

**ADDENDUM
NO. 1**

May 26, 2022

**Zionsville West Middle School Roof Restoration Project
5565 S. 700 E
Whitestown, IN 46075**

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 May 10, 2022, by Technical Assurance. 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 Pages ADD 1 -1 through ADD 1 – 2 Site Phasing Plan, Roof Phasing Plan and attached Technical Assurance Specification Section 07 52 00 – Fluid Applied Roof Coating and Drawing R-102.

A. SPECIFICATION SECTION 00 10 00 – INSTRUCTIONS TO BIDDERS

1. Paragraph 1.18 Time of Commencement and Completion

Revise Subparagraph A.2 to read, “Construction shall be complete no later than September 30, 2022.”

B. SPECIFICATION SECTION 00 20 00 – INFORMATION AVAILABLE TO BIDDERS

Add Paragraph B.

B. Pre-Award Conference will be hosted by The Skillman Corporation per the following schedule via Microsoft Teams. The meeting invitation will be issued following bid opening.

Bid Category 01 – Thursday, June 2, 2022 at 10:00am.

C. SPECIFICATION SECTION 00 12 00 – MULTIPLE CONTRACT SUMMARY

1. Paragraph 1.16 Time of Commencement and Completion

Revise Subparagraph A.2 to read, “Construction shall be complete on September 30, 2022.”

2. Paragraph 3.03 Bid Categories

A. Bid Category No. 1 – Roofing

REPLACE the Following Specification Sections:

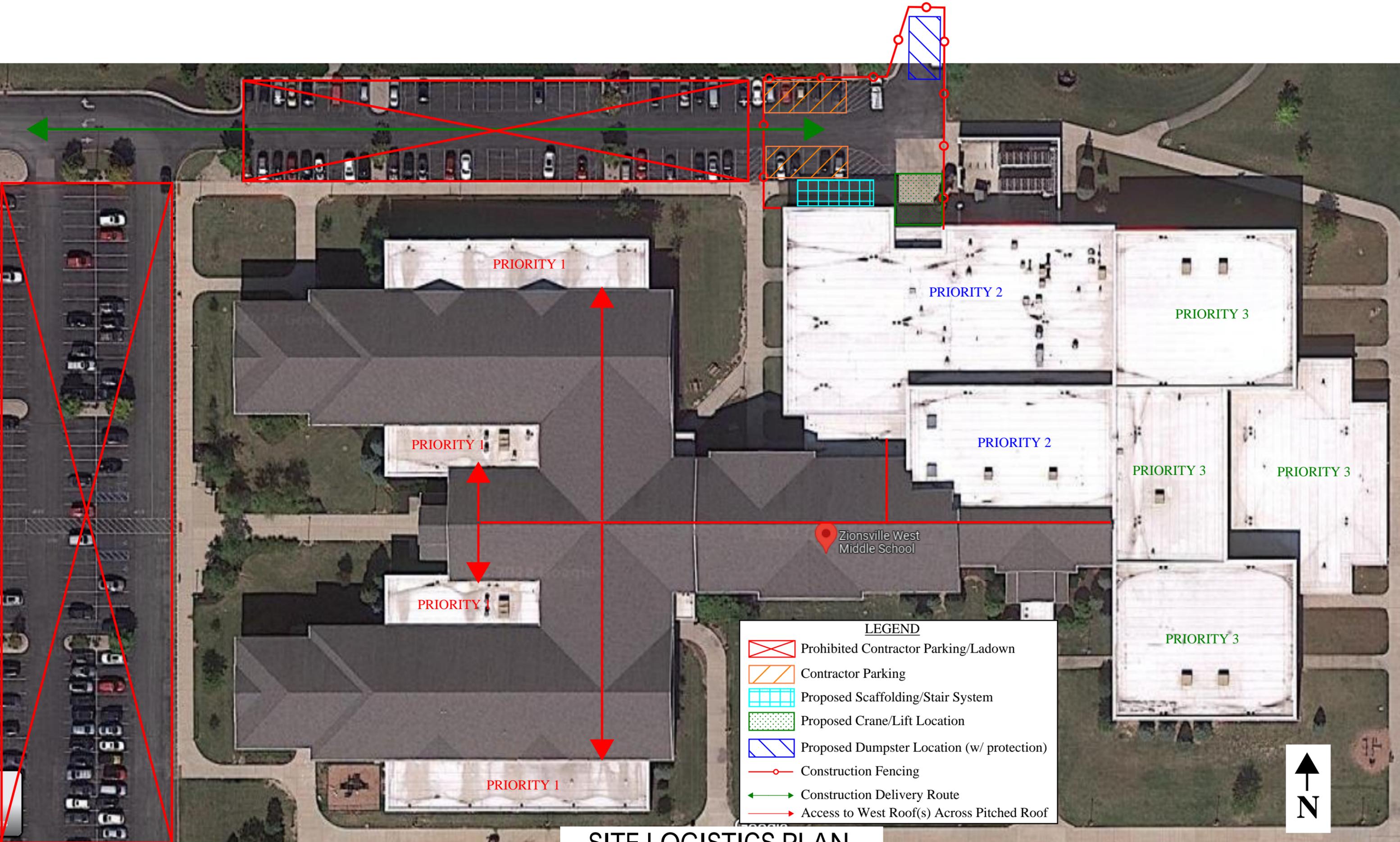
07 52 00 – Fluid Applied Roof Coating

Add the following Project Specific Clarifications:

6. Contractor is prohibited from accessing the interior of the building, unless it is for emergency response, without prior approval from the Owner and Construction Manager.
7. Primary roof access will be a securable (lockable) scaffolding stairway as outlined in the Site Logistics Plan. Secondary roof access can be achieved by extension ladders that are installed for single day use. All ladders and scaffolding are to be locked and secured within the construction fencing at the end of each workday.
8. Contractor is responsible to install charcoal filters at all intake and louver locations to mitigate infiltration of odors associated with the coating application.
9. Water reclamation during cleaning and adhesion testing is conditional dependent on the products being used. Adhesion testing is expected from all manufacturers and/or Contractors. Contractor to plan accordingly and include water reclamation if necessary.
10. Regarding Construction Schedule, it is expected that all submittals begin immediately following Notice to Proceed, anticipated June 14, 2022. Design Team has been instructed to perform an expedited submittal review in order to release materials. Anticipated Work start for mobilization to project site is the week of June 20, 2022. Anticipated Work start for roofing restoration is immediately upon receipt of material, ideally the Week of July 18, 2022. Anticipated Work completion for roofing restoration and demobilization is September 30, 2022, or earlier.

Submittal Submission/Review:	June 14-17, 2022
Mobilize to Site:	June 20, 2022
Start Roofing Repair Work:	June 20, 2022
Coating Material Procurement (4-6 wks):	June 20, 2022 – July 15, 2022
Receive Coating Materials:	July 18-22, 2022
Start Roof Coating Work:	July 18, 2022
Complete Roofing Work:	September 30, 2022

Contractor shall be prepared to discuss the Project Schedule in detail during the Pre-Award Meeting. Discussion will include specifics regarding material lead time and availability, crew sizes, and activity durations.

