
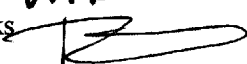


**PUBLIC WORKS DEPARTMENT
MEMORANDUM #2011 – 49**

DATE: December 15, 2011
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: William A. Simmons, City Manager 
David H. Willett, Director of Public Works 
SUBJECT: CR-156, Addendum #2 to Lift Station A Existing Conditions Assessment Project

BACKGROUND

On March 18, 2010, the City accepted three (3) proposals for the 2010 Lift Station A Existing Conditions Assessment Project. URS was the firm selected based on the Request for Proposal. The URS proposal for the 2010 Lift Station "A" Existing Conditions Assessment Project is in the amount of \$28,080.50. City Council authorized \$2,808.00 as a 10% contingency for minor changes in the scope of work up to an approved expenditure limit of \$30,888.50.

Addendum #1 was deducted from the contingency to URS, in the amount of \$500.00, to prepare the application for the Colorado Department of Public Health and Environment (CDPHE) Water Quality Improvement fund and supporting information, for the City to apply for funding for the proposed improvements at Lift Station A. The funding request was denied because the Northglenn WWTP upgrades were placed under Category 2, Priority 3. Other projects submitted to the Water Quality Improvement Fund scored higher where imminent risk to public health was a significant factor.

Staff requested a second addendum from URS to provide technical specifications to procure replacement pumps, suction and discharge valves, and variable frequency drives (VFDs). Subsequently URS submitted a proposal in the amount of \$9,960.00. The second addendum exceeded the contract contingency which required Council authorization. This was an oversight not discovered by staff covering this work until the contractor submitted an invoice. Staff is requesting Council action in this matter.

BUDGET/TIME IMPLICATIONS

The cost of work described in Addendum #2, as proposed, is \$9,960.00 with \$1,000.00 contingency for a total cost of \$10,960.00. Project funding is available in the 2011 Water & Wastewater Fund – Lift Station A Facility Improvements in the amount of \$350,000.00.

RECOMMENDATION

Attached to this memorandum is a Resolution that, if approved, would:

- 1) Authorize the Mayor to execute contract addendum #2 between the City of Northglenn and URS Corporation for the *Lift Station A Facility Improvements* in the amount of \$9,960.00, and;
- 2) Authorize \$1,000 as a contingency (10%) and authorize the City Manager, on behalf of the City, to approve changes in the scope of work and execute relevant change orders up to the approved expenditure limit of \$10,960.00.

Staff recommends approval of this Resolution.

STAFF REFERENCE

David H. Willett, P.E., Director of Public Works
Ray Reling, Public Works Superintendent for Utilities

dwillett@northglenn.org or 303.450.8783
rreling@northglenn.org or 303.450.4049

SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-156
Series of 2011

Series of 2011

A RESOLUTION APPROVING A SECOND ADDENDUM TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND URS CORPORATION FOR THE LIFT STATION A EXISTING CONDITIONS ASSESSMENT PROJECT

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The Second Addendum to Professional Services Agreement between the City of Northglenn and URS Corporation, attached hereto, in the amount of \$9,960.00 with a contingency of \$1,000.00 for a total amount not to exceed \$10,960.00 for the Lift Station A Existing Conditions Assessment Project is hereby approved and the Mayor is authorized to execute same on behalf of the City of Northglenn.

DATED at Northglenn, Colorado, this ____ day of _____, 2011.

JOYCE DOWNING
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

ADDENDUM #2 TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS SECOND ADDENDUM TO AGREEMENT FOR PROFESSIONAL SERVICES is made and entered into this 27th day of June, 2011, by and between the CITY OF NORTHGLENN, State of Colorado (hereinafter referred to as the "City") and URS Corporation (hereinafter referred to as "Consultant").

RECITALS:

A. On March 25, 2010 the City and Consultant entered into an Agreement for Professional Services for civil engineering services (the "Agreement").

B. The parties desire to supplement the Agreement with this Addendum #2 to allow for an additional scope of services for the design services for:

Exhibit A, Northglenn Lift Station A Replacement Equipment and Bypass

AGREEMENT

NOW, THEREFORE, it is hereby agreed that for the consideration hereinafter set forth, that Consultant shall provide to the City, professional engineering services as needed in the manner provided in the Agreement.

1. The Scope of Services in the Agreement is hereby supplemented to include the scope of services for the design services attached hereto as **Exhibit A**, and incorporated herein by this reference (the "Additional Scope of Services"). Consultant shall commence work on the Additional Scope of Services within ten (10) days of the issuance of a Notice to Proceed.

