University of South Carolina Beaufort HH Gateway Campus Chiller Replacement University of South Carolina Beaufort Hilton Head Gateway (Bluffton Campus)
65 West Campus Drive Bluffton, South Carolina Project Number: H36-I316

Addendum No. 1

Attachments: SE 330 – Lump Sum Bid Bid Form

Pre-Bid Meeting Attendance List

October 25, 2017

To: All Responding Contractors

This addendum forms a part of the Contract Documents and modifies the original Project Manual and Drawings. Acknowledge receipt of this addendum on bid proposal form to be submitted to Owner.

The pre-bid meeting was held in Room 100 of the Facilities Building at 10:00 a.m. on October 19, 2017 as scheduled. The attendance list is attached to this addendum.

The deadline for questions is 5:00 p.m. on October 24, 2017. There will be no response made to questions received after that deadline. No further information will be released after the 120-hour mark of October 25, 2017 at 2:00 p.m. The bid opening will be at 2:00 p.m. on October 31, 2017 at 1300 Pickens Street, Columbia, SC 29208.

#### I. Clarifications

- a. <u>Project Parking:</u> Except for loading and unloading, all project vehicles will be parked across West Campus Drive from the Facilities Building.
- b. <u>Driveway Access:</u> The driveway between the Facilities Building and the cooling tower pad is active. For loading and unloading of equipment that will block the driveway, coordinate a minimum of one week in advance with the Director of Facilities.
- c. <u>Davis-Bacon:</u> This project funding for this project comes from ARRA through the U.S. Department of Energy and is subject to Davis-Bacon Wage determination. See https://www.wdol.gov/dba.aspx.

"Subject to further clarification issued by the Office of Management and Budget, Section 1606 of ARRA provides that all laborers and mechanics employed by contractors and subcontractors on projects funded by this grant shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary

- of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code. (ARRA Sec. 1606)"
- d. <u>Buy American:</u> Regarding recipients of ARRA funds (Grantees):
  BUY AMERICAN 4 1. Use of American Iron, Steel, and Manufactured Goods. Grantees
  may not use any funds obligated under this grant for the construction, alteration,
  maintenance, or repair of a public building or public work unless all of the iron, steel,
  and manufactured goods used in the project are produced in the United States.(ARRA
  Sec. 1605)
- e. <u>Condenser Water Pipes to the New Chiller:</u> The condenser water pipes that extend past existing Cooling Tower #1 to the stub-outs for the second chiller, the new chiller of this project, will require cleaning and flushing prior to connection to the new cooling tower. The successful Contractor shall submit a clean-and-flush plan to the Owner and Engineer a minimum of one month prior to the required time for cleaning and flushing.
- f. Shipment of the New Chiller: See change to Section 23 64 16 below in Section V.
- g. <u>Substitute Cooling Tower:</u> If a cooling tower other than the basis of design is used, the structure supporting the cooling tower must be certified by a structural engineer to support the substituted cooling tower during operation.
- h. <u>Chiller Electrical Controls:</u> Pipe and conduit connections and locations shall be as shown on contract documents floor plan.
- i. <u>Cooling Tower Basins Overflow Levels:</u> The existing cooling tower overflow level shall be made equal to the overflow level of the new cooling tower.

## II. Responses to Questions Asked During the REBID Pre-bid Meeting on October 19, 2017

- 1. What is the warranty period for the new chiller? *See change to Section 23 64 16 below.*
- 2. Who is the condenser water chemical treatment vendor?

Nashville Chemical Grant Black 195 Cherokee Street Richmond Hill, GA 31324 Office: 615-350-7070 Cell: 912-658-9045

### III. Responses to Questions Submitted in Writing During the Bid Meeting on October 19, 2017

1. Will thermometers and PGs be required on the chiller piping?

Refer to Section 23 05 19 METERS AND GAGES FOR HVAC PIPING, paragraphs 2.4, 2.5, and 2.6. See also Section 23 21 13 HYDRONIC PIPING, paragraph 2.11.

2. Wye Strainer on Chiller?

Refer to Section 23 21 13 HYDRONIC PIPING, paragraph 2.7 STRAINERS.

