



**Highland Falls-Fort Montgomery Central School District  
Additions & Alterations to Fort Montgomery Elementary School  
SED Control No. 44-09-01-04-0-005-008  
BCA Project No. 2022-138 PH1**

**Addendum No. 4  
July 25, 2024**

This addendum is hereby made part of the Contract Documents as though it were originally included therein. It modifies the following documents:

Original Project Manual and Drawings dated 6/21/2024.  
Addendum No. 1 dated 7/2/2024.  
Addendum No. 2 dated 7/12/2024.  
Addendum No. 3 dated 7/17/2024.

All Bidders must acknowledge receipt of this Addendum in the space provided on the Form of Proposal.

**GENERAL CLARIFICATIONS:**

1. Can we have the bid date extended?  
*ANSWER: Yes, refer to the updated Notice to Bidders section for the revised bid date.*
2. Can we get some clarification on who is providing and installing the kitchen hood? Drawing M100 says Kitchen Hood by others. Drawing A300 says Kitchen Hood by M-Contractor?  
*ANSWER: The Hood is furnished and installed by the Food Service subcontractor under the GC Prime. MC to provide roof top exhaust fans, ductwork, and mechanical connections to the hood.*
3. 011100 spec references Garland DBS requirements, and bidding procedures. Is the roofing scope of work being bid through Garland DBS or the GC contract?  
*ANSWER: The roofing scope of work is being bid through the GC contract. Garland is the basis of design for the new addition roof.*
4. Detail 6 on A410 shows the vapor barrier directly to the metal deck. The roof conditions legend on A400 for Roof 6 also calls for the vapor barrier on the deck with a 1/2" coverboard above it. Spec 075200 calls for a cold applied vapor barrier. The 075200 cannot be adhered directly to metal decking. There must be a substrate board anchored to the deck in order to install the specified vapor barrier. Please advise?  
*ANSWER: The specified Garland Vapor Smart vapor barrier sheet is designed to be applied directly to the metal deck. No 1/2" underlayment board is required. (Metal deck, vapor smart vapor barrier applied directly to the metal deck, then insulation on top, finished with the 1/2" coverboard and membrane system specified.)*

5. Please confirm that Roofs 1-5 are being patched and flashed back in with Carlisle EPDM to maintain the existing roof warranty. There are no EPDM flashing details shown on A410.  
*ANSWER: Yes, existing roofs 1-5 are being modified per the scope of work on the contract documents. The existing system is a Carlisle single-ply EPDM system. The warranty is still active. Any roof modifications required are to comply with Carlisle's standard roof details.*
  
6. Per Addendum 3 print E400, the MTS that is requested is a SALIENT MODEL NUMBER MTSWC08D33XMR800V RM K35P MANUAL TRANSFER SWITCH (MTS). The one-line shows this piece of equipment having a 800A breaker, however this device is only available with fuses. Is this acceptable or would an alternate equal with a breaker be preferred?  
*ANSWER: Fuses within the MTS are acceptable.*
  
7. Drawing E400 - Electrical Diagrams - the electrical one-line diagram for new work shows an Approved CT Cabinet and Meter Socket in two separate locations. One is shown as being provided in H-MDP and the other looks to be on the exterior of the building. Orange & Rockland Utilities requires all Metering Equipment to be installed on the exterior of the building.  
*ANSWER: The CT cabinet is to be installed within the switchgear. The Utility Meter is to be installed on the exterior of the electrical room wall.*
  
8. EL100 calls for the telecomm conduits to be run direct from the existing utility pole to the new MDP. On EL500 detail calls for the telecomm and secondary service conduits to be run in the same trench, please clarify the route the telecomm should be run.  
*ANSWER: Telecom Conduit to be run to the electric room where it will stub up on an empty wall.*
  
9. Is MC cable allowed for branch circuits?  
*ANSWER: Yes, MC cable is allowed for branch circuits.*
  
10. Who owns the pad mounted transformer and transformer concrete base?  
*ANSWER: Transformer by Utility, Pad by EC.*
  
11. In vestibule-2 note L8 there are exterior illuminated letters. Who will be providing these fixtures?  
*ANSWER: GC to provide illuminated letters. EC to provide power connection to fixtures.*
  
12. Drawing E400 One-Line Diagram shows a new utility pole. Drawing El 100 shows the utility Pole to be existing. Is there a new utility pole for this project?  
*ANSWER: No, the existing utility pole will remain and be utilized.*
  
13. Drawing E203, Keynote P19 states to provide Data Rack 7 Data Equipment required to provide network connectivity to building expansion. Spec Section 27 15 lists the types of equipment. Please provide details of what equipment the District would like installed in the Rack.  
*ANSWER: Refer to new specification section 27 1100 Equipment Room Fittings.*

14. On 2/A300 & 2/A302 references 18 ga. material at the soffits and nothing is referenced in specification 09 2116 and sheet AS001 say to reference the specifications. What gauge is to be used for interior metal framing?

*ANSWER: 18 gauge for soffits or walls that do not extend to the deck above. 20 gauge for standard interior walls. Braced as required by the manufacturer.*

**NEW SPECIFICATION SECTIONS TO THE PROJECT MANUAL:**

- A. **ADD** Specification Section 01 6000 *Product Requirements. (This specification is to be added to the Table of Contents).*
- B. **ADD** Specification Section 07 2100 *Thermal Insulation. (This specification is to be added to the Table of Contents).*
- C. **ADD** Specification Section 07 8100 *Applied Fire Protection. (This specification is to be added to the Table of Contents).*
- D. **ADD** Specification Section 27 1100 *Equipment Room Fittings. (This specification is to be added to the Table of Contents).*

**REVISIONS TO THE PROJECT MANUAL:**

- A. Refer to Notice to Bidders; **DELETE** in its entirety and **REPLACE** with the following, attached Notice to Bidders.
- B. Refer to Form of Proposal *Contract 01 – General Construction*; **DELETE** in its entirety and **REPLACE** with the following, attached Form of Proposal *Contract 01 – General Construction*.
- C. Refer to Specification Section 01 1000 *Summary – Multi Contract*; **DELETE** in its entirety and **REPLACE** with the following, attached Specification Section 01 1000 *Summary – Multi Contract*.
- D. Refer to Specification Section 01 2100 *Allowances*; **DELETE** in its entirety and **REPLACE** with the following, attached Specification Section 01 2100 *Allowances*.
- E. Refer to Specification Section 07 2119 *Foamed-In-Placed Insulation*; **DELETE** in its entirety and **REPLACE** with the following, attached Specification Section 07 2119 *Foamed-In-Placed Insulation*.
- F. Refer to Specification Section 08 5113 *Aluminum Windows*; **DELETE** in its entirety and **REPLACE** with the following, attached Specification Section 08 5113 *Aluminum Windows*.
- G. Refer to Specification Section 09 6566 *Resilient Athletic Flooring*; **DELETE** in its entirety and **REPLACE** with the following, attached Specification Section 09 6566 *Resilient Athletic Flooring*.

**RE-ISSUED CONTRACT DRAWINGS:**

- A. Refer to Drawing A900 – TYPICAL TRANSITIONS, MATERIALS AND ROOM FINISH SCHEDULE: **DELETE** Drawing in its entirety and **ADD** new drawing A900 attached to this addendum. *(This drawing is to be added to the Cover Sheet Drawing Index).*

**END OF ADDENDUM**

Please do not hesitate to contact me with any questions on this addendum, thank you.

Respectfully Submitted,

**BCA ARCHITECTS & ENGINEERS**



**Maxwell Bendert, AIA, NCARB**

Associate/Project Manager/Architect



**SECTION 01 6000  
PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations.
- F. Procedures for Owner-supplied products.
- G. Maintenance materials, including extra materials, spare parts, tools, and software.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- B. Section 01 7419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.

**1.03 SUBMITTALS**

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

**PART 2 PRODUCTS**

**2.01 EXISTING PRODUCTS**

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

**2.02 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Asbestos Free Materials: All materials used for construction shall be free of asbestos containing materials. If asbestos is found in installed products, it will be the responsibility of the contractor to abate the asbestos containing material and replace the work with asbestos free materials at no cost to the Owner in compliance with the requirements of the Contract Documents.
- C. Use of products having any of the following characteristics is not permitted:
  - 1. Made using or containing CFC's or HCFC's.
  - 2. Containing lead, cadmium, asbestos, or pcbs.

- D. Where other criteria are met, Contractor shall give preference to products that:
  - 1. If used on interior, have lower emissions.
  - 2. If wet-applied, have lower VOC content.

### **2.03 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

### **2.04 MAINTENANCE MATERIALS**

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

## **PART 3 EXECUTION**

### **3.01 SUBSTITUTION LIMITATIONS**

- A. Architect will consider requests for substitutions as outlined herein and as described in the General Conditions of the Contract for Construction.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- D. A request for substitution constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Owner and Architect for review or redesign services associated with re-approval by authority having jurisdiction.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
  - 1. Submit one copy of request for substitution for consideration. Limit each request to one proposed substitution. Provide all information as required under Section 01 3000 - Administrative Requirements, and Section 3.4.4. of the General Conditions of the Contract for Construction.
  - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence as outlined in Section 01 3000 - Administrative Requirements. Burden of proof is on proposer. When colors are preselected and noted on the drawings or in the specifications, the substitution form will include proposed substitute color palette.
  - 3. The Architect will notify Contractor in writing of decision to accept or reject request.

### **3.02 OWNER-SUPPLIED PRODUCTS**

### **3.03 TRANSPORTATION AND HANDLING**

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.

- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
  - 1. Arrange for delivery of materials and equipment during the hours of the day established by the Construction Manager and Owner.
  - 2. Have workers available to receive and unload materials and equipment delivered to the site. Do not deliver, or have delivered, any materials and equipment to the site unless such forces are available.
  - 3. Owner's personnel are not authorized to sign for receipt of Contractor's material or equipment, nor will they accept the Contractor's materials or equipment.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.04 STORAGE AND PROTECTION**

- A. Provide protection of stored materials and products against theft, casualty, or deterioration.
- B. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
  - 1. Structural Loading Limitations: Handle and store products and materials so as not to exceed static and dynamic load-bearing capacities of project floor and roof areas.
- C. Store and protect products in accordance with manufacturers' instructions.
- D. Neatly pile, store, protect, and secure materials and equipment in locations where directed by the Construction Manager and Owner.
- E. Store with seals and labels intact and legible.
- F. Arrange storage of materials and products to allow for visual inspection for the purpose of determination of quantities, amounts, and unit counts.
- G. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- H. For exterior storage of fabricated products, place on sloped supports above ground.
- I. Provide off-site storage and protection when site does not permit on-site storage or protection.
- J. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- K. Comply with manufacturer's warranty conditions, if any.
- L. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- M. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- N. Prevent contact with material that may cause corrosion, discoloration, or staining.
- O. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

- P. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
- Q. Do not store volatile liquids inside Owner's building or within Work area.



SAMPLE

APPLICATION FOR REVIEW OF SUBSTITUTE MATERIAL OR EQUIPMENT

PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_

CONTRACTOR NAME: \_\_\_\_\_

ITEM  
DESCRIPTION: \_\_\_\_\_

ARCHITECT/ENGINEERING SPECIFICATION OR DRAWING REFERENCE: \_\_\_\_\_

We hereby propose to substitute the following item of material or equipment in lieu of that as originally specified for the above-referenced project. We certify that this substitution, if accepted, will meet the intent of the original design and be equal to that as specified in quality and performance.

The acceptance of this application will not affect the completion of our work in accordance with the Contract Agreement and will not in any way, directly or indirectly, cause additional cost to the Owner. In addition, we accept complete responsibility to perform all additional work, make any necessary modifications and will absorb all costs of any related changes imposed on other contractors resulting from the acceptance of this substitution.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
SIGNATURE

APPLICATION FOR REVIEW OF SUBSTITUTE MATERIAL OR EQUIPMENT

SUMMARY OF PROPOSED SUBSTITUTES

Variations of proposed substitute from specified: (Provide written summary and document with supporting manufacturer's data and attach.)

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Modifications required as a result of the substitution: (If the substitute requires modifications to structure, piping, layout, electrical, etc. Attach details of proposed modifications necessary to accommodate the substitute.)

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(The review and acceptance of this Application does not relieve the Contractor from responsibilities of any unforeseen modifications resulting from this Application.)

Estimate of costs resulting from application:

Claims from other Prime Contractors \$ \_\_\_\_\_

Credit to Owner as a result of this substitution \$ \_\_\_\_\_

\* The time required by the Architect/Engineer to review this application and making the required changes in the Contract Documents shall be recorded. The Contractor shall reimburse the Owner for the Architect/Engineer's charges for evaluating this Application

**SECTION 07 2100  
THERMAL INSULATION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Board insulation and integral vapor retarder at cavity wall construction, perimeter foundation wall, underside of floor slabs, and exterior wall behind exterior wall finish.
- B. Batt insulation in wall, ceiling, and roof construction.

**1.02 RELATED REQUIREMENTS**

- A. Section 05 4000 - Cold-Formed Metal Framing: Board insulation as wall sheathing.
- B. Section 06 1000 - Rough Carpentry: Supporting construction for batt insulation.
- C. Section 07 8400 - Firestopping: Insulation as part of fire-rated through-penetration assemblies.
- D. Section 09 2116 - Gypsum Board Assemblies: Acoustic insulation inside walls and partitions.

**1.03 REFERENCE STANDARDS**

- A. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2023.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023b.
- C. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2022a, with Editorial Revision (2023).

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal process.
- B. Provide product data on product characteristics and performance criteria.
- C. Manufacturer's Installation Instructions: Include information on special environmental conditions required for installation and installation techniques.

**PART 2 PRODUCTS**

**2.01 APPLICATIONS**

**2.02 FOAM BOARD INSULATION MATERIALS**

- A. Foundation Insulation: Extruded polystyrene board insulation with cut cell surfaces with the following characteristics:
  - 1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.
  - 2. Smoke Developed Index: 165 or less, when tested in accordance with ASTM E 84.
  - 3. Thermal Resistance: 5.0 per inch.
  - 4. Board Size: 48 inches x 96 inches.
  - 5. Board Edges: Square.
  - 6. Compressive Resistance: 40 psi.
  - 7. Water Absorption, maximum: 0.3 percent, volume.
  - 8. All extruded polystyrene insulation material shall be manufactured with HCFC or other CFC-free blowing agents.
  - 9. Manufacturer: Highload 40 Brand by The Dow Chemical Company or approved equal.
- B. Continuous Exterior Wall, Metal and Wood Framing: Extruded polystyrene board insulation with closed cell structure with the following characteristics:
  - 1. Smoke Developed Index: 165 or less, when tested in accordance with ASTM E 84.
  - 2. Thermal Resistance: 5.0 per inch.
  - 3. Board Size: 16 inches x 96 inches.
  - 4. Board Thickness: Minimum 2 inches or as indicated on the Contract Drawings.
  - 5. Board Edges: Square.
  - 6. Compressive Resistance: 25 psi.

7. Water Absorption, maximum: 0.3 percent, volume.
  8. All extruded polystyrene insulation material shall be manufactured with HCFC or other CFC-free blowing agents.
  9. Manufacturer: Cavitymate Plus by the Dow Chemical Company or approved.
- C. Masonry Cavity Wall Systems: Extruded polystyrene board insulation with closed cell structure with the following characteristics:
1. Flame Spread Index: 15, when tested in accordance with ASTM E84.
  2. Smoke Developed Index: 165 or less, when tested in accordance with ASTM E 84.
  3. Thermal Resistance: 14 per inch.
  4. Board Size: 16 x 96 inch.
  5. Board Thickness: Minimum 2.5 inches or as indicated on the Contract Drawings.
  6. Board Edges: Square.
  7. Compressive Resistance: 25 psi.
  8. Water Absorption: Water Absorption, maximum: 0.3 percent, volume.
  9. All extruded polystyrene insulation material shall be manufactured with HCFC or other CFC-free blowing agents.
  10. Manufacturer: Cavitymate Ultra by the Dow Chemical Company or approved equal..