2. Subparagraph A. of Article IV entitled "Compensation" is hereby amended to provide as follows:

A. Compensation shall not exceed \$9,960.00 for the work described in **Exhibit A** to this Addendum #2.

3. The original Agreement is in full force and effect and is hereby ratified by the City and the Consultant. The original Agreement and this Addendum constitute all of the agreements between the City and the Consultant.

IN WITNESS WHEREOF, the parties hereto each herewith subscribe to the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: William A. Simmons
William A. Simmons
Title: City Manager 6.27.2011

ATTEST:

Johanna Small 6/27/11
Johanna Small, City Clerk

APPROVED AS TO FORM:

Corey V. Hoffmann 6/27/11
Corey V. Hoffmann, City Attorney

CONSULTANT

By: Michael May
Vice President 6/21/2011
Title Date

ATTEST:

James L. [Signature]
Principal Engineer 6/21/11
Title Date

SCOPE OF WORK
NORTHGLENN LIFT STATION A REPLACEMENT EQUIPMENT AND BYPASS

CITY OF NORTHGLENN, COLORADO

June 21, 2011

Project Objectives

1. Provide technical specifications (Construction Specification Institute [CSI] format) for the City of Northglenn (Northglenn) to procure replacement pumps and related suction and discharge valves and variable frequency drives (VFDs) for use at Lift Station A in the event existing equipment has to be replaced. The pumps and valves will match existing equipment wherever possible to allow for replacement of existing units without extensive repiping or relocation of existing facilities.
2. Provide technical specifications for replacement valves for the existing meter vault on the force main at the lift station.
3. **(Not Authorized at this Time)** Develop a plan and technical specifications for a bypass of the existing meter vault by pumping wastewater from the Overflow Structure to the force main after the meter vault.

Front end and related procurement bidding requirement specifications are not included in this scope of work.

The engineering activities and deliverables to meet the project objectives are summarized in the following tasks.

Task 100 – Visit lift station to obtain nameplate data and observe and measure existing pumps, valves, and VFDs.

Deliverables

- *Lisitng of equipment nameplate data and existing equipment dimensions*

Task 200 - Prepare technical specifications for replacement equipment generally matching existing equipment at the lift station. At this time, we anticipate existing equipment dimensions will be the same as replacement equipment. If dimensions vary, URS will document variations and meet with and advise Northglenn with recommendations to account for the changes. If substantial additional piping or change of equipment is needed, additional engineering services may be required as authorized by Northglenn.

Specifications for the following equipment will be prepared.

- A. Three Cornell Pumps. The pumps will be the same as the existing Pump 4, Cornell Pump at 5,000 gallons per minute (gpm), 84 feet of head, and 200 horsepower.
- B. Replacement of three variable frequency drives for use with the new replacement pumps.
- C. Four manually operated replacement 18-inch knife gate valves on the pump suction piping.

SCOPE OF WORK

NORTHGLENN LIFT STATION A REPLACEMENT EQUIPMENT AND BYPASS

- D. Four replacement electric solenoid actuated DeZurik 16-inch pneumatically operated pump check valves on the pump discharge piping to replace the existing standard check valves. Design for the electric actuation of the valves to open and close based on pump operation is not included and will be at the time of the installation of the new valves.
- E. Four manually operated replacement 16-inch gate valves on the pump discharge piping.
- F. Three replacement manually operated 24-inch knife gate valves inside the meter vault.

Deliverables

- *Digital version of technical specifications for the pumps, VFDs, and valves*

(Not Authorized at this Time) Task 300 – Develop a plan and required equipment for bypass of the wastewater from the Overflow Structure to the force main just downstream of the existing meter vault. The bypass is anticipated to include a wet tap of the existing 27-inch steel or ductile iron force main, a line stop to isolate the meter vault from the force main, 6-inch bypass piping from the force main wet tap to the Overflow Structure, and a rental pump to pump wastewater from the Overflow Structure to the tapped force main. A telephone conference with a specialist line tapping contractor will be conducted to include both URS and Northglenn personnel.

- A. Prepare technical specifications for a wet tap and line-stop on the 27-inch steel or ductile iron force main.
- B. Prepare technical specifications for the bypass piping, valves, and pump connections.
- C. Prepare a technical specification for the rental pump from a local vendor.

Deliverables

- *Digital version of technical specifications for the wet tap, line-stop, piping, and rental pump*

(Not Authorized at this Time) Task 400 – Develop site plan and detail drawing of the bypass pipeline from the Overflow Structure to the force main. A total of two drawings are estimated. The lift station site plan developed for Northglenn by URS in 2010 will be used for the alignment of the bypass pipeline.