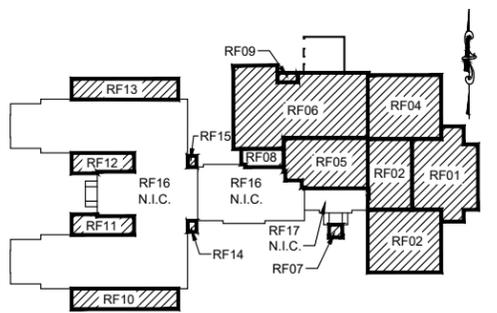


LEGEND

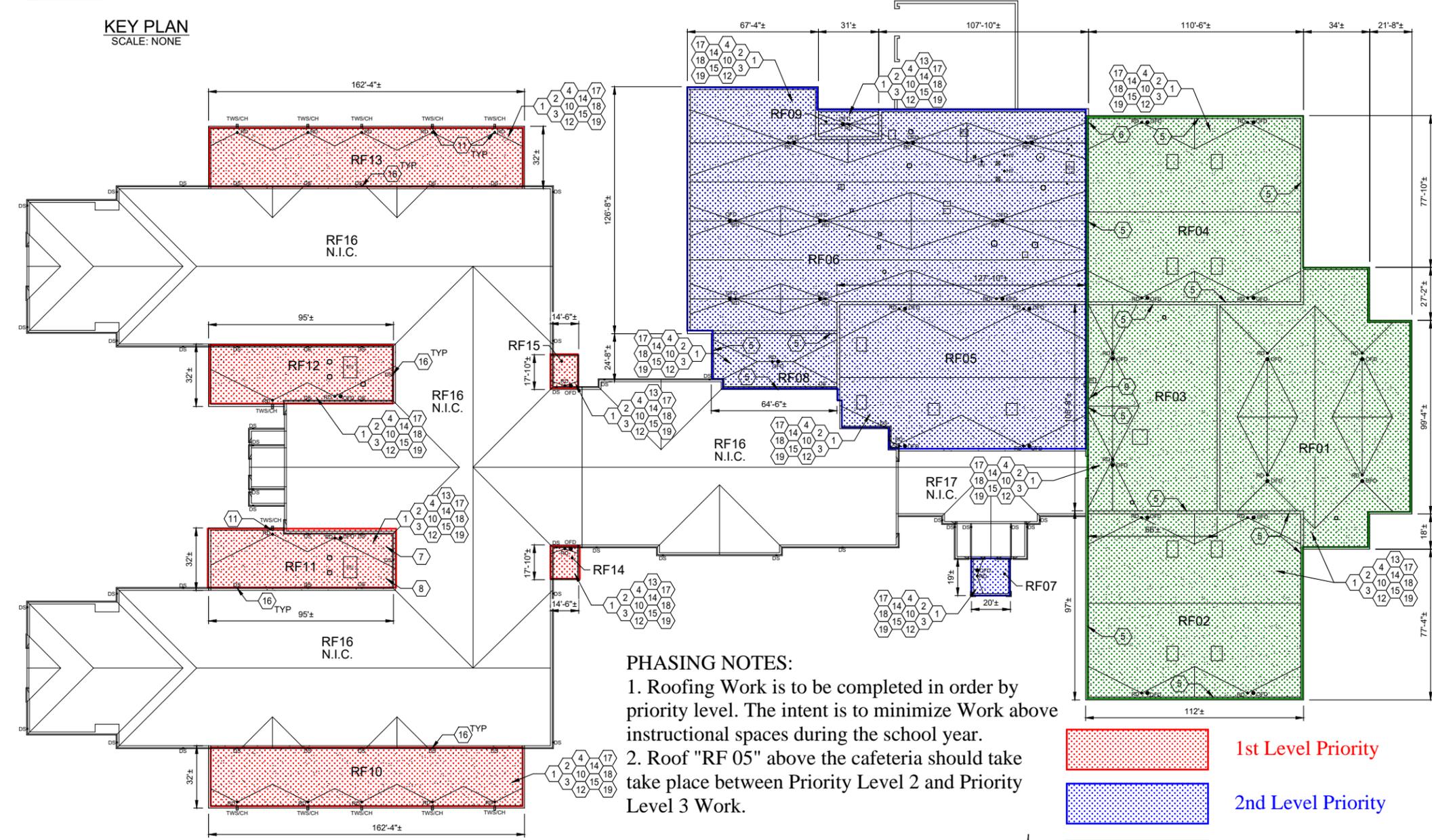
	Prohibited Contractor Parking/Ladown
	Contractor Parking
	Proposed Scaffolding/Stair System
	Proposed Crane/Lift Location
	Proposed Dumpster Location (w/ protection)
	Construction Fencing
	Construction Delivery Route
	Access to West Roof(s) Across Pitched Roof

