



Board of County Commissioners - Staff Report

Meeting Date: September 18, 2018

Presenter: Paul Cote

Submitting Dept: Facilities Maintenance

Subject: CLC Rafter J RetroCommissioning Phase 1

Statement / Purpose:

Consideration to give Notice of Award and Contract for RetroCommissioning Phase 1 (Investigation phase with repair recommendations) of HVAC (Heating, Ventilation, and Air Conditioning) systems at the Children’s Learning Center at Rafter J.

Background / Description (Pros & Cons):

The Children’s Learning Center at Rafter J is a 12,000-sf facility opened in 2011. Since that time there have been ongoing functional problems with the HVAC and lighting systems resulting in poor performance and equipment failures. Heating and cooling are primarily supplied by two ClimateMaster ground water source heat pumps. These heat pumps have 4 compressors, 3 of which have failed and been replaced. One heat pump is currently out of service due to a leaking coil and needs to be repaired or replaced prior to the winter heating season to ensure that we can heat the facility this winter.

Due to the problematic history of the HVAC equipment, Facilities believes that the entire system needs a RetroCommissioning analysis to determine all system deficiencies and to correct them all in a systematic and complete method that will lead to higher system performance and fewer equipment failures. Our opinion is that the widespread and continuing failures are caused by many issues inherent to the whole system and that repairing only single components will not be successful in addressing the needs of the facility.

Using the informal bid process, Facilities solicited three proposals from qualified firms.

The proposals are:

- 1. Quantum Group Engineering, \$10,400.00.*
- 2. Energy 1, \$ 16,500.00.*
- 3. BG BuildingWorks, \$26,590.00.*

Phase 2 will consist of implementing repairs and upgrades recommended in Phase 1. Expenses for phase 2 are currently unknown until recommendations of repairs and replacements are received. Phase 3 will be the actual recommissioning of the entire system to ensure that all components are functioning at their highest level of performance. Lighting system issues will be addressed separately.

Stakeholder Analysis & Involvement:

CLC staff and clients have endured discomfort since the facility opened, primarily poor heating in winter conditions. Facilities staff has spent numerous hours at the facility keeping it operational. Facilities has worked with CLC staff to develop this approach to addressing the needs of the staff, the clients, and facility.

Fiscal Impact:

CIP project 37-4-037-036-029 in the amount of \$17,000.00 was designated for HVAC systems at CLC Mercill. However, due to the urgency of the situation at CLC Rafter J, Facilities asks that the Mercill HVAC project be delayed until FY2020 and the funds redirected to CLC Rafter J.

Staff Impact:

Facilities staff will work with Quantum to provide system access and assist with data collection.

Legal Review: Gingery

Staff Input / Recommendation:

Facilities recommends that the BCC give Notice of Award and Contract for RetroCommissioning Phase 1 of HVAC systems at the Children’s Learning Center at Rafter J to Quantum Group Engineering in the amount of \$10,400.00.

Attachments:

- Quantum Group Engineering scope of work, proposal, and contract.*

*Organizational Excellence * Environmental Stewardship * Vibrant Community * Economic Sustainability*



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Suggested Motion:

I move to give Notice of Award and Contract for RetroCommissioning Phase 1 of HVAC systems at the Children's Learning Center at Rafter J to Quantum Group Engineering in the amount of \$10,400.00.

**QUANTUM GROUP
ENGINEERING
PC**

August 24 2018

Teton County/18075-Children's Learning Center


**SUBCONTRACT AGREEMENT: Children's Learning Center Rafter J Retro Commissioning
Phase 1**

Job #: 18-075
Job Description/Name: Children's Learning Center Phase 1
Owner: Teton County, Wyoming
Mailing Address: 185 South Willow Jackson, WY 83001
Contact Name: Mr. Paul Cote
Phone Number: 307 699-3496
E-mail: pcote@tetonwyo.org

Subcontractor: Quantum Group Engineering, P.C.
Mailing Address: P.O. Box 51353, Idaho Falls, ID 83405-1353
Shipping Address: 5952 West 17th South
Contact Name: William E. O'Donnell, P.E., President
Phone Number: (208) 523.8068
Fax Number: (208) 524.8235
E-mail: reddog@ida.net

This Subcontract Consists of this Signature Page and the Following:

- A. Subcontract Scope of Work;
- B. Subcontract Provisions;
- C. Contract Documents and Drawings;

<u>Teton County Wyoming</u> Owner	<u>Quantum Group Engineering, P.C.</u> Subcontractor
_____ Signature Mark Newcomb, Chairman, Teton County Board of County Commissioners	P.O. Box 51353 Idaho Falls, ID 83405-1353 William E. O'Donnell, P.E., President (208) 523.8068 reddog@ida.net
_____ Date Signed	By  its President Signature Title
_____ Attest: Sherry Daigle, Teton County Clerk	William E. O'Donnell Type or Print Name
_____ Date Signed	8/24/2018 Date Signed

