



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 11.1.18
Halifax Regional Council
September 22, 2020

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by 

Jacques Dubé, Chief Administrative Officer

DATE: September 3, 2020

SUBJECT: **Increase to Contract – RFP No. 18-314 – PO 2070810368**
Englobe/Crandall Engineering Limited – Burnside Phase 13 Detailed Design

ORIGIN

This report originates from a need to increase the contract beyond 20% or \$20,000 of its original value. The approved 2019/20 Capital Budget - Project CQ000008 – Burnside and City of Lakes Development.

LEGISLATIVE AUTHORITY

Under the HRM Charter, Section 79 Halifax Regional Council may expend money for municipal purposes.

The recommended contract award complies with all of the pre-requisites for awarding contracts as set out in section 34 of Administrative Order 2020-004-ADM, the *Procurement Administrative Order*.

Section 36 of the *Procurement Administrative Order*, provides that Halifax Regional Council may approve contract awards of any amount.

RECOMMENDATION

It is recommended that Halifax Regional Council approve an increase to the contract with Englobe / Crandall Engineering Limited (PO 2070810368) in the amount of \$191,376 (no HST included, 100% recoverable) with funding from Project CQ000008 – Burnside and City of Lakes Development, as outlined in the Financial Implications section of this report.

BACKGROUND

On February 14, 2019 the Chief Administrative Officer awarded the design component of Request for Proposal No. 18-314, Burnside Industrial Park - Phase 13 – Design and Construction Inspection Services, to the highest scoring proponent, Englobe / Crandall Engineering Limited, at a cost of \$250,937 (no HST included 100% recoverable). Significant changes were required to the original concept plan during the preliminary design and coordination with Nova Scotia Transportation and Infrastructural Renewal (NSTIR), Nova Scotia Power (NSP), Bell/Aliant, Heritage Gas and Halifax Water related to the Highway 107 Highway Project which provides access to the municipality's lands at Phase 13. This resulted in the preparation of new Concept Drawings for the purpose of subdivision approval, submitted to HRM in September 2019 along with a change order for \$23,500 (no HST included, 100% recoverable) to complete these drawings.

Following the approval of the new development concept, the original designed 30% submission was revised to reflect the new layout. The new street network layout eliminated a traffic signalized intersection on Akerley Boulevard, resulting in capital cost savings to HRM and improving safety. The new network layout also reduced the length of streets by 585-m. It is anticipated these improvements will result in an overall capital cost savings of more than \$2,000,000.

A review of lot grading and configuration for provision of larger lots within the development was undertaken at the request of HRM. This required a detailed review of lot grading and drainage to determine property line placement that would allow for lots to be either amalgamated to combine smaller lots to form larger lots or to split large lots to create smaller lots. This allows greater flexibility for HRM to sell lots to purchasers who require a larger flat lot for their development.

NSTIR provided HRM with an opportunity to relocate the proposed service corridor (water, sanitary sewer, power, communications and natural gas) that would have been completed by directional drilling under Highway 107 to a less expensive open cut excavation that could be included in NSTIR tender for construction work. This resulted in a potential savings of approximately \$250,000.

In order for NSTIR to provide a connection to Wilkinson Ave from Highway 107 a culvert was required over a Maritime & Northeast natural gas transmission line. This resulted in Englobe/Crandall Engineering providing two design options to route utilities around the culvert.

The new concept plan also resulted in a change to the forcemain alignment. Several options were evaluated and required additional design and review. This resulted in the creation of an easement in between lots to eliminate the extreme high point and provide a better overall design for optimal long-term operation and maintenance. This will reduce long-term maintenance issues and reduction in size of pumps and related equipment required at pumping station and elimination of additional equipment such as air release and drain chambers. The approximate construction savings in capital cost is valued at \$575,000 plus the reduced operational long-term costs.

A field review of the wetlands identified in the report prepared by CBCL was completed and nine (9) additional wetlands were identified that required additional work to document the condition and locations.

During design of the Akerley Boulevard and Agnes Dennis Avenue intersection it was noted that a roundabout would be advantageous to addressing super-elevation, steep grades and alignment transitions. HRM will receive a credit for the remaining budget proposed for the design of a signalized intersection in this location. NSP required underground electrical through the roundabout and therefore the drawings will have to be updated. Roundabouts have been proven to be safer than traffic signals, result in lower traffic delays, and have lower long-term maintenance. This roundabout offers an efficient solution to addressing geometric challenges without further impacts on adjacent wetlands.

A review was conducted for providing only 2-lanes on Akerley Boulevard instead of 4-lanes as noted in the original concept. Updated drawings and traffic calculations were prepared for HRM for review and approval. The 2-lane option will further reduce the cost of construction by approximately \$200,000.