SITE LOGISTICS PLAN
5/25/22

C:\ZIONSVILLE WEST MIDDLE SCHOOL\A-10-PLANS.DWG



KEY PLAN
SCALE: NONE



PHASING NOTES:
 1. Roofing Work is to be completed in order by priority level. The intent is to minimize Work above instructional spaces during the school year.
 2. Roof "RF 05" above the cafeteria should take place between Priority Level 2 and Priority Level 3 Work.

- 1st Level Priority
- 2nd Level Priority
- 3rd Level Priority

STANDARD ROOF LEGEND

= ITEMS TO BE REMOVED

	ANTENNA BASE
	CHIMNEY
	CONDUIT ON 4x4
	CURB
	DAVIT
	DOOR
	DOWN SPOUT
	EXPANSION JOINT
	ELECTRICAL OUTLET - JUNCTION BOX
	FENCE AND FENCE POST BASE
	HATCH
	HOT STACK
	RTU UNIT OR AC UNIT
	LADDER
	LIGHT FIXTURE
	LIGHTNING ROD AIR TERMINALS
	LIGHTNING CABLE
	LOUVER
	THRU-WALL SCUPPER
	THRU-WALL SCUPPER CONDUCTOR HEAD
	THRU-FASCIA SCUPPER
	PIPE PENETRATION
	PITCH POCKET
	PORTAL CURB
	RAIL BASE
	RAIL CURB
	ROOF DRAIN - OVERFLOW DRAIN
	WALL DRAIN - ROOF FLOOR DRAIN
	SATELLITE DISH
	SKYLIGHT
	SOIL STACK
	SPLASH BLOCK
	STRUCTURAL PEN. AND SUPPORT LEG
	TIE-OFF
	UNIT ON 4x4
	VENT - GRAVITY AND GOOSE NECK
	VENT - MECHANICAL
	CORE CUT - INFORMATION
	NEW WALKWAY
	ADJOINING BUILDING

A ZIONSVILLE WEST MIDDLE SCHOOL ROOF PLAN
SCALE: N.T.S.

SECTION 07 52 00 – FLUID APPLIED ROOF COATING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions, general provisions of the Contract and General and Special Conditions apply to this section.

1.02 REFERENCES

- A. National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual – latest edition.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM D638 Test Method for Tensile Properties of Plastics.
 - 2. ASTM D4541 Method for Pull-Off Strength of Coatings using Portable Adhesion Tester.
 - 3. ASTM E96(A) Test Methods of Moisture Transmission of Material.
 - 4. ASTM E108/ANSI/UL 790 for fire resistance.

1.03 DESCRIPTION OF WORK

- A. Extent of roofing work is specified as below and indicated on the drawings and is hereby defined to include coating systems intended for weather exposure as initial weatherproofing layer to enhance the primary thermoplastic single-ply roofing system.
- B. This project may be executed as one SINGLE PRIME CONTRACT.
 - 1. The Owner reserves the right to award this contract one Single prime Roofing Contractor based upon proposals.
- C. Description of work (refer to drawings) and Summary Section 01 10 00:
- D. Prepare the existing thermoplastic single-ply roof system in its entirety in a careful manner to avoid/minimize damage to the membrane. All materials shall be properly removed and disposed of in a timely manner at the Roofing Contractor's expense
- E. All electrical, mechanical, plumbing and other utilities shall be protected from overspray of applied coating system.
- F. Provide specified primer, fastener, side and end lap treatments and silicone coating system.
- G. Provide miscellaneous flashings and accessories to achieve the specified manufacturer's specified warranty.
- H. Types of roofing referenced in this section include:
 - 1. Silicone coating system over the existing thermoplastic single-ply roofing membrane.

