<b>BID ADDEN</b>	NDUM
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State Project No: H27-Z155	<b>PROJECT NAME:</b> Thomson Student Health Center Roof and	ADDENDUM NO.: One
	Wall Renovations	<b>ADDENDUM ISSUE DATE:</b> July 3, 2014

**TO ALL BIDDERS:** This addendum is issued for the purposes of modifying or interpreting the project manual, including any specifications or drawings, through addition, deletion, clarification or correction as outlined herein. The information provided in this addendum supersedes any information previously provided in the referenced documents and sections of the project manual or in any separate specifications or drawings incorporated into the project manual. This addendum and the information contained herein shall be used in the preparation of any bid submitted by the Bidder and shall become an integral part of the contract documents for any contract awarded for the project specified.

#### CHANGES TO PRIOR ADDENDA: NA

#### CHANGES TO BIDDING REQUIREMENTS: NA

#### CHANGES TO CONDITIONS OF THE CONTRACT: NA

#### CHANGES TO SPECIFICATIONS:

**DELETE** "Section 00 31 23-Existing Asbestos Information and **ADD** Section 00 31 23-Existing Asbestos Information rev. 7/2/2014."

DELETE "Section 00 01 00-Table of Contents and ADD Section 00 01 00-Table of Contents rev. 7/2/2014."

**DELETE** "Section 00 01 11 00-Summary of Work and **ADD** Section 01 11 00-Summary of Work rev. 7/2/2014."

DELETE "Section 01 14 00-Work Restrictions and ADD Section 01 14 00-Work Restrictions rev. 7/2/2014."

DELETE "Section 04 20 00-Unit Masonry and ADD Section 04 20 00-Unit Masonry rev. 7/2/2014."

**DELETE** "Section 07 19 00-Fluid Applied Water Repellent and **ADD** Section 07 19 00-Fluid Applied Water Repellent rev. 7/2/2014."

DELETE "Section 26 41 00-Facility Lightning Protection."

#### CHANGES TO DRAWINGS: NA

#### **CLARIFICATIONS:**

- **Q1:** Do we need to add additional insulation than the thicknesses specified to meet the requirement of minimum R-20?
- A1: System meets minimum R-20 with above deck lightweight insulating concrete. The minimum thicknesses specified shall be used.
- **Q2:** Where do we provide quotes for Unit Prices?
- A2: Provide quotes for Unit Prices on the Bid Form.

#### ATTACHMENTS:

Pre Bid Sign-in-Sheet Pre Bid REI Engineers Agenda

#### ALL OTHER REQUIREMENTS AND PROVISIONS OF THE BIDDING DOCUMENTS REMAIN UNCHANGED. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID FORM. FAILURE TO DO SO MAY BE CAUSE FOR REJECTION OF THE BID.

#### END OF ADDENDUM

#### **SECTION 00 01 10**

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## END OF SECTION 00 01 10

This specification is developed solely for this project. Client shall hold REI Engineers, Inc. harmless for any errors, omissions or liability associated with reuse.

## SECTION 00 31 23

# **EXISTING ASBESTOS INFORMATION**

# **FM00451411** \*FM00451411\*

# **USC Work Order**

Description HAZMAT SURVEY - BLDG 111

Site	COLUMBIA	Assigned To	JPROVENCE	
Building	111 STUDENT HEALTH CENTER	Crew	HAZMAT	
Floor	Room:	Start Date	19-MAR-14	Priority 5
Equipment		Due date	07-APR-14	
		Request Date	06-MAR-14	by CAMOORE
Request #	FM00451411 Description HAZMAT SU	JRVEY - BLDG 111		
Parent WO #				
CP Number State/Internal	Project Number H27-7155	1 - ROOF & WINDOW	RENOVATIONS	
Poquetor		Project Manager		
Telenhone	7-1288	Telenhone	777-1288	
Alternate	1 1200	Estimated Cost	\$ 0.00	
Telenhone		Billing		
Non-Available	Time	53100-W662-57120		
Non-Available			RENOVA)	
Task List				
	STAPTED			
		CAUSE		
	COMPLETED	CONDITION		
BENCHSTOCH Qty	K MATERIALS Description			Price Per Unit
Supervisor's				
	Approval			
Note Date	Approval Title			
Note Date16-APR-14SURVEY DATE: 4	Approval Title HAZMAT SURVEY RESULTS 4/9/14			
Note Date16-APR-14SURVEY DATE:INSPECTOR #: D	Approval Title HAZMAT SURVEY RESULTS 4/9/14 DARRYL WASHINGTON II BI-00568			
Note Date16-APR-14SURVEY DATE: 4INSPECTOR #: DSTATUS: THE FOR	Approval   Title   HAZMAT SURVEY RESULTS   4/9/14   DARRYL WASHINGTON II BI-00568   DLLOWING MATERIALS HAVE BEEN TESTED FOR ASBE	STOS CONTAINING MA	TERIALS RESULTS F	OLLOWS
Note Date 16-APR-14 SURVEY DATE: 4 INSPECTOR #: D STATUS: THE FC (HIGH ROOF)	Approval   Title   HAZMAT SURVEY RESULTS   4/9/14   DARRYL WASHINGTON II BI-00568   DLLOWING MATERIALS HAVE BEEN TESTED FOR ASBE	STOS CONTAINING MA	TERIALS RESULTS F	OLLOWS
Note Date	Approval   Title   HAZMAT SURVEY RESULTS   4/9/14   DARRYL WASHINGTON II BI-00568   DLLOWING MATERIALS HAVE BEEN TESTED FOR ASBE   RIAL- POSITIVE FOR ASBESTOS CONTAINING MATERIAL	STOS CONTAINING MA	TERIALS RESULTS F	OLLOWS
Note Date 16-APR-14 SURVEY DATE: 4 INSPECTOR #: D STATUS: THE FO (HIGH ROOF) ROOFING MATER TAR- POSITIVE F	Approval   Title   HAZMAT SURVEY RESULTS   4/9/14   DARRYL WASHINGTON II BI-00568   DLLOWING MATERIALS HAVE BEEN TESTED FOR ASBE   RIAL- POSITIVE FOR ASBESTOS CONTAINING MATERIALS   FOR ASBESTOS CONTAINING MATERIALS	STOS CONTAINING MA	TERIALS RESULTS F	OLLOWS
Note Date 16-APR-14 SURVEY DATE: 4 INSPECTOR #: D STATUS: THE FO (HIGH ROOF) ROOFING MATER TAR- POSITIVE F (LOADING DOC)	Approval   Title   HAZMAT SURVEY RESULTS   4/9/14   DARRYL WASHINGTON II BI-00568   DLLOWING MATERIALS HAVE BEEN TESTED FOR ASBE   RIAL- POSITIVE FOR ASBESTOS CONTAINING MATERIALS   FOR ASBESTOS CONTAINING MATERIALS   K ROOF )	STOS CONTAINING MA	TERIALS RESULTS F	OLLOWS

