

The Corporation of the City of Kawartha Lakes

Council Report

Report Number PUR2017-036

Date: June 6, 2017

Time: 2:00 p.m.

Place: Council Chambers

Ward Community Identifier: 10

Subject: Construction Administration of Tender 2016-58-CT Construction of Cells 4 and 5 at the Lindsay Ops Landfill Site

Author/Title: Jeff Buchyns
Asset Management Coordinator



Recommendation(s):

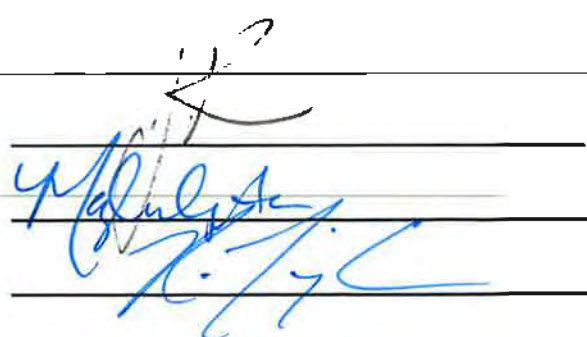
RESOLVED THAT Report PUR2017-036, **Construction Administration of Tender 2016-58-CT Construction of Cells 4 and 5 at the Lindsay Ops Landfill Site**, be received; and

THAT a purchase order be issued to Golder Associates Ltd. for Detailed Design, Tender Support, Construction Oversight and Administrative Services for Tender 2016-58-CT, in the amount of \$185,346.73, plus \$24,095.08 HST, for a total amount of \$209,441.81.

Department Head:

Corporate Services Director / Other:

Chief Administrative Officer:



Background:

Construction of the Cell 4/5 Phase I expansion at the Lindsay-Ops Landfill (project 997161001) began under contract with TBG Environmental Ltd. in August, 2016 as approved through report PUR2016-033, for the tender amount of \$1,550,638.78, net of HST.

In report PUR2016-033, contract administration services for the project were estimated to cost \$120,000. The intent was to engage Golder Associates (Golder), the designer of record for the project and a pre-qualified vendor, for this type of service. Golder provided a quotation for these services in the amount of \$98,415.00 net of HST, within the overall project budget.

Golder was directed to proceed with the work without a purchase order, based on the quotation received, placing the award to Golder out of compliance with the City's Purchasing Policy.

Subsequently, change order requests submitted by Golder for additional costs incurred in the amount of \$57,585.00 net of HST brought the total cost of the contract administration services to \$156,000.00 net of HST.

Furthermore, as authorized by a pre-2017 purchase order (former PO#29241, Appendix A) that was inadvertently closed as part of the transition to the City's new ERP system on January 1st, 2017, costs incurred for Detailed Design and Tender Support for this project were invoiced by Golder in the amount of \$29,346.73 net of HST, bringing the total cost for services provided by Golder for project 997161001 to \$185,346.73 net of HST.

Rationale:

With the net-of-HST cost of the award to Golder now in excess of \$100,000, only Council can authorize this award to bring it into compliance with the City's Purchasing Policy. It is therefore recommended that Council do so by authorizing the above-noted payment and purchase order to Golder for contract administration services provided for project 997161001.

Other Alternatives Considered:

As the work in question has been completed, there is no viable alternative to the staff recommendation.

Financial/Operation Impacts:

The construction of Cells 4 and 5 at the Lindsay Ops Landfill site was approved in the 2016 Capital Budget with a total budget allocation of \$1,700,000. Additional funding in the amount of \$175,000 was approved in PUR 2016-033 to

ensure that there was a contingency in the award of the Tender for the Construction component of this project. The table below summarizes the financial state of project 997161001:

Capital Project Number	Capital Project Budget	Committed Funds	Capital Project Balance	Tender Amount (incl. HST)	HST Rebate	Total	Capital Project Balance
997161001	\$1,875,000	\$1,551,892	\$323,108	\$209,442	(\$20,833)	\$188,609	\$134,499

Other committed funds include all vendor-related commitments to date as well as staff time; construction is complete.

