Tony Baldwin, Ed. D., Superintendent

175 Bingham Rd., Asheville, NC 28806 P:828-255-5921 | F:828-255-5923 buncombeschools.org

# PROJECT MANUAL FOR CANDLER ELEMENTARY SCHOOL ROOF REPLACEMENT

RFP# 16-20

175 BINGHAM ROAD, ASHEVILLE, NORTH CAROLINA 28806

BID DATE: WEDNESDAY, MAY 20, 2020 at 3:00 pm EST



Tony Baldwin, Ed. D., Superintendent

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77 pages

### STATE OF NORTH CAROLINA/BUNCOMBE COUNTY SCHOOLS REQUEST FOR PROPOSAL RFP# 16-20

PROJECT: CANDLER ELEMENTARY SCHOOL ROOF REPLACEMENT

PROJECT DESIGNER: Tim Fierle, Project Manager

ISSUING AGENCY: Buncombe County Schools ISSUE DATE: May 5, 2020

Sealed proposals subject to the conditions made a part hereof will be received until <u>3:00 pm EST on Wednesday, May 20, 2020</u> for furnishing all labor, materials, equipment, and services incidental and implied, for completion of the project described herein.

PRE-BID MEETING: A Pre-Bid meeting has been scheduled for Tuesday, May 12, 2020 at 9:30 am at Candler Elementary School, 121 Candler School Road, Candler, NC 28715. All visitors will meet/check-in at the front of the building outside. \*\*\*DUE TO THE COVID-19 OUTBREAK, A MINIMUM OF 6 FEET OF SOCIAL DISTANCING WILL BE ENFORCED DURING THE MEETING\*\*\*

SEND ALL PROPOSALS DIRECTLY TO THE ADDRESS AS SHOWN BELOW:

### **Buncombe County Schools, Purchasing Department**

175 Bingham Road Asheville, North Carolina 28806

Direct inquiries concerning this RFP to: Tim Fierle, Director of Facilities Phone: (828) 255-5916

Jeff Poe, Project Engineer/Terracon Phone: (828) 230-0563 Phone: (828) 255-5890

### THE PROCUREMENT PROCESS

The following is a general description of the process by which a firm will be selected to provide services.

- 1. Request for Proposals (RFP) is issued to prospective contractors.
- 2. Proposals in one original will be received from each offeror in a sealed envelope or package. Each original shall be signed and dated by an official authorized to bind the firm. Unsigned proposals will not be considered.
- 3. All proposals must be received by the issuing agency no later than the date and time specified on the cover sheet of this RFP.
- 4. At that date and time the proposals from each responding firm will be opened. Interested parties are cautioned that these costs and their components are subject to further evaluation for completeness and correctness and therefore may not be an exact indicator of an offeror's pricing position. Proposals are confidential until such time that award has been made. Thereafter, the Purchasing Department will furnish a bid tab on the district's website.
- 5. Proposals will be evaluated according to completeness, content, experience with similar projects, ability of the offeror and its staff, and cost. Award of a contract to one offeror does not mean that the other proposals lacked merit, but that, all factors considered, the selected proposal was deemed most advantageous to Buncombe County Board of Education.
- 6. Offerors are cautioned that this is a request for offers, not a request to contract, and that Buncombe County Board of Education reserves the unqualified right to reject any and all offers when such rejection is deemed to be in its best interest.

### (NOTE: THIS PAGE MUST BE FULLY EXECUTED AND RETURNED FOR CONSIDERATION OF PROPOSAL) PROPOSAL FORM

### CANDLER ELEMENTARY SCHOOL ROOF REPLACEMENT RFP# 16-20

DUE DATE: Wednesday, May 20, 2020 at 3:00 pm EST

By submitting this proposal, the potential contractor certifies the following:

- \*\* This proposal is signed by an authorized representative of the firm.
- \*\* It can obtain and submit to the Owner insurance certificates as required within 5 calendar days after notice of award.
- \*\* The cost and availability of all equipment, materials, and supplies associated with performing the services described herein have been determined and included in the proposed cost.
- \*\* All labor costs, direct and indirect, have been determined and included in the proposed cost.
- \*\* All taxes have been determined and included in the proposed cost.
- \*\* The offeror has attended the conference (*if applicable*) or conducted a site visit and is aware of prevailing conditions associated with performing these services.
- \*\* The potential contractor has read and understands the conditions set forth in this RFP and agrees to them with no exceptions.

Therefore, in compliance with this Request for Proposals, and subject to all conditions herein, the undersigned offers and agrees, if this proposal is accepted within 60 days (normally less) from the date of the opening, to furnish the subject services for a cost not to exceed:

<u>BASE BID</u>: Replace Roof Area A2. Work on Candler Elementary Area A2 generally consists of the complete removal of all existing roofing system to roof deck and roof drainage systems and the installation of a new roof system as specified and all associated miscellaneous work as specified

herein. \$ \_\_\_\_\_\_dollars and /100 (\$ ). Alternate #1 (ADD): Replace area A5. Completely remove existing roof system and install new roof system as specified. \$ \_\_\_\_\_ dollars and /100 (\$ ). Alternate #2 (ADD): Replace Roof Area A1. Completely remove existing roof system and install new roof system as specified. \$ dollars and /100 (\$ ). Alternate #3 (ADD): Completely replace Roof Area B1. Approximately 300 square feet. Completely remove existing roof system and replace all components as specified. \$ dollars and /100 (\$ ). Alternate #4 (ADD): Instead of installing new primary drain scuppers, install new drains and tie in with nearest drain leader. At locations indicated on drawings, install new drains at locations of new scuppers and tie leader in with closet existing drain leader. Assume that each drain leader will be tied in with the nearest leader at a distance of 30 feet from the new drain, and assume that one fire rated wall will need to be penetrated to create tie in. Contractor should include all costs associated with leader change in direction and connections with drain and existing leader.

\_\_\_\_\_dollars and \_\_\_\_\_/100 (\$

).

designated on drawings and in accordance with section 07620. Walls are approximately six feet in height. \$ \_\_\_\_\_ dollars and \_\_\_\_\_/100 (\$ ). <u>Unit Price #1</u>: Wire brush and paint metal deck. (Per square foot.) \$ \_\_\_\_\_\_ dollars and \_\_\_\_\_/100 (\$ ). Unit Price #2: Wire brush, paint and plate metal deck. (Per square foot.) \$ dollars and /100 (\$ ). Unit Price #3: Replace steel deck. Per square foot. (Per square foot.) \$ \_\_\_\_\_\_ dollars and \_\_\_\_\_/100 (\$ ). Unit Price #4: Replace damaged or deteriorated wood blocking. (Per board foot.) \$ dollars and /100 (\$ ). Unit Price #5: Secure metal deck side laps. (Per fastener.) \$ dollars and /100 (\$ ). Unit Price #6: Re-secure metal deck. (Per fastener.) \$ \_\_\_\_\_ dollars and \_\_\_\_/100 (\$ ). Unit Price #7: Plate steel deck. (Per linear foot.) \$ dollars and /100 (\$ ). Unit Price #8: Install 500 stainless steel fasteners to supplement the existing nailers where not currently in compliance with FM1-49. (Per unit.) \$ \_\_\_\_\_\_ dollars and \_\_\_\_\_/100 (\$ ). Addenda received: \_\_\_\_ (Yes/No) OFFEROR: ADDRESS: CITY, STATE, ZIP: TELEPHONE NUMBER: \_\_\_\_\_ FAX: \_\_\_\_\_ FED ID No: \_\_\_\_\_ Type & License #: \_\_\_\_\_

Alternate #5 (ADD): Install metal panels at existing walls above roof. Remove existing siding and

building paper and Install new weather resistive barrier and metal wall panels at locations

E-MAIL:	MBE S		
Principal Place of Busine Item 18.):	ss if different from above (See G	eneral Information	on Submitting Proposals,
BY: (Signature)		_TITLE:	
DATE:	(Typed or printed name)		

End of Proposal Form

#### **GENERAL INFORMATION ON SUBMITTING PROPOSALS**

- 1. **EXCEPTIONS:** All proposals are subject to the terms and conditions outlined herein. All responses shall be controlled by such terms and conditions and the submission of other terms and conditions, price lists, catalogs, and/or other documents as part of an offeror's response will be waived and have no effect either on this Request for Proposals or on any contract that may be awarded resulting from this solicitation. Offeror specifically agrees to the conditions set forth in the above paragraph by signature to the proposal.
- 78615644. **CERTIFICATION:** By executing the proposal, the signer certifies that this proposal is submitted competitively and without collusion (G.S. 143-54), that none of our officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and that we are not an ineligible vendor as set forth in G.S. 143-59.1. False certification is a Class I felony.
- 78615645. **ORAL EXPLANATIONS:** The State/Buncombe County Schools shall not be bound by oral explanations or instructions given at any time during the competitive process or after award.
- 78615646. **REFERENCE TO OTHER DATA:** Only information which is received in response to this RFP will be evaluated; reference to information previously submitted shall not be evaluated.
- 78615647. **ELABORATE PROPOSALS:** Elaborate proposals in the form of brochures or other presentations beyond that necessary to present a complete and effective proposal are not desired.

In an effort to support the sustainability efforts of the State of North Carolina we solicit your cooperation in this effort.

It is desirable that all responses meet the following requirements:

- All copies are printed double sided.
- All submittals and copies are printed on **recycled paper with a minimum post-consumer content of 30%** and indicate this information accordingly on the response.
- Unless absolutely necessary, all proposals and copies should minimize or eliminate use of non-recyclable or non re-usable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Threeringed binders, glued materials, paper clips, and staples are acceptable.
- Materials should be submitted in a format which allows for easy removal and recycling of paper materials.
- 78615648. **COST FOR PROPOSAL PREPARATION:** Any costs incurred by offerors in preparing or submitting offers are the offerors' sole responsibility; the State of North Carolina/Buncombe County Schools will not reimburse any offeror for any costs incurred.
- 78615649. **TIME FOR ACCEPTANCE:** Each proposal shall state that it is a firm offer which may be accepted within a period of 45 days. Although the contract is expected to be awarded prior to that time, the 45-day period is requested to allow for unforeseen delays.
- 78615650. **TITLES:** Titles and headings in this RFP and any subsequent contract are for convenience only and shall have no binding force or effect.
- 78615651. **CONFIDENTIALITY OF PROPOSALS:** In submitting its proposal the offeror agrees not to discuss or otherwise reveal the contents of the proposal to any source outside of the using or issuing agency, government or private, until after the award of the contract. Offerors not in compliance with this provision may be disqualified, at the option of the State/Buncombe County Schools, from contract award. Only discussions authorized by the issuing agency are exempt from this provision.
- 78615652. **RIGHT TO SUBMITTED MATERIAL:** All responses, inquiries, or correspondence relating to or in reference to the RFP, and all other reports, charts, displays, schedules, exhibits, and other documentation submitted by the offerors shall become the property of the State/Buncombe County Schools when received.
- 78615653. **OFFEROR'S REPRESENTATIVE:** Each offeror shall submit with its proposal the name, address, and telephone number of the person(s) with authority to bind the firm and answer questions or provide clarification concerning the firm's proposal.
- 78615654. **SUBCONTRACTING:** Offerors may propose to subcontract portions of the work provided that their proposals clearly indicate what work they plan to subcontract and to whom and that all information required about the prime contractor is also included for each proposed subcontractor.

- 78615655. **PROPRIETARY INFORMATION:** Trade secrets or similar proprietary data which the offeror does not wish disclosed to other than personnel involved in the evaluation or contract administration will be kept confidential to the extent permitted by NCAC T01:05B.1501 and G.S. 132-1.3 if identified as follows: Each page shall be identified in boldface at the top and bottom as "CONFIDENTIAL". Any section of the proposal which is to remain confidential shall also be so marked in boldface on the title page of that section. Cost information may not be deemed confidential. In spite of what is labeled as confidential, the determination as to whether or not it is shall be determined by North Carolina law.
- 78615656. **HISTORICALLY UNDERUTILIZED BUSINESSES:** Pursuant to General Statute 143-48 and Executive Order #150, Buncombe County Schools invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled.

The Contractor agrees in particular to maintain open hiring and employment practices and to receive applications for employment in compliance with all requirements of applicable federal, state and local laws and regulations issued pursuant thereto relating to nondiscriminatory hiring and employment practices. Each Prime Contractor shall undertake an affirmative action program to ensure that no person shall be excluded from participation in any employment activities because of age, sex, race, religion, color, national origin or handicap.

- 78615657. **PROTEST PROCEDURES**: If an offeror wants to protest a contract awarded pursuant to this solicitation, they must submit a written request to the Purchasing Officer, Buncombe County Schools, 175 Bingham Road, or PO Box 16771, Asheville, NC 28806. This request must be received by the Purchasing Division within thirty (30) consecutive calendar days from the date of the contract award and must contain specific sound reasons and any supporting documentation for the protest. NOTE: Contract award notices are sent only to those actually awarded contracts, and not to every person or firm responding to this solicitation. Contract status and award notices are available through the purchasing division or the project designer with contact information as shown on the first page of this solicitation. Offerors may call to obtain a verbal status of contract award. All protests will be handled pursuant to the North Carolina Administrative Code, Title 1, Department of Administration, Chapter 5, Purchase and Contract, Section 5B.1519.
- 16. **TABULATIONS:** Offerors may visit the Buncombe County Schools website for bid tab details at <a href="https://www.buncombeschools.org/purchasing">www.buncombeschools.org/purchasing</a>.
- 17. **VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM:** Vendor Link NC allows vendors to electronically register free with the State to receive electronic notification of current procurement opportunities for goods and services available on the Interactive Purchasing System. Online registration and other purchasing information are available on the Internet web site: <a href="http://www.state.nc.us/pandc/">http://www.state.nc.us/pandc/</a>.
- 18. **RECIPROCAL PREFERENCE:** G.S. 143-59 establishes a reciprocal preference law to discourage other states from applying in-state preferences against North Carolina's resident offerors. The "Principal Place of Business" is defined as the principal place from which the trade or business of the offeror is directed or managed.

### NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS (Contractual and Consultant Services)

- 1. **GOVERNING LAW:** This contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina.
- 78615732. **SITUS:** The place of this contract, its situs and forum, shall be North Carolina, where all matters, whether sounding in contract or tort, relating to is validity, construction, interpretation and enforcement shall be determined
- 78615733. **INDEPENDENT CONTRACTOR:** The Contractor shall be considered to be an independent contractor and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. The Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this agreement. Such employees shall not be employees of or have any individual contractual relationship with the Agency.
- 78615734. **KEY PERSONNEL:** The Contractor shall not substitute key personnel assigned to the performance of this contract without prior written approval by the Agency's Contract Administrator. The individuals designated as key personnel for purposes of this contract are those specified in the Contractor's proposal.
- 78615735. **SUBCONTRACTING:** Work proposed to be performed under this contract by the Contractor or its employees shall not be subcontracted without prior written approval of the Agency's Contract Administrator/Project Designer. Acceptance of an offeror's proposal shall include any subcontractor(s) specified therein.
- 78615736. **PERFORMANCE AND DEFAULT:** If, through any cause, the Contractor shall fail to fulfill in timely and proper manner the obligations under this agreement, the Agency shall thereupon have the right to terminate this contract by giving written notice to the Contractor and specifying the effective date thereof. In that event, all finished or unfinished deliverable items under this contract prepared by the Contractor shall, at the option of the Agency, become its property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such materials. Notwithstanding, the Contractor shall not be relieved of liability to the Agency for damages sustained by the Agency by virtue of any breach of this agreement, and the Agency may withhold any payment due the Contractor for the purpose of setoff until such time as the exact amount of damages due the Agency from such breach can be determined.

  In case of default by the Contractor, the State may procure the services from other sources and hold the Contractor responsible for any excess cost occasioned thereby. The State reserves the right to require performance bond or other acceptable alternative guarantees from successful offeror without expense to the State.

Upon the entering of a judgment of bankruptcy of insolvency by or against the Contractor, the Agency may terminate this contract for cause.

Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by any act of war, hostile foreign action, nuclear explosion, riot, strikes, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

- 78615737. **TERMINATION:** The Agency may terminate this agreement at any time by 15 days' notice in writing from the Agency to the Contractor. In that event, all finished or unfinished deliverable items prepared by the Contractor under this contract shall, at the option of the Agency, become its property. If the contract is terminated by the Agency as provided herein, the Contractor shall be paid for services satisfactorily completed, less payment or compensation previously made.
- 78615738. **AVAILABILITY OF FUNDS:** Any and all payments to the Contractor are dependent upon and subject to the availability of funds to the Agency for the purpose set forth in this agreement.
- 78615739. **CONFIDENTIALITY:** Any information, data, instruments, documents, studies or reports given to or prepared or assembled by the Contractor under this agreement shall be kept as confidential and not divulged or made available to any individual or organization without the prior written approval of the Agency.

- 78615740. **CARE OF PROPERTY:** The Contractor agrees that it shall be responsible for the proper custody and care of any property furnished it for use in connection with the performance of this contract or purchased by it for this contract and will reimburse the State for loss of damage of such property.
- 78615741. **COPYRIGHT:** No deliverable items produced in whole or in part under this agreement shall be the subject of an application for copyright by or on behalf of the Contractor.
- 78615742. **ACCESS TO PERSONS AND RECORDS:** The State Auditor shall have access to persons and records as a result of all contracts or grants entered into by State agencies or political subdivisions in accordance with General Statute 147-64.7.
  - The Contractor shall retain all records for a period of three years following completion of the contract.
- 78615743. **ASSIGNMENT:** No assignment of the Contractor's obligations nor the Contractor's right to receive payment hereunder shall be permitted. However, upon written request approved by the issuing purchasing authority, the State may:
  - a. Forward the contractor's payment check(s) directly to any person or entity designated by the Contractor, or
  - b. Include any person or entity designated by Contractor as a joint payee on the Contractor's payment check(s).
  - In no event shall such approval and action obligate the State to anyone other than the Contractor and the Contractor shall remain responsible for fulfillment of all contract obligations.
- 78615744. **COMPLIANCE WITH LAWS:** The Contractor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements (permits) that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority.
- 78615745. **AFFIRMATIVE ACTION:** The Contractor shall take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of people with disabilities and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin, or disability.
- 78615746. **INSURANCE:** During the term of the contract, the contractor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the contract. As a minimum, the contractor shall provide and maintain the following coverage and limits:
  - a. Workers Compensation The contractor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$150,000.00, covering all of Contractor's employees who are engaged in any work under the contract. If any work is subcontracted, the contractor shall require the subcontractor to provide the same coverage for any of its employees engaged in any work under the contract.
  - b. Commercial General Liability General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$2,000,000.00 Combined Single Limit. (Defense cost shall be in excess of the limit of liability.
  - c. Automobile Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used in connection with the contract. The minimum combined single limit shall be \$500,000.00 bodily injury and property damage; \$500,000.00 uninsured/underinsured motorist; and \$100,000.00 medical payment.

Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The contractor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this contract. The limits of coverage under each insurance policy maintained by the contractor shall not be interpreted as limiting the contractor's liability and obligations under the contract.

The Contractor shall furnish a Certificate of Insurance as proof of the above coverages. Certificate will contain provision that the insurance coverages cannot be canceled, reduced in amount or coverage eliminated without 30 days written notice to the Buncombe County Board of Education. Owner's Protective insurance must list the Buncombe County Board of Education as the Certificate Holder and as "additional insured" as it's interest may appear. Owner's approval of Certificate of Insurance does not decrease or relieve the contractor's responsibility for maintaining insurance coverage as required in this Request for Proposal.

- 78615747. **ADVERTISING:** Contractor agrees not to use the existence of this contract, the name of the agency, or the name of the State of North Carolina as part of any commercial advertising.
- 78615748. **ENTIRE AGREEMENT:** This contract and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This Request for Proposals, any addenda thereto, and the offeror's proposal are incorporated herein by reference as though set forth verbatim.

All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.

- 78615749. **AMENDMENTS:** This contract may be amended only by written amendments duly executed by the Agency and the Contractor.
- 78615750. **TAXES:** G.S. 143-59.1 bars the Secretary of Administration from entering into contracts with vendors if the vendor or its affiliates meet one of the conditions of G. S. 105-164.8(b) and refuse to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G. S. 105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the bid document the vendor certifies that it and all of its affiliates, (if it has affiliates), collect(s) the appropriate taxes.
- 78615751. **GENERAL INDEMNITY:** The contractor shall hold and save the State/Buncombe County Schools, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses, with the exception of consequential damages, accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the contractor in the performance of this contract and that are attributable to the negligence or intentionally tortious acts of the contractor provided that the contractor is notified in writing within 30 days that the State/Buncombe County Schools has knowledge of such claims. The contractor represents and warrants that it shall make no claim of any kind or nature against the State's agents who are involved in the delivery or processing of contractor goods to the State. The representation and warranty in the preceding sentence shall survive the termination or expiration of this contract.

## CONTRACTOR'S SALES TAX REPORT Buncombe County Schools

### **NC State and Local Sales Taxes Paid**

Address:			PO#/RFP# 16-20			
						Invoice Date
		TOTAL	\$	\$		
perform this cont became a part of certify that, to the	tract and only included or annexed to the but	les those building n	naterials, supplies, fixto	and equipment which we ares and equipment which sales and use tax have be correct, and complete.	ch actually	
This the	_ day of	20				
This the	_ day of	, 20		Signed		
	Notary Public		-			
My Commission Expires:			Print or Type Name of Above & Title			
Seal			NOTE: This certified statement may be subject to audit.			

The North Carolina General Assembly has amended the Statute to provide refunds of sales and use tax to local school units in accordance with the provisions of G.S. 105-164. 14(c) effective with tax paid on or after July 1, 1998.

These refunds are to include the "sales and use taxes paid by contractors on building materials, supplies, fixtures and equipment that become a part of or annexed to a building or structure that is owned or leased by the governmental entity and is being erected, altered or repaired for use by the governmental entity (G.S. 105-164.14)."

Sales and Use Tax Technical Bulletin Section 18-2F specifies: "To substantiate a refund claim for sales or use taxes paid on purchases of building materials, supplies. fixtures and equipment by its contractor, the claimant must secure from such contractor certified statements setting forth all of the following information:

- a. the date the property was purchased;
- b. the type of property purchased:
- c. the project for which the property was used:
- d. if the property was purchased in this State, the county in which it was purchased;
- e. if the property was not purchased in this State, the county in which the property was used; and
- f. the amount of sales and use taxes paid.

In the event the contractor makes several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices and the State and local sales and use taxes paid thereon. Such statement must also include the cost of any tangible personal property withdrawn from the contractor's warehouse stock and the amount of sales and use tax paid thereon by the contractor. Similar certified statements by his subcontractors must be obtained by the general contractor and furnished to the claimant. Any local sales or use taxes must be shown separately from the State sales or use taxes. The contractor's statements must not contain sales or use taxes paid on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to or in some manner become a part of the building or structure that is owned or leased by a governmental agency and is being erected, altered or repaired for use by a governmental entity as defined by G.S. 105-164.14(c). Examples of property on which sales or use tax has been paid by the contractor and which shall not be included in the contractor's statement are scaffolding, forms for concrete, fuel for the operation of machinery and equipment, tools, repair parts and equipment rentals.

All information requested in these specifications and actual bids shall be entered on enclosed "Request for Proposal" All areas of this document must be completed in full, especially: (1) Name of Company, (2) By (signature), (3) Official Title, and (4) Quotation Date.

### CANDLER ELEMENTARY SCHOOL ROOF REPLACEMENT RFP# 16-20

**Project Description:** Furnish all labor, materials, equipment and services, incidental and implied, for the roof replacement project at Candler Elementary School.

**Scope:** Work shall consist of furnishing all labor, taxes, materials, equipment, services, permits, incidental and implied, to install a complete working system as designed per the attached specifications.

Contractor's Responsibility: The Contractor shall be responsible for the construction site during the performance of the work. The Contractor shall be responsible for all damages to persons and property during the performance of work and shall further provide all necessary safety measures and shall fully comply with all federal state and local laws, building rules, and regulations to prevent accidents or injury to persons or property on or about the location of the work site. This is to include OSHA 1910, General Construction, or those regulations mandated by these specifications. Special attention shall be made to proper barricading of the work area.

**Safety Regulations:** The Contractor shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry (Title 29, Code of Federal Regulations, Part 1926, published in Volume 39, Number 122, Part II, June 24, 1974 Federal Register) which is hereby incorporated in these specifications.

**Codes:** All work shall be performed in accordance with the specifications and shall comply with North Carolina Building Code, National Electrical Code Underwriters' Rules and Regulations and Federal, State and Local Regulations covering work of this nature. Whenever specifications are more than such laws, codes and regulations, the specifications shall hold. All equipment shall have U. L. labels attached.

**Permits:** The Contractor shall hold the appropriate license for work to be performed and shall secure all permits required for the job completion, obtain and deliver to Owner, all certification of inspection issued by the authorities having jurisdiction and roofing material manufacturer. Contractor is responsible for paying all costs associated with Buncombe County building permits. All final certificates must be delivered to owner prior to request for final payment.

**School Security and Access:** Security, safety and protection of the instructional environment are priority concerns of Buncombe County Schools. The Contractor shall confine activities to the work area and shall not engage or interact with students, teachers or staff that is not designated as contact personnel. The Contractor shall screen all employees on-site; and, at the request of the Owner, provide documentation that employees and subcontractors meet standards. The Owner, school staff and Contractor shall designate contact personnel and provide contact information to assist in the resolution of any logistical or safety issues beforehand, or that may arise during construction.

**Scheduling**: The Contractor must submit a precise time schedule as to when specific work will occur in specific areas within the building. This will be used to coordinate the work with the occupants of the building. The Maintenance Supervisor, Project manager or Principal may alter the schedule at any time to maintain the work process within the facility. Work must be scheduled during hours that are acceptable to each school and the Buncombe County Board of Education shall not incur any additional cost due to scheduling.

All work must be scheduled to avoid conflict with classroom instruction time and Cafeteria operation times. Project should be completed 75 days after Notice to Proceed and 30 days added for Alternates 1 and 2, if accepted. Complete is defined as: The Contractor has passed the final inspection and a "Certificate of Completion" is issued by authorities having jurisdiction. Liquidated damages in the amount of \$200/day for each calendar day after the date established as substantial completion date.

All permits and inspections will be the responsibility of the contractor, and copies of permits and final inspection will be submitted to Buncombe County Schools prior to final payment.

**Workers on Job**: All employees of the Contractor shall, while on Buncombe County Board of Education property, act in a professional and courteous manner. All workers shall be expected to wear long pants and shirts while on Board property. Also, all employees of the Contractor must "sign in" in the main office upon entering the facility and must "sign out" upon leaving the property. Any employee of the Contractor may be told to leave the property by either the Principal or the Electrical Supervisor, if they do not follow the above procedure. The employee shall be replaced with another at no additional cost to the Buncombe County Board of Education. Smoking or use of Tobacco products is prohibited on Buncombe County School's property.

In accordance with G.S. 14-208.18, all persons who (1) are required to register under the Sex Offender and Public Protection Program AND (2) have been convicted of certain sexually violent offenses or any offense where the victim was under the age of 16 years at the time of the offense are expressly forbidden to knowingly be present on any property owned or operated by the school system, including school buildings, athletic fields, playgrounds, parking lots, school buses, activity buses or other property of any kind for any reason, including attendance at sporting events or other school related functions, whether before, during or after school hours. It is the responsibility of the Contractor or vendor that their employees and sub-contractors are in accordance with G.S. 14-208.18.

**E-Verify:** Contractor shall comply with E-Verify, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. §64-25 et seq. In addition, to the best of Contractor's knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. §64-25 et seq.

**Iran Divestment Act:** North Carolina Local Government Units may not enter into contracts with any entity or individual found on the State Treasurer's Iran Final Divestment List N.C.G.S. 143C-6A. By bidding on this project, the bidder certifies it is not listed on the Final Divestment List created by the State Treasurer.

**Equipment and Tools:** The Contractor shall not use equipment or tools that are owned by the Buncombe County Board of Education. Also, employees of the Buncombe County Board of Education shall not be utilized by the Contractor except for opening locked doors and giving directions.

