



METROLINX

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Memorandum

To: Metrolinx Board of Directors
From: Jack J. Collins
Chief Capital Officer, Capital Projects Group
Date: September 22, 2015
Re: **Capital Projects Group Quarterly Report – September 2015**

RECOMMENDATION

That this report be received for information.

MAJOR HIGHLIGHTS

The Eglinton Crosstown Light Rail Transit (LRT) Design, Build, Finance, Maintain (DBFM) project reached Commercial Close and Financial Close with Crosslinx Transit Solutions (Crosslinx) on July 21 and 24, 2015, respectively. Mobilization for implementation is underway with the establishment of the joint project office. In addition, Infrastructure Ontario (IO) awarded the Independent Certifier contract in July and Metrolinx awarded the On-Site Technical Compliance and Quality Activities contract in August 2015.

Eglinton tunnelling activities are underway for both the West and East Tunnelling contracts. In the west, the Tunnel Boring Machines (TBMs) are expected to approach Bathurst Street by the end of September. In the east, preparatory activities continued through the summer and one of the two TBMs began tunnelling in September 2015 followed by the second later in the fall of 2015.

The Request for Qualifications (RFQ) for Finch West Light Rail DBFM contract is to be released on September 8, 2015.

We anticipated that the vivaNext Highway 7-H2 west BRT design, build and finance (DBF) project will reach Commercial and Financial close with EDCO (a joint venture of EllisDon Capital Inc. and Coco Paving Inc.) by mid-September 2015.

Mississauga Transitway construction work on the west side of the Square One GO Bus Terminal was completed at the end of June 2015 in time for the Pan/Parapan American games.

The GO Regional Express Rail (RER) continues with advancing preliminary and detailed designs, as well as construction activities. The West Harbour Station in Hamilton was in-service as of July 9, 2015, and was in use for the Pan/Parapan American games.

East Rail Maintenance Facility (ERMF) project site mobilization and foundation work began in July 2015. Design development for the facility was completed and submitted on August 26, 2015.

The contract for the GO Transit Train Control System received approval for award in August 2015.

RAPID TRANSIT UPDATE

LIGHT RAIL TRANSIT (LRT)

Eglinton Crosstown LRT (Crosstown) – 19 km

Following commercial and finance close of the DBFM contact with Crosslinx in July 2015, mobilization of the team and establishing a joint project office is underway. To incorporate changes discussed during the preferred proponent negotiation stage, the Metrolinx project team is working with Crosslinx for an update to the 10% design submission.

Two contracts key to the implementation phase were competitively tendered and awarded. The Independent Certifier contract was awarded by IO to BTY Group in July and Metrolinx awarded the On-site Technical Compliance and Quality Activities contract to 4Transit in August 2015.

Construction on the West and East Tunnels continues on Crosstown. In the West, tunnelling activities continued throughout the summer. By the end of September the TBMs are expected to be nearing Bathurst Street. In the East, tunnelling commenced at the Brentcliffe Avenue launch site in September, with the first TBM moving westerly towards Yonge Street. The second TBM is expected to begin mining later in the fall of 2015.

Finch West LRT (Finch) – 11 km

The Metrolinx project team and IO, released the RFQ for the Finch DBFM contract on September 8, 2015 and is expected to close later in the fall of 2015. Shortlisting of proponent is anticipated for late fall of 2015 after which the RFP process will commence.

Following the public open house for the Finch West Maintenance and Storage Facility (MSF) in June, the environmental assessment (EA) process continues and is targeted for completion in late 2015.

Hurontario-Main LRT (HMLRT) – 23 km

The Metrolinx project team continues to work with the Cities of Mississauga and Brampton, as well as other project stakeholders, on project planning to inform early works and the procurement phase of the project. Brampton Council continues to deliberate on the project alignment north of Steeles Avenue in relation to downtown Brampton. Metrolinx has provided the City staff additional information on why the Environmental Project Report approved alignment is the preferred option from a transportation planning, cost and economic benefits viewpoint. In addition, a project Memorandum of Agreement (MOA) is under development between Metrolinx and the Cities to define project responsibilities.

The P3 Canada federal funding application was submitted in June 2015. Notification of application status is expected by fall of 2015.

Tendering for Technical Advisory (TA) services is underway and will return to the board with recommendation for award in fall of 2015. The TA will assist the HMLRT Project Team in preparatory work for the reference concept design, Alternative Financing and Procurement (AFP) Project Specific Output Specifications (PSOS), utilities advice and other technical assistance required to advance the project for procurement.

