CONTRACT NUMBER: 140P4326R0013	**REQUEST FOR INFORMATION**	RFI NUMBER: 0001

CONTRACT TITLE:
GEWA – Upgrade HVAC System at Memorial House Museum

PRIME CONTRACTOR:	SUBCONTRACTOR/SUPPLIER: NA

SUBJECT/TITLE OF RFI:
Pre-Proposal Clarifications

DRAWING(S):	DETAIL(S):	SPECIFICATION:	CPM ACTIVITY NUMBER:

COST EFFECT: INCREASE: ☐ DECREASE: ☐ NONE: ☐

INFORMATION REQUESTED & RECOMMENDED SOLUTION:

General RFI's:

1. Please confirm whether contractors will have parking access next to the immediate working area or if the only parking lot available to contractors is the Visitor Center parking lot and all contractors will have to walk to the site. Parking is limited near the work site. 2-3 vehicles can be next to the work site. Extra vehicles may use the gravel access road by the blacksmith shop in the historic area, while others should park at the visitor center and carpool to the site.
2. Will there be any time of day, week, or seasonal restriction on when the work can take place? No.
3. Please confirm the extent of the building's occupation during on-site execution. Will visitors to the museum be expected to have full access to all areas within the structure, even in rooms where work is currently being performed? The park may temporarily close the building to visitation during construction. Depending what construction activities are taking place at the time.
4. Please provide any available testing data, commissioning reports, or historical maintenance records for the existing geothermal well field. Yes.
5. The drawings include details for a wood-clad enclosure surrounding the cooling tower equipment area. Please confirm whether the wood components are to remain unfinished, receive field-applied stain, receive field-applied paint, or be comprised of any specific lumber species. If a finish is required, please provide color and coating specifications. Is the wood clad to be a specific design/layout? Unfinished, 1x6 pressure treated yellow pine lumber. Place fence boards side by side with 1/8-inch gap.
6. The drawings indicate installation of new return air openings and floor grilles while limiting removal of existing flooring. Please clarify whether replacement flooring materials will be furnished by the Government if removal becomes necessary beyond the anticipated opening size. No replacement flooring material will be provided or is available. It is extremely important that the new air return vents are precisely measured, marked and cut to the exact size of the new vent being installed. The existing wood floors are original to the house and need to be preserved.
7. Please confirm that the Contractor is not responsible for repair, replacement, or correction of deficiencies in existing systems designated to remain, including but not limited to the geothermal well field, hot water coils, condensate pump, existing ductwork, existing electrical distribution equipment, existing gas service infrastructure, and concealed building conditions not visible prior to demolition. You are not responsible for unforeseen conditions. However, any deficiencies found during the pre-bid site visit should be reported to the contracting officer immediately.
8. Based on the Electrical drawings, but then also based on some of the Mechanical specifications (IE 23 09 00), there is some confusion as to if this is a Design Build or Design Bid Build contract, please clarify if PE design is required and to what extent? PE design is not required.
9. Please confirm the requirement of the "Historic Preservation Treatment Plan" listed in SPEC 01 35 91. The contractor must take all necessary steps to preserve and protect the historic structure's original material/fabric when working on or near it.
10. Based on the site conditions, mobilizing concrete to the location of the future cooling tower is limited. Please confirm if a pump is required or if an access path will be provided for the contractor to use to access the location and provide details of the expectation of the contractor to protect and/or restore the grounds. A pumper is not required. A concrete truck is permitted to get close to the site, but it must remain on ground mats if it leaves the existing gravel road. The weather conditions will dictate what method will be used at that time (depending on how saturated the ground is at that time). All ground disturbance/damage must be restored by the contractor to preconstruction conditions.

Electrical RFI's:

11. Please confirm whether MC cable can be used in lieu of electrical conduit. Please note that a significant amount of the existing wiring in the building is currently MC. MC cable is allowed.