**Materials:** All materials stored on site must be stored in a safe and secure manner that does not interfere with the school's daily operation. Buncombe County Board of Education is not responsible for any materials, equipment or tools lost or stolen from the site.

**Clean Up**: The area of work shall be cleaned daily so that the Buncombe County Board of Education shall not incur any additional costs to make the area suitable for the work process. Also, the Contractor shall utilize no trash receptacles or dumpsters owned by the Buncombe County Board of Education. All trash and removed materials shall be properly disposed of off the property. Onsite dumpsters shall not be used.

**Changes during project:** Changes during the project shall only be made by written direction signed by the owner. No additional cost to the contract shall be allowed unless accepted in writing by the owner before work has begun.

**Price Adjustments:** (Term Contracts Only) Any price changes, downwards or upward, which might be permitted during the contract period must be general, either by reason of market change or on the part of the contractor to the other customers.

- a. <u>Notification</u>: Must be given to Buncombe County Schools, in writing, concerning any proposed price adjustments. Such notification shall be accompanied by copy of manufacturer's official notice or other acceptable evidence that the change is general in nature.
- b. **<u>Decreases</u>**: Buncombe County Schools shall receive full proportionate benefit immediately at any time during the contract.
- c. <u>Increases</u>: Consumer Price Index (CPI): Contract prices for equipment and/or service will remain firm through June 30, 2020. Contractors must request price adjustments, in writing, 30 days prior to the renewal date. If a Contractor fails to request CPI price adjustment 30 days prior to the adjustment date, the adjustment will be effective 30 days after Buncombe County Schools receives their written request. Price adjustments will be made in accordance with the percentage change in the U.S. Department of Labor Consumer Price Index (CPI-U) for all urban consumers, all items, southern region.

The price adjustment rate will be determined by comparing the percentage difference between the CPI in effect for the base yearly average (January through December beginning the year 2020); and each (January through December) thereafter. The percentage difference between those two CPI issues will be the price adjustment rate. No retroactive contract price adjustments will be allowed. All bidders will be capped with a 3% maximum price increase.

d. <u>Invoices</u>: It is understood and agreed that orders will be shipped at the established contract prices in effect on dates orders are placed. Invoicing at variance with this provision will subject the contract to cancellation. Applicable North Carolina sales tax shall be invoiced as a separate item.

**Payment:** Progress payments will be made for this project.

### Final documents required:

- 1. Letter to the project manager from contractor which states all work is completed and payment is desired.
- 2. Delivery to owner, copies of all permits, certifications of inspection issued by the authorities having jurisdiction

**Performance of Work**: All work shall be performed at the highest level of quality. The Owner shall be responsible for determining the quality of work and may notify the Contractor of same. ANY WORK COMPLETED THAT IS NOT SUITABLE TO THE OWNER SHALL BE REPEATED BY THE CONTRACTOR AT NO COST TO THE OWNER. Any damage to existing area or utilities will be the responsibility of the Contractor. NO EXCEPTIONS.

**Warranty**: All labor, material and equipment shall be warranted for one (1) year from issuance of inspection.

Contractor must adhere to the guidelines within these specifications; failure to do so will result in default of payment by the BCBOE and/or cancelation of this contract.

The Buncombe County Board of Education reserves the right to reject any or all bids or any or no reason.

End of RFP# 16-20

### **GENERAL CONDITIONS**

The General Conditions for the project shall be AIA Document A201-2017, entitled; "General Conditions of the Contract for Construction". A copy of the General Conditions is available from the owner upon request.

**END OF GENERAL CONDITIONS** 

### **SUPPLEMENTARY GENERAL CONDITIONS - 2019**

## AMENDMENT (MODIFICATIONS) TO GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AIA DOCUMENT A201-2017

NOTE: All references to "Article", "§", and "Section" refer to the matching Article number and Section number in AIA Document A201-2017 General Conditions of the Contract for Construction

- 1. The General Conditions of the Contract for Construction, AIA Document A201-2017, are altered by the modifications, deletions, additions, and substitutions contained in these Supplementary General Conditions.
- 2. § 1.1.1 is amended by deleting the words "Agreement between the Owner and Contractor" in the first line of the first sentence and adding "AIA Document A101-2017 Standard Form of Agreement Between Owner and Contractor" in their place.
- 3. § 1.1.2 is amended by adding "(the Contract)" after the last word of the first sentence.

Delete the fourth sentence of the paragraph.

Delete ", however," from the fifth sentence of the paragraph.

4. § 1.1.5 is deleted and replaced with the following:

### § 1.1.5 The Drawings

The Drawings are the technical, graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, including, but not limited to, plans, elevations, sections, details, schedules, diagrams, and other information which defines the requirements for the Work.

5. § 1.1.6 is deleted and replaced with the following:

### § 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of explicit and detailed written requirements for materials, equipment, systems, standards, and workmanship requirements for the Work, performance standards, specific warranties, and performance of related services.

- 6. § 1.1.8 is amended by adding the words "and certify termination of the Contract under Section 14.2.2" before the period in the first sentence of the paragraph.
- 7. A new § 1.1.9 is added as follows:

### § 1.1.9 Project Manual

The Project Manual is a printed volume or volumes assembled for the Work of the Project which includes the bidding or proposal requirements, sample forms, Conditions of the Contract, Specifications and other Contract Documents. The Project Manual is part of the Contract Documents.

### 8. A new § 1.1.10 is added as follows:

### § 1.1.10 Project Manual Addenda

Project Manual Addenda are written or graphic instruments issued prior to the execution of the Contract, which modify or interpret the bidding or proposal documents, including Drawings and Specifications, by additions, deletions, clarifications, or corrections. Addenda are part of the Contract Documents.

### 9. A new § 1.1.11 is added as follows:

### § 1.1.11 Abbreviations

The following abbreviations and their meanings are:

AIA: American Institute of Architects
ACI: American Concrete Institute

AHERA: Asbestos Hazardous Emergency Response Act

AISI: American Iron and Steel Institute

AISC: American Institute of Steel Construction

ASA: American Standards Association
ASTM: American Society of Testing Materials

AWSC: American Welding Society Code

CERCLA: Comprehensive Environmental Response, Compensation,

and Liability Act

EPA: Environmental Protection Agency

NC DEQ North Carolina Department of Environmental Quality

NC DOI North Carolina Department of Insurance

FS: Federal Specification
NEC: National Electrical Code

NIC: Not in Contract. Indicates work not to be done by this

Contractor under this contract.

OSHA: Occupational Safety and Health Administration

SPR: Simplified Practice Recommendation

UL: Underwriters Laboratories, Inc.

### 10. A new § 1.2.4 is added as follows:

### § 1.2.4 Current Editions

When the Contract Documents refer to standards, building codes, manufacturers' instructions, or other documents, unless otherwise specified, then the current edition as of the date of execution of the Agreement by the last party to execute said Agreement shall apply. It shall be the responsibility of the Architect to address revisions or amendments to applicable codes or standards which arise after the date of execution of the Agreement and until Final Completion,

pursuant to the terms of the Agreement between Owner and Architect. Requirements of public authorities apply as minimum requirements only and do not supersede more stringent specified requirements.

- 11. § 1.3 is amended by capitalizing the letter "A" in the word "Articles" and by adding the words "and Sections" after the word "Articles".
- 12. § 1.5, § 1.5.1, and § 1.5.2 are deleted and replaced with the following § 1.5:

### § 1.5 Ownership and Use of the Contract Documents

The Contract Documents are the property of the Owner which may be used by the Contractor, Subcontractors, materials and equipment suppliers, and service providers for the Project only, and not for other projects or work.

- 13. § 2.1.1 is deleted and replaced with the following:
  - § 2.1.1 The Owner is the body corporate board of education described in the Agreement. The Owner acts through vote of a majority of its board members (hereinafter "the Board") at official meetings of the Board. The Board, by majority vote, is the only representative of the Owner having the power to enter into or amend the Contract, to approve changes in the scope of the Work, to approve and execute a Change Order or Construction Change Directive modifying the Contract Sum or Guaranteed Maximum Price, or to agree to an extension to the dates of Substantial or Final Completion. The Board will act when requested in writing to do so as soon as reasonably possible to avoid undue delays. The Board will designate an authorized representative to act on its behalf for day-to-day operations under the Contract. Unless otherwise designated in the Contract Documents, the Owner's authorized representative shall be the Superintendent of Schools. The Owner's authorized representative, or their delegate, has the authority to approve changes to the Work in accordance with Board Policy 9030. Any such change shall be confirmed in writing between the Contractor and the Owner's Superintendent or designee and notice of such approved changes shall be given to the Board at its next regular meeting. The Architect does not have such authority except as otherwise provided in the Contract Documents. Neither the Architect nor the Contract Documents may rely upon direction of any employee of the Owner who has not been designated in writing by the Superintendent or the Board; the Owner shall not be financially responsible for actions taken by the Architect or the Contractor in reliance upon direction from unauthorized persons.
- 14. § 2.1.2 is deleted and replaced with the following:
  - § 2.1.2 It shall be distinctly understood that no mechanic, Contractor, Subcontractor, material or equipment supplier, supplier of labor services, and suppliers of surveying, engineering, and other professional services shall ever in any manner have, claim, or acquire any lien upon the buildings, equipment, or furnishings or any of the improvements of whatsoever nature or kind so erected or to be erected by virtue of this Contract or upon any of the land on which said buildings or any of its improvements are to be erected, built or situated, such property belonging to a political subdivision of the State of North Carolina.

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- 15. A new § 2.1.3 is added as follows:
  - § 2.1.3 The Owner shall require the Contractor, the Subcontractors, the Architect and the Architect's consultants to meet periodically at mutually-agreed-upon intervals, for the purpose of establishing procedures to facilitate cooperation, communication, and timely responses among the participants in the performance of the Work.
- 16. A new § 2.1.4 is added as follows:
  - § 2.1.4 The Owner may require that the Contractor use and/or respond to certain Owner furnished forms or inquiries regarding the status of the Work during the course of the Project. From time to time, there may be future revisions, changes, additions, or deletions to these forms. The fact that the Owner modifies and increases reasonable reporting requirements shall not serve as the basis for a claim for additional time or compensation by the Contractor.
- 17. A new § 2.1.5 is added as follows:
  - § 2.1.5 The Contractor stipulates and agrees that the Owner has no duty to discover any design defects, errors, or omissions whether in the Drawings, Plans, Specifications and other Construction Documents. The Owner will, however, notify the Contractor and the Architect of design defects, errors or omissions of which the Superintendent of the Board or the Board have actual knowledge. By entering into the Contract Documents or any Agreement with any Architect, the Owner does not warrant the adequacy and accuracy of any Drawings, Plans, Specifications or other Construction Documents.
- 18. §§ 2.2, 2.2.1, 2.2.2, 2.2.3, and 2.2.4 are deleted in their entirety.
- 19. § 2.3.6 is amended by deleting the words "pursuant to Section 1.5.2" from the sentence.
- 20. §§ 3.1.1, 3.1.2, and 3.1.3 are amended by deleting the word "Documents" in all three sections.
- 21. A new § 3.1.4 is added as follows:
  - § 3.1.4 The Contractor represents and warrants the following to the Owner (in addition to the other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute this Contract, which representations and warranties shall survive the execution and delivery of the Contract and the Final Completion of the Work:
  - .1 that it is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the Work and perform its obligations under the Contract;
  - .2 that it is able to furnish the tools, materials, supplies, machinery, equipment and labor required to timely complete the Work and perform its obligations hereunder and has sufficient experience and competence to do so;

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- .3 that it is authorized to do business in the State where the Project is located and properly licensed by all necessary governmental, public, and quasi-public authorities having jurisdiction over it, the Work, or the site of the Project; and
- .4 that the execution of the Contract and its performance thereof are within its duly authorized powers.
- 22. § 3.2.1 shall be amended by adding the following at the end of the existing paragraph:

The Contractor represents and warrants by submission of a Proposal that he has carefully examined the Project Manual and Addenda, the Contract Documents, any soil test reports, drainage studies, geotechnical or other reports and the site of the Work, and that, from his own investigations, he has satisfied himself as to the nature and location of the Work, the condition of the site, the scope of the Work, weather conditions at the site of the Work, the character, quality and quantity of surface and subsurface materials likely to be encountered, the character of machinery and equipment and other facilities needed for the performance of the Work, the character, quality, quantity, and availability of labor and Subcontractors required for the Work, the character, quality and quantity of labor required for the Work, the character, quality and quantity of professional services required for the Work, the character, quality, quantity and availability of materials, machinery, equipment and furnishings required for the Work, and all other matters and things which may in any way affect the Work or its performance. Should the Contractor find discrepancies, omissions or conflicts within the Contract Documents, or be in doubt as to their meaning, the Contractor shall at once notify in writing the Architect and the Owner, and the Architect will issue a written addendum to all parties that is consistent with the Owner's Scope of the Work. The Contractor shall not be entitled to any additional time or compensation for the Contractor's failure to visit the site, or any additional Work caused by the Contractor's fault, by improper construction, or by the Contractor's failure to visit the site or to carefully study and compare Contract Documents prior to execution of the Work.

- § 3.2.2 is amended by deleting "not" and deleting "; however," in the second sentence of the paragraph; adding a period after the word "Documents"; capitalizing the letter "t" in the second sentence following the deleted word "however"; and adding the words "and Owner" after the word "Architect" in the second sentence.
  - Sec. 3.2.2 is further amended by adding the following at the end of the existing paragraph: "The Contractor shall not perform any work involving an error, inconsistency, or omission without further instructions from the Architect or revised Contract Documents from the Architect."
- § 3.2.3 is amended by inserting "Neither the Owner nor" at the beginning of the paragraph; changing the upper case "T" to a lower case "t" for the word "The"; delete "not" in the first line of the paragraph; add "and Owner" following the words "report to the Architect".
- 25. § 3.2.4 is amended by adding the following at the beginning of the existing paragraph:

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If the Contractor has knowledge that any of the products or systems specified will perform in a manner that will limit the Contractor's ability to satisfactorily perform the Work or to honor its warranties, or will result in a limitation of or interference with the Owner's intended use, then the Contractor shall promptly notify the Architect and the Owner in writing, providing substantiation for its position. Any necessary changes in the Work, including substitutions, shall be accomplished by appropriate Modification.

Add the words "changes in the Work," after the words "because of" and a comma after the word "clarifications" in the original first sentence;

Add the words "or this section" after the number 3.2.3 in both the original first sentence and the original second sentence;

Add the words "and the Contractor shall not be entitled to additional compensation or time for performance of the Work." at the end of the original second sentence.

### 26. Add a new § 3.2.5 as follows:

§ 3.2.5 Prior to performing any Work, the Contractor shall locate all utility lines as shown and located on the plans and specifications, including telephone company lines and cables, sewer lines, water pipes, gas lines, electrical lines, including, but not limited to, all buried pipelines and buried telephone cables, and shall perform any Work in such a manner so as to avoid damaging any such lines, cables, pipes and pipelines during its Work, and shall be responsible for any loss, damage or extra expense resulting from such damage. Repairs shall be made immediately to restore all service. Any delay for such break shall be attributable to the Contractor. In addition, the Contractor shall review appropriate AHERA and hazardous material surveys for the Project, and shall notify all Subcontractors and Sub-Subcontractors of the necessity to review said surveys. The Contractor shall perform any Work in such a manner as to avoid damaging, exposing, or dislodging any asbestos-containing materials or other hazardous materials that are clearly identified and located in AHERA and other hazardous material surveys. Before performing any portion of the Work, the Contractor shall fully investigate all physical aspects of the Project Site and verify all dimensions, measurements, property lines, grades, and elevations, existing improvements, and general suitability of existing conditions at the Project site.

### 27. Add a new § 3.2.6 as follows:

§ 3.2.6 The Contractor shall arrange meetings prior to commencement of the Work of all major Subcontractors to allow the Subcontractors to demonstrate an understanding of the Work and Contract Documents to the Architect and to allow the Subcontractors to ask for interpretations, when necessary. Each major Subcontractor shall review the Project Manual and the Construction Documents and shall evaluate and satisfy themselves as to the conditions and limitations under which the Work is to be performed.

### 28. Add a new § 3.3.4 as follows:

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- § 3.3.4 The Contractor shall properly and efficiently coordinate the timing, scheduling and routing of all Work performed by all trades and Subcontractors. The Contractor shall develop and maintain a schedule of critical path construction activities for the Work. This critical path schedule shall be updated at least bi-monthly and presented to the Architect upon request.
- 29. Add a new § 3.3.5 as follows:
  - § 3.3.5 The Contractor shall review Subcontractor safety programs, procedures, and precautions in connection with performance of the Work. However, the Contractor's duties shall not relieve any Subcontractor(s) or any other person or entity, including any person or entity with whom the Contractor does not have a contractual relationship, of their responsibility or liability relative to compliance with all applicable federal, state, and local laws, rules, regulations, and ordinances and manufacturers' instructions which shall include the obligation to provide for the safety of their employees, other persons, and property and the requirements to maintain a work environment free of recognized hazards.
- 30. Add a new § 3.3.6 as follows:
  - § 3.3.6 It is understood and agreed that the relationship of the Contractor to the Owner shall be that of an independent Contractor. Nothing contained in this Agreement or inferable from this Agreement shall be deemed or construed to: 1) make the Contractor the agent, servant or employee of the Owner; or 2) create any partnership, joint venture, or other association between the Owner and the Contractor. Any direction or instruction by the Owner or any of its authorized representatives in respect of the Work shall relate to the results the Owner desires to obtain from the Work, and shall in no way affect the Contractor's independent Contractor status.
- 31. § 3.4.1 is amended by adding "qualified, careful, and efficient workers and" in the first sentence before "labor", and after "labor" add "eligible to work in accordance with state and federal law".

At the end of the original paragraph of § 3.4.1 add the following:

Before ordering any material or doing any Work, the Contractor shall verify that all dimensions specified in the Drawings, Specifications and other Construction Documents are consistent with all actual dimensions in the field. Any inconsistency shall be brought to the attention of the Architect. In the event that discrepancies exist and the Architect was not notified beforehand, then costs to correct and/or replace ordered materials shall be borne by the Contractor. This subsection does not relieve the Architect of any contractual duties owed to the Owner.

- 32. § 3.4.2 is amended by adding "prior written" before "consent of the Owner".
- 33. A new § 3.4.4 is added as follows:
  - § 3.4.4 Including, but not limited to, the specific requirements of § 3.3.5 and Article 10, the Contractor, its Subcontractors and vendors shall bear responsibility for compliance with all federal, state and local laws, regulations, guidelines, and ordinances pertaining to safety of persons and property applicable to the Work. The Contractor further recognizes that the Owner

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and the Architect do not owe the Contractor any duty to supervise or direct its work so as to protect the Contractor from the consequences of its own conduct.

- 34. § 3.5 is amended as follows:
  - § 3.5 shall be amended by changing the section title "WARRANTY" to "WARRANTIES AND GUARANTEES".
- 35. § 3.5.1 is amended by adding the following language after the original second sentence in subsection 3.5.1:

The Contractor further warrants and guarantees that Contractor shall perform the Work in a good and workmanlike manner, continuously and diligently in accordance with generally accepted standards of construction practice for construction projects similar to the Project, except to the extent the Contract Documents expressly specify a higher standard, in which case the standard shall be the higher standard. All material shall be installed in a true and straight alignment, level and plumb, patterns shall be uniform, and joining of materials shall be flush and level, unless otherwise directed in writing by the Architect.

Delete the words "or equipment" and replace with "systems, machinery, equipment or components" in the original third sentence of § 3.5.1.

Change the word "may" to "will" in the original third sentence of § 3.5.1.

36. § 3.5.2 is amended as follows:

Delete the words "in accordance with § 9.8.4" and substitute the words "on the date of Final Completion as provided in § 9.10".

Add the following paragraph following the first sentence of the section:

All specified express warranties required by the Contract Documents on workmanship, equipment, machinery, materials, systems, or components shall be submitted in writing to the Architect for delivery to the Owner no later than the date of Final Completion. Unless specified otherwise, all warranties shall run from the date of Final Completion for a period of three (3) years. Warranties under Section 3.5.1 are not exclusive of any other warranties or guarantees set out in other places in the Contract Documents or expressed or implied under applicable law.

- 37. Add a new § 3.5.3 as follows:
  - § 3.5.3 Upon written notice from the Owner or the Architect, the Contractor shall promptly remedy defects in the Work as covered by applicable warranties. If the Contractor does not respond to the written notice within ten (10) days of Contractor's receipt of a written notice, either by beginning corrective work or notifying the Owner in writing regarding when corrective work will begin, the Owner may take measures to correct the Work and the Contractor will be obligated to reimburse the Owner's costs including reasonable consultant, engineering and legal fees. The

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provisions of this subparagraph shall be in addition to, and not in lieu of, any other rights and remedies available to the Owner.

- 38. Add a new § 3.5.4 as follows:
  - § 3.5.4 The Contractor agrees to perform the Work in such manner so as to preserve any and all manufacturers, suppliers, installers', material, and performance warranties.
- 39. Add a new § 3.5.5 as follows:
  - § 3.5.5 The warranties of the Contractor provided in Section 3.5 shall in no way limit or abridge the warranties of the manufacturers, suppliers, and installers of materials, machinery, equipment, systems or components, performance warranties, and process warranties which are to comprise a portion of the Work and all such warranties shall be in form and substance as required by Contract Documents. The Contractor shall take no action or fail to act in any way which results in the denial, termination, or expiration of such third-party warranties or which otherwise results in prejudice to the rights of the Owner under such warranties. The Contractor agrees to provide all notices required for the effectiveness of such warranties and shall include provisions in the contracts with the suppliers, manufacturers, and installers of such materials, machinery, systems, and equipment whereby the Owner shall have a direct right, but not a duty, of enforcement of such warranty obligations.
- 40. Add a new § 3.5.6 s as follows:
  - § 3.5.6 Prior to Final Completion of the Work, and as a requirement for achieving Final Completion the Contractor shall:
  - .1 Obtain duplicate originals of all warranties, executed by the Contractor and all Subcontractors, manufacturers, suppliers, and installers, making the dates of beginning of the warranties the Date of Final Completion unless otherwise required by the Contract Documents;
  - .2 Verify that the documents are in proper form, contain full information, and have been signed by the proper parties with full authority to sign the same;
  - .3 Co-sign or sign warranties when required;
  - .4 Bind all warranties in an 8-1/2 x 11 inch three-ring binder, with hardback, cleanable, plastic covers;
  - Label the cover of each binder with a typed or printed label entitled "WARRANTIES", along with the title of the Project, name, address and telephone number of the Contractor, and name of its responsible principal;
  - .6 Include a Table of Contents, with each item identified, and with the name, address, and telephone numbers of each party executing the warranty;

- .7 Separate each warranty with index tab sheets keyed to the Table of Contents listing;
- .8 Deliver warranties in the form described above, to the Architect who will review same prior to submission to the Owner and who will then submit the same to the Owner.
- 41. § 3.11 is amended by adding "field test records, inspection certificates or records, manufacturers' certificates," after "Shop Drawings," in the first sentence and by adding "at all times" in the second sentence after "Architect and Owner".
- 42. § 3.12.2 is deleted and replaced with the following:
  - § 3.12.2 Product Data consists of written, printed, drawn, sound recording, video recording, computer generated, electronic or any other form of communication created by manufacturers, suppliers, testing organizations, standards organizations, manufacturer and supplier associations and trade groups, and similar creators of such communications, regarding materials, equipment, machinery, systems, processes and the components thereof, and regarding the installation, use, testing, operation, service, and maintenance thereof. By way of illustration, but not excluding other forms of such communication, Product Data is found in:

Manufacturer's Recommendations Installer Experience Requirements

Manufacturer's Instructions Test Data

Installation Manuals

Construction Manuals

Product Diagrams

Product Drawings

Operation Manuals

Performance Data

Product Diagrams

Product Drawings

Performance Charts

Product Specifications Instructions
Product Descriptions Brochures
Manufacturer's Requirements Illustrations

Production Information Assembly Instructions

Installer Licensing Requirements Charts

Installer Training Requirements

§ 3.12.4 is amended by deleting the last sentence of the paragraph and substituting the following: "Informational submittals upon which the Architect is not expected to take responsive action shall be retained by the Architect and preserved for a period of ten (10) years following Final Completion."

- § 3.12.5 is amended by deleting the word "approved" in the two places it appears in the third line of the paragraph and substituting the word "required" in each place.
- 45. § 3.12.8 is amended by adding the words "and in accordance with the informational submittals upon which the Architect is not expected to take responsive action" following the words "approved submittals" in the first sentence.
- 46. § 3.12.10 is amended by deleting the last sentence of the paragraph.

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47. § 3.15.1 is amended by adding ", on a daily basis," after "Contractor" in the first line of the first sentence.

Add the following after the first sentence of the section:

The Contractor shall provide on-site containers for the collection of waste materials, debris, of all such materials at legal disposal areas away from the Project site. All cleaning operations shall be scheduled so as to ensure that contaminants resulting from the cleaning process will not fall on newly-coated or newly-painted surfaces.

Add the following at the end of the existing paragraph of the section:

Immediately after unpacking materials, equipment and machinery, all packing case lumber or other packing materials, wrapping or other like flammable waste shall be collected and removed from the building. Care shall be taken not to mark, soil, or otherwise deface any finish. In the event that any finish becomes defaced in any way the Contractor or any of its Subcontractors shall clean and restore such surfaces to their original condition.

- 48. Add a new § 3.15.3 as follows:
  - § 3.15.3 The Contractor shall be responsible for the protection of the Work. Prior to the Architect's inspection for Substantial Completion, the Contractor shall clean the exterior and interior surfaces exposed to view, remove temporary labels, stains, putty, soil, paint and foreign substances from all surfaces, including glass and painted surfaces, polish transparent and glossy surfaces, clean equipment and fixtures to a sanitary condition, replace air filters in mechanical equipment, clean roofs, gutters, and downspouts, remove obstructions and flush debris from drainage systems, clean site, sweep paved areas and rake clean other surfaces, remove trash and surplus materials from the site, clean and polish all floors, clean and polish all hardware, and repair all Work damaged during cleaning.
- 49. Add a new § 3.15.4 as follows:
  - § 3.15.4 After Substantial Completion and prior to Final Completion, the Contractor shall; (1) employ skilled workers for final cleaning, (2) remove grease, mastic adhesive, dust, dirt, stains, fingerprints, labels and other foreign materials from all sight-exposed interior and exterior surfaces, (3) wash and shine glazing and mirrors, (4) polish glossy surfaces to a clear shine, (5) vacuum clean carpeted and similar soft surfaces, (6) clean (damp mop with clean mop and water) resilient and hard surface floors repeating as necessary until no visible residue remains on floors, (7) clean plumbing fixtures to a sanitary condition, (8) clean surfaces of all equipment and remove excess lubrication, (9) clean permanent filters and replace disposable filters in ventilating systems if units were operated during construction and clean ducts, blowers, and coils, (10) clean light fixtures, (11) remove waste, foreign matter and debris from roofs, gutters, downspouts, yard drains, and drainage ways, (12) remove waste, debris and surplus materials from the site, (13) remove the stains, spills and foreign substances from paved areas, and (14) broom clean exterior concrete and paved surfaces and rake clean the grounds.

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- 50. § 4.2.1 is amended by deleting the words "date the Architect issues the final Certificate for Payment" and substituting the words "end of the one-year period for correction pursuant to Section 12.2.2".
- 51. § 4.2.6 is amended by replacing "has authority to" with "shall" in the first sentence.

At the end of the existing paragraph add the following:

The Architect and the Contractor shall promptly notify, orally and in writing, the other party and the Owner of any fault or defect in the Work or nonconformance of the Work with the Contract Documents they may respectively discover and each, upon discovery of the defect or nonconformance, shall be responsible for notifying the other party and the Owner of those corrective actions they respectively take; provided, however, the Contractor shall have no duty to notify the Owner of discoveries made or actions taken by the Architect.

