

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 9, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	FOX HOLLOW SWM FACILITY NO. 3 (ES3020-FH3): CONTRACT AMENDMENT TO PHASE 1 GRADING TENDER (T16-47)

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the construction grading contract for Phase 1 of the Fox Hollow Stormwater Management Facility #3 project (ES3020-FH3):

- (a) The Fox Hollow Stormwater Management Facility #3/Outlet Channel and Area Grading Contract (Tender No. T16-47) with 560789 Ontario Limited o/a R & M Construction, **BE INCREASED** from \$1,624,336.80 by \$350,000 to \$1,974,336.80 (excluding H.S.T.) in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- (b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (d) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract or issuing a purchase order for the material to be supplied and the work to be done relating to this project (Tender No. T16-47); and
- (e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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CWC – February 21, 2017 – Contract Award: Tender No. T16-117. Fox Hollow Stormwater Management Facility #3 (ES3020-FH3) and Trunk Sanitary Sewer (ES5236-16) Construction Phase 2

CWC – July 18, 2016 - Appointment of Consulting Engineer for Detailed Design of the Fox Hollow SWM Facility No. 3 (ES3020-FH3) and Trunk Sanitary Sewer (ES5236-16)

CWC – March 23, 2015 - Appointment of Consulting Engineer for Detailed Design and Contract Administration for the Construction of the Fox Hollow SWM Facility No. 3 (ES3020-FH3)

CSC – August 26, 2013 - Statement of Development Charge Reserve Fund Activity – City Services Reserve Funds for the 2013 Year

CWC – November 12, 2012 – Fox Hollow Development Area Stormwater Management Facilities Nos. 1 and 3

CWC – June 19, 2012 – Phasing of Stormwater Management Facilities

BACKGROUND

Purpose

This report advises Council of the increased budget amount for the Fox Hollow 3 Stormwater Management Facility (SWMF) and contract amendment to the Phase 1 grading contract due to inclement weather conditions.

Context

Construction of the Fox Hollow SWM Facility No. 3 and Trunk Sanitary Sewer was awarded as two phases: Phase 1 as a grading contract for the SWM facility and Phase 2 as the construction of the SWM facility and trunk sanitary sewer.

Phase 1

The Phase 1 grading contract was tendered and administratively awarded to R&M Construction on December 1, 2016 for an amount of approximately \$1.62M. The intent of the grading contract was to excavate and place up to 100,000 cubic meters of earth fill to support the construction of the Fox Hollow SWMF 3 and expedite the ultimate completion date of the works. The anticipated completion date for the grading contract was identified as March 3, 2017.

Phase 2

The Phase 2 construction works were tendered and closed in January 2017. On March 2, 2017, the tender was awarded to J-AAR construction for an amount of approximately \$4.1M by City Council. The start date for this tender was identified as May 1, 2017.

DISCUSSION

Phase 1 Weather Delays

From December to February, it was anticipated that there would be colder and dryer conditions to facilitate the Phase 1 earth works. However, the weather over the winter proved to be unseasonably warm and wet, resulting in soils that could not meet compaction requirements for engineered fill and site conditions that were not conducive to the movement of heavy machinery. The result was that by the end of March 2017, the contractor had only moved approximately 10,000 cubic meters of the required 100,000 cubic meters of fill.

Coordination of Phases 1 and 2

At the time of Phase 2 contract award, it was known that there was a delay with the grading contract. However, it was anticipated that this delay could be mitigated by the Phase 1 contractor by working evenings and days when it was colder. The contractor reportedly could move up to 9,000 cubic meters per day in better conditions, thus finishing within 10 working days. However, the colder weather did not materialize and by mid-March, it was assessed that there was a high risk of the Phase 1 contract extending past the Phase 2 contractor's start date without further intervention.

In April 2017, meetings were held with R&M Construction and J-AAR Construction to determine how both contractors could work in close proximity starting May 1, 2017 without creating constructor issues or delay claims. At this time, R&M provided a highly competitive rate to stockpile the materials in order to clear the construction site for J-AAR to meet the May 1, 2017 start date. R&M committed to delineate the site for J-AAR and would then double-handle the materials in order to meet commitments to place the fill.

Review of Options

As a result of the discussions, the City had three options to manage the weather delay:

1. Allow the Phase 1 contractor, R&M to proceed within the contract budget but on a delayed timeline.
2. Hire R&M to double-handle the materials at a competitive rate and clear the site for the Phase 2 contractor, J-AAR to start their work in accordance with the contract.
3. Hire J-AAR at a higher unit rate to complete the outstanding Phase 1 work using the contingency funds from the Phase 2 contract.

Option 1

The City was informed that the developers had engaged contractors to start constructing local servicing in this area as soon as the weather improved. Option 1 would have deferred the construction of the pond and caused further delay to subdivision construction, including the local servicing of approximately 1204 units (561 single family and 643 medium density units). J-AAR also indicated they had dedicated machinery and resources for a May 1st start date and any delay would likely result in the submission of a delay claim.

Option 2 and 3

Since the Phase 2 contractor's estimate was higher than the Phase 1 contractor, Option 2 was recommended as the most cost effective option to manage the weather delay. Therefore, the Phase 1 contractor was instructed to proceed with the work in accordance with the City's Procurement of Goods and Services Policy, Section 20.3 (e) Contract Amendments. Since the amount exceeds 3% of the contract or \$50,000, this report was prepared for Committee to illustrate that the most cost effective option was evaluated and recommended.

After May 1, 2017, R&M will continue to place the materials in drier conditions while J-AAR constructs the Fox hollow SWMF 3 and trunk sanitary sewer on schedule. The location of the two delineated work sites starting May 1, 2017 is provided as Appendix 'B'.

Budget Implications

The weather delays outlined above caused an additional \$350,000 in fees to double handle materials associated with the Phase 1 tender. This work was undertaken in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy. As a result, R&M's construction award was increased from \$1,624,336.80 to a total upset amount to \$1,974,336.80 excluding H.S.T.

The Civic Works Committee Report dated February 21, 2017 outlines the currently approved budget for the construction works as \$8,389,836. The additional \$350,000 in weather delay costs revises the total project budget to \$8,745,996, representing an additional 4.2% increase over the currently approved budget. The increased contract amount includes approximately 15% contingency. This additional cost was recommended as the most cost effective solution.

CONCLUSIONS

Due to unforeseen weather conditions, the Phase 1 grading contract could not be completed before the Phase 2 contractor was scheduled to start work due to wet and warm weather conditions from December 2016 to March 2017. As a result, the City evaluated the options and awarded additional funding to the Phase 1 contractor to mitigate the weather delay through stockpiling and double-handling materials. This was done to ensure both contractors could meet their contractual obligations without constructor issues or delay claims, and to maintain the development schedule for 1204 residential units. The increase of \$350,000 represents 4.2% over the currently Council approved budget.

This document was prepared by Chris McIntosh, P.Eng., Environmental Services Engineer within the Stormwater Engineering Division in consultation with Geoff Smith, Manager of Purchasing and Supply Operations.

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
SHAWNA CHAMBERS, P. ENG. DIVISION MANAGER STORMWATER ENGINEERING	JOHN LUCAS, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER	

April 28, 2017

Attach: Appendix "A" – Sources of Financing
Appendix "B" – Site Delineation

Cc: Jason Senese, Financial, Planning, and Policy
Matt Feldberg & Kevin Edwards, Development Finance
Debbie Gibson, Financial Business Administrator