

REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date:

Project Name & Number: North Rapid Booster Pump Station Reconstruction **CIP #:** 50812.A
Project Number 13-2080

Project Description: The design of the new North Rapid Booster Station located in the northwest corner of College Park (220 College Ave.), which is bordered to the north by Anamosa St., to the south by College Ave., to the west by Wilsie Ave., and to the east by Blaine Ave.

Consultant: Bartlett & West

Original Contract Amount: \$459,470	Original Contract Date: 4/1/2014	Original Completion Date: 03/31/2015 for Tasks 1, 2, and 3
--	---	---

Addendum No:1


Amendment Description: This amendment covers additional effort and tasks that were needed for preliminary and final design for the North Rapid BPS, and the inclusion of an instrumentation and controls integrator as a subconsultant to the Engineer for professional services (design assistance, start-up, and commissioning) as shown on the attached Exhibits A, B, and C. Staff anticipates that approximately \$34,000 of this amendment related to the instrumentation and controls will be recouped as a cost savings during the bid process and construction, as these costs normally would be incurred at this stage. Staff believes that doing this work ahead of the bid will provide better quality for the City.


Current Contract Amount: \$459,470.00	Current Completion Date: March 31, 2015
Change Requested: \$65,804.00	
New Contract Amount: \$525,274.00	New Completion Date: June 30, 2015

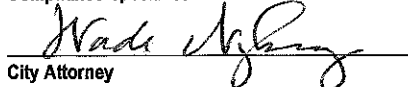
Funding Source This Request:

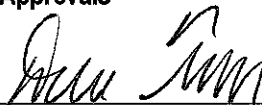
Amount	Dept.	Line Item	Fund	Comments
\$65,804.00	933	4223	602	Water Replacement / Improvements
\$65,804.00	Total			

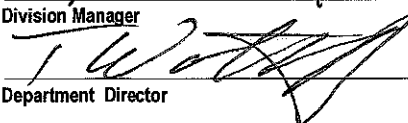
Agreement Review & Approvals


Project Manager 2-18-15
Date


Compliance Specialist 2/19/15
Date


City Attorney 2/23/15
Date


Division Manager 2-20-15
Date


Department Director 2-18-15
Date

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
Finance Office - Retain one original
Project Manager - Retain second original for delivery to Consultant
cc: Public Works
Engineering
Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

Date	Initials	Approved
2/20/15	[Signature]	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> N
Appropriation		
Cash Flow		

AMENDMENT NO. 1 TO AGREEMENT

Project: North Rapid Booster Pump Station Reconstruction
Project Number 13-2080/ CIP 50812.A

Background Data: Effective Date of Agreement: April 1, 2014
Owner: City of Rapid City
Engineer: Bartlett & West, Inc.

Nature of Amendment: This amendment covers additional effort and tasks that were needed for preliminary and final design for the North Rapid BPS, and the inclusion of an instrumentation and controls integrator as a subconsultant to the Engineer for professional services (design assistance, start-up, and commissioning) as shown on the attached Exhibits A, B, and C. Staff anticipates that approximately \$34,000 of this amendment related to the instrumentation and controls will be recouped as a cost savings during the bid process and construction, as these costs normally would be incurred at this stage. Staff believes that doing this work ahead of the bid will provide better quality for the City.

Current Contract Amount: \$459,470.00

Change Requested: \$65,804.00

New Contract Amount: \$525,274.00

Owner and Engineer hereby agree to modify the above referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The effective date of this Amendment is:

_____.

CITY OF RAPID CITY:
By: _____
Mayor

ENGINEER:
By: Bruce J. Hovell
Bartlett & West, Inc.