2. Flashing, sheet metal, sealants and roof accessories related to this work are specified in other Division 7 sections.

1.03 GENERAL WORK ITEMS FOR ALL LOW SLOPE ROOF AREAS:

- A. Power roof membrane to remove loose debris.
- B. Remove and reinstall condensate drain lines, conduit, etc. to allow application of coating system.

1.04 GENERAL ROOF SYSTEM REQUIREMENTS

- A. Provide a silicone coating system with a minimum 45 dry mil thickness installed per the manufacturer's requirements and the intent of these specifications.

1.05 QUALITY ASSURANCE

- A. Manufacturer: Obtain primary coating roof system from a single manufacturer. To participate as a qualified company in production of coating, the company must have a minimum of five (5) years experience as the sole manufacturer of the brand named. The manufacturer shall also furnish a notarized certification that he has been in business and had roofs installed for a minimum of five years.
- B. All related components of the coating system shall be compatible and by the same manufacturer where possible.
- C. Manufacturer shall provide qualified technical representatives as required for purposes of advising Installer of procedures and precautions for use of coating materials.
- D. Installer: A firm certified by the coating manufacturer to install their products for the warranty period specified.
- E. Pre-Roofing Conference: Prior to installation of roofing and associated work, a meeting shall be held at the site including the Roofing Contractor, system manufacturer, Owner's representative and other entities concerned with roofing performance, Construction Manager, Consultant and Owner.
- F. UL Listing: Provide labeled materials that have been tested and listed by UL 790 for application indicated with a Class "A" rating.
 1. Entire roof system shall be listed as a Class A Assembly as well as individual components.

1.06 SUBMITTALS

- A. Product Data: Submit specifications, installation instructions and general recommendations from manufacturers of coating system materials to include the types of primer, lap treatments and coating required. Include any data requiring special application considerations by the manufacturer.
- B. Material List: A complete listing of all products intended for use on the project shall be submitted. List shall include all accessories to be incorporated into the finished roof system.

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

- C. Package and Labels: Deliver materials in sealed package, manufacturer's original labels thereon. Do not remove labels or open packages until the Consultant and Construction Manger certifies them. All materials must have MSDS and be labeled as "asbestos free".
- D. Product Handling: Use all means necessary to protect all materials before, during and after installation. Storage outside on skids and covered with tarps will be permitted if securely tied at sides (no material visible) and sufficiently above ground to eliminate any water damage. No wet insulation will be installed under any conditions.
 - 1. **NOTE:** Poly wrap is not considered proper protection. A breathable waterproof tarp must also be used to prevent condensation.
 - 2. **NOTE:** Shipping wrap and packaging is not considered proper protection.
 - 3. The coating materials are temperature sensitive.
 - a. Store materials at a minimum of 50 degrees F prior to use or as otherwise recommended by the manufacturer.
 - b. Protect materials from freezing.
 - c. Protect materials from prolonged exposure to temperatures exceeding 100 degrees F.
- E. All roofing equipment shall be placed so that the building or premises will not be damaged. The Roofing Contractor shall be responsible for cleaning the building walls. At no time shall any materials be thrown from the roof.
- F. The Roofing Contractor is to coordinate with TA, the construction manager, and owner to notify occupants of an overspray risk. The Roofing Contractor shall demarcate an area sufficient to prevent overspray damage to occupant's personal property or owner's property.
- G. In the event of damage, immediately make all repairs and replacement necessary to the Construction Manager's approval and at no additional cost to the Owner. Roofing Contractors shall list and document any and all damage prior to the start of their work and file it with the Owner, Construction Manager and Consultant.