An alignment change at Aileen Meagher Avenue was identified during the 60% design as the original alignment of this intersection did not meet minimum turning sight distance guidelines. The new alignment meets minimum requirements for turning sight distance, resulting in increased safety and reduced risk of right-angled collisions. The new alignment was achieved with minimal impacts to developable land.

An additional contract for the tender of the pumping station is required as comments could not be provided in time to incorporate the final design into the tender package. Therefore, the decision was made to remove the pumping station from Phase 13-1 and prepare a separate tender package for the pumping station.

Design of pressure reducing valves (PRVs) was not included in the original proposal. Based on Halifax Water's requirement for maximum pressure, this will result in the need for the installation of three (3) PRV's within the development.

The additional work on this project is intended to provide significant major long-term benefits, improved road safety and cost savings estimated up to \$3,025,000 to HRM.

A summary of changes is provided in the table below:

	Item	Additional Fees	Design Benefits	Financial/Construction Cost Savings
1	Revision due to Concept drawing	\$59,510.00	Reduces street network, meets TAC guidelines.	\$2,000,000
2	Traffic Analysis of NSTIR interchange	\$4,200.00	Reduction of street network and reduces long term operational and maintenance cost.	\$200,000
3	Updating Sanitary Sewer Flow from future phase 14	\$6,010.00	Reduction of long term operational and maintenance issues.	\$575,000
4	Review of lot grading options	\$6,860.00	Provides flexibility to be able to respond to market demand for lot sizes without incurring capital expenses to regrade lots in the future or not have available inventory.	
5	Service Easement Corridor	\$25,962.50	Less expensive construction option and all utilities are located in one area.	\$250,000
6	Wetland Work	\$14,616.00	Compliance with regulations. Doesn't become an issue during construction requiring construction change orders.	
7	Roundabout Agnes Dennis Ave and Akerley Blvd and alignment of Aileen Meagher Ave	\$43,047.50	Provides an intersection to meet TAC guidelines.	

8	Additional Tender for pumping station and PRVs	\$31,170.00	Keeps tender moving without delays.	
	Total	\$191,376.00		\$3,025,000

DISCUSSION

The additional design work on this project provides significant major long-term benefits, improved road safety and cost savings estimated up to \$3,025,000 to HRM.

Staff has recommended an increase to Englobe/Crandall Engineering Limited PO #2070810368 for changes to the contracted scope of work in the amount of \$191,376 (no HST included, 100% recoverable). A summary of the changes are as follows:

PO Award	\$ 250,937
CO increases approved to date	\$ 23,500
Request for Increase	\$ 191,376
New Contract Value	\$ 465,813

The total amount of changes (approved and pending) is \$214,876 (no HST included, 100% recoverable), which represents a cumulative increase of 85% to the original contract value of \$250,937. The total design fees represent less than 2% of the estimated construction cost.

FINANCIAL IMPLICATIONS

Based on the quoted price of \$191,376 (no HST included, 100% recoverable), funding is available in Account No CQ000008 – Burnside and City of Lakes Development. The budget availability has been confirmed by Finance.

Budget Summary: **Project Account No. CQ00008 – Burnside and City of Lakes Development**

Cumulative Unspent Budget	\$ 8,377,981
Less: Increase to RFP No. 18-314	\$ 191,376
Balance	\$ 8,186,605

The balance of funds will be used to implement the further development in the business parks.

RISK CONSIDERATION

There is a medium schedule risk associated with the recommendations in this report. Additional design and coordination time will be adjusted in project planning and tendering schedule to meet overall project construction schedule in 2021. To reach this conclusion, consideration was given to financial, legal and compliance, and service delivery risks.

ENVIRONMENTAL IMPLICATIONS

Wetland delineation, avoidance and compensation, where necessary, is in compliance with provincial environmental regulations.

ALTERNATIVES

Council could choose not to approve the recommendations in this report, but this is not recommended by staff given the cost savings in capital cost of approximately \$3,025,000, increased safety that meets Transportation Association Canada (TAC) guidelines, and compatibility with the adjacent NSTIR project. The increased fees will be recovered from lot sales and the long-term savings to operation and maintenance budget of the street network.

ATTACHMENTS

None.

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 490-4208.

Report Prepared by: Michael Wile, Manager, Acquisitions, Disposals and Industrial Lands Finance, Asset Management and ICT / Corporate Real Estate 902-476-9162

John Fawcett, P.Eng., Design Engineering, Project Planning and Design at 902-490-6824

Report Approved By: Original Signed
Peter Stickings, Manager, Corporate Real Estate, Finance, Asset Management & ICT, 902-490-7129

Procurement Review: Original Signed Erin MacDonald – on behalf of Jane Pryor.
Jane Pryor, Manager, Procurement, 902-490-4200

Report Approved By: Original Signed
Edmund Surette, Acting Manager, Project Planning & Design at 902-490-7169

Report Approved by: Original Signed
Jane Fraser, Director/CFO, Finance, Asset Management & ICT