52. § 4.2.9 is amended as follows:

Capitalize the letters "f" and "c" in the words "final completion" in the first phrase. Add the words "and Final Completion" before the word "pursuant" in the second phrase. Add the words "and Section 9.10" after the words "Section 9.8" in the second phase.

- 53. § 4.2.11 is amended in the first line by deleting "decide matters" and replacing it with "make recommendations".
- 54. § 4.2.12 is amended in the first line by deleting "and decision" and replacing it with "or recommendations" and placing a period after "Contractor" in the second sentence and deleting all of the remaining language to the end of the paragraph.
- 55. § 5.1.2 is amended by deleting the first sentence and replacing it with the following: "A Sub-Subcontractor is a person or entity of a lower tier than a Subcontractor who has a direct or indirect contract with a Subcontractor or with another Sub-Subcontractor."
- 56. A new § 5.2.5 is added as follows:
  - § 5.2.5 Each Contractor, Subcontractor and Sub-Subcontractor shall be required to completely familiarize themselves with the plans and specifications, to visit the Work site to completely familiarize themselves with existing conditions, and to conduct any other appropriate investigations, inspections or inquiries prior to submission of a bid or proposal. No increases in Contract Sums shall be allowed for failure to so inspect and investigate.
- § 5.3 is amended by adding "§ 5.3.1" at the beginning of the original paragraph. The following new sentence is added after the first sentence of § 5.3.1: "The terms and conditions of the Contract Documents shall be incorporated by reference into each subcontract agreement, except as provided below."

- 58. Add a new § 5.3.2 as follows:
  - § 5.3.2 All agreements between the Contractor and Subcontractors shall state that the Owner "is an intended third-party beneficiary of this Contract." Consistent with third-party beneficiary status, neither the Owner nor the Architect shall be obligated to pay or to insure the payment of any monies to Subcontractors and Sub-Subcontractors.
- 59. Add a new § 5.3.3 as follows:
  - § 5.3.3 The Contractor shall require any potential Subcontractor to disclose to the Contractor any ownership interest or familial relationship between or among the Contractor, the Architect, the Owner and the potential Subcontractor prior to entering into a subcontract. The Contractor shall report to the Owner all such disclosures and the Owner shall have the right, in its sole discretion, to reject any such affiliated Subcontractor.
- 60. § 6.1.1 is amended by placing a period after the word "forces" in the second sentence and deleting the remainder of the second sentence after the period.
- 61. § 6.1.2 is deleted in its entirety.
- 62. § 6.1.4 is deleted in its entirety.
- 63. Add a new § 7.1.4 as follows:
  - § 7.1.4 Allowance balances may be used to fund changes in the Work. The Contractor will not be allowed an overhead, profit or fee mark-up when changes to the Work are funded by one of the Allowances.
- 64. Add a new § 7.2.2 as follows:
  - § 7.2.2 The Contractor expressly agrees that the acceptance of a Change Order by the Contractor constitutes full accord and satisfaction and release of any and all Claims, whether direct or indirect, arising from the subject matter of the Change Order.
- 65. Add a new § 7.3.11 as follows:
  - § 7.3.11 The Owner and the Contractor mutually agree that the fixed or percentage fee calculations shall not exceed the following:
  - .1 for any Work performed by the Contractor's own forces, 15% of the costs of the change in the Work exclusive of overhead and profit;
  - .2 for any Work performed by a Subcontractor or Sub-subcontractor, an amount not to exceed 22.5% of the costs of the change exclusive of overhead and profit, with 15% of that amount assigned to the Contractor and 7.5% assigned to the Subcontractor or Subsubcontractor.
- 66. Add a new § 7.5 as follows:

### § 7.5 Items Excluded from Adjustments in the Contract Sum

- § 7.5.1 Costs for all changes in the Work shall not include the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work.
- § 7.5.2 Costs due to the fault or negligence of the Contractor, Subcontractors, and Subsubcontractors, anyone directly or indirectly employed by any of them, or for whose acts and omissions any of them may be liable, including but not limited to costs for the correction of damaged, defective, or nonconforming Work, disposal and replacement of materials and equipment incorrectly ordered or supplied, and making good any damage to property which is not part of the Work or the Project shall not be included in any increase in the Contract Sum
- 67. Add a new § 7.6 as follows:

### § 7.6 Records and Accounts of Changes

The Contractor shall check all materials, equipment, and labor entering into the Work as a result of changes in the Work and shall keep full and detailed accounts and records of quantities, prices, and costs thereof satisfactory to the Architect and the Owner. The Architect and the Owner shall have full access to all of the Contractor's accounts and records relating to changes in the Work, including but not limited to receipts, vouchers, cancelled checks, requests for quotations, quotations, requests for information, information, invoices, correspondence, memoranda, drawings, purchase orders, reports, inspections, instructions, change orders with Subcontractors and Sub-subcontractors and similar data.

68. § 8.1.2 is amended by deleting "established in the Agreement" and replacing it with the following language:

established in the written Notice to Proceed issued by the Architect. The Notice to Proceed shall not be issued by the Architect until the Agreement has been signed by the Contractor, representative, and the Owner and the Architect have received, and approved as to form, all required payment and performance bonds and insurance, in compliance with Article 11. Issuance of the Notice to Proceed shall not relieve the Contractor of its responsibility to comply with Article 11.

69. § 8.1.3 is amended by adding the following new sentence after the first sentence:

The date of Final Completion is the date certified by the Architect in accordance with Paragraph 9.10. Unless otherwise agreed in writing by the Owner, the Contractor agrees that Final Completion shall occur not more than thirty (30) days after the date of Substantial Completion.

- 70. § 8.2.3 is amended by adding the words "and Final Completion" after the words "Substantial Completion".
- 71. Add a new § 8.2.4 as follows:

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- § 8.2.4 The Contractor is subject to damages, as specified in Article 4 of AIA Document A101-2017 Standard Form of Agreement Between Owner and Architect if the Work is not completed by the dates of Substantial Completion and Final Completion.
- 72. § 8.3.1 is deleted and replaced with the following
  - § 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the work; (3) by governmental actions, fire, adverse weather conditions documented in accordance with Section 15.1.6.2; (4) by delay authorized in writing by the Owner; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time may be extended for such reasonable time as the Architect and the Owner may determine.
- 73. § 8.3.3 is deleted and replaced with the following:
  - § 8.3.3 This Agreement does not permit the recovery by the Contractor of monetary damages, including, without limitation, extended home office overhead expenses, general conditions, consequential damages, or other compensable damages for delay or disruption or for extensions of time due to bad weather or acts of God, unless caused solely by the Owner or its Agent. In the event that a delay, disruption or extension of time beyond the contract dates for Substantial Completion or Final Completion is caused solely by the Owner or its Agent, then the Contractor may claim actual direct expenses that have only been incurred as a direct result thereof.
- 74. § 9.3.1 is amended by deleting the words ", if required," in both the first and second sentences.
- 75. § 9.3.2 is deleted and replaced with the following:
  - § 9.3.2 Payments will be made on the basis of invoices for specific materials or equipment incorporated in the Work and specified materials or equipment (1) suitably stored at the site or (2) suitably stored at some off-site location, provided the following conditions are met for off-site storage:
  - .1 The location must be agreed to, in writing, by the Owner and Surety.
  - .2 The location must be a bonded warehouse.
  - .3 The Contractor's Surety must agree, in writing, to the amounts included in each Application for Payment.
  - .4 The Contractor must bear the cost of the Owner's and the Architect's expenses related to visiting the off-site storage area and reviewing the stored contents. The Contractor acknowledges that the Architect's time is an additional service and shall compensate the Architect directly for same.
  - .5 Payment shall not include any charges for overhead or profit on stored materials.

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- Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance (naming the Owner as insured and naming the specific materials or equipment stored and their location) and transportation to the site for those materials and equipment are delivered to the Owner's site. Failure to follow these procedures shall result in nonpayment for storage of or insurance on stored materials and equipment. Failure to follow these procedures shall also result in nonpayment of materials and equipment until said materials and equipment are incorporated into the Work.
- 76. § 9.3.3 is amended by adding the following at the end of the existing paragraph:

CONTRACTOR SHALL INDEMNIFY AND HOLD OWNER HARMLESS FROM ANY LIENS, CLAIMS, CLAIMS OF TITLE, SECURITY INTERESTS, OR ENCUMBRANCES OF THE CONTRACTOR, SUBCONTRACTORS, SUB-SUBCONTRACTORS, MATERIAL SUPPLIERS, MANUFACTURERS, INSTALLERS, CREDITORS, OR ANYONE CLAIMING BY, THROUGH OR UNDER THEM FOR ITEMS COVERED BY PAYMENTS MADE BY THE OWNER TO CONTRACTOR.

- 77. § 9.4.2 is amended by adding the word "and" before "(2)" and placing a period after the word "procedures" in phrase (2) and deleting the remainder of the paragraph.
- 78. § 9.5.1.7 is amended by replacing the period with a semi-colon and adding "or" after it.
- 79. Add a new § 9.5.1.8 as follows:
  - .8 failure to submit a written plan indicating action by the Contractor to restore, keep or maintain the Work on schedule for completion of Work within the Contract time.
- 80. Add a new § 9.5.5 as follows:
  - § 9.5.5 Notwithstanding any provision contained within this Article, if the Work has not attained Substantial Completion or Final Completion by the required dates, subject to extensions of time allowed under these Conditions, then the Architect may withhold any further Certificate for Payment to the Contractor to the extent necessary to preserve sufficient funds to complete construction of the Project and to cover any damages as set forth in the Agreement. The Owner shall not be deemed in default by reason of withholding payment as provided for in § 9.3.2, § 9.5.1, or this § 9.5.5.
- § 9.6.1 is amended by adding "for undisputed amounts" after "shall make payment" in the first sentence and adding the following at the end of the sentence:

The Owner shall notify the Contractor within twenty-one (21) days if the Owner disputes the Architect's Certificate for Payment or the Contractor's Payment Application, listing the specific

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- reasons for nonpayment. Payments to the Contractor shall not be construed as releasing the Contractor or the Surety from any obligations under the Contract Documents or the Performance and Payment Bonds.
- 82. § 9.7 is amended by adding the words "the undisputed amount" after the word "Contractor" in the second line of the first sentence, by adding the word "undisputed" before the word "amount' in the third line of the first sentence, and by deleting the words "or awarded by binding dispute resolution" in the first sentence.
- 83. § 9.8.1 is amended by deleting the words "or designated portion thereof".
- 84. § 9.8.2 is amended by adding "in writing" after the word "Owner".
- 85. § 9.8.3 is amended by deleting the words "so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use" from the second sentence.
- 86. § 9.8.4 is amended by deleting the words "or designated portion thereof" from the first sentence, placing a period after the second usage of the words "Substantial Completion", and deleting the remainder of the paragraph.
- 87. § 9.8.5 is deleted and replaced with the following:
  - § 9.8.5 The Contractor shall achieve Final Completion of the Work within thirty (30) days after the date the Contractor achieves actual Substantial Completion as determined by the Architect.
- 88. § 9.9.1 is amended by deleting the remainder of the section after the first sentence.
- 89. § 9.10.2 is deleted and replaced with the following:
  - § 9.10.2 Neither final payment nor any remaining retainage percentage shall become due until the Contractor submits to the Architect and the Architect delivers to the Owner:
  - (1) using AIA Document G706-1994, an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied;
  - (2) evidence satisfactory to the Owner that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner;
  - (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents;
  - (4) using AIA Documents G707-1994, consent of sureties to final payment;
  - (5) AIA Document G706A-1994 Contractor's Affidavit of Release of Liens liens;
  - (6) receipts, releases, waivers and cancellation of liens, claims, security interests, claims of title, or encumbrances arising out of the Contractor's performance of the Work;
  - (7) unconditional certificate of occupancy from governmental entities having jurisdiction over the Project and the Work; and

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(8) certifications and inspection reports for installations and systems such as elevators and boilers.

In addition, the following items must be completed by the Contractor and received by the Owner before Final Payment will be due:

- (9) written certifications required by Section 10.5, 10.6, and 10.7;
- (10) final list of Subcontractors (AIA Document G705-2001);
- (11) warranties, organized as required elsewhere in the Contract Documents;
- (12) maintenance, operation, use, repair and instruction manuals;
- (13) the Owner's Final Certificate and Release form; and
- (14) record drawings and "as built" drawings. At the completion of the Project, the Contractor shall submit one complete set of "as built" drawings, with all changes made during construction, including concealed mechanical, electrical and plumbing items. The Contractor shall submit these as electronic, sepia, or other acceptable medium, in the discretion of the Owner.

Documents identified as affidavits must be notarized. All manuals will contain an index listing the information submitted. The index section will be divided and identified by tabbing each section as listed in the index. Upon request, the Architect will furnish the Contractor with blank copies of the forms listed above. Final payment shall be paid by the Owner to the Contractor within thirty (30) days after the Owner's Board has voted to approve Final Payment.

- 90. § 9.10.4 is amended by deleting the entire section and adding a new § 9.10.4 as follows:
  - § 9.10.4 Acceptance of the Work and the making of final payment does not constitute a waiver of any claims by the Owner.
- 91. Add a new § 10.1.1 as follows:
  - § 10.1.1 The Contractor's employees, agents, Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall not perform any service for the Owner while under the influence of any amount of alcohol or any controlled substance, or use, possess, distribute, or sell alcoholic beverages or any controlled substance while on the Owner's premises. No person shall use, possess, distribute or sell illicit or unperceived controlled drugs or drug paraphernalia; misuse legitimate prescription drugs; or act in contravention of warnings on medications while performing the Work or on the Owner's premises.
- 92. Add a new § 10.1.2 as follows:

- § 10.1.2 The Contractor has adopted or will adopt its own policy to assure a drug-free and alcohol-free workplace while on the Owner's premises or performing the Work. The Contractor will remove any of its employees, agents, Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, from performing the Work any time there is suspicion of alcohol and/or drug use, possession, or impairment involving such person, and at any time an incident occurs where drug or alcohol use could have been a contributing factor. The Owner has the right to require the Contractor to remove any person from performing the Work any time cause exists to suspect alcohol or drug use. In such cases, the person so removed may only be considered for return to work after the Contractor certifies as a result of a for-cause-test, conducted immediately following removal that said person was in compliance with this Contract. The Contractor will not use any person to perform the Work who fails or refuses to take, or tests positive on, any for-cause alcohol or drug test.
- 93. Add a new § 10.1.3 as follows:
  - § 10.1.3 The Contractor will comply with all applicable federal, state and local drug and alcoholrelated laws and regulations (e.g. Department of Transportation regulations, Drug-Free Workplace Act). The Owner has also banned the presence of all weapons on the Project site, whether or not the Owner thereof has a permit for a concealed weapon, and the Contractor agrees that the Contractor's representatives, employees, agents, Subcontractors and Sub-Subcontractors will abide by same.
- 94. § 10.2.1.1 is amended by adding, after "Work", the following ", school personnel, students, parents and other persons on the Owner's premises", and after "thereby", adding ", including the installation of fencing between the Work site and the occupied portion of a connecting or adjacent educational facility".
- 95. § 10.2.1.3 is amended by adding "other buildings, and their contents, fencing" after "such as"; and adding "athletic fields, facilities and tracks" after "walks".
- 96. § 10.2.4 shall be amended by deleting "explosives or other", and adding the following before the final period:
  - , and shall only conduct such activities after giving reasonable advance written notice of the presence or use of such materials, equipment or methods to the Owner and the Architect. The storage of explosives other than small explosive charges for nail or rivet guns on the Owner's property is prohibited. The use of explosive materials on the Owner's property other than small explosive charges for nail or rivet guns is prohibited unless expressly approved in advance in writing by the Owner and the Architect.
- 97. § 10.2.5 is amended by deleting the words "(other than damage or loss insured under property insurance required by the Contract Documents)".
- 98. Add a new § 10.2.9 as follows:

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- § 10.2.9 The Contractor shall do all things necessary to protect the Owner's premises and all persons from damage and injury, when all or a portion of the Work is suspended for any reason.
- 99. Add a new § 10.2.10 as follows:
  - § 10.2.10 The Contractor shall promptly report in writing to the Owner and the Architect all accidents arising out of or in connection with the Work which cause death, bodily injury or property damage, giving full details and statements of any witnesses. In addition, if death, serious bodily injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner and the Architect.
- 100. § 10.3.3 is deleted in its entirety.
- 101. § 10.3.4 is amended by placing a period after the word "site" in the first sentence and by deleting the remainder of the paragraph.
- 102. § 10.3.6 is deleted in its entirety.
- 103. § 10.4 is amended by adding the words "or the environment" following the word "property" and by deleting the words ", at the Contractor's discretion," in the first sentence.
- 104. Add a new § 10.5 as follows:

# § 10.5 Asbestos or Asbestos-Containing Materials

Prior to payment of retainage and final payment, the Contractor shall submit to the Architect a written certification addressed to the Owner that all materials used in the construction of this Work contain less than 0.10% by weight of asbestos and for which it can be demonstrated that, under reasonably foreseeable job site conditions, will not release asbestos fibers in excess of 0.1 fibers per cubic centimeter. The written certification shall further state that, should asbestos fibers be found at this Work in concentrations greater than 0.1 fibers per cubic centimeter, then the Contractor shall be responsible for determining which materials contain asbestos fibers and shall take all necessary corrective action to remove those materials from the Work, at no additional cost to the Owner. The written certification shall be dated, shall reference this specific Work and shall be signed by an officer of the Contractor.

105. Add a new § 10.6, § 10.6.1, and § 10.6.2 as follows:

# § 10.6 Lead-Free Material in Potable Water System

§ 10.6.1 Prior to payment of retainage and final payment, the Contractor and each Subcontractor involved with the potable water system shall furnish a written certification that the potable water system installed as a part of the Work is "lead-free".

§ 10.6.2 The written certification shall further state that should lead be found in the potable water system built under this Work, then the Contractor shall be responsible for determining which materials contain lead and shall take all necessary corrective action to remove lead from the

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Work, at no additional cost to the Owner. The written certification shall be dated, shall reference this specific Work and shall be signed by an officer of the Contractor.

# 106. Add a new § 10.7 as follows:

## § 10.7 Hazardous Materials Certification

The Contractor shall provide written certification that no materials used in the Work contain lead, asbestos, volatile organic compounds, formaldehyde, or other hazardous materials in them in excess of amounts allowed by federal, state or local standards, laws, codes, rules and regulations; the Federal Environmental Protection Agency (EPA) standards; and/or the Federal Occupational Safety and Health Administration (OSHA) standards, whichever is most restrictive. The Contractor shall provide this written certification as part of submittals under the Section in the Project Manual related to Contract Closeout.

# 107. Add a new § 11.1.5 as follows:

§ 11.1.5 The Contractor shall not commence work under the Contract until it has obtained all insurance required under this Article and as required by law, and evidence thereof has been received by the Owner. The Owner and the Contractor may alter the insurance requirements herein by separate written amendment. The Contractor shall not allow any grading and site work, roofing, mechanical, plumbing or electrical subcontractor(s) to commence work until all similar insurance as specified in this Article has been so obtained and the Contractor has presented the Owner with a Certificate of Insurance evidencing such coverage. Prior to the commencement of any work, the Contractor shall require all other Subcontractors and any Sub-Subcontractors to provide insurance coverage as required by law and as reasonably necessary given the scope of the Subcontractor or Sub-Subcontractor's work. The Contractor shall present the Owner with a Certificate of Insurance evidencing such coverage. All Certificates of Insurance must be on Acord Form 25 or later version as approved by the North Carolina Department of Insurance.

# 108. Add a new § 11.1.6 as follows:

§ 11.1.6 The Contractor's Liability Insurance shall include all major divisions of the Work and be on a comprehensive basis including:

- a) Premises/operations (including explosion, collapse and underground, as applicable).
- b) Independent Contractor's and Owner's and Contractor's Protective.
- c) Products and completed operations.
- d) Bodily and personal injury liability with employment exclusion deleted.
- e) Owned, non-owned and hired motor vehicles.
- f) Broad form property damage including completed operations.
- g) Any and all liability by way of indemnification, contribution and contractual liability.

# 109. Add a new § 11.1.7 as follows:

§ 11.1.7 The insurance required by Section 11.1.1 shall be written for not less than the limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, which shall be written on an occurrence basis, shall be maintained without interruption from the date of the commencement of the Work until the date of expiration of the

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§ 12.2.2.1 one-year period of correction of the Work following the date of final Completion or for such other longer period for maintenance for completed Work as specified in the Contract Documents.

- 110. Add a new § 11.1.8 as follows:
  - § 11.1.8 The insurance required by subparagraph 11.1.1 shall be written for not less than the following limits, or greater if required by law:
  - 1. Worker's Compensation:

a. State Statutoryb. Applicable Federal Statutory

c. Employer's Liability

i. \$100,000 Each Accident

ii. \$1,000,000 Disease, Policy Limit iii. \$100,000 Disease, Each Employee

- 2. <u>Commercial General Liability</u> (including premises/operations, independent contractors, products and completed operations, and broad form property damage):
  - a. Bodily Injury & Property Damage (combined single limit):

\$1,000,000 Each Occurrence

\$2,000,000 Aggregate

- b. Products and completed operations to be maintained for one (1) year after Final Payment.
- 3. <u>Contractual Liability (Hold Harmless Coverage)</u>:
  - a. Bodily Injury & Property Damage (combined single limit):

\$1,000,000 Each Occurrence

\$2,000,000 Aggregate

4. <u>Personal Injury, with employment exclusion deleted:</u>

a. \$1,000,000 Aggregate

5. <u>Comprehensive Automotive Liability (owned, non-owned and hired):</u>

a. Bodily Injury & Property Damage (combined single limit):

\$1,000,000 Each Accident

6. Excess Liability (umbrella): Minimum Limits

a. \$2,000,000 Over Primary Insurance

Policies must follow the form of the base policies

7. Owner's Protective Liability Insurance: The Contractor shall purchase and maintain owner's protective liability covering the Owner's contingent liability for claims which may arise from operations under the Contract Documents. Limits of coverage required for this insurance shall be not less than \$1,000,000 combined single limit.

## 8. Builders Risk Insurance:

The Contractor shall effect and maintain all ISO Special Causes of Loss perils, including peril of transit upon the entire Project on which the Work is to be done, to one hundred percent (100%) of the insurable value thereof, including but not limited to items of labor and materials connected therewith, whether in or adjacent to the structure insured; materials in place or to be used as part of or in the construction of the permanent construction, including but not limited to surplus materials, shanties, protective fences, bridges, and temporary structures; miscellaneous materials and supplies incidental to the Work; and such scaffolding, staging, towers, forms, and equipment as are not owned or rented by the Contractor, the cost of which is included in the cost of the Work. Said insurance must be maintained in full until final completion of the Project and, prior to canceling said insurance, Contractor shall notify Owner in writing.

Exclusions: This insurance need not cover: any tools owned by the mechanics; and tools, equipment, scaffolding, staging, towers, and forms rented or owned by the Contractor, the capital value of which is not included in the Work; or any structures erected for housing of or service to workmen.

A loss, if any, is to be adjusted with the Owner, and is to be payable to the Owner and to the Contractor jointly, as their interests may appear. The Owner shall be named on the policy, by rider or other applicable endorsement as an additional insured.

# 111. Add a new § 11.1.9 as follows:

§ 11.1.9 Certificates of Insurance: No later than the date of the execution of the Contract, the Contractor will submit to the Owner four (4) copies of Certificates of Insurance on the latest approved North Carolina Department of Insurance Acord Form 25 by an insurer authorized to do business in North Carolina by the North Carolina Department of Insurance and rated A- (minus) or better by A.M. Best Company. The certificates shall certify that the insurance policies carried by Contractor were in force before the Work commenced and certifying that these policies will not be canceled during the Contract other than by an endorsement added to the policies and certificates reading substantially as follows: 'The policies herein referred to are not cancelable or subject to reduction of coverage by the Insurer unless the Owner has received thirty (30) days written notice via registered or certified letter.' Additional Certificates of Insurances will be provided, from time to time, as listed policies expire in order to evidence continuance insurance coverage from the date of the Contract through the end of the one (1) year correction period following the date of final completion. Certificates of Insurance containing disclaimers holding the insurer harmless for failure to notify the Owner of Contractor policy cancellations will not be acceptable and should be modified to delete such disclaimers from the Insurance Certificate

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forms. Evidence of insurance requirements of these Supplementary General Conditions may be provided by modification to Acord Form 25 by endorsement, rider or separate certification by the insurer. No surplus lines insurance shall be acceptable.

In preparation of these forms, the following items should read:

- 1. The description of the Project / the Work / operations / locations / vehicles / special items.
- 2. The certificate holder is:

THE \_\_\_\_\_ COUNTY BOARD OF EDUCATION

3. The cancellation statement is:

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL THIRTY (30) DAYS PRIOR WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.

All blanks and questions on certificates must be filled out completely. Incomplete or inadequate certificates will be returned to Contractor as unsatisfactory and commencement of its Work will be delayed until satisfactory certificates are submitted. Such delay will not warrant extension of Contract Time. In the event of a reduction in any aggregate limit, the Contractor shall take immediate steps to have it reinstated. All insurance coverages of the Contractor shall be primary to any insurance or self-insurance program carried by the Owner. Renewal Certificates of Insurance on the Owner's form must be provided to the Owner thirty (30) days prior to expiration of current coverages so that there shall be no interruption in the Work due to lack of proof of insurance coverages required of the Contractor in the Contract Documents.

- 112. Add a new § 11.1.10 as follows:
  - § 11.1.10 The acceptance of delivery to the Owner of any Certificate of Insurance evidencing the insurance coverages and limits required in the Contract does not constitute approval or agreement by the Owner that the insurance requirements in the Contract have been met or that the insurance policies shown in the Certificates of Insurance are in compliance with the Contract requirements.
- 113. Add a new § 11.1.11 as follows:
  - § 11.1.11 Should at any time the Contractor not maintain the insurance coverages required of it in the Contract Documents, the Owner may either cancel or suspend the Contract or, at its sole discretion, shall be authorized to purchase such coverage and charge the Contractor for such coverages purchased. The Owner shall be under no obligation to 1) purchase such insurance 2) be responsible for the coverages purchased or 3) be responsible for the insurance companies used. The decision of the Owner to purchase such insurance coverages shall in no way be construed to be a waiver of its rights under the Contract Documents.

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# 114. Add a new § 11.1.12 as follows:

§ 11.1.12 If any General Liability Insurance required herein is to be issued or renewed on a "claims made" form as opposed to the "occurrence" form, the retroactive date for coverages shall be no later than the commencement date of the Project, the extended reporting period date for claims shall be seven (7) years following the date of Final Completion, and shall provide that in the event of cancellation or non-renewal the discovery and extended reporting period of claims shall be unlimited.

## 115. Add a new § 11.1.13 as follows:

§ 11.1.13 All policies described in paragraph 11.1 shall be made available to the Owner or its legal representatives by means of exact copies of the original policies and placed in the hands of the Owner or its representatives.

# 116. Add a new § 11.1.14 as follows:

§ 11.1.14 If requested in writing by any party in interest, the Contractor shall, upon occurrence of loss, furnish bond for the proper performance of its duties. The Contractor shall deposit any money received from insurance in an account separate from all its other funds; and it shall distribute it in accordance with such agreement as the parties of interest may reach, or in the absence of such an agreement, as the interest of the parties may appear. Replacement of injured work shall be performed by the Contractor.

# 117. Add a new § 11.1.15 as follows:

§ 11.1.15 The cost of the Bonds required by § 11.1.2 and the Contract Documents and required by law shall be included in the Contract Sum. The Bonds shall guarantee the Contractor's faithful performance of the Contract and the payment of all obligations arising thereunder. The Bonds shall remain in force until the later of the following has occurred:

- a. the Contract has been fully performed by the Contractor;
- b. the Project has been completed and accepted by the Owner;
- c. the provisions of all warranties and guarantees required by the Contract Documents have been fulfilled:
- d. the time for the filing of all mechanics liens has expired; and
- e. the applicable statute of repose, in the North Carolina General Statutes has expired.

Bonds which seek to limit the time for bringing a suit on the bonds to less than the foregoing are unacceptable.