# **FM00451411** \*FM00451411\*

GREY CAULKING- POSITIVE FOR ASBESTOS CONTAINING MATERIALS ROOF PATCH- POSITIVE FOR ASBESTOS CONTAINING MATERIALS FLASHING- POSITIVE FOR ASBESTOS CONTAINING MATERIALS BASE PLYS- POSITVE FOR ASBESTOS CONTAINING MATERIALS WHITE CAULK- POSITIVE FOR ASBESTOS CONTAINING MATERIALS ROOFING MATERIAL- NEGATIVE FOR ASBESTOS CONTAINING MATERIALS (BUILDING EXTERIOR) DARK GREY WINDOW CAULK- POSITIVE FOR ASBESTOS CONTAINING MATERIALS OLD WHITE EXPANSION CAULK- NEGATIVE FOR ASBESTOS CONTAINING MATERIAL- NEGATIVE FOR ASBESTOS CONTAINING MATERIALS TEXTURE - NEGATIVE FOR ASBESTOS CONTAINING MATERIALS NEW WHITE EXPANSION CAULK- NEGATIVE FOR ASBESTOS CONTAINING MATERIALS CAULK ( BACK GLASS DOOR OF BLD )- NEGATIVE FOR ASBESTOS CONTAINING MATERIALS (MAIN ROOF) ROOFING MATERIAL- NEGATIVE FOR ASBESTOS CONTAINING MATERIAL DARK GREY EXPANSION CAULK- NEGATIVE FOR ASBESTOS CONTAINING MATERIAL LIGHT GREY EXPANSION CAULK- NEGATIVE FOR ASBESTOS CONTAINING MATERIAL BLACK CAULK- NEGATIVE FOR ASBESTOS CONTAINING MATERIAL TAR - NEGATIVE FOR ASBESTOS CONTAINING MATERIAL GRAY BEAM PAINT ( MAIN ROOF )- NEGATIVE FOR LEAD WHITE EXTERIOR PAINT- NEGATIVE FOR LEAD **INSPECTORS NOTES:** PLEASE CONTACT BRIAN WOOD FOR LOCATION AND DETAIL INFORMATION FOR THIS ROOFING PROJECT. IF YOU ENCOUNTER ANY SUSPECT MATERIALS IN PLACE AND DEEM IT SUSPECT FOR ASBESTOS AND OR LEAD AND IT IS NOT LISTED ABOVE PLEASE STOP WORK AND CALL THE ASBESTOS PROGRAM MANAGER FOR FURTHER TESTING OR ABATEMENT REFER TO THE SURVEY RESULTS DOCUMENT ATTACHED TO THE WO FOR DETAILED INFORMATION. 30-JUN-14 HAZMAT SURVEY RESULTS SURVEY DATE: 6/26/14 INSPECTOR #: ERIC MELARO (BI-01296) STATUS: THE FOLLOWING MATERIAL HAS BEEN TESTED FOR ASBESTOS AND THE RESULTS FOLLOW: FELT PAPER (LINING PARAPET ON FRONT ROOF) – POSITIVE FOR ASBESTOS

IF YOU ENCOUNTER ANY OTHER MATERIALS IN PLACE AND DEEM THEM SUSPECT FOR ASBESTOS AND/OR LEAD, PLEASE STOP WORK AND CONTACT THE ASBESTOS PROGRAM MANAGER FOR FURTHER TESTING OR ABATEMENT.

# FM00451411

# \*FM00451411\*

# **USC Work Order**

PLEASE NOTE THAT THE MATERIAL QUANTITY PROVIDED ON THE FIELD SHEET IS ONLY AN ESTIMATE FOR SAMPLING PURPOSES. THE QUANTITY SHOULD BE FIELD VERIFIED FOR ALL OTHER PURPOSES INCLUDING ABATEMENT.

REFER TO THE SURVEY RESULTS ATTACHED TO THE WORK ORDER FOR DETAILED INFORMATION.

#### 08-APR-04 ASBESTOS MAY BE PRESENT IN THIS BUILDING

WARNING - ASBESTOS EXPOSURE ALERT - EXPOSURE TO ASBESTOS MAY BE HARMFUL TO YOUR HEALTH.

AS OF 4/1/2004 THE FOLLOWING AREAS WITHIN THE BUILDING HAVE BEEN IDENTIFIED BY SURVEY TO CONTAIN ASBESTOS:

BLDG 111 STUDENT HEALTH MECH ROOM 106 --> ABATED MECHANICAL RM FIRST FLOOR & HVAC ROOMS --> HOT WATER PIPE [160 LIN. FT.] MECHANICAL RMS --> HOT WATER PIPE [30 LIN. FT.]

PLEASE NOTE - IDENTIFICATION OF ASBESTOS CONTAINING COMPONENTS WITHIN THIS STRUCTURE DOES NOT SPECIFICALLY EXCLUDE THE PRESENCE OF ASBESTOS WITHIN OTHER AREAS.

THE FOLLOWING COMMON TYPES OF BUILDING COMPONENTS COULD CONTAIN MATERIALS THAT, WHEN DISTURBED, MIGHT EXPOSE YOU TO ASBESTOS:

1. FLOOR TILE

- 2. PIPE INSULATION
- 3. BLACK MASTIC
- 4. HVAC DUCT MASTIC
- 5. SPRAYED-ON FIREPROOFING
- 6. SPRAYED-ON CEILINGS
- 7. SHEETROCK JOINT COMPOUND

BEFORE DISTURBING THESE TYPES OF COMPONENTS, CONFIRM THAT THEY DO NOT CONTAIN ASBESTOS AND TAKE PROPER PRECAUTIONS AT ALL TIMES.

