

December 22, 2015

ADDENDUM NO.2
to the
Iowa Department of Transportation
For: Proposal 15535
For Salt Dome Roof Restoration for eight various locations in Iowa
Hanlontown, Desoto, Sidney, West Burlington, Tipton, Anamosa, Marion, Davenport
Letting Date: 12/23/2015

Notice To Bidders:

This Addendum is issued to incorporate the following additions, deletions, corrections, and/or clarifications to the terms or specifications and shall hereby be considered a part of the final contract documents. This Addendum shall supersede, modify and/or change all statements to the contrary in the bid proposal and shall take precedence over previous terms or specifications.

CHANGE: Section 07 5700: Replace Specification Section 07 5700 with Section 07 5700 (Revised 12-21-2015)

ADDITIONS:

CLARIFICATIONS:

All Bidders must sign and return this Addendum for the bid opportunity referenced above. Failure to do so may subject the Bidder to disqualification. If a bid response has already been submitted, this Addendum shall be signed and emailed or faxed to the Purchasing Section prior to the scheduled Letting Date.

Company Name *(please print)*

Date

Signature

Sincerely,

Jody McNaughton, Purchasing Agent III
Phone No. 515-239-1298 Fax No. 515-239-1538
Jody.McNaughton@dot.iowa.gov

SECTION 07 5700
COATED FOAMED ROOFING (REVISED 12-21-2015)

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Foamed-in-place insulation.
- B. Protective overcoat.

1.02 REFERENCE STANDARDS

- A. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2013.
- B. ASTM C273/C273M - Standard Test Method for Shear Properties of Sandwich Core Materials; 2011.
- C. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2006a (Reapproved 2013).
- D. ASTM D1621 - Standard Test Method for Compressive Properties Of Rigid Cellular Plastics; 2010.
- E. ASTM D1622/D1622M - Standard Test Method for Apparent Density of Rigid Cellular Plastics; 2014.
- F. ASTM D1623 - Standard Test Method for Tensile And Tensile Adhesion Properties of Rigid Cellular Plastics; 2009.
- G. ASTM D2126 - Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging; 2009.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on foam insulation and overcoat, physical and chemical properties, preparation of substrate required, product limitations, and cautionary requirements.
- C. Manufacturer's Instructions: Indicate installation requirements and procedures.
- D. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Iowa Department of Transportation's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience, and approved by manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect stored products from ambient temperatures below 75 degrees F.

1.06 FIELD CONDITIONS

- A. Do not install foam insulation under the following conditions:
 - 1. When ambient temperature is below 50 degrees F or above 110 degrees F.
 - 2. When relative humidity is above 80 percent.
 - 3. When wind velocity is above 10 mph.
- B. Do not install overcoat under the following conditions:
 - 1. When ambient temperature is below 50 degrees F.
 - 2. When wind velocity is above 10 mph.
 - 3. During precipitation.

1.07 WARRANTY

- A. Provide 10 year manufacturer warranty for insulation and coating.

- B. Provide coverage of roofing system for delamination of bond.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Coated Foamed Roofing:
 - 1. Neogard Division of Jones-Blair Company; Neogard Permthane II FR System: www.neogard.com. (Used as Basis of Design)
 - 2. Greenshield Products; Aromatic Urethane Coating System.
 - 3. Substitutions: See Section 01 6000 - Product Requirements.

2.02 FOAM INSULATION MATERIALS

- A. Foam Insulation: Polyurethane type, as follows:
 - 1. Thermal Conductivity: When tested in accordance with ASTM C177:
 - 2. Compressive Strength: ASTM D1621; 40 psi.
 - 3. Tensile Strength: ASTM D1623, 60 psi.
 - 4. Shear Strength: ASTM C273/C273M, 35 psi.
 - 5. Dimensional Stability: Maximum 15 percent volume change, when tested in accordance with ASTM D2126 for 28 days at 150 deg F and 100 percent relative humidity.
 - 6. Density: ASTM D1622/D1622M; 2.5 lb/cu ft.

2.03 OVERCOAT MATERIALS

- A. Overcoat: Polyurethane base and cover coats, white color.
 - 1. Tensile Strength (ASTM D412): 643 psi.
 - 2. Elongation (ASTM D412): 620%.

2.04 ACCESSORIES

- A. Cant: Spray applied foam insulation, filleted to interruptions and penetrations through roof surface.
- B. Sealant: Type required or recommended by roofing manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Schedule work after all penetrations through roof are complete and perimeter conditions are ready to receive roof system.
- B. Verify that deck surface is smooth and dry and deck joints do not exceed 1/16 inch.

3.02 PREPARATION - TO EXISTING ROOF SYSTEM

- A. Prepare existing roofing surface by power washing dust and debris.
- B. Mask off adjacent surfaces that are not scheduled to receive foam.

3.03 INSULATION INSTALLATION

- A. Apply primer and foam insulation in accordance with manufacturer's instructions.
- B. Place insulation to 1 inch thickness; plus 1/4 inch, minus zero.
- C. Apply foam to permit first coat of overcoat application on same day. If this time limit is exceeded, prepare foam skin surface in accordance with manufacturer's instructions.
- D. Fully Encapsulate existing roof vents with insulation to obtain water tight end product.

3.04 FLASHINGS AND ACCESSORIES

- A. Coordinate installation of control joints.
- B. Seal flashings and flanges of items penetrating membrane.

3.05 OVERCOAT INSTALLATION

- A. Install overcoat, which includes base coating and top coating, in accordance with manufacturer's instructions.

- B. Prepare and seal penetrations through roof with sealant.
- C. Apply overcoat in a two or three coat urethane coating system as required by manufacturer to a total dry film thickness of 36 mils minimum.
- D. Extend overcoat to cover foam insulation on dome roof and over the precast concrete walls so the dome building has the same color and appearance throughout.

3.06 FIELD QUALITY CONTROL

- A. Testing will include verification of insulation properties, thickness, coverage of overcoat, number of coats, and color.

3.07 CLEANING

- A. Remove excess insulation or overcoat from finished surfaces.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.
- C. Repair or replace defaced or disfigured finishes caused by work of this section.

3.08 PROTECTION

- A. Ensure roof surface is free of traffic for minimum three days after overcoat application.

END OF SECTION