### **2.03 BATT INSULATION AND NOISE BARRIER INSULATION MATERIALS**

- A. Batt Insulation: ASTM C 665; preformed batt; conforming to the following:
1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.
  2. Smoke Developed Index: 50 or less, when tested in accordance with ASTM E84.
  3. Formaldehyde Content: Zero.
  4. Thermal Resistance: R of 13 for metal framing. This in conjunction with paragraph 2.01 Foam Board Insulation Materials. Attic Insulation - R-38.
  5. Thickness: 3-1/2 inch or 6-1/2 inch for metal framing.
  6. Facing: Unfaced.
  7. Provide wire or metal straps to hold insulation in place in applications where the stud depth is larger than the insulation thickness.
  8. Manufacturer: Unfaced Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation by Johns Manville or approved equal.

### **2.04 ACOUSTICAL FIRE BATT INSULATION MATERIALS**

- A. Batt Insulation: ASTM C 665; preformed batt; conforming to the following:
1. Material: Mineral wool fiber made from basalt rock and slag fiber.
  2. Flame Spread Index: 0 when tested in accordance with ASTM E 84.
  3. Smoke Developed Index: 0 when tested in accordance with ASTM E 84.
  4. Formaldehyde Content: Zero.
  5. Thermal Resistance: R of 4.1 per inch of thickness.
  6. Facing: Unfaced.
  7. Provide wire or metal straps to hold insulation in place in applications where the stud depth is larger than the insulation thickness.
  8. Manufacturer: Roxul AFB Acoustical Fire Batts by Roxul or approved equal.

### **2.05 ACCESSORIES**

- A. Sheet Vapor Retarder: Clear polyethylene film for above grade application, 6 mil thick.
- B. Air Infiltration Barrier: Tyvek CommercialWrap as manufactured by DuPont or approved equal.
- C. Sill Sealer: Styrofoam sill seal foam gasket as manufactured by The Dow Chemical Company or equal.
- D. Adhesive: Type recommended by insulation manufacturer for application.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation and adhesive.
- B. Verify substrate surfaces are flat, free of honeycomb, fins, irregularities, or materials or substances that may impede adhesive bond.
- C. Sequence Work to ensure fireproofing and firestop materials are in place before beginning Work of this Section.

### **3.02 BOARD INSTALLATION AT FOUNDATION PERIMETER**

- A. Install boards horizontally on foundation perimeter.
  - 1. Place boards to maximize adhesive contact.
  - 2. Install in running bond pattern.
- B. Extend boards over expansion joints, unbonded to foundation on one (1) side of joint.
- C. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.

### **3.03 BOARD INSTALLATION AT EXTERIOR WALLS**

- A. Install boards horizontally on walls.
  - 1. Place boards to maximize adhesive contact.
  - 2. Install in running bond pattern.
- B. Extend boards over expansion joints, unbonded to wall on one (1) side of joint.
- C. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.

### **3.04 BOARD INSTALLATION AT CAVITY WALLS**

- A. Install boards to fit snugly between wall ties.
- B. Install boards horizontally on walls.
  - 1. Install in running bond pattern.
  - 2. Butt edges and ends tightly to adjacent boards and to protrusions.
- C. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.

### **3.05 BOARD INSTALLATION UNDER CONCRETE SLABS**

- A. Place insulation under slabs on grade after base for slab has been compacted.
- B. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.
- C. Prevent insulation from being displaced or damaged while placing vapor retarder and placing slab.

### **3.06 BATT INSTALLATION**

- A. Install insulation and vapor retarder in accordance with manufacturer's instructions.
- B. Install in wall and roof spaces without gaps or voids. Do not compress insulation.
- C. Install fiberglass insulation in truss spaces.
- D. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- E. Fit insulation tightly in cavities and tightly to exterior side of mechanical and electrical services within the plane of the insulation.
- F. Retain insulation batts in place with wire mesh secured to framing members.
- G. Tape seal tears or cuts in vapor retarder.

### **3.07 PROTECTION**

- A. Do not permit installed insulation to be damaged prior to its concealment.

**END OF SECTION**

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**SECTION 07 8100  
APPLIED FIRE PROTECTION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Fireproofing of interior structural steel.

**1.02 RELATED REQUIREMENTS**

- A. Section 05 1200 - Structural Steel Framing.
- B. Section 05 2100 - Steel Joist Framing.
- C. Section 05 3100 - Steel Decking.
- D. Section 07 8400 - Firestopping.

**1.03 REFERENCE STANDARDS**

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023b.
- B. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- C. ASTM E605/E605M - Standard Test Methods for Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members; 2019 (Reapproved 2023).
- D. ASTM E736/E736M - Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members; 2019 (Reapproved 2023).
- E. ASTM E760/E760M - Standard Test Method for Effect of Impact on Bonding of Sprayed Fire-Resistive Material Applied to Structural Members; 1992 (Reapproved 2023).
- F. ASTM E937/E937M - Standard Test Method for Corrosion of Steel by Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members; 1993 (Reapproved 2023).

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal process.
- B. Product Data: Provide data indicating product characteristics and performance criteria.
- C. Test Reports: Reports from reputable independent testing agencies for proposed products, indicating compliance with specified criteria, conducted under conditions similar to those on project, for:
  - 1. Bond strength.
  - 2. Bond impact.
  - 3. Compressive strength.
  - 4. Fire tests using substrate materials similar those on Project.
- D. Manufacturer's Installation Instructions: Indicate special procedures.
- E. Manufacturer's Certificate: Certify that sprayed-on fireproofing products meet or exceed requirements of Contract Documents.
- F. Manufacturer's Field Reports: Indicate environmental conditions under which fireproofing materials were installed.
- G. Submit evidence that the cementitious fireproofing has been tested in accordance with ASTM E119 by Underwriters Laboratories, Inc.
  - 1. Provide evidence that the fire testing was sponsored by the manufacturer and that the material tested was produced at the manufacturer's facility under the supervision of Underwriters Laboratories, Inc.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section, with not less than 5 years of documented experience.

- B. Applicator Qualifications: Company specializing in performing the Work of this Section, with minimum 5 years of experience.

#### **1.06 MOCK-UP**

- A. Comply with project requirements for fire ratings.
- B. Locate where directed. Coordinate with the Architect and Construction Manager.
- C. Examine installation within one hour of application to determine variances from specified requirements due to shrinkage, temperature, and humidity. Coordinate with the Construction Manager.
- D. Where shrinkage and cracking are evident, adjust mixture and method of application as necessary; remove materials and re-construct mock-up.
- E. Mock-up may remain as part of the Work, if approved.

#### **1.07 FIELD CONDITIONS**

- A. Do not apply spray fireproofing when temperature of substrate material and surrounding air is below 40 degrees F or when temperature is predicted to be below said temperature for 24 hours after application.
- B. Provide ventilation in areas to receive fireproofing during application and 24 hours afterward to dry applied material.
- C. Provide temporary enclosure to prevent spray from contaminating air.

#### **1.08 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Correct Defective Work within a 5 year period after Date of Substantial Completion.
  - 1. Include coverage for fireproofing to remain free from cracking, checking, dusting, flaking, spalling, separation, and blistering.
  - 2. Reinstall or repair failures that occur within warranty period.

### **PART 2 PRODUCTS**

#### **2.01 MANUFACTURERS**

- A. Sprayed-On Fireproofing:
  - 1. Grace Construction Products; Monocote MK-6: [www.na.graceconstruction.com/#sle](http://www.na.graceconstruction.com/#sle).
  - 2. Or approved equal.
  - 3. Substitutions: See Section 01 6000 - Product Requirements.

#### **2.02 FIREPROOFING ASSEMBLIES**

- A. Provide UL 1-hour fire-rated assemblies (in locations as indicated on Contract Drawings):

#### **2.03 MATERIALS**

- A. Sprayed Fire-Resistive Material for Interior Applications: Manufacturer's standard factory mixed material, which when combined with water is capable of providing the indicated fire resistance, and conforming to the following requirements:
  - 1. Bond Strength: 150 pounds per square foot, minimum, when tested in accordance with ASTM E736/E736M when set and dry.
  - 2. Compressive Strength: 850 pounds per square inch, minimum.
  - 3. Effect of Impact on Bonding: No cracking, spalling or delamination, when tested in accordance with ASTM E760/E760M.
  - 4. Corrosivity: No evidence of corrosion, when tested in accordance with ASTM E937/E937M.
  - 5. Surface Burning Characteristics: Maximum flame spread of 0 and maximum smoke developed of 0 when tested in accordance with ASTM E84.



## **2.04 ACCESSORIES**

- A. Provide accessories to comply with manufacturer's recommendations and to meet fire resistance design and code requirements. Such accessories include, but are not limited to, any required or optional items such as bonding agents, mechanical attachments; application aids such as metal lath, scrim, or netting; and MONOKOTE Accelerator.
- B. Bonding Agent: Firebond Bonding Agent as manufactured by W.R. Grace.
  - 1. Use bonding agent over primed/painted structural steel and metal deck scheduled to be fireproofed.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. All surfaces to receive spray-applied fireproofing shall be free of oil, grease, paints/primers, loose mill scale, dirt, or other foreign substances which may impair proper adhesion of the fireproofing to the substrate. Where necessary, the Contractor shall clean or make other surface corrections to receive fireproofing.
- B. Application of the fireproofing shall not begin until the Contractor, applicator, and fireproofing inspector have examined surfaces to receive fireproofing and determined that the surfaces are acceptable to receive the fireproofing material.
- C. Verify that clips, hangers, supports, sleeves, and other items required to penetrate fireproofing are in place.
- D. Verify that ducts, piping, equipment, or other items that would interfere with application of fireproofing have not been installed.
- E. Verify that voids and cracks in substrate have been filled. Verify that projections have been removed where fireproofing will be exposed to view as a finish material.
- F. Verify that projections have been removed where fireproofing will be exposed to view as a finish material.

### **3.02 PREPARATION**

- A. Prior to application of the fireproofing material, a bonding agent, approved by the fireproofing manufacturer, shall be applied to all substrates in accordance with the fireproofing manufacturer's recommendations.
- B. Perform tests as recommended by fireproofing manufacturer in situations where adhesion of fireproofing to substrate is in question.
- C. Remove incompatible materials that could affect bond by scraping, brushing, scrubbing, or sandblasting.
- D. Prepare substrates to receive fireproofing in strict accordance with instructions of fireproofing manufacturer.
- E. On roof decks without concrete cover, complete all roofing applications and roof mounted equipment installation prior to application of the fireproofing to the underside of roof decking and supporting beams and joist. Prohibit all roof traffic upon commencement of the of the fireproofing and until fireproofing material is completely dry.
- F. Protect surfaces not scheduled for fireproofing and equipment from damage by overspray, fall-out, and dusting.
- G. Close off and seal ductwork in areas where fireproofing is being applied.

### **3.03 APPLICATION**

- A. Equipment and application procedures shall conform to the fireproofing material manufacturer's application instructions.
- B. Erect appropriate barriers to prevent entry by non-fireproofing workers into the fireproofing spray and mixing areas and other areas exposed to wet fireproofing material.

- C. Apply primer adhesive in accordance with manufacturer's instructions.
- D. Apply fireproofing in thickness and density necessary to achieve required ratings, with uniform density and texture.

**3.04 FIELD QUALITY CONTROL**

- A. Inspect the installed fireproofing after application and curing for integrity, prior to its concealment. Ensure that actual thicknesses, densities, and bond strengths meet requirements for specified ratings and requirements of the Authority Having Jurisdiction.
- B. Re-inspect the installed fireproofing for integrity of fire protection after installation of subsequent Work.
- C. An Independent Testing Laboratory shall randomly sample and verify the thickness and the density of the fireproofing in accordance with the provisions of ASTM E 605. The Independent Testing Laboratory shall randomly sample and verify the bond strength of the fireproofing in accordance with provisions of ASTM E 736.

**3.05 CLEANING**

- A. Remove excess material, overspray, droppings, and debris.
- B. Remove fireproofing from materials and surfaces not required to be fireproofed.
- C. At exposed fireproofing, clean surfaces that have become soiled or stained, using manufacturer's recommended procedures.

**3.06 PATCHING**

- A. All patching and repairing of spray-applied fireproofing, due to damage by any Trade, shall be performed with same materials under this Section and shall be completed at no additional cost to the Owner. Plumbing, Mechanical, and/or Electrical Contractor that is required to patch or repair fireproofing must employ the same Contractor that applied the original fireproofing.

**END OF SECTION**

**SECTION 27 1100  
EQUIPMENT ROOM FITTINGS**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. The communications equipment room will be referred as Main Distribution Frame (MDF) and Intermediate Distribution Frame (IDF) in this document is intended to house racks, cabinets and equipment necessary for the support of the communications cabling infrastructure.

**1.02 RELATED DOCUMENTS**

- A. This Section shall be used in conjunction with the following other specifications and related Contract Documents to establish the total general requirements for the project communications systems and equipment:
  - 1. Contract Documents
  - 2. Division 00 – Procurement & contracting Requirements Group
  - 3. Division 1 – General Requirements
  - 4. Section 27 15 00 – Horizontal Cabling CAT 6

**1.03 REFERENCES**

- A. All work shall be performed in accordance with the following codes and industry standards, unless noted otherwise:
- B. NFPA 70 – National Electrical Code, current version adopted by local or State AHJ.
- C. TIA/EIA-568-B – Commercial Building Telecommunications Cabling Standard, current version.
- D. TIA/EIA-569-B – Commercial Building Standard for Telecommunications Pathways and Spaces, current version.
- E. TIA/EIA-606-A – Administration Standard for Commercial Telecommunications Infrastructure, current version.
- F. J-STD-607-A – Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications, current version.
- G. IEEE 241 – IEEE Recommended Practice for Electric Power Systems in Commercial Buildings, pertaining to communication systems.
- H. TIA-310- D Cabinets, Rack, and Associated Equipment

**1.04 WARRANTY**

- A. The telecommunications contractor must be an approved installer of the specified manufacturer's copper & fiber cable. The Telecommunications contractor is responsible for workmanship and installation practices in accordance with the specified manufacturer's copper & fiber cable extended warranty programs.

**PART 2 PRODUCTS**

**2.01 APPROVALS AND SUBSTITUTIONS**

- A. All products shall be provided as specified, without exception, unless approved in writing prior to the bid. All products shall be "NEW".
- B. Non-compliant products installed as a part of this Contract shall be removed and replaced and all costs for removal and replacement shall be borne solely by the Contractor.

**2.02 TELECOMMUNICATIONS BACKBOARDS**

- A. AC-rated plywood, fire-retardant treated, 3/4 inches by 48 inches by 96 inches (19 by 1220 by 2440 mm).

**2.03 FREE STANDING EQUIPMENT RACKS**

- A. 7 foot high, 19 inches wide, 6.5 inch channel depth, EIA free-standing rack, UL listed, black finish

1. Great Lakes Model 19084-BA
2. Refer to Drawings

#### **2.04 HORIZONTAL WIRE MANAGERS**

- A. 19 inches wide, two rack units high with cover, for copper management
  1. Great Lakes CM-05
- B. 19 inches wide, one rack unit high with cover, for fiber management
  1. Corning CJP-01U

#### **2.05 TELECOMMUNICATIONS GROUNDING BUSBAR**

- A. Solid copper busbar kit, 12.0 inches long X 4.0 inch wide, wall-mounted, with standoffs.
  1. Ortronics P/N WMBB-12

#### **2.06 CABLE RUNWAY**

- A. 12 inches wide, 10 foot lengths, steel construction, Telco Style.
- B. Cablofil 09-8104-0010-12
- C. Refer to Ortronics-Cablofil catalog for additional part numbers and accessories required proper installation of specified cable runway.

