



Addendum #1

Issue Date:

Bird House Cooling Tower Replacement RFP 2021

Project Number: 2021-01-046

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Pre-bid Meeting Notes | January 6, 2022 | 10:00 AM CST

Attendee List

Company	Name	Phone Number	Email Address
Mechanical Solutions	Mike Osterhot	636-675-1500	osterholtm@msi.stl.com
Corrigan Company	Joe Varraro	314-327-4047	Joe.Varraro@corriganco.com
Corrigan Company	Dan Brickoy	314-250-7489	Dan.Brickoy@corriganco.com
Simon Crane	Ryan Champin	314-200-7929	ryan@simoncraneservice.com
Wiegmann Associates	Matt Etherton	636-541-7307	metherton@waidb.com
IFS	Ryan Goewert	314-756-3770	rgoewert@intfs.com
ABM	Tyler Roland	636-62-8468	troland@abmstl.com
GRP	Dan Dotson	618-779-2936	ddotson@grpwegman.com
Byrne Electric	Brian Wetteroff	314-544-4071	ebw@byrne.electric.com
Jarrell	Derek Briesacher	618-792-5559	dbriesacher@jejarrell.com
Nooter	Jaul Wiese	314-574-6937	pjwiese@nooter.com
Pipe & Duct	Jason Grills	314-565-4623	jgrills@pipesystemsmech.com
Hof Construction	Chris Hof	314-645-2200	chris.hof@hofconstruction.com
Waldinger	Drew Elsner	314-371-1000	drew.elsner@waldinger.com
Hayes	Jim Bommarito	314-651-3453	jbommarito@hayesmechanical.com
STL Direct Mech	Chris Barnes	314-795-2514	chrisb@stldimech.com
Ross & Baruzzini	Mike Wyland	314-283-7141	mwyland@rossbar.com
Siemens	Natalie Meyer	636-639-0621	natalie.meyer@siemens.com
Kay Bee Electric	Nathan Ketterer	314-397-4805	ifk@kaybeeelectric.com
St Louis Zoo	Ken Hunter	618-514-0190	hunter@stlzoo.org

Notes

Link to Drawings and Specifications- <https://stlzoopoc.egnyte.com/fl/FhuV2cucco>

The Zoo can provide a large forklift to unload the cooling tower when it arrives on zoo grounds. This might eliminate a double trip for the contractor that might be using a crane. There will not be a need to bring the crane just to unload the new tower.

Drawings included in this Addendum are: M100, M600, E100, E500.

Questions | Answers

1. For the tower we could use as much of the following as possible. **See link above.**

GPM, EWT (Entering water temp), LWT (Leaving water temp), WBT (wet bulb temp), Tonnage of the chiller, Any info on the condenser pump

2. For the heat exchanger we could use similar information. **See link above**

Side 1: GPM, EWT, LWT. Side 2: EWT, LWT

3. Can Ross & Baruzzini annotate which control points on the table they want to have on the Siemens BMS. For example, basin heater enable and basin heater temp will be internal to cooling tower. Do you want Siemens to pick up a signal from those. Also, currently Siemens monitors the high water level alarm and low water level alarm from the cooling tower controller. Do you still want those monitored by Siemens. **Siemens to provide all points as listed in the points list schedule. The basin heater shall be controlled through the basin heater control panel. The sump water level sensor will be provided with the cooling tower and monitored by Siemens.**

4. Where do you want the VFD mounted? In the room or outside on the tower (with proper enclosure). Please verify if you want Siemens to provide the VFD. **The drawings have been updated to show them outdoors with the appropriate enclosure. The VFD is indicated to be provided by Division 26. If bids are coordinated, it would be acceptable for Siemens to provide the VFD.**

5. Do you want the ABB drive to have FLN communication on it. This is typical at zoo to get information like frequency, kw, etc. from the drive. **Yes, the ABB drives should be provided with FLN communication to access the point data base inside the drives.**

6. Please clarify what control points are existing and what will remain (i.e. condenser water supply/return temp). Clarification in the notes section of the control points table would be

adequate. Control components and wiring should be reused if possible. The condenser water temperature sensors could be reused, depending on if they are located in existing piping to remain. The remaining points listed will be new.

7. What Division provides the VFD? What is the preferred manufacturer by the Zoo? The VFD should be provided by Division 26 as indicated on the Equipment Data Schedule on sheet E100. The Zoo's preferred VFD manufacturer is ABB.

8. Couldn't find where the basin heater was powered. Sheet E100 revised and included with this addendum to add power for the basin heater.

9. Sheet M100 revised and included with this addendum to remove existing make-up water line and associated backflow preventor and provided piping for new larger make-up water line.

10. Sheet M600 revised to include the HVAC Instrumentation and Controls specification.

11. How is the basin heater shown on the mechanical schedule to be powered? There is no reference to the basin heater on the electrical drawings. Drawings have been updated to show power to the cooling tower fans.

12. What type of VFD is being specified for the cooling tower fan? Provided and installed by EC? Drawings have been updated to provide specifications for the VFD.

13. What is Natalie's contact information with Siemens? See Attendees List above.

14. The Cooling tower schedule on sheet M5 shows that the new BAC tower has 2 – 7.5 hp motors, but the electrical drawings and Equipment Data Schedule shows only one feeder(3#6, #8G, 1" C) and one 100 amp disconnect switch at the equipment.

- a. If the new tower has 2 motors, do we need 2 separate feeds and 2 separate disconnect switches? (one each motor)? Drawings have been updated to provide individual electrical feeds to each motor.
- b. If the new tower has 2 motors, will 2 VFD's be required? Drawings have been updated to indicate 2 VFDs.
- c. Will the new Cooling tower have any vibration cut-off switches that are required to be wired? The cooling tower will have a vibration cut-off switch that will need to be wired.
- d. Will the new Cooling Tower have motor heaters that are required to be wired? Drawings have been updated to provide power to the basin heater.
- e. Can the drawing be revised to show this wiring? See drawings provided with this addendum.

15. The Cooling tower schedule on sheet M5 shows that the new BAC tower has 1 – 6kW sump heater, but no wiring for the heater is shown on the Electrical drawings.
 - a. If the new tower requires a sump heater, can it be clarified if the new BAC cooling tower will be provided with a factory Sump Heater Control Panel and Low-water-cutoff / temperature probe? **Drawings have been updated to provide power to the basin heater.**
 - b. If the new tower requires a sump heater, can the drawings be revised to show this wiring? **See drawings provided with this addendum.**

16. The drawings show the electrical panels in the same Mechanical Room adjacent to the existing cooling tower, but in fact they are in the Mechanical room on the other side of the building.
 - a. Can a revised (scaled) drawing be provided showing the correct location of the existing electrical panels in the Mechanical Room on the other side of the building basement? **See drawings provided with this addendum.**

17. I was not able to locate a specification on the VFD(s).
 - a. Can spec be provided with approved manufactures and other details required? (Warranty / factory start-up / by-pass / etc.) **Electrical drawings updated to provide detail for the VFDs to be provided.**

18. There does not appear to be enough working clearance available for the new VFD(s) location as shown on the drawings.
 - a. Can a new location be shown on drawings with 3' working clearance? **Drawings have been updated.**

19. Does the MBE/WBE Utilization Statement form apply only to the bidding contractor? In particular, should the “Workforce Demographic Declaration” section only be filled out according to the bidding contractor’s workforce or factor in any subcontractors’ workforces as well? **Please factor in the complete team (primes and subs) which will be working on the project.**