118. § 11.2 is amended by deleting the word "Insurance" and substituting the words "Risk Management" in its place.

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- 119. § 11.2.1 is amended by deleting the paragraph in its entirety and substituting the following paragraph:
  - The Owner shall purchase and maintain its usual and customary general liability and property insurance, or, in the alternative, the Owner may obtain and maintain all or part of its risk management services by participating in a risk management trust, risk management pool, or other alternative to purchase of insurance from commercial insurance companies.
- 120. § § 11.2.2 and 11.2.3 are deleted in their entirety.
- 121. § § 11.3, 11.3.1, and 11.3.2 are deleted in their entirety.
- 122. § 11.4 is deleted in its entirety.
- 123. § § 11.5, 11.5.1, and 11.5.2 are deleted in their entirety.
- 124. § 12.1.1 is amended by adding "or the Owner's" after the first and second use of the word "Architect's", and by adding "or the Owner" after "by the Architect".
- 125. § 12.1.2 is amended by adding "or the Owner" after "covered, the Architect" in the second line of the first sentence.
- § 12.2.1 is amended by deleting the word "Substantial" in the title to the section and substituting the word "Final" in its place, by adding the word "Work" after the words "Architect or" in the first line of the first sentence of the section, and by deleting the words "Substantial Completion" and substituting the words "Final Completion" in their place in the second line of the first sentence of the section.
- 127. § 12.2.2 is amended by deleting the word "Substantial" in the title to the section and substituting the word "Final" in its place.
- 128. § 12.2.2.1 is deleted and replaced with the following:
  - § 12.2.2.1 In addition to the Contractor's obligation to perform the Work in accordance with the Contract and in addition to all express and implied warranties, including without limitation the Contractor's obligations under § 3.5, if, within one year after Final Completion of the Work, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so. The cost of correcting the Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary by such correcting shall be at the Contractor's expense.
- 129. Sec. 12.2.2.2 is deleted and replaced with the following:
  - § 12.2.2.2 If the Contractor fails to perform the corrective Work, then the Owner may perform corrective Work, at the Contractor's expense. If the Owner performs corrective Work, then the

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Owner may also remove nonconforming Work and store the salvageable materials or equipment at the Contractor's expense. If the Contractor does not pay all costs incurred by the Owner within ten (10) days after written notice, then the Owner may, upon ten (10) additional days' written notice, sell the removed materials and equipment in accordance with the Owner's policies, and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, including the costs of additional testing and inspection and compensation for the Architect's services and expenses made necessary thereby, then the Contractor shall pay the difference to the Owner within 30 days after written demand made by the Owner to the Contractor for payment of such costs.

- 130. § 12.2.2.3 is deleted in its entirety.
- 131. Sec. 12.2.5 is amended by deleting the words "as described in Section 12.2.2" in the second sentence of the section, placing a period after the words "Contractor's obligations" in the last line of the second sentence of the section, and deleting the remainder of the second sentence following the period.
- 132. Add a new § 12.4 as follows:

## § 12.4 Repairs by Owner

The Owner may make emergency repairs to the Work. In addition, the Owner may perform or cause to be performed corrective Work and take such other measures necessary under the circumstances if the Contractor does not promptly respond to a notice of defective or nonconforming Work. The Contractor shall pay the costs of the emergency repairs or the corrective Work, including the costs of additional testing and inspection and compensation for the Architect's services and expenses made necessary thereby within 30 days after written demand made by the Owner to the Contractor for payment of such costs.

- 133. § 13.1 is deleted and replaced with the following:
  - Sec. 13.1 The Contract is governed by the laws of the State of North Carolina and any litigation shall be conducted in the appropriate division of the General Court of Justice. Mandatory and exclusive venue for any disputes shall be in the county in which the Owner's main administrative office is located. The invalidity of any part or provision of the Contract shall not impair or affect in any manner whatsoever the validity, enforceability or effect of the remainder of the Contract.
- 134. § 13.2.2 is amended by placing a period after the word "Project" and deleting the remainder of the paragraph.
- 135. § 13.4.4 is amended by inserting "with a copy to the Owner" before the period.
- 136. Add a new section 13.6 as follows:

#### § 13.6 Records

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- § 13.6.1 The Contractor shall at all times through the date of Final Completion, maintain Job Records, including, but not limited to, invoices, payment records, payroll records, daily reports, diaries, logs, instructions, drawings, receipts, subcontracts, purchase orders, vouchers, memoranda, or other financial data and job meeting minutes applicable to the Project, in a manner which maintains the integrity of the documents. Job Records must be retained by the Contractor for at least twelve (12) years after the date of Final Completion of the Project. Within ten (10) days of the Owner's request, the Contractor shall make such Job Records available for inspection, copying and auditing by the Owner, the Architect or their respective representatives, at the Owner's central office.
- 137. § 14.1.1 is amended by deleting subsection 14.1.1.4.
- 138. § 14.2.4 is amended by deleting the last sentence.
- 139. Article 15 shall be amended in the title by adding "OF CONTRACTOR" at the end of the existing title.
- 140. § 15.1.1 shall be amended by deleting "one of the parties" and replacing it with "the Contractor"; inserting "interpretation of Contract terms, extension of time," after "money,"; before the period at the end of the first sentence add ", the Project or the Work"; deleting the second sentence in its entirety; deleting at the end of the paragraph "party making the Claim" and replacing it with "Contractor"; and deleting the last sentence.
- 141. § 15.1.2 is deleted in its entirety.
- 142. § 15.1.3.1 is amended by deleting in the first sentence "either the Owner or" and replacing it with "the"; deleting "other party" and replacing it with "Owner"; deleting "Initial Decision Maker with a copy sent to the"; deleting ", if the Architect is not serving as the Initial Decision Maker.". The second sentence is amended by deleting "either party" and replacing it with "the Contractor"; inserting "calendar" after "21" in both places; replacing "claimant" with "Contractor"; inserting "knew or should have known of", in the place of the word "recognizes".

Add the following at the end of the amended § 15.1.3.1 paragraph:

Claims must be initiated by written notice titled "Notice of Claim" ("Notice") and sent to the Architect and the Owner's designated representative. The Notice shall clearly set out the specific matter of complaint, and the impact or damages which may occur or have occurred as a result thereof. To the extent that the damages cannot be assessed at the time of the Notice, the Notice shall be amended at the earliest date reasonably possible. It is imperative that the Owner receive timely specific Notice of any potential problem identified by the Contractor in order that the problem can be mitigated or resolved promptly. Any alleged damages suffered by the Contractor that have not been included in a Notice within ninety (90) days after the Contractor first knew or should have known of the damages shall be deemed waived by the Contractor.

143. § 15.1.3.2 is deleted in its entirety.

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- 144. § 15.1.4.2 is deleted in its entirety.
- 145. § 15.1.5 is amended by adding "or Increase in the Contract Sum" at the end of the existing title.
- 146. § 15.1.5 is amended in the first sentence by inserting "additional cost or" after "claim for" and deleting "before proceeding to execute the Work that is the subject of the claim" and replacing those words with "to the Owner and the Architect".

Add the following to § 15.1.5 at the end of the existing paragraph:

The Architect will promptly investigate such claim and report findings and a recommended resolution in writing to the Owner and the Contractor. If the Claim is approved by the Owner's Board, or the Owner's representative, if provided for herein, then the Contractor shall proceed with the execution of the Work that is the subject matter of the Claim. If the Claim is rejected by the Owner, then the Contractor may pursue alternative dispute resolutions provided for in the Contract Documents.

- 147. § 15.1.6.1 is amended by deleting "of cost and"; and by adding "critical path of the" before the word "Work" in the second sentence.
- 148. § 15.1.6.2 is amended by deleting "had an adverse effect on the scheduled construction" and replacing those words with "prevented the execution of critical path elements of the Work on normal working days."

Add the following to § 15.1.6.2 at the end of the existing paragraph:

Adverse weather conditions means unusually severe weather which is beyond the normal weather recorded and expected for the locality and/or the season or seasons of the year.

- 149. Add a new § 15.1.6.3 as follows:
  - § 15.1.6.3 The Contractor shall anticipate and include in a critical path construction schedule rain days due to adverse weather conditions in accordance with the rainfall table below. A rain day is defined as a day when rainfall exceeds one-half (.5) inch during a 24-hour period. The number of rain days expected for each month is as follows:

January	0 calendar days	July	4 calendar days
February	0 calendar days	August	4 calendar days
March	0 calendar days	September	4 calendar days
April	Ocalendar days	October	0 calendar days
May	0 calendar days	November	0 calendar days
June	4 calendar days	December	0 calendar days

- 150. Add a new § 15.1.6.4 shall be added as follows:
  - § 15.1.6.4 Time extensions may be granted for rain days in any month when the cumulative number of rain days during that month exceeds the number scheduled, provided that the rainfall

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prevented the execution of the critical path of the Work on normal working days as shown on the Contractor's schedule. No day will be counted as a rain day when substantial forces are able to perform Work on the Project for more than fifty percent (50%) of the usual workday or when the critical path of the Work on the Project is not adversely impacted. The number of rain days shown in the above schedule for the first and last months of Contract will be prorated in determining the total number of rain days expected during the period of the Contract.

# 151. Add a new § 15.1.6.5 as follows:

§ 15.1.6.5 No extension of time shall be made to the Contractor because of hindrances or delays from any cause which is the fault of the Contractor or the Contractor's Subcontractors or Sub-Subcontractors or under the Contractor's control. Claims for extension of time may only be considered because of adverse weather conditions, rain delays, or hindrances or delays which are the fault of the Owner and/or under the Owner's control, but only to the extent that the critical path of the Work is delayed. Other claims for extension of time shall be considered because of hindrances or delays not the fault of either the Contractor or the Owner, but only to the extent that the critical path of the Work is delayed. Board approval shall be required for any extension of time. No damages shall be paid for delays. The Contractor shall only be entitled to time extensions per the terms of the Contract Documents.

# 152. Add a new § 15.1.6.6 shall be as follows:

- § 15.1.6.6 Requests for time extension shall be submitted on a monthly basis and shall specify the time delay, the cause of the delay, and the responsible party for the delay, whether the Contractor, the Owner, adverse weather, rain day, or other. No claims for damages for delay shall be made by the Contractor. Any claim not submitted under the terms of this Section shall be waived.
- 153. § 15.1.7 is amended by deleting the existing paragraph in its entirety and substituting the following in its place:

  The Contractor waives all claims against the Owner for consequential damages arising out of or

relating to the Contract, the Project, and the Work.

- 154. § 15.2 is amended by replacing the title with "Resolution of Claims and Disputes".
- 155. § 15.2.1 is deleted and replaced with the following:
  - § 15.2.1 Claims by the Contractor against the Owner, including those alleging an error or omission by the Architect shall be referred initially to the Architect for written recommendation. An initial recommendation by the Architect shall be required as a condition precedent to litigation of all Claims by the Contractor arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Architect with no recommendation having been rendered by the Architect.
- 156. § 15.2.2 is deleted and replaced with the following:

- § 15.2.2 The Architect will review Claims and within ten (10) days of the receipt of the Claim take one of the following actions: (1) request additional supporting data from the Contractor, or (2) make a written recommendation to the Owner, with a copy to the Contractor.
- 157. § 15.2.3 is deleted and replaced with the following:
  - § 15.2.3 In evaluating Claims, the Architect may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Architect in making a written recommendation.
- 158. § 15.2.4 is deleted and replaced with the following:
  - § 15.2.4 If the Architect requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten (10) days after receipt of such a request, and shall provide a response on the requested supporting data, advise the Architect when the response or supporting data will be furnished or advise the Architect that no supporting data will be furnished.
- 159. § 15.2.5 is deleted and replaced with the following:
  - § 15.2.5 As required by North Carolina General Statutes § 143-128(f1) the Owner, the Contractor, the Architect and all first tier and lower-tier Subcontractors and Sub-Subcontractors are required to participate in mediation as a precondition to initiating litigation. The dispute resolution process adopted by the State Building Commission pursuant to North Carolina General Statutes § 143-135.26(11) is hereby adopted and incorporated by reference for use in conducting the mediation. Statutory, contract, bond, insurance, warranty and all other time periods (including but not limited to applicable statutes of limitation and statutes of repose) shall be tolled (suspended from running) during the mediation process. The costs of the mediation shall be paid one-third by the Owner and two-thirds by the other party or parties to the mediation, divided equally among the other parties if there is more than one other party.
- 160. § 15.2.6 is deleted and replaced with the following:
  - § 15.2.6 Upon receipt of a Claim against the Contractor or at any time thereafter, the Architect or the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Architect or the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- 161. § 15.2.6.1 is deleted in its entirety.
- 162. § 15.2.7 is deleted in its entirety.
- 163. § 15.2.8 is deleted in its entirety.
- 164. §§ 15.3, 15.3.1, 15.3.2, 15.3.3. and 15..3.4 are deleted in their entirety.

- 165. § § 15.4, 15.4.1, 15.4.1.1, 15.4.2, 15.4.3, 15.4.4, 15.4.4.1, 15.4.4.2, and 15.4.4.3 are deleted in their entirety.
- 166. Add a new § 15.3 and § 15.3.1 as follows:

# § 15.3 LITIGATION

- § 15.3.1 Any Claim arising out of or related to the Contract, except Claims waived under the terms of the Contract Documents, shall, subject to the provisions of § 15.2.5, be subject to resolution by litigation.
- 167. Add a new ARTICLE 16 and § 16.1 as follows:

#### **ARTICLE 16 GENERAL**

§ 16.1 Relation to AIA Documents These Supplementary General Conditions and the General Requirements, the Supplementary Instructions to Bidders, the forms of various required documents, and any Special Conditions, all of which are bound in and incorporated in the Project Manual, modify and amend AIA Document A201-2017 General Conditions of the Contract for Construction, AIA Document A101-2017 Standard Form of Agreement Between Owner and Contractor, AIA Document A701-1997, Instructions to Bidders, and any other AIA documents published, copyrighted, or trademarked by the American Institute of Architects to which reference is or may be made in the Project Manual.

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# BUNCOMBE COUNTY BOARD OF EDUCATION SUBCONTRACTORS FORM

#### SUBCONTRACTORS:

Pursuant to General Statute 143-128(d) if a construction or repair project is \$200,000 or higher, and subcontractors are to be utilized, bidders must identify prime subcontractors by listing them below. The bidder shall identify work by the subcontractor or state not applicable. Failure to do so may result in bid being declared non-responsive. All blanks must be filled in, or if no subcontractors are to be utilized, indicate by signing at the appropriate place at the bottom of this page. Do not list suppliers.

\*\*Roofing applicator must have a GC-R license and declared on this Subcontractors Form\*\*

Heating & A/C	Name:	Lic#:	
Plumbing	Name:	Lic#:	
Electrical	Name:	Lic#:	
General	Name:	Lic#:	<del></del>
Roofing	Name:	Lic#:	<del></del>
Wedonotpl	anto use subcontract forces: — –	Bidder's Signature (sign if applicable)	

# BUNCOMBE COUNTY BOARD OF EDUCATION GUIDELINES FOR RECRUITMENT AND SELECTION OF MINORITY BUSINESS FOR PARTICIPATION IN SCHOOL CONSTRUCTION CONTRACTS

In accordance with G.S. 143-128, these guidelines establish goals for minority participation in single-prime and separate-prime school construction contracts. The legislation provides that public bodies shall have a verifiable percentage goal for participation by minority businesses in the total value of work for each project for which a contract or contracts are awarded. These guidelines are published to accomplish that end.

#### SECTION 1: INTENT AND APPLICATION OF GUIDELINES.

It is the intent of these guidelines that The Buncombe County Board of Education as awarding authority for school construction projects, and the contracts and subcontractors performing the construction contracts awarded, shall cooperate and in - food faith do all things legal, proper and reasonable to achieve the verifiable goal of 10% for participation by minority businesses in each construction project. Nothing contained in these guidelines shall be construed to require awarding authorities to award contracts to or to make purchase of materials or equipment from minority-business contracts who do not submit the lowest responsible bid or bids.

These guidelines shall apply to all contractors for the erection, construction, alteration, or repair of any buildings or other construction projects when the entire cost of such work shall exceed \$100,000.

#### **SECTION 2: DEFINITIONS.**

- 1. Minority a person who is a citizen or lawful permanent resident of the United States and who is:
  - a. Black, that is, a person having origins in any of the black racial groups in Africa;
  - b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of k race;
  - c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia and Asia, the Indian subcontinent, the Pacific Islands:
  - d. American Indian or Alaskan Native, that is, a person having origins in any of the original peoples of North America; or
  - e. Female.
- 2. Minority Business means a business:
  - a. In which at least fifty-one percent (51%) is owned by one or more minority persons, or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one of more minority persons; and

- b. Of which the management and daily business operations are controlled by one or more of the minority persons who owns it.
- 3. Owner The Buncombe County Board of Education.
- 4. Bidder Any person, firm, partnership, corporation, association, or joint venture seeking to be awarded a public contract or subcontract.
- 5. Contract A mutually binding legal relationship, or any modification thereof obligating the Contractor to furnish labor, equipment, materials, or services for the erection, construction, alteration, or repair of any buildings or other construction projects and obligating the Owner to pay for them.
- 6. Contractor Any person, firm, partnership, corporation, association, or joint venture which has contracted with the Owner to perform a Contract to which these guidelines apply.
- 7. Subcontractor Any person, firm, partnership, corporation, association, or joint venture under contract with a Contractor for supplying materials or labor, equipment, materials, or services. The subcontractor may or may not provide materials in his subcontract. Work subcontracted in an emergency and which could not have been anticipated is excluded as part of this program.

#### 8. Verifiable goal means:

- a. For purpose of separate-prime contract system, that the Owner has adopted written guidelines specifying the actions that will be taken to ensure a good faith effort in the recruitment and selection of minority businesses for participation in contracts awarded; and
- b. For purposes of single-prime contract system, that the Owner has adopted written guidelines specifying the actions that the prime contractor must take to ensure good faith effort in the recruitment and selection of minority businesses for participation in contracts awarded; the required actions must be documented in writing by the contractor to the Owner.

#### **SECTION 3: RESPONSIBILITIES.**

1. Minority Business Development Agency of the Small Business Development Division, North Carolina Department of Economic & Community Development (hereafter referred to as Minority Business Development Agency). The Minority Business Development Agency will establish a program in which it will certify to interested persons businesses which quality as Minority Business Enterprises (MBE). The Minority Business Development Agency will be responsible for the following:

- a. Determine MBE certification, ie. that those certified are MBEs under GS 143-128 as a contractor and/or subcontractor.
- b. Identify those areas of work for which there are certified MBEs, as requested.
- c. Provide interested parties with a list of prospective certified MBE contractors and subcontractors.
- d. Assist in the determination of technical assistance in the certification program that needs to be provided.

In addition to being responsible for the participation of those small and emerging business that want to participate in the construction program, the Minority Business Development Agency will:

- 1) Maintain a current list of certified MBEs. The list shall include the areas of work in which each MBE is interested.
- 2) From information furnished by the Owner publicize the contracting and subcontracting opportunities available for each construction project being advertised.
- 3) Work with the North Carolina Association of Minority Businesses and the Carolinas Branch of the Association of General Contractors in developing and implementing a certification program intended to improve the ability of MBEs to compete in this program.
- 2. Owner/Buncombe County Board of Education: Under the single-prime contract system and the separate-prime contract system, the Owner will be responsible for,,\_ the following:
  - a. For contracts in excess of \$500,000 in estimated costs, furnish to the Minority Business Development Agency, the Asheville-Buncombe Community Relations Council, and YMI, Inc., of Asheville a minimum of twenty-one (21) days prior to the bid opening the following:
    - 1. Project description and location;
    - 2. Locations where bidding documents may be reviewed;
    - 3. Name of representative of the Owner who can be contracted during the advertising period to advertise who the prospective bidders are;
    - 4. Date, time, and location of the bid opening; and
    - 5. Date, time, and location of pre-bid conference, if scheduled.

The twenty-one (21) day advance time period may be reduced to ten (10) days for contracts in the range of \$100,000 to \$500,000 in estimated cost.

b. The Owner Will request that the Minority Business Development Agency, the Asheville-Buncombe Community Relations Council, and YMI, Inc. notify MBEs of construction projects.

- c. The pre-bid conference, if scheduled, conducted by the representative of the Owner, will be open to all known and anticipated prime contracts, subcontractors, material suppliers, and other bidders. During the conference, this program, including the bidders' responsibilities, will be fully explained.
- d. The Owner will be responsible for reviewing the spent low bidders compliance with the items listed in the proposal that must be complied with if the bid is to be considered responsive and responsible. The Owner reserves the right to reject any and all bids and to waive informalities.
- e. Attend the scheduled prebid conference.
- f. Identify or determine the work areas of a contract where MBEs may have an interest in performing contract work.
- g. At least ten (10) days prior to the scheduled day of bid opening, the Owner will notified certified MBEs in the area of the project of potential contracting opportunities listed in the proposal. The notification will include the following:
  - 1. A description of the work for which the bid is being solicited.
  - 2. The date, time, and location where bids are to be submitted.
  - 3. The name of a representative of the Owner who will be available to answer questions about the Project.
  - 4. Where bid documents may be received.
  - 5. Any special requirements that may exist, such as insurance, licenses, bonds and financial arrangements.

If there are more than three certified MBEs in the area of the Project, the Owner shall notify three, but may contact more, if the Owner so desires.

h. Maintain documentation of any contacts, correspondence, or conversations with MBE firms made in an attempt to meet the goals.

#### 3. Prime Contractor(s)

Under the single prime contract system the prime contractor will:

- a. Attend the scheduled pre-bid conference.
- b. Identify or determine those work areas of a subcontract where MBEs may have an interest in performing subcontract work.

- c. At least ten (10) days prior to the schedule day of bid opening, notify certified MBEs of potential subcontracting opportunities listed in the proposal. The notification will include the following:
  - 1) A description of the work for which the subbid is being solicited.
  - 2) The date, time, and location where subbids are to be submitted.
  - 3) The name of the individual within the company who will be available to answer questions about the project.
  - 4) Where bid documents may be reviewed.
  - 5) Any special requirements that may exist, such as insurance, licenses, bonds, and financial arrangements.

If there are more than three (3) certified MBEs in the area of the project, the contractors shall notify three (3), but may contact more, if the contractors so desires.

- d. During the bidding process, comply with the Owner's requirements listed in the contract documents for minority participation.
- e. Submit with the bid a description of that portion of the work to be executed by MBEs expressed as a percentage of the total contract price.
- f. Upon being named the apparent low bidder, provide the necessary documentation as listed in the contract documents provided by the Owner. Failure to comply with procedural requirements as defined in contract documents may render the bid as nonresponsive and may result in rejection of the bid and award to the next lowest responsible and responsive bidder.
- g. During the construction of a project, if it becomes necessary to replace an MBE subcontractor, advise the Owner.
- h. If during the construction of a project additional subcontracting opportunities become available, make a good faith effort to solicit bids from MBES.

# 4. MBE Responsibilities:

While MBE's are not required to become certified in order to participate in this program, it is recommended that they become certified and should take advantage of the appropriate technical assistance that is made available. In addition, MBE's who are contacted by the Owner or bidders should respond promptly whether or not they wish to submit a bid.

#### **SECTION 4: DISPUTE PROCEDURES.**

It is the policy of the Buncombe County Board of Education that disputes with another person that involve a person's rights, duties, or privileges, should be settled through informal procedures. To that end, MBE disputes arising under these guidelines should be resolved, if possible, by informal proceedings arranged by the Superintendent or his designee.

#### **SECTION 5: EFFECTIVE DATE**

828-255-5916.

These guidelines are effective on December 15, 1989. Copies of these guidelines may be obtained from the Office of the Superintendent at 175 Bingham Road, Asheville, North Carolina, NC 28806; telephone number

SECTION 6: GUIDELINES AND COMPLIANCE DOCUMENTATION TO BE PART OF CONTRACT DOCUMENTS.

These guidelines will be included in the contract to each construction bid package and provisions for documenting contractual compliance in providing for MBE participation in the construction program %%, Will be included in each construction bid package

# ADDITION TO SUPPLEMENTARY GENERAL CONDITIONS

#### APPLICATION:

The requirements of the Buncombe County Board of Education Guidelines for Recruitment and Selection of Minority Businesses for Participation in School Construction Contracts are hereby made a part of these contract documents. These requirements shall apply to all contractors regardless of ownership. A copy of the Buncombe County Board of Education Guidelines for Recruitment and Selection of Minority Businesses for Participation in School Construction Contracts is attached.

#### MBE SUBCONTRACT GOALS:

The goals for participation by Minority firms as subcontractors on this project have been set by the Buncombe County Board of Education (hereinafter Board) at 10%.

The bidder must identify on MBE Form I, the businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts or affidavit (Affidavit B) of self-performance of work, if bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

The lowest responsible, responsive bidder must provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal.

#### OR

Provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, with documentation of Good Faith Effort, if the percentage is not equal to the applicable goal.

#### OR

Provide Affidavit B, which includes sufficient information for the State to determine that the bidder does not customarily subcontract work on this type project.

The above information must be provided as required. Failure to provide this evidence may result in rejection of the bid and award to the next low bidder.

#### MINIMUM COMPLIANCE REQUIREMENTS:

If the MBE subcontract goals are not achieved, the Bidder shall provide the following documentation to the Board.

1. MBE Utilization Commitment (MBE Form 1) with the bid.

- 2. Documentation of the Bidder's good faith efforts to meet the goals set forth in these provisions (upon request prior to award). This documentation shall include the following evidence:
  - A. Copies of solicitations for quotes to at least three (3) MBE firms from the source list provided by the Minority -Business Development Agency of the Small Business Development Division, North Carolina Department of Economic & Community Development (hereinafter Minority Business Development Agency) for each subcontract to be let under this contract (if 3 or More firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
  - B. Copies of quotes or responses received from each firm responding to the solicitation.
  - C. A telephone log of follow-up calls to each firm sent a solicitation.
  - D. For subcontracts where an MBE firm is not considered to be the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
  - E. Documentation of any contacts, correspondence or conversation with MBE firms made in an attempt to meet the goals.

Note: If the Bidder provides sufficient evidence (listed in #1) that the goals stated in the contract documents have been met, or awards all subcontracts to MBE'S, the documentation listed in #2 will not be required.

Upon being named apparent low bidder, the Bidder shall provide a Letter of Intent (MBE) Form 3), complete with a description of the scope of services and dollar value from each MBE firm proposed for use in this contract. Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder. The Board reserves the right to waive any irregularities in MBE documentation if they can be resolved prior to award of the contract, and the Board finds it to be in its best interest to do so and award the contract.

#### SUBCONTRACTOR PAYMENT REQUIREMENTS:

North Carolina General Statute 143-134. 1, states that the percentage of retainage on payment made by the prime contractor to the subcontractor shall not exceed the percentage of retainage on payments made by the Board to the prime contractor. Failure to comply with this provision shall be considered a breach of the contract, and the contract may be terminated in accordance with the termination provisions of the contract.

The Contractor shall provide an itemized statement of payments to each MBE subcontractor with each request for payment or before final payment is processed.

PROGRAM COMPLIANCE REQUIREMENTS:

All written statements, certification or intentions made by the Bidder shall be come a part of the agreement between the Contractor and the Board for performance of this contract. Failure to comply with any of the these states, certifications, or intentions, or with the MBE Guidelines shall constitute a breach of the contract. A finding by the Board that any information submitted either prior to award of the contract or during the performance of the contract is inaccurate, false or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the Board whether to terminate the contract for breach.

In determining whether a contractor has made good faith efforts, the Board will evaluate all efforts made by the Contractor and will determine compliance in regard to quantity, intensity, and results of there efforts. The Board may take into account any or all of the following:

- 1. Whether the Bidder attended any prebid meetings that were scheduled by the Board;
- 2. Whether the Bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;
- 3. Whether the Bidder provided written notice to a minimum of three MBE's for each portion of the work subcontract, that their interest in the contract was being solicited in sufficient time to allow the MBE's to participate effectively;
- 4. Whether the Bidder followed up initial solicitations of interest by contacting MBE's to determine with certainty whether the MBE's were interested;
- 5. Whether the Bidder selected portions of the work to be performed by MBE's in order to increase the likelihood of meeting MBE goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE participation);
- 6. Whether the Bidder provided interested MBE's with adequate information about the plans, specifications and requirements of the contract;
- 7. Whether the Bidder negotiated in good faith with interested MBE's not rejecting MBE's as unqualified without sound reasons based on a thorough investigation of their capabilities.