3. Vibration isolation on chiller? Schedule shows "LS". Specs do not address.

Yes. See Section 23 64 16, para 2.02.D.

4. Pipe flex on pumps since they are on inertia bases?

*Not required.* 

5. Cooling tower schedule on M3 indicates LS vibration isolation while sec 23-05-48-4 says not required. Detail for the "Typical Cooling Tower Pier" indicates the cooling tower will be connected to the relocated beam. Will LS vibration be required.

See change to Drawing M3 below in Section V.

6. Are housekeeping pads required in addition to the pump inertia bases?

Yes. It is the intent of this project to follow the design of the initial central plant.

7. Do pumps need balancing valves. Detail on M3 shows only a check valve. Triple duty valve?

See change to Drawing M3 below in Section VI.

8. Assume the "strainer" shown for the pumps are suction diffusers?

Yes.

9. Are balancing valves needed on the chiller?

No. Two-position control valves. Existing chiller control valves will be modified to two-position control valves instead of modulating.

10. Bid form Page BF1-A requires unit pricing for asbestos removal of roof. There is no roofing on this project.

The bid form is being re-issued with this Addendum.

11. Understand that Johnson Controls (JCI) has taken over the chiller plant in lieu of Automatic Logic (specs call for Automatic Logic). Will JCI be acceptable

Yes. See changes below in Section V.

12. Section 23 07 16-3 par 3.3 schedule states for the chilled water pumps to be insulated with 1-1/2 fiberboard. Can the pump be insulated with Armaflex rubber?

Yes. Maintain thermal transmission coefficient as specified. External finish to match finish on existing pump insulation.

#### V. Changes to the Specifications

1. Section 01 10 00

At Para 1.11 Work Restrictions,

Delete sub-para B and substitute the following:

"B. USCB is a smoke free campus, and no smoking will be allowed on the property."

2. Section 01 31 19

At Para 1.04 Project Meetings

Delete sub-para A.1 and substitute the following:

"1. Biweekly progress meetings will be held in the Maintenance Building Conference/Break Room."

3. Section 23 09 23

At Para 1.4 Summary, delete sub-para H and substitute the following:

"A. Integrate the controls and graphics into both of the existing Building Automation Systems (BAS). Original BAS was Automated Logic DDC System. Central Plant controls were modified to overlay the central plant control and interface with Automated Logic system."

At Para 1.8 Warranty, subparagraph B.

In the second line of the paragraph, delete the words "one year" and substitute "60 months."

At Para 1.8 Warranty, subparagraph D.

Delete sub-para 3 in its entirety.

At Para 12.1 Manufacturers

Delete sub-para A and substitute the following:

"The current chiller plant control system is a Johnson Control, Inc. control system that is interfaced into the existing original campus-wide Automated Logic BAS.

#### 4. Section 23 21 13

At Para 2.1 Pipe and Tubing

Delete sub-para A and substitute the following:

"A. Chilled Water and Condenser Water (Above Ground)"

5. Section 23 64 16 – Centrifugal Water Cooled Chiller

At Para 1.08 Knocked-Down Shipment and Reassembly Delete Para 1.08 in its entirety.

At Para 1.10 Warranty, Sub-para A.

Delete the number and word "18 months" and substitute "66 months." Delete the number and word "12 months" and substitute "60 months."

At Para 2.14 Verification of Performance, delete sub-para B in its entirety.

At Para 1.11 Maintenance, Sub Para B, add the following as the lead-in to the paragraph:

"Bid Alternate #1 – Include as Bid Alternate #1 the cost for providing an extended five-year, manufacturer's preventive maintenance agreement as described below for the new chiller.

#### VI. Drawings

Drawing M3/Cooling Tower Schedule,

Delete "LS" under Type and replace with "Not required." Delete "2.0" under Min. Static Deflection, In. and replace with "Not applicable."

Drawing M3/Typical Pump Schematic

Delete check valve symbol and add symbol for triple-duty valve and add the following note:

"Provide Bell & Gossett Model 3D (or approved equal) angle pattern triple-duty valve with grooved end connections suitable for 300 psi working pressure in pump discharge."

