Upper Occoquan Service Authority

Leader in Water Reclamation and Reuse

14631 COMPTON ROAD, CENTREVILLE, VIRGINIA 20121-2506
(703) 830-2200

June 29, 2021

TO ALL IFB RECIPIENTS:

For UOSA **IFB 21-18, Roof Replacement Services**

SUBJECT: Addendum #1

The above numbered solicitation is amended as set forth below. The hour and date specified for receipt of offers:

| **x** | is not extended;

| | is extended

OFFERORS MUST ACKNOWLEDGE receipt of this Addendum by one of the following methods:

a. By SIGNING and RETURNING (1) copy of this Addendum with the bid or proposal;
b. By acknowledgement of this Addendum on Transmittal Form submitted with the proposal;
c. By referencing its receipt in your Transmittal Letter

If by virtue of this Addendum if you desire to change a proposal already submitted, such change may be made by letter, provided it includes reference to the solicitation and this Addendum and is received prior to the due hour and date specified.

DESCRIPTION OF ADDENDUM:

1. The addition of a safety railing around existing roof hatch has been added. Paragraph 1.2 PROJECT SUMMARY is deleted in its entirety and replaced with Attachment A to this Addendum.

2. Paragraph 1.15 is changed to read "Bidder shall include a schedule that assume a start date of September 1 and provides number of days required to complete each principal task area. Do not factor in bad weather days.

ISSUED BY:

Upper Occoquan Service Authority

Kristen Hylton, Purchasing Mgr — 6/29/2021 Date

ACKNOWLEDGED BY:

Company/Offeror Name

Signature of Authorized Agent

DatePrinted/Typed Name

1.2 PROJECT SUMMARY

A. The project consists of the removal and replacement of the existing roof on Building S-1, approximately 9600 square feet. The original roof was installed in 1978 and recovered with hypolon cover in 1992.

B. The roof replacements will include removal of the existing hypolon cover roof and original gravel surfaced asphalt built-up roofing including all insulations, flashings, drains, metal trims and accessories, shall be removed down to the existing structural roof deck and replacement with a new 3-ply modified bitumen membrane roofing system installed with all associated cover board, insulation, flashings, terminations and trim metals. The Work also includes the addition of an OSHA approved guard rail with gate around the hatch providing access to the roof from the building. The total project roof square footage is approximately 9600 square feet.

C. Unless otherwise indicated, Base Bids shall include 30 year No Dollar Limit Warranty.

D. The Contractor shall maintain a copy of the Project Manual, the Project Drawings, and a copy of all MSDS sheets applicable to the Project on site at all times for the duration of the project.

E. Maintain the existing buildings in watertight conditions throughout this Contract.

1. Do not permit water to build-up on the roof. Provide power hook-up and pumps on the roof as required to remove rain that occurs before the new roofing is completed.
2. Interior of building to be kept free of water entry of <u>ANY</u> amount throughout the entire roof replacement process. All required interior protection of the building must be installed prior to removal of any of the existing roof membrane.
3. The roofing over each roof area shall be phased so as to have no more roof area open and/or under construction than can be made watertight at the end of each workday.

E. The Contractor will follow all applicable safety requirements of Upper Occoquan Service Authority as well as all OSHA and local, State, and Federal requirements.

1. Existing roof system compositions: It is the contractor's sole responsibility, to field verify all existing roof system compositions and conditions that will affect the execution of the work.

<u>Building S/1 – Entire Roof Area</u>

- Existing Structural Metal Roof Deck
- Existing 2 ply felt vapor barrier
- Tapered Perlite Insulation
- 2-Inch Polyisocyanurate Insulation
- 3-4 Ply Asphalt Built-up Roof
- Remnant Gravel Surfacing
- Hypolon Roof Cover
- Guardrail with Gate Installed Around Existing Roof Hatch

G. New roof system composition:

1. Existing deteriorated wood blocking shall be removed and replaced with new treated blocking as required and shown on the roof plans and roof details.
2. All blocking shall match the height of the new roof insulation system and/or shall provide a minimum of 8-inch flashing height as required by the roof system manufacturer.
3. All new blocking shall be fastened to the substrate to meet the specifications.