Hamilton LRT (HLRT) – 11 km

Metrolinx and IO met with the City of Hamilton in mid-August 2015 to discuss project governance, establishing a local project office, developing an initial Memorandum of Agreement with the City and initiating additional planning and environmental work. Metrolinx assigned a dedicated Director to move the project forward.

BUS RAPID TRANSIT (BRT)

vivaNext Yonge Street– Richmond Hill to Newmarket – 8.9 km

York RapidLINK Constructors, the design-build (DB) team led by Aecon and Dufferin, is continuing with design activities. The 90% design packages are targeted for completion in the fall of 2015 and utility relocation activities are ongoing. Project completion is anticipated by the end of 2018.

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

The preferred proponent was announced in August 2015, following evaluation and successful negotiation with the highest ranked proponent, EDCO, a consortium of EllisDon Civil Ltd, Coco Paving Inc, IBI Group, WSP Canada, LEA Consulting Ltd., and PetoMacCallum Ltd. Commercial and Financial Close was reached in mid-September. The project is anticipated to be completed and in-service in late 2020.

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

Construction on the segment east of Jane Street to east of Keele Street is over 60% complete and is expected 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 alongside the opening of Toronto York Spadina Subway Extension.

vivaNext Davis Drive – Newmarket (D1) – 2.6 km

Construction is over 75% complete and major infrastructure work including culverts, storm and sanitary sewers and watermains are nearing completion. The construction of viva stations, asphalt paving and boulevard work is proceeding along the segment. This segment is scheduled to be in-service by the end of December 2015.

Mississauga Transitway – 18 km

Phase 2 of the Mississauga Transitway construction is expected to be completed by early 2017 and includes stations at Winston Churchill, Erin Mills, Tahoe, Etobicoke Creek, Spectrum, Orbitor and Renforth.

The remaining construction of the Square One GO Bus Terminal is on track for completion for late 2015. The portion of construction work on the west side of the Terminal was completed at the end of June 2015 in time for the PanAm games.

The funding partners from all three levels of government took part in a site tour on September 18, 2015 along the Mississauga Transitway.

The contract for the environmental assessment and detailed design for the new 407 West connection from Winston Churchill Station to Highway 407 commenced in August 2015.

BUS INFRASTRUCTURE (BI)

GO Bus Storage & Servicing Facilities

A new GO bus maintenance facility is being built in Hamilton to better support GO Operations. The facility is located at 155 Coreslab Drive on an 8.7 acre Metrolinx property and will include a 6,721 square meter building. The project team is aiming to achieve Leadership in Energy and Environmental Design (LEED) gold certification. Project completion is anticipated in early 2016.

The project team is undertaking a new Kitchener GO bus and rail joint-use facility. The rail layover component is anticipated to be complete in early 2016, followed by the bus facility component in 2017.

Park & Ride Lots

Construction of the Davis Dr. & Hwy 404 Park & Ride Lot started early May 2015 and completion is anticipated in fall 2015. This lot features 199 parking spaces, six bus platforms with GO Transit and York Region Transit servicing the facility.

The contract for an environmental assessment and detailed design for the 407/Bronte Road Park and Ride Lot commenced in September 2015.

Other parking and ride expansion projects are under development at Milton, Aurora, Newmarket and Orangeville.

REGIONAL EXPRESS RAIL UPDATE

CORRIDOR INFRASTRUCTURE

Barrie Corridor

The grading/track and signal contract for a second rail and culvert extension from Steeles to Rutherford is advancing. The EA and preliminary design for mile 1.35 to mile 36 is well underway with completion expected in December 2016.

Preliminary design for the Davenport rail to rail grade separation (diamond) is at the 10% level. The residents' reference panel that started in the spring has completed making recommendations which are now under review by the Metrolinx project team. The Notice of Commencement for EA process was deferred at the request of the City of Toronto. During this pause Metrolinx will schedule additional meetings with Davenport residents to explain why it feels the overpass option has less impact than the underpass and tunnel options.

The feasibility study for the parking structures at King, Maple, and Rutherford GO stations is now complete. Station modifications and design to support Regional Express Rail service for Rutherford, Maple, King City, Aurora, Newmarket, and East Gwillimbury GO stations are 25% complete. The design for Rutherford GO station building rehabilitation has also advanced to the 10% level.

Kitchener Corridor

Strachan Ave was paved and fully reopened in July 2015 closely followed by paving and landscaping for Dennison Ave and Carlingview Drive that were completed in September 2015. Footings and piers are under construction for the John Street Pedestrian Bridge in the Weston area, Weston, Bloor and Etobicoke North Stations are nearing full completion. The McNabb/John St bridge widening on the CN Corridor in Georgetown began in July 2015.