#### VII. Substitution Requests

1. Section 23 05 14 Variable Frequency Controllers

Substitution Request Submitted By: Heat Transfer Sales of the Carolinas

Requested Substitution: Franklin Controls.

Specified Basis of Design: Microprocessor-based, pulse-width-modulated inverter, variable speed drive.

Information submitted is insufficient to make a determination of equivalency.

No documentation submitted.

2. Section 23 64 16 – Water Cooled Centrifugal Chiller Substitution Request Submitted by Trane

Requested Substitution: Trane Energy Efficient Packaged Water Cooled Chiller with Lubricated Bearings

Specified: York Energy Efficient Packaged Centrifugal Water Cooled Chiller with Magnetic Bearings

Selections submitted do not meet the scheduled performance criteria for maximum and minimum load profiles.

Pressure drop across the evaporator bundle is 33' to 45' higher than basis of design.

Pressure drop across the condenser water bundle is 15' to 38' higher than the basis of design.

Selections submitted do not include magnetic bearings. The Owner elected magnetic bearings based on the potential reduction in energy consumption, noise, and maintenance.

Submittals did not include documentation that the chiller should be capable of continuous operation with EWT as low as 36°F entering condenser water.

Submittals did not include any documentation regarding the user interface and system operating information.

Submittals did not include any information describing the variable speed drive.

Submitted power factor of 0.87 and 0.89 do not meet the minimum power factor requirement of a 0.97 power factor.

Data submitted does not indicate sufficient information to document equivalency and does not meet the requirements of the basis of design.

#### 3. Section 23 65 16 – Cooling Tower

Substitution Request Submitted by: Heat Transfer Sales of the Carolinas Requested Substitution: Reymsa Cooling Tower, Inc., Fiberglass Reinforced Plastic Cooling Tower.

Specified Basis of Design: Induced Draft Cooling Tower with all 304 stainless steel construction.

Information submitted is insufficient to make a determination of equivalency.

Information submitted did not include information regarding:

- 1. Specific cooling tower type and configuration.
- 2. Performance and test data on substitution being proposed.

University of South Carolina Beaufort HH Gateway Campus Chiller Replacement USC Beaufort Hilton Head Gateway (Bluffton) Campus

- 3. No documentation submitted regarding compliance with South Carolina Building Code IBC compliance.
- 4. No documentation submitted regarding design load requirements to withstand wind speed range of 133 to 144 miles per hour and seismic design category C per the South Carolina Building Code.
- 5. Physical dimensions and weight were not submitted.

END OF ADDENDUM # 1

## $\begin{array}{c} \textbf{SE-330} - \textbf{LUMP SUM BID} \\ \textbf{BID FORM} \end{array}$

Bidders shall submit bids on only Bid Form SE-330.

BID SUBMITTED BY:
(Bidder's Name)
BID SUBMITTED TO: University of South Carolina, 743 Greene Street, Columbia, South Carolina 29208
(Owner's Name)
FOR PROJECT: PROJECT NAME USC Beaufort HH Gateway Campus Chiller Replacement
PROJECT NUMBER <u>H36-I316</u>
<u>OFFER</u>
§ 1. In response to the Invitation for Construction Bids and in compliance with the Instructions to Bidders for the
above-named Project, the undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract
with the Owner on the terms included in the Bidding Documents, and to perform all Work as specified or indicated
in the Bidding Documents, for the prices and within the time frames indicated in this Bid and in accordance with the
other terms and conditions of the Bidding Documents.
§ 2. Pursuant to Section 11-32-3030(1) of the SC Code of Laws, as amended, Bidder has submitted Bid Security as
follows in the amount and form required by the Bidding Documents:
☐ Bid Bond with Power of Attorney ☐ Electronic Bid Bond ☐ Cashier's Check
(Bidder check one)
§ 3. Bidder acknowledges the receipt of the following Addenda to the Bidding Documents and has incorporated the
effects of said Addenda into this Bid:
ADDENDUM No:
§ 4. Bidder accepts all terms and conditions of the Invitation for Bids, including, without limitation, those dealing with the disposition of Bid Security. Bidder agrees that this Bid, including all Bid Alternates, if any, may not be revoked or withdrawn after the opening of bids, and shall remain open for acceptance for a period of 60 Days following the Bid Date, or for such longer period of time that Bidder may agree to in writing upon request of the Owner.
§ 5. Bidder herewith offers to provide all labor, materials, equipment, tools of trades and labor, accessories, appliances, warranties and guarantees, and to pay all royalties, fees, permits, licenses and applicable taxes necessary
to complete the following items of construction work:
§ 6.1 BASE BID WORK (as indicated in the Bidding Documents and generally described as follows):,
, which sum is hereafter called the Base Bid.  (Bidder - insert Base Bid Amount on line above)

