

**RESOLUTION No. 12-01-2010**

**A RESOLUTION OF THE SANTAQUIN CITY COUNCIL AUTHORIZING  
ENGINEERING SERVICES FOR THE DESIGN AND  
CONSTRUCTION MANAGEMENT OF THE SANTAQUIN CITY  
WASTEWATER RECLAMTION FACILITY PROJECT**

**WHEREAS**, the City of Santaquin, a municipality in Utah County, Utah, has a need to expand its ability to process its wastewater and has approved a Wastewater Reclamation Facility (WRF) which incorporates Membrane Bioreactor technology; and

**WHEREAS**, the Santaquin City Engineers of Record, JUB Engineering, have designed said facility and has submitted the project to prequalified construction firms; and

**WHEREAS**, Federal and State grants and low interest loans have been secured which require a local match of \$2.03M from Santaquin City; and

**WHEREAS**, to obtain full credit for the local dollars spent on the design of the WRF requires City Council approval; which will reduce the amount of cash Santaquin City will need to submit at the closing of our funding package; and

**WHEREAS**, these Federal and State funding partners also require a Construction Management Contract with our design engineers of record to provide project oversight and to insure that the utilization of Federal and State funds is in accordance with the requirements and standards of said agencies;


**NOW THEREFORE, BE IT RESOLVED BY THE SANTAQUIN CITY COUNCIL  
THAT:**

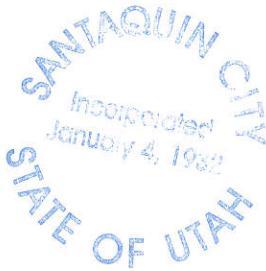
1. The Santaquin City Council approves and authorizes the Mayor to execute the SANTAQUIN CITY WATER RECLAMTION FACILITY PROJECT Amendment for Preliminary Design Services, Additional Services, and Related Support Agreement with JUB Engineers; and
2. The Santaquin City Council approves and authorizes the Mayor to execute the SANTAQUIN CITY WATER RECLAMTION FACILITY PROJECT – Scope of Services – Field and Office Engineering and Related Construction Services with JUB Engineers; and
3. This Resolution shall take effect immediately upon its passage.

PASSED AND APPROVED this 1<sup>st</sup> day of December, 2010.

  
James E. DeGraffenried, Mayor

ATTEST:

  
Susan B. Farnsworth  
Santaquin City Recorder





On March 18, 2009, J-U-B ENGINEERS Inc., (J-U-B) was authorized by the Santaquin City Council to assist the City in the preliminary and final design of the Santaquin Water Reclamation Facility (WRF) and related improvements. Throughout the preliminary and final design in 2009 and 2010 some of the originally budgeted time and materials tasks required or will require additional time beyond what was originally budgeted in order to address project related issues. **The following is an Amendment to the March 2009 Design Scope of Services and is issued under the master Agreement for Professional Services #50-06-016 dated July 5, 2006 between Santaquin City and J-U-B ENGINEERS Inc.** The July 5, 2006 Agreement for Professional Services is a master city engineering agreement that includes Capital Improvement Projects.

## **SANTAQUIN CITY WATER RECLAMATION FACILITY PROJECT**

### **Amendment for Preliminary Design Services, Additional Services, and Related Support**

**December 1, 2010**

**The following describes Amended Tasks for additional or ongoing effort beyond the original scope of work (all Time and Materials) certain preliminary and final design tasks.**

**Task 120 - Evaluate Membrane Proposals/Coordinate with Suppliers:** Provide final review, analysis, and comparison of the membrane supplier's proposals. Coordinate, facilitate, and score formal interviews with the top two suppliers. Inform highest scoring supplier of score and potential award. Coordinate with City staff and City attorney to negotiate terms and conditions relative to the procurement documents for the final Agreement. Coordinate signing and distribution of Agreements (City, membrane supplier, Engineer). Original Estimate: \$28,761 Amended Amount \$53,643.

**Task 410 - Permitting and Approvals:** Coordinate with Utah Division of Water Quality relative to acquiring the Construction permit. Negotiate favorable design conditions and permit terms with DWQ on behalf of the City. Coordinate with City staff for planning and zoning and site plan approval process. Address City staff comments relative to site plan and building code. Produce plan sets for agency review including sets anticipated for Santaquin City, Utah DWQ, Utah Board of Water Resources, USDA, and Dam Safety. Answer agency comments and facilitate meetings or responses to

assist the City in acquiring required approvals. Original Estimate: \$25,271 Amended Amount \$60,000.

**Task 420 - Funding:** Engineer shall coordinate with agencies that are funding the project. Task 420 includes meetings with agencies or with others such as the City, Zions Bank, or funding partners discuss funding, cashflow, user rates, or impact fees. Agencies to coordinate with include USDA, DWQ-SRF, CUWCD, and UDWR. Perform Right of Way investigation work for funding agency closing documents. Provide contract information or other project related information for STAG approval and DWQ funding approvals. Original Estimate: \$23,621 Amended Amount \$60,000.