Date Signed: _____

Date Signed: 9/18/15

ATTEST:
By: _____
Finance Officer

Date Signed: _____

REVIEWED BY:
[Signature]
Morgan Gagliano, Project Manager

AMENDMENT NO. 1 to EXHIBIT A

North Rapid Booster Pump Station Reconstruction Project Number 13-2080/ CIP 50812.A

The scope/work items outlined in the following paragraphs and pages are modified as noted. All other changes to the original scope/work still apply. The general nature of the changes include:

- Additional work associated with hydraulic modeling. Details are outlined in a project memo dated July 8, 2014.
- Addition to the project of incorporation for a new 12 inch PVC water transmission main to replace the existing 16 inch asbestos cement transmission main along Anamosa Street for about 450 feet. Details are outlined in a letter from the Engineers subconsultant that was presented to the City on July 18, 2014.
- Incorporation of the instrumentation and controls system integrator for professional services (design, start-up, and commissioning) into this contract. Details are outlined in a project memo dated October 14, 2014.
- Addition of time to manage the instrumentation and controls subconsultant.
- Additional time to revise structural calculations once new design codes took effect at the beginning of 2015.
- Incorporation of soils testing during construction into the Engineers contract.
- Change in contract date in Section 6 of Agreement for Tasks 1, 2, and 3 from March 31, 2015 to June 30 2015. Change the contract date for Tasks 4 and 5 from June 30, 2018 to Sept 30, 2018.
- Under Task 1 - Shift fee from Tasks 1.8 and 1.9 to Task 1.15.A.1.x and 1.15.A.1.oo.

Following are the detail changes to the scope/work items:

TASK 1 - PRELIMINARY DESIGN SERVICES

1.3. Add survey associated with the Anamosa transmission main.

1.8. Any work required will be completed subsidiary to other work tasks. Shift fee to 1.15.A.1.x to account for extra effort associated with looking at various options pertaining to a generator for the North Rapid BPS vs other water facility locations.

1.9. Any work required will be completed subsidiary to other work tasks. Shift fee to 1.15.A.1.oo to account for extra effort in developing the design report.

1.15.A.1.b) Additional work due to original hydraulic model(s) provided by the City had some issues that needed to be worked through when changing model scenarios. Time was associated with sorting out the issues, and developing fixes to allow the models to work properly. Included documentation and communication with the City.

1.15.A.1.u) Additional work to revise structural calculations to show compliance IBC 2012 which went into effect in 2015.

TASK 2 - FINAL DESIGN SERVICES

2.5 Control system integrator to provide additional support related to system design, and specifications.

Add an in -field Path Study / Antenna design (budget 1 trip)

Engineering and design services to determine a reliable radio path.

1. FCC licensing and coordination for the frequency that is currently licensed with the City
2. On-site radio path study to include a service technician for one-day to setup temporary radios and take data points to prove out the paper study for final determination that the radio path will work. Includes one-day services, travel time and all travel expenses.
3. The City will be responsible to supply a 30' boom lift (or equal) and spare personnel to assist in the radio path study.

Add Submittals

1. Control Panel Wiring Schematics and back panel layouts will include interconnect drawings, loop drawings and field wiring schematics to terminal numbers.
2. SCADA screens will be submitted on separately based on a similar look and feel to the city's existing system. No formal SCADA screen submittal meeting is included in this proposal however an informal teleconference with a screen sharing service would be advised prior to final development and implementation.

Prior to the project going to bid the Engineers subconsultant's will provide a firm cost for all field devices, PLC, panels and other hardware. After review and acceptance by the City, this cost will be incorporated in the bid schedule. This equipment will be sold directly by the Engineers subconsultant's to the construction contractor for installation. These items and equipment are not a part of the Engineers contract with the City.

Factory based PLC Programming. All PLC programming will be done in Engineers subconsultant's controlled testing environment where there is access to toolboxes, Simulators, LAN/Radio networks and cabling to simulate field conditions. Control strategies will be based on input from the city during the on-site meeting, or phone call. This cost is based on programming the LC-3000 platform.

Mountain View SCADA Modifications to add the new pump station. All SCADA application development will be done in Engineers subconsultant's controlled testing environment. These services will include graphical screen development, alarm handling & reporting requirements. This item will be pertaining to just integration this station into the existing application.

