ADDENDUM NO. 4

January 2, 2020

Carmel Elementary School
Carmel, IN 46032

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated November 19, 2019, by CSO Architects. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Page ADD 4-1, 4-2; Site Fencing Plan, Site Access Plan, Site Improvements Phasing Plan; CSO Architects Addendum 4, dated December 30, 2019, consisting of 2 pages; and 23 82 43 – Radiant Ceiling Panels.

A. SPECIFICATION SECTION 00 20 00 – Information Available to Bidders

H. Site Fencing Plan
I. Site Access Plan
J. Site Improvements Phasing Plan

B. SPECIFICATION SECTION 01 12 00 – Multiple Contract Summary:

1. Paragraph 3.03 Bid Categories

A. Bid Category No. 1:

Add the following Clarification:

28. Bid Category No. 1 Contractor to include WP1, while Bid Category No. 5 Contractor to include WP2.

E. Bid Category No. 5:

Add the following Clarification:

4. Bid Category No. 1 Contractor to include WP1, while Bid Category No. 5 Contractor to include WP2.

M. Bid Category No. 13:

Add the following Specification Section

23 82 43 – RADIENT CEILINGS PANELS

ADDENDUM

CSO
ARCHITECTURE · INTERIOR DESIGN

ADDENDUM NO: 4

BID PACKAGE NO: N/A

PROJECT: New Carmel Elementary School

PROJECT NO: 18094 DATE: 12/30/2019 BY: Brent Hite

JOHN E. RIGSBEE REGISTERED No. 920019 STATE OF INDIANA ARCHITECT

This Addendum is issued in accordance with the provisions of "The General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This Addendum includes:

Addendum Pages:
Attachments: 23 82 43 – RADIANT CEILING PANELS

PART 1 - BIDDING AND CONTRACT REQUIRMENTS

1.01 NOT USED

PART 2 - SPECIFICATIONS

2.01 00 00 00 - TABLE OF CONTENTS

A. Revise section 06 10 53 to read WOOD BLOCKING in lieu of ~~MISC. ROUGH CARPENTRY~~

B. Remove section 12 36 63 SOLID SURFACE COUNTERTOPS from Table of Contents.

C. Add section 12 36 61 SIMULATED STONE COUNTERTOPS, specification section already included in project manual.

2.02 23 82 43 – RADIANT CEILINGS PANELS

A. Add section in its entirety.

PART 3 - DRAWINGS

3.01 NOT USED

A. NOT USED

PART 4 - OTHER ITEMS

4.01 NOT USED

A. NOT USED

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PART 5 - QUESTION AND ANSWER

5.01 CAN ADDITIONAL DETAIL BE PROVIDED ON INTENT OF WOOD FLOOR INSTALLATION ON STAGE AND STEPS?

A. Wood flooring subcontractor shall provide subfloor construction consisting of wood finish flooring over 5/8" plywood sheathing on 1" wood sleepers. Subfloor shall be provided at all locations wood flooring is shown (stage, steps, etc.). Thickness of flooring system shall be coordinated with slab construction to ensure finish floor elevations are installed correctly.

5.02 WINDOW TYPE W10 IS SHOWN ON A505 TO BE 10' 4" TALL BUT SCHEDULED AT 7' 8" TALL – PLEASE ADVISE WHICH HEIGHT IS CORRECT.

A. Please follow height on frame elevation W10 (10'-4").

5.03 WINDOW TYPE W12 IS SHOWN ON A505 TO BE [19' 4" X 7' 3-3/8"] BUT IS SCHEDULED [20' 8" X 6' 0"] – PLEASE ADVISE WHICH IS CORRECT.

A. Please follow height shown on frame elevation W12 (19'-4" x 7' 3 3/8").

5.04 WINDOW 527.2 IS SCHEDULED TO RECEIVE G3 (LAMINATED) WHILE ADJACENT DOOR/FRAME 527 IS SCHEDULED TO RECEIVE G4 (TEMPERED) – PLEASE ADVISE IF 527.2 SHOULD RECEIVE G4.