#### 25-OCT-13 ASBESTOS IN JOINT COMPOUND

ASBESTOS CONTAINING JOINT COMPOUND HAS BEEN FOUND IN THIS BUILDING. DO NOT CUT, SAND OR DRILL WALLS. FOR FURTHER INFORMATION OR ASSISTANCE, PLEASE CONTACT THE USC HAZMAT PROGRAM.

#### 12-AUG-10 2009-11-10 BLDG COMPONENT ASBESTOS/LEAD EXPOSURE UPDATE

BELOW ARE THE ASBESTOS AND LEAD TESTING RESULTS FOR THE THOMPSON STUDENT HEALTH CENTER:

SHEET ROCK: NEGATIVE FOR ASBESTOS CONTAINING MATERIALS

JOINT COMPOUND: POSITIVE FOR ASBESTOS CONTAINING MATERIALS

NO PAINT TESTED DUE TO THE WALLS HAVING WALL PAPER ON WALLS

2X2 CEILING TILE: NEGATIVE FOR ASBESTOS CONTAINING MATERIALS

THIS BUILDING HAS BLACK MASTIC ON WATER LINES AND BEHIND FLOORING THAT CONTAINS ASBESTOS CONTAINING MATERIALS THE FLOOR TILE IN THIS BUILDING CONTAINS ASBESTOS

SHEET FLOORING IN VARIOUS COLOR PATTERNS ARE POSITIVE FOR ASBESTOS

PIPE INSULATION IN MECHANICAL ROOMS AND BETWEEN WALLS MAY OR MAY NOT CONTAIN ASBESTOS

THE 1X1 TILES ABOVE THE 2X2 SECTIONS ARE NEGATIVE FOR ASBESTOS

DO NOT DRILL INTO THE COLUMNS IN THIS BUILDING DUE TO THE JOINT COMPOUND BEING TRIALED ON EACH SECTION

IF YOU AND/ OR CONTRACTORS NEED TO DISTURB ANY MATERIALS YOU DEEM SUSPECT THAT ARE NOT LISTED ABOVE, STOP WORK AND CONTACT THE ASBESTOS PROGRAM MANAGER, 777-1208. IF YOU NEED TO DISTURB ANY MATERIAL LISTED AS POSITIVE, YOU MUST CONTACT THE ASBESTOS PROGRAM MANAGER TO ARRANGE FOR REMOVAL. THIS INFORMATION MUST BE PASSED ALONG TO ALL CONTRACTORS, SUB-CONTRACTORS, AND INDIVIDUALS WORKING IN THIS BUILDING

#### **SECTION 01 11 00**

#### **SUMMARY OF WORK**

#### PART 1 GENERAL

#### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Name: Thomson Student Health Center Roof and Wall Renovations
- B. Project Address: 1409 Devine St. Columbia, SC 29208
- C. Owner: University of South Carolina
- D. Engineer: The Contract Documents, dated May 22, 2014, were prepared by REI Engineers.
- E. This work includes the provision of all labor, material, equipment, supervision and administration to integrate the work outlined in this project manual into the total building system such that no leakage into the system occurs. In general, the scope of work in the **Base Bid** will include:
  - 1. Sector A (Approximately 6,900 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
  - 2. Sector B (Approximately 3,138 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere coverboard insulation in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
  - 3. Sector C (Approximately 240 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight insulating concrete; repair damaged or deteriorated lightweight insulating concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere coverboard insulation in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
  - 4. Sector D (Approximately 844 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically

attach new base sheet; adhere base layer insulation in foam adhesive; adhere coverboard insulation in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

- 5. Sector E (Approximately 190 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically attach new base sheet; resecure the existing edge nailers to remain in place; adhere base layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
- 6. Sector F (Approximately 200 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing structural deck; repair damaged or deteriorated structural decking; mechanically attach base layer and second layer insulation; mechanically attach gypsum overlayment; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
- 7. Sector G (Approximately 155 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing structural deck; repair damaged or deteriorated structural decking; mechanically attach new base sheet; resecure the existing edge nailers to remain in place; adhere base layer insulation in foam adhesive; adhere second layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.
- 8. Document location of existing lightning protection components. Remove existing lightning protection/grounding system prior to commencement of roof replacement work. Upon completion of flashing and sheet metal installation, reinstall existing lightning protection/grounding system and integrate into new roof system with flashing components to meet the requirements of the membrane manufacturer. Furnish UL Letter of Findings.
- 9. Exterior Wall Repairs: Remove and replace all exterior wall control joint sealant, remove and replace window and storefront wet seals, grind out spalling mortar joints at brick ties and repoint, grind back shelf angles at spalling mortar and repoint, install copper cover plates at copper ledge, repoint existing deteriorated mortar joints, stucco repairs, seal various wall penetrations, prepare and paint lintels, concrete coping repairs, install clear water repellant at top of brick parapet on East end of building, and cleaning of building exterior.
- 10. Remove and store offsite for reinstallation existing electric bird relocation system. Reinstall relocation system after completion of wall renovation work. Furnish evidence of restored operation to Owner.
- F. Asbestos Containing Roofing Materials (ACRM):
  - 1. The presence of Asbestos Containing Roofing Materials (ACRM) has been detected in test samples identified in Section 00 31 23. The Contractor shall remove and dispose of all ACRM in a safe and legal manner.
  - 2. Contractor responsibilities include the following:

a. The contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, transporting, disposal, and protection of workers, visitors, to the site, and persons occupying areas adjacent to the site. Matter of interpretation of standards shall be submitted to the appropriate administrative agency for resolution before starting work.

- 3. Submittals required:
  - a. Training
    - i. The contractor shall submit copies of supervisor(s) and workers certificated from an DHEC approved course for each employee who will disturb asbestos as evidence that each asbestos employee is accredited as required by USC.
  - b. Asbestos Abatement Work Plan
    - i. The contractor shall submit a detailed written work plan outlining the asbestos abatement sequencing, method(s) of removal, work areas, etc. must be accepted in writing by the owner prior to start of any asbestos work.
  - c. Asbestos Waste Shipment
    - i. The contractor shall submit the asbestos waste manifest within five days of the final waste disposal if not previously submitted.
- 4. It is the intention of these specifications that no asbestos bearing materials be incorporated into the work. In the event the contractor should determine unanticipated asbestos bearing materials to be present in the existing building components, Contractor is to stop all work in the affected area, notify the Engineer and Owner, and provide temporary protection as required. Costs incurred, if any, due to the presence of hidden and/or unanticipated asbestos bearing materials will be authorized by Change Order to this contract.
- G. The contractor is responsible for all electrical, plumbing, mechanical, and other related trade work necessary to facilitate project operations. Contractor is responsible for relocating any and all conduit, HVAC equipment, curbs, and/or plumbing necessary to comply with the requirements of these documents. All work shall conform to the requirements of the current Building Code approved in the State of the project location.
- H. General requirements and specific recommendations of the material manufacturers are included as part of these specifications. The manufacturers' specifications are the minimum standards required for the completed systems. Specific items listed herein may improve the standards required by the manufacturers and will take precedence where their compliance will not affect the manufacturers' guarantee or warranty provisions.

