DATE: February 22, 2013

TO: All Prospective Bidders

FROM: Delores R. Pertee

RE: VARIABLE FREQUENCY DRIVE REPLACEMENTS FOR COLUMBUS CENTER - BC-20844-P

ADDENDUM # 2

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

The due date and time for the Bids to be submitted to the University remains as FRIDAY, MARCH 1, 2013 by 2:00 p.m., via fax to the attention of Delores R. Pertee at 410-455-1009.

A. QUESTIONS AND ANSWERS

1. QUESTION: Is ABB drive certification required?
   ANSWER: Certification is required only for “start-up”, and not the “installation”.

2. QUESTION: Is the State of Maryland Electrical Contractors License the only required license? Is the General Contractors’ license acceptable in its place?
   ANSWER: For Electrical work, it should be MD “Electrical” Contractors license and not through the GC license. GC electrical sub should be licensed electrical contractor.

3. QUESTION: Is the bid bond requirement based on the base bid alone or is it a total when combined with the alternates?
   ANSWER: The Bid Bond requirement is based on the total bid submitted, which should include the alternate as well.

4. QUESTION: Per the Standard General Conditions of Maintenance Projects/Contracts, Section 9.05 Minority Business Enterprise Utilization, states intentionally omitted. Does that mean there is no MBE requirement?
   ANSWER: That is correct. There is no MBE goal requirement for this bid.
5. **QUESTION:** Per the Standard General Conditions of Maintenance Projects/Contracts, Section 9.06 Prevailing Wage Rates, states intentionally omitted. Does that mean there in no prevailing wage requirement?

   **ANSWER:** That is correct.

6. **QUESTION:** Are we responsible for the ATC wiring? If so, do you have a preferred ATC Contractor?

   **ANSWER:** Yes the bidder is responsible for the ATC wiring/terminations. The current building ATC maintenance contractor, Capron Co., shall be engaged by the bidder to perform the tie-ins.

7. **QUESTION:** Please clarify the splice requirements under Section 2.3 Wire and Cable, Item H “Under no circumstances shall feeders be spliced and/or tapped.”

   **ANSWER:** The Junction Boxes are intended for splices, otherwise we don’t need it if it’s a homerun.

8. **QUESTION:** Page 25 of the PDF, Drawing Riser Diagram “EMCCA” Notes #5, #6, & #7 state “...In same space provide New 3P (Note 5 - 150A, Note 6 - 100A, Note 7 - 50A) circuit breaker to match existing...”. Please provide the specifications, type, and catalog # for the new circuit breaker.

   **ANSWER:** Square D or Cutler Hammer that will fit in the same bucket that will allow the existing handle/lever to turn On or Off. Sizes noted on the drawing notes.

9. **QUESTION:** The ABB part numbers shown on the contract drawings do not include codes for Line Reactors. Are the existing remotely mounted line reactors to be reconnected ahead of the new variable frequency drives?

   **ANSWER:** Please refer to the manufacturer’s specs and installation.

10. **QUESTION:** Is the exhaust fan shut down by the Fire Alarm system initiated through the ATC controls?

    **ANSWER:** Yes, Fire Alarm Panel should send signal to the ATC controls and will control the exhaust fan.
11. QUESTION: Are any communication protocols required between the ATC system and the new variable frequency drives? If yes what protocols are required?
   ANSWER: Depending on the Building Automation System, some needs 4-20ma signal to control and vary the drive and some needs special software to do the same.

12. QUESTION: Can you please clarify if it will be the responsibility of the contractor to coordinate Capron for the controls tie in and verification on the VFD’s or if UMBC will handle that on their side?
   ANSWER: Yes, for better coordination the contractor should contact Capron directly.

13. QUESTION: When the building was initially wired there was a problem with the variable frequency drives blowing up (failing prematurely). The problem was determined to be the 5th harmonic when multiple drives were installed on the same bus. Remote harmonic filters for each drive was installed and the drives stopped failing. All of the new ABB drives that have been installed have remotely mounted line reactors (harmonic filters). The project that you have to replace the drives does not mention reconnecting the existing remote harmonic filters and or installing harmonic filters for EF 3 & 4. (The harmonic filters for EF 3 & 4 are inside of the drive cabinet.)

   We will price the project as shown on the contract drawings. If the problems created by the 5th harmonic are not addressed, it is my opinion this project will have problems with the drives.
   ANSWER: The ones with built-in filters does not need remote filters; Ones without must use the remote filters.

14 QUESTION: The ABB part numbers shown on the contract drawings do not include codes for Line Reactors. Are the existing remotely mounted line reactors to be reconnected ahead of the new variable frequency drives?
   ANSWER: Please refer to the manufacturer’s installation specs.

15. QUESTION: Is the exhaust fan shut down by the Fire Alarm system initiated through the ATC controls?
   ANSWER: Yes, ATC controls the VFD’s. Fire Alarm will send signal to ATC to shut it down.
16. QUESTION: Are any communication protocols required between the ATC system and the new variable frequency drives? If yes what protocols are required?

ANSWER: Please follow Capron’s protocol.

Enclosure: Acknowledgement of Receipt of Addenda Form

Cc: Procurement File

END OF ADDENDUM #2 DATED 02/22/13
This addendum was posted on the University’s eBid Board and eMaryland Market on 02/22/13
(Original with enclosures were not mailed)
BID NO.: BC-20863-P
BID DUE DATE: FRIDAY, MARCH 1, 2013 AT 2:00 P.M.
BID FOR: VARIABLE FREQUENCY DRIVE REPLACEMENTS FOR COLUMBUS CENTER
NAME OF BIDDER: ____________________________________________

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

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

Addendum No. 1  dated 02/14/13
Addendum No. 2  dated 02/22/13
Addendum No. _____ dated _________
Addendum No. _____ dated _________
Addendum No. _____ dated _________

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

______________________________
Signature

______________________________
Printed Name

______________________________
Title

______________________________
Date

END OF FORM