**Task 430 - Public Involvement:** Update Citizens Advisory Committee at the request of the City. Facilitate discussions between the City and concerned citizens at the direction of the City. Answer or facilitate continuing discussions/requests regarding the Capital Facilities Plan. Original Estimate: \$26,156 Amended Amount \$54,221.

**Task 440 - Project Management:** Provide project management through the duration of the design project including bi-weekly meetings (approximately 2 times per month) and provide coordination with City staff relative to invoicing and related billing. Original Estimate: \$32,723 Amended Amount \$50,000.

**Task 710 - Reclaimed Water Public Education:** City staff will provide newsletter updates throughout construction relative to construction status and use of reclaimed water. Original Estimate \$9,925. Amended Amount \$0.

**Task 720 - City Design Reserve Account:** Engineer shall provide other design services related to the wastewater treatment facility project on a time and materials basis as directed by the City. Tasks may include: modifying Capital Facility Plan to conform to USDA preliminary report outline, coordinate with USDA on the preliminary engineering report, develop CUWCD feasibility report, provide pump selection and installation support for irrigation pump station, attend Orchard Days, address questions for perspective solar power providers. Original Estimate: \$25,000 Amended Amount \$72,387.

**Task 750 - Revisting Master Plan:** Throughout 2009 at different points the council and concerned citizens asked questions relative to the Master Plan and the outcomes. Many of these questions came after the master plan was approved by the Council. Contact concerned citizens or meet with concerned citizens at the request of the Council regarding the Master Planning document. Original Estimate: \$0 Amended Amount \$11,474.

#### **PAYMENTS TO J-U-B - Time and Materials**

The amended Time and Materials tasks are estimated to be Engineer's Fee for the Time and Materials Items shall not exceed **\$190,529** payable on a time and materials basis in accordance with Article 4.01A of the July 5, 2006 Agreement for Professional Services.

#### **PROVISION TO AMEND THE AGREEMENT AND WRITTEN AUTHORIZATION**


In the event a change in scope occurs and corresponding change in fee is required, the Scope of Services, associated fee, and schedule can be amended. Exceeding a single task's budget or expending less than the budget on a single task is allowed as long as

the total budget is observed not exceeded without prior notice and authorization of the City. If it appears the estimate will be exceeded prior to completion the City and Engineer will negotiate and amendment based on the time remaining. Services and project requirements can be requested by Santaquin City under Article 1.01 and 2.01A of the Agreement for Professional Services dated July 5, 2006. In the event a change in scope, schedule, or fee is required, notice will be given in accordance with Article 3.01B and Article 6.11 of the Agreement for Professional Services dated July 5, 2006.

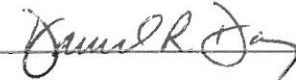
**SCHEDULE**

It is anticipated the amendment related items will be complete prior to the Notice to Proceed for the Contractor.

CLIENT:  
Designated Representative  
(Paragraph 6.02A of July 5, 2006  
Agreement)

Signature:   
Title: Mayor  
Phone: 801-754-3211  
Fax: 801-754-1620  
E-mail: Udegraffenried@Santaquin.org

J-U-B:  
Designated Representative  
(Paragraph 6.02A of July 5, 2006  
Agreement)

Signature:   
Title: VP  
Phone: 801-226-0393  
Fax: 801-226-0394  
E-mail: DRD@JUB.COM



The following Scope of Services is for Construction Administration (CA) Services (also known as CMS by Utah Division of Water Quality) for the construction portion of the Santaquin Water Reclamation Facility Project and is referred to as the **300 series tasks** and is issued under the master Agreement for Professional Services #50-06-016 dated July 5, 2006 between Santaquin City and J-U-B ENGINEERS Inc. The July 5, 2006 Agreement for Professional Services is a master city engineering agreement that includes Capital Improvement Projects. Tasks 100 and 200 of the CA services for GE shop drawing review and bidding phase services were approved previously in a council action on June 16, 2010 with a Scope of Services date of May 12, 2010.

## **SANTAQUIN CITY WATER RECLAMATION FACILITY PROJECT**

### **Scope of Services**

#### **Field and Office Engineering and Related Construction Administration Services**

**December 1, 2010**

The following tasks describe services to be provided by ENGINEER as part of the Santaquin Water Reclamation Facility (WRF) project. Design services are included in a separate Scope of Services. All services for these CA tasks are on a T&M basis at the rates shown. If overtime is required for the RPR that rate will be at the overtime rate of 1.5 times rate shown.

Engineer shall perform the following services:

#### **300 Series - Construction Phase Services**

##### **Task 310 - Office Engineering:**

- Review all shop drawing submittals for conformance with contract documents and design intent.
- Evaluate substitutes/or equals relative to overall process functionality, design intent, and contract requirements.
- Issue any requests for information (RFIs) relative to process functionality and design intent.
- Evaluate requests for change order proposals (RFCOPs) and negotiate on behalf of City; render decisions on changer order requests.