#### 1.03 CONTRACT

A. Project will be constructed under a single prime general construction contract.

#### 1.04 SITE INVESTIGATION

A. The Contractor acknowledges that he has satisfied himself as to the nature and location of the Work, the general and local conditions, particularly those bearing upon transportation,

disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, ground water table or similar physical conditions at the site, the conformation and condition of the ground, the character, quality and quantity of surface and subsurface materials to be encountered, the character of equipment and facilities needed prior to and during the prosecution of the Work and all other matters which can in any way affect the Work or the cost thereof under this Contract. Any failure by the Contractor to acquaint himself with all the available information concerning these conditions will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. Field measurements shall be taken at the site by the Contractor to verify all data and conditions affected by the Work.

#### 1.05 HOT WORK OPERATIONS

- A. Hot work includes, but is not limited to open flames and spark producing operations, welding, cutting, grinding, torches, etc.
- B. The Contractor shall be responsible for all hot work and hot work monitoring. The Contractor shall be responsible for coordinating hot work with Owner.
- C. The Contractor shall be responsible for the hot work operations of their subcontractors, and shall monitor hot work operations conducted by their subcontractors.
- D. Work Area:
  - 1. The Contractor shall inspect conditions listed on the Hot Work Permit.
  - 2. The Contractor shall be responsible for inspecting the work area prior to beginning work. The Contractor shall notify the Owner of unsatisfactory conditions, and ensure conditions are satisfactory to proceed with work.
  - 3. Where torch application is specified, and fire safe conditions cannot be assured by the Contractor, the Contractor shall notify the Owner, the Engineer and Manufacturer immediately to develop alternate methods of material application to ensure fire prevention. Operations shall not proceed when unsafe conditions are found.
  - 4. The Contractor shall seal all building openings to prevent flames or burning debris from entering concealed spaces and building interior. All openings, roof deck joints, curbs, ducts, etc. shall be stripped or otherwise sealed and protected. Wood materials shall be protected as required to eliminate direct flame exposure from torch. Alternate methods of application are encouraged where fire prevention measures cannot be fully assured by the Contractor.
  - 5. The Contractor shall disconnect air handling equipment in the hot work area as required to prevent smoke and flames from being pulled into the building and equipment. This shall be coordinated 48 hours in advance with the Owner before disconnecting equipment.
  - 6. The Contractor shall remove all other combustibles from the hot work area. Remove all solvents, roofing adhesives, roofing cement, and all other flammable liquids from the hot work area.
- E. Fire Watch:
  - 1. The Contractor shall provide fire watch personnel to closely monitor and inspect the work area and adjacent areas for fires, smoldering materials, hot surfaces and smoke.
  - 2. The Contractor shall inspect and monitor the area between the roof deck and ceiling during and after hot work.
  - 3. The Contractor shall monitor conditions for the period of time specified by the Hot Work Permit, and as conditions dictate. The work area and adjacent areas shall be

monitored no less than one hour after hot work has ceased. The time period shall be recorded by the Contractor.

- 4. The Contractor shall provide designated fire watch personnel to monitor interior conditions and exterior conditions during, and after, hot work operations.
- 5. The Contractor shall be responsible for properly training and instructing fire watch personnel of their responsibilities and duties.
- 6. Fire watch shall meet the Owner's requirements.
- 7. Contractor shall monitor the work area and building interior, and coordinate monitoring process with the Engineer and Owner 48 hours in advance of hot work. Contractor shall ensure proper hot work procedures are maintained in all curbs, ducts, concealed spaces and building interior.
- F. Fire Prevention and Fire Safety:
  - 1. Fire prevention and fire safety shall be the Contractor's responsibility. Contractor shall be responsible for developing a pre-fire emergency plan, coordinated with the Engineer and Owner to plan for fire emergencies.
  - 2. It is the responsibility of the Contractor to enforce fire safety precautions and to ensure safety measures are followed at all times by the Contractor's and Subcontractor's personnel.
  - 3. Contractor shall be responsible for maintaining sufficient fire suppression equipment, including fire extinguishers and a charged water hose.

#### **1.06 WORK UNDER OTHER CONTRACTS**

- A. Separate Contract: Owner may award a separate contract for performance of certain construction operations at Project site.
- B. Contractor shall cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying Work under this Contract.

#### 1.07 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 49-division format and CSI/CSC's "MasterFormat" numbering system.
  - 1. Section Identification: The Specifications use section numbers and titles to cross-reference Contract Documents. Sections in the Project Manual are in numeric sequence.; however, the sequence is incomplete. Consult the Table of Contents at the beginning of the Project Manual.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

## PART 2 PRODUCTS (NOT USED)

## PART 3 EXECUTION (NOT USED)

# END OF SECTION 01 11 00

#### **SECTION 01 14 00**

#### WORK RESTRICTIONS

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Administrative and procedural requirements for work sequence, work restrictions, occupancy requirements and use of premises.

#### **1.02 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

#### 1.03 WORK SEQUENCE

- A. The Work shall be conducted in the following sequences unless construction phases are otherwise specified.
  - 1. Construct Work in phases to accommodate the Owner's use; if applicable, of the premises during the construction period; coordinate the construction schedule and operations with the Owner and Engineer.
  - 2. Complete through wall flashing work at Sectors A and D prior to existing roof system removal at Sectors A and D.
  - 3. Complete Work at South elevation of building, including Final Cleaning, prior to August 11, 2014.
  - 4. Complete fluid applied water repellent Work prior to installation of surface ply membrane.
  - 5. Complete exterior wall Work prior to installation of surface ply membrane.
  - 6. Construct Work in phases to provide for public convenience. Do not close off public use of facility until completion of one phase of construction will provide alternative usage.
  - 7. Construction shall be scheduled in such a manner that once work has commenced on one facility, the Contractor's work force shall remain at that facility continuously each work day through final completion at that facility.

