Procurement and Contracting Services

Request for Bids for Re-Roofing of Four Buildings for Facilities Management

ADDENDUM #2

Please mark all Bid submission Envelopes with the following information

Sealed RFB # S181907
Due on 1/24/19 no later than 2:00 PM, MST
The purpose of this addendum is to issue all questions and back-up that has been gathered over the two meetings and walkthroughs and to include all responses received by 1/9/19 at 12:00 PM, MST.

**Addendum Section 1: Vendor submitted questions**

1. Can the University provide locations acceptable for crane placement at each building and or roof deck to facilitate debris removal and material loading?
   
   a. Building locations and satellite photos are attached below under Addendum Section 3: Satellite Photos, the highlighted areas in the photos are the location where cranes and material loading, and removal can take place.

2. Can the University provide safety requirements for protecting the public at each crane location?
   
   a. Areas of Crane use should be blocked off with barricades and red danger tape for protection provided by the vendors.

3. Can the University review the Pollution Legal Liability Insurance requirement?
   
   a. There is no requirement of Pollution Liability Insurance on this RFB.

4. Is the University open to extending the schedule?
   
   a. The expected date of completion of 6/30/19 is still the completion deadline and is not to be extended.

5. Will the University handle mechanical and electrical disconnects to allow the work to be completed?
   
   a. Facilities Management will assist the vendors in taking care of this aspect as needed.

6. What is the R value that is needed on the roofs?
   
   a. The R value is not to be less than R3.

7. What is the warranty period?
   
   a. It is 20 year manufacturer warranty, and 5 year service warranty of work performed.

8. Are their parking spaces available for work trucks?
   
   a. The vendor will need to contact Parking and Transportation per the RFB for parking information.

9. What is the max ladder height allowed?
a. The max ladder height would need to follow the OSHA Standards which means the ladder must extend 3 feet above the surface you are attempting to access.

10. Are we required to use safety rails on the roof?
   a. Fall protection is required for areas where the roof walls are under 34 inches around the edge.

11. What is located underneath the roofs of these buildings?
   a. Below all roofs on the buildings are just offices, no labs or equipment.

12. Are there any current leaks on any of the roofs of buildings?
   a. There was recently a leak on the tile portion of the Southside of Harshbarger, but no other buildings have any leaks.

13. How do you want us to bid the jobs?
   a. We are asking that you itemize your bids based off the following:
      i. Total price for entire roofing project of all 4 buildings
      ii. Total price per each building
      iii. Breakdown price on each building based on roof material (Tile, shingles, SBS, etc.)

14. Will everything be awarded to one vendor?
   a. The University will have the option to award to multiple vendors as needed.

15. Are any buildings a priority?
   a. All the buildings in question are equally important and should be treated with the same priority.

16. At the Harshbarger building, was it just Harshbarger roof or Mines as well, building 11 and 12?
   a. Both roofs are to be done at this site, 11 and 12 per the RFB.

17. Is there any lead on the roofs in question?
   a. No, there are no lead roof material on the roofs for this RFB.

18. What color should the roofs be?
   a. Roofing material should be White Granulated Surface, Terracotta red Tile and Color Match the metal on Old main for the Metal. (if we ask for the roofs to match, they will automatically
paint the roofs without allowing them to vent out the natural oils and cause the coating to fail.)

19. Is there any allowance on tile where we are to reuse?

   a. We are allowing a 50% tile breakage allowance when the tile is to be reused

**Addendum Section 2: Deferred Maintenance RFB Gen Spec**

**Buildings:**

- 11/12 Harshbarger/Mines
- 20 Engineering
- 35 Herring Hall
- 104 ECE (Electronic and Computer Engineering)

The work involves providing an **SBS** (STYRENE-BUTADIENE-STYRENE) Modified Bituminous Membrane Roofing system without a torch, a kettle or the use of solvent based cold adhesives. The pertaining roofs should be applied using self-adhesive techniques that have a finished surface of granules. Roofing materials shall be compatible with one another. Systems need to be appropriately fastened over an approved insulation substrate on an approved deck type. These types of decks include: steel, concrete, lightweight concrete, poured or plank gypsum, wood plank, plywood, cementitious wood fiber or hybrid decking complete with flashings, scuppers, expansion joints, control joints, can’t strips, edge strips, crickets, insulation, and performing such incidental or other work as may be required by these operations and called for by the drawings. The Bids will need to be for four (4) roofs on the University of Arizona main campus.