A. Window 527.2 shall be glass type G4 (Tempered) to match door frame 527.

5.05 WINDOWS W6A/B SHOW 4 BAYS IN PLAN (3 LARGE + 1 SMALL) WHEREAS SHEET A505 SHOWS 3 LARGE EQUAL BAYS – PLEASE CONFIRM THE DESIRED LAYOUT.

A. Follow frame elevation on A505 indicated (3) equal sections for frame W6A/B,

END OF ADDENDUM

SECTION 23 82 43 – RADIANT CEILING PANELS - HYDRONIC

PART 1 – GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Radiant Ceiling Panels - Hydronic.

1.2 SUBMITTALS

A. Product Data: Include rated capacities, operating characteristics, furnished specialties, and accessories for each type of product indicated.

B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

1. Include a schedule showing unique model designation, room location, model number, size and accessories furnished.

C. Samples: For each exposed product and for each color and texture specified.

D. Field quality-control test reports.

E. Operation and maintenance data.

1.3 QUALITY ASSURANCE

A. Product Options: Drawings indicating size, profiles and dimensional requirements of radiant panels are based on the specific system indicated.

1.4 COORDINATION

A. Coordinate layout and installation of radiant panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system and partition assemblies.

PART 2 - PRODUCTS

2.1 RADIANT CEILING PANELS - HYDRONIC

A. Linear radiant panels shall use extruded aluminum with integrated heat sinks on the back to transfer heat between copper tubes and the panel face. The linear radiant panel is to radiate or absorb heat from or to the zone below.

B. Water Tubes: Tubes shall consist of seamless ½" nominal (5/8" OD) copper tubing. ½" nominal (5/8" OD) return bends and interconnectors shall be flared ends and be shipped loose. Water connections shall be suitable for solder, compression fittings or threaded connection.

C. Heat Sinks: Heat sinks shall be extruded aluminum and copper piping will be mechanically fastened to the heat sink. A non-hardening heat transfer paste is required between the tubing and the heat sink.

D. Extruded Aluminum Planks: The panel shall be constructed of 0.0725" thick minimum extruded aluminum. The extruded aluminum panels shall interlock using tongue and groove connections and be mechanically held together.

E. Insulation: All active panels shall be insulated with 1" thick, ¾ lb. density fiberglass insulation.

F. Dimensions: Panel lengths and widths as indicated on the drawings. Total width and number of tubes should meet the required design specifications.

G. Capacity: As scheduled. Linear radiant panel capacity shall be tested and certified by manufacturer to meet performance listed on the schedule.

H. Finish: All visible components shall be powder-coated with polyester paint. Color to be manufacturer's standard white unless noted otherwise. Panel manufacturer to provide all T-bar trim framing for installations in hard ceilings or bulkheads. Division 23 contractor shall be responsible for the coordination of the installation.

I. Mounting: Radiant panels shall be mounted in lay-in or drywall ceiling. Manufacturer shall provide all required hardware for suspension support system.

J. Manufacturers

1. Sterling
2. Price
3. Airtex
4. Vulcan
5. Zhender Rittling

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

A. Install radiant panels level and plumb. Maintain sufficient clearance for normal services, maintenance or in accordance with construction drawings.

B. Install radiant panels according to manufacturer's instructions.

C. Complete installation and startup checks according to manufacturer's written instructions and perform the following:

1. Verify that controls and control enclosure are accessible
2. Verify that control connections are complete to control valves as needed.
3. Verify that any identification tags are visible.

4. Verify that controls respond to inputs as specified.

3.2 CONNECTIONS

A. Connect radiant panels and components to piping as detailed on drawings.

1. Install shutoff valves and unions on inlet and outlet, strainer on inlet and balancing valve on outlet.

B. Install control valves as indicated on drawings.

C. Install piping adjacent to radiant panels to allow for service and maintenance.

3.3 FIELD QUALITY CONTROL

A. Perform the following field tests and inspections and prepare test reports:

1. Leak Test: After installation, fill water tubes and test for leaks. Repair leaks and retest until no leaks exist.
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.

B. Remove and replace convection heating units that do not pass tests and inspections and retest as specified above.

3.4 CLEANING AND PROTECTION

A. Clean all visible surfaces of equipment; touch up as required.

B. Protect all units before, during and after installation. Damaged materials due to improper protection shall be cause for rejection.

END OF SECTION 23 82 43

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