# FORM 1

Attach to Bid Identification of Minority Busi		
Name of Bidder)	•	
do hereby certify that on this project, we will use the folloconstruction subcontractors, vendors, suppliers or provide	owing minority busin ders of professional	ess enterprises as services.
Firm Name, Address and Phone #	Work type	*Minority Category
	-	
	4	
*Minority categories: Black, African American (B), Hispanic (H) Female (F) Socially and Economically I  The total value of minority business contracting	Disadvantaged (D)	

# **Section 000003** Attach to Bid State of North Carolina AFFIDAVIT A - Listing of the Good Faith Effort County of (Name of Bidder) Affidavit of i have made a good faith effort to comply under the following areas checked: Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive. (1 NC Administrative code 30 1.0101) 1 – (10 pts) Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed. 2 – (10 pts) Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due. 3 – (15 pts) Broken down or combined elements of work into economically feasible units to facilitate minority participation. 4 – (10 pts) Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses. 5 – (10 pts) Attended prebid meetings scheduled by the public owner. 6 - (20 pts) Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors. 7 - (15 pts) Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing. 8 – (25 pts) Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit. 9 - (20 pts) Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible. 10 - (20 pts) Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands. The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d). Failure to abide by this statutory provision will constitute a breach of the contract. The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date:	Name of Authorized Officer:	<del></del>
	Signature:	
SEAL	Title:	
	State of	me this day of 20
MBForms 2002-Revised	ing commission expires	<del></del>

MBForms 2002-Revised March, 2005

# Section 000003

Attach to Bid At

County of	<del></del>	
Affidavit of		
	(Name of Bidder)	
I hereby certify that it	t is our intent to perform 100% of the work required for the	
		contract.
	(Name of Project)	
elements of this type	cation, the Bidder states that the Bidder does not customarily sue project, and normally performs and has the capability to perform of the work on this project with his/her own current work forces.	m and <u>will</u>
The Bidder agrees to owner in support of the	o provide any additional information or documentation requested he above statement.	d by the
	reby certifies that he or she has read this certification and is autle e commitments herein contained.	horized to
Date:	Name of Authorized Officer:Signature:	
SEAL	Title:	
SEAL	State of County of	
	State of, County of Subscribed and sworn to before me this day of	20
	Notary Public	20
	My commission expires	

**Section 000003** State of North Carolina - AFFIDAVIT C - Portion of the Work to be **Performed by Minority Firms** (Note: this form is to be submitted only by the apparent lowest responsible, responsive bidder.) If the portion of the work to be executed by minority businesses as defined in GS143-128.2(g) is equal to or greater than 10% of the bidders total contract price then the bidder must complete this affidavit. This affidavit shall be provided by the apparent lowest responsible responsive bidder within 72 hours after notification of being low bidder. Affidavit of \_\_\_\_\_\_(Name of Bidder) \_\_\_\_\_. I do hereby certify that on the (Project Name) Project ID#\_\_\_\_\_ Amount of Bid \$\_\_\_\_\_ I will expend a minimum of\_\_\_\_\_\_% of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. Attach additional sheets if required Name and Phone Number \*Minority Work description Dollar Value Category \*Minority categories: Black, African American (B), Hispanic (H), Asian American (A), American Indian (I), Female (F), Socially and Economically Disadvantaged (D) Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract. The undersigned hereby certifies that he or she has read the terms of this commitment and is

authorized to bind the bidder to the commitment herein set forth.

Date:	Name of Authorized Officer:	 
	Signature:	 
SEAL	Title:	
	State ofSubscribed and sworn to before Notary PublicMy commission expires	 20

## State of North Carolina AFFIDAVIT D - Good Faith Efforts

County of			
(Note: this form is to be submitted or	nly by the apparent	lowest responsible, re	esponsive bidder.)
If the goal of 10% participation by minor following documentation to the Owner of			ll provide the
Affidavit of		I do herel	by certify that on the
(Nar	πe of Bidder)		
	(Project Name)		
Project ID#	Amount o	f Bid \$	
l will expend a minimum of business enterprises. Minority busines suppliers or providers of professional listed below. (Attach additional sheets)	sses will be employ services. Such wor	ed as construction subo	contractors, vendors,
Name and Phone Number	*Minority Category	Work description	Dollar Value
		<u> </u>	

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A), American Indian (I), Female (F), Socially and Economically Disadvantaged (D)

Examples of documentation include, but are not limited to, the following evidence:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible subbidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster.
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- Letter documenting proposed assistance offered to minority business in need of equipment, loan
  capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including
  waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

# **Section 000003**

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date:	Name of Authorized Officer:	
	Signature:	
SEAL	Title:	
	State of	me this day of 20

MBForms 2002-Revised March, 2005

# APPENDIX E MBE DOCUMENTATION FOR CONTRACT PAYMENTS

Prime Contractor/Archit	ect:			
Address & Phone:				
Project Name:				
SCO Project ID:				
Pay Application #:		Period:		<del> </del>
The following is a list of for the above-mentioned		nade to Minority Bus	iness Enterprises	on this project
MBE FIRM NAME	* TYPE OF MBE	AMOUNT PAID THIS MONTH (With This Pay App)	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED
*Minority categories: Black ( White Female (WF), Socially	B), Hispanic (H	H), Asian American (AA) cally Disadvantaged (SE	, American Indian (AI) D), Disabled (D)	<u> </u>
Approved/Certified By:				
Name		Title		
Date		 Signatur	e	

SUBMIT WITH EACH PAY REQUEST - FINAL PAYMENT - FINAL REPORT

# BID BOND (ALL BIDDERS ARE STRONGLY ENCOURAGED TO USE THIS FORM)

Date of Execution of this Bond:	
Name and Address o Principal (Bidder):	f
Name and Address of Surety:	
Name and Address of Obligee:	THE BUNCOMBE COUNTY BOARD OF EDUCATION, a body corporate of the State of North Carolina, 175 Bingham Road, Asheville, NC 28806.
Amount of Bond:	5% of the maximum potential contract award for all bids submitted.
Bid and Proposal dated:	

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL above named and SURETY above named who is duly licensed to act as SURETY in the State of North Carolina, are held and firmly bound unto THE BUNCOMBE COUNTY BOARD OF EDUCATION, a body corporate of the State of North Carolina, as Obligee, in the penal sum of FIVE PERCENT (5%) of the amount bid in the bid and proposal described in lawful money of the United States of America, for the Payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such, that if the Principal shall be awarded the contract for which the bid and proposal above described is submitted and shall execute the contract, give bond for the faithful performance of the contract, and give bond for the payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, within then (10) days after the award of the same to the Principal above named, then this obligation shall be null and void; but the Principal above named fails to so execute such contract and give performance bond and payment bond as required by Section 129 of Chapter 143 of the General Statutes of North Carolina, as amended, and Article 3 of Chapter 44A of the General Statutes of North Carolina, as amended the Surety shall, upon demand, forthwith pay to the Obligee the amount of this bond set forth above.

IN WITNESS WHEREOF, the Principal above named and the Surety above named have executed this instrument under their several seals on the date set forth above.

		of individual, individual rtnership, corporation or
WITNESS:		
	BY:	(Seal)
(Proprietorship or Partnership)	TITLE:	_
		fice held in corporation,
·	(C	orporate Seal)
ATTEST: (Corporation)		
BY:		
TITLE:(Corporate Secretary or Assistant Secretary or	ıly)	
WITNESS:	SURETY (Name of	Surety Company)
	BY:	
	TITLE: At	torney-in-Fact
	(Corpor	rate Seal of Surety)
	(Address o	of Attorney-in-Fact)
COUNTERSIGNED:	<b>,</b>	,,
	_	
N.C. Licensed Resident Agent	_	

# **PERFORMANCE BOND**

of r):
of
THE BUNCOMBE COUNTY BOARD OF EDUCATION, a body corporate of the State of North Carolina, 175 Bingham Road Asheville, NC 28806.
That certain contract by and between the Principal and the Contracting Body above named, dated

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, as identified and shown above and hereto attached.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

THIS PERFORMANCE BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part hereof, and deemed to be conclusively written into this Bond.

PFB<sub>1</sub>

Data of Evapution

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

	Principal (Name of individual, individual and trade name, partnership, corporation or joint venture)	
WITNESS:		
	BY:	(SEAL)
(Proprietorship of Partnership)		
	TITLE:	to a office held is comparation
	joint venture	tner, office held in corporation,
ATTEST: (Corporation)		(Corporate Seal)
BY:		
TITLE:(Corporate Secretary of Assistant S		
WITNESS:	Surety (Name of Surety Company)	
	BY:	
	TITLE:	Attorney-in-Fact
	(Corpo	orate Seal of Surety)
COUNTERSIGNED:	(Address of Attorney-in-Fact)	
N.C. Licensed Resident Agent		
-	PFB 2	

#### **PAYMENT BOND:**

Date of Execution of this Bond:	
Name and Address of	
Principal (Contractor):	
Name and Address of Surety:	
Name and Address of	
Contracting Body:	THE BUNCOMBE COUNTY BOARD OF EDUCATION, a body corporate of the State of North Carolina, 175 Bingham Road, Asheville, NC 28806.
Amount of Bond:	
Contract:	That certain contract by and between the Principal and the
	Contracting Body above named, dated
	for

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal and Surety above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, as identified and shown above and hereto attached.

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications and extensions of time of said contract that may hereafter be made, notice of which modifications and extensions of time to the Surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

THIS PAYMENT BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part hereof, and deemed to be conclusively written into this Bond.

PYB 1

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

		Name of individual, individual ame, partnership, corporation or re)
WITNESS:		
(Proprietorship of Partnership)		rtner, office held in corporation,
ATTEST: (Corporation)		(Corporate Seal)
BY:	_	
TITLE: (Corporate Secretary of Assistant Secretary only)	-	
WITNESS:	Surety (Name of Surety Company)	
	_ BY:	
	TITLE:	Attorney-in-Fact
		(Corporate Seal of Surety)
COUNTERSIGNED:	(Address of	f Attorney-in-Fact)
N.C. Licensed Resident Agent PYB	-	



SPECIFICATIONS FOR
CANDLER ELEMENTARY SCHOOL – PHASE II
PARTIAL ROOF REPLACEMENT PROJECT
BUNCOMBE COUNTY SCHOOL DISTRICT
CANDLER, NORTH CAROLINA



ELEVATING YOUNG MINDS

Project No. FH196268 JHP:cb

**ISSUED FOR BIDDING** 

Terracon Consultants, Inc. 2701 Westport Road Charlotte, North Carolina 28208
P 704.509.1777 F 704.509.1888 terracon.com

Environmental - Facilities - Geotechnical - Materials

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#### SECTION 00800 - INSTRUCTIONS TO BIDDERS

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplemental Conditions and other Division 1 Specifications Sections, apply to this section.

#### 1.2 BID FORM

A. Base quotations upon the Specifications and Drawings. Include a statement to that effect. Quotations containing qualifying statements will not be considered.

#### 1.3 BIDDER QUALIFICATIONS

- A. Bidders must be licensed General Contractors for a minimum of five (5) years of the class required by North Carolina Statutes for executing the work being bid. Bidder's name, address, State license number, and date of license must appear on the outside of envelope containing Bidder's proposal.
- B. Bidder shall submit a copy of contractor's license with his Bid. Failure to provide evidence of an appropriate license by any bidder as described herein shall result in that bid, quotation or proposal not being considered.
- C. bidder shall be a licensed Contractor with at least five (5) years of contracting experience in the type of work involved and shall have performed work similar in scope to the work proposed in this project. Evidence of qualifications shall be available upon request by Owner. The contracting firm's experience will be considered in the enforcement of this provision. All experience must have been acquired by the bidding contractor named on the form of proposal. Firms using aliases, or who have changed names during the five (5) year period are subject to disqualification at the discretion of the Owner. Contractor shall demonstrate experience on a minimum of five (5) projects of similar size, scope and complexity to this project.
- D. All experience must have been acquired by bidding contractor named on the form of proposal. Firms using aliases, or who have changed names during the five year period are subject to disqualification at the discretion of the Owner.
- E. Submit upon request of Engineer or Owner certification from the roofing materials manufacturer that the bidding contractor is acceptable to the roofing system manufacturer as an installer of the manufacturer's system in all regards and no warranties required by the contract documents will be withheld by the manufacturer solely as a result of the bidder's qualifications to perform the work.
- F. Bidder, by submitting a bid for this project, certifies that the bidding contractor is acceptable to the roofing system manufacturer as an installer of the manufacturer's system in all regards

- and no warranties required by the contract documents will be withheld by the manufacturer solely as a result of the bidder's qualifications to perform the work.
- G. Any bidder deemed as not qualified will be notified by the Engineer or Owner after the Bid Opening.
- H. None but skilled foremen and workmen shall be employed on work requiring special qualifications. Any person employed on the work who fails, refuses, or neglects to obey the instructions in anything relating to this work, or who appears to be disorderly, insubordinate, unfaithful, or incompetent, shall upon the order of the Owner be at once discharged and not again employed on any part of the work. Any interference with, or abusive or threatening conduct toward the Owner or his assistants by the Contractor or his employees or agents, shall be authority for the Owner to annul the Contract and re-let the work.

I.

## 1.4 BID WITHDRAWAL

A. No proposal shall be withdrawn subsequent to specified time of Bid Opening for a period of sixty (60) calendar days without written consent of Owner.

## 1.5 WAGE RATES

A. Bidders shall inform themselves as to local labor conditions, including prospective changes or adjustments of local wage rates, and shall not pay less than the prevailing wage scale in the locality for comparable type of work. No increase in Contract price shall be authorized on account of payment of wage rates in excess of prevailing local rates.

# 1.6 EXAMINATION OF SITE, PLANS AND SPECIFICATIONS

- A. The Bidder is required, before submitting his proposal, to visit the site of the proposed work and familiarize himself with the nature and the extent of the work and any surface and subsurface conditions that may in any manner affect the work to be done, and the equipment, materials, and labor required, and the cost thereof. Bidder is also required to examine carefully the Plans and Specifications and Contract Documents and to inform himself thoroughly regarding any and all conditions and requirements that may in any manner affect the work to be performed under the Contract.
- B. Ignorance on the part of the Contractor will in no way relieve him of the obligations and responsibilities assumed under the Contract. No information derived from maps, drawings, specifications, or from Employees of the School District, the Engineer, or his assistants, shall relieve the Contractor from any risk or from fulfilling all terms of the Contract.

# 1.7 INTERPRETATIONS, INCONSISTENCIES AND ADDENDA

A. No interpretation of the meaning of the Drawings, Specifications or other Contract Documents will be made orally to any bidder. Prospective bidders must request such interpretation in writing from the Engineer. To be considered, such request must be received at least five (5) days prior to the time fixed for the opening of bids.

B. Any and all interpretations and supplemental instructions will be issued in the form of written addenda, which will be sent by email to all prospective bidders (at the email address furnished by the bidder) not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

## 1.8 SUBSTITUTIONS

A. Brand or manufacturer names are used as standards of quality when no other appropriate reference is available. The Engineer (or Owner) will consider substitution of materials of equal quality and properties provided a written request accompanied substantiating data is received by him at least five (5) days prior to bid date.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 00800** 

#### SECTION 01100 - GENERAL SUMMARY

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplemental Conditions and other Division 1 Specifications Sections, apply to this section.

#### 1.2 DESCRIPTION OF EXISTING SYSTEM

A. Information in this Section is provided only to establish general description and is not necessarily accurate. The Contractor is responsible for visiting the site and becoming satisfied as to the existing conditions, size of roof areas, etc. before preparation and submission of bid. Receipt of bid will be considered evidence Contractor has inspected roof or otherwise become satisfied on all details relating to the work.

# B. Existing Systems:

1. **Areas A1, A2, A5, and B1:** EPDM membrane adhered to mechanically attached half inch wood fiber board over two-and-a-half-inch extruded polystyrene over four-ply built-up roof adhered in asphalt to gypsum underlayment over a metal deck.

#### C. Roof Area:

- 1. A1: Approximately 7,000 Square Feet
- 2. A2: Approximately 11,700 Square Feet
- 3. A5: Approximately 2,000 Square Feet
- 4. B1: Approximately 300 Square Feet
- D. Drainage on areas A1, A2, and B1 is to internal drains with overflow scuppers.
- E. Drainage on Area A5 is to scuppers, conductor heads, and downspouts.
- F. Roof is structurally sloped to the parapet with a slope of approximately 1/4" per foot.
- G. Top of roof at majority of the areas is approximately 14 feet above grade.
- H. Asbestos containing materials are present on the pre-existing Built-Up-Roofing.
- I. Metal flashings are generally composed of galvanized metal.
- J. Contractor shall be responsible to document all existing damage to facility prior to beginning work and producing documentation acceptable to Engineer prior to starting work. Damage discovered during the project which was not documented, and which is not clearly the responsibility of others, may be presumed by the Engineer or Owner as the responsibility of the contractor. Documentation may be in the form of written statements and/or drawings but must also be supported with photographs and/or video tape supplied by contractor.

## 1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Project generally consists of roof replacement of low slope roof Area A1, A2, A5, and B1, and the installation of new edge metal, expansion joints, counterflashing, drains, overflow scuppers and all other miscellaneous work associated herein.
  - 1. Project location: Candler Elementary Candler, North Carolina.
  - 2. Owner: Buncombe County School District.
  - 3. Refer to Key Plan KP.
- B. The Owner has elected to designate Terracon Consultants, Inc., Charlotte, North Carolina, as Engineer for this Project.
- C. The terms "Architect" and "Engineer" used in the contract documents are that individual, partnership, or corporation engaged by the Owner for the preparation of certain of the Contract Documents and referred to in the Contract Documents. The "Architect" or "Engineer" may, however, be an Architect, Architect-Engineer, Engineer or other design professional authorized by the Owner to perform such functions and the terms are interchangeable.
- D. The work under the Base Bid is as follows. Refer to Roof Plans.
  - 1. <u>Low Slope Roofing Replacement</u>: Work on Candler Elementary Area A2 generally consists of the complete removal of all existing roofing membrane, insulation, gypsum underlayment, base sheet, flashings, metal flashing and the installation of a new preengineered perimeter edge metal, TPO membrane, high density polyisocyanurate cover board, tapered and base insulation, flashings, metal flashings, new drain extensions, new overflow scuppers as indicated, and all associated miscellaneous work as specified herein.
- E. Work under Alternate No. 1 is on Area A5 and generally consists of the same scope of work as on area A2. Refer to Section 01230.
- F. Work under Alternate No. 2 is on Area A1 and generally consists of the same scope of work as on area A2. Refer to Section 01230.
- G. Work under Alternate No. 3 is on Area B1 and generally consists of the same scope of work as on area A2. Refer to Section 01230.
- H. Work under Alternate No. 4 generally includes installing new drains instead of scuppers and tying those drains in with the nearest drain leader. Refer to Section 01230.
- Work under Alternate No. 5 generally includes removing existing siding and installing new weather resistive barrier and metal panels to walls above roof level as identified on roof plans. Refer to Section 01230.

# 1.4 START AND COMPLETION

A. Work on the project under the Base Bid is to be substantially complete within Forty (40) calendar days from the date of commencement. Upon arrival at substantial completion, Contractor shall have fourteen (14) calendar days to arrive at final completion.

- B. Prework Conference: Prior to start of work there shall be a conference attended by the Contractor, the representative of the Owner, roofing manufacturer's representative, and other parties who may be designated by the Owner, to be convened at the work site for the purpose of reviewing the specifications and job conditions and resolving any questions then arising. Contractor shall advise the office of the Owner of date and time at least one week before the date to allow proper notification of parties.
- C. Work on the project may begin after the date of fully executed contracts and after submittals have been approved. Materials may be delivered to the site prior to the start of work upon Owner approval.
- D. Any extension of contract time considered necessary by the Contractor must be submitted in writing to the Owner with complete details of conditions necessitating extension and specific time of extension requested. Any extension must be specifically authorized by the Owner in writing.
- E. For purposes of this project, a foul weather day is defined as a day when precipitation equal to or greater than 0.01 inches is recorded at the NOAA or NWS weather station closest to the project, the high temperature is below 45 degrees, or winds exceed 25 miles per hour. Only that day on which the foul weather occurs will be considered a foul weather day. The threat of rain, low temperatures, high wind, or the occurrence of standing water from previous rain days will not be considered in the evaluation of the contract time to complete the project. In the event, the nearest NOAA or NWS weather station is greater than 15 miles from the project, a foul weather day will also be defined as any day during which foul weather occurs at the project and the foul weather is documented daily by the contractor and the daily report is provided to the Engineer within 24 hours.
  - 1. Extensions will not be granted for foul weather unless the number of days of foul weather exceeds five (5) foul weather days per month that which can reasonably be expected to occur during the construction time period and the contractor can clearly demonstrate to the satisfaction of the Owner that the project was delayed by the additional days of foul weather.
- F. Substantial completion is defined for this project as the successful installation of every component required under the contract documents to be installed for this project. A punch list may be issued by the Engineer for work complete at this time.
- G. When Owner has certified substantial completion, contractor shall have an additional fourteen (14) calendar days to complete all work under the contract, including any outstanding punch list items established at the substantial completion; any required submittals, including warranties, releases of liens, unit price logs, consents of surety, final pay request, etc. Date of final completion is defined as the date when all work required under the contract has been completed.
- H. Contractor shall begin the Work on the commencement date set forth in the Contract and shall perform the Work expeditiously with adequate forces and shall complete the Work within the Contract Time.
- I. All time limits stated in the Contract are of the essence with respect to Contractor's obligations hereunder.

#### 1.5 LIQUIDATED DAMAGES

- A. Liquidated damages will apply starting the first calendar day after the date established for final completion and will be assessed at a rate of \$200.00 per day for each calendar day, until such time as all construction is complete and has been accepted by the Owner.
- B. Contractor, by submitting a bid for this project, attests and agrees that the value of liquidated damages as stated are a fair and equitable representation of damages to the Owner in the event project is not completed within the allotted time.
- C. In the event the project extends beyond the contract period (including any extensions to contract, approved by Owner), Owner will back charge the contractor for fees and expenses attributable to additional services by Owner's consultants which are provided solely as a result of the project being extended beyond the contract period. Owner may withhold monies attributable to these fees and expenses from contractor's requests for payment. Where liquidated damages are imposed as a result of the contract between the Owner and Contractor, these fees and expenses will be funded from the liquidated damage payments by the contractor. Owner may withhold monies attributable to these fees and expenses from contractor's request for payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01100** 

#### SECTION 01210 - ALLOWANCES

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Unit-cost allowances.
- C. Related Sections include the following:
  - 1. Division 1 Section "Unit Prices" for procedures for using unit prices.

## 1.3 ALLOWANCE PROCEDURES

- A. Prior to the conclusion of the project, credit the amount of unused allowance to Owner by Change Order.
- B. Deductive amounts of unit price work included in the Contract Sum will be calculated at 100% of the quoted unit price.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

## 3.1 UNIT PRICE ALLOWANCES SCHEDULE

- A. Include the following unit price allowances in the Contract Sum.
  - 1. Allowance No. 1 Wire brush and paint 3,000 square feet of deteriorated metal decking.
  - 2. Allowance No. 2 Wire brush, paint and plate 500 square feet of deteriorated metal decking.
  - 3. Allowance No. 3 Replace 500 square feet of deteriorated metal decking.
  - 4. Allowance No. 4 Replace 100 board feet of damaged deteriorated wood blocking.
  - 5. Allowance No. 5 Install 500 fasteners at loose metal deck side laps.
  - 6. Allowance No. 6 Install 500 fasteners to secure loose metal deck to existing framing members.

ALLOWANCES 01210-1

- 7. Allowance No. 7 Install 1000 linear feet of sheet metal over changes in direction of metal decking, over loose perimeters to wood blocking and over deficiencies in deck.
- 8. Allowance No. 8 Install 500 stainless steel fasteners to supplement the existing nailers where not currently in compliance with FM1-49.

**END OF SECTION 01210** 

ALLOWANCES 01210-2

#### SECTION 01230 - ALTERNATES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

#### 1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems or installation methods described in the Contract Documents.
- B. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

#### 3.1 SCHEDULE OF ALTERNATES

- A. Add Alternate No. 1: Replace Roof Area A5.
  - Approximately 2,000 square feet. Remove existing EPDM membrane, insulation, aggregate, built-up roof membrane, underlayment board, scupper liners, coping caps, conductor heads and downspouts and install new roof system as denoted in Table 1 of section 07450, new edge metal, new scupper liners, new conductor heads, and new downspouts.
  - 2. In the event Alternate No. 1 is accepted, the contract time will be increased by Fourteen (14) calendar days.
- B. Add Alternate No. 2: Replace Roof Area A1.
  - 1. Approximately 7,000 square feet. Remove existing EPDM membrane, insulation, aggregate, built-up roof membrane, underlayment board, scupper liners, coping caps, conductor heads and downspouts and install new roof system as denoted in Table 1 of section 07450, new edge metal, new scupper liners, new conductor heads, and new downspouts.

ALTERNATES 01230-1

- 2. In the event Alternate No. 2 is accepted, the contract time will be increased by Thirty (30) calendar days.
- C. Add Alternate No. 3: Replace Roof Area B1.
  - Approximately 300 square feet. Remove existing EPDM membrane, insulation, aggregate, built-up roof membrane, underlayment board, scupper liners, coping caps, conductor heads and downspouts and install new roof system as denoted in Table 1 of section 07450, new edge metal, new scupper liners, new conductor heads, and new downspouts.
  - 2. In the event Alternate No. 3 is accepted, the contract time will be increased by Seven (7) calendar days.
- D. Add Alternate No. 4: Instead of installing new primary drain scuppers, install new drains and tie in with nearest drain leader.
  - 1. At locations indicated on drawings, install new drains at locations of new scuppers and tie leader in with closet existing drain leader. Assume that each drain leader will be tied in with the nearest leader at a distance of 30 feet from the new drain, and assume that one fire rated wall will need to be penetrated to create tie in. Contractor should include all costs associated with leader change in direction and connections with drain and existing leader.
  - 2. In the event Alternate No. 4 is accepted, the contract time will be increased by Fourteen (14) calendar days.
- E. Add Alternate No. 5: Install metal panels at existing walls above roof.
  - Remove existing siding and building paper, and Install new weather resistive barrier and metal wall panels at locations designated on drawings and in accordance with section 07620. Walls are approximately six feet in height.
  - 2. In the event Alternate No. 5 is accepted, the contract time will be increased by Fourteen (14) calendar days.

END OF SECTION 01230

ALTERNATES 01230-2

#### SECTION 01250 - CONTRACT MODIFICATION PROCEDURES

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
  - 1. Division 1 Section "Unit Prices" for procedures for using unit prices.
  - 2. Division 1 Section "Allowances" for procedural requirements regarding handling and processing allowances.

#### 1.3 MINOR CHANGES IN WORK

A. Engineer will issue supplemental instructions (field orders) authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

# 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Owner or Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Owner are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and

finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Engineer.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- C. Change Order proposal shall be submitted by the Contractor to the Engineer with a breakdown suitable for proper review. At a minimum, the breakdown should include line items for materials, labor, insurance, bonds and overhead and profit. If the proposal is approved by the Engineer, a recommendation will be made to the Owner. If approved by Owner, Engineer will provide written confirmation to the Contractor to proceed with proposed work.
- D. The Contractor shall not commence work or purchase materials for such proposed work until written approval is received.
- E. All changes in the work must be reviewed by Engineer and forwarded to Owner.