The feasibility study for a third track on the Halton Subdivision was completed in September 2015. The contract for an environmental assessment and detailed design for a new layover facility for the corridor commenced in August 2015.

Lakeshore West Corridor

The new West Harbour Station in Hamilton was in-service as of July 9, 2015 ahead of the start of the service for the Pan/Parapan American Games. The balance of the station construction remains on schedule for completion in Summer 2016.

A Grade Separation Feasibility Study report is underway for the corridor and is expected to be completed in September 2015, including review of grade separations at Kerr Street and Burloak Drive.

Lakeshore East Corridor

The Environmental Assessment for the expansion of the corridor between Pickering Station and Guildwood Station is underway. A second Environmental Assessment for the expansion of the corridor between Union and Scarborough GO Station will commence in the spring of 2016.

The detailed design for Highland Creek and Rouge River bridges is at the 30% level and construction tendering is expected for the spring of 2016.

An enabling works contract for fibre optic and signal cables in the rail corridor is scheduled to start in the winter of 2016.

Stouffville Corridor

The construction contract for 5.15 km of new mainline track between Agincourt and Milliken GO stations, including signals, crossings, noise walls, and preparation for future electrification, to support Regional Express Rail service began construction in August 2015 and is expected to be complete in the fall of 2016.

Detailed design of the remaining new mainline track along the corridor up to Unionville is 95% complete. Procurement of construction services is planned for the fall/winter of 2015.

The tender issued in May 2015 for environmental and engineering services of select grade separations along the corridor was awarded in August 2015. The consulting assignment will begin by the fall of 2015.

Milton Corridor

The new Kipling Station and Bus Terminal project has been re-initiated and design is anticipated to start by the fall of 2015.

Richmond Hill Corridor

Construction at Gormley Station is underway. Design has started and is approaching 50% completion for the new Bloomington Station, which will be the new northern terminus of the corridor.

Union Station Rail Corridor (USRC)

The excavation for the Downtown Bus Terminal is expected to start in the fall of 2015.

Public access to the Bay Concourse was closed on August 16, 2015 and construction by City of Toronto is planned to begin in September 2015.

The Trainshed Rehabilitation work on Stage 2 (Tracks 10 and 11 and Platform 20/21) is well underway and on track for completion by December 2015. Installation of new smoke vents over Track 10 is complete.

The USRC Enhancement Program Report was completed on July 30, 2015, recommending an infrastructure plan to support RER Service expansion.

NETWORK INFRASTRUCTURE

The technical advisors for electrification have focused their initial start up activities on time critical activities, stakeholder interface, and information exchange. Interface meetings with corridor teams are being arranged and third party utility lists are being formulated.

A gap analysis of supplied information is underway regarding Hydro One connection sites, standards, specifications, existing signalling and operational requirements, clearance and third party asset identification.

The closeout of design work is on-going with the following completed tasks this quarter including the Conceptual Design for Kitchener and Lakeshore Corridors, TPAP/Environmental Assessment and Preliminary Design for UP Express, and Preliminary Design of the Overhead Catenary System, Grounding and Bonding, and Capital Costs for USRC.

The contractor for the USRC Signalling System is currently working towards the preliminary design milestone which is scheduled to be completed in the fall of 2015. Design work and geotechnical and the preliminary sighting of the signal structures has been completed.

The GO Transit Train Control System (GTCS) Request for Proposals (RFP) tender closed in May and the tender results were submitted to the Executive Committee of the Board for approval on August 17, 2015. The Notice to Proceed was issued on August 27, 2015.

With the completion of the Enhanced Train Control (ETC) Feasibility Study, work is underway on the Concepts of Operation Plan and a draft Migration Strategy. Work has commenced on a procurement strategy for an ETC consultant and the main design/build contract.

The GO Fibre Communication Feasibility Study final report was completed in August 2015.

At the Willowbrook Rail Maintenance Facility (WRMF), the Consist Wash Building retrofit project was completed in July 2015. 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 across from Willowbrook is also underway and is scheduled to be completed in early 2016. The tender for the design of a new Crew Centre has been initiated and is scheduled to close in August 2015.

Site Plan Approval (SPA) was obtained from the Town of Whitby on July 24, 2015, and partial foundation permits are ongoing. The construction of foundations began on July 13, 2015. At the East Rail Maintenance Facility in Whitby, design development for the DBFM project was completed and submitted on August 26, 2015.

Respectfully submitted

Jack J. Collins

Chief Capital Officer, Capital Projects Group