<u>Building S/1 – Entire Roof Area</u>

- Existing Structural Metal Roof Deck Primed with Manufacturer Approved Asphalt Primer
- New 1-Ply Base Sheet Torch Applied
- New Base Layer of 3-Inch Polyisocyanurate Insulation Adhered with Low Rise Foam Insulation Adhesive
- New 1/4-Inch Per Foot Tapered Polyisocyanurate Insulation Adhered with Low Rise Foam Insulation Adhesive
- New 1/2-Inch Gypsum-Fiber Board Adhered with Low Rise Foam Insulation Adhesive
- New 2-Ply Base Sheet Torch Applied
- New Granular Modified Bitumen Cap Sheet Torch Applied

H. Demolition and Preparation: The following items apply to the roof replacement work.

1. Remove and dispose of the existing gravel surfaced built-up roof system including but not limited to, all insulation and all membrane flashing materials down to the existing structural metal roof deck.
2. Inspect structural metal roof deck for corrosion or damage requiring repair and report the findings to the Owner and Consultant.
3. Asbestos containing material that may be uncovered during the course of the project.

a. No roof sampling for asbestos was performed.
b. Removal and disposal of asbestos containing materials (if required) shall be in accordance with all local, state abnd federal laws.
c. Asbestos containing materials may be present in other areas of the building where work is not directly being performed. The contractor is responsible to ensure that any asbestos containing materrials are not disturbed or damaged and will be responsible for all costs associated with clean up and clearance of the building die to disturbance or damage to asbestos containing materials not included in the scope of work.
d. Upper Occoquan Service Authority may hire a third party to perform air monitoring before, during and after abatement, if required. This in no way relieves the contractor of its own air monitoring reponsibility.
e. Any ACM material that is abated shall be disposed of in accordance with all local, state and federal laws.

4. Remove existing metal copings and edge metals along with associated flashings.
5. Leave existing wood blocking in place unless otherwise noted to be removed. Existing deteriorated blocking shall be removed and replaced at all roof perimeters, roof curbs, expansion joints and all other locations as required by the roof system manufacturer's standard requirements. REMINDER – This is an original roof built in 1978.
    a. Unit prices, as outlined in BID FORM, paragraph B shall be used as an Add/Deduct from the lump sum bid dollar amount. The Contractor's on-site representative shall keep a daily log with running total and before/after photographs of areas of deteriorated wood nailer replacement with daily signatures being obtained from the Owner's on-site project manager.
6. Furnish and install new treated wood blocking as required to accommodate the height of the new roof insulation system and provide a minimum 8-inch flashing height as required to coordinate with new insulation heights. All new blocking shall be fastened to the substrate to meet the specifications. New blocking to match insulation heights and raising of roof curbs shall be included in the Base Bid (Unit Prices shall not apply).
7. Remove all penetration/pitch pockets, their flashing and filler materials. Clean the associated pipes, conduits, angles, etc. for application of new pitch pockets or flashing materials. Prime and paint all elements to at least 2-inchs above finished pitch pocket height before installing filler.
8. Disconnect, raise and reconnect all rooftop ventilator units, fans, ducts and equipment curbs as required to provide a minimum of 8-inch flashing height above the new finished roofing surface.
9. All rusted pipes, curb steel, caps or covers shall be cleaned, primed and painted (prior to flashing) with two coats of exterior, oil-based paint matching existing colors.
10. Mask off adjoining surfaces to prevent spillage or splashing roofing fluids onto other construction.

J. Roof Drainage

1. Using a standard water hose with full pressure water flow, perform a water flow test on all existing drain lines. Should drain leaders be slow to drain (water standing in the pipe) or clogged, notify Owner prior to start of any work. All drain lines shall be fully functional throughout the course of the project.
2. Furnish and install new drain bowl to first elbow, clamping rings, bolts and cast-iron strainers to match existing drain bowl size in accordance with the Contract Documents.

K. New Roof System

1. After proper preparation of the structural metal roof deck, prime the entire roof deck surface with manufacturers approved asphalt primer.
2. Torch apply a new 1-ply base sheet over the entire primed concrete roof deck.
3. Furnish and install one layer of new3-inch polyisocyanurate roof insulation adhered with Low Rise Foam Insulation Adhesive
4. Furnish and install new 1/4-inch per foot tapered polyisocyanurate roof insulation adhered with Low Rise Foam Insulation Adhesive
5. Furnish and install one layer of new ½-inch Gypsum-Fiber Board Adhered with Low Rise Foam Insulation Adhesive
6. Furnish and install a 2-ply torch applied base sheet membrane in accordance with the selected roof membrane manufacturer's requirements. The lap seams of both plies shall be heat welded.
7. Furnish and install a 1-ply torch applied cap sheet membrane in accordance with the selected roof membrane manufacturer's requirements. The lap seams of both plies shall be heat welded.
8. Furnish and install new base flashing and stripping at all walls, curbs, expansion joints, gravel stop edges and other roof penetrations with proper termination as required or shown.
9. Furnish and install new termination bar and metal counter flashings as required or shown.
10. Furnish and install new perimeter metal copings, fascia, edge metal and flashings as required or shown.