# 1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Engineer will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

# 1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Engineer may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- B. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or Contract Time.
- C. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
- D. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01250

#### SECTION 01270 - UNIT PRICES

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.
- B. Related Sections include the following:
  - 1. Division 1 Section "Allowances" for procedures for using unit prices to adjust quantity allowances.
  - 2. Division 1 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

#### 1.3 DEFINITIONS

A. Unit price is an amount proposed by Bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of work required by the Contract Documents are increased or decreased.

## 1.4 PROCEDURES

- A. Include in unit prices all necessary material, plus cost of delivery, installation, insurance, taxes, overhead and profit.
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A list of unit prices if included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.
- D. Contractor shall maintain a daily log showing dates, location and exact quantities of unit price work. Contractor is responsible for providing photographic evidence of unit price work installed. Copies of log and appropriate change order forms shall be submitted with each application for payment unless no unit price work is accomplished during the period covered by the application.

UNIT PRICES 01270-1

## PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

#### 3.1 LIST OF UNIT PRICES

- A. Unit Price No. 1 Wire brush and paint metal deck.
  - 1. Description: Wire brush and paint rusted metal decking according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per square foot.
- B. Unit Price No. 2 Wire brush, paint and plate metal deck.
  - Description: Wire brush, paint and plate deteriorated metal deck according to Division 7
    Section "Roofing Preparation."
  - 2. Unit of Measurement: Per square foot.
- C. Unit Price No. 3 Replace steel deck.
  - 1. Description: Replace damaged/deteriorated metal deck according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per square foot.
- D. Unit Price No. 4 Replace damaged or deteriorated wood blocking.
  - 1. Description: Replace damaged or deteriorated wood blocking according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per board foot.
- E. Unit Price No. 5 Secure metal deck side laps.
  - 1. Description: Secure existing metal deck side laps according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per fastener.
- F. Unit Price No. 6 Resecure metal deck.
  - 1. Description: Resecure existing metal deck to existing structural members according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per fastener.
- G. Unit Price No. 7 Plate steel deck.
  - 1. Description: Install steel plate over changes in direction of steel deck according to Division 7 Section "Roofing Preparation."
  - 2. Unit of Measurement: Per linear foot.

UNIT PRICES 01270-2

- H. Unit Price No. 8 –Install 500 stainless steel fasteners to supplement the existing nailers where not currently in compliance with FM1-49.
  - 1. Description: Install 500 stainless steel fasteners to supplement the existing nailers where not currently in compliance with FM1-49. according to Division 7 Section "Roofing Preparation.
  - 2. Unit of Measurement: Per unit.

**END OF SECTION 01270** 

UNIT PRICES 01270-3

#### SECTION 01290 - PAYMENT PROCEDURES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
  - 1. Division 1 Section "Allowances" for procedures for using unit prices to adjust quantity allowances.
  - 2. Division 1 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
  - 3. Division 1 Section "Unit Prices" for procedures for using unit prices.

# 1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
  - 1. Prior to start of any work, Contractor must submit to Owner a Schedule of Values on a copy of AIA Document G703 listing each phase of the work and its scheduled value. Contractor must be prepared to verify all material costs by producing supplier invoices, bills of lading, etc. upon request by Owner.
  - 2. Schedule of Values, shall include labor and material line items for all material components with a material value of more than \$2,000.00 or 5% of the contract amount (whichever is least). The schedule of values must include, as a minimum, line items for any of the following which are applicable to this project including separate labor and material line items where applicable.
    - a. Mobilization
    - b. Performance and Payment Bonds
    - c. Demolition
    - d. Asbestos Removal
    - e. Asbestos Disposal
    - f. Wood Blocking
    - g. Underlayment
    - h. Cover Board
    - i. Single Ply Membrane

- j. Insulation
- k. Base Flashing
- I. Sheet Metal Flashing and Trim
- m. Pre-Engineered Perimeter Edge Metal
- n. Retrofit Drains
- o. New Drains
- p. Overflow scuppers
- q. Site Cleanup
- r. Manufacturer's Inspections
- s. Unit Price Work
- t. Guarantee
- 3. Schedule Updating: Update and resubmit the Schedule of Values before the next Application for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.
- 4. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
- 5. Temporary facilities and other major cost items that are not direct cost of actual work-inplace may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.

#### 1.4 APPLICATIONS FOR PAYMENT

- A. Monthly pay estimates shall be submitted to Engineer by email on AIA Document G702 and AIA Document G703.
- B. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
  - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- C. Applications for payment requesting payment for materials will not be certified or approved unless accompanied with Manufacturer's Certificates of Compliance for those materials. It is suggested that Contractor request material certificates of compliance from material suppliers at the time materials are ordered.
- D. Include a retainage amount of ten percent (5%) for the value of materials stored at the site and work executed.
- E. A payment or payments made to Contractor for work performed shall not constitute acceptance or approval of the work and shall in no way relieve Contractor from the requirements of the Contract.
- F. All sums received by Contractor for any part or parts of the work furnished or performed by a Subcontractor shall be paid promptly to the latter by Contractor, and while in the hands of Contractor, shall constitute trust funds held for the use and benefit of Owner.

- G. If payments are to be made on account of materials or equipment not incorporated in the work but delivered and suitably stored at the Site, or at such other location agreed upon in writing, such payments shall be conditioned upon submission by Contractor of bills of sale or other documents satisfactory to Owner establishing Owner's title to such materials or equipment or otherwise protecting Owner's interest therein including the prepayment of applicable insurance and transportation charges to the Site.
- H. Each Payment Applications shall include a notarized Sales Tax Report.
- I. Contractor warrants and guarantees the title to all work, materials and equipment covered by an invoice, whether or not incorporated in the work, will pass to Owner upon Contractor's receipt of the payment covering such work, materials and equipment, free and clear of all liens or other similar or dissimilar encumbrances in any way affecting Owner's title thereto.
- J. A payment or payments made to Contractor for work performed shall not constitute acceptance or approval of the work and shall in no way relieve Contractor from the requirements of the Contract.

#### 1.5 FINAL PAYMENT APPLICATION

A. Refer to Section 01400 – QUALITY REQUIREMENTS, Paragraph 1.5, Inspection of Work for Final Inspection Requirements and related provisions for final payment and closeout documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01290** 

#### SECTION 01330 - SUBMITTAL PROCEDURES

#### PART 1 - GENERAL

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples and other miscellaneous submittals.
  - 1. Division 1 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
  - 2. Division 7 Section for specific requirements for submittals in those Sections.

#### 1.3 DEFINITIONS

- A. Shop Drawings: Drawings, diagrams, illustrations, schedules, performance charts, brochures and other data prepared by Contractor or any Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor which illustrate some portion of the work.
- B. Samples: Physical examples furnished by Contractor to illustrate materials, equipment or workmanship and establish standards of work.

# 1.4 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate the schedule for submittal of shop drawings and samples with progress schedule and the requirements of the Contract. Failure to schedule and submit shop drawings and samples in ample time for checking, correction and rechecking will not justify any delay in the timely performance of the work.
- B. Submittal Schedule: Within two weeks after award of Contract, provide a schedule of the dates for submission of each shop drawing and sample required by the Contract.
- C. Processing Time: Allow sufficient time for an orderly review with reasonable time for checking, correction and rechecking corrections, as well as returning the approved or rejected shop drawings and samples to Contractor and, in turn, any Subcontractor.
- D. Allow a minimum of 10 working days from the date submittal is received until the date the submittal is required to be returned to the Contractor.
- E. If a submittal contains more than 10 shop drawings, indicate which drawings must be returned within the period of 10 working days, and, in such event, allow an additional 10 working days for return of the balance of the submittal.
- F. Identification: Provide each submittal with the following information:

- 1. Owner's and Engineer's respective project numbers.
- 2. Date of submittal.
- 3. Submittal number.
- 4. Title of project.
- 5. Name of Contractor and date of Contractor's approval.
- 6. Name of Subcontractor or supplier and date of submittal to Contractor.
- 7. Reference to Specification Section and Paragraph and/or Drawing Number.
- 8. The specific location of that portion of the work covered by the submission.
- 9. Any qualification, departure or deviation from the requirements of the Contract.
- 10. Any additional information required by the Specifications for the particular material being furnished.
- G. Provide a space on each shop drawing for the approval stamps of Contractor, Engineer and Engineer's sub-consultants, if any.
- H. Transmittal Form: Use form of transmittal contained at the end of this Section, or a similar form containing the same information.
- I. Numbering: Number each submittal. Retain numbering system throughout all revisions.
- J. Submit all associated shop drawings relating to a complete assembly at the same time, where possible, so that each may be checked in relation to the entire proposed assembly.
- K. Prepare composite shop drawings and installation layouts, when required, to depict proposed solutions for tight field conditions. Coordinate composite shop drawings and field installation layouts in the field with Subcontractors for proper relationship to the work of all other trades involved in the work.
- L. Prior to submission, review, affix a stamp on, and indicate approval of all shop drawings and samples. Determine and verify field measurements and availability of the material, and coordinate each shop drawing and sample with requirements of the Contract.
- M. All submittals are to be submitted electronically to the Engineer.
- N. Engineer will review Shop Drawings and Samples to determine conformance with the design concept of the Project and with the information given in the Contract. Engineer's approval of a separate item shall not be construed to mean approval of the assembly of which such item is a part.
- O. Engineer's approval of Shop Drawings or Samples shall not relieve Contractor of responsibility for any deviation from the requirements of the Contract unless Contractor has informed Engineer in writing of such deviation at the time of submission and Engineer has given written approval to the specific deviation, nor shall Engineer's approval relieve Contractor from responsibility for errors or omissions in the shop drawings or samples.
- P. Make corrections required by Engineer and resubmit corrected copies of shop drawings or new samples until approved. Direct specific attention in writing, or on resubmitted shop drawings, to revisions other than the corrections required by Engineer. The number and distribution of copies shall be the same as in Contractor's first submission.
- Q. In the event that Engineer shall mark shop drawings "approved" or "approved as noted," make such corrections, if any, as may be noted. Correction shall be made on, and prints for final

- distribution shall be made from, the drawings bearing Engineer's notations and impress stamps. Final distribution of prints shall be made by Contractor.
- R. Do not commence any portion of the work requiring a shop drawing or sample until the submission has been approved by the Engineer. All such portions of the work shall be in accordance with approved shop drawings and samples.
- S. Do not commence any work which will result in structural changes in walls, steel, floors and masonry prior to Engineer's written approval. Fully describe all details of methods, shoring and bracing in submission for such work.
- T. Contractor shall submit a copy of building permit prior to beginning work.

# 1.5 LIST OF PROJECT SUBMITTALS

A. Refer to Project Document Checklist at the end of this Section for submittals that will be required from contractor and approved by Engineer prior to start of work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

# CANDLER ELEMENTARY SCHOOL BUNCOMBE COUNTY SCHOOL DISTRICT

SUBMITTAL TRANSMITTAL		Date:
From:	To:	Terracon Consultants, Inc. 2701 Westport Road Charlotte, NC 28208
Project Name: Candler Elementary School	– Phase	e 2
Owner: Buncombe County School D	istrict, A	Asheville, North Carolina
Owner's Project Number:		
Terracon Consultants, Inc. Project Number: FH19	<u>6268</u>	
Submittal Number: No. of Co	pies:	
Specification Section and Paragraph Refer	-	
Drawing/Detail Reference(s):		
Location of Work:		
Product Manufacturer:		
- · · · · · · · · · · · · · · · · · · ·		
Date submitted to Contractor:		
Qualifications/Deviations From Specifications:		
CONTRACTOR'S APPROVAL THIS SUBMITTAL HAS BEEN PREPARED BY THE BY THE CONTRACTOR AND IS A CONTRACTO QUALIFICATIONS MADE HEREON OR ON THE	R APPI	ROVED SUBMITTAL SUBJECT TO ANY HMENTS.
SIGNED:	<u> </u>	DATE:
NAME:		
ENGINEER'S APPROVAL		
APPROVED; APPROVED AS NOTED REVIEWED; APPROVED FOR CONSTRU REVISE AND RESUBMIT; REFER TO APP	ICTION	ACCORDING TO NOTATIONS.
Checking by Engineer is only for conformance with with the information given in the contract document confirmed and correlated at the job site, for information to techniques of construction, and for coordinate	ts. Conti	tractor is responsible for dimensions to be pertains solely to the fabrication processes
SIGNED:	DATE	<u>:</u>

# PROJECT DOCUMENT CHECKLIST

# **SUBMITTALS**

Materials List				
Material Data Sheets:				
_	Lumber			
	Prefinished Galvalume			
	Sealant			
	TPO Membrane			
	Gypsum Underlayment Board Polyisocyanurate Insulation			
	High Density Polyisocyanurate Cover Board			
	Base Flashing			
	Pre-Engineered Edge Metal			
0 '	Wood Fiber Tapered Edge Strips			
0	Self-adhering Underlayment			
Manufa	cturer's Application Procedures			
Edge M	letal Installation procedures			
Copies	of Authorizations and Licenses from Authorities having jurisdiction			
AIA Document G703, Schedule of Values				
Material Safety Data Sheets				
Schedule for Removal and Installation				
Written	Safety Procedures			
Underwriter's Laboratories, Inc. Class A Roof Covering Certificate from Roofing System Manufacturer				
Shop Drawings				
Color Chart				
Documentation of Existing Conditions				
Certification from Manufacturer that Contractor is an Approved Installer				
List of Subcontractors				
List of C	Contractor Staff Assignments and Qualifications			
Tapered	d Insulation Shop Drawings			
Metal S	hop Drawings			
Asbesto	os Abatement Permit and License			
Building	g Permit			
_				

END OF SECTION 01330

#### SECTION 01400 - QUALITY REQUIREMENTS

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

A. This section includes administrative and procedural requirements for quality assurance and quality control.

#### 1.3 SUPERINTENDENT

- A. For the purpose of these Specifications the designation "superintendent" is hereby defined as the individual present on the job site at all times work is being performed.
- B. The superintendent shall not be changed except with the consent of the Owner and Engineer, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employment.
- C. The superintendent shall be in attendance at the project site at all times during the progress of the work and his duties as superintendent shall be limited to this project only. The superintendent shall supervise and instruct workmen. Should the superintendent be absent temporarily from the project at any time, he shall designate a competent foreman to assume his duties.
- D. The superintendent shall have had a minimum of five (5) years continuous experience as a job superintendent.
- E. Only the project superintendent (or the designated foreman in the superintendent's absence) will be permitted inside the facility, except when accompanied by the superintendent to perform work or in cases of emergency.
- F. The Contractor shall provide the Owner, in writing, the name of the proposed project manager, job superintendent and foreman for approval no later than seven (7) days prior to the prework conference. Also include chronological listing of superintendent's experience by project name, type system, size and required warranty.
- G. Once approved, neither the project manager nor the superintendent will be changed except with the consent of the Owner unless either proves to be unsatisfactory to the Owner or Contractor, or ceases to be in the Contractor's employment.
- H. Promotion or reorganization within the company will not be an acceptable cause for reassignment of project manager or superintendent.

- It shall be the superintendent's responsibility to communicate all matters pertaining to the Work with the Owner and/or Engineer. In case of emergency or safety, superintendent shall communicate directly with the Owner or Owner's representative, and, immediately thereafter, notify the Owner and/or Engineer. No decisions regarding changes in the Work will be made without the Owner's knowledge.
- J. Each day before work begins, superintendent shall indicate on the Roof Plan the area to be reroofed that day. Color markers are appropriate for this purpose. If changes in the work schedule occur, the Owner shall be notified accordingly.
- K. The job superintendent will have a local contact phone number.

#### 1.4 INSPECTION OF WORK

- A. Work found to be in violation of specifications or not in accordance with established workmanship practices and standards will be subject to complete removal and proper replacement with new materials at Contractor's expense.
- B. Owner will provide inspection during the work. Such inspection may be periodic or daily.
- C. The words "supervise" and "inspect" wherever used herein in connection with the duties or activity of the Owner shall in no way, expressed or implied, relieve the contractor from his responsibilities for the safety of the workmen, the preservation of the work or proper performance under this contract. The Owner shall not be responsible for the safety of the workmen, the safeguarding of the work, or the proper performance of the Contractor.
- D. No Inspector shall have the power to waive the obligations resting upon the Contractor to furnish good material and do good work as herein prescribed. Any failure or omission on the part of any Inspector or the Engineer to observe, object to or condemn any defective material or work shall not release the Contractor from the obligation to at once tear out, remove, and properly replace or rebuild the same at any time upon discovery of the defect and upon notice from the Owner or Engineer to do so.
- E. Materials stored on site which are marked by the Inspector, Engineer or Owner as not meeting the requirements of the contract documents are to be removed from the site by the contractor immediately.
- F. Top surfacing will be judged by sight. If Inspector's decision is not acceptable to the Contractor he may, at his own expense, take samples and make tests by methods to which both parties agree.
- G. Failure of Owner or Engineer to discover or reject defective work, or work not in accordance with the Contract, shall not be deemed an acceptance thereof, nor a waiver of Owner's rights to Contractor's compliance with the Contract or performance of the work, or any part thereof. No partial or final payment, or partial or entire occupancy, by Owner shall be deemed to be an acceptance of work or of material which is not strictly in accordance with the Contract, nor shall it be deemed to be a waiver by Owner of any of Owner's rights pursuant to this Contract or otherwise.
- H. Substantial Completion Inspection shall be conducted as follows:

- When Engineer has certified substantial completion, Contractor shall have an additional fourteen (14) calendar days to complete all work under the contract, including any outstanding punch list items established at the substantial completion; any required submittals, including warranties, release of liens, unit price logs, consents of surety, final pay request, etc.
- 2. Substantial completion is defined for this project as the successful installation of every component required under the contract documents to be installed for this project. A punch list may be issued by the Engineer for work complete at this time.
- I. Final Inspection shall be conducted as follows:
  - 1. Upon final completion, Contractor must notify Engineer and Owner in writing requesting a final inspection.
  - 2. The Engineer and Owner will conduct a final inspection of all work included in the contract as soon as possible after receiving written notification by the Contractor that the work is complete and ready for inspection.
  - 3. The final inspection report shall be prepared by the Engineer and Owner listing observed deficiencies and furnished to the Contractor.
  - 4. Upon satisfactory completion of all deficiencies, Contractor shall initial each item on the report certifying his compliance and return to the Engineer.
  - 5. No portion of the final payment will be made until all items have been satisfactorily corrected and the project closeout documents submitted to the Architect/Engineer.
  - 6. All project completion documents are to be submitted within thirty (30) days following acceptance by the Owner.

#### 1.5 PERMITS

- A. Contractor is responsible for obtaining all necessary licenses and permits required by law in order to accomplish the work. Satisfactory evidence that all licenses and permits have been issued must be submitted to Owner prior to starting work.
- B. Contractor must provide all protective structures, barriers, or other means of protection necessary to assure the public safety and to fulfill all requirements by governmental authorities.
- C. Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority having jurisdiction of Contractor's performance of the work or any part thereof. If Contractor knows, or should know that any requirement of these Specifications is at variance with any such laws, ordinances, rules, regulations or orders in any respect, Contractor shall promptly notify Engineer in writing and obtain written instructions before proceeding with the portion of the work thereby affected. If Contractor performs any work which is contrary to such laws, ordinances, rules and regulations without receiving Engineer's instructions, Contractor shall assume full responsibility therefor and shall bear all penalties and costs of remedying the work attributable thereto. However, this section shall not be construed to require Contractor to perform detailed engineering calculations normally performed by Engineer except when specifically provided.

#### 1.6 SUBCONTRACTORS

A. Use of Subcontractors to accomplish such miscellaneous or associated work as structural modifications, plumbing, relocation of conduit, service piping and/or HVAC equipment, etc. is

permitted. Do not subcontract any part of the roofing work specified herein without the prior written consent of the Owner.

#### 1.7 PRE-CONSTRUCTION CONFERENCE

A. Prior to the start of work there shall be a conference attended by the Contractor, the representative of the Owner, and other parties who may be designated by the Owner, to be convened at the work site for the purpose of reviewing the specifications and job conditions and resolving any questions then arising.

#### 1.8 MANUFACTURER'S INSPECTIONS

A. A technical representative of the roof system manufacturer shall conduct periodic inspections throughout the course of the work. The representative shall prepare a written report for each inspection and shall promptly provide a copy of each report to the Owner, Contractor and Engineer. Each report shall note any deficiencies the representative observes which require correction. A minimum of three (3) inspections is required for this project including a final inspection after contractor has completed installation of all roof system components.

**END OF SECTION 01400** 

## SECTION 01500 - TEMPORARY FACILITIES, CONTROLS AND PROTECTION

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

A. This Section includes requirements for temporary facilities, controls, protection and disconnects.

#### 1.3 SUBMITTALS

A. Submit plans for work for approval prior to starting work so that, if necessary, inside operations can be coordinated with the work.

#### 1.4 TEMPORARY UTILITIES

- A. Water Service: Use water from Owner's existing water system without metering and without payment of use charges.
- B. Electric Power Service: Use electric power from Owner's existing system without metering and without payment of use charges.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities and drinking-water fixtures. Locate at sites approved by the Owner. Facilities in existing buildings are off-limits.
- D. Lunchroom Facilities: On-site facilities are not available to Contractor personnel.

## 1.5 TOBACCO AND VAPORIZING PRODUCTS

A. Tobacco and vaporizing products will not be allowed on site at any time. Enforce the tobacco and vaporizing policy of the Owner with regard to Contractor's personnel. Non-compliance by any of Contractor's personnel will be justification for removal of those individuals from this project.

## 1.6 SCAFFOLDING AND PLATFORMS

A. Contractor shall provide all necessary platforms and scaffolds of ample strength. Inclusive are all hoisting machinery, all appliances and materials such as ladders, planks, ropes, wedges, centers and other tools and materials including the carriage thereof to and from the buildings as required for proper handling and installation and/or erection of materials and equipment included in the work.

- B. Prior to starting work, Contractor shall obtain approval of the Owner for locations of work operations at ground level such as material storage, hoisting, dumping, etc. Work will be restricted to approved locations.
- C. Access to the roof will be by external means only. Access by ladder or scaffolding will be the responsibility of the Contractor.
  - 1. Ladders must be taken down daily and locked in storage or removed from site.
  - 2. Scaffolding must be barricaded to deter unauthorized usage by the public.

## 1.7 TEMPORARY PROTECTION

- A. Temporary measures shall be provided and maintained by the Contractor to protect the building and its contents from weather and construction related damages. Damaged or disturbed buildings or grounds to be corrected to the Owner's satisfaction prior to final payment.
- B. Protect the existing building, roof, equipment, and grounds from flying or falling debris during the demolition process. Protect so as not to disrupt building operations or cause damage to the building and its contents during construction.

## 1.8 PROTECTION OF BUILDINGS AND PROPERTY

- A. Note that building will remain occupied during work. Take all precautions necessary to protect building, contents and personnel from damage or injury from operations and from water entry into the building during construction. Keep dust and dirt to a minimum.
- B. At conclusion of each day's work, carefully inspect work including temporary daily tie-offs to ensure system is completely water-tight, all stored materials are suitably protected from the weather and all equipment is stored in such a manner as not to interfere with facility operations.
- C. On normal workdays when no work is accomplished due to inclement weather or other reasons, visit the site no later than normal start time and verify that the system is completely water-tight, all stored materials are suitably protected from the weather and all equipment is stored in such a manner as not to interfere with facility operations. Be prepared to implement emergency repairs as necessary to prevent leakage into the facility.
- D. Prior to starting work, obtain approval from Owner for locations of work operations at ground level, such as material storage, hoisting, dumping, etc. Restrict work to approved locations
- E. Prevent any work which could reasonable be deemed to be hazardous from taking place over or adjacent to occupied areas. Coordinate with the Owner the vacating of such affected areas of all occupants and give the Owner adequate notice to allow time to comply. Post a watchman inside the building in the affected area(s) at all times during the work to ensure no one enters or remains in the affected area(s).
- F. Contractor shall protect adjacent existing and new roof areas from damage. In the event roofing is damaged, Contractor is to restore to the original condition at no cost to the Owner.
- G. Remove debris and other material from the site in a timely manner to minimize accumulation.

- H. Owner reserves the right to judge whether or not debris is being removed in a timely manner. In the event debris is not removed from the site as required to maintain the site in a manner acceptable to the Owner, the Owner reserves the right to engage other contractor(s) or its own forces to clean the areas and deduct costs of such operations from this Contract.
- I. Protect grounds and landscaping from damage. In the event of damage, restore damaged property to a condition equivalent to that at time of start of operations.
- J. Document all existing damage to facility prior to beginning work and produce documentation acceptable to Engineer/Owner prior to starting work. Damage discovered during the project which was not documented and which is not clearly the responsibility of others may be presumed by the Engineer/Owner as the responsibility of the Contractor. Documentation may be in the form of written statements and/or drawings but must also be supported with photographs and/or video tape supplied by the Contractor.
- K. Isolate equipment from non-Contractor personnel by whatever means necessary, including the construction of a six-foot tall chain link fence (which completely surrounds the equipment, bitumen storage and personnel necessary to maintain the equipment) with integral lockable gate. Owner reserves the right to judge adequacy of Contractor's methods to isolate equipment and may, at any time, demand construction of the fence as compliance with this requirement. Should the Owner demand the construction of the fence, such shall be accomplished at no additional cost to the Owner.
- L. Implement related safety provisions imposed by local fire marshals, etc. Determine what procedures will be acceptable prior to submitting a bid or proposal.
- M. Initiate, maintain and supervise all safety precautions and programs in connection with the work. Take all necessary precautions for the safety of, and provide the necessary precaution to prevent damage, injury or loss to:
  - 1. All employees on the work and other persons who may be affected thereby.
  - 2. All the work and all materials or equipment to be incorporated therein, whether in storage on or off the site.
  - 3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
  - 4. Comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety and protection. Remedy all damage, injury or loss to any property caused, directly or indirectly in whole or in part, by the Contractor, and Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

## 1.9 DISCONNECTS

A. In the event it is necessary to disconnect any electrical wiring or connections, plumbing lines or other building services, notify the Owner. Do not disconnect or connect services unless authorized in writing by Owner.

- B. Include in Base Bid all costs required for modification of existing service piping, wiring and duct work required in connection with the lifting, removal or relocation of roof-mounted equipment.
- C. All associated work is to be accomplished by appropriately licensed personnel in accordance with all applicable codes and regulations.
- D. Review roof-top equipment usage with Owner and facility user at beginning of project. Disable equipment determined to be essential to the operations of the facility only at those times prescribed by the Owner. This may require work to be done at other than normal operating hours.

#### 1.10 USE OF PREMISES

- A. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
  - 2. Driveways and Entrances: Keep driveways, loading areas, 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.
- B. Use of Existing Building: Repair damage caused by construction operations. Protect building and its occupants during construction period.

## 1.11 OWNER'S OCCUPANCY REQUIREMENTS

- A. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period as this school is on a year round calendar. The construction schedule has been developed around the recess periods for the students. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits, unless otherwise indicated.
  - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
  - 2. Owner Occupancy of Completed Areas of Construction: Owner will occupy the building, before Substantial Completion, as provided in the construction schedule.

# 1.12 GROUNDS RESTORATION

- A. Upon completion of required work, contractor is to restore grounds to a level equivalent to the condition prior to the start of the project. This includes but is not limited to:
  - 1. Cleaning grounds of trash and debris.
  - 2. Smoothing ruts and discontinuities in the soil.

- 3. Reseeding grass.
- 4. Pavement restoration.
- 5. Concrete restoration.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01500** 

#### SECTION 01732 - SELECTIVE DEMOLITION

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - Removals.
- B. Related Sections include the following:
  - 1. Division 1 Section "Unit Prices and Allowances."
  - 2. Division 7 Section "Roofing Preparation."

### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

#### 3.1 REMOVALS

- A. Remove all EPDM membrane, aggregate, built-up membrane roofing, insulation, vapor retarder, underlayment boards, expansion joint covers, flashings and metal flashings, coping caps, scupper liners, conductor heads and downspouts and discard.
- B. Lift or remove all existing equipment so that existing flashings can be totally removed and new flashings installed.
- C. Carefully relocate all electrical, co-axial, telephone, fiber optic, intercom and miscellaneous wires, cables, etc. as required to accomplish work specified herein. Accomplish such relocation without interrupting the service provided by these lines except as specifically authorized by the Owner.
- D. Remove or correct any obstruction which might interfere with the proper application of new materials.