A. General Provisions

- 1) The Subcontract Documents consist of (1) this Agreement; and (2) Modifications issued subsequent to the execution of the Agreement between the Owner and Subcontractor, whether before or after the execution of this Agreement; and (4) Modifications to this Subcontract issued after execution of this Agreement. These form the Subcontract, and are as fully a part of the Subcontract as if attached to this Agreement or repeated herein. The Subcontract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Subcontract Documents, other than Modifications issued subsequent to the execution of this Agreement, appears in Attachment A.
- 2) The Subcontract may be amended or modified only by a written document. The Subcontract Documents shall not be construed to create a contractual relationship of any kind between any persons or entities other than the Owner and Subcontractor.
- 3) The Owner shall cooperate with the Subcontractor in scheduling and performing the Work to avoid conflicts or interference in the Subcontractor's Work and shall expedite written responses to submittals made by the Subcontractor. Promptly after execution of this Agreement, the Owner shall provide the Subcontractor copies of the Children's Center occupancy schedule and schedule of submittals, together with such additional scheduling details as will enable the Subcontractor to plan and perform the Subcontractor's Work properly. The Owner shall promptly notify the Subcontractor of subsequent changes in the occupancy and submittal schedules and additional scheduling details.
- 4) The Contractor shall promptly make available to the Subcontractor information, including information received from the Owner, that affects this Subcontract and that becomes available to the Owner subsequent to execution of this Subcontract.

B. Scope of Work:

The Subcontractor shall execute the following portion of the Work described in the Subcontract Documents, including all labor, materials, equipment, services and other items required to complete such portion of the Work, except to the extent specifically indicated in the Subcontract Documents to be the responsibility of others.

- 1) Phase 1: Test and Analyze the HVAC system and provide repair recommendations. Develop a complete understanding of how the HVAC System is currently operating and being controlled. This would require complete testing of all the HVAC systems including the forced air, radiant, solar, and geothermal systems. We would also need full access to the Allerton Control system so we can run and observe all the systems in real time. It would be helpful if we could look at historical data which most of the modern control system track. System historical data and feedback from your maintenance staff and the building occupants would be helpful as well. The

deliverable would be a report of our findings including recommendations for repair and upgrades. This will require two days of on-site time with myself and two HVAC technicians, remote control system observations, system analysis and preparation of the report. Report would be issued within approximately two weeks of the on-site system review. Task #1, Milestone #1

- 2) Implement the repairs and upgrades noted in 1 above. This would require Teton County to prioritize the repair list and may require immediate repairs to prepare the building for winter and longer-term repairs and upgrades to prepare the building for re-commissioning. This work would require preparation of repair instructions and review of the repair work. The repair work would be performed by licensed Mechanical, Electrical, and Control contractors on separate contracts with Teton County. The equipment and controls need to be operating correctly in order to put the building back in commission. Fee for this task would be established based on the prioritized work list. Task #2, Milestone #2
- 3) Recommission the HVAC System once the repairs and upgrades are completed. Recommissioning would use the information provided in items 1 and 2 above and may be a multiple step process; make the building functional for winter and make it fully operational and at peak energy efficiency for recommissioning. Commissioning usually takes about two days of on-site time and then a day or two of follow up. Fee for this task would be established based on items 1 and 2 above. Task #3, Milestone #3
- 4) Additional Services or Amendments to the Contract.

C. Professional Fee Schedule

The period covered by each application for payment shall be one calendar month ending on the last day of the month, or as follows:

Provided an application for payment is received by the Owner not later than the last day of the month, Owner will reimburse the Subcontractor on the tenth (10th) of the following month.

Repair and Recommendation Report (Task #1, Milestone #1)	\$10,400
Implement system repairs and upgrades (Task #2, Milestone #2)	TBE
Recommission the HVAC System (Task #3, Milestone #3)	TBE

D. Additional Services or Amendments to the Contract

- 1) The Owner may make changes in the Work by issuing Modifications to the Subcontract. Upon receipt of such a Modification issued subsequent to the execution of the Subcontract Agreement, the Owner shall promptly notify the Subcontractor of the Modification. Unless otherwise directed by the Owner, the Subcontractor shall not thereafter order materials or perform Work that would be inconsistent with the changes made by the Modification to the Subcontract.

- 2) The Subcontractor may be ordered in writing by the Owner, without invalidating this Subcontract, to make changes in the Work within the general scope of this Subcontract consisting of additions, deletions or other revisions, including those required by Modifications to the Subcontract issued subsequent to the execution of this Agreement, the Subcontract Sum and the Subcontract Time being adjusted accordingly. The Subcontractor, prior to the commencement of such changed or revised Work, shall submit promptly to the Owner written copies of a claim for adjustment to the Subcontract Sum and Subcontract Time for such revised Work in a manner consistent with requirements of the Subcontract Documents.
- 3) Additional Services or Amendments to the Contract would be billed at our normal professional fee schedule of \$135/hour for Principle Engineers, \$125/hour for Licensed Engineers, \$110/hour for Engineers, \$85/hour for Associate Engineers, \$85/hour for Senior Technologists, \$75/hour for Technologists, \$65/hour for Associate Technologist, Senior Administrative Assistant \$75/ hour, Administrative Assistant \$65/ hour, and Clerical \$65/hour. Standard mileage charges and room and board if necessary would be added.

E. Counterpart Signatures: This Settlement Agreement and Release may be executed in multiple counterpart signature pages which shall have the same force and effect as if all signatures appeared on the same document. Copies of signatures delivered by facsimile or copies attached to e-mails shall be binding as if originals.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

Thank you for the privilege of allowing us to help you with your project.

Offered by:



William E. O'Donnell, P.E.

President