1.07 JOB CONDITIONS

- A. Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Workers: All workers shall be thoroughly experienced in the particular class of work employed on this project and all materials shall be securely fastened in place in a watertight, neat and workmanlike manner. All work shall be done in accordance with these specifications and shall meet the approval in the field of the Owner's Representative, Construction Manager and Consultant.
 - 1. The Roofing Contractor's Representative or Job Superintendent shall have a complete copy of specifications and drawings on the job site at all times.
- C. The Roofing Contractor shall plan and conduct the operations of the work so that each section started on one day is complete and thoroughly protected before the close of that day.

- D. Fume Control: Roofing Contractor is to provide fume control on all air intake equipment to prevent fumes from entering the building.

1.08 WRITTEN GUARANTEE

- A. The Roofing Contractor and the coating material manufacturer shall furnish to the Owner the specified written guarantee on the complete coating installation. The guarantee shall be sent in triplicate to Owner's Associate Consultant and Construction Manager for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner, Construction Manager and Consultant.
 - 1. Manufacturer Warranty: 10 years
 - 2. Roofing Contractor Guarantee: 2 years
- B. The Roofing Contractor two (2) year workmanship guarantee shall cover all work items not covered under Manufacturer's warranty. The guarantee shall be sent in triplicate to Owner's Associate Consultant and Construction Manager for review and filing. Said Guarantee shall begin when the project is completed and accepted by the Owner, Construction Manager and Consultant.
- C. The Guarantee shall cover, at no cost to the Owner, all labor and materials required to repair or replace coating work against leaks or faulty workmanship. All costs for any of the above shall be absorbed by the Roofing Contractor primarily and materials manufacturer secondarily.
- D. The Manufacturers and Roofing Contractor Guarantees shall include the following:
 - 1. Warranty shall cover 100% of all labor and materials including all accessories incorporated into the finished roof system. No exclusions will be allowed.
- E. Recommended Manufacturers Maintenance Guide/Instruction's: In addition to the guarantee, the Roofing Contractor shall furnish to the Owner, the Manufacturer's printed recommendations for proper maintenance of the specified roof system, including, inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

1.09 INSPECTION

- A. During application of the materials, the Roofing Contractor shall have the manufacturer's representative accompanied by the Consultant and Construction Manager on the job site for job meetings as required.
- B. Upon Completion, a final inspection will be made by the Consultant, Construction Manager, a representative of the Owner, the material representative and the Roofing Contractor. No final payment will be authorized for work done until such assessment has been made and all work is found to have been performed in accordance with the Specifications, manufacturer's requirements and to the satisfaction of the Consultant, Construction Manager and Owner.

- C. The approved Manufacturer shall make site visits to the job during construction and after construction by a Certified Technical Representative of the Company. Sales Representative site visits will not be considered an official Technical site visit.
1. **Site visits** shall include attendance at the following:
 - a. Preconstruction meeting
 - b. Project mid-point inspection
 - c. Final Inspection
 - d. 18-month warranty inspection
 2. Site visit reports shall be provided to Owner, Construction Manager and Consultant.
 3. Manufacturer shall provide an Inspection Report for each site visit and for each separate roof area.
 - a. Reports shall be distributed to Owner, Construction Manager and Consultant.
- D. The Roofing Contractor acknowledges that TA will conduct the assessment stated below and any deficiencies found related to workmanship will be repaired by the Roofing Contractor at no cost to TA, construction manager or the owner.
1. 18-month warranty inspection
- E. The Owner, Construction Manager and Consultant must be notified 48 hours prior to the Roof Membrane Manufacturer's Final inspection and be present. A letter of the inspection results must be issued by the manufacturer representative to the Owner, Construction Manager and Consultant.
1. Failure to properly notify the Consultant and Construction Manager of the manufacturer's inspection could be caused to require a re-inspection of the project.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Basis of Design: 502MS Karna-Flex, 180 Karna-Sil Epoxy Primer, and 670HS Karna-Sil Ultra, By Karnak Corp., manufactured and tested to meet the following criteria:
1. 502MS Karna-Flex
 - a. ASTM D412, ASTM D2824, ASTM G155 and ASTM D2939
 - b. VOC Content: <490 g/l
 - c. FBC (HVHZ) TAS139
 2. 180 Karna-Sil Epoxy Primer
 - a. VOC Content: Part A: 0 g/l and Part B: <100 g/l
 3. 670HS Karna-Sil Ultra
 - a. ASTM D2370, ASTM D624