Any surplus remaining after the project is completed will be reported in the Capital Close Report provided by the Treasury Division in accordance with the Capital Close Policy.

The purpose of this report is to bring the above-noted award to Golder into compliance with the City's Purchasing Policy. As shown in the above table, the capital project in question will close with a positive balance.

Relationship of Recommendation(s) to the 2016-2019 Strategic Plan:

This project aligns with the City's Strategic Goal of creating and promoting a Healthier Environment through integration with the Waste Management Strategy.

Consultations:

Director of Engineering and Corporate Assets
Manager of Corporate Assets
Financial Coordinator

Attachments:

Appendix A: Former Purchase Order Issued to Golder Associates for Detailed Design and Tender Support:



P.O. 29241 Golder
Cell 4 Design and App

Appendix B: Golder Associates Proposal for Construction Oversight.



1524542 PRP
Construction Oversight

Appendix C: Golder Associates Change Order Request #1 for Construction Oversight.



17-03-15 Golder CA
Change Order.pdf

Appendix D: Golder Associates Change Order Request #2 for Construction Oversight.



17-05-12 GOLDER
Change Order 002 Re

Phone: 705-324-9411 ext. 1151

E-Mail: jrojas@city.kawarthalakes.on.ca

Department Head: Juan Rojas, Director of Engineering and Corporate Assets

Department File:

**PURCHASING DIVISION**

26 FRANCIS STREET W
PO BOX 9000
LINDSAY ON K9V 5R8
Tel. (705) 324-9411 Fax (705) 324-7058
GST/HST No. 864455563 RT0001

INVOICE TO: ACCOUNTS PAYABLE

26 FRANCIS STREET
BOX 9000
LINDSAY ON K9V 5R8
Tel. (888) 822-2225 Fax (705) 324-7058

PURCHASE ORDER NO.**29241****PAGE**

1

**TO ENSURE PROPER PAYMENT
THE ABOVE NUMBER MUST APPEAR
ON ALL DOCUMENTS RELATING TO THIS ORDER.**

VENDOR GOLD001

GOLDER ASSOCIATES LTD.
100-6925 CENTURY AVENUE
MISSISSAUGA ON L5N 7K2

Tel. (905) 567-4444 Fax (905) 567-6561

SHIP TO ENV SERVICES - SOLID WASTE DIVISION
12 PEEL STREET
LINDSAY ON K9V 3L8

Tel. (705) 324-9411 Fax (705) 328-3054

SHIP VIA**PO TYPE** Contract**ORDER DATE** 10-Feb-2015**PAYMENT TERMS** 30**DATE REQUIRED**

10-Feb-2015

DEPARTMENT 1014 FINANCIAL SERVICES - ACCOUNTS PAYABLE**F.O.B.** DEST**BUYER**

kallan

ITEM #	QUANTITY	UM	DESCRIPTION	VENDOR PART NUMBER	COMMODITY CODE	UNIT PRICE	EXTENSION PRICE
1	34515		CELL 4 & 5 AT LLFS ENGINEER AND DESIGN			1.0000	34515.00
Item #	Distribution	Account Code	Name	Req No.	Proj Code	SRN #	Dept
1	100%	2444204003 Project #: WM1510	CONTRACT ALLOCATION		CWM4299	C00018	

CITY OF KAWARTHA LAKES

AUTHORIZED SIGNATURE
NOT VALID UNLESS SIGNED.

☐ MAIL ☐ FAX ☐ TELEPHONE ☐ INTERNAL

Notes

ENGINEERING AND DESIGN OF CELL 4 AND 5 AT LINDSAY/OPS LFS AS PER THE CITY'S STANDARD TERMS AND CONDITIONS.

