

**PUBLIC WORKS AND UTILITIES
MEMORANDUM #08-20**

DATE: September 25, 2008
TO: Honorable Mayor Kathleen M. Novak and City Council Members
FROM: David Allen, Acting City Manager / Director of Public Works and Utilities ~~DA~~
SUBJECT: CR-130 – Construction Management Services Contract for Bull Reservoir Outlet and Liner Emergency Repairs
CR-131 – Construction Contract for Bull Reservoir Outlet and Liner Emergency Repairs
CR-142 – Addendum to Design Services Contract for Bull Reservoir Outlet and Liner Emergency Repairs

RECOMMENDATION:

Attached to this memorandum are three Resolutions which, if approved, would authorize the Mayor to execute the following documents on behalf of the City:

- 1) A Professional Services Agreement between the City of Northglenn and J&T Consulting, Inc. to provide construction management services in the amount of \$49,180 and to authorize a contingency of \$9,836.
- 2) A Professional Services Agreement between the City of Northglenn and BT Construction, Inc. to provide construction services in the amount of \$583,135 and to authorize a contingency of \$116,627.
- 3) An Addendum to the Professional Services Agreement between the City of Northglenn and URS Corporation, Inc. to provide design support services in the amount of \$62,900 and to authorize a contingency of \$12,580.

In addition, each resolution would authorize the Acting City Manager to approve minor changes in the scope of work and execute relevant change orders up to the contingent amount. Staff recommends approval of the proposed Resolutions.

BACKGROUND:

On June 24, 2008 the asphalt liner for Bull Reservoir was severely damaged near the outlet works that discharges the treated effluent from the Waste Water Treatment Plant (WWTP). Staff installed a temporary piping to resume discharges from the new WWTP and to divert flows away from the damaged area so permanent repairs could be completed without affecting normal operations.

On July 10, 2008 Council approved CR- 104 which authorized URS to complete the design for the permanent repairs to the liner and outlet works. A completed design package has been received by the City however final approval from the Colorado State Division of Safety of Dams (State) has not been provided. Therefore, City Staff is recommending a 20% contingency, which

is larger than normal, to make any adjustments required by the State. If approved, construction would be scheduled to start in the middle of October with completion within 60 working days assuming no interference from weather.

The estimated cost to complete the repairs is summarized below:

Project Breakdown	Company	Amount
Temporary Bypass Piping	Northglenn	\$24,458
Engineering Design	URS	\$44,100
Construction	BT Construction	\$699,762
Construction Management	J&T Consulting	\$59,016
Design Support	URS	\$75,480
Materials Testing (estimate)	Cesare and Associates	\$25,000
Bypass Pumping (estimate)	Northglenn	\$50,000
TOTAL		\$977,816

Staff is recommending the use of funds from eight Capital Improvement Projects that are scheduled for 2008. These eight projects as well as two previously canceled projects and the corresponding budget amounts are listed below. Only partial funding will be provided for these projects which are included in the 2008 Capital Improvement Budget.

Project Name	Account Number	Amount
WTP Pump Rehabilitation	516.69264.000.3999.843	\$25,000
Webster Lake Outlet Repairs	516.69265.000.3999.934	\$15,000
Webster Lake Water Quality Mitigation	516.69265.000.3999.941	\$20,000
Bull Res Pump Station Replacement	516.69272.000.3999.899	\$22,000
WWTP Security Fence	516.69272.000.3999.909	\$59,000
Manhole & Valve Box Adj	516.69211.000.3999.656	\$117,000
Distribution Sampling Stations	516.69263.000.3999.690	\$90,000
Gas Chromatograph	516.69264.000.3999.723	\$80,000
Pump & Motor Replacement (used for design)	516.69271.000.3999.817	\$45,000
Sewer Service Area Study (used for bypass piping)	516.69275.000.3999.930	\$25,000
TOTAL		\$498,000

A supplemental budget appropriation amendment is being brought forward with CB-1672 to fund the balance of the project. Additionally, Staff anticipates presenting a contract for material testing with Joseph A. Cesare and Associates, Inc at the November 13, 2008 Council meeting.

BUDGET/TIME IMPLICATIONS:

There is no impact to the General Fund. Funds from the 2008 Capital Improvements Fund and supplemental funds from the Connect Charges would be used to fund all services.

STAFF REFERENCE:

If Council Members have any comments or questions, they may contact David Allen at (303) 450-8783 or dallen@northglenn.org.

SPONSORED BY: MAYOR NOVAK

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-142
Series of 2008

Series of 2008

A RESOLUTION APPROVING A FIRST ADDENDUM TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND URS CORPORATION FOR THE BULL RESERVOIR OUTLET AND LINER EMERGENCY REPAIRS DESIGN PROJECT

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

Section 1. The Addendum to Professional Services Agreement between the City of Northglenn and URS Corporation, attached hereto, in the amount of \$62,900.00 with a twenty percent (20%) contingency of \$12,580.00 for a total amount not to exceed \$75,480.00 for design services for the Bull Reservoir Outlet and Liner Emergency Repairs 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 _____, 2008.