SELECTIVE DEMOLITION 01732-1

- E. Remove all existing roof drain strainers and discard.
- F. Remove existing pitch pans and discard.
- G. Remove the existing Components marked for removal on the roof surface and discard. Cabling is to be cut flush at penetration into building, and sealed as necessary.

**END OF SECTION 01732** 

SELECTIVE DEMOLITION 01732-2

#### SECTION 01733 - ASBESTOS PRODUCTS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes procedural requirements relating to asbestos-containing materials.
- B. Related Sections include the following:
  - 1. Division 7 Section 07000 "Roofing Preparation."

#### 1.3 PROCEDURES

- A. It is the intention of these Specifications that no asbestos-containing materials be incorporated into the work and that, unless specifically designated to remain, no existing asbestos-containing materials incorporated in the existing roof system will remain subsequent to completion of the work. In the event additional hidden or unanticipated asbestos-containing materials are present in the existing roof system, stop all work in the affected area, notify the Engineer and provide temporary protection as required. Costs incurred, if any, due to the presence of hidden and/or unanticipated asbestos-containing materials will be resolved by Change Order to this Contract.
- B. Products containing asbestos fibers are present on roof areas on which work is specified. See the included asbestos testing results. Include in the Base Bid all costs for compliance with all regulatory agency requirements in effect on the bid date, or scheduled to become effective prior to completion of the work. Cost incurred, if any, due to changes in existing or scheduled regulatory requirements will be resolved by Change Order to this Contract or by such other means as may be deemed in the best interest of the Owner.
- C. Contractor shall provide current asbestos certifications at preconstruction meeting.

### 1.4 WARRANTY

A. Upon completion of the work, and before final payment and/or release of retainage, submit, and obtain from each subcontractor, material supplier and equipment manufacturer and submit, a properly executed Asbestos Free Warranty. Provide Warranty in the form included herein. Ensure forms are signed by a responsible officer of the Contractor, subcontractor, material supplier and equipment manufacturer and are notarized.

ASBESTOS PRODUCTS 01733-1

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

ASBESTOS PRODUCTS 01733-2

# CANDLER ELEMENTARY SCHOOL BUNCOMBE COUNTY SCHOOL DISTRICT

# ASBESTOS FREE WARRANTY (on Contractor's standard letterhead)

Owner:	Buncombe County School District
Location of Building:	Candler, North Carolina
Name of Building:	Candler Elementary School
Know all men by these pr	(Contractor, Subcontractor, Material Supplier or Equipment Manufacturer)
flashings and/or miscella	naterials, equipment and/or supplies; removed roofing, roof insulation, vapor retarder, neous roof system components; accomplished certain repairs to existing roof system; finsulation vapor retarder, flashing and/or miscellaneous roof system components;
from, to and/or on	(Buildings, Roof Areas, etc.) as shown on the roof plan below under
contract between	(Owner and Contractor)  and (Contractor and/or Subcontractor, Material Supplier or Equipment Supplier)
work, and that, to our known	spect to said work that no materials containing asbestos fibers were incorporated into the civiledge and belief, no materials containing asbestos remain in or are covered by the work.
Exceptions:	If there are no exceptions, state "No Exceptions" here
	EOF, we have caused this instrument to be duly executed, this day of  WITNESS:
Company	
Ву	Notary Public
END OF SECTION	ON 01733

ASBESTOS PRODUCTS 01733-3



# **Bulk Asbestos Analysis**

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E





Customer: Terracon

72 Pointe Circle Greenville, SC 29615 Attn: Stephen Ellis Jeffrey Gurrie **Lab Order ID:** 71937573

**Analysis ID:** 71937573 PLM

Date Received: 3/2/2020 Date Reported: 3/5/2020

**Project:** Candler Elementary Roof FH196268

Sample ID	Description		Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	- Asbestos	Components	Components	Treatment
CEA-1 - A	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_1	built up roofing				Dissolved
CEA-1 - B	Thin Roofing	None Detected	80% Cellulose	20% Other	Brown, White Fibrous Homogeneous
71937573PLM_10	insulation				Teased
CEA-2 - A	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_2	built up roofing				Dissolved
CEA-2 - B	Thin Roofing	None Detected	90% Cellulose	10% Other	Brown Fibrous Homogeneous
71937573PLM_11	insulation				Teased
CEA-3	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_3	built up roofing				Dissolved
CEB-1	Flashing	8% Chrysotile	20% Cellulose 20% Fiber Glass	52% Other	Black Non Fibrous Heterogeneous
71937573PLM_4	built up roofing				Dissolved
CEB-2	Flashing	Not Analyzed			
71937573PLM_5	1				
CEB-3	Flashing	Not Analyzed			
71937573PLM_6	1				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Byron Stroble (11)

P-F-002 r15 1/16/2021

Analyst

Approved Signatory



# **Bulk Asbestos Analysis**

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E





Customer: Terracon

72 Pointe Circle Greenville, SC 29615 Attn: Stephen Ellis Jeffrey Gurrie

**Lab Order ID:** 71937573

**Analysis ID:** 71937573\_PLM

**Date Received:** 3/2/2020 **Date Reported:** 3/5/2020

**Project:** Candler Elementary Roof FH196268

Sample ID  Lab Sample ID	Description  Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
CEC-1	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_7					Dissolved
CEC-2	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_8					Dissolved
CEC-3	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_9					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Byron Stroble (11)

Approved Signatory

Client: \*Instructions: Version 1-15-2012 Terracon Use Column "B" for your contact info Contact: Stephen Ellis Address: 72 Pointe Circle, Greenville, SC 29615 Phone: 423-426-2164 To See an Example Click the bottom Example Tab. Fax: stephen.ellis@terracon.com Email: Enter samples between "<<" and ">>" jeff.gurrie@terracon.com Begin Samples with a "<< "above the first sample Candler Elementary Roof Scientific Project: and end with a ">>" below the last sample. Analytical FH196268 Positive Stop Only Enter your data on the first sheet "Sheet1" Institute **Client Notes:** P.O. #. 4604 Dundas Drive Relinquished by: Greensboro, NC 27407 2/28/2020 0:00 Date Submitted: Stephen Ellis Phone: 336.292.3888 Fax: 336.292.3313 PLM EPA 600 Analysis: Email: lab@sailab.com TurnAroundTime: 3 Day TAT

Sample Number Data 1	Sample Description	Data 2	
<<			
CEA-1	Thin Roofing	PLM	
CEA-2	Thin Roofing	PLM	
CEA-3	Thin Roofing	PLM	
CEB-1	Flashing	PLM	
CEB-2	Flashing	PLM	
CEB-3	Flashing	PLM	
CEC-1	Thin Roofing	PLM	
CEC-2	Thin Roofing	PLM	
CEC-3	Thin Roofing	PLM	
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#### SECTION 01770 - CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes procedural requirements relating administrative and procedural requirements for contract closeout, including, but not limited to, the following.
  - 1. Inspection procedures.
  - 2. Warranties.
  - 3. Final cleaning.
- B. Related sections include the following:
  - 1. Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.

## 1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Complete final cleaning requirements, including touchup painting.
  - 3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer and Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

#### 1.4 FINAL COMPLETION

A. Final Inspection shall be conducted as follows:

- 1. Contractor will have 14 days from Substantial Completion to reach Final Completion.
- 2. The Engineer and Owner will conduct a final inspection of all work included in the contract as soon as possible after receiving written notification by the Contractor that the work is complete and ready for inspection.
- 3. The final inspection report shall be prepared by the Engineer and Owner listing observed deficiencies and furnished to the Contractor.
- 4. Upon satisfactory completion of all deficiencies, Contractor shall initial each item on the report certifying his compliance and return to the Engineer.
- 5. No portion of the final payment will be made until all items have been satisfactorily corrected and the project closeout documents submitted to the Engineer. Final payment shall be made within thirty (30) days of receipt of closeout documents.
- 6. All project completion documents are to be submitted within thirty (30) days following acceptance by the Owner.
- B. Refer to Closeout Document Checklist at the end of this Section for all documents to be submitted and approved by Engineer.
- C. Contractor shall submit a Certificate of Compliance prior to close-out of the project.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

#### PART 3 - EXECUTION

#### 3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - b. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.

- c. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
- d. Clean transparent materials, including glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish glass, taking care not to scratch surfaces.
- e. Remove labels that are not permanent.
- f. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
  - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
- g. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

#### 3.2 REPAIR KIT

- A. Contractor shall provide the Owner with a Repair Kit in a new canvas bag or equal portable package suitable for transport and use on the roof by the Owner's maintenance personnel. The Repair Kit shall consist of the following:
  - 1. Scissors
  - 2. Hand Roller
  - 3. One tube M-1
  - 4. One quart cleaner/primer
  - 5. Six clean rags
  - 6. 20'-0" x 6" roll of peel-and-stick elastoform EPDM adhesive-applied membrane
  - 7. One roll 20' x 6" pressure sensitive TPO cover strip
  - 8. Two tubes of lap sealant
  - 9. One tube of color matched, compatible polyurethane and/or butyl caulk
  - 10. Six peel-and-stick target patches
  - 11. Two chip brushes

## **CLOSEOUT DOCUMENTS CHECKLIST**

Asbestos Manifests.
Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
Updated final statement, accounting for final changes to the Contract Sum
AIA Document G704, "Certificate of Substantial Completion."
AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
AIA Document G706A, "Contractor's Affidavit of Release of Liens."
AIA Document G707, "Consent of Surety to Final Payment."
Contractor's Warranty
Metal Finish Warranty
Manufacturer's Warranty
Copy of Final Inspection
Record Drawings
Repair Bag
Certificate of Compliance

# THERMOPLASTIC MEMBRANE ROOFING SYSTEM WARRANTY (on Contractor's Standard Letterhead)

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#### SECTION 06100 - ROUGH CARPENTRY

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Rooftop equipment bases and support curbs.
  - 2. Wood nailer.
  - 3. Expansion joint.
- B. Related Sections include the following:
  - 1. Division 1 Section "Allowances."
  - 2. Division 1 Section "Unit Prices."
  - 3. Division 7 Section "Thermoplastic Membrane Roofing."
  - 4. Division 7 Section "Sheet Metal Flashing and Trim."

#### 1.3 DELIVERY, STORAGE AND HANDLING

- A. Supply and keep all materials dry at all times prior to application.
- B. Store all lumber/plywood in dry, covered storage, or on platforms, and with weatherproof, breathable type material such as heavy canvas. Materials which are not stored under specified covers are subject to removal from the site at Engineer's or Owner's discretion.

#### PART 2 - PRODUCTS

## 2.1 WOOD PRODUCTS

- A. Lumber: No. 2 grade (or better) southern yellow pine or douglas fir unless specifically noted otherwise. Each piece of lumber shall bear the inspection stamp of the Southern Pine Inspection Bureau (SPIB) or the Western Wood Products Association (WWPA) indicating the grade and type of lumber.
  - Wood Preservative: Alkaline Copper Quaternary (ACQ) pressure-treatment conforming to AWPA Standard C-2 (above ground). Retention of preservative shall be 0.025 pcf. All material shall be kiln-dried after treatment to 19 percent or less moisture content.
- B. Plywood: APA Rated Sheathing (CDX) with waterproof glue for exterior applications in thicknesses specified. All plywood shall comply with the requirements of U.S. Product

ROUGH CARPENTRY 06100-1

Standard PS1-09 and each sheet shall clearly bear the APA trademark of the American Plywood Association. Minimum span rating for 1/2 inch plywood shall be 32/16 and shall be so marked on each sheet.

#### 2.2 FASTENERS

- A. Provide stainless steel fasteners at all locations where fastener will come into contact with pressure-treated lumber.
- B. For securing lumber or plywood to lumber, provide stainless steel ring shank nails of sufficient length to penetrate a minimum of 1½ inches into the underlying member but not smaller than 8d nails.
- C. For securing wood to concrete or masonry, secure using Tapcon Masonry fasteners at 12 inches on center, staggered.
- D. For securing wood to steel, secure using self-drilling/self-tapping fasteners.
- E. Anchor Bolts: ½ inch diameter, length to embed in concrete a minimum of 8 inches, with appropriately-sized nuts and washers.

#### PART 3 - EXECUTION

#### 3.1 GENERAL

- A. Furnish and install new nominal 6-inch wide wood blocking at all edges and openings as required for blocking to finish flush with the top of the roof insulation.
- B. Secure wood nailers over existing nailers with ring shank fasteners or screws in two rows staggered and spaced not over 12 inches in each row.
- C. Secure wood blocking and curbs at spacings of 8 inches on center in a staggered pattern.
- D. Stagger fasteners when securing nominal 6 inch wide lumber or wider.
- E. At tops of CMU, brick, and concrete walls secure wood nailers to walls with anchor bolts. Space bolts at 2 feet on center within 8 feet of building corners and 4 feet on center at remaining locations. Recess nuts and washers into wood blocking.

#### 3.2 EXISTING WOOD

- A. Remove all existing loose, wet, damaged or deteriorated wood blocking and discard. Install new wood blocking using the same size and thickness as existing.
- B. Inspect existing wood blocking at perimeters. In the event current fastener spacing exceeds 8 inches on center, secure blocking with additional specified fasteners to achieve fastener rate of 8 inches on center or less.

ROUGH CARPENTRY 06100-2

## 3.3 WOOD BLOCKING

- A. Furnish and install new wood blocking at all roof mounted equipment and hatches as required to provide a minimum flashing height of 8 inches above finished roof level.
- B. Install new wood blocking at all expansion joints as required to provide a minimum flashing height of 8 inches above finished roof level.
- C. Where vertical lumber is to be used, install chamfered wood cant for added rigidity with screws at 12 inches on center.

**END OF SECTION 06100** 

ROUGH CARPENTRY 06100-3

#### SECTION 07000 – ROOFING PREPARATION

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Preparations.
  - 2. Deck repairs.
  - 3. Connects and disconnects
  - 4. Overflow scupper installation.
- B. Related Sections include the following:
  - 1. Division 1 Section "Allowances."
  - 2. Division 1 Section "Unit Prices."
  - 3. Division 6 Section "Rough Carpentry."

#### PART 2 - PRODUCTS

## 2.1 STEEL DECK REPAIR MATERIALS

- A. Metal Deck Primer: Sherwin Williams Kem Kromik Universal Metal Primer or approved equal.
- B. Sheet Metal for Steel Decks: 20 gauge galvanized steel.
- C. Steel Deck: ASTM A 653, galvanized, G-90 deck, manufactured in accordance with the requirements of the Steel Deck Institute, Inc. for narrow rib (Type A) and wide rib (Type B). (Contractor to field verify deck type.) Minimum section properties:
  - 1. Yield strength = 33 ksi.
  - 2. Section Modulus: 0.111in<sup>3</sup>.
  - 3. Moment of Inertia: 0.124in<sup>4</sup>.
  - 4. Thickness: 22 gauge.

#### 2.2 FASTENERS

A. Self-Drilling Fasteners: Stainless steel of sufficient length to secure steel such as #12 diameter TEKS 5.

B. TEKS 3 for side laps.

## 2.3 DRAIN AND LEADER MATERIALS

- A. Drain Leader: Schedule 40 PVC with Schedule 40 PVC connections. Drain and leader dimensions are to match existing.
- B. Insulation: ASTM C 547, glass fiber, rigid molded, noncombustible, with white kraft paper vapor retarder reinforced with glass fiber yarn and bonded to aluminized film, 1/2 inch thick.
- C. Roof Drains: Coated cast iron body with cast iron low-profile dome, with clamping ring and deck clamp assembly. 4-inch diameter. No hub connection.
- D. Pipe Hangers: Carbon steel, adjustable, clevis-type with steel riser clamp.
- E. Intumescent wrap strips and sealant capable of wrapping around leader at fire walls.
- F. Drain extensions, if required, provided by drain manufacturer.
- G. Retrofit Roof Drains:
  - 1. Size: 4 inch
  - 2. Compliance:
    - a. ANSI/SPRI RD-1.
    - b. ULC/ORD-C790.4.
  - 3. Drain Body:
    - a. Material: 1-piece, 11-gauge (0.125-inch) spun aluminum.
    - b. Flange: 17-1/2-inch diameter.
    - c. Drain Stem Length: 12 inches
    - d. Flange Includes: Six 2-1/2-inch-long aluminum studs.
    - e. Sump Area: Depressed.
  - 4. Strainer Dome:
    - a. Material: Cast aluminum.
    - b. Height: 7.25 inches.
    - c. Outside Base Diameter: 9.77 inches
  - 5. Clamping Ring:
    - a. Material: Cast aluminum.
    - b. Gravel Stop Height: 1.2 inches.
    - c. Drainage Slots: 18 V-shaped.
      - . Bosses: 6, to accept studs on flange.
  - 6. Backflow Seal:
    - Compression Seal: Watertight, "U-Flow" mechanical seal.
    - b. Material: Polyamide and EPDM rubber.
    - c. Required for Activation: "U-Flow" screwdriver.
  - 7. Hardware:
    - a. Locknuts: 6, stainless steel, for studs.
    - b. Screws: 3, stainless steel, to attach strainer to clamping ring.

#### 2.4 MISCELLANEOUS MATERIALS

A. Steel Plate: For covering openings, 1/8 inch thick, single sheet sized to extend 6 inches beyond opening in all directions.

- B. Single Component Polyurethane Sealant: ASTM C 920, Type S, Grade NS, Class 25, Use NT, M, A and O.
- C. Primer: As recommended by sealant manufacturer.
- D. Primer: Sherwin Williams Kem Kromik Universal Metal Primer rust-inhibitive primer.
- E. Paint: To be applied over steel. Color to be selected by Owner.
- F. Single Component Silicon Sealant: Capable of being installed over metal panel roofing fasteners.
  - 1. Shall match color of existing metal panels.
- G. Hat Channels: 1-1/2-inch channel, 18 gauge galvanized as manufactured by Metal Sales Manufacturing Corporation or approved equal.
  - 1. ASTM A653, Grade 50, Class 2 (55 ksi minimum yield.)

#### PART 3 - EXECUTION

## 3.1 PREPARATION, GENERAL

- A. Prior to commencement of any work, inspect and thoroughly water test all existing roof drains for free flow operation with Owner's maintenance personnel present. Report drain restrictions to Engineer and Owner. Owner's maintenance personnel shall perform repairs to remove any restrictions found. Should drains become clogged at any time after the start of work, correct the condition at no additional expense to the Owner.
- B. All vents, hatches and mechanical units must be raised to provide an 8 inch base flashing height above the finished roof system.
- C. Prior to the installation of any new roofing, flashings, and metal flashings, clean surfaces of all dust, dirt and other foreign matter.
- D. Furnish and install new primer and paint at all exhaust vents, power ventilators and stack vents as specified herein:
  - 1. Remove all loose rust by wire brushing. Sweep away all dirt, dust and debris prior to paint and primer application.
  - 2. Apply one coat of Sherwin Williams Kem Kromik Universal Metal Primer rust-inhibitive primer and two coats of fibrated aluminum roof coating to match roof surface.
- E. Over all openings in deck, install new steel plate. Secure to deck using specified fasteners spaced not over 6 inches on center at all edges.
- F. Extend all existing vents through the roof to the height required by the local plumbing code but not less than 8 inches above finished roof level.
- G. Wire brush, prime and paint rusted mechanical vents.

#### 3.2 CONNECTS AND DISCONNECTS

- A. In the event it is necessary to disconnect any electrical wiring or connections, plumbing lines or other building services, notify the Owner. Contractor shall not disconnect or connect services unless authorized in writing by Owner.
- B. Modification of existing service piping, wiring and duct work required in connection with the lifting, removal or relocation of roof mounted equipment shall be accomplished by this Contractor and is to be <u>included</u> in the Proposal price.
- C. All costs required in connection with electrical and/or mechanical service connections/disconnections, including satellites and weather stations, are to be included in the Bid price. All associated work is to be accomplished by appropriately licensed personnel in accordance with all applicable codes and regulations.
- D. Contractor shall review roof top equipment usage with Owner and facility user at beginning of project. Equipment determined to be essential to the operations of the facility may only be disabled at those times prescribed by the Owner. This may require the contractor to work at other than normal operating hours.

#### 3.3 STEEL DECK REPAIR

- A. Where steel deck is rusted but remains structurally sound, thoroughly clean deck units of rust and foreign matter with a wire brush. Paint with specified metal primer.
- B. Where steel deck is damaged or rusted through in small areas, smaller than 2' by 2', clean deck units of rust with a wire brush. Paint with specified metal primer. Install over the damaged area a steel plate secured to the existing steel deck with sheet metal screws around the perimeter of the plate at 6 inches on center. Extend the new steel plate a minimum of 6 inches onto the surface of the existing steel deck beyond the damaged area.
- C. Where steel deck units are severely damaged or have deteriorated over large areas, larger than 2' by 2', remove the entire existing deck unit and install new decking of the same type and gauge as the existing. Lap new deck units over the existing the same manner as originally installed but not less than 6 inches. Lap ends only over structural framing. Secure to structural framing with specified fasteners at 6 inches on center at each framing member. Secure deck side laps at not more than 36 inches on center.
- D. Secure all existing loose steel deck to roof framing members using specified fasteners placed 12 inches on center at each available framing member.
- E. Secure metal deck side laps with specified fasteners at spacings not exceeding 36 inches from each other or nearest deck support. For deck supports (framing members) spaced greater than 36 inches on center and less than 72 inches on center, install a single side lap fastener at midspan between framing members.
- F. At all changes in direction, install specified steel plate 6 inches across change in direction on each side and secure using specified fasteners at 6 inches on center around the perimeter.

ROOFING PREPARATION

#### 3.4 DRAINS

- A. Perform all drain work after hours or during weekends. Coordinate with building staff for access to the building interior.
- B. Connect new and existing leader with no hub connection.
  - 1. Support all leaders with hangers at spacings not exceeding 4 inches.
  - 2. Slope leader from drain a minimum of 1/4 inch per foot.
  - 3. Install 8-inch long 24 gauge sheet metal half-sleeves at insulated pipe runs through hangers to support pipe without crushing insulation.
- C. Insulate all roof drain bodies with specified insulation in accordance with insulation manufacturer's instructions.
- D. Install new drain extensions, if required to match new insulation thicknesses, over drain bowl using manufacturer-supplied extensions, gaskets, and fasteners.
- E. Seal drain to roof leaders in accordance with manufacturer's latest printed instructions for type of drain specified using only manufacturer-supplied gaskets, seals, clamps, etc.
- F. Compression gaskets shall conform to ASTM C 564. Ensure gaskets are compressed when the pipe is fully inserted.
- G. Thoroughly water test all joints upon completion.
- H. Upon completion of membrane and flashing installation at drains, install drain clamping rings at existing drains with new manufacturer-supplied bolts of sufficient length to properly engage drain bowl lugs.
- I. Install intumescent wrap strips or sealant capable of wrapping around leader at all new leaders that penetrate fire walls.
- J. Install retrofit roof drains in accordance with manufacturer's instructions at existing drain locations.

#### 3.5 SCUPPER INSTALLATION

- A. Existing scuppers are to be modified as necessary to accommodate new roof system height.
- B. New scuppers shall be located flush with the bottom of the two-foot sump sloped 1/2" per foot below the surface of the new roof level.
- C. Scupper minimum opening height shall be 4 inches.
- D. Scupper minimum opening width shall be 8 inches.
- E. Extend opening through entire thickness of parapet. Take precautions to avoid damaging adjacent wall surfaces.
- F. Repair exterior finish to match adjacent surfaces.

#### 3.6 OVERFLOW SCUPPER INSTALLATION

- A. Locate bottom of overflow scupper no more than 4 inches above the drainage sump.
- B. Scupper minimum opening height shall be 4 inches.
- C. Scupper minimum opening width shall be 8 inches.
- D. Extend opening through entire thickness of parapet. Take precautions to avoid damaging adjacent wall surfaces.
- E. Repair exterior finish to match adjacent surfaces.

#### 3.7 HAT CHANNEL INSTALLATION

- A. At locations shown on drawings to receive new metal wall panels, furnish and install new steel hat channels as specified herein.
- B. Secure hat channels to existing wall using two (2) specified fasteners (one per flange) at each securement location. Fasteners are to be installed at 12 inches on center. Maintain hat channel alignment. It may be required to grind down high spots in split face masonry or use washers to maintain a straight hat channel.
- C. Space hat channels as required to secure wall panels at 18 inches on center.

3.8

**END OF SECTION 07000** 

#### SECTION 07450 - THERMOPLASTIC MEMBRANE ROOFING

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Thermoplastic membrane roofing.
  - 2. Cover board.
  - 3. Roof insulation.
  - 4. Gypsum Underlayment
- B. Related Sections include the following:
  - 1. Division 7 Section "Reroofing Preparation."
  - 2. Division 7 Section "Sheet Metal Flashing and Trim."

## 1.3 PERFORMANCE REQUIREMENTS

- A. Provide a roofing system that complies with the requirements of Underwriters' Laboratories, Inc. for a Class A roof covering.
- B. Provide roofing system meeting wind uplift requirements as follows:

Field: -26 psf
 Perimeters: -44 psf
 Corners: -66 psf

## 1.4 SUBMITTALS

- A. Materials List: Give written notification of the brand name and manufacturer of each material proposed for use and include a statement that all proposed materials meet the specification requirements. Obtain approval prior to placing orders.
  - 1. Submittal of catalog cut sheets, etc. in lieu of the materials list required above is not acceptable.
- B. Manufacturers' Installation Instructions: As follows:
  - 1. Instructions for membrane and flashing installation.

- C. Manufacturer Certificates: As follows:
  - 1. System Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
  - 2. Material Certificates: Original document signed by a responsible officer of the firm, notarized, on manufacturer's standard letterhead, certifying materials furnished for project comply with the referenced standard. Specifically reference the project and applicable compliance standard on certificate.
- D. Polyisocyanurate Insulation Certificate: Signed by insulation manufacturer stating that polyisocyanurate insulation shipped to this project complies with requirements listed in Part 2.
- E. Warranties: As specified in this Section.

## 1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials to site in original containers bearing manufacturers' name and type of material. All materials used in roof membrane must have appropriate Underwriters' Laboratories, Inc. labels.
- B. Supply and keep all materials dry at all times prior to application.
- C. Store all insulation and tapered edge strips in dry, covered storage, or on platforms, and with weatherproof coverings. Coverings shall be waterproof breathable type material such as heavy canvas. Insulation wrappers are <u>not</u> sufficient. Materials which are not stored under specified covers are subject to removal from the site at Engineer's or Owner's discretion.
- D. Store all roll goods on end on clean floors or platforms. Do not use flattened rolls or rolls with ends damaged.
- E. Materials which, in the opinion of the Engineer, have been prematurely exposed to the weather are subject to immediate removal by the contractor and replaced with new materials at contractor's expense. Engineer may, at Engineer's option, mark such materials with paint or other indelible materials while they remain on-site.
- F. Store solvent bearing materials in dry, cool storage and keep lids tight on partially used containers to prevent escape of solvents.

## 1.6 WARRANTIES

- A. Installer's Warranty: Installer's warranty, on form included in these specifications, signed by roofing Installer, properly executed and printed on Installer's letterhead form.
  - 1. Warranty Period: Two (2) years from date of Final Completion.
- B. Roofing System Guarantee: Manufacturer's Standard Form without monetary limitation in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period. Period includes roof leaks.
  - 1. Roofing system guarantee includes roofing membrane, base flashings, cover board, roof insulation, perimeter edge metal and other components of roofing system.

- 2. Guarantee Period: Twenty (20) years from date of final completion. Nothing herein is to be interpreted or construed as changing any provisions of the specifications except as stated herein.
- 3. System shall include a 72 mph warranty.
- 4. A separate membrane warranty shall be included.
- 5. Conflicts for all warranties shall be resolved in Buncombe County, North Carolina.