SUB TOTAL	34515.00
GST/HST	4486.95
TOTAL	39001.95



August 17, 2016

Project No. 1524542

Mr. Jeff Buchyns, P.Eng.
City of Kawartha Lakes
Public Works
City Hall
26 Francis Street
Lindsay, Ontario
K9V5R8

**RE: CONSTRUCTION OVERSIGHT AND ADMINISTRATIVE SERVICES
LINDSAY OPS LANDFILL SITE [2016 CONSTRUCTION]
NORTH HALF OF CELLS 4 AND 5 (STAGE 1)**

Dear Mr. Buchyns,

As requested Golder Associates Ltd. (Golder) is pleased to submit this proposal to the City of Kawartha Lakes (City) for the Provision of Construction Oversight and Administrative Services for the North Half of Cells 4 and 5 (Stage 1) at the Lindsay/Ops Landfill Site.

This Proposal outlines our work plan, project team and cost estimate. To meet the project objectives, Golder has assembled a strong project team of experienced waste management professionals and technical staff with extensive experience in landfill design and construction, procurement support and construction quality assurance/quality control (QA/QC) services. Our senior professionals will remain involved throughout the implementation of the project, reflecting our commitment to the City to provide quality work and sound advice.

WORK PLAN

Golder will provide the following services on a full time basis throughout and approximately 13 week (3 month) construction period from late August to early-November:

- i) Tender support (i.e. attend bidders meeting, answer questions from bidders, provide revised tender documents as required);
- ii) assist with contract administration (i.e. review Contractor invoices, provide recommendations on change orders and provide updates on construction progress);
- iii) attend construction meetings (one every 2 weeks to be attended by Chris Visser and / or F. Barone);
- iv) provide full time Construction QA/QC and engineering support services for the landfill cell construction;
- v) prepare as-built drawings; and



Golder Associates Ltd.

6925 Century Avenue, Suite #100, Mississauga, Ontario, Canada L5N 7K2
Tel. +1 (905) 567 4444 Fax +1 (905) 567 6561 www.golder.com

Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America

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- vi) prepare a Site Preparation Report that describes the QA\QC activities and results and confirms that all requirements of the cell construction noted in the Specifications and the Certificate of Approval (specifically Conditions 28, 29, 32, 35, 36, 37 and 38) have been met.

A detailed list of the inspection/testing that will be carried out by Golder to satisfy the above project requirements is provided in Table 1.

Table 1 Summary of QA\QC Inspection and Testing

Component	Inspection/Testing To Be Carried Out By Golder
1. Site Preparation	<ul style="list-style-type: none">■ visual inspection of topsoil stripping, sedimentation controls, monitoring well protection, fence removal, sight signage, temporary access road construction, etc. (part time);■ inspection of gas pipe trench excavation and backfilling;
2. Cell Excavation and Base Grade Preparation	<ul style="list-style-type: none">■ compaction testing for perimeter berm fill;■ mapping of any sand lenses exposed on the base of the finished excavation;■ inspection of sand lense removal from the excavation base, including compaction testing of clay backfill; and■ proof roll inspection of the finished base of cell excavation prior to clay liner construction.
3. Compacted Clay Liner	<ul style="list-style-type: none">■ inspection and sampling during clay extraction operations at the on-site clay borrow, including directing the Contractor on how/where to advance the borrow excavation;■ inspection of clay liner placement and compaction, including scarifying and moisture conditioning between lifts;■ compaction and water content testing in accordance with the Specifications;■ on-site laboratory testing for microwave oven water content■ laboratory testing for grain size, Atterberg Limits and Standard Proctor in accordance with the project Specifications.
4. Geomembrane Liner	<ul style="list-style-type: none">■ inspection and approval of finished clay liner surface prior to geomembrane deployment;■ review of geomembrane quality control certificates provided by the Manufacturer;■ measurement of geomembrane thickness; and