KATHLEEN M. NOVAK
Mayor

ATTEST:

JOHANNA SMALL, CMC
Acting City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

ADDENDUM #1 TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS FIRST ADDENDUM TO AGREEMENT FOR PROFESSIONAL SERVICES is made and entered into this 19th day of September, 2008, by and between the CITY OF NORTHGLENN, State of Colorado (hereinafter referred to as the "City") and URS Corporation Inc. (hereinafter referred to as "Consultant").

RECITALS:

A. On July 10, 2008, 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 #1 to allow for an additional scope of services for the design services for:

**Exhibit A, Additional Services for Bull Reservoir Outlet and Liner Emergency Repairs
– Construction Observations**

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 **\$107,000** for the work described in **Exhibit A** to this Addendum #1.

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: _____
Kathleen M. Novak
Title: Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann, City Attorney

CONSULTANT

By: [Signature]
Vice President 9/19/08
Title Date

ATTEST:

Title Date



8181 E. Tufts Avenue
Denver, CO 80237
Tel: 303.694.2770 and 303.740.2600
Fax: 303.694.3946

September 22, 2008

Mr. Cory Peterson
City of Northglenn
Water and Environmental Services
11701 Community Center Drive
Northglenn, CO 80233

Subject: Revised Letter Proposal – Bull Reservoir Emergency Repairs, Additional Services - Construction Phase Services

Dear Cory:

This revised letter proposal has been prepared by URS Corporation, Inc. (URS) in response to your Request for Proposal (RFP) received by Mr. Ed Villano via electronic mail on September 9, 2008. This proposal letter provides revisions to our original proposal letter dated August 18, 2008, based on the scope of services that your Construction Management (CM) firm will be providing, as detailed in the CM scope of services you provided by email on September 19, 2008, and the complementary construction-related services that URS proposes providing, described below.

The proposed revised work consists of providing part-time construction observation services and other construction-related services for the City of Northglenn's (City) Bull Reservoir Emergency Repairs project. Our proposal is based on our design for emergency repairs and our assumptions listed in this letter, and is separated into four sections: Technical Proposal, Deliverables, Price Proposal, and Other Items.

1.0 TECHNICAL PROPOSAL

1.1 Project Description

The site is located in Weld County, Colorado, approximately 1.5 miles east of the intersection of Interstate 25 and State Highway 7, north of Denver. Bull Reservoir stores treated effluent from the City's wastewater treatment plant, located onsite. The purpose of the construction is to repair the failed upstream face of the south embankment at the effluent spillway by implementing design modifications prepared by URS. Construction will consist of the following major components:



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- Construct cofferdam and dewater work area.
- Demolish the existing concrete apron and damaged asphalt.
- Strip and stockpile drain course layer and impervious fill bench, and over excavate embankment in failure area.
- Place and compact new embankment fill.
- Install and test foundation anchors.
- Place and compact new drain course material.
- Construct new spillway.
- Replace asphalt.
- Place and compact impervious fill bench.
- Remove cofferdam.
- Repair asphalt damaged by work activities.

1.2 Scope of Work

The Scope of Work for this project has been divided into four tasks:

Task 1: Construction Observation

Task 2: Quality Assurance Testing Review

Task 3: Final Construction Documentation

Task 4: Project Management

A description of each task is provided below.



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1.2.1 Task 1: Construction Observation

This task includes providing part-time (18 hrs per week), on-site observation of the construction activities by a URS Site Inspector, and office support by the URS Denver Tech Center (DTC) office. Assumptions are listed below.

URS Site Inspector Responsibilities

The URS Site Inspector will perform the following duties:

- **Pre-Construction Meeting** – The Site Inspector will attend the pre-construction meeting. It is our understanding that the CM firm will prepare the Construction Observation Plan required by the SEO.
- **Construction Observation** – Limited observation and documentation of the contractor's construction activities during critical work items (e.g., joint construction, concrete work, fill placement and compaction), paying particular attention to the contractor's adherence to the requirements of the project construction documents and SEO rules and regulations for construction. A written daily observation report will be prepared, to be included with the CM firm's daily inspection reports. Two half-day site visits (12 hrs) per week are assumed.
- **Health and Safety** – Adherence to the applicable health and safety rules and regulations presented in the CM firm's health and safety plan, and to any City health and safety requirements.
- **Coordination with URS DTC Office** – Coordination with URS DTC office staff with regard to review of construction submittals, response to Requests for Information (RFI), and preparation of any necessary Field Directives.
- **Observation of Quality Assurance Testing** – Limited observation of the CM firm's QA testing. One half-day site visit (6 hrs) per week is assumed.
- **Interim and Final Inspections** – The URS site inspector will attend SEO interim and final inspections.
- **Record Drawings** – Preparation of record drawings to document the as-constructed condition.