#### 1.04 WORK RESTRICTIONS

- A. Work hours shall generally be performed during normal business hours. Should the Contractor elect to work outside of normal business hours or if required for shutdown or disconnection of rooftop equipment, notification to the Owner and Engineer at least one week in advance shall be required. No work shall be scheduled without prior notification and authorization.
- B. Shutdown and disconnect of rooftop equipment as required for performance of Work shall take place over weekend hours or after occupant work hours.
- C. Contractor shall coordinate work schedule with School's testing and special events schedule and may not be allowed to be on-site during certain testing days/events.
  - 1. At the Owner's discretion, no work shall take place September 10, 2014 through September 17, 2014.

#### 1.05 OCCUPANCY REQUIREMENTS

#### A. Owner Occupancy

- 1. Owner will occupy the premises during the entire period of construction to conduct his normal operations. Cooperate with Owner in all construction operations to minimize conflict, and to facilitate Owner usage.
- 2. Contractor shall at all times conduct his operations as to ensure the least inconvenience and the greatest amount of safety and security for the Owner, his staff, and the general public.
- 3. Control noise from operations so that building occupants are not affected.

#### 1.06 USE OF PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
  - 1. Limits: Confine constructions operations to areas of work being renovated as approved by Engineer and Owner.
    - a. Access, staging and storage locations shall be limited to areas indicated in Contract Drawings.
    - b. Performance of Work at North elevation of building shall be limited to access provided from roof Sector A and B. No access from the ground is provided.
    - c. Performance of Work at South elevation of building shall be limited to the sidewalk area adjacent to the building. Refer to the Contract Drawings. Devine Street shall not be utilized for access, staging or storage.
  - 2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
  - 3. Move any stored materials and equipment that interfere with operations of the Owner.
  - 4. Roof access ladder and scaffolding shall not be staged overnight. Remove and secure offsite unless otherwise approved by Owner.
- B. Use of Existing Building
  - 1. Maintain existing building in a weathertight condition throughout construction period.
  - 2. Take every precaution against injuries to persons or damage to property.
  - 3. Protect building, its contents, and its occupants during construction period.
  - 4. The Contractor shall not overload or permit any part of the structure to be loaded with such weights as will endanger its safety or to cause excessive deflection. Materials placed on the roof prior to installation shall be equally distributed over the roof area.
  - 5. Protect any existing surface improvements, such as pavements, curbs, sidewalks, lawn and landscaped areas, utilities, etc.

- 6. Repair to the Owner and Engineer's satisfaction, or to restore to a condition equal to that existing at the time of award of Contract, or to make restitution acceptable to the Owner, any and all damages to the building, its contents, or surface improvements resulting from, or attributable to, the work operation.
- 7. Interior Access
  - a. Shall be limited to that required for existing roof access door modification, inspection after inclement weather and daily site reporting unless otherwise directed by Owner.
  - b. Provide an additional set of footwear with clean soles when accessing interior for Work related activities.
- C. Transportation Facilities
  - 1. Truck and equipment access:
    - a. Avoid traffic conflict with vehicles of the Owner's employees and customers, and avoid over-loading of street and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the designated areas.
    - b. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
  - 2. Contractor's vehicles:
    - a. Require contractor's vehicles, vehicles belonging to employees of the contractor, and all other vehicles entering the Owner's property in performance of the work the contract, to use only the designated access route.
    - b. Do not permit such vehicles to park on any street or other area of the Owner's property except in the designated area.

#### 1.07 OWNER POLICIES

- A. Tobacco Policy
  - 1. The Owner has adopted a Tobacco Free Policy which applies to all school property. This is a total ban on all tobacco products including cigarettes, cigars, pipes, chewing tobacco, snuff, etc. Contractor is responsible for employee's actions while they are on school property. Failure to follow this policy shall constitute a breach of contract and said contract may be terminated without penalty to the school system.
- B. Refer to USC Supplemental General Conditions for Construction Projects and the Indefinite Delivery Contract for additional requirements.

#### PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION (NOT USED)

#### END OF SECTION 01 14 00

#### **SECTION 04 20 00**

#### **UNIT MASONRY**

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Selective replacement of damaged brick masonry units.
- B. Cleaning of building's brick masonry units.

#### **1.02 RELATED DOCUMENTS**

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section, including but not limited to:

1	Mantan Cua	and Dalama	an Madified Come	unto I
1.	Monar, Gro	ut, and Polym	er Moumed Conc	rete ,

2. Masonry Tuck Pointing

Section 04 05 14 Section 04 05 24 Section 07 19 00

3. Fluid Applied Water Repellents

#### 1.03 SUBMITTALS

- A. Refer to Specification Section 01 33 00-Submittal Procedures.
- B. Product Data: For the following:
  - 1. Samples: Review Owners existing veneer and match new veneer to existing for Engineer and Owner approval.

#### 1.04 WARRANTY

- A. Installer's Two Year Warranty: Contractor's two year warranty on their company letterhead using sample contained in Section 01 77 00-Closeout Procedures.
  - 1. Contractor will be required to attend a Post-Construction field inspection no earlier than twenty- three months and no later than twenty-four months after the Date of Substantial Completion and complete any corrective action requested by Owner, Engineer, or Manufacturer at no additional cost to the Owner.

#### PART 2 PRODUCTS

#### 2.01 BRICK

- A. General: Provide shapes indicated and as follows for each form of brick.
  - 1. Provide units without cores or frogs and with exposed surfaces finished for ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces.
- B. Provide special shapes for applications requiring brick of size, form, color and texture on exposed surfaces that cannot be produced by sawing.
  - 1. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints,

bond beams, sashes and lintels.