Component	Inspection/Testing To Be Carried Out By Golder
	<ul style="list-style-type: none">■ inspection of geomembrane deployment and seaming, including trial seams, non-destructive testing and destructive testing as per the Specifications.
5. Geotextiles	<ul style="list-style-type: none">■ review of geotextile quality control certificates provided by the Manufacturer; and■ inspection of geotextile deployment and seaming;
6. Clear Stone Drainage Layer and Sand Filter	<ul style="list-style-type: none">■ review of material quality control certificates provided by the Manufacturer;■ inspection of hauling and spreading activities to ensure that the underlying geosynthetic layers are not damaged; and■ sampling and testing for grain size distribution and LA Abrasion.
7. Leachate Collection Pipes and Maintenance Holes	<ul style="list-style-type: none">■ review of material quality control certificates provided by the Manufacturer;■ inspection of pipe fusion; and■ inspection of liner system construction beneath the maintenance holes (involves multiple layers of geosynthetics, compacted clay and concrete).■ Supply and install vibrating wire piezometer at west end of cell per ECA requirement
8. Landfill Gas Piping Relocation	<ul style="list-style-type: none">■ inspection of trench excavation and backfilling (assume that Comcor will inspect all other work relating to the piping relocation and connection)

PROJECT TEAM

Frank Barone Ph.D., P.Eng., will be the Project Manager and Lead Geotechnical Engineer. He has carried out geotechnical and hydrogeological engineering work for the Lindsay/Ops Landfill over the past 25 years and is very familiar with all aspects of the site, including engineering and QA/QC requirements for the north expansion area of the landfill.

Our lead geotechnical technician will be Ben Drescher (CET) who has more than five years experience in construction oversight and testing for waste management facilities.

Our lead geosynthetics (geomembrane) technician will be Carl Linyard (CET) who has carried out this role for the Lindsay / OPS North Expansion Cells over the past 12 years.

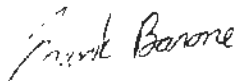
Chris Visser P.Eng. will assist on the contract Administrator (CA) aspect of the work. Chris has carried CA for landfill projects for more than 15 years.

CAD support for the project will be provided by Frank Ciuffreda. He has assisted on the design of the northern expansion area cells over the past 15 years.

PROJECT FEE

Table 1 (attached) presents a breakdown of manpower loadings and cost to complete this assignment. The total cost (excluding HST) is \$ 98,415, comprised of \$79,355 fees and \$19,060 disbursements.

GOLDER ASSOCIATES LTD.



Frank Barone, Ph.D., P.Eng
Principal

FSB/rb

Attachments: Table 1 - Manpower Loadings and Cost Breakdown

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Table 1 - Manpower Loadings and Cost Breakdown

TASK	MANPOWER (Hrs)							DISBURSEMENTS							Task Total Cost (excluding HST)
	F. Barone Lead Engineer	F. Cluffada CAD	C. Vasser	S. Rimal Engineering Support	B. Dresher	C. Linyard Int. Tech	Secretary	Mileage	Motel/Meals	Lab Testing	Vibrating Wire Piezometer Install	Tensiometer Rental	Nuclear Gauge Rental	Printing	
	(\$205/hr)	(\$130/hr)	(\$185/hr)	(\$135/hr)	(\$80/hr)	(\$85/hr)	(\$60/hr)		(\$140/day)						
1. Assistance during tendering including bidders meeting	10	2						\$100							\$2,410
2. Project Management and Construction Administration Support	2		20	2			3								\$4,580
3. Site Preparation and Cell Lay Out Inspection (2 days)	2	8			10			\$500							\$2,750
4. Base Grade Inspection and Testing (15 days)	2	2			120		1	\$500	\$2,100						\$12,930
5. Clay Liner Inspection and Testing (20 days)	5			5	200			\$400	\$2,800	\$2,315 ¹			\$500		\$33,715
6. Geomembrane and Geotextile Inspection and Testing (12 days)	1			3		120		\$500	\$1,680			\$300			\$13,290
7. Leachate Collection System Inspection and Testing (15 days)	2			3	120			\$400	\$1,680	\$1,835 ²	\$2,150				\$16,480
8. Site Meetings (1 every two weeks, total of 7 meetings)	25		35				4	\$850							\$12,890
9. Site Preparation Report	6	5		35	2	5	4							\$200	\$7,830
10. As-Built Drawings	2	10												\$250	\$1,950
Totals	57	27	55	48	452	125	12	\$3,250	\$8,280	\$4,150	\$2,150	\$300	\$500	\$450	\$90,416