L. Roofhatch Guardrail with Gate

1. Guardrail with gate shall be constructed in accordance with OSHA 1910 and IBC 1015 as shown below:

Standards For Fall Protection Requirements On Rooftop Openings

OSHA 1910.28(b)(1)(i) ***[1910.23(a)(4)]***

Except as provided elsewhere in this section, the employer must ensure that each employee on a walking-working surface with an unprotected side or edge that is 4 feet (1.2 m) or more above a lower level is protected from falling by one or more of the following: Guardrail systems; safety net systems; or personal fall protection systems, such as personal fall arrest, travel restraint, or positioning systems.

IBC1015.7 Roof Access:

Guard shall be provided where the roof hatch opening is located within 10 feet (3.05m) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (76.2cm) above the floor, roof or grade
below. **Exception:** Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z359.1 are installed.

Standards for Height and Midrail of Guards

OSHA 1910.29(b)(1) ***[1910.23(e)3(v)(a)]***

The top edge height of top rails, or equivalent guardrail system members, are 42 inches(1.07 m), plus or minus 3 inches (8 cm), above the walking/working surface. The top edge height may exceed 45 inches (1.14 m), provided the guardrail system meets all other criteria of paragraph (b) of this section.

IBC 1015.3 Guard Height:

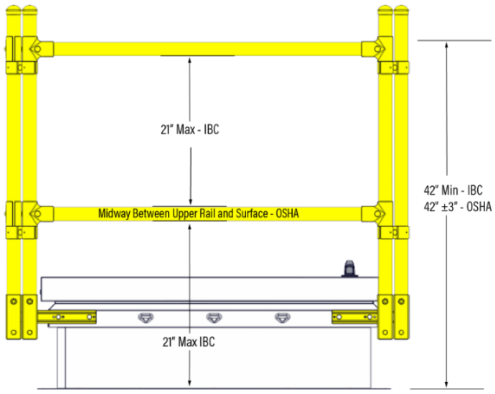
Required guards shall be not less than 42 inches (1.07m) high, measured vertically as follows: From the adjacent walking surfaces.

OSHA 1910.29(b)(2)(i) ***[1910.23 (3)(e)]***

Midrails are installed at a height midway between the top edge of the guardrail system and the walking working surface.

IBC1015.7 Roof Access:

The guard shall be constructed as to prevent the passage of a
sphere 21 inches (53.3cm) in diameter.



Standards for Load-Bearing of Railing

OSHA 1910.29(b)(3) ***[1910.23(e)(3)(iv)]***

Guardrail systems are capable of withstanding, without failure, a **force of at least 200 pounds** (890 N) applied in a downward or outward direction within 2 inches (5 cm) of the top edge, at any point along the top rail.

IBC 1607.8.1

Railings shall be designed to resist **a linear load of 50 lb per linear foot** (plf) (0.73 kN/m) in accordance with Section 4.5.1.1 of ASCE 7, Guardrails and guards shall be designed to resist a **concentrated load of 200 lbs** (890 N) in accordance with Section 4.5.1.1 of ASCE 7.

Intermediate rails shall be designed to resist a concentrated load of 50 lbs (222 N) in accordance with Section 4.5.1.1 of ASCE 7.

OSHA 1910.29(b)(4) ***[1910.23(e)(3)(v)(b)]***

When the 200-pound (890-N) test load is applied in a downward direction, the top rail of the guardrail system **must not deflect** to a height of less than 39 inches (99 cm) above the walking-working surface.

OSHA 1910.29(b)(5)

Midrails, screens, mesh, intermediate vertical members, solid panels, and other equivalent intermediate members are capable of withstanding, without failure, **a force of at least 150 pounds** (667 N) applied in any downward or outward direction at any point along the intermediate member.

Standards for Railing Construction

OSHA 1910.29(b)(6) ***[1910.23(e)(3)(v)]***

Guardrail systems are smooth-surfaced to protect employees from injury, such as punctures or lacerations, and to prevent catching or snagging of clothing.

IBC

IBC does not currently specify diameter sizing for guards, however graspability is stated in **IBC 1014.3.1**

Handrails with a circular cross section shall have an outside diameter of not less than 1-1/4 inches (32mm) and not greater than 2 inches (51mm).

OSHA 1910.29(b)(7) ***[1910.23(3)(e)]***

The ends of top rails and midrails do not overhang the terminal posts, except where the overhang does not pose a projection hazard for employees.

OSHA 1910.29(b)(9) ***[1910.23(e)(3)(ii)]***

Top rails and midrails are **at least 0.25-inches** (0.6 cm) in diameter or in thickness.

Standards for Gates

OSHA 1910.29(b)(13) ***[1910.23(a)(2)]***

When guardrail systems are used around holes that serve as points of access (such as ladderways), **the guardrail system opening: have a self-closing gate** (13)(i) that slides or swings away from the hole, and is equipped with a top rail and midrail or equivalent intermediate member that meets the requirements in paragraph (b) of this section; **or is offset** to prevent an employee from walking or falling into the hole (13)(ii).