### **PART 3 EXECUTION**

#### **3.01 INSTALLATION PRACTICES**

- A. All materials shall be installed as per the manufacturers' instructions, unless noted otherwise.
- B. Furnish and install telecommunication backboards on wall of communication equipment rooms as indicated. The bottom of the backboards shall be placed approximately six inches above finished floor (AFF), and must extend to a minimum height AFF of eight feet. Mount backboards with the smooth side facing away from the wall, and paint the backboard with two coats of fire resistant white paint prior to mounting. A minimum of six appropriate fasteners shall be used for every sixteen square feet of backboard.
- C. Free-standing equipment racks shall be fastened to the communications room floor using a minimum of four 3/8 inch concrete anchors.
- D. Equipment racks shall be positioned according to drawings with a minimum of 3 feet clearance in front and back. The contractor shall field verify the dimensions of the room prior to installation of racks and report any discrepancies to the owner or owner's representative.
- E. Vertical wire managers for free-standing racks shall be bolted to the side or front of the rack using the manufacturer's recommended hardware.
- F. All equipment racks, cabinets, enclosures, cable tray, conduits, and patch panels shall be bonded to the Telecommunications Grounding Busbar (TMG) (one per Telecommunications Room), which shall be bonded to the Telecommunications Main Grounding Busbar (TMGB), which shall be grounded to the main electrical ground in the main electrical room. Coordinate with electrical contractor. Coordinate exact routing and connection points with the electrical work. All surfaces that are used as a bond shall be filed to bare metal before completing connections.
- G. Install cable tray as shown in drawing package. The locations shown may need to be adjusted slightly in the field to assure proper placement.
- H. All tray sections shall be field cut to length as required with a minimum number of splice points. All field cuts shall be made using the manufacturers recommended equipment.

#### **3.02 LABELING**

- A. Label all racks within the BER, MDF, and IDF with a unique identifier beginning with the number one, i.e. MDF1-1. (Coordinate with Designer)

- B. Label the telecommunications grounding busbar and bonding conductor within the BER, MDF, and IDF with a unique identifier, beginning with the number one, i.e. TGB-IDF-1. (Coordinate with Designer).
- C. Label all patch panels and wiring blocks within the BER, MDF, and IDF with a number and a unique identifier for the Patch Panel, beginning with the AA, i.e. IDF1-AA- 38. (Coordinate with Designer)

**END OF SECTION**

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## NOTICE TO BIDDERS

The **Highland Falls Fort Montgomery Central School District**, invites the submission of Sealed Bid Proposals to furnish materials and labor to complete the

Highland Falls Fort Montgomery Central School District  
Additions & Alterations to Fort Montgomery Elementary School  
Project No. 2022-138 PH1

all in accordance with the plans and specifications.

This work is to be bid under a MULTIPLE CONTRACT system covering the work of all trades under separate contracts as follows:

Contract No. 1 – General Construction  
Contract No. 2 – Mechanical  
Contract No. 3 – Plumbing  
Contract No. 4 – Electrical

Sealed Bid Proposals will be received until **2:00 p.m.** prevailing time, on **July 31, 2024**, at the

Highland Falls Fort Montgomery Central School District  
District Offices  
21 Morgan Road  
Highland Falls, New York 10928

Any bid may be withdrawn without prejudice prior to the official bid submission time or any publicized postponement thereof.

Complete digital sets of Bidding Documents, drawings and specifications, may be obtained online as a download at the following website: <https://thebcgroup.biddyhq.com> under 'projects.'

Complete sets of Bidding Documents, Drawings and Specifications, may be obtained from REVplans, 28 Church Street; Suite 7, Warwick, New York 10990 Tel: 1-877-272-0216, upon depositing the sum of \$100.00 for each combined set of documents. Checks or money orders shall be made payable to BCA Architects & Engineers. Plan deposit is refundable in accordance with the terms in the Instructions to Bidders to all submitting bids. Bidders wishing documents mailed to them shall include, in addition to the document deposit, a non-refundable check of \$15.00 per set for handling and postage or a UPS/FedEx account number.

Please note REVplans (<https://thebcgroup.biddyhq.com>) is the designated location and means for distributing and obtaining all bid package information. Only those Contract Documents obtained in this manner will enable a prospective bidder to be identified as an official plan holder of record. The Provider takes no responsibility for the completeness of Contract Documents obtained from other sources. Contract Documents obtained from other sources may not be accurate or may not contain addenda that may have been issued.

All bid addenda will be transmitted to registered plan holders via email and will be available at <https://thebcgroup.biddyhq.com>. Plan holders who have paid for hard copies of the bid documents will need to make the determination if hard copies of the addenda are required for their use and coordinate directly with the printer for hard copies of addenda to be issued. There will be no charge for registered plan holders to obtain hard copies of the bid addenda.

The Bid Documents and Contract Documents may also be examined at the office of BCA Architects & Engineers, 31 Lewis Street, Suite 402 Binghamton, New York 13901.

**PLANS AND SPECIFICATIONS REMAIN THE PROPERTY OF BCA Architects & Engineers AND MUST BE RETURNED IN GOOD CONDITION WITHIN THIRTY (30) BUSINESS DAYS AFTER AWARD OF CONTRACT OR REJECTION OF BIDS.** The plan deposit for one set of Plans and Specifications will be refunded to bona fide bidders returning Plans and Specifications to REVplans within 30 business days after award of Contract or rejection of bids. A partial refund of the plan deposit, in an amount equal to the full amount of such deposit, less the actual cost of reproduction of the Plans and Specifications shall be made to non-bidders and unsuccessful bidders for the return of all other copies of the Plans and Specifications in good condition within 30 business days following the award of the Contract or the rejection of the bids.

Plan Deposit Policy, Plan Holders List, Pre-Bid Estimates, and a list of Addendums, if any, may be found at [www.thebcgroup.com/bidding](http://www.thebcgroup.com/bidding).

A pre-bid conference and onsite review of the project areas will be conducted by the Architect and Construction Manager on **Monday, July 15, 2024**, commencing at **11:00 a.m.** at the Fort Montgomery Elementary School, 895 Rte. 9W Fort Montgomery, NY 10922. The pre-bid conference will be for all contracts.

Bids shall be prepared as set forth in the Information to Bidders, enclosed in a sealed envelope bearing on its face the name, address and phone number of the bidder and the title of the project.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and the respective employees, arising out of or in connection with the administration, evaluation or recommendation of any bid.

The Owner further reserves its right to disqualify bidders for any material failure to comply with the Information for Bidders and General, Supplementary, and Special Conditions.

The Owner reserves the right to reject any or all bids and to waive any informalities or defects in such bid either before or after opening.

Each bidder must deposit with his bid, security in the form and subject to the conditions provided in the "INFORMATION FOR BIDDERS". Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and to the minimum wage rates to be paid under the Contract. No bidder may withdraw his bid within 45 business days after the date of the opening of bids.

**ATTENTION OUT-OF-STATE BIDDERS**

Please pay particular attention to the Form of Proposal and its related forms in the project manual. Out-of-State Bidders are required to complete the "Statement Concerning Authority to do Business in the State of New York for non-New York State Companies" located in the Form of Proposal package. There are three sections that must be completed. You must also have the Non-Collusion Certificate completed and signed and if you are a corporation, you must have the Resolution completed and signed.

No bid will be considered when opened unless accompanied by a certified copy of your Authority to do Business in New York State. This is not to be confused with a sales tax certificate. The Authority can be obtained by contacting:

New York State Department of State  
Division of Corporations  
162 Washington Avenue  
Albany, NY 12231  
(518) 473-2492

If the Certificate does not accompany the bid, the bid is not valid.

In the event you are of the opinion that you are not required to obtain the Authority To Do Business in New York state, and you are not a New York State Corporation, then you should complete the *Statement Concerning Authority to do Business*. You must complete two out of three sections. The top portion must be completed by all vendors needing to complete this document and then either the *Individual Acknowledgement* or the *Corporate Acknowledgement*, depending on the status of your business.

By Order Of:

Date: \_\_\_\_\_

\_\_\_\_\_  
District Clerk



**FORM OF PROPOSAL**  
**Highland Falls Fort Montgomery Central School District**  
**Additions & Alterations to Fort Montgomery Elementary School**

BID DESCRIPTION

CONTRACT NO. 1 – GENERAL CONSTRUCTION

Work under this Contract may generally be described to include, but not be limited to the following:

Procurement and general requirements; and all other work and related materials as indicated on the Contract Drawings, as specified herein, and as required for the complete and proper execution of the Work.

This outline is a general indication of the requirements of this Contract and is not intended to be all inclusive. The complete Contract Documents in their entirety, to include any and all addenda, form the basis of the responsibility of this Contract.

Each contractor is advised that the specification sections in Division 01 - General Requirements apply distinctly to each Prime Contractor and the balance of the technical specifications apply to each Contractor (as appropriate) for the accomplishment of his work.

All work of this contract shall be coordinated with other Prime Contractors involved in the project. All work shall additionally be coordinated with all other activities, construction, or others at each site throughout the progress of the work of this project.

The Contractor shall use all means possible and shall be responsible for coordinating the installation of all materials of this Contract with work of all other trades involved with this project. All work shall be done in strict accordance with the Contract Documents and in compliance with all applicable Local, State and Federal Codes.

Prior to the Bid Date of this project, the Contractor shall be completely responsible for visiting the project site to become completely familiar with the scope of this project.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and the respective employees, arising out of or in connection with the administration, evaluation or recommendation of any bid.

It shall be completely understood that the use of asbestos containing materials in this project is strictly forbidden and all materials are provided in accordance with the Federal Asbestos Hazard Emergency Response Act (AHERA), and the New York State Asbestos Safety Act (SASA).

In addition to those items in the Base Bid, the Contractor shall further sub-divide his bid proposal as described in the following bid items, alternates, and/or unit prices. The Contractor shall include in the Base Bid all of the work of this Contract not specifically described in a Bid Item or Alternative. The Owner reserves the right to accept any and/or all of the Bid Items and/or Alternates or any combination thereof and to waive any informalities or defects in the bid proposals either before or after opening.

Bid Items

**Allowances** - As described in Specification Section 01 2100 – Allowances.

- Bid Item No. 1 – Field Directive Allowance
- Bid Item No. 2 – Rock Removal Directive Allowance

**FORM OF PROPOSAL**  
**Highland Falls Fort Montgomery Central School District**  
**Additions & Alterations to Fort Montgomery Elementary School**

**Alternates** - As described in Specification Section 01 2300 – Alternates.

- Alternate No. GC-01 – Ceilings

**Unit Prices** - As described in Specification Section 01 2200 – Unit Prices

- Unit Price No. 1 – Bulk Rock Removal per cubic yard
- Unit Price No. 2 – Trench Rock Removal per cubic yard
- Unit Price No. 3 – Unsuitable Insitu Materials per cubic yard
- Unit Price No. 4 – Asbestos abatement per mud fitting
- Unit Price No. 5 – Asbestos abatement per linear foot
- Unit Price No. 6 – Asbestos abatement per square foot
- Unit Price No. 7 – Interior concrete slab trenching per square foot
- Unit Price No. 8 – Asphalt Paving (Standard and Heavy Duty – per square foot)

**FORM OF PROPOSAL**  
**Highland Falls Fort Montgomery Central School District**  
**Additions & Alterations to Fort Montgomery Elementary School**

The Undersigned \_\_\_\_\_  
Contractor

\_\_\_\_\_ Address \_\_\_\_\_ Zip Code

hereby certifies that he/she has examined and fully comprehends the requirements and intent of the drawings and specifications as prepared by BCA Architects & Engineers, for **CONTRACT NO. 1 – GENERAL CONSTRUCTION** to furnish all labor, materials, supplies, plant and equipment and other facilities to properly perform the work for the total:

BASE BID SUM of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)

Bid Item No. 1 – Field Directive Allowance  
\_\_\_\_\_ Two Hundred Thousand DOLLARS (\$200,000.00 )

Bid Item No. 2 – Rock Removal Directive Allowance  
\_\_\_\_\_ 250 Cubic Yards \_\_\_\_\_

**TOTAL BASE BID (Base Bid and Bid Items No. 1 and No. 2)**  
\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)

Alternate No. GC-1 – Ceilings  
\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)  
DEDUCT

**UNIT PRICES**

*Unit Price Item No. 1 – Bulk Rock Removal* \$ \_\_\_\_\_ / per cubic yard

*Unit Price Item No. 2 – Trench Rock Removal* \$ \_\_\_\_\_ / per cubic yard

*Unit Price Item No. 3 – Unsuitable Insitu Materials* \$ \_\_\_\_\_ / per cubic yard

*Unit Price Item No. 4 – Asbestos Abatement* \$ \_\_\_\_\_ / per mudded fitting



Receipt of the following Addenda is hereby acknowledged:

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

No. \_\_\_\_\_ dated \_\_\_\_\_

\_\_\_\_\_  
(Name of Bidder)

Signed \_\_\_\_\_

Title \_\_\_\_\_

Street \_\_\_\_\_

City/State \_\_\_\_\_

Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

Cell Phone \_\_\_\_\_

Email \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_

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**NON-COLLUSIVE BIDDING CERTIFICATE**

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

- (1) the prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- (2) unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and
- (3) no attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

(Signed) \_\_\_\_\_  
 \_\_\_\_\_  
 Title

**RESOLUTION - for corporate bidders only**

RESOLVED that \_\_\_\_\_ be authorized to sign and submit the bid or proposal  
(individual)  
 of this corporation for the following project

\_\_\_\_\_  
(describe project)

and to include in such bid or proposal the certificate as to non-collusion required by Section 103-d of the General Municipal Law as the act and deed of such corporation, and for any inaccuracies or misstatements in such certificate this corporate bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the resolution adopted by \_\_\_\_\_  
 corporation at a meeting of its Board of Directors held on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

SEAL OF CORPORATION)

\_\_\_\_\_  
 Secretary

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**Statement Concerning Authority to do Business  
in the State of New York for non-New York State Companies**

**Please complete all requested information in both sections below.**

A certificate of authority is required of out of state companies if the company has property, employees or agents used in conducting its business activities within the state of New York. Generally, business activities are defined as having an office in the state, making sales or promotional calls within the state, delivering products or merchandise and/or making service calls within the state.

Companies conducting mail order activities with New York customers are not considered doing business within New York State if the company **has no property, employees, agents and/or representatives in or, traveling into the state.** \_\_\_\_\_ is such a mail order company, and as such, is not  
(Fill in company name)  
required to hold a Certificate of Authority.

Performance under the attached bid will not result in any action that would result in a requirement to obtain a Certificate as all commerce will be conducted by mail. It is the opinion of the legal counsel for this firm:

Name \_\_\_\_\_  
Address \_\_\_\_\_ (Complete the information)  
Address \_\_\_\_\_  
Telephone \_\_\_\_\_

that this firm is not required to file an Authority to do Business in New York State as required by Section 1301 of the NYS Business Corporate Law.

=====  
**Complete one of the following two acknowledgements in addition to above information.**

Individual Acknowledgment for Sole Proprietors or Partnerships

\_\_\_\_\_  
Signature

State of \_\_\_\_\_  
County of \_\_\_\_\_ ss.

On this \_\_\_\_ day of \_\_\_\_\_ two thousand and \_\_\_\_\_ before me, the subscriber, personally appeared \_\_\_\_\_ to me personally known and known to me to be the same person described in and who executed the within Instrument, and he/she acknowledged to me that he/she executed the same.