#### PART 2 - PRODUCTS

#### 2.1 GENERAL

- A. Listed in this section are specifications for materials required generally for use in accomplishing the work specified. Materials not listed may also be required.
- B. Except as specifically noted herein, all reference standards included herein are to be presumed to be the latest published editions of such standards available as of the issue date of these specifications.
- C. Brand or manufacturer names are used as standards of quality where no other appropriate reference is available. The Engineer (or Owner) will consider substitution of materials of equal quality and properties provided a written request accompanied by substantiating data is received by him at least 10 days prior to bid date.
- D. Where a generic product or a general manufacturer's product is specified and more than one such product is offered by the manufacturer, it is understood that only the manufacturer's premium materials are approved for this project.
- E. All roofing system components used on this project shall be compatible and approved for use by the roofing system manufacturer and shall qualify for the specified roofing system guarantee.

#### 2.2 MANUFACTURERS

- A. For purposes of these documents, the roof system manufacturer is defined as the manufacturer of the primary roof membrane. The roof system is intended to encompass, but is not necessarily limited to, all components above the structure including roof insulation, metal panels, membrane and metal flashings and any proprietary flashing/components of the system manufacturer. Subject to compliance with the material specifications of these documents, all materials are to be supplied by the same manufacturer.
- B. All materials used in systems to be covered by a Manufacturer's Guarantee must be supplied by the same manufacturer, unless the manufacturer issuing the guarantee waives this requirement in writing.
- C. The following material manufacturers are approved for this project. Such approval does not relieve the Contractor from the requirement to supply materials which meet all other requirements of these Specifications.
  - 1. Carlisle
  - 2. Firestone

- Johns Manville.
- D. Alternate manufacturers shall meet all requirements of these specifications, including warranty, fire rating and length of production.

#### 2.3 FLEXIBLE SHEET MEMBRANE MATERIALS

- A. Membrane: Reinforced thermoplastic polyolefin (TPO) membrane, white color, minimum thickness to be 80 mil complying with ASTM D 6878 on all areas within the approved scope of work.
- B. Adhesive: Solvent-based contact adhesive.
- C. Base Flashing: 60 mil TPO.
- D. Walkpads: As recommended by membrane manufacturer.
- E. Pre-fabricated Flashing Components: Provide other pre-fabricated components as required, such as corner flashing, vent stacks, etc.
- F. Miscellaneous Products: Sealants, preformed sealant pockets, primers and cleaners supplied by the membrane manufacturer.

#### 2.4 ROOF INSULATION MATERIALS

- A. Polyisocyanurate Roof Insulation: Rigid, cellular polyisocyanurate thermal insulation with core formed by using HCFCs as blowing agents complying with ASTM C 1289, Type II, with glass-fiber mat on both major surfaces. Maximum board size shall be 4' x 4' for adhered boards and 4x8 for mechanically attached boards. No organic facers shall be used.
- B. Polyisocyanurate insulation shall be manufactured to meet the following requirements in addition to the requirements above:
  - 1. Min. Compressive Strength: 20 psi
  - 2. Dimensional Stability: 2% maximum linear change when conditioned at 158°F and 97% relative humidity
  - 3. Min. Curing Time: 24 hrs. plus 24 hrs. for each inch of thickness at a minimum of 60°F before shipment from manufacturer
  - 4. Maximum Board thickness: 3 inches
- C. Contractor shall submit a statement from manufacturer of polyisocyanurate insulation stating they will certify compliance of material shipped to this project with these requirements.
- D. High Density Cover Board: ASTM C 1289, Type II, Class 4, Grade 2, minimum compressive strength 120 psi: Board size: 4' x 4'.
- E. Gypsum Underlayment: ASTM C 1177, non-structural board, glass mat embedded, water-resistant gypsum core, factory primed, 5/8 inch thick.
  - 1. Maximum board size: 4' x 8'.

- F. Tapered Edge Strips: ASTM C 208, wood fiberboard, 1-1/2 inch at thick edge.
- G. Insulation Adhesive: Two component, low rise polyurethane foam, approved by membrane manufacturer for insulation and substrates on this project.

#### 2.5 FASTENING DEVICES

- A. Termination Bar: Extruded aluminum bar, 1 inch by 1/8 inch, with pre-punched holes at 6 inches on center.
- B. Insulation Fasteners and Plates: Plated steel fastener and 3 inch diameter round or 3 inch square steel plate as manufactured by or specifically recommended by the roof system manufacturer. Fasteners should be capable of resisting specified uplift pressure.
- C. Masonry Anchors: Stainless steel screw anchor for use in concrete, brick or concrete masonry units manufactured with threads for cutting into walls of pre-drilled opening to provide tight friction fit, 1/4 inch diameter, 1.5 inch minimum length.

#### PART 3 - EXECUTION

#### 3.1 SYSTEM SCHEDULE

A. Refer to Table 1 for a general schedule of the primary roof components (described from the bottom up) for the roof area. Methods of installation and related materials are in other sections of these specifications.

Candler Areas A1, A2, A5, and B1				
Existing metal deck				
5/8" gypsum underlayment (loose laid)				
2" polyisocyanurate insulation (mechanically attached)				
1" polyisocyanurate insulation (adhered)				
1/2" thick high-density cover board (adhered)				
Fully adhered single ply membrane				

## 3.2 EXAMINATION

- A. Inspect all surfaces to receive work specified herein. Application of materials constitutes approval of the substrate as being satisfactory.
- B. Do not proceed with roofing until all vents, drains, curbs, cants, blocking, nailing strips, and projections through the roof deck have been installed.

## 3.3 INSTALLATION, GENERAL

A. Do not apply materials on wet or damp surfaces, over dust, dirt, or other foreign matter.

- B. Accomplish application of roofing materials so that each area will be complete at the end of each workday.
- C. Protect edges and incomplete flashings against water entry at all times. Remove cut-offs and temporary protection prior to resumption of work.
- D. Where work detailing affects adjacent roof areas, contractor is to coordinate with existing roofing manufacturer as to not affect the existing manufacturers warranty.
- E. Contractor shall by all means necessary, prevent odors from entering building.

#### 3.4 GYPSUM UNDERLAYMENT APPLICATION

- A. Furnish and install new 5/8 inch thick gypsum underlayment over metal decks.
- B. Clean deck surfaces of all dirt, dust and other foreign matter.
- C. On metal decks, apply gypsum insulation with long dimension of units across deck ribs. On open rib steel decks, ends of units must bear on deck surface.
- D. Apply gypsum with end joints staggered approximately one-half the length of units.
- E. Fit all gypsum units snugly to each other and to all vertical surfaces.

#### 3.5 INSULATION APPLICATION

- A. Furnish and install new base insulation, tapered polyisocyanurate insulation, and cover board as specified herein.
- B. Refer to Roof System Schedule for all locations to receive base layer, tapered polyisocyanurate insulation and cover board.
- C. Clean surfaces of all dirt, dust and other foreign matter.
- D. Over metal decks, fasten base layer insulation with specified fasteners through steel plates into deck at the following rates:
  - 1. Field: Minimum of 8 fasteners per 4' x 8' board.
  - 2. Perimeter (8 ft. from edge): Minimum of 16 fasteners per 4' x 8' board.
  - 3. Corner (8' x 8'): Minimum of 24 fasteners per 4' x 8' board.
- E. Provide insulation fasteners of lengths sized to engage top flange of metal deck a minimum of 3/4 inch and a maximum of 1-1/2 inches.
- F. Fasteners shall be a minimum of 6 inches away from any edge of board.
- G. Insulation Adhesive over Insulation, Concrete Deck, Base Sheet and Existing Roofs:
  - 1. Set each layer of insulation in cold fluid applied adhesive with ribbons spaced at 12 inches on center and continuous at edge of each board in the field.

- 2. Set each layer of insulation in cold fluid applied adhesive with ribbons spaced at 6 inches on center and continuous at edge of each board in the perimeter (8 feet from edges).
- 3. Set each layer of insulation in cold fluid applied adhesive with ribbons spaced at 4 inches on center and continuous at edge of each board in the corners (8 feet from edges).
- H. Stagger all joints off those of preceding layer.
- I. Fit all insulation units snugly to each other and to all vertical surfaces.
- J. Apply insulation in two or more separate layers.
- K. Form crickets as specified herein:
  - 1. Form crickets along the upslope side of all curb mounted equipment with base widths exceeding 24 inches using factory tapered polyisocyanurate insulation and fill units and tapered edge strips.
  - 2. Form crickets between drains using factory tapered polyisocyanurate insulation units, polyisocyanurate insulation fill units, and tapered edge strips.
  - 3. Start cricket construction by striking chalk lines for outer edges of tapered edge strips. Install edge strips along chalk lines, mitering and fitting at the points where lines break.
  - 4. Build crickets over the base layer insulation. Take special care to prevent water penetration into crickets during construction.
  - 5. Unless noted otherwise all crickets are to be fabricated from tapered stock as required to provide an installed slope matching that of the adjacent roof area. For example, where the roof slope is 1/4 inch per foot, crickets are to be fabricated from 1/2 inch per foot stock to provide an installed slope of 1/4 inch per foot.
  - 6. Adhere insulation units as described previously.
  - 7. Provide tapered edge strips as required along cricket edges to provide a smooth transition.
  - 8. Install crickets of sufficient size and slope as required to ensure complete drainage and prevent standing water. Fabricate full crickets between drains with a minimum width-to-length ratio of 0.5. Fabricate partial crickets with dimensions which would result in a minimum width-to-length ratio of 0.5 if they were extended to full size.
  - 9. Fabricate crickets sufficiently wide as to result in valleys with positive slopes of not less than 1/16 inch per foot.
- L. Taper insulation down to drains and drain scuppers beginning at a point approximately 24 inches from drain. There is to be a 1 inch change from the top of the drain sump to the drain. Furnish and install drain extensions as required to elevate drain level.

#### 3.6 HIGH DENSITY COVER BOARD INSTALLATION

- A. Install cover board in specified adhesive as described herein.
  - 1. Follow ribbon spacing specified for insulation adhesives.
  - 2. Set cover board into cold adhesive immediately after application while adhesive is still soft and tacky.
  - 3. Stagger all joints off those of preceding layer.
  - 4. Apply high density cover board with end joints staggered approximately one-half the length of units.

- B. Ensure full adhesion of all layers of insulation and take whatever steps necessary to achieve full adhesion including, if necessary, temporary ballasting of insulation until adhesive sets.
- C. Provide an insulation thickness at eaves as required to maintain edge metal-fascia at uniform elevation and with uniform face widths. Install additional tapered edge strips at eaves, etc. as required to meet this requirement.

#### 3.7 MEMBRANE INSTALLATION

- A. Install membrane in strict accordance with manufacturer's recommendations.
- B. Unroll membrane and allow to relax before installing.
- C. Accurately align roofing membrane and maintain uniform side and end laps of minimum dimensions required by manufacturer.
- D. Apply bonding adhesive to substrate and underside of roofing membrane at rate(s) required by roofing manufacturer and allow to partially dry before installing roofing membrane. Do not apply bonding adhesive to splice area of roofing membrane.
- E. Mechanically fasten roofing membrane securely at terminations, penetrations and perimeter of roofing.
- F. Apply membrane with side laps shingled with slope of roof where possible.
- G. Seams: Clean seam areas, overlap roofing membrane and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
  - 1. Test lap edges with probe to verify seam weld continuity.
- H. Repair tears, voids and lapped seams in roofing that do not meet requirements.
- I. Contractor must perform pull tests daily to verify proper bonding at seams and maintain a daily log.
- J. Cut edge sealant shall not be used. Uncut reinforced membrane stripping shall be used instead of cut edge sealant. Stripping shall be welded a minimum of 2 inches on either side of lap.

#### 3.8 FLASHING APPLICATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate(s) and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

- D. Weld side and end laps to ensure a watertight seam installation.
- E. At vertical terminations, terminate and seal top of sheet flashings and mechanically anchor to substrate with specified fasteners through specified termination bar approximately 1 inch below top edge and spaced not over 6 inches on center.
- F. Where base flashing terminates at existing siding, contractor shall carefully remove siding and lift existing building paper so that the base flashing can extend at least 8 inches above the roof surface. Once base flashing has been terminated, contractor is to drape building paper over the termination and reinstall the siding. Contractor shall not fasten the siding through the base flashing. Should siding be damaged, contractor is to replace with like material and match the existing color.
- G. Unless specifically stated otherwise in these specifications or on drawings <u>all</u> base flashings are to extend a minimum of 8 inches above finished roof level. Costs for modifications to parapets, equipment curbs, expansion joint curbs, etc. are to be included in the contractor's bid.
- H. Fasten base flashing using specified fasteners and termination bar.
- I. Follow roofing system manufacturer's instructions for installation and securement of wall flashings when wall height exceeds maximum for base flashing material.

#### 3.9 DRAIN FLASHING INSTALLATION

- A. Provide a smooth transition from the roof surface to drain clamping ring. Prepare the substrate around each roof drain to avoid membrane bridging at the sump area and possible distortion at the drain clamping ring. Use drain extensions as necessary.
- B. Locate membrane field splices a minimum of 24 inches outside drain sump.
- C. Cut the membrane so it extends approximately ½ inch beyond the attachment points of the drain clamping ring. Ensure hole is no smaller than drain leader.
- D. Provide water cut-off mastic under compression between membrane and drain base.

#### 3.10 WALKWAY APPLICATION

- A. Install new walkway at all locations indicated on Drawings as specified herein.
- B. Install new walkway on all sides of all major equipment (motorized equipment, scuttles, or any rooftop unit with any single dimension greater than 4 feet).
- C. Adhere flexible walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

#### **END OF SECTION 07450**

#### SECTION 07620 - SHEET METAL FLASHING AND TRIM

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - Sheet metal flashing and trim.
- B. Related Sections include the following:
  - 1. Division 7 Section "Thermoplastic Membrane Roofing."

#### 1.3 SUBMITTALS

- A. Materials List: Give written notification of the brand name and manufacturer of each material proposed for use and include a statement that all proposed materials meet the specification requirements. Obtain approval prior to placing orders.
  - 1. Submittal of catalog cut sheets, etc. in lieu of the materials list required above is not acceptable.
- B. Submit shop drawings of all specified types of metal shapes, showing details of proposed installation where appropriate.
- C. Submit two 6-inch long samples of each metal shape.
- D. Manufacturer Certificates: Original document signed by a responsible officer of the manufacturing firm, notarized, on manufacturer's standard letterhead, certifying materials furnished for project comply with the referenced standard. Certificate shall specifically reference the project and applicable compliance standard.
- E. Color Chart: Manufacturer's standard range of colors for prefinished metals, including available gauges.
- F. Obtain approval of shop drawings, samples and certifications prior to fabrication and installation.
- G. Do not purchase, fabricate or install any sheet metal item until all required shop drawings and related submittals for each item are approved. Items purchased, fabricated and/or installed which are not in compliance with approved shop drawings are subject to immediate removal from the project at contractor's expense.

#### 1.4 STORAGE

A. Restrict on-site storage to minimum for work in progress. Protect all stored metal from exposure to weather and physical damage.

#### 1.5 WARRANTIES

- A. Upon completion of the work, furnish from manufacturer a standard twenty (20) year finish warranty.
- B. Finish: Deterioration includes, but is not limited to, the following:
  - 1. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
  - 2. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
  - 3. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

#### PART 2 - PRODUCTS

#### 2.1 SHEET METAL MATERIALS

- A. Aluminum Sheet: ASTM B 209.
- B. Prefinished Galvalume Steel: Aluminum-zinc alloy-coated steel sheet meeting ASTM A 792, Class A 750, coating designation, Grade 40 (Class AZM 150 coating designation, Grade 275), structural quality with Kynar 500<sup>®</sup>. Color to be selected by Owner.
- C. Exposed Finish Kynar ® 500 Based fluoropolymer coating, containing not less than 70% polyvinylidiene fluoride resin by weight. Mask metal with protective film.
- D. Color: As selected by Owner from manufacturer's full range.
- E. Corrugated Metal Siding: 24 gauge prefinished galvalume corrugated siding such as PBU Panel as manufactured by Fabral. Color as selected by Owner from manufacturer's standard color chart.
- F. Membrane Clad Metal: 24 gauge galvanized steel with factory laminated membrane material supplied by manufacturer.

## 2.2 PRE-FABRICATED EDGE METAL

- A. Pre-fabricated edge metal shall meet ANSI/SPRI ES-1 Roof Edge Standard.
- B. Pre-fabricated edge metal shall be covered under roofing manufacturer's 20 year, 72 mph warranty.
- C. Base flange shall be a minimum of 3 inches wide.
- D. Retainer base plate shall be 0.100 extruded aluminum

- E. Exterior fascia covers shall be 24 ga. galvalume.
- F. Pre-fabricated edge metal shall be approved by roof manufacturer and included in system warranty.
- G. Corners, and end caps shall be fabricated by the roof edging manufacturer. Factory fabricated mitered corners shall have 12" nominal leg lengths.

#### 2.3 AUXILIARY MATERIALS

- A. Sealant: ASTM C 920, Type S, Grade NS, Class 25, one-part polyurethane sealant.
- B. Self-Adhering High-Temperature Underlayment: Sanded face, ASTM D 1970, minimum of 40 mil thick sheet, slip-resisting, sanded top, surface laminated to SBS-modified asphalt adhesive, with backing, cold applied.

24 gauge prefinished galvalume

24 gauge prefinished galvalume

#### 2.4 SHEET METAL SCHEDULE

Counterflashing:

Λ.	Counternasting.	24 gauge preminsiled garvaidine
B.	Metal Siding:	24 gauge prefinished galvalume
C.	Conductor Head:	24 gauge prefinished galvalume
D.	Downspouts:	24 gauge prefinished galvalume
E.	Splash Pans:	0.040 prefinished aluminum
F.	Scupper Liner:	24 gauge membrane clad metal.

## PART 3 - EXECUTION

G.

Α

#### 3.1 INSTALLATION, GENERAL

Coping Caps (sleepers)

- A. Inspect all surfaces to which metal is to be applied. Do not install metal unless surfaces are even, sound, clean, dry and free from defects that might affect the application.
- B. Follow recommendations of Sheet Metal and Air Conditioning Contractors National Association Architectural Sheet Metal Manual (Seventh Edition, 2012) for fabricating in-shop and on-site, and for installation, unless otherwise specified herein or on Drawings.
- C. Follow published instructions of the product manufacturer for installation of extruded or proprietary metal products, unless otherwise specified herein or on Drawings.
- D. Use nails, screws, bolts, cleats or other fasteners of the same material or, if approved by Engineer, of material chemically compatible with the contacted metal.
  - 1. Use stainless steel fasteners at all locations in contact with pressure-treated lumber.

- E. Fabricate cleats to be one gauge heavier than metal to be secured by cleat unless otherwise noted.
  - Secure cleats to substrate with fasteners specifically manufactured for the purpose at spacings of 6 inches, on center. Fasteners are to be manufactured of metal chemically compatible with the contacted metal. Fasteners to be used in wood substrates are to be ring shank. Fasteners are to be located as close to hem of cleat as practical but no more than 2 inches from hem unless specifically indicated otherwise herein or on drawings.
- F. Install metal to be water and weathertight with lines, arrises and angles sharp and true and with plane surfaces free of waves or buckles. All raw edges of exposed or finish sheet metal shall be hemmed.
- G. Install shop-formed flashings in 10-foot lengths maximum and with minimum number of pieces in each straight run.
- H. Do not place dissimilar metals in direct contact or in positions where water sheds across both metals.
- I. Miter and seal all inside and outside corners of coping cap. Shop fabricated corner pieces are preferable
- J. Shop form all metal shapes, which are to be formed of prefinished metal, with protective plastic film in place. Do not remove plastic film until just prior to (or, if possible, after) installation.
- K. At all corners, shop form corner pieces of coping caps, eave and rake flashings with 18 inch legs (joints no more than 18 inches from corner). Seal joint of corner piece.
- L. Form faces of fascia with vertical faces of sufficient width to extend to specified length as shown in the details.

#### 3.2 ROOF EDGING INSTALLATION

- A. Submit design drawing for review and approval to Engineer before fabrication.
- B. Installing contractor shall check as-built conditions and verify the manufacturer's roof edging details for accuracy to fit the wall assembly prior to fabrication. The installer shall comply with the roof edging manufacturer's installation guide when setting edging.
- C. Installer shall use stainless steel screw type fasteners, provided by edge manufacturer to assure minimum 240# pull-out resistance is achieved for the substrates to which being installed.
- D. Install waterproof sealant to underside of retainer base plate as recommended by the roofing membrane manufacturer.

#### 3.3 COUNTERFLASHING INSTALLATION

- A. Install new counterflashing at various wall and equipment locations as specified herein. Refer to Drawings for additional information.
- B. Refer to sheet metal schedule for gauge and metal type.
- C. Install new counterflashing at all roof mounted equipment. Extend new counterflashing across top of curb beneath seating flange of unit. Extend flange down a minimum of 4 inches over base flashing. Secure counterflashing to top of curb, or to integral flange of unit with appropriate fasteners at 4 inches on center.
- D. Notch and lap joints and inside corners. Notch and seam outside corners. Do not rivet or otherwise secure joints and corners.
- E. Lap ends 4 inches. Crimp hem of overlapping section around hem of underlapping section.

#### 3.4 MISCELLANEOUS FLANGED FLASHING INSTALLATION

- A. Set flange on top of roofing membrane in solid bed of water cut-off mastic.
- B. Except at plumbing vents or other locations where flashing is turned into top of pipe or otherwise integrally secure against water entry, install bonnet flashing extending below and beyond edges of flashing riser and secure mechanically to roof penetration so that connection is watertight. Securement by sealant alone is not acceptable.

#### 3.5 DOWNSPOUT INSTALLATION

- A. Install new downspouts at roof as specified herein. Refer to SMACNA Architectural Sheet Metal Manual Figures1-33B and 1-33E.
- B. Refer to sheet metal schedule for gauge and metal type.
- C. Size downspout to be 5" x 4".
- D. Form downspout hangers from the same material as downspouts using material not less than two (2) gauges heavier than downspouts.
- E. Secure downspout to wall with hangers spaced not more than 5 feet on center. Refer to SMACNA Architectural Sheet Metal Manual Figure 1-35C.
- F. Where downspout terminates at lower roof areas, provide new splash pans over walkpad. Size walkpad to be 6 inches longer and wider than splash pan. Adhere splash pan to walkpad using materials consistent with roof membrane installation. Refer to SMACNA Architectural Sheet Metal Manual Figure 1-36, Second Alternate Section. Provide elbows at base of downspouts which turn out at 45°.
- G. Where downspouts terminate at grade, provide concrete splash block. Refer to SMACNA Architectural Sheet Metal Manual Figure 1-36, Second Alternate Section. Provide elbows at base of downspouts which turn out at 45°.

#### 3.6 CONDUCTOR HEAD INSTALLATION

- A. Install new conductor heads at locations indicated on drawings as specified herein. Refer to SMACNA Architectural Sheet Metal Manual Figure 1-25E.
- B. Refer to sheet metal schedule for gauge and metal type.
- C. Fabricate conductor head with top a minimum of 1 inch below scupper.
- D. Fabricate conductor head to the following dimensions:

Face Width: 12 inches.
 Face Depth: 8 inches.
 Height: 12 inches.

E. Secure conductor head to wall with appropriate fasteners as required for permanent and secure attachment.

#### 3.7 METAL SIDING INSTALLATION

- A. Furnish and install new metal siding at the walls indicated on Plans.
- B. Prior to installing metal panels and hat channels, install specified Self-Adhering High-Temperature Underlayment over the face of the substrate.
- C. Refer to Sheet Metal Schedule for gauge and metal type.
  - 1. Contractor is to submit to Engineer a copy of manufacturer's latest printed instructions.
    - a. Install siding with ribs oriented vertically.
- D. Fasten siding to hat channels with fasteners as recommended by the manufacturer.
- E. Counterflash top of all wall areas where new metal siding is to be installed above flashing.
- F. Apply termination trim.
- G. Furnish and install new surface mounted receiver at bottom of metal siding. Extend vertical flange of receiver behind siding a minimum of 4 inches and secure to substrate using screws at 9 inches on center. Secure new counterflashing to receiver using pop rivets at 6 inches on center.

## 3.8 SCUPPER INSTALLATION

- A. Install new scupper liners at locations as specified herein. Refer to SMACNA Architectural Sheet Metal Manual Figure 1-26.
- B. Refer to sheet metal schedule for gauge and metal type.
- C. Cover all masonry surfaces to be in contact with scupper with a bed of roofing cement.

D. Install scupper. Install closure flanges at both sides of wall, lock and seal closure flange seams.

END OF SECTION 07620



# **Bulk Asbestos Analysis**

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E





Customer: Terracon

72 Pointe Circle Greenville, SC 29615 Attn: Stephen Ellis Jeffrey Gurrie **Lab Order ID:** 71937573

**Analysis ID:** 71937573 PLM

Date Received: 3/2/2020 Date Reported: 3/5/2020

**Project:** Candler Elementary Roof FH196268

Sample ID	Description		Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	- Asbestos	Components	Components	Treatment
CEA-1 - A	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_1	built up roofing				Dissolved
CEA-1 - B	Thin Roofing	None Detected	80% Cellulose	20% Other	Brown, White Fibrous Homogeneous
71937573PLM_10	insulation				Teased
CEA-2 - A	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_2	built up roofing				Dissolved
CEA-2 - B	Thin Roofing	None Detected	90% Cellulose	10% Other	Brown Fibrous Homogeneous
71937573PLM_11	insulation				Teased
CEA-3	Thin Roofing	None Detected	20% Cellulose 20% Fiber Glass	60% Other	Black Non Fibrous Heterogeneous
71937573PLM_3	built up roofing				Dissolved
CEB-1	Flashing	8% Chrysotile	20% Cellulose 20% Fiber Glass	52% Other	Black Non Fibrous Heterogeneous
71937573PLM_4	built up roofing				Dissolved
CEB-2	Flashing	Not Analyzed			
71937573PLM_5	1				
CEB-3	Flashing	Not Analyzed			
71937573PLM_6	1				

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Byron Stroble (11)

P-F-002 r15 1/16/2021

Analyst

Approved Signatory



# **Bulk Asbestos Analysis**

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E





Customer: Terracon

72 Pointe Circle Greenville, SC 29615 Attn: Stephen Ellis Jeffrey Gurrie

**Lab Order ID:** 71937573

**Analysis ID:** 71937573\_PLM

**Date Received:** 3/2/2020 **Date Reported:** 3/5/2020

**Project:** Candler Elementary Roof FH196268

Sample ID  Lab Sample ID	Description  Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
CEC-1	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_7					Dissolved
CEC-2	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_8					Dissolved
CEC-3	Thin Roofing	None Detected	20% Cellulose	80% Other	Black Non Fibrous Heterogeneous
71937573PLM_9					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Byron Stroble (11)

Approved Signatory

Client: \*Instructions: Version 1-15-2012 Terracon Use Column "B" for your contact info Contact: Stephen Ellis Address: 72 Pointe Circle, Greenville, SC 29615 Phone: 423-426-2164 To See an Example Click the bottom Example Tab. Fax: stephen.ellis@terracon.com Email: Enter samples between "<<" and ">>" jeff.gurrie@terracon.com Begin Samples with a "<< "above the first sample Candler Elementary Roof Scientific Project: and end with a ">>" below the last sample. Analytical FH196268 Positive Stop Only Enter your data on the first sheet "Sheet1" Institute **Client Notes:** P.O. #. 4604 Dundas Drive Relinquished by: Greensboro, NC 27407 2/28/2020 0:00 Date Submitted: Stephen Ellis Phone: 336.292.3888 Fax: 336.292.3313 PLM EPA 600 Analysis: Email: lab@sailab.com TurnAroundTime: 3 Day TAT

Sample Number Data 1	Sample Description	Data 2	
<<			
CEA-1	Thin Roofing	PLM	
CEA-2	Thin Roofing	PLM	
CEA-3	Thin Roofing	PLM	
CEB-1	Flashing	PLM	
CEB-2	Flashing	PLM	
CEB-3	Flashing	PLM	
CEC-1	Thin Roofing	PLM	
CEC-2	Thin Roofing	PLM	
CEC-3	Thin Roofing	PLM	
>>			

Accepted Rejected 3 2. 10:30um