- 2. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- C. Face Brick: ASTM C 216 and as follows:
  - 1. Grade: SW
  - 2. Initial Rate of Absorption: Between 5 and 20 g/30 sq in per minute when tested per ASTM C 67.
  - 3. Surface Coloring: Brick with surface coloring, other than flashing or sandfinished brick, shall withstand 50 cycles of freezing and thawing per ASTM C 67 with no observable difference in the applied finish when viewed from 10 feet.
  - 4. Type: FBS
  - 5. Size: Bricks manufactured to the following actual dimensions within tolerances specified in ASTM C 216.
  - 6. Where shown to "match existing", provide face brick matching color, texture, and size of existing adjacent brickwork.
  - 7. Products: Subject to full compliance with the requirements, provide units from one of the following manufacturers:
    - a. General Shale Brick
    - b. Ashe Brick Co.
    - c. Boren Brick Co.
    - d. Cherokee Sanford Group, Inc.
    - e. Statesville Brick
    - f. Boral Brick Co.
    - g. Taylor Clay Products
    - h. Triangle Brick
    - i. Lee Brick
    - j. Engineers approved equivalent

### 2.02 MORTAR AND GROUT MATERIALS

A. Refer to Section 04 05 14- Mortar, Grout and Polymer Modified Concrete.

#### 2.03 MASONRY CLEANER

A. Non-etching general purpose masonry concrete and brick cleaner.

### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Examine conditions for compliance with requirements for installation tolerances and other conditions affecting performance.
  - 1. Prepare written report the listing conditions detrimental to performance.
  - 2. Verify that foundations are within tolerances specified.
  - 3. Verify that reinforcing dowels are properly placed.
  - 4. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 **PROTECTION**

- A. Protect adjacent Work areas and finish surfaces from damage during unit masonry work.
- B. Provide temporary protection in areas of Work in progress. Protect occupants from harmful dust, airborne particles and debris.
- C. Provide temporary barricades or signage as required by Owner to redirect occupants from areas of Work in progress.

#### 3.03 INSTALLATION, GENERAL

- A. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units to provide a continuous pattern and to fit adjoining construction. Where possible, use full-size units without cutting. Install cut units with cut surfaces and, where possible, cut edges concealed.
- B. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.
- C. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.
- D. Wetting of Brick: Wet brick before laying if the initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested per ASTM C 67. Allow units to absorb water so they are damp but not wet at the time of laying.

#### 3.04 CONSTRUCTION TOLERANCES

- A. Comply with tolerances in ACI 530.1/ASCE 6/TMS 602 and the following:
- B. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/4 inch in 20 feet, nor 1/2 inch maximum.
- C. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet, nor 1/2 inch maximum.
- D. For conspicuous horizontal lines, such as exposed lintels, sills, parapets, and reveals, do not vary from level by more than 1/4 inch in 20 feet, nor 1/2 inch maximum.
- E. For exposed bed and head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.

#### 3.05 MORTAR BEDDING AND JOINTING

- A. Lay hollow masonry units as follows:
  - 1. With full mortar coverage on horizontal and vertical face shells.
  - 2. Bed webs in mortar in starting course on footings and in all courses of piers, columns, and pilasters, and where adjacent to cells or cavities to be filled with grout.
  - 3. For starting course on footings where cells are not grouted, spread out full mortar bed, including areas under cells.

B. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint).

#### **3.06 REPAIRING AND POINTING**

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application.

#### 3.07 CLEANING

- A. Preparation
  - 1. Cover, protect, and mask adjacent areas, materials and surfaces not to receive cleaning.
  - 2. Test Cleaning:
    - a. Test cleaning methods on sample wall in a location obstructed from pedestrian and adjacent building view and accepted by Engineer; leave one-half of wall uncleaned for comparison purposes. Obtain Engineer's approval of sample cleaning before proceeding with cleaning of masonry.
  - 3. Determine environmental impact and appropriate removal method of cleaning effluent.
- B. General
  - 1. Match cleaning method and cleaning solution to type of brick being cleaned.
  - 2. Follow brick manufacturer's written recommendations for cleaning procedure.
  - 3. Utilize least abrasive cleaning method for specified results.
  - 4. Do not use unbuffered muriatic acid as a cleaning solution.
  - 5. Clean wall section from top of wall working to ground.
  - 6. Clean brick units in a consistent manner. Maintain a uniform appearance
  - 7. Do not overlap areas being cleaned to produce a consistent, uniform result.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After all repointing work is completed, mortar is thoroughly set, and cured, clean exposed masonry as follows:
  - 1. Brick Masonry:
    - a. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
    - b. Perform final cleaning using the cleaning method and cleaning solution from one of the following methods as determined during Cleaning Preparation of this Section.
      - i. Pressurized Water Cleaning In accordance with the method

described in BIA Technical Notes No. 20

- Bucket-and-brush Hand-cleaning In accordance with the method described in BIA Technical Notes No. 20, using job-mixed detergent solution. Do not allow cleaning solution to dry on exterior wall. Thoroughly rinse using a maximum water pressure of 200 to 300 psi.
- 2. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2 applicable to type of stain on exposed surfaces.

#### 3.08 MASONRY WASTE DISPOSAL

A. Remove masonry waste and legally dispose of off Owner's property.

### END OF SECTION 04 20 00

#### **SECTION 07 19 00**

#### FLUID APPLIED WATER REPELLENT

#### PART 1 **GENERAL**

#### 1.01 SECTION INCLUDES

A. Preparation of walls, including cleaning, and application of water repellent treatment to existing masonry walls where indicated including protection of adjacent surfaces, and cleaning of residue.

#### 1.02 **RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section, including but not limited to:
  - 1. Mortar, Grout, and Polymer Modified Concrete Section 04 05 14 Masonry Tuck Pointing 2. Section 04 05 24
  - 3 Unit Masonry

# Section 04 20 00

#### 1.03 REFERENCES

Municipal and State regulations governing cleaning, scaffolding and protection of A. adjacent properties.

#### 1.04 **SUBMITTALS**

- A. Refer to Section 01 33 00-Submittal Procedures.
- B. Latest edition of the Manufacturer's current material specifications and installation instructions.
- C. Manufacturer's Product Data Sheets for all materials specified.
- D. Certifications by manufacturers that all materials supplied comply with all requirements of the identified ASTM and other industry standards or practices.

#### 1.05 **DELIVERY, STORAGE AND HANDLING**

- A. Furnish materials in manufacturer's packaging, complete with instructions for use.
- B. Store materials out of direct exposure to the elements using tarps and elevated off ground on pallets.

#### 1.06 **JOB CONDITIONS**

- Environmental conditions: A.
  - Do not patch, repoint, wash down or wet surfaces when temperature may drop 1. below 40 degrees F within 24 hours.
  - Do not use any process creating dust or dirt when wind speed is over 15 miles per 2. hour.
- B. Protection

- 1. Protect windows, doorways, trim, roof and other surfaces from damage and immediately remove stains, efflorescence, or other unsightly excess resulting from the work of this section.
- 2. Protect existing surfaces and surrounding yards or landscape from damage due to work in this section.