\_\_\_\_\_  
Notary Public

Corporate Acknowledgment for corporations or LLC's

\_\_\_\_\_  
Signature

State of \_\_\_\_\_  
County of \_\_\_\_\_ ss.

On this \_\_\_\_ day of \_\_\_\_\_ two thousand and \_\_\_\_\_ before me personally known, who, being by me duly sworn did depose and say that he/she resides in \_\_\_\_\_ that he/she is the \_\_\_\_\_ of \_\_\_\_\_ the corporation described in, and which executed, the above Instrument; that he/she knows the seal of said corporation; that the seal affixed to said Instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that he/she signed his/her name thereto by like order.

\_\_\_\_\_  
Notary Public

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## FEDERAL LAW CERTIFICATION

I, \_\_\_\_\_ [insert name], the \_\_\_\_\_ [insert title] of  
\_\_\_\_\_ [name of company], \_\_\_\_\_ [Nine Digit DUNS  
Number] hereby swear or affirm that the following is true:

1. The company, its principles or entities related to the company named above, is not now, nor ever has been, debarred from contracting with the United States Government or any State government.
2. The company is not now under investigation by any agency of the Federal Government or the government of any State for any actions by the company, its principles or any related entity, for any alleged malfeasance or misfeasance of any kind or nature which could lead to a debarment from governmental contracting or criminal prosecution, as well as render any contracts signed in reliance on this certification voidable by the party relying on this certification. This includes any violations related to the Davis-Bacon Act, the federal prevailing wage statute, the Copeland Act and the Contract Hours and Safety Standards Act which covers hours of work and safety standards in federal public contracting.
3. I have full legal authority under my company's organizational documents or bylaws to make this certification on the company's behalf.
4. I understand that submission of a false statement on this document will subject me to criminal prosecution.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

**THIS FORM MUST BE COMPLETED AND SUBMITTED WITH THE BID**

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**STATEMENT OF SURETY'S INTENT**

To:

\_\_\_\_\_

(Owner)

We have reviewed the Bid of \_\_\_\_\_

(Contractor)

of \_\_\_\_\_

(Address)

for \_\_\_\_\_

\_\_\_\_\_

(Project)

Bids for which will be received on \_\_\_\_\_

(Bid Opening Date)

and wish to advise that should this Bid of the Contractor be accepted, and the Contract awarded to him, it is our present intention to become surety on the performance bond and labor and material bond required by the Contract.

Any arrangement for the bonds required by the Contract is a matter between the Contractor and ourselves and we assume no liability to you or third parties if, for any reason, we do not execute the requisite bonds.

We are duly authorized to do business in the State of New York.

Attest:

\_\_\_\_\_

\_\_\_\_\_

(Surety's Authorized Signature)

**Attach Power of Attorney**

**(Corporate Seal, if any.  
If no seal, write "No Seal"  
across this place and sign.)**

**THIS FORM MUST BE COMPLETED AND SUBMITTED WITH THE BID**

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**CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT**

As a result of the Iran Divestment Act of 2012 (the "Act"), Chapter 1 of the 2012 Laws of New York, a new provision has been added to State Finance Law (SFL) § 165-a and New York General Municipal Law § 103-g, both effective Aprils 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law) (the "Prohibited Entities List"). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, each Bidder/Contractor, any person signing on behalf of any Bidder/Contractor and any assignee or subcontractor and, in the case of a joint bid, each party thereto, certifies, under penalty of perjury, that once the Prohibited Entities List is posted on the OGS website, that to the best of its knowledge and belief, that each Bidder/Contractor and any subcontractor or assignee is not identified on the Prohibited Entities List created pursuant to SFL § 165-a(3)(b).

Additionally, Bidder/Contractor is advised that once the Prohibited Entities List is posted on the OGS Website, any Bidder/Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to this solicitation must certify at the time the Contract is renewed, extended or assigned that it is not included on the Prohibited Entities List.

During the term of the Contract, should the School District receive information that a Bidder/Contractor is in violation of the above-referenced certification, the School District will offer the person or entity an opportunity to respond. If the person or entity fails to demonstrate that he/she/it has ceased engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the School District shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor in default. The School District reserves the right to reject any bid or request for assignment for a Bidder/Contractor that appears on the Prohibited Entities List prior to the award of a contract and to pursue a responsibility review with respect to any Bidder/Contractor that is awarded a contract and subsequently appears on the Prohibited Entities List.

I, \_\_\_\_\_, being duly sworn, deposes and says that he/she is the \_\_\_\_\_ of the \_\_\_\_\_ Corporation and that neither the Bidder/ Contractor nor any proposed subcontractor is identified on the Prohibited Entities List.

\_\_\_\_\_  
SIGNED

SWORN to before me this

\_\_\_\_\_ day of \_\_\_\_\_

20\_\_\_\_

Notary Public: \_\_\_\_\_

**EITHER THIS FORM OR THE "DECLARATION OF BIDDER'S INABILITY TO PROVIDE CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT" FORM ON THE FOLLOWING PAGE MUST BE COMPLETED AND SUBMITTED WITH THE BID**

**DECLARATION OF BIDDER'S INABILITY TO PROVIDE CERTIFICATION OF COMPLIANCE  
WITH THE IRAN DIVESTMENT ACT**

***Bidders shall complete this form if they cannot certify that the bidder /contractor or any proposed subcontractor is not identified on the Prohibited Entities List. The District reserves the right to undertake any investigation into the information provided herein or to request additional information from the bidder.***

Name of the Bidder: \_\_\_\_\_

Address of Bidder: \_\_\_\_\_

Has bidder been involved in investment activities in Iran? \_\_\_\_\_

Describe the type of activities including but not limited to the amounts and the nature of the investments (e.g. banking, energy, real estate) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If so, when did the first investment activity occur? \_\_\_\_\_

Have the investment activities ended? \_\_\_\_\_

If so, what was the date of the last investment activity? \_\_\_\_\_

If not, have the investment activities increased or expanded since April 12, 2012? \_\_\_\_\_

Has the bidder adopted, publicized, or implemented a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran? \_\_\_\_\_

If so, provide the date of the adoption of the plan by the bidder and proof of the adopted resolution, if any and a copy of the formal plan. \_\_\_\_\_

In detail, state the reasons why the bidder cannot provide the Certification of Compliance with the Iran Divestment Act below (additional pages may be attached):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I, \_\_\_\_\_ being duly sworn, deposes and says that he/she is the \_\_\_\_\_ of

the \_\_\_\_\_ Corporation and the foregoing is true and accurate.

\_\_\_\_\_  
SIGNED

SWORN to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Notary Public: \_\_\_\_\_



**SECTION 01 1000  
SUMMARY - MULTI CONTRACT**

**PART 1 GENERAL**

**1.01 PROJECT**

- A. Project Name: Alterations and Additions to Fort Montgomery Elementary School.
- B. Owner's Name: Highland Falls-Fort Montgomery CSD.
- C. Architect's Name: BCA Architects & Engineers.
- D. Construction Manager: Triton Construction Company, LLC.
- E. The Project consists of but not limited to the construction and alteration of a new Cafenadium addition, renovation of the existing cafenadium into three new rooms, expansion of the nurse's suite, mechanical and electrical upgrades, renovation of the existing toilet rooms, and site improvements.

**1.02 CONTRACT DESCRIPTION**

- A. Contract Type: Multiple prime contracts, each based on a Stipulated Price.

**1.03 DESCRIPTION OF ALTERATIONS AND NEW WORK**

- A. Scope of alterations and new work is indicated on drawings.
- B. General Construction:
- C. Plumbing: Alter existing system and add new construction, keeping existing in operation.
- D. HVAC: Alter existing system and add new construction, keeping existing in operation.
- E. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation.
- F. Fire Alarm: Replace existing system with new construction, keeping existing in operation until ready for changeover. (BY OWNER)
- G. Communications: Replace existing system with new construction, keeping existing in operation until ready for changeover. (BY OWNER)
- H. Security System: Alter existing system and add new construction, keeping existing in operation. (BY OWNER)
- I. HVAC Building Management Controls: (BY OWNER)

**1.04 WORK BY OWNER**

- A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by the Owner.
- B. Items noted NIC (Not in Contract) will be supplied and installed by Owner before Substantial Completion. Some items include:
  - 1. Movable cabinets.
  - 2. Loose furniture, not including millwork or cabinetry - which is by the General Construction Prime.
  - 3. Rugs/walkoff mats.
  - 4. Card reader access controls on all doors.
- C. Owner will supply the following for installation by Contractor:
  - 1. General Construction: Paper towel dispenser, toiletry dispensers, waster receptacles, and soap dispensers.
  - 2. Or as noted on 'A' Drawings.

### **1.05 OWNER OCCUPANCY**

- A. The entire building will be available for construction activities from construction commencement to substantial completion. The Owner may access parts of the building for regular maintenance and improvements not/associated with the project. Prior to substantial completion the Owner shall begin installing loose furniture and begin cleaning areas not impacted by construction.
- B. Owner intends to occupy the Project upon Substantial Completion.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.

### **1.06 CONTRACTOR USE OF SITE AND PREMISES**

- A. Construction Operations: Limited to areas noted on Drawings.
  - 1. Locate and conduct construction activities in ways that will limit disturbance to site.
  - 2. Each Prime Contractor will be responsible for repairing existing conditions that have been altered due to their work, to a new-like state once their work is complete.
  - 3. The General Construction Prime will be responsible for repairing the staging and laydown areas (exterior and interior) in which all prime contractors use, at the time of Substantial Completion.
- B. Arrange use of site and premises to allow:
  - 1. Construction Manager, Architect, and their Consultants.
  - 2. Intermittent Owner occupancy.
  - 3. Work by Others.
  - 4. Unabated access for testing companies.
  - 5. Access for local and government officials.
- C. Provide access to and from site as required by law and by Owner:
  - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- D. Utility Outages and Shutdown:
  - 1. Do not disrupt or shut down life safety systems, including but not limited to fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
  - 2. Prevent accidental disruption of utility services to other facilities.

### **1.07 WORK SEQUENCE**

- A. Coordinate construction schedule and operations with Architect and Construction Manager.

### **1.08 SPECIFICATION SECTIONS APPLICABLE TO ALL PRIME CONTRACTS**

- A. All Contractors are responsible for the information regarding their work on all the drawings and specifications. Each Prime Contractor's scope of work includes the following, but not limited to the following. The below is not intended to limit any Contractor's requirements to review all the drawings for their work.
- B. All Prime Contractors are responsible for reviewing the entire drawing set and specifications for coordination of their work with other trades.
- C. Unless otherwise noted, all provisions of the sections listed below apply to all contracts. Specific items of work listed under individual contract descriptions constitute exceptions.
- D. Division 00 Procurement and Contracting Requirements
  - 1. All Sections including Bidding Requirements, Contract Forms, and Conditions of the Contract.
- E. Division 01 General Requirements including but not limited to the following:
  - 1. Section 01 0000 - General Requirements.
  - 2. Section 01 1000 - Multiple Contract Summary.

3. Section 01 2000 - Price and Payment Procedures.
  4. Section 01 2100 - Allowances.
  5. Section 01 2200 - Unit Prices.
  6. Section 01 2300 - Alternates.
  7. Section 01 3000 - Administrative Requirements.
  8. Section 01 3216 - Construction Progress Schedule.
  9. Section 01 3529.10 - Life Safety Requirements During School Construction.
  10. Section 01 3553 - Security Procedures.
  11. Section 01 4000 - Quality Requirements.
  12. Section 01 4533 - Code-Required Special Inspections.
  13. Section 01 5000 - Temporary Facilities and Controls.
  14. Section 01 5100 - Temporary Utilities.
  15. Section 01 5500 - Vehicular Access and Parking.
  16. Section 01 5721 - Indoor Air Quality Controls.
  17. Section 01 6000 - Product Requirements.
  18. Section 01 7000 - Execution and Closeout Requirements.
  19. Section 01 7800 - Closeout Submittals.
  20. Section 01 7900 - Demonstration and Training.
  21. Section 01 9113 General Commissioning Requirements.
  22. Section 01 9114 Commissioning Authority Responsibilities.
- F. Division 02 Existing Conditions
1. Section 02 4119 - Minor Demolition.
  2. Section 02 8313 - Lead Hazard Control Activities.
- G. Division 02 Concrete
1. Section 03 3000 - Cast-in-Place Concrete.
- H. Division 07 Thermal and Moisture Protection
1. Section 07 8400 - Firestopping.
  2. Section 07 9005 - Joint Sealers.
- I. Division 08 Openings
1. Section 08 3100 - Access Doors and Panels.
- J. Division 09 Finishes
1. Section 09 9000 - Paints and Coatings.

**1.09 DRAWINGS APPLICABLE TO ALL PRIME CONTRACTS**

- A. Unless otherwise noted, all drawing listed below apply to all Contracts.
1. Drawings: Title Sheet and Index of Drawings.
  2. Drawings: CC series drawings.
  3. Drawings: PP series drawings.
  4. Drawings: RP series drawings.

**1.10 TESTING REPORTS APPLICABLE TO ALL CONTRACTS**

- A. Asbestos, Lead, and PCB Testing Reports.
- B. Geotechnical Report.

**1.11 CONTRACT NO. 01 - GENERAL CONSTRUCTION (GC)**

- A. Includes Hazardous Materials, Architectural, Structural, and Site, plus other operations traditionally recognized as General Construction. General Construction contractor is responsible to coordinate their scope of work with all other prime contractor's tasks. Including administration and coordination responsibilities. Work under this contract includes, but not limited to, the following:
1. Division 01 - General Requirements:
    - a. Specification sections listed above as applicable to all contracts.

- b. Section 01 7000: Basic project engineering and layout.
- c. Section 01 5000: Provide debris receptacles, remove debris from site.
- d. Section 01 5000: Erosion control structures.
- e. Section 01 5000: Temporary Sanitary facilities.
- f. Section 01 5813: Temporary Project Signage.
- g. Section 01 7000: Final cleaning.
- 2. Division 2 - Existing Conditions.
  - a. Section 02 8213 - Asbestos Abatement.
  - b. Section 02 8313 - Lead Safe Work Practices.
  - c. Section 02 8314 - Miscellaneous Hazardous & Special Wastes.
- 3. Division 3 - Concrete.
  - a. With the exception of concrete equipment pads furnished and installed by other prime contracts unless noted otherwise.
- 4. Division 4 - Masonry.
- 5. Division 5 - Metals.
- 6. Division 6 - Woods, Plastics and Composites.
- 7. Division 7 - Thermal and Moisture Protection.
  - a. With the exception of roof curbing furnished by other prime contracts for installation by the GC.
- 8. Division 8 - Openings.
  - a. With the exception of the following:
    - 1) Access doors and panels furnished by other prime contracts for installation by the GC. Card reader access controls
    - 2) Card reader access controls by the Owner's vendor. GC to coordinate with Owner's vendor.
- 9. Division 9 - Finishes.
- 10. Division 10 - Specialties.
- 11. Division 11 - Equipment.
- 12. Division 12 - Furnishings.
- 13. Division 13 - Special Construction.
- 14. Division 14 - Conveying Equipment.
- 15. Division 31 - Earthwork.
- 16. Division 32 - Exterior Improvements.
- 17. Division 33 - Utilities.
  - a. All Division 33 utilities unless otherwise noted in the Electrical Contract.
- 18. Division 34 - Transportation.
- 19. Drawings listed above as applicable to all contracts.
- 20. Drawings: L series drawings.
- 21. Drawings: S series drawings.
- 22. Drawings: A series drawings.
- 23. Drawings: HM series drawings.
- 24. Drawings: FS series drawings.
- 25. Reference all other series of drawings.