- B. Subject to compliance with requirements, products that may be incorporated in the work include, but are not limited to the following:
 - 1. Approved manufactured equivalent (acceptable to, or recommended by, the roof system manufacturer).
- C. Provide products recommended by manufacturers to be fully compatible with the various components of the existing thermoplastic single-ply roof system.
- B. Comply with Quality Assurance, References, specification, and Manufacturer's Data. Where conflict may exist, more stringent requirements govern
- C. No asbestos containing material shall be allowed on this project.

2.02 APPROVED ROOF MEMBRANE AND MANUFACTURER'S SYSTEMS

- A. Coating Manufacturers
 - 1. Karnak Corp.
 - 2. Gaco Western
 - 3. Progressive Materials
 - 4. Sherwin-Williams (Uniflex)
 - 5. Sika
- B. Substrate Preparation
 - 1. Karnak Corp.
 - a. 2,000 psi minimum power wash equipment
 - b. 799 Wash-N-Prep Roof Cleaner
 - 2. Gaco Western
 - a. 3,000 psi minimum power wash equipment
 - b. GacoFlex GacoWash Concentrated Cleaner
 - 3. Progressive Materials
 - a. 2,000 psi minimum power wash equipment
 - b. P-120 Rinseable Cleaner
 - 4. Sherwin-Williams (Uniflex)
 - a. 2,000 psi minimum power wash equipment
 - b. Bond-It Wash Primer

5. Sika
 - a. 2,200 psi minimum power wash equipment
 - b. Uline Simple Green Cleaner
- C. Seam/penetration/repair Sealer
 1. Karnak Corp.
 - a. Karna-Flex WB
 - b. 5540 Resat-Mat
 2. Gaco Western
 - a. GacoFlex SF2000 Seam Seal
 - b. GacoFlex 66-S Polyester Tape
 3. Progressive Materials
 - a. PF 200 Series Polyester Fabric
 - b. FG 400 Silicone Flashing Grade Sealant
 4. Sherwin-Williams (Uniflex)
 - a. Uniflex Polyester Fabric
 - b. Silicone 44-900 Flashing Sealant
 5. Sika
 - a. Sika Flexitape Heavy
 - b. Sikalastic-500 Flashing Sealant
- D. Primer
 1. Karnak Corp.
 - a. 180 Karna-Sil Epoxy Primer
 2. Gaco Western
 - a. GacoFlex E-5320 Epoxy Primer
 3. Progressive Materials
 - a. PF-151 Single Ply Primer

4. Sherwin-Williams (Uniflex)
 - a. Bond-It Wash Primer
 5. Sika
 - a. Sikalastic-503 Primer
- E. Coating
1. Karnak Corp.
 - a. 670HS Karna-Sil Ultra
 - b. Color: To be selected by the owner
 2. Gaco Western
 - a. GacoFlex S-20 Series Silicone Coating
 - b. Color: To be selected by the owner
 3. Progressive Materials
 - a. Pro-EcoSil HS 3200 Series
 - b. Color: To be selected by the owner
 4. Sherwin-Williams (Uniflex)
 - a. Silicone 44 Rubberized Silicone Roof Coating
 - b. Color: To be selected by the owner
 5. Sika
 - a. Sikalastic-500
 - b. Color: To be selected by the owner

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify the surfaces and site conditions are ready to receive work
- B. Verify deck/substrate opening, curbs, and protrusions through deck/substrate are in place and solidly set
- C. Verify deck/substrate is structurally supported, secure and sound

