Ivins City Staff Report
City Council Meeting 03/06/25

Agenda Item: Discuss and consider approval of expenditure for engineering professional services for Anasazi Sewer Lift Station design.

Submitted by: Thomas J. Jorgensen, P.E. Assistant City Engineer

Recommended City Council Action:
Approve expenditure of $85,064.00 for engineering professional services for Anasazi Sewer Lift Station design.

BACKGROUND:
The Ivins City Wastewater Master Plan identifies several areas where the existing sewer system will not have enough capacity to handle future wastewater flows as the city reaches full development. One solution to this issue is to redirect wastewater through different parts of the system to avoid undersized infrastructure.

Additionally, areas west of Dry Wash—both north and south of Old Highway 91—currently lack sewer service. To address this, the Sewer Master Plan proposes a project that would collect wastewater from these areas and direct it down Old Highway 91 instead of using the inverted siphon in Kwavasa Drive.

To support this plan, a sewer lift station is needed near the intersection of Old Highway 91 and Anasazi Road. This station would pump wastewater uphill to connect with the city's existing gravity sewer system. By doing so, it would help expand the sewer service area and prevent future capacity issues in the system.

Kayenta is currently developing the Moenkopi subdivision, located east of Kayenta Parkway and north of Old Highway 91. Ivins City staff have been coordinating with the developers to ensure that the sewer line and lift station are completed in time to serve this new subdivision. As a result, this project has been given a higher priority.

Staff has issued a Request for Proposals (RFP) for engineering services to develop construction drawings for the project. The goal is to have the project ready for bidding by late summer 2025.

FINDINGS AND ANALYSIS:
Staff received five proposals. Below are the four engineering firms and their cost proposals.

Alpha Engineering	$85,064.00
Mainline Engineering	$115,000.00
Sunrise Engineering	$136,900.00
Bowen Collins	$155,000.00

After reviewing the proposals, staff determined that Alpha Engineering offers the most cost-effective option while maintaining strong qualifications in sewer lift station design.

Staff recommend selecting Alpha Engineering and approve the $85,064 expenditure. We are confident in their expertise, project team, fair pricing, and proven track record in lift station design.

SUPPORT MATERIALS:

- Alpha Engineering Proposal

FINANCIAL IMPACT:

This project was not included in the previous Sewer Master Plan but has been added to the current draft as fully impact fee eligible. In the meantime, funding may need to be temporarily allocated from the capital projects fund, with reimbursement from impact fee funds once the master plan update is completed. We are working on the final draft of the Sewer Master Plan and are hoping to present to council soon.

This item is not currently budgeted and will be included in the budget amendment process. It will be addressed as part of the estimated-to-complete fiscal year (FY) budget amendment, which takes place alongside the approval of the upcoming FY budget.

The capital projects fund should come in under budget as the BLM land acquisition costs are expected to be delayed until FY26. The budgeted costs for the land was $480,040, which frees up these funds.

Respectfully Submitted:

Thomas J. Jorgensen, P.E. Assistant City Engineer

Content Review:

Dale Coulam, City Manager

ALPHA ENGINEERING

March 25, 2024

Ivins City
Attn: Mr. Thomas Jorgensen, P.E.
85 North Main Street
Ivins, Utah 84738
tjorgensen@ivinsutah.gov

Re: Statement of Qualifications (SOQ) to Provide Engineering Services for the Ivins City Anasazi Sewer Lift Station Project

Dear Tom,

Alpha Engineering is pleased to submit this update to our Statement of Qualifications (SOQ) to provide professional engineering services for the Ivins City – Anasazi Sewer Lift Station Project. Our firm is very familiar with existing utility infrastructure in the area and have designed multiple lift stations similar to this project.

As you are aware, our firm has been providing engineering services for municipalities, water and sewer districts in Washington County for over 30 years. This working knowledge will aid in reducing overall staff time in the development of this important project. All our staff reside in Washington County supporting our local economy and are available for immediate service on this project. I will be the primary contact for this project. Our contact information is:

Alpha Engineering Company
Glen E. Carnahan, P.E., President
43 South 100 East, Suite 100
St. George, Utah 84770
Phone: (435) 628-6500
glencarnahan@alphaengineering.com

We look forward to the opportunity of working with you on this project. We have attached information relative to this SOQ for your consideration. Please do not hesitate to call if you have any questions concerning our SOQ.

Sincerely,

Glen Carnahan, P.E., President
ALPHA ENGINEERING COMPANY

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Technical Understanding, Timeline and Approach

We have reviewed the request for proposals for the Anasazi Sewer Lift Station and feel that the City has prepared a very detailed scope of services. We are committed to following the scope of services provided in the RFP.

We propose to design a Gorman Rupp style pump housed in a masonry building, with circular wet wells and would anticipate specifying the pump system with a backup engine, which eliminates the need for a backup generator. We have designed several of these systems, both propane and diesel for Ash Creek Special Service District.