**1.12 CONTRACT NO. 03 - PLUMBING (PC)**

- A. Includes plumbing equipment, fixtures, accessories and piping systems. Plumbing Construction contractor is responsible to coordinate their scope of work with all other prime contractor's tasks. Including administration and coordination responsibilities. Work under this contract includes, but not limited, to the following:
  - 1. Specification sections listed above as applicable to all contracts.
  - 2. Division 03 - Concrete and the Work of this Contract.
    - a. Section 03 -3000 - Cast-in-Place Concrete: Concrete equipment pads.
  - 3. Division 07 - Thermal and Moisture Protection:

- a. Section 07 8400 - Firestopping: Firestopping of fire-rated vertical and horizontal assembly penetrations, including membrane penetrations for the Work of this Contract. Firestop all openings and voids in fire-rated assemblies occurring from removals of Work.
- b. Section 07 9005 - Joint Sealers for the Work of this Contract.
- 4. Division 08 - Openings:
  - a. Section 08 3100 - Access Doors and Panels: Access doors and panels in walls and ceilings. Furnish to the GC for installation.
- 5. Division 09 - Finishes:
  - a. Section 09 9000 - Painting and Coating: Identification painting for equipment and piping.
- 6. Division 22 - Plumbing:
  - a. All Sections of Division 22
- 7. Drawings listed above as applicable to all contracts.
- 8. Drawings P series drawings.
- 9. Reference all other series of drawings.

### **1.13 CONTRACT NO. 02 - MECHANICAL (MC)**

- A. Includes heating, ventilation, air conditioning systems and the temperature control systems. . Mechanical Construction contractor is responsible to coordinate their scope of work with all other prime contractor's tasks. Including administration and coordination responsibilities. Work under this contract includes, but not limited to, the following:
  - 1. Specification sections listed above as applicable to all contracts.
  - 2. Division 03 - Concrete:
    - a. Section 03 3000 - Cast-in-Place Concrete: Concrete equipment pads and the Work of this Contract.
  - 3. Division 07 - Thermal and Moisture Protection:
    - a. Section 07 8400 - Firestopping: Firestopping of fire-rated vertical and horizontal assembly penetrations, including membrane penetrations for the Work of this Contract. Firestop all openings and voids in fire-rated assemblies occurring from removals of Work.
    - b. Section 07 9005 - Joint Sealants for the Work of this Contract.
    - c. Furnish roof curbing, roof equipment rails and pipe portals for installation by the GC.
  - 4. Division 08 - Openings:
    - a. Section 08 3100 - Access Doors and Panels: Access doors and panels for walls and ceilings. Furnish to the GC for installation.
  - 5. Division 09 - Finishes:
    - a. Section 09 9000 - Painting and Coating: Identification painting for equipment and piping.
  - 6. Division 11 - Equipment:
    - a. Section 11 5413 - Kilns.
  - 7. Division 23 - Heating, Ventilating, and Air Conditioning:
    - a. All Sections of Division 23.
  - 8. Drawings listed above as applicable to all contracts.
  - 9. Drawings M series drawings.
  - 10. Reference all other series of drawings.

### **1.14 CONTRACT NO. 04 - ELECTRICAL (EC)**

- A. Includes electric power distribution, lighting, and technology cabling. Electrical Construction contractor is responsible to coordinate their scope of work with all other prime contractor's tasks. Including administration and coordination responsibilities. Work under this contract includes, but is not limited to, the following:
  - 1. Specification sections listed above as applicable to all contracts.
    - a. Section 01 5000: Temporary electricity installation.
    - b. Section 01 5000: Temporary lighting.

- c. Section 01 5000: Temporary power.
- 2. Division 03 - Concrete:
  - a. Section 03 3000 - Cast-in-Place Concrete: Concrete equipment pads and the Work of this Contract.
- 3. Division 07 - Thermal and Moisture Protection:
  - a. Section 07 8400 - Firestopping: Firestopping of fire-rated vertical and horizontal assembly penetrations, including membrane penetrations for the Work of this Contract. Firestop all openings and voids in fire-rated assemblies occurring from removals of Work.
  - b. Section 07 9005 - Joint Sealers for the Work of this Contract.
  - c. Furnish roof curbing and pipe portals for installation by GC.
- 4. Division 08 - Openings:
  - a. Section 08 3100 - Access Doors and Panels: Access doors and panels. Furnish to the GC for installation.
- 5. Division 09 - Finishes:
  - a. Section 09 9000 - Painting and Coating: Identification painting for equipment and piping.
- 6. Division 26 - Electrical:
  - a. All Sections of Division 26.
- 7. Division 27 - Communications:
  - a. All Sections of Division 27.
- 8. Division 28 - Electronic Safety and Security:
  - a. All Sections of Division 28.
    - 1) EC to coordinate with Owner's Security and Fire Alarm vendor.
- 9. Division 33 - Utilities:
  - a. Section 33 7000 Electrical Utilities: Electrical utilities.
  - b. Section 33 8000 Communications Utilities: Power and communication utilities.
- 10. Drawings listed above as applicable to all contracts.
- 11. Drawings E series drawings.
- 12. Reference all other series of drawings

### **1.15 CONTRACT ASSIGNMENTS**

- A. Contract Assignments: In addition to specific responsibilities indicated in this section, the contracts noted below are assigned certain responsibilities, as follows:
  - 1. Excavation, backfill, and restoration of all utilities 5'-0" and further outside the building limits shall be performed by the GC unless otherwise noted.
  - 2. Excavation and backfill within the building and extending to 5'-0" outside the building shall be performed by the Prime Contractor for General Construction for the following contracts: General Construction, Plumbing Construction, and Electrical Construction. GC shall be responsible for replacing concrete, asphalt, and flooring materials at all excavated locations. The Prime Contractor for Plumbing or Electrical will be responsible to grade and pitch the bedding supplied by the GC and is to coordinate with the GC while backfilling to assure proper pitch is maintained and no damage is done during backfilling.
  - 3. GC shall be responsible for contracting a Third Party Monitoring consultant to review and document the site rock removal required. This Third Party Monitoring consultant shall document and review the vibration caused by the site rock removal to the existing buildings on site and recommend other buildings, if needed, to be monitored beyond the property line boundaries of the school. Consultant shall be engaged prior to the commencement of site rock removal.
  - 4. GC shall be responsible for the removal and replacement of suspended ceiling systems required for the work of all Prime Contracts where shown that ceilings are to be removed. Where ceilings are to remain, each Prime Contractor is responsible to remove, safeguard/store and reinstall ceilings as needed. Where ceilings are damaged, the Prime Contractor performing said work shall replace the ceiling with new material as required.

5. Blocking for the work of each contract shall be the responsibility of each Prime Contractor for their own Work. Roof blocking shall be the responsibility of the GC. The GC shall be responsible for blocking required for built-in casework, toilet accessories, and like furnishings as provided by others, unless otherwise noted.
6. Openings in walls, floors/slabs, and roofs:
  - a. In new surfaces: Providing openings, including lintels and structural framing shall be the work of the GC. Each Prime Contractor is responsible for identifying opening sizes and locations for its own work and advising the GC of such, in writing, in a timely manner.
  - b. In existing surfaces: Providing openings, including lintels and structural framing shall be the work of the GC. Each Prime Contractor is responsible for identifying opening sizes and locations for its own work and advising the GC of such, in writing, in a timely manner. GC is responsible to patch adjacent surfaces to match the existing conditions. Cut openings under 100 square inches or drilled openings of 8 inches or less in diameter are to be the work of each Prime Contractor.
  - c. GC to size lintels and structural framing for openings in accordance with the information on the Drawings and information provided by each Prime Contractor.
  - d. Provide openings by qualified tradesmen in work similar to that indicated for this Project, whose work has resulted in construction with a record of successful service performance.
  - e. All wall penetrations in new air barriers, vapor barriers and waterproofing membranes shall be the work of the GC. All wall penetrations in existing air barriers, vapor barriers and waterproofing membranes shall be the work of each Prime Contractor.
7. Furnishing of access doors and panels for the work of each contract shall be by each Prime Contract, except as follows:
  - a. In new surfaces: Furnishing and installing wall or ceiling access doors and panels shall be the work of the GC.
  - b. In existing surfaces: Furnishing and installing wall and ceiling access doors and panels exposed to view shall be the work of the GC. Each Prime Contract shall be responsible to furnish and install access doors and panels for thier own work which is not exposed to view (i.e. ductwork access panels, etc.) and integral to the equipment. for its own work.
8. Furnishing of roof mounted equipment curbs, equipment rails and pipe portals for the work of each contract shall be the work of each Prime Contract for its own work.
  - a. Installing of roof-mounted equipment curbs, equipment rails and pipe portals (including roof system and deck modification, flashing, blocking and sealing) shall be the work of the GC in accordance with roofing manuafturer's requirements.
9. Painting for the work of each contract shall be the work of the GC, except as follows:
  - a. Identification painting (such as equipment and piping) for the work of each contract shall be the work of each contract for its own work.
  - b. Exposed ductwork (existing or new) identified to be painted shall be the work of the GC.
10. Furnishing linear grilles for casework shall be the work of the MC.
  - a. Installation of the linear grilles for casework shall be by the GC.
11. Furnishing mechanical louvers and grilles for exterior walls shall be the work of the MC.
  - a. Installation of louvers and grilles for exterior walls (including lintels, flashing, and sealing) shall be the work of the GC.
12. Furnishing motor starters and disconnects for the work of each contract shall be the work of each contract for its own work.
  - a. Installing motor starters and disconnects shall be the work of the EC.
13. Providing automatic door operators shall be the work of the GC, including installing control wiring from activation device (push-plate switch) to operator.
  - a. Providing power to the operator shall be the work of the EC.
14. Field Engineering and Surveying:
  - a. The GC is responsible for the field engineering and surveying for all building work.

- b. The GC is responsible for all field engineering and surveying for all site work.
- 15. EC to install all boxes and conduits for Fire Alarm/PA/Access Control/CCTV System and is to pull all wiring to each of these systems, data wiring shall be terminated at patch panel and have RJ 45 jack on other end cable to be tested. State Contract Vendor is then to provide and install all field devices and head end panels and will provide all of the final connections to all devices, test and commission all systems. The removal of these existing systems field devices and head end panels to be by State Contract Vendor, the Electrical contractor to be responsible for the removal of all existing wiring for these systems, including backboxes and conduits.

**END OF SECTION**



**SECTION 01 2100  
ALLOWANCES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Cash allowances.
- B. Labor and material allowances.
- C. Payment and modification procedures relating to allowances.

**1.02 ALLOWANCES**

- A. When authorized by the Architect/Engineer, cash allowances will be authorized by a Construction Change Directive. The determination shall be as described in Article 7.3 of the General Conditions of the Contract for Construction and Supplementary Conditions of the Contract for Construction.
- B. Costs included in the Contractor's labor and materials allowances shall include all costs as outlined in the General Conditions of the Contract for Construction and Supplementary Conditions of the Contract for Construction.
- C. Architect/Engineer Responsibilities:
  - 1. Consult with Contractor for consideration and selection of products.
  - 2. Select products in consultation with Owner and transmit decision to Contractor.
  - 3. Prepare allowance authorization.
- D. Contractor Responsibilities:
  - 1. Assist Architect/Engineer in selection of products, suppliers, and installers.
  - 2. Obtain proposals from suppliers and installers and offer recommendations.
  - 3. Arrange for and process Shop Drawings, product data, and samples. Arrange for delivery.
  - 4. Promptly inspect products upon delivery for completeness, damage, and defects.
- E. The Owner reserves the right to reduce or eliminate all allowances at any time during this Contract by change order.

**1.03 CASH ALLOWANCES**

- A. Contract No. 1 - General Construction:
  - 1. Bid Item No.1 - Field Directive Allowance: The General Contractor shall include in his Total Base Bid a cash allowance in the amount \$200,000.00 for Work Directive Changes as authorized by the Resident Project Representative in accordance with pertinent provisions of the General Conditions of the Construction Contract.
  - 2. Bid Item No.2 - Rock Removal Directive Allowance: The General Contractor shall include in his Total Base Bid a rock (bulk and trench) removal allowance in the amount of 250 cubic yards for Work Directive Changes as authorized by the Resident Project Representative in accordance with pertinent provisions of the General Conditions of the Construction Contract.
- B. Contract No. 2 - Mechanical:
  - 1. Bid Item No.1 - Field Directive Allowance: The Mechanical Contractor shall include in his Total Base Bid a cash allowance in the amount \$100,000.00 for Work Directive Changes as authorized by the Resident Project Representative in accordance with pertinent provisions of the General Conditions of the Construction Contract.
- C. Contract No. 3 - Plumbing:
  - 1. Bid Item No.1 - Field Directive Allowance: The Plumbing Contractor shall include in his Total Base Bid a cash allowance in the amount \$50,000.00 for Work Directive Changes as authorized by the Resident Project Representative in accordance with pertinent provisions of the General Conditions of the Construction Contract.
- D. Contract No. 4 - Electrical:

1. Bid Item No.1 - Field Directive Allowance: The Electrical Contractor shall include in his Total Base Bid a cash allowance in the amount \$100,000.00 for Work Directive Changes as authorized by the Resident Project Representative in accordance with pertinent provisions of the General Conditions of the Construction Contract.

**1.04 PAYMENT AND MODIFICATION PRICE**

- A. Unit price allowances shall be utilized, when authorized by the Architect/Engineer to determine the value of added or reduced scope to be performed, as described in each Bid Item. Unit pricing shall be prorated based on the actual quantities determined necessary on-site. The ultimate quantities procured may exceed or be less than the quantity stipulated on the Contractor's Form of Proposal and may be utilized in multiple work areas.
- B. It is expressly understood that, at the completion of the project, all remaining unused portions of the allowance(s) shall be credited to the Owner. A deductive Change Order shall be prepared by the Architect/Engineer and executed by the Contractor and the Owner.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 07 2119  
FOAMED-IN-PLACE INSULATION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Foamed-in-place insulation.
  - 1. In underside of floor decks.
- B. Protective intumescent coating.

**1.02 REFERENCE STANDARDS**

- A. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2021.
- B. ASTM D2842 - Standard Test Method for Water Absorption of Rigid Cellular Plastics; 2019.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023b.
- D. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2022a, with Editorial Revision (2023).
- E. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials; 2021a.
- F. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components; 2023.
- H. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; 2019.
- I. ICC-Evaluation Service - ICC-ES AC 377 Acceptance Criteria for Spray-Applied Foam Plastic Insulation.

**1.03 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
  - 1. Agenda:
    - a. Construction site safety relating to potential hazards or fire risks during application;
    - b. materials approved for use and their compatibility;
    - c. submittals;
    - d. protective coatings;
    - e. coordination with substrate preparation;
    - f. coordination with installation of adjacent and covering materials;
    - g. ventilation of building;
    - h. construction and testing of mock-up, and;
    - i. protection of material.

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide product description, insulation properties, overcoat properties, and preparation requirements.
- C. Certificates: Certify that products of this section meet or exceed specified requirements.
- D. Manufacturer's Installation Instructions: Indicate special procedures, and perimeter conditions requiring special attention.
- E. Manufacturer Qualification: Submit documentation of current evaluation of proposed manufacturer and materials.

- F. Installer Qualification: Submit documentation of current contractor accreditation and current installer certification. Keep copies of all contractor accreditation and installer certification on site during and after installation. Present on-site documentation upon request.
- G. Compatibility: Submit letter from primary material manufacturer stating that materials proposed for use are permanently chemically compatible and adhesively compatible with adjacent materials or adjacent materials proposed for use.
- H. Tests and Evaluation Reports:
  1. Submit research/evaluation report for foam plastic insulation from ICC-ES or equivalent.