12. Are the new units being replaced with link in kind HP, voltage, amperage, etc. as units being removed? If so, would it just be an electrical disconnect & reconnect to the new units utilizing existing wire, disconnects, circuit breakers, etc. Please confirm. New units require new controls. If the existing wiring and breakers are adequate, the contractor can use them. If code calls for a new disconnect per unit, it should be installed.
13. Are the units to be replaced one at a time, or can multiple units be replaced at one time. The building must maintain climate control at all times. Multiple units may be replaced simultaneously; however, heating and/or cooling must remain operational throughout the process.
14. Per Note 1 on Sheet 17, the design is to be completed by the contractor, is this required to be Sealed by an Electrical PE obtained by the contractor? Or just provided by a licensed electrical contractor? Licensed electrical contractor is adequate.

HVAC RFI's:

15. Please confirm that a full building HVAC BAS system is required per the SPEC. This system is currently not in place at the building and will be quite extensive and costly. Full building BAS is not required, system operations can be accomplished by utilizing new smart controls/thermostats along with equipment controllers. The building has WIFI and it can be simply thermostats that communicate through an App.
16. Please confirm whether temporary heating, cooling, humidity control, or environmental monitoring is required within the Memorial House during demolition and replacement of the existing HVAC system. If needed, yes. Unless the units are replaced in phases to maintain climate control in the building.
17. The drawings indicate that existing ductwork shall remain and be reconnected to the new equipment. Please clarify whether the Government has conducted any assessment of the existing ductwork. Should concealed deficiencies, leakage, insulation deterioration, or damaged duct sections be encountered, please confirm whether repair or replacement will be considered additional work beyond the contract scope. It would be considered additional work beyond the scope unless you are aware of any deficiencies as a result of the pre-bid site visit. If so, please report these findings to the contracting officer immediately.
18. The drawings indicate reconnection of the gas service to the new boiler. Please confirm the existing fuel type serving the building and whether any modifications to the existing regulator, piping, or gas delivery system are anticipated to accommodate the new equipment. LP gas. Yes, if the existing regulator, piping, or gas delivery system needs to be upgraded.
19. The drawings indicate new WSHP condensate drains are to be routed to the existing condensate pump. Please confirm whether the existing condensate pump has been evaluated and determined suitable for continued service with the new equipment. Replace the existing condensate pump with new ones.
20. The contract documents indicate existing hot water coils are to remain in service and be connected to the new boiler system. Please confirm whether the existing coils have been pressure tested or evaluated. They have not been pressure tested. Coils were working properly during this last heating season.
21. What is the current status of the ground source loop? It's in good condition but it's not long enough to adequately cool the water.
22. The drawings call for the refrigerant lines to the attic to be replaced, however, during the site visit they appear to be installed in an enclosed chase. Can these lines be purged and reused? Yes, but should be confirmed with heat pump manufacture to confirm this won't affect the warranty.
23. Is the Chemical Treatment by the Government or to be included by the contractor? (Note on sheet 11 implies that this may be by the gov't) Chemical treatment by contractor, note refers to location shall be coordinated with park before installation.
24. Please confirm the entirety of the Chemical Treatment system listed in SPEC 23 25 00. Yes, confirm to follow chemical treatment spec.
25. Where are the new Chemical Treatment Systems to be located? They are not shown on the plan view. Recommended near boilers and pumps, however locations can be anywhere in the basement that accommodates equipment and clearances for accessibility.
26. Please confirm the duct cleaning required of the existing to remain ducts. Yes, clean existing ductwork.
27. Based on review of the scope, is "Delegated Design" for Vibration and Seismic necessary for this project as specified in section 23 05 48? Concrete wall for cooling tower shall be reviewed by structural engineer.
28. Please confirm that duct leak testing is NOT required based on Pressure Class. Correct, ductwork leakage is not required to be tested.

Siemens RFI's:

BMS Panel and Workstation :

29. There is no indication on the drawing to show where Siemens BMS panel should go, please advise. BMS panel is not required. Control panels should be located on equipment or on open wall in the basement.
30. There is no indication on the drawings where Siemens BMS workstation should go, please advise. BMS workstation is not required

31. Will the site be providing IP (CAT-6 ethernet drops) to the control panel and workstation so that the BMS will sit on the sites network or will this be a closed loop network (no remote access, CAT-6 provided and ran by Siemens from a Siemens provided managed switch) provided by Siemens? The building has Wifi that can be used for remote access.
32. Will a dedicated 120VAC 20A circuit be provided to Siemens control panel.