BF - 1

## $\begin{array}{c} \textbf{SE-330} - \textbf{LUMP SUM BID} \\ \textbf{BID FORM} \end{array}$

§ 6.2 BID ALTERNATES - as indicated in the Bidding Documents and generally described as follows:
<u>ALTERNATE # 1</u> (Brief Description): <u>Manufacturer's Five-Year PM Agreement</u>
☐ ADD TO or ☐ DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)
ALTERNATE # 2 (Brief Description): None
ADD TO or DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)
ALTERNATE # 3 (Brief Description): None
☐ ADD TO or ☐ DEDUCT FROM BASE BID:
(Bidder to Mark appropriate box to clearly indicate the price adjustment offered for each alternate)
§ 6.2 UNIT PRICES – as indicated in the Bidding Documents and generally described as follows:
UNIT PRICE #1
\$ per (Bidder to fill in the appropriate cost per unit offered. Unit cost to include all costs associated with this work.)
UNIT PRICE #2
\$ per (Bidder to fill in the appropriate cost per unit offered. Unit cost to include all costs associated with this work.)
<u>UNIT PRICE #3</u>
\$ per (Bidder to fill in the appropriate cost per unit offered. Unit cost to include all costs associated with this work.)

**SE-330 – LUMP SUM BID** Rev. 9/21/2011

#### **BID FORM**

§ 7. LISTING OF PROPOSED SUBCONTRACTORS PURSUANT TO SECTION 3020(b)(i), CHAPTER 35, TITLE 11 OF THE SOUTH CAROLINA CODE OF LAWS, AS AMENDED – (See Instructions on the following page BF-2A)

Bidder shall use the below-listed Subcontractors in the performance of the Subcontractor Specialty work listed:

SUBCONTRACTOR SPECIALTY By License Classification and/or Subclassification (Completed by Owner)	SUBCONTRACTOR'S PRIME CONTRACTOR'S NAME (Must be completed by Bidder) BASE BID	SUBCONTRACTOR'S PRIME CONTRACTOR'S SC LICENSE NUMBER
None		
	ALTERNATE 1	
	ALTERNATE 2	
	ALTERNATE 3	
		•

If a Bid Alternate is accepted, Subcontractors listed for the Bid Alternate shall be used for the work of both the Alternate and the Base Bid work.