**1.05 QUALITY ASSURANCE**

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

**1.06 MOCK-UPS**

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Locate where directed.
- C. Mock-up may remain as part of the Work.

**1.07 PROTECTION**

- A. Ventilate area to receive insulation by introducing fresh air and exhausting air continuously during and 24 hours after application to maintain non-toxic, unpolluted, safe working conditions.
- B. Provide temporary enclosures to prevent spray and noxious vapors from contaminating air beyond application area. Post warning signs to advise non-protected personnel to avoid the spray area.
- C. Shut down and seal off existing ventilation equipment.

**1.08 FIELD CONDITIONS**

- A. Do not apply foam when temperature is below that specified by the manufacturer for ambient air and substrate.
- B. Do not apply foam when temperature is within 5 degrees F of dew point.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

- A. Foamed-In-Place Insulation:
  1. Huntsman Building Solutions; Heatlok HFO High Lift: [www.huntsmanbuildingsolutions.com](http://www.huntsmanbuildingsolutions.com).
  2. BASF Corporation; WALLTITE US Series Closed Cell: [www.spf.basf.com/#sle](http://www.spf.basf.com/#sle).
  3. Substitutions: See Section 01 6000 - Product Requirements.

**2.02 MATERIALS**

- A. Foamed-In-Place Insulation: Medium-density, rigid or semi-rigid, closed cell polyurethane foam; foamed on-site, using blowing agent of water or non-ozone-depleting gas.
  1. Thermal Resistance: R-value of 7.4, minimum, per 1 inch thickness at 75 degrees F mean temperature when tested in accordance with ASTM C518.
  2. Water Vapor Permeance: Vapor retarder; 2 perms, maximum, when tested at intended thickness in accordance with ASTM E96/E96M, desiccant method.
  3. Water Absorption: Less than 2 percent by volume, maximum, when tested in accordance with ASTM D2842.
  4. Air Permeance: 0.04 cfm per square foot, maximum, when tested at intended thickness in accordance with ASTM E2178 at 1.57 psf.
  5. Closed Cell Content: At least 90 percent.

6. Surface Burning Characteristics: Flame spread/Smoke developed index of 25/450, maximum, when tested in accordance with ASTM E84.

### **2.03 ACCESSORIES**

- A. Primer: As required by insulation manufacturer.
- B. Protective Coating: Intumescent coating of type recommended by insulation manufacturer and as required to comply with applicable codes.
  1. Coating Type: Single component, water based.
  2. Protected Insulation Type: Spray polyurethane foam (SPF).
  3. Application: Apply using brush, roller, or airless sprayer.
  4. Fire Test: Flame spread index (FSI) of 0 (Zero) and smoke developed index (SDI) of 10 (Ten), when tested in accordance with ASTM E84.
  5. Flammability: Comply with local building code acceptance criteria for NFPA 286.
  6. Exterior Wall System: Comply with NFPA 285.
  7. Color: Gray.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify work within construction spaces or crevices is complete prior to insulation application.
- B. Verify that surfaces are clean, dry, and free of matter that may inhibit insulation or overcoat adhesion.

### **3.02 PREPARATION**

- A. Mask and protect adjacent surfaces from over spray or dusting.
- B. Apply primer in accordance with manufacturer's instructions.

### **3.03 APPLICATION**

- A. Apply insulation in accordance with manufacturer's instructions.
- B. Apply insulation by spray method, to a uniform monolithic density without voids.
- C. Apply to a minimum cured thickness of 4 inch.
- D. Apply overcoat monolithically, without voids, to fully cover foam insulation, to achieve fire rating required.
- E. Patch damaged areas.
- F. Where applied to voids and gaps assure space for expansion to avoid pressure on adjacent materials that may bind operable parts.
- G. Trim excess away for applied trim or remove as required for continuous sealant bead.

### **3.04 FIELD QUALITY CONTROL**

- A. Field inspections and tests will be performed by an independent testing agency under provisions of Section 01 4000 - Quality Requirements.
- B. Inspection will include verification of insulation and overcoat thickness and density.

### **3.05 PROTECTION**

- A. Do not permit subsequent construction work to disturb applied insulation.
- B. Protect adjacent surfaces and equipment from damage by overspray, fallout, and dusting of insulation materials.

**END OF SECTION**

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**SECTION 08 5113  
ALUMINUM WINDOWS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Extruded aluminum windows with fixed sash, operating sash, and infill panels.
- B. Operating hardware.

**1.02 RELATED REQUIREMENTS**

- A. Section 05 5000 - Metal Fabrications: Steel lintels.
- B. Section 06 1000 - Rough Carpentry: Wood perimeter shims.
- C. Section 07 9005 - Joint Sealers: Perimeter sealant and back-up materials.
- D. Section 08 8000 - Glazing.
- E. Section 12 2400- Window Shades.

**1.03 REFERENCE STANDARDS**

- A. AAMA/WDMA/CSA 101/I.S.2/A440 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights; 2022.
- B. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site; 2015.
- C. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document); 2015.
- D. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.
- E. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections; 2009.
- F. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- G. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- H. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- I. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; American Architectural Manufacturers Association; 2012.
- J. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004 (Reapproved 2012).
- K. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2023).

**1.04 PERFORMANCE REQUIREMENTS**

- A. Performance Requirements: As specified in PART 2, with the following additional requirements:
  - 1. Movement: Accommodate movement between window and perimeter framing and deflection of lintel, without damage to components or deterioration of seals as recommended by manufacturer.
  - 2. Fixed Windows - 4-5/8 Inch Depth:

- a. Air Infiltration: Limit air infiltration through assembly to 0.1 cubic feet/minute/square foot of wall area, measured at a reference differential pressure across assembly of 6.2 psf as measured in accordance with ASTM E 283-04.
  - b. Condensation Resistance Factor: CRF of 59 (frame) and 72 (glass) when measured in accordance with AAMA 1503.98.
  - c. Thermal Transmittance: Maximum .33 BTU/hour/square foot/F U value.
  - d. Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of .15 lbf/square foot.
  - e. Solar Heat Gain Coefficient: 0.4 or better.
3. Fixed - Stand Alone Windows - 4 Inch Depth:
- a. Air Infiltration: Limit air infiltration through assembly to 0.1 cubic feet/minute/square foot of wall area, measured at a reference differential pressure across assembly of 6.24 psf as measured in accordance with ASTM E 283-04.
  - b. Condensation Resistance Factor: CRF of 60 (frame) and 69 (glass) when measured in accordance with AAMA 1503.98.
  - c. Thermal Transmittance: Maximum .42 BTU/HR/SQ.FT/F U value.
  - d. Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of 12 lbf/square foot.
  - e. Solar Heat Gain Coefficient: 0.4 or better.
4. Horizontal Sliding Windows - 4-5/8 Inch Depth:
- a. Air Infiltration: Limit air infiltration through assembly to 0.3 cubic feet/minute/square foot of wall area, measured at a reference differential pressure across assembly of 6.24 psf as measured in accordance with ASTM E 283.
  - b. Condensation Resistance Factor: CRF of 33 when measured in accordance with AAMA 1503.1.
  - c. Thermal Transmittance: maximum .45 BTU/HR/SQ.FT/F U value.
  - d. Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of .10 lbf/square foot.
  - e. Solar Heat Gain Coefficient: 0.4 or better.
  - f. Horizontal Sliding Windows - 4-5/8 inch Depth:
    - 1) Air Infiltration: Limit air infiltration through assembly to 0.3 cubic feet/minute/square foot of wall area, measured at a reference differential pressure across assembly of 6.24 psf as measured in accordance with ASTM E 283.
    - 2) Condensation Resistance Factor: CRF of 53 when measured in accordance with AAMA 1503.1.
    - 3) Thermal Transmittance: maximum .55 BTU/hour/square foot/F U value.
    - 4) Water Leakage: None, when measured in accordance with ASTM E 331 with a test pressure difference of .25 lbf/square foot.
    - 5) Solar Heat Gain Coefficient: 0.4 or better.
5. Glazing shall comply with the CPSC 16 CFR, Part 1201 criteria for Category 1 or Category 2:
- a. Category 1: 9 square feet or less of exposed surface area.
  - b. Category 2: more than 9 square feet of exposed surface area.

#### **1.05 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week before starting work of this section.

#### **1.06 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal process.
- B. Product Data: Provide component dimensions, information on glass and glazing, internal drainage details, and descriptions of hardware and accessories.



- C. Shop Drawings: Indicate opening dimensions, elevations of different types, framed opening tolerances, method for achieving air and vapor barrier seal to adjacent construction, anchorage locations, glass types, and installation requirements.
- D. Manufacturer's Installation Instructions: Include complete preparation, installation, and cleaning requirements.
- E. Manufacturer's Qualification Statement.
- F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

#### **1.07 QUALITY ASSURANCE**

- A. Manufacturer and Installer: Company specializing in fabrication of commercial aluminum windows of types required with not fewer than 5 years of experience.
- B. Furnish a valid AAMA "Notice of Product Certification" indicating that the windows for the Project conform to AAMA/NWDA 101/I.S.2-97.
- C. Furnish visible, permanent IGCC certification labels for the CBA rating level on dual-seal double insulating glass units.

#### **1.08 DELIVERY, STORAGE, AND HANDLING**

- A. Comply with requirements of AAMA CW-10.
- B. Protect finished surfaces with wrapping paper or strippable coating during installation. Do not use adhesive papers or sprayed coatings that bond to substrate when exposed to sunlight or weather.

#### **1.09 FIELD CONDITIONS**

- A. Do not install sealants when ambient temperature is less than 40 degrees F.
- B. Maintain this minimum temperature during and 24 hours after installation of sealants.
- C. Verify all existing conditions prior to order release.

#### **1.10 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Windows: Warrant for 1 year against defects in material or workmanship under normal use.
- C. Insulating Glass Units: Warrant seal for 5 years against visual obstruction from film formation or moisture collection between internal glass surfaces, excluding that caused by glass breakage or abuse.
- D. Paint Finish: Duranar™ Organic Finish Conforming to AAMA 2605-02: Warrant for 15 years against chipping, peeling, cracking, chalking, or fading.
- E. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.

### **PART 2 PRODUCTS**

#### **2.01 MANUFACTURERS**

- A. Kawneer; Product OptiQ AA 5450 Heavy Commercial AW-PG70-FW Fixed, Thermal Aluminum Window - 4-5/8" Depth. (If using with other window types)
- B. Kawneer; Product 8400TL Heavy Commercial AW-PG100-FW Fixed, Thermal Aluminum Window - 4" Depth. (Stand Alone Unit)
- C. Kawneer; Product 8400TL Heavy Commercial HS-AW40 Horizontal Sliding Thermal Aluminum Window - 4" Depth.
- D. Kawneer; Product OptiQ AA 5450 Heavy Commercial AW-PG50-HS Horizontal Sliding Thermal Aluminum Window - 4-5/8" Depth.
- E. Or approved equal.

F. Substitutions: See Section 01 6000 - Product Requirements.

## **2.02 WINDOWS**

- A. Aluminum Windows: Extruded aluminum frame and sash, factory fabricated, factory finished, with operating hardware, related flashings, and anchorage and attachment devices.
- B. Performance Requirements: Provide products that comply with the following:
  - 1. Grade: AAMA/WDMA/CSA 101/I.S.2/A440 requirements for specific window type:
    - a. Performance Class (PC): R.
  - 2. Performance Requirements: AAMA/NWWDA 101/I.S.2 AP-AW65 C-AW65; HS-AW50; H-AW40.
- C. Fixed, Non-Operable Type:
  - 1. Construction: Thermally broken.
  - 2. Glazing: Double; clear; Solarban 60 on # 3 surface Low E.
  - 3. Exterior Finish: Class I natural anodized.
  - 4. Interior Finish: Class I natural anodized.
- D. Horizontal Sliding Type:
  - 1. Construction: Thermally broken.
  - 2. Provide screens.
  - 3. Glazing: Double; clear; Solarban 60 on # 3 surface Low E.
  - 4. Exterior Finish: Class I natural anodized.
  - 5. Interior Finish: Class I natural anodized.

## **2.03 COMPONENTS**

- A. Glazing: As specified in Section 08 8000.
- B. Insect Screens (Sliding): Half; held in exterior integral tracks with two (2) stainless steel leaf springs; 5/16 inch x 1-1/2 inches x .050 inch extruded tubular aluminum frame with finish to match window in color and performance; corners mitered, gusset reinforced, and crimped; 18 x 16 dark aluminum mesh secured with PVC spline.
  - 1. Insect screens shall not be installed on emergency egress windows.
- C. Weatherstrip (Sliding Windows): Secured in extruded ports; double rows on sash perimeters; rigid PVC weatherseal in one side of the horizontal sash rails, and pile conforming to AAMA 701-00 with polypropylene center fin in remaining locations.
- D. Glazing Materials: As specified in Section 08 8000.

## **2.04 MATERIALS**

- A. Extruded Aluminum: ASTM B 221, 6063 alloy, T5 temper.

## **2.05 HARDWARE**

- A. Hardware (Sliding): Two (2) stainless steel wheel housings per sash with one (1) ball bearing stainless adjustable steel wheel per housing; one (1) black zinc automatic handle/lock mounted with stainless steel screws and one (1) black zinc keeper on meeting stiles.
- B. Pulls: Manufacturer's standard type.
- C. Bottom Rollers: Stainless steel, adjustable.

## **2.06 FABRICATION**

- A. Sliding:
  - 1. Frame: Head and sill coped and fastened to jambs with two (2) stainless steel screws per frame head/jamb corner, four (4) per frame sill/jamb corner; corners factory-sealed with sealant conforming to AAMA 800-92.
  - 2. Water Control: Tubular frame sill with separate and offset weep slots for each track; concealed exterior weep covers with flaps to allow water to drain by gravity and resist wind-driven water.

3. Sash: Tubular vertical sash stiles coped and fastened to horizontal sash rails with a telescope-design joint secured with one (1) stainless steel screw per sash corner.
  4. Sash Design: Mechanical meeting stile interlock; sash removed by removing take-out stop in frame head, lifting sash, and swinging sash bottom to interior; weep holes for drainage.
- B. Stand alone windows shall be provided with an extruded sill with drip leg matching existing profile and setback whether a replacement or new installation, or as indicated on drawings. Windows in receptor or panning systems shall meet the same criteria, but will incorporate manufacturer's entire system.

## 2.07 FINISHES

- A. Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils thick.
- B. Class I Natural Finish Anodized 2-step Finish:
1. Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils thick.
- C. Class I Color Anodized Finish: AAMA 611 AA-M12C22A44 Electrolytically deposited colored anodic coating not less than 0.7 mils thick; dark bronze or black.
- D. Superior Performance Organic Coating System: AAMA 2605 multiple coat, thermally cured polyvinylidene fluoride system; color as selected from manufacturer's standard colors.
1. Coating: PPG Duranar™ with resin containing 70 percent fluoropolymer; thermosetting; alternative finishes will not be acceptable.
  2. Quality standard: conforming to AAMA 2605-02, including 10 years Florida exposure and 4,000 hours humidity tests.
  3. Pretreatment: 5-stage; zinc chromate conversion coating.
  4. Application: Electrostatic spray and oven bake by approved applicator.
  5. Coating quantity: Minimum one (1) primer coat and one color coat.
  6. Dry film thickness: Minimum 1.2 mils on exposed surfaces, except inside corners and channels.
- E. Finish Color: As selected by Architect from manufacturer's standard range.

## 2.08 ACCESSORIES

- A. Roller Shades for all new windows as described in Section 12 2400 - Window Shades.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Prepare openings to be in tolerance, plumb, level, provide for secure anchoring, and in accordance with approved Shop Drawings. Provide perimeter wood blocking as required for secure anchoring.
- B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive aluminum windows.