Notes

1. Lab costs include 4 Standard Proctors @ \$140/test + 7 Atterberg Limits x \$100/test + 7 grain size tests @ \$145/test + 6 water content @ \$5/test.
2. Lab costs include 8 Grain size tests @ \$145/test + 3 Micro-deval Tests @ \$225/test.



March 15, 2017

Project No. 1524542

Jeff Buchyns - Asset Management Coordinator
City of Kawartha Lakes
12 Peel Street, Box 9000
Lindsay, Ontario
K9V 5R8

**RE: CITY OF KAWARTHA LAKES
CONTRACT NO. 2016-58-CT LINDSAY OPS LANDFILL CELLS 4 AND 5 CONSTRUCTION
CHANGE ORDER REQUEST – ADDITIONAL CONSTRUCTION OVERSIGHT AND ADMINISTRATIVE
SERVICES EFFORT**

Dear Mr. Buchyns,

Golder Associates Ltd. (Golder) was retained by the City of Kawartha Lakes (City) to provide Construction Oversight and Administrative Services for the North Half of Cells 4 and 5 (Stage 1) at the Lindsay/Ops Landfill (Site). The original scope of work is outlined in our proposal submitted to the City on August 17, 2016.

In our proposal it was identified that full time oversight would be provided to confirm Contractor compliance with the contract specifications during an estimated 13 week (3 month) construction period from late August to early-November. The project commenced on August 12, 2016 and had a stipulated substantial completion date of October 31, 2016.

As per our proposal, and throughout the project, we managed our construction contract administration and oversight closely to remain as close to the initially stated budget. Delays in the completion of the project by the City's appointed contractor has resulted in an extension of the original substantial completion date of October 31, 2016 to February 28, 2017. As a result, additional contract administration and oversight effort was required by Golder to maintain the project objectives relating to the construction budget and work quality.

The purpose of this letter is to request an increase to the original budget, to offset the additional effort over and above the original project budgets. The cost of the additional work is \$50,620.82 (excluding HST). A cost breakdown is provided in Table 1 below:



Golder Associates Ltd.

100, Scotia Court, Whitby, Ontario, Canada L1N 8Y6
Tel: +1 (905) 723 2727 Fax: +1 (905) 723 2182 www.golder.com

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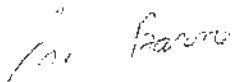
Table 1: Cost Breakdown

Staff	Hours	Hourly Rate	Costs
Ben Drescher	314.5	\$80.00	\$25,160.00
Carl Linyard	16.5	\$85.00	\$1,402.50
Daniel Jones	36	\$95.00	\$3,420.00
Reza Vahdani	10	\$65.00	\$650.00
Ryan Waud	78	\$90.00	\$7,020.00
Simon Lutz	18	\$90.00	\$1,620.00
Disbursements			\$11,348.32
TOTAL (excluding HST)			\$50,620.82

Our Change Order form is attached for your review and approval. We trust the above meets with your approval. Please do not hesitate to contact the undersigned if you have any questions.

Yours truly,

GOLDER ASSOCIATES LTD.



Frank Barone, Ph.D., P.Eng.
Principal

CV/fb/cv/sac

Attachments: Golder Change Order Form

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CHANGE ORDER # 001

GOLDER ASSOCIATES LTD.