#### 1.07 WARRANTY

- A. Installer's Two Year Warranty: Contractor's two year warranty on their company letterhead using sample contained in Section 01 77 00-Closeout Procedures.
  - 1. Contractor will be required to attend a Post-Construction field inspection no earlier than twenty- three months and no later than twenty-four months after the Date of Substantial Completion and complete any corrective action requested by Owner, Engineer, or Manufacturer at no additional cost to the Owner.

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Water: Clean and potable.
- B. Water Repellent: Isobutyltrialkoxysilane 40% minimum active penetrating ingredient as manufactured by:
  - 1. Evonik Protectosil Chem-Trete PB VOC
  - 2. Pecora Corporation Klere-Seal 940-S VOC
  - 3. Sika Sikagard 701W
  - 4. Hydrozo MasterProtect H 177
  - 5. Engineers accepted equivalent

#### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Cover, protect, and mask adjacent areas, materials and surfaces not receiving work of this section to be adequately protected from damage.
- B. Schedule with Engineer and Owner and protect all entrances to building with appropriate warning signs and barricades. Protect all persons and property including pedestrian traffic.

#### 3.02 CLEANING

- A. Preparation
  - 1. Cover, protect, and mask adjacent areas, materials and surfaces not to receive cleaning.
  - 2. Cut mortar tags and remove mortar droppings from exposed face of units.
  - 3. Test Cleaning:
    - a. Test cleaning methods on sample masonry unit in a location obstructed from pedestrian and adjacent building view and accepted by Engineer; leave one-half of masonry unit uncleaned for comparison purposes.

Obtain Engineer's approval of sample cleaning before proceeding with cleaning of masonry.

- 4. Determine environmental impact and appropriate removal method of cleaning effluent.
- B. General
  - 1. Match cleaning method and cleaning solution to type of masonry unit being cleaned.
  - 2. Follow masonry manufacturer's written recommendations for cleaning procedure.
  - 3. Utilize least abrasive cleaning method for specified results.
  - 4. Clean masonry units in a consistent manner. Maintain a uniform appearance.
    - a. Dilution rate of cleaning solution shall remain unchanged throughout cleaning.
    - b. Brushing/scraping method shall remain consistent throughout cleaning.
    - c. Dwell time, reapplication and rinse procedure shall remain consistent throughout the cleaning.
  - 5. Do not overlap areas being cleaned to produce a consistent, uniform result.
- C. Cleaning Methods: Perform cleaning prior to water repellent installation using the cleaning method and cleaning solution from one of the following methods as determined during Cleaning Preparation of this Section.
  - 1. Hand Cleaning: In accordance with the recommendations of National Concrete Masonry Association TEK 8-4A.
  - 2. Water Cleaning: In accordance with the recommendations of National Concrete Masonry Association TEK 8-4A.
  - 3. Chemical Cleaning: In accordance with the recommendations of National Concrete Masonry Association TEK 8-4A.

#### **3.03 WATER REPELLENT TREATMENT**

- A. Surface Preparation
  - 1. Refer to Preparation and Cleaning, above.
  - 2. Do not allow further moisture absorption or soiling of masonry after cleaning and prior to water repellent installation.
  - 3. Surfaces to receive sealer shall be cleaned of dirt, oil, grease, laitance, and other contaminants. Oil, grease and other automotive contaminants shall be removed with degreasers. Remove dirt, dust and materials that will interfere with the proper and effective application of the penetrating sealer. It is the responsibility of the Contractor to prepare the surfaces of the substrate to a condition acceptable to the Engineer and Owner.
  - 4. Check the compatibility of any materials to be used with the penetrating sealer.
  - 5. Sealants and patching materials shall have been installed and approved.
- B. Field Quality Control
  - 1. Spray Test

- a. After water repellent has dried, spray coated surfaces with water.
- b. After surfaces have adequately dried, recoat surfaces that show water absorption.
- 2. Manufacturer's Field Services
  - a. Provide written certification that surface preparation methods and final condition have manufacturer's approval and comply with the warranty.
  - b. Furnish test area: Furnish results of test area absorption on each type of substrate. Test results shall determine application rate.
- 3. Substrate Preparation Mock-up
  - a. Before substrate preparation and product test mock-up, the following field evaluation will be done.
  - b. Prepare a five foot by five foot area for each preparation method to be evaluated by the Owner, Engineer, Manufacturer's Representative, and Contractor.
- 4. Product Test Area
  - a. Before a sealer application, the following field evaluation will be done.
  - b. Prepare a three-foot by three-foot area for each test area to be sprayed with the water repellent. The area will be determined by the Engineer and Owner. Apply the water repellent at a rate to achieve a flood coat application. If recommended by the manufacturer, apply a second coat of the water repellent.
  - c. After allowing five days for the sample to cure, run a RILEM uptake test on the treated area (s).
- C. Application
  - 1. Product shall be applied as supplied by the manufacturer without dilution or alteration, unless noted in the manufacturer's data sheet.
  - 2. Apply with low pressure (15 psi) airless spray equipment with a fan spray coarse nozzle, flooding the surface to obtain uniform coverage unless otherwise recommended by the manufacturer.
  - 3. Apply at a rate specified by manufacturer after field tests.
  - 4. Apply at temperature and weather conditions recommended by the manufacturer or as written in this specification.
  - 5. Follow manufacturer's recommendations concerning protection of glass, metal and other non-porous substrates. Contractor will be responsible for cleaning all surfaces which are contaminated by the water repellent.
  - 6. Follow manufacturer's recommendation concerning protection of plants, grass and other vegetation. Contractor will be responsible for replacing all plants, grass or vegetation damaged by the water repellent.
  - 7. Apply water repellent by brush only at locations where overspray would affect adjacent materials and where not applicable for spray application.
  - 8. Start application at bottom of wall and work up surface with flood coat that has a six to eight inch rundown from the spray pattern.

### 3.04 CLEAN UP

A. On a daily basis, leave mixer, other tools and all materials in a manner so as to preclude

any vandalism.

## END OF SECTION 07 19 00

University of South Carolina Columbia, South Carolina

Pre Bid Meeting Sign In Sheet

Thomson Student Health Center Roof & Wall Renovations H27-Z155

Project Name: Project Number: Pre Bid Date & Time:

June 26, 2014 @10 am

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By signing this sheet you agree to receive information electronically.