SCADA additional enhancements not related to this booster station. The enhancements are included as an additional vehicle to allow the city to clean up the SCADA system with features or enhancements to existing screens, alarms or reports not included in this contract. (10 hours have been included for enhancements)

2.6 Add design and development of options technical memo associated with the Anamosa transmission main.

- 2.8. Add stormwater control design associated with the Anamosa transmission main.
- 2.9. Add traffic control design associated with the Anamosa transmission main.
- 2.16 Add development of plan sheets and specifications associated with the Anamosa transmission main.
- 2.24 Develop cost estimates associated with the Anamosa transmission main.
- 2.29 Additional project management associated with the Anamosa transmission main. Additional project management associated with incorporating I&C system integrator into the project.
- 2.30 One additional meeting with the City during the design phase related to the controls system. Includes cost to meet with the city to review any content relative to their system. This will include 1 meeting at the city's facility for one Engineers subconsultant's personnel and all travel expenses.

TASK 4 – BASIC CONSTRUCTION SERVICES

4.4 through 4.7 Additional construction administration associated with the Anamosa transmission main.

TASK 5 – EXPANDED CONSTRUCTION SERVICES

5.1 through 5.20 Additional construction services associated with the Anamosa transmission main.

5.9 The Engineer will employ the services of a subconsultant local testing company to complete in-field and laboratory testing associated with soils and earthwork. This work will also include in-field testing and or observation of the bearing soils prior to installation of the pump station foundation. Not included are tests associated with concrete, asphalt, paint, welding, or any other specialty tests.

Add work item 5.24

5.24 Start-up, Training, and Commissioning of the control system.

- a) Commissioning of the control panel and instrumentation systems into the SCADA application at the new North Rapid BPS. A full I/O point check will be performed and documented. Loop testing and validation forms completed. Instrumentation calibrations for the flow meter and pressure devices. VFD's will be configured with the appropriate parameters and network configured prior to commissioning. Telemetry system will be reviewed for final signals including Signal-to- Noise ratio/RSSI data points. All above services included a certified technician for one week onsite including all travel expenses and travel time.
- b) SCADA Commissioning Mountain View WTP (Central). This work will commence while the booster station is brought on-line and points will be verified for scaling and ranges against field readings. All reports and alarming will be reviewed with city and changes made to reflect submittal review comments. Any additional modifications or enhancements will be drawn from the SCADA enhancements allowance.

END

ENGINEERING FEE - EXHIBIT B

City of Rapid City

50812.A North Rapid Booster Pump

TASK NUMBER	TASK	TASK SUBTOTAL
	1 Preliminary Design	
1.3	Survey Anamosa 12" Trans Main	\$ 405
1.15.A.1.b)	Additional Hydraulics	\$ 4,302
1.15.A.1.u)	Revise Structural Calcs	\$ 1,550
	2 Final Design	
2.5	I&C Subconsultant Design Support	\$ 6,600
	In-Field Path Study, FCC Licensing	\$ 4,680
	Submittals	\$ 10,380
	Factory Programming	\$ 5,280
	Mountain View SCADA modifications	\$ 5,280
	(Optional) Additional Support	\$ 1,650
2.6	Tech Memo Anamosa 12" Trans Main	\$ 250
2.8	Stormwater Control Anamosa 12" Main	\$ 400
2.9	Traffic Control Plan Anamosa 12" Main	\$ 250
2.16	Plans & Specs Anamosa 12" Main	\$ 1,400
2.24	Cost Estimates Anamosa 12" Main	\$ 300
2.29	Additional Project Management	
	Anamosa 12" Main	\$ 250
	Incorporation I&C Subconsultant	\$ 1,000
2.30	Additional Meeting w/ City for I&C	\$ 4,500
	4 Basic Construction Services	
4.4 - 4.7	Const Admin Anamosa 12" Main	\$ 1,000
	5 Expanded Construction Services	
5.1 - 5.20	Const Observation Anamosa 12" Main	\$ 2,675
5.9	Soils Testing During Construction	\$ 4,722
5.24	I&C Start Up, Commissioning	\$ 8,930

Total Fee, Including Sub-Consultants \$ 65,804

ENGINEERING FEE - EXHIBIT C

City of Rapid City

50812.A North Rapid Booster Pump Station

Reconstruction (Project Number 13-2080)

Addition of Subconsultant

ICS Healy-Ruff

Position	Hourly Rate
Technical Lead/Engineer	\$ 165.00
Field/Service Technician	\$ 105.00

Note: For projects that extend beyond December 31, 2014 the Hourly Charges are subject to an increase on January 1 of each succeeding year, maximum of 3% annually.