Undertaking Construction of Utility Infrastructure to Support the Six Points Interchange Reconfiguration

Date: January 8, 2016
To: Public Works & Infrastructure Committee
From: Executive Director, Engineering & Construction Services
Wards: Ward 5 (Etobicoke Lakeshore)
Reference Number: P:\2016\Cluster B\TEC\PW16004 (AFS #21999)

SUMMARY

This report seeks authority for the Executive Director, Engineering & Construction Services, to negotiate and enter into any required agreements with utility companies on behalf of the City of Toronto for the relocation and the expansion of utility's infrastructure through construction contracts managed by the City in support of the Six Points Interchange Reconfiguration Project.

RECOMMENDATIONS

The Executive Director, Engineering & Construction Services, recommends that City Council:

1. Authorize the Executive Director to negotiate and enter into any required agreements with affected utility companies, to undertake the expansion and relocation of utilities required for the Six Points Interchange Reconfiguration Project on terms acceptable to the Executive Director and in a form acceptable to the City Solicitor; and,

2. Authorize the Executive Director of Engineering & Construction Services to execute any agreements negotiated on behalf of the City.
FINANCIAL IMPACT

The total estimated construction cost of all the utility relocation and expansion work required to support the Six Points Interchange Reconfiguration project is estimated to be $15,538,317.00 (net of all taxes). The City will be responsible for $5,509,083 (net of all taxes), which is the total non-recoverable cost associated with the utility relocations that is the City's responsibility in accordance with the cost sharing formula in the Public Service Works on Highways Act (PWSHA).

The utility companies and Build Toronto will be responsible for $10,029,234.00 of the cost related to the utility relocation and expansion work as agreed upon within the cost sharing agreements and in accordance with the cost sharing formula outlined in the PWSHA and the utility company policies regarding developments, respectively. The table below presents the estimated cost for utility construction, the amount to be paid by: each utility, Build Toronto, and the City, respectively.

<table>
<thead>
<tr>
<th>Utility</th>
<th>Total Estimated Construction Cost</th>
<th>Estimated Recoverable Construction Cost (to be paid by the Utility)</th>
<th>Estimated Recoverable Construction Cost (to be paid by Build Toronto)</th>
<th>Estimated Non-Recoverable Cost (to be paid by the City)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cogeco</td>
<td>$151,100</td>
<td>$65,550</td>
<td>$51,000</td>
<td>$34,550</td>
</tr>
<tr>
<td>Telus</td>
<td>$127,506</td>
<td>$17,376</td>
<td>$110,130</td>
<td>N/A</td>
</tr>
<tr>
<td>Rogers</td>
<td>$745,911</td>
<td>$178,051</td>
<td>$494,767</td>
<td>$73,093</td>
</tr>
<tr>
<td>Toronto Hydro</td>
<td>$7,570,000</td>
<td>$260,000</td>
<td>$5,076,000</td>
<td>$2,234,000</td>
</tr>
<tr>
<td>Bell Canada (Phase 2)</td>
<td>$467,030</td>
<td>$172,546</td>
<td>$294,484</td>
<td>N/A</td>
</tr>
<tr>
<td>Bell Canada (Phase 1)</td>
<td>$4,876,147</td>
<td>$2,279,540</td>
<td>N/A</td>
<td>$2,596,607</td>
</tr>
<tr>
<td>Enbridge Gas</td>
<td>$1,600,623</td>
<td>$1,029,790</td>
<td>N/A</td>
<td>$570,833</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$15,538,317</td>
<td>$4,002,853</td>
<td>$6,026,381</td>
<td>$5,509,083</td>
</tr>
</tbody>
</table>

The above information has been incorporated into the Transportation Services 2016 – 2025 Capital Budget and Plan.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of December 11, 12, and 13, 2007, City Council adopted the Six Points Interchange Reconfiguration Class Environmental Assessment Study, and requested a funding and staging strategy for implementing the reconfiguration, to include detailed design after completion and approval of the Environmental Study Report which was completed in accordance with the requirements of the Province of Ontario's Environmental Assessment Act. The Council decision can be found at pages 104 and 105 of: http://www.toronto.ca/legdocs/mmis/2007/cc/decisions/2007-12-11-cc15-dd.pdf
On February 20, 2013, by authority of Bid Committee, Purchase Order No. 6037464 was issued to HDR Corporation based on their response to RFP 9117-12-7040 for the Provision of Contracted Professional Services for the Pre-Design, Detailed Design, and Preparation of Drawings and Tender Documents for the Reconfiguration of the Six Points Interchange. The Bid Committee Report can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.BD112.1

At its meeting of May 7, 8, 9, and 10, 2013, City Council requested the Deputy City Manager, Cluster B, in consultation with the General Manager, Transportation Services, and the Chief Planner and Executive Director, City Planning, to develop Complete Streets Guidelines. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW22.10