**Materials:** SBS System Materials are based off Soprema Roofing Materials. Materials should be Soprema or **comparable materials** for new roofing bids.

These materials include:

**Fasteners:**

Duotack SPF; 2” Screws and Fastener plates

**Primers:**

Elastocol Stick

**Insulations:**

Polyisocyanurate Board Insulation: ASTM C 1289 Sopra-ISO;

Tapered Insulation: Polyisocyanurate Board Insulation: ASTM C 1289 Sopra-ISO or a comparable product

**Cover-Boards:**
1/4" SOPRABOARD or a comparable product

**SBS Membranes:**
Elastophene Sure-Stick; Sopralene Stick; Elastophene Sure-Stick FR GR. White

**Miscellaneous Accessories:**
Roofing Cement: Sopramastic;

Ceramic-coated roofing granules, as need to match manufacturers surface membrane in both size and color.

**Martials not specific to Soprema Include all Tile and all Standing Seam Metal.**

- Eagle Clay 2-Piece Tile. Color matched
- 30# Tile Underlayment or Synthetic Tile Underlayment.
- ATAS International, Inc. 24-gauge coated Steel Standing Seam Metal Roof Panels
- Low-E Therma Sheet Underlayment

**General Specs:**

These Roofs Consist of sections that are BUR (Built Up Roof), Tile Roofs (including Two-Piece and S-Tile) And lastly Standing Seam Metal Roofs.

**For all BUR (Including shingled area on BLDG 12 Mines):**

- Tear-off all existing roofing material down to the substrate including insulation, tapered insulation, roofing membrane, base flashings, sheet metal flashings and lead flashings.

  - Examine substrates, areas, and conditions for compliance with requirements and other conditions affecting performance of the work

  - Inspect and confirm that all roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.

  (Proceed with installation only after unsatisfactory conditions have been corrected.)

- Please clean substrate of dust, debris, moisture, sharp projections, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions.

- Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

- Prime surface of concrete deck with approved primer and allow primer to dry.

(Prime decks as per membrane manufacturers requirements to obtain specified warranty)
► Prevent roofing asphalt and adhesives from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

► Prime surface of concrete deck with asphalt primer and allow primer to dry. Set insulation in ribbons of bead-applied insulation adhesive.

OR

► Wooden Roof Substrate Decks will require insulation to be Mechanically Fastened to the deck with screws and plates per Material Manufacture guidelines.

► Install insulation of like dimensions (1 ½” acceptable) with long joints of insulation in a continuous straight line, with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with insulation.

► Install tapered insulation under area of roofing where tapered insulation was removed. (1” at Lowest Point to 3” at Highest Point).

► Install cover-board.

► Set Cover-board in ribbons of bead-applied insulation adhesive with long joints in continuous straight lines and with end joints staggered between rows. Loosely butt cover boards together.

► Install Self-Adhered Base-Ply:

► Prime cover-board prior to application of Self-Adhered membrane.

► Install Self-Adhered Base-Ply to primed cover-board and press down base with weighted roller.

► Hand Torch laps.

► Install base flashing, where applicable, over cant strips and other sloped and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates.

► Mechanically fasten top of base flashing securely at terminations

► Install New penetration jacks where needed.

► Install Self-Adhered Cap Sheet:

► Install Self-Adhered Cap Sheet to Self-Adhered Base-Ply and press down base with weighted roller.

► Hand Torch laps.

► Install Cap Sheet wall flashing on top of base wall flashings.

► Mechanically fasten top of base flashing securely at terminations

► Seal top termination of wall flashing. (Reinstall parapet wall metal where applicable once completed.)
All metal must be replaced with new and must be natural colored as close to existing as possible. This includes: metal edge, wall metal panels, coping metal and metal details. No raw galvanized. (Parapet Cap Metal to be removed and reused at BLDG 104 ECE)

**For Tile Portions: (Note:)**

(2-Piece Tile for BLDG 11/12 Harshbarger/Mines will be completely new color match Eagle Clay 2-Piece Tile and underlayment.)

(S-Tile for BLDG 20 Engineering will be removed and reused with new underlayment)

- Remove all existing roofing tile and underlayment down to the substrate and dispose of properly.
  - Examine substrates, areas, and conditions for compliance with requirements and other conditions affecting performance of the work. Replace Wood as needed with like material, shape and size
  - Inspect and confirm that all roof openings and penetrations are in place.
  - Please clean substrate of dust, debris, moisture, sharp projections, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions.
  - Prevent materials from entering and clogging roof drains and Gutters and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs/gutter plugs when no work is taking place or when rain in forecast.