### 3.02 INSTALLATION

- A. Use only skilled tradesmen with Work done in accordance with the Contract Drawings and approved Shop Drawings.
- B. Install windows in accordance with manufacturer's instructions.
- C. Install window assembly in accordance with AAMA/WDMA/CSA 101/I.S.2/A440.
- D. Provide perimeter wood blocking as required for secure anchoring. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities.
- E. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent Work.

- F. Provide thermal isolation where components penetrate or disrupt building insulation. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- G. Coordinate attachment and seal of perimeter air barrier and vapor retarder materials.
- H. Install operating hardware not pre-installed by manufacturer.
- I. Install glass in accordance with requirements specified in Section 08 8000.
- J. Install perimeter sealant in accordance with requirements specified in Section 07 9005 - Joint Sealers.
  - 1. Prior to installing, window subsills shall be dammed at each end to substrate a minimum 1 inch vertical and horizontal. Sealant shall be tooled to create swale moving water away from each end. Fastener heads shall be sealed with manufacturer recommended sealant prior to setting window. Receptor and panning systems shall be dammed at the head on each end, and at all exterior joints where vertical and horizontal members meet. Systems that are required to be reversed due to existing conditions shall be dammed at the interior members intersections, however, prior approval by Architect is required.
- K. Sliding windows in receptor or panning systems shall receive blocking prior to installing closure strips near the sill on either side to prevent movement from closing.
  - 1. Post installation, windows shall be sealed at the exterior junction between window and subsill along with full perimeter sealant as required.
  - 2. Fasteners shall be concealed under glazing stops or where otherwise possible.

### **3.03 TOLERANCES**

- A. Maximum Variation from Level or Plumb: 1/16 inches every 3 ft non-cumulative or 1/8 inches per 10 ft, whichever is less.

### **3.04 FIELD QUALITY CONTROL**

- A. Test installed units in conformance with AAMA 502-02 minimum requirements for air and water infiltration with the window manufacturer, Contractor, and Owner present.
- B. Select test units as directed by the Owner's Representative and use an AAMA-accredited laboratory provided by the Owner or Contractor.
- C. Replace windows that have failed field testing and retest until performance is satisfactory.

### **3.05 ADJUSTING**

- A. Adjust hardware for smooth operation and secure weathertight closure.

### **3.06 CLEANING**

- A. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.
- B. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant and window manufacturer.

**END OF SECTION**

**SECTION 09 6566  
RESILIENT ATHLETIC FLOORING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Vinyl sheet flooring, adhesively installed.
- B. Painted game lines.

**1.02 RELATED REQUIREMENTS**

- A. Section 09 0561 - Common Work Results for Flooring Preparation: Concrete slab moisture and alkalinity testing and remediation procedures.

**1.03 REFERENCE STANDARDS**

- A. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2016 (Reapproved 2021).
- B. ASTM D2240 - Standard Test Method for Rubber Property--Durometer Hardness; 2015 (Reapproved 2021).
- C. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; 2023.
- D. ASTM F2772 - Standard Specification for Athletic Performance Properties of Indoor Sports Floor Systems; 2011 (Reapproved 2019).
- E. DIN EN 14904 - Surfaces for Sports Areas – Indoor Surfaces for Multi-Sports Use – Specification; 2006.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; attendance by all affected installers; review preparation and installation procedures and coordination and scheduling necessary for related work.

**1.05 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's printed data sheets for products specified.
- C. Shop Drawings: Fabrication and installation details, and layout, colors, and widths of game lines and equipment locations.
- D. Selection Samples: Manufacturer's color charts for flooring materials specified and game line paints, indicating full range of colors and textures available.
- E. Verification Samples: Actual flooring material specified, not less than 6 inch square, mounted on solid backing.
  - 1. Include samples of game lines, illustrating colors selected.
- F. Concrete Subfloor Test Report: Submit a copy of the moisture and alkalinity (pH) test reports.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 6000 - Product Requirements, for additional provisions.
  - 2. Extra Flooring Material: 10 square yards matching installed flooring.

**1.06 QUALITY ASSURANCE**

**1.07 DELIVERY, STORAGE, AND HANDLING**

- A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.
- B. Deliver materials to project site in unopened containers clearly labeled with manufacturer's name and identification of contents.

- C. Store materials in dry and clean location until needed for installation. During installation, handle in a manner that will prevent marring and soiling of finished surfaces.

## **1.08 FIELD CONDITIONS**

- A. Maintain temperature in spaces to receive adhesively installed resilient flooring within range of 70 to 95 degrees F for not less than 48 hours before the beginning of installation and for not less than 48 hours after installation has been completed. Subsequently, do not allow temperature in installed spaces to drop below 50 degrees F or to go above 100 degrees F.

## **PART 2 PRODUCTS**

### **2.01 PREFORMED ATHLETIC FLOORING**

- A. Manufacturers: All products by the same manufacturer.
  - 1. Basis of Design: Tarkett Sports Indoor; Field Turf USA, Inc.; Omnisports HPL-9MM; [www.tarkettsportsindoor.com/#sle..](http://www.tarkettsportsindoor.com/#sle..)
  - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Resilient Multi-Purpose Athletic Sheet Flooring:
  - 1. Wearing Surface: Pure polyvinyl chloride, mechanically extruded and uniformly resilient material with uniform color throughout thickness. Single surface embossing and Extreme Three (3) layers technology (X#LT) as supplied by Tarkett with wood image on face.
  - 2. Cushion: XCS cushion force reduction layer of high density closed cell PVC foam with honeycomb embossing applied in one continuous manufacturing process.
  - 3. Sheet Thickness: Minimum 9mm nominal.
  - 4. Sheet Width: Minimum: 6'-6".
  - 5. Sheet Lengths: Max. 85' or as necessary to minimize transverse seams.
  - 6. Static Load: Minimum 500 psi, per ASTM D412.
  - 7. ASTM -E648- Class 1.
  - 8. Seaming Method: Welding with heat or chemical.
  - 9. Surface Texture: Smooth.
  - 10. Color: As selected from manufacturer's standard range.
  - 11. Game Lines: Paint as approved by manufacturer of vinyl sheet flooring. Coordinate final game line layout with Owner/Architect during the submittal process.
  - 12. Top Coat: If required by manufacturer for additional UV protection, a clear polyurethane coating that protects game lines and wearing surface.
  - 13. Ball rebound:- Passed ASTM F2772 more than 90%.
  - 14. Transitions to adjacent flooring material: see notes on drawings for types required for transition to flooring type.
  - 15. Products:
    - a. Tarkett- Omnisports HPL- 9mm. : [www.tarkettsportsindoor.com/#sle..](http://www.tarkettsportsindoor.com/#sle..)
    - b. Substitutions: See Section 01 6000 - Product Requirements.

### **2.02 ACCESSORIES**

- A. Leveling Compound: Latex-modified cement formulation as recommended by flooring manufacturer for substrate conditions.
- B. Flooring Adhesive: Waterproof; types recommended by flooring manufacturer.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine substrates for conditions detrimental to installation of athletic flooring. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of athletic flooring to substrate.

### **3.02 WARRANTY**

- A. Special Limited Warranty:
  - 1. Manufacturer's standard form in which manufacturer agrees to repair or replace sportsflooring including labor that fails within specific warranty period.
  - 2. Material Warranty must be direct form the manufacturer.
    - a. Material warranties from separate or third party insurance providers are not valid.
    - b. Material warranties must come from original manufacturer or division thereof. Private label warranties from distributors or brokers are not valid. Supply original point of manufacturing upon request.
  - 3. Failures include, but are not limited to the following:
    - a. Material manufacturing defects.
    - b. Surface wear and deterioration to the point of wear through of wear layer per ASTM F410/ASTM F1303.
    - c. Failure due to substrate moisture exposure exceeding 98% relative humidity when tested according to ASTM F2170.
  - 4. Warranty Period:
    - a. For material defects and surface wear-through: 15 years from date of substantial completion.
    - b. For moisture vapor tolerance: 15 years from date of substantial completion.
  - 5. Installer's Limited Warranty:
    - a. Installers standard form in which installer agrees to repair or replace sports flooring that fails due to poor workmanship or faulty installation with in the specified warranty period.
    - b. Warranty Period: 2 years from date of substantial completion.

### **3.03 PREPARATION**

- A. Remove coatings that are incompatible with flooring adhesives, using methods recommended by flooring manufacturer.
- B. Broom clean areas to receive athletic flooring immediately before beginning installation.

### **3.04 INSTALLATION**

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Resilient Sheet Flooring:
  - 1. Unroll flooring and allow to relax before beginning installation.
  - 2. Mix adhesive thoroughly and apply to substrate with notched trowel. Roll flooring into fresh adhesive, overlapping end seams and double cutting, butting factory edges and compression fitting.
  - 3. Roll entire flooring surface with steel roller to assure adhesion to substrate and eliminate air bubbles.
  - 4. Immediately remove any adhesive from flooring surface, using chemical recommended by flooring manufacturer.
  - 5. Weld seams using techniques and equipment recommended by manufacturer.
  - 6. Lay out game lines using tape and taping machine approved by flooring manufacturer. Apply game line paint with roller, and allow to dry before removing tape.
  - 7. Apply transparent top coat over flooring if recommended by manufacturer, to achieve a uniform finished appearance.

### **3.05 CLEANING**

- A. Clean flooring using methods recommended by manufacturer.

**3.06 PROTECTION**

- A. Protect finished athletic flooring from construction traffic to ensure that it is without damage upon Date of Substantial Completion.

**END OF SECTION**



**MATERIAL SCHEDULE**

ITEM GROUP	TYPE MARK	PRODUCT DESCRIPTION	MANUFACTURER	PRODUCT NAME	PRODUCT NUMBER	PRODUCT MAKE	SIZE	COMMENTS
BASE	RB-1	RUBBER BASE	TARKEIT/JOHNSONITE	BASEWORKS THERMOSET RUBBER (TYPO TIS)	TG2	SHARK FIN CG	4"	
BASE	RB-2	RESILIENT BASE	ALTRO USA, INC.	ALTRO CLASSIC 25	K30911	WR101	4"	INTEGRATED COVE BASE. SEE TRANSITION DETAIL AND RF-1 FOR ADDITIONAL INFO
CASEWORK	PL-1	PLASTIC LAMINATE	FORMICA	NEUTRAL TWILL	8826-58	MATTE		SEE INTERIOR ELEVATIONS FOR LOCATIONS
CASEWORK	PL-2	PLASTIC LAMINATE	FORMICA	CITADEL	1094-MC	MICRODOT FINISH		SEE INTERIOR ELEVATIONS FOR LOCATIONS
CASEWORK	PL-3	PLASTIC LAMINATE	FORMICA	SEA SALT	9529-43	ARTISAN TEXTURE		SEE INTERIOR ELEVATIONS FOR LOCATIONS
CASEWORK	PL-4	PLASTIC LAMINATE	WILSONART	CRIMSON HONEYCOMB	Y0661-60	MATTE		SEE INTERIOR ELEVATIONS FOR LOCATIONS
CASEWORK	SS-1	SOLID SURFACE COUNTERTOP	WILSONART	SOLID SURFACE	9735M	AVAILANCHE MELANGE		COUNTERTOPS AND WINDOW SILLS. SEE INTERIOR ELEVATIONS FOR LOCATIONS
CASEWORK	SS-2	SOLID SURFACE COUNTERTOP	DURAT	MULTICOLOUR SPECKLES	D0100-12	WHITE - SPARSE		SEE INTERIOR ELEVATIONS FOR LOCATIONS
CEILING	ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	SCHOOL ZONE FINE FISURED AIRRAURE	1356	WHITE (WH)	24"x24"x3/4"	ANGLED TEGULAR 15/16"
FLOORING	EP-1	EPOXY FLOORING	SHERWIN WILLIAMS	DUR-A-FLEX	HYBRI-FLEX EC	MACRO CHIP - PEWTER	-	USE PEWTER AS BASIS OF DESIGN, BUT INCORPORATE FLECKS OF PT-3
FLOORING	EP-2	EPOXY FLOORING	SHERWIN WILLIAMS	DUR-A-FLEX	HYBRI-FLEX EC	SOLID COLOR	-	CUSTOM COLOR MATCH PT-3
FLOORING	LVT-1	LUXURY VINYL TILE	PATCRAFT	SHAPE STUDY   GRAPH	1713V	GRAVEL 00540-V2	24"x24"	INSTALL: MONOLITHIC; PROVIDE SEAMING DIAGRAM
FLOORING	LVT-2	LUXURY VINYL TILE	PATCRAFT	SHAPE STUDY   PLANAR	1716V	RED PLANAR 00855-V2	24"x24"	INSTALL: MONOLITHIC; PROVIDE SEAMING DIAGRAM
FLOORING	LVT-3	LUXURY VINYL TILE	PATCRAFT	SHAPE STUDY   PLANAR	1716V	RED PLANAR 00855-V2	24"x24"	INSTALL: MONOLITHIC; PROVIDE SEAMING DIAGRAM
FLOORING	LVT-4	LUXURY VINYL TILE	PATCRAFT	SHAPE STUDY   GRAPH	1713V	MAROON 00870-V2	24"x24"	INSTALL: MONOLITHIC; PROVIDE SEAMING DIAGRAM
FLOORING	LVT-5	LUXURY VINYL TILE	PATCRAFT	SHAPE STUDY   GRAPH	1713V	BUTTERSOTCH 00290-V2	24"x24"	INSTALL: MONOLITHIC; PROVIDE SEAMING DIAGRAM
FLOORING	PFT-1	PORCELAIN FLOOR WALL TILE	DAL TILE	PORTFOLIO	PF06	IRON GREY	12"x24"	INSTALL: HORIZONTAL STACK; GROUT: MAPEI 107 IRON; USE SCHLUTER STRIP WHERE MEETS WALL
FLOORING	RF-1	RESILIENT SHEET FLOORING	ALTRO USA, INC.	ALTRO CLASSIC 25	K30911	WR101	12"x24"	SAFETY FLOORING - WET AND GREASY AREA
FLOORING	RST-1	RUBBER STAIR TREAD	TARKEIT/JOHNSONITE	COLOR SPLASH	HRTSP VJ4	SPECKLED PLYMOUTH ROCK	7MMx2MM	HAMMERED FINISH (LEVEL 1 TO LANDING)
FLOORING	RST-2	RUBBER STAIR TREAD	TARKEIT/JOHNSONITE	COLOR SPLASH	HRTSP VJH7	SPECKLED SPICY CLEMENTINE	7MMx2MM	HAMMERED FINISH (STAIR LANDING)
FLOORING	RST-3	RUBBER STAIR TREAD	TARKEIT/JOHNSONITE	COLOR SPLASH	HRTSP VH4	SPECKLED GOLDEN FLASH	7MMx2MM	HAMMERED FINISH (LANDING TO LEVEL 2)
FLOORING	SC-1	SEALED CONCRETE	-	CLEAR COAT EPOXY	-	-	-	-
FLOORING	VCT-1	VINYL COMPOSITE TILE	TARKEIT	TARKEIT VCT II	557	SHOOTING STAR CG	12"x12"	-
MISCELLANEOUS	SSS-1	STAINLESS STEEL SHEET WALL PROTECTION	CONSTRUCTION SPECIALTIES	CS ACROVYN	-	STAINLESS STEEL	4'x8'	-
PAINT	PT-1	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH LATEX PAINT	SW7006	EXTRA WHITE		(WHITE) OVERALL PAINT
PAINT	PT-2	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH LATEX PAINT	SW7055	LIGHT FRENCH GRAY		(WHITE) OVERALL PAINT
PAINT	PT-3	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH LATEX PAINT	SW7592	CRABBY APPLE (RED)		(WHITE) OVERALL PAINT
PAINT	PT-4	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH LATEX PAINT	SW6883	RAUCOUS ORANGE (ORANGE)		(WHITE) OVERALL PAINT
PAINT	PT-5	PAINT	SHERWIN WILLIAMS	EGGSHELL FINISH LATEX PAINT	SW6676	BUTTERFIELD (YELLOW)		(WHITE) OVERALL PAINT
PAINT	PT-6	DRY ERASE WALL PAINT	MDC INTERIOR SOLUTIONS	DRY ERASE WALL PAINT	-	WHITE		(WHITE) OVERALL PAINT
WALLS	AWP-1	ACOUSTIC WALL PANEL	ACOUSTICS FIRST	FABRIC WRAPPED PANEL - GUILFORD OF MAINE	BEEHAVE 3948	CURRENT 2802	24X48"	DIRECT ATTACH; STAGGERED AS SHOWN
WALLS	AWP-2	ACOUSTIC WALL PANEL	ACOUSTICS FIRST	FABRIC WRAPPED PANEL - GUILFORD OF MAINE	BEEHAVE 3948	LEMON 2805	24X48"	DIRECT ATTACH; STAGGERED AS SHOWN
WALLS	AWP-3	ACOUSTIC WALL PANEL	ACOUSTICS FIRST	FABRIC WRAPPED PANEL - GUILFORD OF MAINE	1301-1207	RESOLVE - ZEAL	24X48"	DIRECT ATTACH; SEE ELEVATIONS
WALLS	AWP-4	ACOUSTIC WALL PANEL	ACOUSTICS FIRST	FABRIC WRAPPED PANEL - GUILFORD OF MAINE	1301-1203	RESOLVE - EFFECT	24X48"	DIRECT ATTACH; SEE ELEVATIONS
WALLS	CG-1	CORNER GUARDS	CONSTRUCTION SPECIALTIES	CS ACROVYN LG SERIES	LG-200	CLEAR		
WALLS	CGM-1	CUSTOM GRAPHIC MURAL	TBD	TBD	TBD	TBD	5'-6 1/2"x30'-1"	CUSTOM WALL GRAPHICS TBD; HOLD ALLOWANCE; COORDINATION REQUIRED BETWEEN ARCHITECT, OWNER AND VENDOR
WALLS	PWT-1	PORCELAIN WALL TILE	DAL TILE	ANNAPOLIS REMIX	PF08	SAL GLASSY	6"x18"	INSTALL: HORIZONTAL STACK; GROUT: MAPEI 00 WHITE
WALLS	PWT-2	PORCELAIN WALL TILE	DAL TILE	STENCIL	SC36	BERRY LINEAR	4"x12"	INSTALL: VERTICAL STACK; GROUT: MAPEI 00 WHITE
WALLS	PWT-3	PORCELAIN WALL TILE	FILEBAR	HEXART POP	-	YELLOWPOP MATTE	8"x8"	INSTALL: RANDOM; GROUT: MAPEI 00 WHITE
WALLS	WC-1	MAGNET RECEPTIVE DRY ERASE WALLCOVERING	MDC INTERIOR SOLUTIONS	FUZE WALLCOVERING	DEW15303	WHITE	48"	