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URS DTC Office Support

The URS DTC office will provide office support during construction, including the following:

- Review of the Construction Management firm's Construction Management Plan.
- The URS Project Manager will attend the pre construction meeting.
- One visit by the URS Project Manager to the site every two weeks during construction to attend meetings and clarify questions.
- Review of the CM firm's daily field reports and construction progress reports.
- Review of technical construction submittals (concrete, rebar, asphalt, borrow material, drain course material, waterstop, etc.)
- RFI responses.
- Preparation of Field Directives.
- Coordination with the CM firm.
- Project Manager attendance of SEO interim and final inspections.
- Preparation of Record Drawings and review of the CM firm's Construction Report.

Assumptions

URS' assumptions for this task include:

- Construction duration is assumed to be 60 calendar days; work weeks are assumed to be five 10-hr days per week.
- Construction Progress Reports will be submitted by the CM firm every 30 days during the course of construction. Two progress reports are anticipated.
- Change orders may be necessary but cannot be predicted. A cost modification to these additional services contract may be required if the actual work required is different from the assumptions stated herein. Based on our experience with other projects, it is very likely that at least one change order and contract modification will be necessary, so we have included a nominal amount (\$5,500) to cover this contingency in our cost proposal. It is envisioned that this inclusion will reduce the potential for contract modification during the construction period.
- Construction contractor will be responsible for site safety.



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- The CM firm's QA testing will be performed by a qualified materials testing company.
- Normal weather delays; no extreme/severe weather.
- Construction contractor's work pace and methodology may result in a construction duration less than or greater than URS' assumed 60 calendar days.
- Items not included in URS scope of work, but to be performed by the CM firm include:
 - Construction contractor selection assistance.
 - Conduct a pre-bid meeting.
 - Conduct project progress meetings.
 - On-site management/oversight of the construction contractor.
 - Review/approval of progress payments.
 - Coordination and submittal of required reports wit the SEO.

1.2.2 Task 2: Quality Assurance Testing

URS will review the results of the CM firm's QA test results to evaluate adherence to the requirements in the specifications.

1.2.3 Task 3: Final Construction Documentation

Final construction documentation will include record drawings (see Section 2.0 Deliverables), prepared in accordance with SEO rules and regulations.



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1.2.4 Task 4: Project Management

This task includes project setup (project management plan, QA plan, health and safety plan, project setup forms, central project file, etc.), project tracking (schedule, budget, staffing), and project closeout (file management and disposition, archiving).

2.0 DELIVERABLES

The following are the anticipated deliverables:

- Construction Observation Reports – Limited daily reports detailing the URS Site Inspector's observations will be prepared for the days the Site Inspector is on site, to be submitted to the CM firm for inclusion in their comprehensive daily reports.
- Record Drawings – Record drawings will be prepared to document the as-constructed condition. Record drawings will reflect new survey data generated during construction.

Per discussion with Mr. Paul Perri of the SEO on August 19, 2008, the number of final copies of the record drawings required are: 1 mylar set, 1 bond set, and 1 copy of the completion document (certification letter) signed and sealed by a Professional Engineer registered in the State of Colorado. Mr. Perri anticipates that submission of draft versions of these documents will be unnecessary. Three final copies of the record drawings, along with the electronic files of the CD drawings, will be submitted to the City.

3.0 PRICE PROPOSAL

URS proposes to complete this project on a time and materials basis, with a not-to-exceed value of **\$62,900**. A cost breakdown by task is provided in Table 1.

This price proposal is based on URS' understanding of the project requirements as presented in this proposal.

4.0 OTHER ITEMS

4.1 Project Personnel

The URS Project Manager for this work will be Mr. Ed Villano (Telephone: 303-740-3800, Facsimile: 303-694-3946, Email: ed_villano@urscorp.com). Construction observation (as



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needed) will be performed by Mr. Joe Owen (Telephone: 303-740-2718, Facsimile: 303-694-3946, Email: joe_owen@urscorp.com. URS will utilize other staff from our Denver office as necessary to support the site observation work.

4.2 Schedule

URS is prepared to start work immediately after a signed professional services agreement is received from the City. The City anticipates approval of a construction contractor at the City Council meeting in September/October 2008. URS anticipates that construction would commence within two weeks of that date, and that construction would be completed in December 2008 or January 2009.

3.3 Contact Information

If you have any questions or require additional information, please contact Mr. Ed Villano at 303-740-3800.

Sincerely,

Ed Villano, PE
Project Manager

Gregg Batchelder Adams, PE
Principal in Charge