**SE-330 – LUMP SUM BID** Rev. 9/21/2011

**BID FORM** 

## INSTRUCTIONS FOR SUBCONTRACTOR LISTING

- 1. Section 7 of the Bid Form sets forth a list of subcontractor specialties for which bidder is required to identify by name the subcontractor(s) Bidder will use to perform the work of each listed specialty. Bidder must identify only the subcontractor(s) who will perform the work and no others.
- **2.** For purposes of subcontractor listing, a Subcontractor is an entity who will perform work or render service to the prime contractor to or about the construction site. Material suppliers, manufacturers, and fabricators that will not perform physical work at the site of the project but will only supply materials or equipment to the bidder or proposed subcontractor(s) are not subcontractors and Bidder should not insert their names in the spaces provided on the bid form. Likewise, Bidder should not insert the names of sub-subcontractors in the spaces provided on the bid form but only the names of those entities with which bidder will contract directly.
- 3. Bidder must only insert the names of subcontractors who are qualified to perform the work of the listed specialties as specified in the Bidding Documents and South Carolina Licensing Laws.
- **4.** If under the terms of the Bidding Documents, Bidder is qualified to perform the work of a specialty listed and Bidder does not intend to subcontract such work but to use Bidder's own employees to perform such work, the Bidder must insert its own name in the space provided for that specialty.
- **5.** If Bidder intends to use multiple subcontractors to perform the work of a single specialty listing, Bidder must insert the name of each subcontractor Bidder will use, preferably separating the name of each by the word "and". If Bidder intends to use both his own employees to perform a part of the work of a single specialty listing and to use one or more subcontractors to perform the remaining work for that specialty listing, bidder must insert his own name and the name of each subcontractor, preferably separating the name of each with the word "and".
- 6. Bidder may not list subcontractors in the alternative nor in a form that may be reasonably construed at the time of bid opening as a listing in the alternative. A listing that requires subsequent explanation to determine whether or not it is a listing in the alternative is non-responsive. If bidder intends to use multiple entities to perform the work for a single specialty listing, bidder must clearly set forth on the bid form such intent. Bidder may accomplish this by simply inserting the word "and" between the name of each entity listed for that specialty. Owner will reject as non-responsive a listing that contains the names of multiple subcontractors separated by a blank space, the word "or", a virgule (that is a /), or any separator that the Owner may reasonably interpret as a listing in the alternative.
- **7.** If Bidder is awarded the contract, bidder must, except with the approval of the owner for good cause shown, use the listed entities to perform the work for which they are listed.
- 8. If bidder is awarded the contract, bidder will not be allowed to substitute another entity as subcontractor in place of a subcontractor listed in Section 7 of the Bid except for one or more of the reasons allowed by the SC Code of Laws.
- 9. Bidder's failure to insert a name for each listed specialty subcontractor will render the Bid non-responsive.

#### SE-330 – LUMP SUM BID BID FORM

§ 8. LIST OF MANUFACTURERS, MATERIAL SUPPLIERS, AND SUBCONTRACTORS OTHER THAN SUBCONTRACTORS LISTED IN SECTION 7 ABOVE (FOR INFORMATION ONLY): Pursuant to instructions in the Invitation for Bids, if any, Bidder will provide to Owner upon the Owner's request and within 24 hours of such request, a listing of manufacturers, material suppliers, and subcontractors, other than those listed in Section 7 above, that Bidder intends to use on the project. Bidder acknowledges and agrees that this list is provided for purposes of determining responsibility and not pursuant to the subcontractor listing requirements of SC Code Ann § 11-35-3020(b)(i).

#### § 9. TIME OF CONTRACT PERFORMANCE AND LIQUIDATED DAMAGES

- a. CONTRACT TIME: Bidder agrees that the Date of Commencement of the Work shall be established in a Notice to Proceed to be issued by the Owner. Bidder agrees to substantially complete the Work within <u>120</u> calendar days from the Date of Commencement, subject to adjustments as provided in the Contract Documents.
- b. LIQUIDATED DAMAGES: Bidder further agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the sum of \$300.00 for each calendar day the actual construction time required to achieve Substantial Completion exceeds the specified or adjusted time for Substantial Completion as provided in the Contract Documents. This sum is intended by the parties as the predetermined measure of compensation for actual damages, not as a penalty for nonperformance.

#### § 10. AGREEMENTS

- a. Bidder agrees that this bid is subject to the requirements of the law of the State of South Carolina.
- b. Bidder agrees that at any time prior to the issuance of the Notice to Proceed for this Project, this Project may be canceled for the convenience of, and without cost to, the State.
- c. Bidder agrees that neither the State of South Carolina nor any of its agencies, employees or agents shall be responsible for any bid preparation costs, or any costs or charges of any type, should all bids be rejected or the Project canceled for any reason prior to the issuance of the Notice to Proceed.

#### § 11. ELECTRONIC BID BOND

By signing below, the Principal is affirming that the identified electronic bid bond has been executed and that the Principal and Surety are firmly bound unto the State of South Carolina under the terms and conditions of the AIA Document A310, Bid Bond, included in the Bidding Documents.

