ALPHA ENGINEERING
43 South 100 East, Suite 100
St George, Utah 84770
T 435.628.6500
F 435.628.6553
alphaengineering.com

November 12, 2014

Ivins City
Attn: Mr. Chuck Gillette, P.E., City Engineer
55 North Main Street
Ivins, Utah 84738

Re: RFP – Engineering Services for Design of Pump Station Upgrades

Dear Chuck,

We appreciate the opportunity to submit this proposal for design of the upgrades to the Taviawk and Tuacahn Pump Stations. Our design team will be led by Mr. Brent Gardner, P.E. who has been intimately involved in the design of multiple pumping facilities over his 34 year career. He will be assisted by our consultant Keith Hegerhorst, P.E., a professional electrical engineer and master electrician with 35 years' experience in electrical and instrumentation/control engineering. Todd Gardner, P.E., will also assist in the configuration of the piping and pumps. Members of this team have recently completed the design of two pump stations and a hydroelectric facility.

We understand this project needs to be completed fast track with long lead items ordered in advance to be able to have the project on line in time for the peak summer use. Of critical importance is coordination with Rocky Mountain Power and getting a project number assigned, especially for the extension of three phase power to the Taviawk Pump station and possible load increases at each of the pump stations. We have worked extensively with Rocky Mountain Power and understand their procedures.

We would propose the following tasks be completed as part of each of the pump station designs:

- **Kickoff Meeting.** Meet with Owner on project and conduct field survey to obtain existing pump station layout including piping configuration and location.
- **Review hydraulics and Site Information.** Prepare as built information for the pump station. Review existing pump station layouts and possible configuration with additional pumps. Verify flow and head data provided by city with hydraulic model. Establish approximate load requirements and notify Rocky Mountain Power to obtain project number.
- **50% Design.** Coordinate with Rocky Mountain Power for cost data for power supply. Compile information into a 50% design report including recommended piping and pump layout options, system curve data and calculations, recommended pump selection, and preliminary cost estimate. Provide technical specification for ordering pumps for the Owner to bid the pumps and award the manufacture of the pumps.

- **Design Drawings and Technical Specifications.** Obtain final dimensions from the pump manufacturer. Prepare final drawings and technical specifications for the installation of the new pumps including electrical and mechanical details. Plans to include title sheet, site plan, piping/pump station layout, electrical plan, and necessary detail sheets. Instrumentation/SCADA design to be designed and performed by others but location and size of panel will be coordinated with them and included on the plans as well as conduit locations required.
- **Final Bid Set.** Review final bid set with Owner and make any modifications as necessary.
- **Bidding Services.** Answer questions during the bidding process that are requested by the Owner.
- **Construction Engineering Services.** Attend pre-construction meeting and provide consultation with Owner regarding questions or field changes up to the hours shown.

As requested we have attached a separate cost proposal sheet with the anticipated man hours and associated costs to complete the projects. We look forward to being able to work with you on this important project.

If you have any questions regarding our proposal, please feel free to call.

Sincerely,

Brent E. Gardner

Brent E. Gardner, P.E.
ALPHA ENGINEERING COMPANY

Attachments: Hours and Cost Estimate
Standard Hourly Rates

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Taviawk Pump Station Design Cost

Task	Hours				
	Brent G	Keith H	Todd G	Misc.	Cost
Kick Off Meeting	4	10	4	$350	$2,626
Review Hydraulics and Site Information	4	4	16	$50	$2,446
50% Design	8	16	20	$50	$4,998
Design Drawings and Technical Specs	4	8	8	$200	$2,516
Final Bid Set	2	4	4	$50	$1,208
Bidding Services	1	2	2		$579
Construction Engineering Services	4	4	8	$100	$1,864
Total Hours	27	48	62		
Total Cost	$3,915	$6,624	$4,898	$800	$16,237

The hourly rates of the individuals we propose to use on this project are as follows:

Brent Gardner, P.E. $145/hour
Keith Hegerhorst, P.E. $138/hour
Todd Gardner, P.E. $79/hour

Additional services can be provided, if necessary at our Standard Hourly Rates, Attachment A.

If awarded both pump stations to be completed at the same time, the cost of the **Tuacahn Pump Station** would be 75% of the above cost or **$11,998**. If completed at a separate time it would be the same cost as the Taviawk Pump Station Design or $16,237.

ATTACHMENT "A"

ALPHA ENGINEERING COMPANY
STANDARD RATE SCHEDULE

March 2014

Principal Engineer (PE): $145.00 / hour

Electrical Engineer Consultant (PE): $138.00/hour

Senior Engineer II (PE): $120.00 / hour

Senior Engineer I (PE): $108.00 / hour

Project Engineer II (PE): $98.00 / hour

Project Engineer I (PE): $91.00 / hour

Project Engineer (PE): $79.00 / hour

Engineer (EIT): $72.00 / hour

Head Design Technician: $64.00 / hour

Design Technician: $55.00 / hour

Senior Licensed Surveyor: $101.00 / hour

Licensed Survey Crew Chief: $73.00 / hour

Survey Crew Member: $50.00 / hour

GPS Survey Equipment: $35.00 / hour

Inspector: $50.00 / hour

Accountant: $61.00 / hour

Secretary: $41.00 / hour

Type I Survey Monuments: $364.00 each

Type II Survey Monuments: $156.00 each

Mileage: $0.55 / mile

Large Format Prints / Copies:	24x36 (b&w) $2.00 / print	24x36 (color) $8.00
	30x42 (b&w) $3.00 / print	30x42 (color) $9.00
Photocopies:	8.5x11 (b&w) $0.10 / page	8.5x11 (color) $1.00 / page
	11x17 (b&w) $0.20 / page	11x17 (color) $2.00 / page

*Other expenses will be billed at cost plus 10%.
*Rates will be adjusted periodically to reflect inflation and cost changes.