- Install new metal Edge (and Bird stop where Applicable) (All metal must be natural colored as close to existing No galvanized)

- Install new Underlayment for Tile.

- Properly Install New Two-Piece Tile double nailed and wired. (Comply with roofing system manufacturer's written instructions.)
  - Install new penetration jacks. Insure that all penetrations and openings are correctly sealed.

- Seal internal gutters located under tile.
  - Clean substrate removing all loose dirt and coating. Rough up surface to assure good adhesion where and if needed.
  - Use Alsan Primer, Alsan and Membrane to line the gutter.
  - Apply first coat of Alsan, embed membrane-reinforcing fabric, and apply second coat of Alsan to completely saturate reinforcing fabric and to obtain a seamless reinforced membrane

**For Standing Seam Metal Roof Portions: (Note:)**

Standing Seem Metal to match that of Old Main Standing Seam Metal and Color) (**Per Historical**)  
(Information Matching Old Main)
Basis-of-Design Product: ATAS International, Inc.; Field-Lok™; FLL135 or a comparable product.

Manufacturer: ATAS International, Inc.
► Material: 24-gauge coated Steel
► Texture: Smooth
► Pan Coverage: 13-1/2"
► Seam Height: 1"
► KYNAR 5000® PDVF or HYLAR 5000® Finish e.
► Custom color to be the same as Old Main

General Spec as Stated: Provide factory-formed metal roof panels designed to be field assembled by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation. Field cutting of sheet metal roofing by torch is not permitted

Remove all existing metal Roof and underlayment down to the substrate and dispose of properly.
► Examine substrates, areas, and conditions for compliance with requirements and other conditions affecting performance of the work. Replace Wood as needed with like material, shape and size.
► Inspect and confirm that all roof openings and penetrations are in place.
► Please clean substrate of dust, debris, moisture, sharp projections, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions.

Install new Underlayment for metal roof (Thera Sheet Underlayment)

Install new manufactured to exact replication of Gutter System (*Herring Hall*)

Install new Metal Roof System.

**Harshbarger/Mines:**

BLDG: 11/12 Harshbarger/Mines will receive two bids;
   A: Bid for the 2-Piece Tile portion estimating at 13,781.37 ft²
   B: Bid for the BUR estimating at 21,694.39 ft²

**Section A:**
*Tile portion will be new tile and new underlayment, double nailed and wire fastened

**Section B:**
*This BUR Re-Roof should include new jacks, new scuppers (if applicable), replace drain rings and clamps (If needed).

Old Engineering: (Historic)

BLDG: 20 Old Engineering will receive three bids;

A: Bid for the S-Tile portion estimating at 10,461.02 ft².

B: Bid for the BUR 14,382.02 ft²

C: Bid for Standing Seem Metal estimating at 4,634.61 ft² (To match that of Old Main Standing Seam Metal and Color) (*Per Historical)

Section A:

*S-Tile for BLDG 20 Engineering will be removed and reused with new underlayment

Section B:

*3rd Floor BUR wood substrate structurally tapered, and insulation is to be Mechanically Fastened by screws and plates.

*2nd Floor BUR requires Tapered Insulation system of 1” at lowest point to 3” at highest and is to be adhered with foam.

*This BUR Re-Roof should include new jacks, new scuppers (if applicable), replace drain rings and clamps (If needed).

Herring Hall: (Historic)

BLDG: 35 Herring will receive 1 bid:

A: Bid for the BUR estimating at 10,461.02 ft².

B: Standing Seem Metal estimating at 5,224.60 ft².

(To match that of Old Main Standing Seam Metal and Color) (*Per Historical)

*Gutters Must Match Existing

ECE (Electronic and Computer Engineering)

BLDG: 104 ECE will receive 1 bid:

A: Bid for the BUR estimating at 55,179.25 ft².

*Parapet Cap Metal to be removed and Reused.

*This BUR Re-Roof should include new jacks, new scuppers (if applicable).

*Replace drain rings and clamps.
Addendum Section 3: Satellite Photos

BLDG 11-12 HARSHBERGER/MINES
End of addendum, all else remains the same.