- A. Develop a site plan drawing and civil details indicating the wet tap and line-stop location on the force main and the alignment of the bypass piping from the existing force main to the Overflow Structure, including the location for connecting a rental pump.

Deliverables

- *Digital version of site plan and related drawing details for the bypass*

Task 500 – Pricing of Equipment and Bypass

SCOPE OF WORK
NORTHGLENN LIFT STATION A REPLACEMENT EQUIPMENT AND BYPASS

- A. Obtain a quotation from one equipment supplier for each of the equipment specifications.
- B. **(Not Authorized at this Time)** Estimate the cost for the installation of the bypass from the Overflow Structure to the force main.

Deliverables

- *Copies of equipment quotations received from vendors*
- *Preliminary opinion of construction cost for bypass piping system*

Schedule

URS' proposed schedule following receipt of a notice to proceed is summarized in Table 1.

Table 1
Proposed Schedule

Task	Duration
Task 100 - Site visit to Lift Station A to complete Task 100	5 working days
Task 200 – Prepare technical specifications for pumps, VFDs, and valves	15 working days
(Not Authorized at this Time) Task 300 – Prepare plan and specifications for bypass	5 working days
(Not Authorized at this Time) Task 400 – Develop site plan and detail drawings for bypass	10 working days
Task 500 – Pricing of equipment and bypass	3 working days
Coordination with Northglenn	10 working days
Total	48 33 working days

URS Project Team: URS proposed key personnel are:

Project Manager	Jim Ris, PE
Principal in Charge and Review	Mike Middleton, PE
Civil Engineer	Nate Walker, PE
Electrical Engineer	Jeremiah Anderson

SCOPE OF WORK
NORTHGLENN LIFT STATION A REPLACEMENT EQUIPMENT AND BYPASS

Compensation

The estimate for URS' services is detailed on enclosed Table 2, Cost Summary that provides a breakdown of the work. We propose to complete this work on a time and materials basis with a ceiling amount of ~~\$20,500~~ **\$9,960**. The detail of the total authorized work task cost is:

Task 100 - \$2,665

Task 200 - \$6,095

Task 500 - pricing 6 of the total of 9 equipment/pipe items $2/3 \times \$1800 = \1200

TOTAL - \$9,960

The labor rates are based on our 2011 URS Colorado Fee Schedule that is enclosed for reference.

2011 URS COLORADO FEE SCHEDULE - ENGINEERING SERVICES

The following describes the basis for compensation for services performed during 2011. This Fee Schedule will be effective through December 31, 2011. Each subsequent year, this Fee Schedule will be adjusted annually to reflect merit increases, economic salary increases, inflation increases, cost of living increases, and changes in the expected level and mode of operations for the new year. The new Fee Schedule will apply to existing and new assignments.

PERSONNEL CHARGES

The charge for all time required in performing the Scope of Services, including office, field, and travel time, will be at the Unit Price Hourly Rates set forth below for the labor classifications indicated.

<u>Labor Classification</u>	<u>Hourly Rate</u>
Assistant/Support Staff 1	45
Assistant/Support Staff 2	55
Assistant/Support Staff 3	65
Assistant/Support Staff 4	75
Assistant/Support Staff 5	85
Assistant/Support Staff 6	95
Assistant/Support Staff 7	105
Assistant/Support Staff 8	115
Assistant/Support Staff 9	125
Assistant/Support Staff 10	135
Staff 1	80
Staff 2	90
Staff 3	100
Staff 4	110
Project 1	120
Project 2	130
Project 3	140
Project 4	150
Consultant 1	165
Consultant 2	180
Consultant 3	195
Consultant 4	210
Principal 1	225
Principal 2	240
Principal 3	255
Principal 4	270
Expert Witness	375

Project Manager Classification rates are by levels and depend on the size and complexity of the job.

Charges for temporary personnel under Company supervision and using Company facilities will be invoiced according to the hourly rate corresponding to their classification, if not billed as subcontractors.

When Company staff appears as expert witnesses at court trials, arbitration hearings, mediation, and depositions, their time will be charged at the Expert Witness rate.

Overtime (hours worked in excess of eight (8) hours per day) by exempt personnel will be charged at the above straight time hourly rate. Overtime by non-exempt personnel will be charged at time and a half.

Project accounting reporting and financial services, including submission of invoice support documentation will be charged at the appropriate rate of the staff performing the work.

