

City Council Meeting Agenda Request

Date of City Council Meeting..... February 4, 2014
Person Requesting..... Public Works Director
Department..... Engineering /Public Works
Time Required for Agenda Item..... 10 Minutes

A G E N D A I T E M

CONSIDER a RESOLUTION AUTHORIZING THE PUBLIC WORKS DIRECTOR TO AWARD a CONTRACT TO: Bowen, Collins & Associates for the engineering services related to the Crowd Canyon Well Modification.

BACKGROUND INFORMATION:

Bowen, Collins and Associates an Engineering Company that specializes in Water Systems, is pleased to submit a proposal to Mapleton City, implementing water quality improvements at the Crowd Canyon Well to address problematic iron concentrations.

COST:

Funding for the work – General Fund Reserves
Engineering Services Only - \$20,300
Construction Contract - March/April 2014

RECOMMENDATION:

Award Contract: to Bowen, Collin and Associates.

DOCUMENTS ATTACHED:

Bid Proposal Included

January 24, 2014

Mr. Gary Calder, P.E.
Mapleton City Public Works
1405 West 1600 North
Mapleton, Utah 84664

Subject: Proposal for Water Quality Improvements for Crowd Canyon Well

Dear Gary,

Bowen, Collins & Associates (BC&A) is pleased to submit this proposal to assist Mapleton City implementing water quality improvements at the Crowd Canyon Well to address problematic iron concentrations. We appreciate the time you took in meeting with us and providing background information on the well to help us to better understand the project requirements.

BACKGROUND AND PROJECT UNDERSTANDING

Our project understanding is based on meeting with you and review of the background information provided. The Crowd Canyon Well has iron concentrations that have proven problematic for the City when put into use. Water users within the service area of the well have complained about staining in their fixtures. The City has conducted some previous water quality testing and recently has taken additional samples for analysis in November. Available information indicates the well produces water with iron concentrations above the National Secondary Drinking Water Standard of 0.3 mg/L, and that the iron is in suspended (oxidized) form. The original proposal was to provide design and construction services for implementing a poly phosphate treatment system that will keep the iron dissolved in the water (not visible). With the oxidized iron being present, the poly phosphate approach will not work. After further discussions with you, it was decided that chlorination would be required. The City currently uses gas chlorination within the City at other sources. This scope will design of gas chlorination for the Crowd Canyon Well.

PROPOSED SCOPE OF SERVICES

The following scope or services details the tasks for the design.

Phase 1 –Design

Task 1-1: Site Visit, Collect and Review Existing Information. BC&A will make a site visit to the well site. We will review the existing information provided by the City including sampling results, drawings, etc.

Task 1-2: Design Drawings. Based on the evaluation, site visit and information collected, BC&A will prepare drawings for the preferred alternative for chlorination. The design will include HVAC, mechanical, plumbing, electrical, and possibly some structure modifications to the existing well pump station building depending on the preferred alternative. It is anticipated that no more than 12 design sheets will be prepared for the design. These drawings will include:

- Cover Sheet, Index, Location Map
- Well Pump Station Floor Plans and Sections
- General Mechanical Construction Details
- HVAC Plan and Details
- Electrical Drawings and Details
- Structural Modification Drawings and Details

Task 1-3: Contract Documents. BC&A will prepare an electronic pdf copy of 11x17 drawings and contract documents including technical specifications with bid schedule for use in bidding the project.

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January 24, 2014

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Task 1-4: Construction Cost Estimate. We will prepare an engineer's opinion of probable construction cost for the project including a cost breakdown for each well site.

Task 1-5: Construction Permits. We will assist the City with obtaining the DDW permits. We will prepare permit applications, coordinate with DDW, and assist the City with obtaining the final operating permits. We will also identify as part of the contract documents, the needed permits required by the contractor. We assume there will be one 2 hour meeting with DDW to discuss the project submittal.