On September 17, 2014, by authority of Bid Committee, a Purchase Order was awarded on Tender Call 237-2014, Contract No. 14EY-18RD, to Drainstar Contracting Ltd. for Site Clearing, Road Embankment Construction to Subgrade Level, Sanitary Sewer and Services for the New Alignment of Dundas Street West from Kipling Avenue to Bloor Street West. The Bid Committee Report can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.BD199.4

On June 17, 2015, by authority of the Public Works and Infrastructure Committee, an amendment was approved to Purchase Order No. 6037464 with HDR Corporation for the provision of Contracted Professional Services for the pre-design, detailed design and preparation of tender documents for the reconfiguration of the Six Points Interchange by an additional amount of $849,792.00, net of all taxes and charges, and to extend the term of the Purchase Order to December 31, 2015. The additional funds and time were required in order to complete additional engineering design activities for the Six Points Interchange Reconfiguration and for contract administration and site supervision for the construction of Phase 1 of the Six Points Interchange Reconfiguration, which were not included in the original scope of work under Purchase Order No. 6037464. The Public Works and Infrastructure Committee Report can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW6.6
ISSUE BACKGROUND

The Six Points Interchange is located at the intersection of Dundas Street West, Bloor Street West and Kipling Avenue, near the Kipling Subway/GO Train stations. Attachment 1, at the end of this report, shows an aerial view of the original interchange.

In the 1980's, the former City of Etobicoke chose the Six Points area (Dundas Street West/Kipling Avenue/Bloor Street West) for the location of its new civic centre. The new civic centre was never built and the lands were identified as a potential future mixed-use residential/commercial development node.

In 2003, the Six Points Interchange Reconfiguration Class Environmental Assessment Study was initiated. The Class Environmental Assessment examined various scenarios for the existing road configuration to support the development of Etobicoke Centre and the objectives of the Etobicoke Centre Secondary Plan. The study concluded in 2008 and identified a preferred reconfiguration for the interchange that was based on the removal of existing bridges and the construction of standard intersections between Kipling Avenue, Bloor Street West and Dundas Street West.

To finalize the streetscaping and open space plan details, the City undertook an urban design study between 2009 and 2011. This study included detailed streetscape designs for the new roads in accordance with the Six Points Interchange Reconfiguration Environmental Assessment. Cross sections for the streetscape designs finalized in this study included public realm details such as pedestrian clear zones within boulevards to ensure compliance with AODA (Accessibility for Ontarians with Disabilities Act) requirements, market zones with areas designated for cafés, stands, and private signs, and tree planting zones to accommodate trees, shrubbery, planters and the like.

Transformation of the interchange includes the future rebuilding of the Kipling Subway/GO Transit stations. The existing bridges and ramps of the old road interchange, which was constructed in the 1950s, will be removed and replaced with three major at-grade intersections at:

1. Dundas Street West & Bloor Street West;
2. Dundas Street West & Kipling Avenue; and,
3. Bloor Street West & Kipling Avenue.

As shown in the proposed realignment of the Six Points Interchange illustrated in Attachment 2 to this report, Dundas Street West will be re-constructed east of Kipling Avenue through the former Westwood Theatre lands to meet Bloor Street West, and Bloor Street West will be re-constructed east of Kipling Avenue to re-establish connectivity. The reconfiguration will result in surplus City lands, which will be parcellled for re-development and transferred to Build Toronto for future development. One of the parcels of land will incorporate a new YMCA facility near Kipling Avenue at Dundas Street West.
Construction of the Six Points Interchange Reconfiguration will be delivered in two phases:

- **Phase 1** construction of the Six Points Interchange Reconfiguration project began in October 2014 and reached substantial completion on October 7, 2015. The scope of work included site clearing, road embankment, and sanitary sewer for the new alignment of Dundas Street West from Kipling Avenue to Bloor Street West. Attachment 3 shows the completed section of the project.

- **Phase 2** construction of the Six Points Interchange Reconfiguration project will be delivered using a Master Contract that is scheduled to be tendered in the Spring of 2016. The scope of work that will be included in the Master Contract includes removal of the existing interchange, road resurfacing, road reconstruction, utility reconstruction, underground infrastructure reconstruction, boulevard and streetscaping, installation of street lighting and traffic signals, and structural and site grading. Phase 2 construction will take place over a four year period starting in the Fall of 2016, and is expected to be completed by 2020. Construction will be staged so that construction-related restrictions are minimized to ensure that road access is provided to the public throughout the construction period. Attachments 4, 5 and 6 shows the proposed construction stages of the Master Contract.

A major component of the Six Points Interchange Reconfiguration project is coordinating utility relocation requirements.

The existing road network contains utility infrastructure in various forms (overhead and underground) owned by the following utilities:

- Toronto Hydro
- Enbridge Gas;
- Bell Canada;
- Rogers;
- Cogeco Data Services; and,
- Telus Canada.

The utility infrastructure construction work will include the relocation of the existing utilities to the proposed Right-of-Way, including new services to the proposed developments, and upgrading the utility infrastructure to an underground system, where possible. The majority of the utility work is required to be included in the Master Contract due to grading issues and construction staging requirements that would otherwise require an extended construction schedule or multiple remobilizations of workers and equipment.
In general, for most City contracts requiring the relocation of utility infrastructure within the Right of Way, the utility company would complete the work with their own forces in advance of the City’s work and the cost of this relocation would be shared between the City and the utility company in accordance with the formula set out in the Public Service Works on Highways Act (PSWHA).