LABORATORY SERVICES

The charges for laboratory testing performed at Company facilities are set forth in the Schedule of Company Laboratory Testing Charges.

FIELD EQUIPMENT

The charges for field equipment owned by URS are set forth in the Schedule of Equipment Charges. Leased or rented field equipment will be charged as an other direct cost.

OTHER PROJECT CHARGES

Subcontracts

The cost of services subcontracted by the Company to others will be charged at cost plus 15%.

Travel and Other Direct Costs

The cost of travel (airfares, lodging, meals, rental vehicles, parking fees, baggage handling cost, etc.) or other direct cost (field supplies, report binding supplies, film and processing, etc.) will be charged at cost plus 15%. A per diem may be used for lodging and meals.

Communications

A flat rate of 3% (6% international) of the total labor charges will be invoiced for charges for normal domestic telephone, long-distance telephone, cellular telephone, facsimiles, email, and correspondence mailing. All other communication fees (e.g., Express Mail, other shipping, etc.) will be charged as Other Direct Costs.

Document Reproduction

In-house labor for document reproduction will be charged directly to projects. External reproduction will be charged at cost plus 15%.

Dedicated Equipment

Equipment (e.g., cellular telephone, computers, etc.) dedicated to specific projects will be billed at cost plus 15%.

Vehicles and Mileage

Company owned or leased field vehicles (pick-ups, vans, trucks, etc.) used on project assignments will be charged at the rates noted in the Schedule of Equipment Charges. The mileage charge for personal autos will be the current mileage rate established by the Internal Revenue Service.

This fee schedule contains URS confidential business information. Do not disclose, copy, or distribute without written permission from URS.

TABLE 2
COST SUMMARY
 6/17/11 REVISION

DESIGN PHASE SERVICES Task - Description		Total				Labor																Total Labor Hours	Total Labor Cost	Other Direct Costs (ODCs)			Total ODC with 15% markup		
		Labor Hours	Labor Cost	ODCs	Total Cost	Assistant/Support Staff 3		Assistant/Support Staff 4		Assistant/Support Staff 7-CAD		Project 3 Civil Engineer		Staff 2 Civil Engineer		Staff 2 Electrical Engineer		Project 3 Electrical Engineer		Consultant 4 Project Manager				Principal 1		Travel - Mileage		Misc. Expenses	
						Kelly Wofford		Jen Caskins		Brian Bucklin		Nate Walker		Don Bloomquist		Jeremiah Anderson		Dan Grant		Jim Ris				Mike Middleton		Miles		Per Mile	
						Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate			Hours	Rate			\$0.51	\$10.00
Task 100	Visit Lift Station for Data and Dimensions	22	\$2,630	\$35	\$2,665		\$0	2	\$150		\$0	4	\$560	8	\$720	4	\$360		\$0	4	\$840		\$0	22	\$2,630	60	\$31		\$35
Task 200	Prepare Specifications for Pumps, VFD and Valves	57	\$6,060	\$35	\$6,095	2	\$130	2	\$150		\$0		\$0	32	\$2,880	12	\$1,080	1	\$140	8	\$1,680		\$0	57	\$6,060	60	\$31		\$35
Task 300	Prepare Plan and Specifications for Bypass. (Not Authorized at this Time)	34	\$3,930	\$0	\$3,930	2	\$130	2	\$150		\$0	4	\$560	20	\$1,800		\$0		\$0	4	\$840	2	\$450	34	\$3,930		\$0		\$0
Task 400	Prepare Plan and Detail Drawings for Bypass. (Not Authorized at this Time)	52	\$5,960	\$35	\$5,995		\$0	2	\$150	24	\$2,520	4	\$560	16	\$1,440		\$0		\$0	4	\$840	2	\$450	52	\$5,960	60	\$31		\$35
Task 500	Pricing of Equipment and Bypass	19	\$1,800	\$0	\$1,800		\$0	2	\$150		\$0		\$0	16	\$1,440		\$0		\$0	1	\$210		\$0	19	\$1,800		\$0		\$0
PROJECT TOTAL		184	20,380	\$106	\$20,486	4	\$260	10	\$750	24	\$2,520	12	\$1,680	92	\$8,280	16	\$1,440	1	\$140	21	\$4,410	4	\$900	184	\$20,380	180	\$92	\$0	\$106

The detail of the total authorized work task cost is:
 Task 100 - \$2,665
 Task 200 - \$6,095
 Task 500 - pricing 6 of the total of 9 equipment/pipe items 2/3 x \$1800 = \$1200
REVISED TOTAL - \$9,960