Client Name	Project Name and Site	Client Reference No.	Golder Project No.
CITY OF KAWARTHA LAKES	LINDSAY OPS LANDFILL CELL 4 & 5 CONSTRUCTION		1524542

CHANGE IN SCOPE OF SERVICES

Request to increase the original budget to offset additional effort in construction administration and oversight costs as a result of a delay in the Substantial Performance of the project. Additional contract administration and oversight effort was required to maintain the overall objective of ensuring Contractor compliance with the contract specifications.

CHANGE IN AGREEMENT COST (attach detailed calculation sheets in \$ CAD):

Original Agreement Cost:	<u>\$ 98,415.00</u>
Current Agreement Cost(as adjusted by previous Change Orders):	<u>\$ 98,415.00</u>
Increase/Decrease in Agreement Cost due to this Change Order:	<u>\$ 50,620.82</u>
New Agreement Cost due to this Change Order:	<u>\$ 149,035.82</u>

CHANGE IN AGREEMENT TIME (attach revised schedule):

Original Completion Date:	<u>31-Oct-2016</u>
Current Completion Date (as adjusted by previous Change Orders):	<u>31-Oct-2016</u>
Increase/Decrease in Agreement time (calendar days) due to this Change Order:	<u>120</u>
New Completion Date due to this Change Order:	<u>28-Feb-2017</u>

The work covered by this Change Order shall be performed under the same terms and conditions as those included in the original Agreement. All other terms and conditions of said Agreement, as it may have been modified, shall be and remain the same.

The foregoing modification of said Agreement is hereby accepted.

CITY OF KAWARTHA LAKES

GOLDER ASSOCIATES LTD.

Per:

Per:

Authorized Signatory

Authorized Signatory

Name: _____

Name: Frank Barone, P. Eng

Title: _____

Title: Principal

Date: _____

Date: March 14, 2017



CHANGE ORDER # 002

GOLDER ASSOCIATES LTD.

Client Name	Project Name and Site	Client Reference No.	Golder Project No.
CITY OF KAWARTHA LAKES	LINDSAY OPS LANDFILL CELL 4 & 5 CONSTRUCTION	WM1610 -0997161001	1524542

CHANGE IN SCOPE OF SERVICES

Request to increase the original budget to offset additional effort in construction administration and oversight costs as a result of a delay in the Substantial Performance of the project. Additional contract administration and oversight effort was required to maintain the overall objective of ensuring Contractor compliance with the contract specifications.

CHANGE IN AGREEMENT COST (attach detailed calculation sheets in \$ CAD):

Original Agreement Cost:	<u>\$ 98,415.00</u>
Current Agreement Cost(as adjusted by previous Change Orders):	<u>\$ 149,035.82</u>
Increase/Decrease in Agreement Cost due to this Change Order:	<u>\$ 6,964.18</u>
New Agreement Cost due to this Change Order:	<u>\$ 156,000.00</u>

CHANGE IN AGREEMENT TIME (attach revised schedule):

Original Completion Date:	<u>31-Oct-2016</u>
Current Completion Date (as adjusted by previous Change Orders):	<u>28-Feb-2017</u>
Increase/Decrease in Agreement time (calendar days) due to this Change Order:	<u>130</u>
New Completion Date due to this Change Order:	<u>15-June-2017</u>

The work covered by this Change Order shall be performed under the same terms and conditions as those included in the original Agreement. All other terms and conditions of said Agreement, as it may have been modified, shall be and remain the same.

The foregoing modification of said Agreement is hereby accepted.

CITY OF KAWARTHA LAKES

GOLDER ASSOCIATES LTD.

Per:

Per:

Authorized Signatory

Authorized Signatory

Name: _____

Name: Frank Barone, P. Eng

Title: _____

Title: Principal

Date: _____

Date: _____