We anticipate a 6-month design period once site selection has been completed. We feel that the City's goal of completion of design mid 2025 and start of construction by the end of 2025 is reasonable and we are committed to meet this schedule.

Relevant Experience & Qualifications

The Alpha Engineering team has a wide variety of project experience that uniquely qualifies us to assist Ivins City in the design of the Anasazi Sewer Lift Station. Presented below is a partial summary of some of our relevant past lift station projects that we have completed:

Ash Creek Special Service District Bench Lake Sewer Project

Alpha Engineering worked with the ACSSD to design the Bench Lake Area Sewer Project improvements. The project included the installation of a new sewer lift station, approximately 15,000 feet of 10", 12" and 15" gravity sewer line, manholes and appurtenances, and approximately 7,300 feet of 8-inch pressure sewer line and appurtenances. The lift station wet well is 38-ft deep and self-cleaning submersible pumps were designed for the application. A separate electrical room and full backup generator were



Bench Lake Lift Station - ACSSD

also designed for the lift station. The project included the installation of 24-inch steel casing for the pressure sewer line through the UDOT right of way for the Southern Parkway crossing. The project also included the surface improvements on 3000 South from 1100 West to the Southern Parkway interchange and the rough grading of the 3070 West corridor.

Ash Creek Special Service District Anderson Junction Sewer Lift Station

Alpha Engineering worked closely with ACSSD, Toquerville City and the Washington County Water Conservancy District (WCWCD) to design a replacement lift located in the Anderson Junction area proximate to the new Chief Toquer Reservoir being constructed by the WCWCD in 2022. Alpha Engineering designed the original lift station in 2003, before the reservoir design had been completed and as the design was completed it was necessary to move it. This lift station design allowed for removal of an existing lift station and relocated the new lift station within the property at the low point of the existing and proposed development, but outside of the new inundated area of the reservoir. Alpha completed the design and assisted the WCWCD/ACSSD with the construction management of this facility.

Ash Creek Special Service District Grandpas Pond Lift Station

Alpha Engineering worked closely with ACSSD, Hurricane City and Interstate Rock to design a replacement lift station located in the Grandpas Pond Park being installed in a development Interstate Rock was completing. This lift station design allowed for removal of an existing lift station and relocated the new lift station within the park at the low point of the existing and proposed development. Alpha completed the design and assisted ACSSD with the construction management of this facility. The design was coordinated with multiple parties including Interstate Rock's engineer, and Hurricane City.

Ash Creek Special Service District LaVerkin Lift Station Replacement

Alpha Engineering completed the design and construction management of the LaVerkin Lift Station replacement project. This lift station provides service to the LaVerkin and Toquerville areas and was in need of replacement and upsizing. Alpha worked closely with ACSSD staff to review flow requirements and design a new lift station.



LaVerkin Lift Station – New Pump Station Installation

Fee Proposal

Design Engineering Fee

For all design engineering services as outlined in the Scope of Services in the RFP, we propose a lump sum fee of **Eighty-Five Thousand and Sixty Four Dollars ($85,064.00).** The lump sum design fee is broken down for each item as follows:

A. Coordination Meetings $2,734.00
B. Data Gathering, Topographic Survey $6,596.00
C. Property Acquisition $3,452.00
D. Geotechnical Investigation $10,276.00
E. Construction Drawings $27,888.00
F. Technical Specifications $6,524.00
G. Regulatory Compliance $2,446.00
H. Construction Cost Esitmates $3,416.00
I. Contract Documents $16,464.00
J. Bidding Services $5,268.00

Total Design Engineering Fee $85,064.00

Construction Engineering Fee

Although not specifically requested in the RFP, we have provided an estimated fee for construction management services for this project. We propose construction administration be on a time and materials basis in accordance with the estimate below. The following amounts are estimated assuming a 12-week (5 days/week for 3 months) construction period with part-time inspection. The rates shown are for the year 2025.

Construction Management

Item	Rate	Quantity	Cost
Senior Engineer II, P.E. (2 hrs/wk)	$245	24	$5,880.00
Senior Engineer I, P.E. (8 hrs/wk)	$205	96	$19,680.00
Project Engineer II, P.E. (4 hrs/wk)	$169	48	$8,112.00
Project Engineer I, P.E. (2 hrs/wk)	$155	24	$3,720.00
Land Surveyor, L.S. (1 hrs/wk)	$177	12	$2,124.00
Survey Crew Chief w/ GPS (2 hrs/wk)	$176	24	$4,224.00
Design Technician (Record Drawings)	$110	16	$1,760.00
Secretary (1 hr/wk)	$70	12	$ 840.00
Direct Costs (Mileage, Copies, Etc. / Week)	$200	12	$2,400.00
Direct Costs (Soils & Concrete Testing etc.)	$15,516	1	$15,516.00
Total Estimated Construction Management			**$64,256.00**

3.1 Additional Services. Additional work and reproduction expenses will be invoiced per our *Standard Rate Schedule* (Attachment "A").