads & Bridges Magazine* as the second best road in its 2015 Roads & Bridges Top 10 Roads list. The Highway 7 East project was recognized as a multi-modal, “complete street” throughway, with the trade magazine noting the transit operations technology, the red-pigmented pavement, bike lanes and sidewalk landscaping.

Highway 7 West – Vaughan to Richmond Hill Centre (H2) – 12.4 km

Commercial and Financial Close was reached in mid-September to design, build and finance (DBF) the Highway 7 West rapidway. The preferred proponent, EDCO, a joint venture of EllisDon and Coco Paving, is working on design activities in preparation for construction activities, expected to commence in spring 2016. Project completion is anticipated in late 2020.

Highway 7 – Vaughan Metropolitan Centre (H2 VMC) – 3.6 km

Construction on the segment east of Jane Street to east of Keele Street is advancing and is scheduled to be in-service at the end of 2016. The segment west of Jane Street has been delayed by lack of access to the TTC subway station and is now planned to open with the opening of the Toronto York Spadina Subway Extension.

Davis Drive – Newmarket (D1) – 2.6 km

Construction of the Davis Drive Rapidway reached substantial completion and went into service on November 27, 2015. An event opening the Davis Drive segment was celebrated with the Minister of Transportation and other regional and local officials. The opening of this segment represents over 8 kilometres of in-service rapidway in York Region.

REGIONAL EXPRESS RAIL UPDATE

Corridor Infrastructure

Barrie Corridor

The installation of the new track from Steeles Avenue to Rutherford station is ongoing and will be complete by spring 2016. New centralized traffic control signals system from Aurora to Barrie is ongoing with completion expected in March 2016.

Discussions with the City of Toronto continue with regard to the Davenport Diamond Rail overpass. The EA process will commence in January 2016.

EA and detailed design for the second track north of the Davenport Diamond to East Gwillimbury and four grade separations is approaching 25%. Completion is scheduled for December 2016.

Station designs to accommodate requirements for Regional Express Rail (RER) are at 30%. Tunnel design work will be separated from the contract and issued for tender in early 2016.

Preliminary designs for parking structures at Rutherford, Maple and King GO stations are complete. Parking structures will be incorporated into the overall station rework.

Kitchener Corridor

Carlingview Avenue and Denison Avenue were closed as part of the grade separation work required for UP Express. Carlingview Avenue, which provides access to Woodbine Race Track, was paved and fully reopened in October 2015. Denison Avenue, the last of the closed roads, is scheduled to be open to traffic in December 2015.

A layover facility at Shirley Street in Kitchener is currently under construction. The new facility will offer additional train storage and will also support the increase in train service on the Kitchener Corridor. An EA and design work to support this project is also underway. Construction is expected to be complete in June 2016.

Metrolinx is also widening the John/McNabb Street bridge (in Georgetown) to support the additional train service on the corridor. Construction is underway and is anticipated to be complete in June 2016.

Lakeshore West Corridor

The Master Plan for the Port Credit station area was completed in October 2015 by the City of Mississauga. This work is being done in coordination with the Hurontario LRT project and enabled the release of the RFP for the planned joint development parking structure west of Hurontario Street in November. This design-build contract will be procured through Infrastructure Ontario.

Construction at Exhibition station continues with the installation of the snow-melt system and canopies on the west end of the platform. Once complete, work will transition to the east end of the platform and the TTC retaining wall replacement will commence. Completion is anticipated for the end of 2016.

Design for accessibility improvements at Long Branch and Mimico GO stations is underway and is anticipated to be completed by the fall of 2016. Construction on both stations is anticipated to begin in the spring of 2017.

The next phase of work at Burlington station has commenced with demolition of the existing station building. The parking rehabilitation work is expected to be substantially complete by the end of 2015.

Parking rehabilitation projects are ongoing at Appleby, Bronte and Clarkson stations. Work includes expansion and/or paving of parking lots, improving pedestrian and active transportation access and installing LED light fixtures to improve operational efficiencies.

Track and signal construction continues in the Lakeshore West corridor from the Hamilton Junction into West Harbour station to accommodate service into the new West Harbour station. Completion is anticipated by the end of 2016.

