




PUBLIC WORKS DEPARTMENT
MEMORANDUM # 2013 - 03

DATE: January 14, 2013
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: David H. Willett, Acting City Manager 
Jason Loveland, Director of Finance 
Raymond Reling, Public Works Superintendent for Utilities 
SUBJECT: CR – 5; Chemical Building Improvements -- Engineering, Design, and
Construction Administration Contract Addendum No. 2

BACKGROUND

The original contract with HDR Engineering for engineering, design, and construction administration services for the Chemical Building Improvements project was approved via CR-81 on August 25, 2011 and amended on August 24, 2012 (Addendum No. 1). The contract amount is currently \$143,234.00.

During the early design review, the City requested additional design elements that were not described in the original scope of services. These design elements allowed the City to: a) avoid a lengthy shutdown of the plant, b) provide better access to equipment, and c) increase worker safety.

- a) The original scope of work included connections to the existing raw water piping inside of the Chemical Building. It later became clear that this would require a lengthy shutdown of the plant. An alternative approach was developed that allowed the construction of the new connection outside of the Chemical Building, inside of a new valve vault. The new valve vault required additional structural design and an analysis to determine whether the new vault would affect the existing Chemical Building structure.
- b) The control vault adjacent to the rapid mix was originally designed with ladder access. City staff requested stairway access in lieu of the ladder, to increase safety and provide better access to the equipment in the vault. The addition of stairs increased the size of the vault and required a re-evaluation of the structural parameters, plus design for the stairs, stair supports, and a larger access hatch.
- c) In order to ensure worker safety, the City requested an evaluation of heating and ventilation parameters for the main room and permanganate room in the Chemical Building. Adequate heating and ventilation is required to meet the chemical hazard classification guidelines. This was not included in the original scope of work.

Consequently, the additional design elements described above resulted in the need for additional construction administration effort on the part of HDR. The estimated cost for the review of additional submittals and requests-for-information exceeds the original contract amount and contingency by \$22,415.00.

BUDGET/TIME IMPLICATIONS

Staff is seeking approval of a Resolution to authorize an additional **\$22,415.00** to complete the engineering, design, and construction administration of the project.

Engineering, Design, and Construction Administration	
Original Contract Amount Plus Addendum No. 1	\$143,234.00
<u>Addendum No. 2</u>	<u>\$22,415.00</u>
New Contract Amount	\$165,649.00

CAPITAL EXPENDITURE BREAKDOWN

Total Project Costs

CIP Budgeted Appropriation	\$1,750,000.00
Terminal Reservoir Mixing	\$196,000.00
Engineering, Design, and Construction Administration	(\$165,649.00)
Construction, including 10% contingency (2102 CR-94)	(\$1,759,690.00)
<u>Materials Testing, including 10% contingency</u>	<u>(\$12,936.00)</u>
Amount Remaining in CIP Appropriation	\$7,725.00

The total cost of the engineering, design, and construction administration will be approximately 10 percent of the total construction cost, which is typical of water and wastewater projects of similar size and scope.

RECOMMENDATION

Attached to this memorandum is a Resolution to authorize an additional **\$22,415.00** and authorize the City Manager, on behalf of the City, to approve this minor change in the scope of work up to the approved expenditure limit of **\$165,649.00**.

Staff recommends approval of the proposed resolution.

STAFF REFERENCE

Jason Loveland, Director of Finance

Raymond Reling, Public Works Superintendent for Utilities

jloveland@northglenn.org or 303.450.8817

rreling@northglenn.org or 303.450.4049

SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-5
Series of 2013

Series of 2013

A RESOLUTION APPROVING ADDENDUM NO. 2 TO THE AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND HDR ENGINEERING, INC. TO PROVIDE ENGINEERING, DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR IMPROVEMENTS TO THE CHEMICAL BUILDING AT THE CITY OF NORTHGLENN WATER TREATMENT FACILITY

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

Section 1. The City Council hereby approves Addendum No. 2 to the Agreement between the City of Northglenn and HDR Engineering, Inc., in an amount not to exceed \$22,415.00, for engineering, design and construction administration services for improvements to the chemical building at the City of Northglenn Water Treatment Facility, and authorizes the Mayor to execute the same on behalf of the City of Northglenn.

DATED at Northglenn, Colorado, this ____ day of _____, 2013.

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 _____ day of _____, 2013, by and between the CITY OF NORTHGLENN, State of Colorado (hereinafter referred to as the "City") and HDR Engineering, Inc. (hereinafter referred to as "Consultant").

RECITALS:

A. On August 25, 2011 the City and Consultant entered into an Agreement for Professional Services for engineering, design, and construction management 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, Additional Construction Administration (2013)

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 \$22,415.00 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 David Willett
Title: City Manager

ATTEST:

Johanna Small, City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann, City Attorney

CONSULTANT

By: [Signature]
Vice President 12/13/12
Title Date

ATTEST:

[Signature]
Senior Project Manager 12/13/12
Title Date

EXHIBIT A

Engineering Fee Estimate

Northglenn Water Treatment Facility Improvements

City of Northglenn Northglenn Water Treatment Facility Improvements Change Proposal Request #2		PIC QA/QC Fuller	Project Manager Clark	Project Engineer Quigley	Elec / Instr Engineer Buechler	Structural Engineer Manske	Mechanical Engineer O'Brien	CADD Nelson	Admin Assistant Velasquez	Project Controller Taggett	Tech Charge	Direct Expenses (at Cost)	Total Cost and Hours By Phase
V Additional Construction Administration (2013)													
5.2	Receive, log, and review submittals (41 additional submittals=81 total)		4	40	16	4	2		15		\$299.70		81
5.3	Receive, log, and respond to RFIs (20 additional RFIs = 30 total)		4	40	8	4	2		15		\$270.10		73
5.7	Redesign services for MCC			4	8						\$44.40		12
Subtotal (Hours)		0	8	84	32	8	4	0	30	0	\$0.00		0
Subtotal (Cost)		\$0.00	\$1,692.94	\$9,812.29	\$6,155.01	\$1,315.02	\$773.93	\$0.00	\$2,051.06	\$0.00	\$614.20	\$0.00	\$22,414.46
Total Hours		0	8	84	32	8	4	0	30	0			166
Total Project Fee Estimate		\$0.00	\$1,692.94	\$9,812.29	\$6,155.01	\$1,315.02	\$773.93	\$0.00	\$2,051.06	\$0.00	\$614.20	\$0.00	\$22,414.46