School District of Indian River County

Purchasing Department
Attn: Jeff Carver, Director
6055 62nd Avenue
Vero Beach, FL 32967
Telephone 772-564-5050 Fax 772-564-5048

Date: March 14, 2017

To: All Participants

From: Jeff Carver, CPPO, Director of Purchasing

Re: SDIRC 10-0-2017 Addendum 1

ADDENDUM 1

The School District of Indian River County has issued Addendum 1 to provide the attached Pre-Bid Meeting Minutes, Pre-Bid Sign In Sheet and additional Technical Specifications.

_____

Signature of Respondent Date

***Failure to include this signed addendum with your submittal may result in disqualification.**

D O N A D I O
& Associates, Architects, P.A.

SCHOOL DISTRICT OF INDIAN RIVER COUNTY
FELLESMERE ELEMENTARY BUILDING 700 HVAC REPLACEMENT
PRE-BID MEETING MINUTES OF 03/08/17

ISSUE DATE: 03/10/17

The following items were discussed at a Pre-Bid Meeting held on 03/08/17 in the Fellsmere Elementary Cafeteria:

1. Due Date for Bids is 03/22/17 at 2pm.
2. School Board Meeting for Approval is 04/25/17.
3. Deadline for RFI's is 03/10/17.
4. All questions must be directed to Purchasing.
5. Construction Agreement in the Bid Documents is non-negotiable.
6. All Primary contractors must be pre-qualified. Sub-contractors under the General Contractor need not be qualified.
7. School is out on May 26, 2017 and August 1, 2017 is the project completion date.
8. Rick Huff will be the Project Manager for this project.
9. Sign-in sheet will be made part of the addendum.
10. Building Permit will be ready by the time contract is awarded.
11. All existing rooftop units, to be removed, shall be taken to the School District's Support Services Facility by the contractor and will be unloaded by the District.
12. All new dropped ceiling tile systems shall have the Fineline grid to match existing with standard fissured lay-in ceiling tile.
13. PDFs of the existing drawings will be issued as part of the addendum.
14. The following sub-contractors shall be used:
    a. Fire Alarm – First Fire and Security
    b. Fire Protection – Metro Fire Protection.
    c. Controls – DCI
15. Test and Balance shall be by the School District.
16. All material testing shall be provided by the Contractor with in the Bid.

End of 03/08/17 Pre-Bid Meeting Minutes

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License No. AA0002238

School District of
Indian River County
Purchasing Department, 6055 62nd Avenue, Vero Beach, FL 32967
Tele: (772) 564-5050 Fax: (772) 564-5048

PRE-BID MEETING
March 8, 2017 10:00 a.m.

Representative's Signature	Company Name	Telephone #	Email Address
[illegible]	SDIRC Purchasing – Jeff Carver, Director	772.564.5050	jeffrey.carver@indianriverschools.org
[illegible]	SDIRC Facilities– Rick Huff, Construction Coord.	772.564.5018	richard.huff@indianriverschools.org
[illegible]	SDIRC Facilities – Nick Westenberger, Director	772.564.5016	nicholas.westenberger@indianriverschools.org
	SDIRC Building/Codes - Pete Copeman, Bldg. Ofl.	772.564.5021	peter.copeman@indianriverschools.org
	SDIRC Building/Codes - Scott Ganger, Inspector	772.564.5026	scott.ganger@indianriverschools.org
WC [illegible]	Kerns Construction	772 985 5015	Kerns02@Att.net
[illegible]	Marmer Construction	863-314-9851	Joe@marmerconstruction.com
[illegible]	One Call Services	772-324-1146	Brent@onecallprop.com
Lincoln Irons	Summit Construction	772-794-2099	Lincoln@summitcm.net
Robert Jacquin	Jacquin & Sons inc	772-465-2475	robert.Jacquin@PJSI.Com
Jack Peabody	Mid-State Mechanical, INC	772-567-3102	Jack@midstatemech.com
Brian Hessinger	Ingenuity Engineers, INC	407-398-6007	BHESSINGER@INGENUITYFL.COM

Representative's Signature	Company Name	Telephone #	Email Address
TONY DONADO	DONADO & ASSOCIATES	772-火-2525	anthony@donadopa.com
ROBERT H. PAUGH	BILL BRYANT & ASSOCIATES INC.	772 567-0045	RHPaugh@BillBryantAssociates.com

SECTION 15840 - AIR TERMINAL UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Shutoff, single-duct air terminal units.

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Hangers and supports shall withstand the effects of gravity loads and stresses within limits and under conditions described in SMACNA's "HVAC Duct Construction Standards - Metal and Flexible".

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For air terminal units. Include plans, elevations, sections, details, and attachments to other work.

C. Delegated-Design Submittal:

   1. Materials, fabrication, assembly, and spacing of hangers and supports.

D. Field quality-control reports.

E. Operation and maintenance data.

1.4 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1-2010, Section 5 - "Systems and Equipment" and Section 7 - "Construction and System Start-Up."