Lakeshore East Corridor

The EA for corridor expansion between Guildwood and Pickering GO stations is underway and is expected to be approved in the summer of 2016. As part of the EA, both the Highland Creek and Rouge River bridges must be widened to accommodate a third track and a future fourth track. Design for the bridge widenings is underway and an enabling works contract for fiber optic and signal cables in the rail corridor is scheduled to start in the spring of 2016.

An EA for corridor expansion between the Union Station Rail Corridor (USRC) and Scarborough GO station will commence before the end of the year. The expansion requires a fourth mainline track and bridge modifications and expansions along the corridor.

Station improvements, including new pedestrian tunnels and walkways and improved accessibility are now completed at Scarborough GO station. Similar work is currently underway at Oshawa and Eglinton GO stations.

New station buildings will begin construction in early 2016 for Guildwood, Whitby and Rouge Hill GO stations.

The construction for adding a third main track at Rouge Hill GO station is planned to start before the end of 2016.

Parking expansion at Oshawa GO station will begin in early 2016.

Stouffville Corridor

The first phase of the construction of a new second mainline track between Agincourt and Milliken GO stations is underway with site preparation, civil works and adjacent resident engagement on encroachments and noise walls. This first phase is expected to be complete in the fall of 2016.

Construction tender documents are being developed for the remaining new mainline track along the corridor up to Unionville. Procurement of construction services is planned for early 2016. A corridor analysis of all rail crossings on the corridor was underway. In consultation with municipalities and based on technical data, a corridor-wide crossings program will establish priorities to move into environmental assessment, design and construction.

Design of station modifications, including a new second track, platforms and tunnels, is progressing toward design-build procurement in spring 2016.

Milton Corridor

Construction to increase capacity at the Milton GO Train Layover Facility began in November 2015. The new capacity will increase train storage from 8 to 10 trains and allow additional peak train service on the corridor. The project is scheduled to be complete in the fall of 2016.

Richmond Hill Corridor

Construction at Gormley station is underway and progressing according to schedule with expected completion in the fall of 2017.

The design for the new Bloomington station is progressing and is now more than 50% complete. A tender call is planned for late summer 2016. The station is anticipated to be in service in 2019. Bloomington station will be the new northern terminus of the corridor. While the Richmond Hill station platform expansion is ongoing, to be completed in early 2016, the design for the new expanded station building is at the 10% design stage and construction is anticipated to begin in late 2016.

Union Station Rail Corridor (USRC)

As part of the Union Station Revitalization Project and following the recent opening of the York Concourse, public access to the Bay Concourse was closed in August 2015. This successful transition was possibly the largest single change for GO customers in recent history. Metrolinx completed the decommissioning of the Bay Concourse in early October 2015, which allowed the City of Toronto to start construction. When completed in 2018, the combined York and Bay Concourses will be three times the size of the original Bay Concourse and will include better platform access, connections to a new retail level below and a fully accessible connection to the PATH system through the TTC's Union Subway station.

The construction manager prequalification for the Union Station Trainshed Enhancement Project was issued in October 2015 and the design consultant tender was posted in November 2015. This is the first project that Metrolinx will procure with the Construction Manager General Contractor delivery model. The \$600 million project includes expansion and renovations of the Union station trainshed to allow for electrification and increased train service as part of GO Transit's RER.

Network Infrastructure

Network Signals

Preliminary Design Review for the USRC Signalling System Project was completed in October with the submission of 92 documents for review and acceptance by Metrolinx. The contractor is currently working towards submitting additional design documents for acceptance as part of the System Interim Design package, which is scheduled to be completed early 2016. Early installation works have also commenced to advance the project schedule.

The GO Transit Train Control System project commenced and the contractor's project team has been established. The contractor is now working towards acceptance of their contract schedule and conceptual design.

Network Facilities

At the Willowbrook Rail Maintenance Facility the track improvements and construction of a new sanding station in the yard are well underway and are scheduled for completion by the end of 2015. Construction of the new Mimico Train Layover Facility, located across from Willowbrook, is also underway and is scheduled to be completed in early 2016. The tender for the design of a new Rail Operations and Train Crew Facility was awarded in November 2015.

At the East Rail Maintenance Facility in Whitby, the construction development drawings for the DBFM project are ongoing and 75% submission was received in November. The construction of foundations is continuing and structural steel work commenced in October.

Respectfully submitted,

Jack J. Collins
Chief Capital Officer, Capital Projects Group