DATE: June 28, 2013

TO: All Prospective Proposers

FROM: Sharon Quinn

RE: BW Tech @UMBC South - Chiller Replacement – BC-20882-Q ADDENDUM # 3

The following amends the above referenced RFP documents. Receipt of this addendum must be acknowledged by completing the enclosed "Acknowledgement of Receipt of Addenda" Form and submitting it along with the Technical Proposal you return to the University.

The due date and time for the Technical & Price Proposals to be submitted to the University remains as **TUESDAY, JULY 2, 2013 by 2:00 p.m.** to the issuing office.

A. Please see attached a copy of the Pre-Proposal Meeting Notes for the above referenced Procurement.

B. Write-up for additional Addendum items including some supporting sketches (9 pages)

C. The following questions have been submitted to the University for a response:

1. **QUESTION:** Which of the drawings have the correct water flow direction coming out of building "A". PH-1.0 is completely opposite to M-3.1. Detail 2.

   If the water flow is reconnected backwards there will be a minimum of 40% loss of cooling and heating to building "A".

   **ANSWER:** PH-1.0 is correct. See attached Sketch SK-ADD3- M1 for correct Detail 2 on M-3.1.
2. QUESTION: The Manufacture requires a that a section of straight pipe with a length that is five times its diameter, is installed between the suction side of the pump and the first fitting, or that a suction diffuser is installed. The engineer has drawn this system without suction diffusers. This will cut access spacing shown on drawing M 3.3. Are we correct in the assumption there is not to be suction diffusers installed?

ANSWER: No, you are not correct. Suction diffusers are drawn on the plan; are shown on the details on M-6.1; and are specified under Section 15100, Article 2.4.

3. QUESTION: Is it the intent of the Engineers to NOT include a Water Treatment System for the closed loop or Chilled Water Loop? Specification 15700-2.6 deals with the system and chemicals as they are listed in the CTI "Legionellosis Guideline". The compounds are for the open loop or Condenser Water Loop. Further evidence of this missing system is provided on drawings M-3.2 and 3.2 no place on these pages is it shown. Are we to include this system as it is required by all Chiller Manufacturers in our pricing? If so we need the Engineer to add the size and location of this system. These chemicals are similar to the chemicals need in the heating water system.

Our suggestion would be to locate this equipment in the South Building Mechanical room where the boilers are located. That way the Building Engineer could check both systems at the same time and the chemicals can be stored in a location close by.

ANSWER: Water Treatment for both the Condenser Water System and the Chilled Water System is specified in Section 15700, Article 2.6. Details for the water treatment for the Condenser Water System and the Chilled Water System are shown on M-6.1. The Chilled Water System treatment is a shot feeder to be located in Building G.

4. QUESTION: Is the scheduled efficiency for the PRESENT or FUTURE load?

ANSWER: Assuming you are referring to the Chiller Schedule, the efficiencies are for the future load.
5. QUESTION: The chiller schedule says NPLV (part load) but the values are more indicative of full load efficiency. Is the scheduled efficiency for Full Load Operation or Part Load Operation

ANSWER: The NPLV values are for part load. See attached Sketch SK-ADD3-M2 for revised Chiller Schedule.

6. QUESTION: After review of the chiller schedule on M-8.1, there appears to be a discrepancy in the KW and NPL scheduled numbers. The NPLV numbers do not seem correct as they relate to a machine with a VFD, and the max KW doesn't seem to make sense as it relates to the NPLV or the tonnage of the chiller. One would expect the max KW to increase with increased tonnage (since the machines are not the same size) and the NPLV to be lower for both machines with a VFD.

ANSWER: The values in the schedule were based on the minimum requirements from ASHRAE 90.1-2010. A revised schedule is shown on Sketch SK-ADD3-M2 to reflect the values associated with the Basis of Design.