University of South Carolina Columbia, South Carolina

**Pre Bid Meeting Sign In Sheet** Thomson Student Health Center Roof & Wall Renovations H27-Z155

Project Name: Project Number: Pre Bid Date & Time:

June 26, 2014 @10 am

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Name	Company Name	Address	Phone #	Email
Peter Gross	Siplast		872-721- <i>34</i> 77	uspargicupal.com
Jim SHERRY	4 SC STUDENT AFTA	RS PATTERSON HAL	803-777-5719	JSLERGY OMAILBOX, SC. EDU
Delabor Sert	use shadyled.	Thomson	1016-444	dbeck a mailoox.sc. edu
Mike Quiacer	MLS ROOFING	2905 WESNNAMONSE BLUD, SUITE 1000	704-405-1621	Moniquer @ ARS-Roofing. (a
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**University of South Carolina** Columbia, South Carolina

Pre Bid Meeting Sign In Sheet

Thomson Student Health Center Roof & Wall Renovations H27-Z155

June 26, 2014 @10 am

Project Name: Project Number: Pre Bid Date & Time:

Pre-Bid Meeting – June 26, 2014 Thomson Student Health Building Roof and Wall Renovations University of South Carolina State Project No. H27-Z155

Project Representatives:	University of South Carolina REI Engineers
Section 00 31 23:	Existing Asbestos Information
Section 00 62 33:	Must be executed by a representative from the membrane manufacturer and included with the Bid. Independent sales representatives will not suffice for this requirement.
Section 01 11 00:	Summary of Work

**Sectors A and E (Approximately 7,090 square feet):** Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

Sectors B and D (Approximately 3,982 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight concrete; repair damaged or deteriorated lightweight concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere new second layer insulation in foam adhesive; adhere new gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

**Sector C (Approximately 240 square feet):** Remove and dispose of the existing roof system including flashings and sheet metal down to the existing lightweight insulating concrete; repair damaged or deteriorated lightweight insulating concrete; mechanically attach new base sheet; adhere base layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

Sector F (Approximately 200 square feet): Remove and dispose of the existing roof system including flashings and sheet metal down to the existing structural deck; repair damaged or deteriorated structural decking; mechanically fasten base layer and second layer insulation; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

**Sector G (Approximately 155 square feet):** Remove and dispose of the existing roof system including flashings and sheet metal down to the existing structural deck; repair damaged or deteriorated structural decking; mechanically attach new base sheet; resecure the existing edge nailers to remain in place; adhere base layer insulation in foam adhesive; adhere second layer insulation in foam adhesive; adhere gypsum overlayment in foam adhesive; adhere a new two-ply modified bitumen roof membrane including a heat applied base ply and heat or cold applied surface ply and provide new sheet metal flashings and accessories to provide a complete, watertight, 20-year warrantable roof assembly.

Remove the **existing lightning protection/grounding system** prior to commencement of roof replacement work. Upon completion of flashing and sheet metal installation, reinstall existing lightning protection/grounding system and upgrade as required to meet the current requirements of all applicable organizations and building codes including but not limited to Building Standards and Underwriters Laboratories.

**Exterior Wall Repairs:** Remove and replace all exterior wall control joint sealant, remove and replace window and storefront wet seals, grind out spalling mortar joints at brick ties and repoint, grind back shelf angles at spalling mortar and repoint, install copper cover plates at copper ledge, repoint existing deteriorated mortar joints, stucco repairs, seal various wall penetrations, prepare and paint lintels, concrete coping repairs, install clear water repellant at top of brick parapet on East end of building, and cleaning of building exterior.

Remove and store offsite for reinstallation **existing electric bird relocation system**. Upgrade existing components as required to meet the current installation requirements of Avian Flyaway, Inc.

Asbestos Abatement: Removal of ACRM identified in Section 00 31 23.

Section 01 14 00:	Work Restrictions	(Owner will occupy premises during duration of Project. Sequencing and Restrictions contained this Section.)	
Section 01 21 00:	Allowances	(Include in Base Bid)	
Section 01 22 00:	Unit Prices	(Provide proposed Quote on Bid Form)	
Section 01 31 00:	Project Management and Coordination		
Section 01 33 00:	Submittal Procedures	(Use of AIA G702 and G703 for Applications for Payment)	
Section 01 40 00:	Quality Requirements		

## Pre-Bid Meeting – June 26, 2014 Thomson Student Health Building Roof and Wall Renovations University of South Carolina State Project No. H27-Z155

Section 01 42 00:	References	
Section 01 50 00:	Temporary Facilities and Controls	s (3.02 - Contractor shall provide own sanitary toilets and electrical power)
Section 01 73 29:	Cutting and Patching	
Section 01 74 00:	Cleaning and Waste Management	
Section 01 77 00:	Closeout Procedures	
Section 04 05 14:	Mortar, Grout and Polymer Modif	fied Concrete
Section 04 05 24:	Masonry Tuck Pointing	
Section 04 20 00:	Unit Masonry	
Section 06 10 00:	Rough Carpentry	(Allowance for Wood Blocking is in addition to nailers shown on Detail Drawings.)
Section 07 01 50:	Preparation for Reroofing	(Roof Deck repair, existing door modification
Section 07 19 00:	Fluid Applied Water Repellent	<i>Roof drain components.)</i> (For installation at the existing concrete coping where indicated)
Section 07 22 16:	Roof Insulation	(Refer to 1.09 for Overview of new Insulation system.)
Section 07 52 16:	Modified Bitumen Roofing	(Refer to Part 2 for approved manufacturers and products.)
Section 07 62 00:	Sheet Metal Flashing and Trim	(Manufacturer's standard color to be selected.)
Section 07 65 00:	Through Wall Flashing	(Refer to Drawing R-101 for location.)
Section 07 72 00:	Roof Accessories	(Includes new a, new equipment supports and condensation/conduit supports where indicated.)
Section 07 92 00:	Elastomeric Joint Sealants	
Section 09 01 90:	Elastomeric Coating Restoration	(Review for stucco repairs.)
Section 09 91 13:	Exterior Paint	(Miscellaneous rooftop equipment painting.)
Section 09 97 23:	Elastomeric Concrete and Masonr	у
Section 26 41 00:	Facility Lightning Protection	(Work includes removal of existing components, storage and reinstallation and upgrade as required to furnish certificates specified.
Drawings:		(Review Drawing R-104 for Staging and Access.)

Questions