- Answer questions relating to the membrane system contract for GE and the general contractor.

**Task 320 - Field Engineering:**

- Provide onsite Resident Project Representative (RPR) to perform observation of the work and to verify contract documents are being adhered to and design intent is being implemented. Assumes 40 hours per week for 14 months and 20 hours per week for 4 months.
- RPR to coordinate weekly progress meetings.
- RPR to review schedules and progress.
- RPR to review applications for payment and approve payment requests.
- Evaluate and provide field orders (FOs) as required.
- Periodic visits by Engineer.
- Field survey staking including temporary benchmarks for use of contractor, periodically verify contractor elevations and structures. (General contractor will provide own surveying for constructed facilities).
- Perform materials testing including soils density, concrete cylinders, masonry testing, and special structural and electrical inspection.
- Inform City relative to Contractor's conformance/nonconformance with contract documents and design intent.

**Task 330 - Control System Design and System Integration:**

- Provide services of control system designer/integrator who will provide: PLC Programming, SCADA integration, HMI integration, and testing and startup service.
- Attend Control System Test at factory prior to shipping PLCs to the Site.
- System integrator to provide the overall plant control panel including the panel, GE PLC, I/O cards and modules, power supply, UL certification. System integrator will field wire inside the panel with the General Contractor landing all conduit and wires to the panel.

**Task 340 - Commissioning and Close-Out:**

- Coordinate with equipment suppliers, contractor, and GE to seed the system, begin forward flow, and commission the system.
- Review of the GE Commissioning Plans and Contractor Commissioning Plans to ensure protection of the membranes and proper coordination.
- Assist with startup of the facilities to ensure that the membrane system operates as specified.
- Coordinate trouble shooting.
- Complete record drawings.
- Work with DWQ to get final approval of construction.
- Issue Substantial Completion Notices and work with contractor to address punchlist items.
- Final inspection.

**Task 350 - O&M Manuals/Training:**

- Receive all equipment O&M manuals
- Review the GE Installation and Vendor Data Manuals.
- Review of the GE Preliminary and Final O&M Manuals.

- Review of GE Training Manuals.
- Develop plant-wide operating manual for overall plant operation; integrate with equipment specific manuals.
- Develop SOPs for plant operation.
- Coordinate Training for supplier-provided equipment.

**Task 360 - Post Construction Phase Services:**

- Provide continuing service through 1 year correction period to ensure contract documents are completed (contractor and supplier warranties).
- Provide support through first year of operations as requested by the City.

**Task 400 - Value Engineering for Santaquin WRF:**

Engineer will provide value engineering to assist the Contractor in meeting the budget. This will include meetings with the contractor, specification review, and potentially minor sketches to modify the design. This value engineering will be done at no charge to the City. Significant design changes will be investigated on a case by case basis relative to additional design fee.

A fee table showing the estimated hours for Task 300, labor categories, and sub consultants is attached.

**PAYMENTS TO J-U-B - Time and Materials**

Engineer's Fee for the Time and Materials Items is estimated as \$825,650 payable on a time and materials basis in accordance with Article 4.01A of the July 5, 2006 Agreement for Professional Services.

**PROVISION TO AMEND THE AGREEMENT AND WRITTEN AUTHORIZATION**

In the event a change in scope occurs and corresponding change in fee is required, the Scope of Services, associated fee, and schedule can be amended. Engineer is authorized to manage the overall total budget and notify the City when 75 percent of the total budget has been expended (in addition to monthly invoices). Exceeding a single task's budget or expending less than the budget on a single task is allowed as long as the total budget is observed and the City is appraised of the status at 75 percent spent and again near 100 percent. If it appears the estimate will be exceeded prior to completion the City and Engineer will negotiate and amendment based on the time remaining. Services and project requirements can be requested by Santaquin City under Article 1.01 and 2.01A of the Agreement for Professional Services dated July 5, 2006. In the event a change in scope, schedule, or fee is required, notice will be given in accordance with Article 3.01B and Article 6.11 of the Agreement for Professional Services dated July 5, 2006.

**SCHEDULE**

It is anticipated that Task 300 will begin upon Notice of Award to a contractor with the part time RPR beginning within 30 days of the Notice of Award and the full time RPR beginning within 60 to 90 days of the Notice of Award to the contractor. It is anticipated Task 300 will be substantially complete near the time the Contractor achieves substantial completion which is 480 from the Notice to Proceed.



CLIENT:  
Designated Representative  
(Paragraph 6.02A of July 5, 2006  
Agreement)

Signature: Joseph DeChiffend

Title: Mayor

Phone: 801-754-8211

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E-mail: Jdegraffenried@Saratoguin.org

J-U-B:  
Designated Representative  
(Paragraph 6.02A of July 5, 2006  
Agreement)

Signature: David R Jay

Title: VP

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