PARIC CORPORATION
77 Westport Plaza Suite 250
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TEL: 636-561-9500
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REQUEST FOR INFORMATION

DATE: June 07, 2016 **NO.:** RFI-156

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: Feeding fin tube heaters from panel 2NH1

Response Required By: June 14, 2016

Drawing / Spec Reference:

Information Requested:

The VE option offered in RFI 144 was dependent upon the approval that the electrical contractor could feed the fin tube heaters from panel 2NH1. This was mistakenly omitted from the original RFI. Please advise if this will be acceptable.

(attached: RFI 144)

Response:

The VE option offered RFI-144 was not accepted making RFI-156 not applicable.

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ARCHITECT'S RESPONSE:
This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.
Cc: Kathy Bathe, Paric Corporation

Answered By: Patrick Garner, WTA Date: 6/8/16

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REQUEST FOR INFORMATION

DATE: June 02, 2016 **NO.:** RFI-144

To: Cannon Design

Attn: Kelvin Patel

From: Paric Corporation

Requested By: Joe Voypick

Project Name: 15051-Webster University Interdisciplinary Science Building Project No.: 15051

Subject: 2nd Floor Underfloor Fin Tube Radiation

Response Required By: June 09, 2016

Drawing / Spec Reference:

Information Requested:

Can the underfloor HW fin tube radiation be eliminated and replaced with seven (7) electric plenum rated unit heaters?

Suggestion: We propose to replace the hot water radiation in the 2nd floor overhang with electric unit heaters due to the freeze, burst and water damage potential. This recently occurred in the St. Louis area where a small controls glitch prevented the control valve, serving the fin tube, from opening and caused the pipes to freeze and burst resulting in extensive water damage. By replacing the hot water piping with electric heat, the threat of water damage is eliminated. There are many variables that could cause this piping to freeze, system glitch, control valve failure, future controls programming changes, etc..
This proposal includes seven (7) 3kW, plenum rated, electric unit heaters to replace the HW fin tube and associated piping. Unit heaters will come with local thermostat control and can be set to the desired setpoint for the underfloor heat.

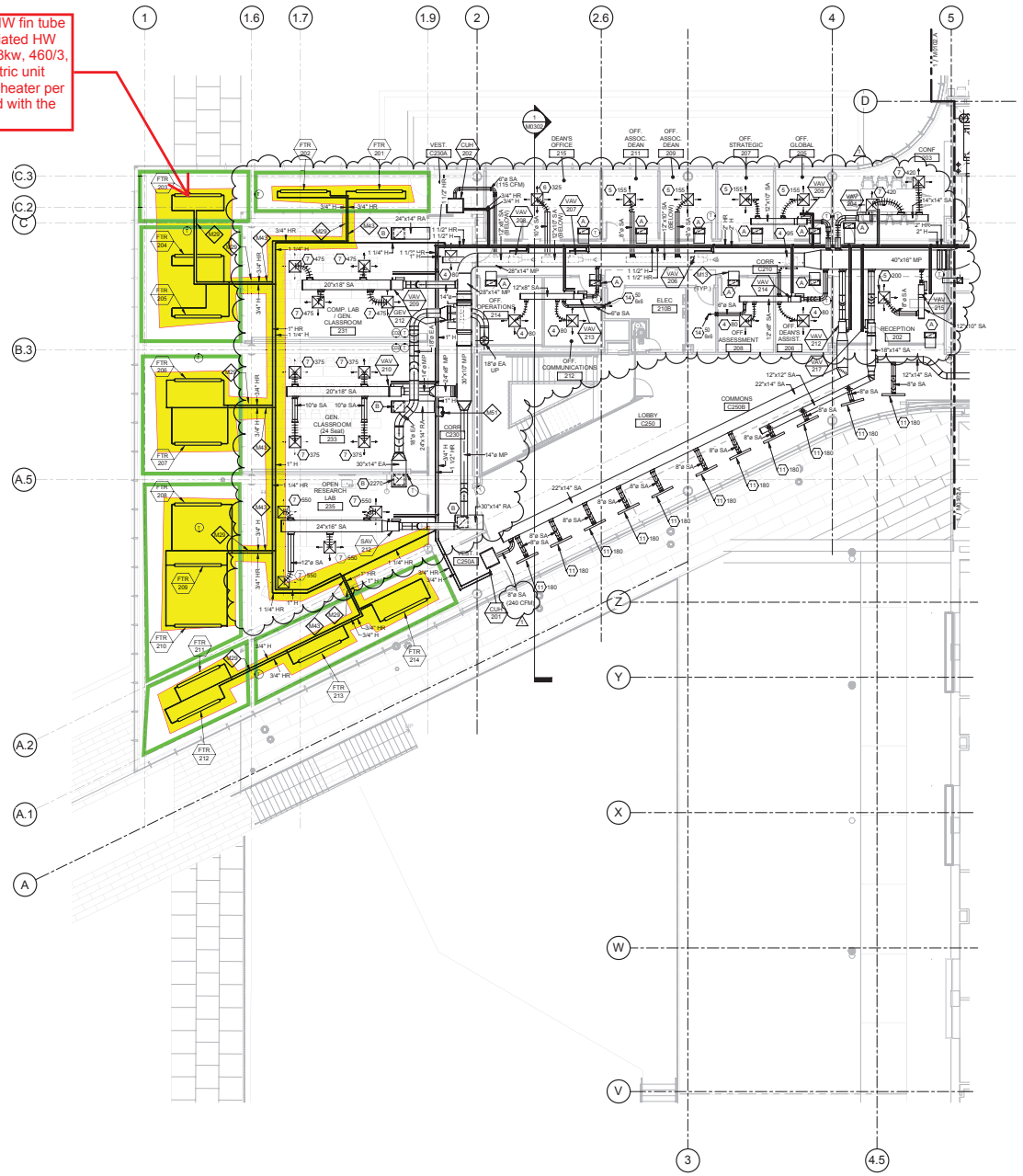
Response:

Yes, heating water finned tube radiation can be replaced with plenum rated electric unit heaters. Provide access for maintenance, electrical power, and controls. Also include BAS alarms if any unit heater fails or if plenum space temperature approaches freezing temperatures to protect sprinkler lines.

ARCHITECT'S RESPONSE:
This information is provided as an interpretation of the Contract Documents for implementation. It is not an authorization for change to the Contract Sum or Contract Time. If this information results in a claim for a change to the Contract, the Contractor shall notify the [Construction Manager][Architect] of a change through the change process.
Cc: Kathy Bathe, Paric Corporation

Answered By: Mark Schaefer Date: 6/2/2016

Proposal to replace HW fin tube radiation and associated HW piping with seven (7) 3kw, 460/3, plenum rated electric unit heaters. One (1) unit heater per "pocket", highlighted with the green box.



1 LEVEL 02 - AREA B - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
B. Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
C. All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
D. All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
E. All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum c = 0.12. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
F. Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
G. Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
H. Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
I. All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
J. Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
K. Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
L. Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some preminuim time work may be required.
M. Refer to piping details for final connections to equipment.
N. Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing: A & B.

KEYED NOTES

M13 LINED RETURN AIR TRANSFER DUCT, 22x10 TYPICAL UNLESS NOTED OTHERWISE.

M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.

M29 PIPING THROUGH HOLE IN BEAM. COORDINATE WITH STRUCTURAL DRAWINGS.

M43 INSTALL CONTROL VALVES AND SERVICE SHUT-OFF VALVES ABOVE ACCESSIBLE CEILING. PROVIDE FLOW MEASURING AND BALANCING VALVE AT EACH FTR ELEMENT. BALANCE WATER FLOW BEFORE OVERHANG ENCLOSURE IS INSTALLED.

M51 1" HEATING HOT WATER BYPASS WITH BACKPRESSURE CONTROL VALVE (5 GPM).

Webster UNIVERSITY

Webster University
Interdisciplinary Science Building

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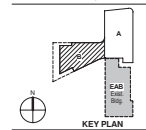
No.	Description	Date
1	ADDENDUM 2-1	17 MAR 2016
–	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

Drawing Title:

LEVEL 02 AREA B FLOOR PLAN - MECHANICAL

Project No.: 04561.01 Checked by:

M0102.B