Boiler/Hot Water System:

33. Boiler will be coming with manufacturer provided BMS interface, can you please confirm the communication protocol the boiler will be coming with and if BACnet will it be BACnet/MSTP or BACnet/IP. BACnet shouldn't be required.
34. Siemens assumes that the boiler manufacturer provided controls will handle the "Heating Hot Water System" sequence of operations listed in spec section 23 09 93, including control of P-3 and Siemens will interface with the boiler for monitoring and setpoint purposes, please confirm. Yes, P-3 shall be controlled by boiler controller.
35. Will Siemens need to provide the 2-way boiler isolation control valve, or will that be manufacturer provided. Boiler manufacturer.
36. Will there be any misc. devices that are shipped loose from the manufacturer that Siemens will need to wire or will need to provide and wire either to the boiler control panel of Siemens control panel such as: Misc devices required and will be tied into manufacture controllers, contractor to determine who owns the devices and wiring. Devices do not need to be tied into a BAS.
    - Outside air temp sensor
    - Boiler room space temp sensor
    - Break glass/emergency stop
    - Natural gas sensor
37. There is no sequence of operations listed for pump P-4 and its respective VFD, please provide and specify who is to control P-4's sequence. P-4 shall turn on when space t-stat calls for heating and WSHP is at full capacity.

Cooling Tower Questions:

38. Cooling tower is coming with manufacturer provided Franklin control panel, electric level controller and solenoid valve and electric basin heaters. Siemens assumes that the combination of all these factory provided controls will handle the "Cooling Tower" sequence of operations listed in spec section 23 09 93, please confirm. Yes, Franklin control shall control cooling tower to meet sequence of operations.
39. There is no mention of a BMS interface or communication in the cooling tower spec or sequence. Should Siemens account for a BACnet connection to the cooling tower controller or will it operate completely stand alone. No BACnet communication required.
40. Will Siemens need to provide the DCW flow meter shown on M3.0? Contractor to determine who will provide required devices.
41. Will there be any misc. devices that are shipped loose from the manufacturer that Siemens will need to wire or will need to provide and wire either to the cooling tower control panel or Siemens control panel such as: Misc devices required and will be tied into manufacture controllers, contractor to determine who owns the devices and wiring. Devices do not need to be tied into a BAS.
    - Level sensors to level controller
    - Solenoid valve to level controller
    - Basin heater temp sensor to basin heater electric controller
    - Basin heater enable/disable
    - Vibration switch to VFD safety circuitry
42. Please confirm whether the drain line from the cooling tower to the hill side is intended to be perforated or if only the drain line at the cooling tower is to be perforated and the remaining drain line from the tower to hill is to be solid. Solid with cleanouts.

Water Source Heat Pump:

43. Water source heat pumps are coming with manufacturer provided controllers and thermostats. Siemens assumes that the combination of all these factory provided controls will handle the "WSHP" sequence of operations listed in spec section 23 09 93, please confirm. Yes, manufacture's controller shall meet sequence of operations.
44. There is no mention of a BMS interface or communication in water source heat pump spec or sequence. Should Siemens account for a BACnet connection the WSHP or will the operations be completely stand alone? No BACnet communication required.

45. The WSHP spec mentions wall mounted humidistats, but they are not shown on the drawings only thermostats. Will the WSHP's be coming with humidistats as well? A single device should be used to measure both temperature and humidity.
46. Will there be any misc. devices that are shipped loose from the manufacturer that Siemens will need to provide and wire either to the WSHP controller or Siemens control panel such as:
    Misc devices required and will be tied into manufacture controllers, contractor to determine who owns the devices and wiring. Devices do not need to be tied into a BAS.
    - Thermostat
    - Humidistat

Misc. Control Questions:

47. The existing ground loop circulation pump will operate completely stand alone with no BMS connection or interface, please confirm. Correct.
48. There are two 3-way valves shown on M3.0, are these valves existing or new? If new who needs to provide them. Also, what system controls them and what is the sequence of operations for them? These valves are new.

From:

The RFI system is intended to provide an efficient mechanism for responding to contractor's request for information ONLY. This system DOES NOT authorize the contractor to proceed with work - to do so, the contractor proceeds at his own risk. If the contractor considers the RFI response a changed condition, written notice to the Contracting Officer is required within 20 calendar days.

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