7. QUESTION: Please provide a room finish schedule. The specifications are too vague to attempt an accurate price. They specify that gyp board ceilings are to be painted however we are not installing any. There is nothing specified for gym board walls and we have a new wall. This specification tells us to paint doors where we have no new doors to paint. This specification tells us to use a low luster acrylic enamel paint on masonry walls in classrooms, media centers, offices, and staff areas. According to the drawings we have none of these. That is unless the specifications are telling us to paint this entire branch. We really need a finish schedule that tells us what is painted in each room. The specifications could be interpreted in a manner that would require the entire branch to be painted.

ANSWER: Paint concrete floors as specified in Section 09910, Article 2.8A. Paint all CMU walls as specified in Section 9910, Article 3.7A. Paint all GWB walls as specified in Section 9910, Article 3.7B. There are no gypsum board ceilings. Existing doors shall be prepared, primed and painted. See response to question 24 for clarification of systems painted.
8. QUESTION: Project Manager – We will assign a fulltime foreman/Superintendent on job site. Will he suffice as project manager?

ANSWER: Per the RFP document, in Section V, Item C-4, “The Project Manager is defined as the University's primary point of contact on a day-to-day basis and the on-site person who will manage the contract for the vendor.” If your fulltime Foreman /Superintendent’s responsibilities are consist with those noted above then please compete the form in Appendix A, but note that the person’s title is “Foreman /Superintendent” instead of Project Manager.

9. QUESTION: Provide details for sewage ejector pump (P7) pit in Building G. Is it a concrete structure or steel holding tank?

ANSWER: Detail is shown on M-6.1. The basin for the Type K Sewage Pump (P7) is specified in Section 15440, Article 2.1.

10. QUESTION: Provide details for sewage ejector pump (P8) pit in Building H. Is it a concrete structure or steel holding tank?

ANSWER: Detail is shown on M-6.1. The basin for the Type L Sewage Pump (P8) is specified in Section 15440, Article 2.2.

11. QUESTION: Is there a requirement for sand/oil separator in Building G?

ANSWER: No.

12. QUESTION: Are all bollards removable? Please provide spec for bollards.

ANSWER: Detail is shown on C-4.0. They are not removable.

13. QUESTION: Drawing A-2.1 – Provide details for new wall type along column line 1, in electrical room area.

ANSWER: Use Wall Type 1. Wall shall terminate at bottom of trusses.
14. QUESTION: Drawing A-5.1 – Detail D – The detail calls for lintel, do you mean precast concrete lintel?

ANSWER: Yes.

15. QUESTION: Drawing S.3.0 – Where are the precast lintel being used on this project?

ANSWER: Lintels are required for the three pipe penetrations on the North Elevation wall and over the louver above the door on the West Elevation. Precast lintels are specified for the CMU and steel for the veneer.

16. QUESTION: There is a spec section (08110) for steel doors and frames. We do not see any new doors in the drawings. Are there any new doors in project?

ANSWER: There are no new doors and frames on this project.

17. QUESTION: Spec section 08710 calls for hardware sets in mechanical room door 011, and 019. There is no door number on drawing. Please clarify.

ANSWER: No new hardware sets on existing doors.

18. QUESTION: There is no room finish schedule for building. Are the walls being painted? Are the concrete floors being sealed? Please provide a room finish schedule.

ANSWER: Refer to response on question 7.

19. QUESTION: There is no specification for metal studs, GWB, sound attenuation blanket. Please provide specifications.

ANSWER: Metal studs shall be 20 Gage galvanized steel metal stud at 16" on center. Extend studs up to underside of roof deck. Provide 6 inches of glass fiber acoustical batt insulation in wall cavity; 16-inch Width, 6-inch Depth. Achieve STC Value of 50 in new wall type 1 assembly.
20. QUESTION: Please provide the name and contact information of current roofing contractor for Building G, and South Building addition for warranty requirement (See drawing M.2.2, Note 4)

ANSWER: The roofing contractor we use for shingled roofs (G-Building) and our Sarnafil warranted roof (South Addition) is one and the same:

Alliance Roofing & Sheet Metal, Inc.
4215 Eastern Avenue
Baltimore, Md. 21224
410-483-7470
Contact: Kenneth Benner: Cell: 443-690-6107
E-mail: kbenner@alroof.net

21. QUESTION: Provide detail for “concrete encased 6 – way 4” duct bank

ANSWER: Detail will be provided. See attached Sketch SK-ADD3-E2.