Through the planning and coordination efforts for the Six Points Interchange Reconfiguration project it became evident that it would be prudent for the City to include most of the utility infrastructure construction within the City's construction contract for the Six Points Interchange Reconfiguration (referred to as the "Master Contract"). By using this approach, the work would be performed by the City's contractor rather than through the individual utility companies. This will reduce the number of construction stages required to complete the necessary works (by eliminated the need for the utility companies to undertake their works in advance of the City's staging), thus reducing the overall construction schedule. Furthermore, incorporating the utility construction into the Master Contract reduces the number of individual contractors working on the project, which should in turn reduce the number of issues that the City might otherwise encounter and drive cost efficiencies.

Having the City undertake the utility works also provides the following advantages:

- Reducing and mitigating potential occupational health and safety risks that could result from having multiple contractors working in close proximity;
- Reducing the overall cost of the utility work by, for example, allowing joint trenches so that the underground infrastructure for a number of utilities can be installed at the same time, and reducing construction related traffic impacts; and,
- Providing better construction oversight through the "one-window" Master Contract.

In April 2015, a meeting was held with each of the utility companies and Build Toronto to discuss the scope of work and how costs would be allocated for the relocation and expansion of utility infrastructure work needed to support the Six Points Interchange Reconfiguration project, taking into account the cost sharing formula for utility relocations in the right of way set out in the PSWHA. The following utility companies were involved in discussions with the City:

- Toronto Hydro;
- Bell Canada;
- Rogers;
- Cogeco Data Services; and,
- Telus Canada.
Following the discussions, it was agreed that the relocation and expansion of infrastructure owned by Rogers, Cogeco Data Services and Telus Canada will be undertaken as part of the Master Contract.

Also following the discussions, two utility companies commenced or announced works in the Six Points project area:

- Enbridge Gas began the first phase of work to relocate its infrastructure in August 2015, and this is expected to be completed by January 2016. Future Enbridge Gas utility construction work will be coordinated through the Master Contract to ensure compliance with occupational health and safety regulations.
- Bell Canada plans to undertake utility construction work starting in the Spring of 2016, with completion expected by Fall 2017.

Enbridge Gas and Bell Canada will continue to undertake some of the utility infrastructure relocation and expansion works themselves, in cases where the utility work is highly specialized and / or is required to be completed by the utility's own forces (Enbridge) due to Enbridge's safety policies regarding large diameter gas distribution mains or when it is more advantageous to allow the utility company to complete their work in advance of the Master Contract (such as is the case with the first phase of work being done by Bell Canada).

All of the properties being developed within the Six Points Interchange Reconfiguration project area are currently owned, or will be purchased from private owners, by the City of Toronto prior to the start of the Master Contract construction work.
The authority being sought in this report is to permit the Executive Director, Engineering & Construction Services, to negotiate and enter into any required agreements with utility companies on behalf of the City of Toronto for the relocation and the expansion of utility infrastructure as part of the City's construction contracts for the Six Points Interchange Reconfiguration project. Such agreements are intended to permit the incorporation of the utility company's needs, with respect to utility infrastructure relocation and expansion, into the City's scope of construction work under the forthcoming Master Contract.

CONTACT

Frank Clarizio, P.Eng.
Director, Design & Construction
Transportation Infrastructure,
Engineering & Construction Services
Tel: 416-392-8412
Fax: 416-392-8410
Email: fclarizi@toronto.ca

SIGNATURE

_______________________________
Michael D'Andrea, M.E.Sc., P.Eng.
Executive Director
Engineering & Construction Services

ATTACHMENTS

Attachment 1: Existing Study Area
Attachment 2: Future Street Network
Attachment 3: Phase 1 (Initial Works)
Attachment 4: Future Construction Stages, Stage 1 (Master Contract)
Attachment 5: Future Construction Stages, Stage 2 (Master Contract)
Attachment 6: Future Construction Stages, Stage 3 (Master Contract)
Attachment 3 (Phase 1, Initial Works)

Initial Works – Fall 2014

- Advanced grading and the installation of sanitary sewer along the Dundas Street Realignment

- Closure and removal of existing Kipling NB to Bloor EB Ramp and NB Bus Loop to Kipling NB and Bloor EB Ramps (Deferred to Phase 2)
Stage 1
Build:
- Dundas Street
  (East of Kipling)
- Road A
- Road B
Reconstruct:
- Bus Loop Ramp
- Bloor Street
  (East of Dunbloor)
Future Construction Stages

Stage 2
Build:
- Dundas Street (West of Kipling)

Reconstruct:
- Viking Lane
- Beamish Road
- Bloor Street (Dunbloor to Kilping)
- Dundas Street (East of Dunbloor)
- Dundas to Kipling Ramp
Stage 3
Reconstruct:
- Kipling Avenue