Phase 2 – Bidding and Construction Services

Task 2-1: Bid Period Services. BC&A will advertise and conduct the bidding for the project. We will be available to answer questions from prospective contractors during the bid period and we will prepare required addenda to the contract documents. We will assist the City in preparing for the pre-bid meeting by preparing an agenda, documenting the meeting, and distributing notes of the meeting. The meeting will include the contractors, the City, and others as needed. We will attend the bid opening and assist the City in evaluating the bids and selecting a contractor.

Task 2-2: Services During Construction. BC&A will attend the pre-construction meeting, process contractor payments, review submittals, and prepare any needed change orders or field orders. BC&A will monitor construction progress, make periodic site visits, maintain record drawing notes, and coordinate with the permitting agencies and the City about on-site activities. For this project, we have assumed 3 site visits during construction for the assumed 4 week construction period. The visits would include one mid construction visit, a startup visit and a final walk through visit.

Task 2-3: Project Documentation. We will prepare record drawings for the project. We will also keep a photographic log of the project construction. One copy of electronic files in PDF format on a CD will be provided to the City.

Task 2-4: Final Permits. A submittal of the required documentation will be provided to DDW for the final operating permit request.

SCHEDULE

BC&A can proceed with this project when proper authorization is received.

COST PROPOSAL

Table 1 provides our estimated cost to complete the proposed scope of work. We propose to complete the project on a time and materials basis, using our standard Agreement for Professional Services.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. If you have any questions, please do not hesitate to call.

Sincerely,

Bowen, Collins & Associates



Tena Campbell, P.E.
Principal

TABLE 1
Mapleton City
Water Quality Improvements for Crowd Canyon Well
Engineering Man-Hour and Fee Estimate

1/24/2014

JOB	LABOR	OFFICE STAFF		TECHNICIANS				PE	ELEC	STRUC	PM	HYDROG	SUBTOTAL	SUBTOTAL	SUBTOTAL	TOTAL
		OFFICE	EDITOR	TECH 3	TECH 5	PE	ELEC						STRUC	PM	HYDROG	HOURS
	Raw Rate	\$50.00	\$60.00	\$90.00	\$112.00	\$104.00	\$112.00	\$112.00	\$135.00	\$141.00						
Phase 1 - Design																
1-1	Site Visit, Collect and Review Existing Information					8			4	2	14	\$1,654	\$166	\$1,820		
1-2	Design Drawings			32	4	16	8	4	4		68	\$6,876	\$476	\$7,352		
1-3	Contract Documents		2			4	2	2	1		11	\$1,119	\$135	\$1,254		
1-4	Construction Cost Estimate					8	2	2	1		13	\$1,415	\$91	\$1,506		
1-5	Construction Permits					2			2		4	\$478	\$58	\$536		
	Subtotal Phase 1 - Design	0	2	32	4	38	12	8	12	2	110	\$11,542	\$926	\$12,468		
Phase 2 - Bidding and Construction																
2-1	Bid Period Services	2				8			4		14	\$1,472	\$166	\$1,638		
2-2	Services During Construction					18	4	2	6		30	\$3,354	\$413	\$3,767		
2-3	Project Documentation			12		4			2		18	\$1,766	\$126	\$1,892		
2-4	Final Permits					2			2		4	\$478	\$58	\$536		
	Subtotal Phase 2 - Bidding and Construction	2	0	12	0	32	4	2	14	0	66	\$7,070	\$762	\$7,832		
	TOTAL LABOR	2	2	44	4	70	16	10	26	2	176	\$18,612	\$1,688	\$20,300		
		\$100	\$120	\$3,960	\$448	\$7,280	\$1,792	\$1,120	\$3,510	\$282	\$18,612					
EXPENSES																
	Item	Unit	Rate	Cost												
	COMMUNICATION/COMPUTER/MISC EXPENSES	176	\$7.00	\$1,232												
	PRINTING /GRAPHICS			\$58												
	AUTO MILEAGE	530	\$0.75	\$398												
	TOTAL EXPENSES			\$1,688												
												TOTAL LABOR COST		\$18,612		
												TOTAL EXPENSES		\$1,688		
												TOTAL COST		\$20,300		