22. QUESTION: Provide specification and details on leak detection system.

ANSWER: The Refrigerant Monitoring System is specified under Section 15900, Article 2.7 and 3.6.

23. QUESTION: There is a wall shown on drawing A-2.0 on column line 1 that does not state what type of wall it is or how high it is. Could we get clarification on this?

ANSWER: Refer to response on question 13.

24. QUESTION: We are having trouble trying to out guess the A/E on the painting of the pipe and jacketing over the pipe insulation. First off Specification 9910 3.3 G 6 tells us to paint over the pipe insulation having "all-service jacket" or other paintable jacket material. According to specification 15080 there is no jacketing on any of the piping. There is in Part 2 Products in section 2.2 C 1 a coating applied by the insulators. Is this the painting specification 9910 3.3 referring too? Also section in 15080 Part 3 section 3.1 U Penetrations item "d" alludes to the fact that there might be some jacketing on the outside piping. However there is nothing other than just the mention of the word jacketing.
We need clear direction as to what is being painted? We also need to know if the pipe outside at the cooling tower is to have a jacket on it, what that jacketing material will be and how it is secured?

ANSWER: Please do not “out guess” the A/E on any phase of the project. Refer to Section 00700, Article 2.06 and Section 15050, Article 1.1 for procedures on issues that are not clear.

See attached changes to specification Section 09910, Article 3.3.

Jacketing is specified for Type A insulation in Section 15080, Article 2.3. See attached changes to specification Section 15080, Article 3.3 for modifications to the finish for Type A insulation.

The jacket for the piping outside at the cooling tower is specified in Section 15080, Article 3.3 for Type A and Type C insulation.

25. QUESTION: On drawing M-3.1 there is a sanitary line adjacent to the P-407 sanitary line that is supposed to be stubbed up to a P-819. I do not see a P-819 shown on drawing M-3.2 and I cannot find a specification for this fixture either.

ANSWER: P-819 was deleted. Take the 3” sanitary from the floor drain and tie it into the line serving P-407. See attached Sketch SK-ADD3-M3

26. QUESTION: The scheduled chiller evaporator pressure states max of 10 feet. Is it acceptable if a specified chiller manufacture has an evaporator pressure drop be as high as 17 feet.

ANSWER: The pressure drops shown are the maximum allowed.
27. QUESTION: There is a 3P-1200A NFSS in NEMA/UL 4X Stainless Steel Enclosure shown on the riser diagram. The only 1200A Safety Switch that Square D offers is in a NEMA 1, NEMA 3R or NEMA 12 Enclosure. I do not know of any manufacture that offers a 1200A NEMA 4X Stainless Steel safety switch. Can you please find out if NEMA 4X is really required or if NEMA 3R / NEMA 12 is acceptable?

ANSWER: NEMA 3R is acceptable. See attached Sketch SK-ADD3-E1 and SK-ADD3-E3.

Enclosures: Acknowledgement of Receipt of Addenda Form
Pre-Proposal Meeting Note – (3 pages)
Additional Addendum No. 3 items – (9 pages)

Cc: Procurement File

END OF ADDENDUM #3 DATED 06/28/13
This addendum was posted on the University’s eBid Board and eMaryland Market on 06/28/13. (Original with enclosures were not mailed)
RFP NO.:  BC-20882-Q

TECHNICAL & PRICE
PROPOSALS DUE DATE: TUESDAY, JULY 2, 2013 AT 2:00 P.M.

RFP FOR:  BW TECH @ UMBC SOUTH - CHILLER REPLACEMENT

NAME OF BIDDER: ________________________________

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned, hereby acknowledges the receipt of the following addenda:

Addendum No. 1  dated 06/13/13
Addendum No. 2  dated 06/19/13
Addendum No. 3  dated 06/28/13
Addendum No. ___ dated ______
Addendum No. ___ dated ______

As stated in this Addendum, this form is to be returned within your Technical Proposal.