**ROOM FINISH SCHEDULE**

No.	ROOM NAME	FLOORS	WALLS		CEILING	REMARKS
			FLOOR FINISH	BASE		
100	PASSAGEWAY		LVT-1,LVT-4	RB-1	PT-1, PT-2, PT-3	GWB,2X2 ACT
101	WARNING KITCHEN		RB-1	RB-1	PT-1, SSS-1	2X2 ACT
101-1	DRY STORAGE		RB-1	RB-1	PT-1	2X2 ACT
102	CAFENASUM		RB-1	RB-1	PT-1,PT-2	EXPOSED TRUSSES TO BE PAINTED, PT-3, PT-4, AND PT-5; ACOUSTIC WALL PANELS; SEE ELEVATIONS
102-1	TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
102-2	STORAGE		PFT-1	-	PT-1, PT-1	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
102-3	P.E. OFFICE		LVT-1	RB-1	PT-1,PT-2	2X2 ACT
103	O.T.P.T.		LVT-1	RB-1	PT-1,PT-2	2X2 ACT
104	KINDERGARTEN CLASSROOM 11		LVT-1, LVT-5	RB-1	PT-1,PT-5	GWB,2X2 ACT
104-1	TOILET		PFT-1	-	PT-1,PWT-1,PWT-4	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
104-2	STAIR		ETR	RB-1	PT-1,PT-2	2X2 ACT
105	KINDERGARTEN CLASSROOM 10		ETR	ETR	PT-1	GWB,ETR EXPOSED
106	PRE-K CLASSROOM 9		ETR	ETR	PT-1	GWB,ETR EXPOSED
107	LIFT		EP-1	RB-1	PT-1	2X2 ACT
107-1	LIFT LOBBY		EP-1	RB-1	PT-1	2X2 ACT
107-2	LIFT LOBBY		EP-1	RB-1	PT-1	2X2 ACT
109	RESOURCE ROOM		LVT-1,LVT-2	RB-1	PT-1,PT-3,WC-1	2X2 ACT
109-1	STORAGE		VCT-1	RB-1	PT-1	ETR
110	PRE-K CLASSROOM 8		ETR	ETR	PT-1	GWB,ETR EXPOSED
111	ART / MUSIC ROOM		LVT-1,LVT-3,LVT-4	RB-1	PT-1,PT-2,PT-3,WC-1	2X2 ACT ACOUSTIC WALL PANELS EDGE OF SOFFITS TO BE PAINTED; SEE ELEVATIONS
112	START TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	GWB,2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
113	ALCOVE		EP-1	RB-1	PT-3	2X2 ACT
115	MEDIA / STREAM ROOM		LVT-1,LVT-3,LVT-4	RB-1	PT-1,PT-2,PT-3,CGM-1	2X2 ACT EDGE OF SOFFITS TO BE PAINTED; SEE ELEVATIONS
115-1	STORAGE		RB-1	RB-1	PT-1	2X2 ACT
115-2	ELECTRICAL ROOM		VCT-1	RB-1	PT-1	ETR
115-3	STORAGE		SC-1	RB-1	PT-1	2X2 ACT
117	NURSES OFFICE		LVT-5	RB-1	PT-1,PT-2	2X2 ACT
117-1	TOILET		PFT-1	-	PT-1,PWT-1,PWT-4	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
117-2	EXAM		LVT-1	RB-1	PT-1,PT-2	2X2 ACT
118	STUDENT TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
120	STUDENT TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
120	UTILITY ROOM		PFT-1	PT-1	PT-2,PT-4	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
128	WOMEN'S TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
201	STORAGE		VCT-1	RB-1	PT-1	2X2 ACT
202	ELECTRICAL ROOM		VCT-1	RB-1	PT-1	2X2 ACT
203	FACULTY ROOM		PFT-1	RB-1	PT-1, PT-2, PT-3	2X2 ACT
203-1	STORAGE		VCT-1	RB-1	PT-1	2X2 ACT
203-2	TOILET		PFT-1	-	PT-1,PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
203-3	STORAGE		VCT-1	RB-1	PT-1	2X2 ACT
204	SPECIAL ED. 12.1 CLASSROOM 12		LVT-1, LVT-5	RB-1	PT-1, PT-5	2X2 ACT
204-1	TOILET		PFT-1	-	PWT-1,PWT-2	2X2 ACT USE SCHLUTER TRANSITIONS AS SPECIFIED
204-2	OFFICE		ETR	RB-1	PT-1, PT-2	2X2 ACT
C1-2	CORRIDOR 2		EP-1,EP-2	RB-1	PT-1	2X2 ACT
C2-1	CORRIDOR 1		EP-1,EP-2	RB-1	PT-1	2X2 ACT
C3-1	CORRIDOR 3		EP-1,EP-2	RB-1	PT-1	2X2 ACT
E105-1	STORAGE		ETR	ETR	ETR	ETR
E105-2	STORAGE		ETR	ETR	ETR	ETR
E105-3	STORAGE		ETR	ETR	ETR	ETR
E106-1	GIRLS TOILET		ETR	ETR	ETR	ETR
E108	JANITOR		ETR	ETR	ETR	ETR
E110-1	BOYS TOILET		ETR	ETR	ETR	2X2 ACT
E114	UT. CLOSET		ETR	ETR	ETR	ETR
E116	UTILITY ROOM		ETR	ETR	ETR	ETR
E119	MAIN OFFICE (6)		ETR	ETR	ETR	2X2 ACT
E121	PRINCIPAL'S OFFICE (6)		ETR	ETR	ETR	2X2 ACT
E122	2ND GRADE CLASSROOM 4		ETR	ETR	ETR	2X2 ACT
E123	LIBRARY (3)		ETR	ETR	ETR	2X2 ACT
E124	2ND GRADE CLASSROOM 2		ETR	ETR	ETR	2X2 ACT
E125	STORAGE		ETR	ETR	ETR	ETR
E127	1ST GRADE CLASSROOM 1		ETR	ETR	ETR	ETR
E205	FIRST GRADE CLASSROOM 13		ETR	ETR	ETR	GWB,2X2 ACT
E205-1	TOILET		ETR	ETR	ETR	2X4 ACT
E206	KINDERGARTEN CLASSROOM 14		ETR	ETR	ETR	GWB,2X2 ACT
E206-1	TOILET		ETR	ETR	ETR	2X4 ACT
E207	JANITOR		ETR	ETR	ETR	2X2 ACT
E208	STORAGE		ETR	ETR	ETR	2X2 ACT
E209	FIRST GRADE CLASSROOM 15		ETR	ETR	ETR	GWB,2X2 ACT
E209-1	TOILET		ETR	ETR	ETR	2X2 ACT
E210	FIRST GRADE CLASSROOM 16		ETR	ETR	ETR	GWB,2X2 ACT
E210-1	TOILET		ETR	ETR	ETR	2X2 ACT
EB02	BOILER ROOM		ETR	-	-	-
EB03	TANK ROOM		ETR	-	-	-
EB03-1	TANK ROOM		ETR	-	-	-
EB04	STORAGE		ETR	-	-	-
EB05	PASSAGE		ETR	-	-	-
EB06	CRAWL SPACE		ETR	-	-	-
EB06-1	CRAWL SPACE		ETR	-	-	-
EB06-2	CRAWL SPACE		ETR	-	-	-
EB101	STORAGE		ETR	ETR	ETR	ETR
EC2-2	CORRIDOR 2		ETR	RB-1	PT-1	2X2 ACT
EC4-1	CORRIDOR 4		ETR	RB-1	PT-1	2X2 ACT
EL1-1	ELEVATOR 1		ETR	ETR	ETR	ETR
EL1-1-1	ELEV MACHINE ROOM		ETR	ETR	ETR	ETR
EL1-2	ELEVATOR		ETR	ETR	ETR	ETR
EL1-2-1	ELECTRICAL ROOM		ETR	ETR	ETR	ETR
ES12-1	STAIR 2		RST-2	RB-1	PT-1	GWB
ES12-2	STAIR 2		RST-2	RB-1	PT-1	GWB
ES13-1	STAIR 3		RST-3	RB-1	PT-1	GWB
ST1-1	STAIR 1		RST-1, RST-2, RST-3	RB-1	PT-1, PT-3,PT-4,PT-5	GWB SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION ON LOCATION
ST1-2	STAIR 1		RST-1, RST-2, RST-3	RB-1	PT-1, PT-3,PT-4,PT-5	GWB SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION ON LOCATION
V1-1	VESTIBULE 1		EP-1,EP-2	RB-1	PT-1	2X2 ACT
V1-2	VESTIBULE 1		EP-1,EP-2	RB-1	PT-1	2X2 ACT
V1-2	VESTIBULE 2		EP-1,EP-2	RB-1	PT-1	2X2 ACT
V3-1	VESTIBULE 3		VCT-1	RB-1	PT-1	ETR

**GENERAL FINISH NOTES**

- REFER TO MATERIAL SCHEDULE ON SHEET A900 FOR ADDITIONAL FINISH INFORMATION.
- ALL PARTITIONS TO BE PAINTED PT-1, U.N.O. REFER TO SPECIFICATIONS AND FINISH SCHEDULES FOR COLORS, SHEENS, AND MINIMUM COATING REQUIREMENTS.
- ALL PARTITIONS TO RECEIVE RB-1 BASE, U.N.O. REFER TO SPECIFICATIONS FOR COLOR AND STYLE.
- PROVIDE TRANSITIONS AS SCHEDULED. REFER TO TRANSITION DETAILS ON SHEET A900 FOR TYPICAL TRANSITIONS BETWEEN DIFFERING FINISHES. TRANSITION OF FLOOR MATERIALS TO BE LOCATED AT CENTER OF DOORS IN CLOSED POSITION, U.N.O. FLOAT AS REQUIRED FOR LEVEL TRANSITION.
- ALIGN GROUT LINES WHEN FLOOR TO WALL TRANSITIONS EXIST TO PROVIDE SEAMING DIAGRAM FOR ALL FINISHES (WALLCOVERING, FLOOR COVERING, FABRIC PANELS ETC.) PRIOR TO INSTALLATION.
- SLAB DEPRESSION IN CAFENASUM AND ADJACENT TOILET ROOM. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- REPAIR AND PREPARE ALL EXISTING SURFACES SCHEDULED TO REMAIN AS NECESSARY FOR APPLICATION OF NEW FINISHES.
- REFER TO ELEVATIONS FOR ALL MILLWORK/CASEWORK FINISHES. WHERE APPLICABLE MILLWORKER TO PROVIDE GRANT AND PATTERN DIAGRAM ALL WALLS WITH DRY ERASE PAINT PT-6 TO HAVE LEVEL 5 FINISH PRIOR TO APPLYING THE DRY ERASE PAINT AS SCHEDULED.
- ALL FLOOR COVERINGS TO BE INSTALLED PRIOR TO CASEWORK; CONTINUE FLOORINGS AS SPECIFIED.
- "ALIGN" MEANS TO SIMILAR COMPONENTS OF CONSTRUCTION SUCH AS PARTITIONS, JAMBS, ETC. ALIGN ACROSS VOIDS OR ADJACENT TO EXISTING CONSTRUCTION.
- LVT PATTERNS THAT TRANSITION FROM ONE COLOR TO THE NEXT SHOULD BE INSTALLED IN A GRADIENT PATTERN. SUBMIT SEAMING DIAGRAM BEFORE INSTALLATION FOR ARCHITECT'S APPROVAL.

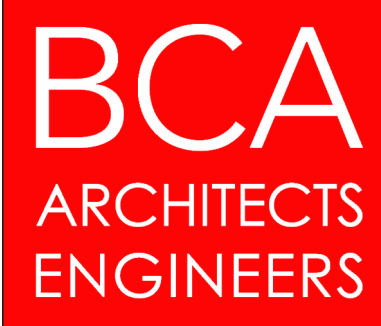
KEY PLAN:

SED NO. 44-09-01-04-0-005-008

THIS SHEET INCORPORATES COLOR GRAPHICS WHICH INDICATE IMPORTANT INFORMATION AND SHALL BE PRINTED IN COLOR IF REPRODUCED BY A CONTRACTOR.

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HIGHLAND FALLS-FORT MONTGOMERY CSD  
ALTERATIONS AND ADDITIONS TO:  
FORT MONTGOMERY ELEMENTARY SCHOOL  
HIGHLAND FALLS - ORANGE COUNTY - NEW YORK

REV	DATE	DESCRIPTION
4	07/23/2024	BID ADDENDUM #4