3.02 SURFACE PREPARATION

- A. Verify that substrate is clean, dry and free of substances that could affect bond.
- B. Remove heavy deposits of dirt and other debris from the roof using a broom.
- C. Inspect roof for open joints, laps, damage, etc. and repair membrane so water does not enter the building.
- D. Pressure wash roof with water and concentrated cleaner and allow to dry completely.
 - 1. Allow solution to stand for 10-15 minutes, adding a light mist of water to prevent drying. While solution is curing, lightly agitate any heavily soiled areas with a broom or brush.
 - 2. Use a commercial power washer to effectively remove debris and continue rinsing until all suds are gone. Start at the lowest point in the roof and work to highest.
 - 3. It is very important to keep the surface wet until all of the concentrated wash solution has been completely rinsed off.
- E. Allow surfaces to thoroughly dry to prevent blistering. Examine roof, paying particular attention to areas of physical damage to determine that residual water has in fact dried.
- F. The final substrate for waterproofing shall be clean, dry, free of loose, spalled or weak material including coatings, oil, grease, contaminants, abrupt changes in level, waterproofing agents, curing compounds, and free of projection which could damage membrane materials.
 - 1. Coordinate and complete adhesion testing of fluid-applied roof system; adhesion testing shall be performed by the roof system manufacturer.
 - a. Adhesion testing shall be utilized to determine the amount of additional preparation work needed for the substrate conditions, and type and amount of primer to be utilized overtop the deck surface.

3.03 INSTALLATION

- A. Seams, penetrations and Repairs
 - 1. Apply 1 coat of specified sealer as specified by manufacturer
 - 2. Embed specified reinforcement material and remove any wrinkles or fishmouths
 - 3. Apply 1 coat of specified sealer leaving none of the reinforcement material visible
- B. Primer
 - 1. Apply 1 coat of specified primer at a rate of one (1) gallon per 300 sq. ft.
- C. Coating System
 - 1. Do not apply coating when moisture is present or if rain is expected before coating will properly cure.

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

2. Coating must cover all surfaces completely. An extra pass of coating material may be required at all edges, penetrations and vertical surfaces.
3. Primer shall be allowed to cure before proceeding with subsequent applications.
4. All coating and primers shall be installed within recommended time period.
5. Finish coating minimum thickness shall be 45 dry mils
6. Apply topcoat at a rate of three (3) gallons per 100 square feet; at all edges and penetrations, an extra pass must be applied.
7. The topcoat must completely cover the primer. For this reason, the primer shall be of a contrasting color to the topcoat.
8. No traffic is allowed on the surface for a minimum of 3 days.

3.03 WEATHER CONDITIONS AND CAUTIONS

- A. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations. The Roofing Contractor shall have on site covering materials and shall take all necessary precautions to protect the Owner's property.
- B. Do not allow waste products of petroleum, grease, oil and solvents to come in contact with the roofing system.

3.04 PROTECTION AND CLEAN UP

- A. It shall be the Roofing Contractor's responsibility to protect all property and surfaces from drippings by means of masking, shielding or screening. Any drippings adhering to surfaces not intended to receive materials, the Roofing Contractor to the satisfaction of the Owner shall remove including automobiles.
- B. During the course of the job, the Roofing Contractor shall maintain good housekeeping practices. Debris shall not be allowed to accumulate but will be removed from the site on a daily basis. At the completion of the job, all areas shall be left clean to the satisfaction of the Owner's representative.

3.05 INTENT OF SPECIFICATIONS

- A. It is the intent of these specifications to call out the performance criteria desired for the roof coating system on this project.
- B. It is the Roofing Contractor's responsibility to make all measurements and supply materials for all areas on the project as specified, including all changes made in writing prior to the bid.
- C. The Roofing Contractor shall also be responsible for providing approved drawings and details meeting the manufacturer's requirements so that a warranty will be issued upon completion.
- D. This specification shall cover all roof areas and related items necessary to complete the roofing project and must accommodate any current detail changes or deviations by the manufacturer necessary to insure that the Warranty will be issued as specified upon completion.

END OF SECTION