__________________________
Signature

__________________________
Printed Name

__________________________
Title

__________________________
Date

END OF FORM
MINUTES OF MEETING

Date: June 13, 2013
HA Project No: BWTECH AT UMBC – BUILDING G
CENTRAL CHILLER PLANT REPLACEMENT
HA PROJECT NO. 06-U037P

MEETING NO.
Meeting Location: BWTEch at UMBC South
Subject: Bid Scope/Site Visit
Participants:
Sharon Quinn UMBC Procurement
Rob Starr BWTEch at UMBC South
Charles Irvin BWTEch at UMBC South
Wayne Hudson Ecologic
Don Steiner Henry Adams
Contractors (list to be provided by UMBC)

1.1 S. Quinn discussed the bid and negotiation dates.

- Questions are due June 25, 2013. All questions must be directed to UMBC through S. Quinn.
- Bids are due July 2, 2013 at 2 PM. No bids can be accepted past 2 PM in accordance with Maryland Law. Allow time for taking steps or elevator to the Procurement Office. Also allow time for parking in spaces designated for visitors.
- Bid Award is anticipated to be August 1, 2013.
- New Chilled Water Plant must be operational and on-line May 1, 2014. Demolition work in South Building Addition may be performed after May 1, 2014.

1.2 S. Quinn discussed the proposal requirements.

- Submit Technical Proposal and Cost Proposal in separate envelopes.
- List any proprietary information.
- A debriefing for unsuccessful firms will be available.
- Electronic payment will be available.
- Contract Documents are available from CMC in Towson. Contractors are required to purchase directly.
- Cost proposal will only be opened if firm passes technical proposal phase.
MINUTES OF PRE-BID MEETING
Project No: 06-U037P
Page 2

1.3 S. Quinn discussed the Technical Proposal.

- Submit original plus five copies.
- Narrative on comprehensive plan to perform project.
- Timeline for construction.
- List of sub-contractors.
- Firm experience to include three examples of similar work within the last five years.
- Company profile.
- Key personnel to be on the site (Project Manager).
- Performance Bond (to be submitted at time of award but provide letter that indicates ability to provide).
- Optional to include any other additional information but state that there is additional information.

1.4 S. Quinn discussed the Cost Proposal.

- Submit original plus three copies.
- Bid Affidavit.

1.5 D. Steiner discussed the Scope of Work.

- New Chilled Water Plant in Building G.
- Remove existing Chilled Water Plant in South Building Addition after new Plant is operational and on-line.
- New transformer and electrical service to Building G.
- New sump pump in Building G to transfer liquid waste from floor drains and hand sink to new sump pump in Building H and then tie into Building H’s gravity systems.
- Site work for new chilled water lines to existing underground distribution system.
  Underground chilled water mains between new connection and South Building Addition will switch the supply and return lines.

1.6 Responses to Questions raised.

- No budget is available to publish.
- Project is subject to taxes.
- Automatic Controls are to be Siemens.
- Trane is basis of design for chillers but selection is open to four manufacturers named in the specifications.
June 13, 2013

MINUTES OF PRE-BID MEETING
Project No: 06-U037P
Page 3

- Pre-demolition readings of the flows to Building A, Building B and three sets of mains in South Building Addition are required to insure rebalance at completion of project is equal to existing conditions.
- Removal of existing chillers and associated equipment will be through existing freight elevator and loading dock. Other suggestions must be approved by the University.
- Existing cooling towers on roof of South Building Addition can be performed by a crane from the front of the Building.

1.7 A tour was conducted of the South Building Chiller Room and roof, Building G, Building H, and site.

This concludes our understanding of the items discussed. Please forward any comments or clarifications to the writer within seven days. If no corrections are received, the decisions recorded above will be considered to be part of the criteria on which the design will be based.