PART 2 - PRODUCTS

2.1 SHUTOFF, SINGLE-DUCT AIR TERMINAL UNITS

A. Manufacturers: Subject to compliance with requirements provide products by one of the following:

   1. Environmental Technologies, Inc.
   2. Price Industries.

3. Titus.
4. Trane; a business of American Standard Companies.

B. Configuration: Volume-damper assembly inside unit casing with control components inside a protective metal shroud.

C. Casing: 0.032-inch (22 gauge) galvanized steel, single wall.

1. Casing Lining: Adhesive attached, 1-inch- (25-mm-) thick, polyurethane foam insulation complying with UL 181 erosion requirements, and having a maximum flame-spread index of 25 and a maximum smoke-developed index of 50, for both insulation and adhesive, when tested according to ASTM E 84.
2. Air Inlet: Round stub connection or S-slip and drive connections for duct attachment.
3. Air Outlet: S-slip and drive connections.
4. Access: Removable panels for access to parts requiring service, adjustment, or maintenance; with airtight gasket.
5. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1-2004.

D. Volume Damper: Galvanized steel with peripheral gasket and self-lubricating bearings.

1. Maximum Damper Leakage: ARI 880 rated, 2 percent of nominal airflow at 3-inch wg (750-Pa) inlet static pressure.
2. Damper Position: Normally open.

E. Electric-Resistance Heating Coils: Nickel-chromium heating wire, free of expansion noise and hum, mounted in ceramic inserts in a galvanized-steel housing; with primary automatic, and secondary manual, reset thermal cutouts. Terminate elements in stainless-steel, machine-staked terminals secured with stainless-steel hardware.

1. Access door interlocked disconnect switch.
2. Downstream air temperature sensor with local connection to override discharge-air temperature to not exceed a maximum temperature set point (adjustable.)
3. Nickel chrome 80/20 heating elements.
4. Airflow switch for proof of airflow.
5. Fuses in terminal box for overcurrent protection (for coils more than 48 A).
6. Mercury contactors.
7. Magnetic contactor for each step of control (for three-phase coils).

F. Direct Digital Controls: Bidirectional damper operators and microprocessor-based controller and room sensor. Control devices shall be compatible with temperature controls specified in Division 15 Section "HVAC Instrumentation and Controls" and shall have the following features:

1. Damper Actuator: 24 V, powered closed, spring return open.
2. Terminal Unit Controller: Pressure-independent, variable-air-volume controller with electronic airflow transducer with multipoint velocity sensor at air inlet, factory calibrated to minimum and maximum air volumes, and having the following features:

    a. Occupied and unoccupied operating mode.
    b. Remote reset of airflow or temperature set points.
    c. Adjusting and monitoring with portable terminal.
    d. Communication with temperature-control system specified in Division 15 Section "HVAC Instrumentation and Controls."

3. Room Sensor: Wall mounted, with temperature set-point adjustment and access for connection of portable operator terminal.

2.2 HANGERS AND SUPPORTS

A. Hanger Rods for Noncorrosive Environments: Cadmium-plated steel rods and nuts.

B. Steel Cable End Connections: Cadmium-plated steel assemblies with brackets, swivel, and bolts designed for duct hanger service; with an automatic-locking and clamping device.

C. Air Terminal Unit Attachments: Sheet metal screws, blind rivets, or self-tapping metal screws; compatible with duct materials.

D. Trapeze and Riser Supports: Steel shapes and plates for units with steel casings; aluminum for units with aluminum casings.

2.3 SOURCE QUALITY CONTROL

A. Factory Tests: Test assembled air terminal units according to ARI 880.

1. Label each air terminal unit with plan number, nominal airflow, maximum and minimum factory-set airflows and ARI certification seal.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install air terminal units according to NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems."

B. Install air terminal units level and plumb. Maintain sufficient clearance for normal service and maintenance.

C. Install wall-mounted thermostats.

3.2 HANGER AND SUPPORT INSTALLATION

A. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 4, "Hangers and Supports."

B. Hangers Exposed to View: Threaded rod and angle or channel supports.

C. Install upper attachments to structures. Select and size upper attachments with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.

3.3 CONNECTIONS

A. Connect ducts to air terminal units according to Division 15 Section "Metal Ducts." and Division 15 Section "Nonmetal Ducts."

B. Make connections to air terminal units with flexible connectors complying with requirements in Division 15 Section "Duct Accessories."

3.4 IDENTIFICATION

A. Label each air terminal unit with plan number, nominal airflow, and maximum and minimum factory-set airflows. Comply with requirements in Division 15 Section "Identification for HVAC Piping and Equipment" for equipment labels and warning signs and labels.

3.5 FIELD QUALITY CONTROL

A. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

B. Tests and Inspections:

1. After installing air terminal units and after electrical circuitry has been energized, test for compliance with requirements.
2. Operational Test: After electrical circuitry has been energized, start units to confirm proper unit operation.
3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

C. Air terminal unit will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

3.6 STARTUP SERVICE

A. Perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.
2. Verify that inlet duct connections are as recommended by air terminal unit manufacturer to achieve proper performance.
3. Verify that controls and control enclosure are accessible.
4. Verify that control connections are complete.
5. Verify that nameplate and identification tag are visible.
6. Verify that controls respond to inputs as specified.

3.7 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain air terminal units.

END OF SECTION 15840