<b>Electronic Bid Bond</b>	Number:
Signature and Title:	

#### SE-330 – LUMP SUM BID BID FORM

#### **BIDDER'S TAXPAYER IDENTIFICATION**

FEDERAL EMPLOYER'S IDENTIFICATION N	IIMRFR:	
OR	CWIDER.	
SOCIAL SECURITY NUMBER:		
CONTRACTOR'S CLASSIFICATIONS AND	SUBCLASSIFICATIO	ONS WITH LIMITATIONS
Classification(s)& Limits:		
Subclassification(s) & Limits:		
SC Contractor's License Number(s):		
BY SIGNING THIS BID, THE PERSON CERTIFICATIONS MADE BY BOTH THE PER LIMITATION, THOSE APPEARING IN AR INVITATION FOR BIDS, AS DEFINED IT INCORPORATE BY REFERENCE.  SIGNATURE  BIDDER'S LEGAL NAME:  ADRESS:	RSON SIGNING AND RTICLE 2 OF THE N THE INSTRUCTIO	THE BIDDER, INCLUDING WITHOUT INSTRUCTIONS TO BIDDER. THI ONS TO BIDDERS, IS EXPRESSLY
BY:(Signature)		
TITLE:_		
TELEPHONE:		
EMAIL:		

## University of South Carolina -Beaufort Pre Bid Sign In Sheet Beaufort, South Carolina

Project Name: Project Number: Pre Bid Date & Time:

USC Beaufort HH Gateway Campus Chiller Replacement H36-1316 October 19, 2017 10:00 AM

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Email	hogang @ OROKSUNASSOCIATES, NET	stanobarbourte hrollan con	mark a. E.P. Jei. com	W. 11to Mccarter Mechanical. com wilte		402 SALUDA FEER ED COLUMBIA, SC 29212-0296 8031096450 = 1picontrol@aol.com			
Phone #	912-527-	-74-74S	843-261-	264599	864 809-305-3	es 803 la96452			
Address	P.O. Rax 23520 Suradist, 9431403	7675 Runch St.	225 CONTINUE DO BUS-261-	685 John Mocles Socitabrus 51 2133		402 SALVOA FERRY COLUMBIA, SC 29212-0296			
Company Name	ELICKSON ASSOCIATES ING. SAVANINA, CASI403	H. R. Allen	Section county	1 M. Cartin 685 foly Noch 200 20 599	Suntype Elec	JESUCIE.			
Name	Hogger Puren	STAN HARBOURT	012 nut/v	Gover Teamwelk	Longe Suntys	Fac/White			
SWMBE?	Yes No	Yes No	Yes No	Yes No	Yes	Yes No	Yes No	Yes No	Yes No

\*\*\*\*By signing this sheet you agree to receive information electronically.

# University of South Carolina -Beaufort Pre Bid Sign In Sheet Beaufort, South Carolina

Project Name: Project Number: Pre Bid Date & Time:

USC Beaufort HH Gateway Campus Chiller Replacement H36-1316 October 19, 2017 10:00 AM

SWMBE?	Name	Company Name	Address	Phone #	Email
Yes	Bill Collan	TRANEUS, INC W. CHARLESTA	4951 RIVERS ANE 29406 W.CHARLESTON	843-534-	BOOLAR & FRANGEOM
Yes No	Boby Johnson	Trank V/5 Inc.	4951 Rivers/700	805-603 0765	rjohnsens Oftrame.com
Yes (Ng	Terrywobles	White Elect	2305 Courses 112 Rd Stept 1 Sas GA 31415	812-238 4215	trobles@white-electrical.
ves (%)	Chad Krompak	WEC	<i>4</i> 71	644-620	ckrompake whith - oloctrical, com
ves (No)	Claye Angerson	) J J M	71	915-433-	Clauebo SYH 6@ amail. com
Yes No	Lonce Benon	ESSEX	3125 Medlock Er. & 678-495. NodCRES, GA 3084 3329	3329	/barran Cessexco, com
Yes No	Dwight Jours	USCB	1 University Perhany	802-548	dhjoues Qusch.edu
Yes No	MIKE PARROW	USCB	( Moon, BUD.	843-208	MPARON TO QUECE, EDU
Yes No					)

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\*\*\*\*By signing this sheet you agree to receive information electronically.