Respectfully submitted,

[Signature]

Donald F. Steiner, PE
Senior Vice President

cc: All in attendance
ADDENDUM

Date: June 27, 2013
Henry Adams Project No.: BWTECH AT UMBC: BUILDING G CENTRAL CHILLER PLANT REPLACEMENT 06-U037P

Addendum No.: 3
Please attach this Addendum to the Project Manual. This Addendum is hereby made a part of the Contract Documents on which the Contract will be based and is issued to modify or correct the original Contract Documents.

Changes to the Specifications:

<table>
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<tr>
<th>Section</th>
<th>Paragraph</th>
<th>Change or Clarification</th>
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<td>3.3.F</td>
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<tr>
<td>15080</td>
<td>3.3.A.2.a</td>
<td>Change to read,</td>
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“a. Pipe: All insulated piping shall be jacketed with laminated, flexible, self-adhering, protective jacketing, vapor barrier, and weather proofing membrane, having a high performance acrylic adhesive capable of installation with no additional mechanical attachment. Material shall be equal to VentureClad 1579CW with natural aluminum and flat finish. Jacketing material shall have a maximum flame spread/smoke developed index of 25/20, per ASTM E84 test. Material shall have a 0.0000 water vapor permeance rating per ASTM E-96, and
June 27, 2013

ADDENDUM No.: 3
HA Project No. 06-U037P
Page 2

<table>
<thead>
<tr>
<th>Section</th>
<th>Paragraph</th>
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<td>15080</td>
<td>3.3.A.2.b.</td>
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<td>“b. Fittings and Valves: All insulated piping shall be jacketed with laminated, flexible, self-adhering, protective jacketing, vapor barrier and weather proofing membrane, having a high performance acrylic adhesive capable of installation with no additional mechanical attachment. Material shall be equal to VentureClad 1579CW with natural aluminum and flat finish. Jacketing material shall have a maximum flame spread/smoke developed index of 25/20, per ASTM E84 test. Material shall have a 0.0000 water vapor permeance rating per ASTM E-96, and mold inhibitors incorporated. All products shall be UL stable. Fabrication and installation shall conform to the manufacturer’s installation instructions.”</td>
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<td>3.3.A.2.c.</td>
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<td>“c. Apply surface finish to pipes, fittings, and valves in the Mechanical Equipment Room.”</td>
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<td>15620</td>
<td>1.7</td>
<td>Add the following new Article,</td>
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<td>“1.7 WARRANTY</td>
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<td>Provide full two year warranty on parts and labor for Chiller including variable frequency drives.”</td>
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<tr>
<td>15620</td>
<td>2.1.C.9.p</td>
<td>Change to read,</td>
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<td>“p. Warranties: The variable frequency drive shall be warranted by the manufacturer for a period of two years from the date of installation. The warranty shall include parts, labor, travel costs, and living expenses incurred by the manufacturer to provide factory-authorized on-site service.”</td>
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Changes to the Drawings:

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<tbody>
<tr>
<td>M-3.1</td>
<td>See attached Sketch SK-ADD3-M1 and SK-ADD3-M3.</td>
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<tr>
<td>M-8.1</td>
<td>See attached Sketch SK-ADD3-M2.</td>
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<td>E-0.1</td>
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<td>CH-2</td>
<td>BLDG G MECH RM</td>
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NOTES:
① PROVIDE WITH INTEGRAL DISCONNECT AND CIRCUIT BREAKER OVERCURRENT PROTECTIVE DEVICE FOR CH-1.
② PROVIDE WITH INTEGRAL DISCONNECT AND CIRCUIT BREAKER OVERCURRENT PROTECTIVE DEVICE FOR CH-2.

PROJECT: BWTECH AT UMBC BUILDING G CENTRAL CHILLER PLANT REPLACEMENT
SUBJECT: ADDENDUM NO. 3
BY: DFS DATE: 6-27-13 SCALE: NONE

SHEET: SK-ADD3-M2
REFERENCE DWG: M-8.1