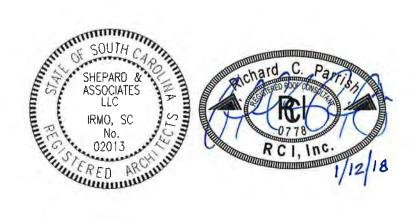
Architect: Shepard & Associates, LLC

3547 Dreher Shoals Road, Suite 6 Irmo, South Carolina 29063 Phone: 803/407-8284 Fax: 803/407-8206

Owner: School District Five of Lexington and Richland Counties 1020 Dutch Fork Road Irmo, SC 29063

> A PROJECT MANUAL FOR THE ROOF REPLACEMENT PROJECT AT CHAPIN INTERMEDIATE SCHOOL ORIGINAL BUILDING (PHASE II) JANUARY 2018



Bid No. 2018-023 PF 3006.036 004 January 2018 RCP: bsa

ROOF REPLACEMENT PROJECT AT CHAPIN INTERMEDIATE SCHOOL ORIGINAL BUILDING (PHASE II)

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- NOTE: The pages of each specification section are numbered independently for each section and the total number of pages for each section is recorded in this Table of Contents. Each Section is concluded with an End of Section statement. It shall be the Contractor's responsibility to verify that specifications received for bidding and/or construction are complete in accordance with this Table of Contents; no additional compensation will be allowed the Contractor due to belated discovery of missing pages.

END OF TABLE OF CONTENTS

AIA DOCUMENT A701-1997 INSTRUCTIONS TO BIDDERS IS A PART OF THESE BID DOCUMENTS AS IF PRINTED HEREIN IN ITS ENTIRETY. DOCUMENT IS AVAILABLE FOR REVIEW AT THE OFFICE OF

Shepard & Associates, LLC 3547 Dreher Shoals Road, Suite 6 Irmo, SC 29063 803-407-8284

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS GENERAL CONDITIONS INCORPORATION OF DOCUMENTS

The "Instructions to Bidders," American Institute of Architects Document A701, 1997 Edition, Article 1 through 8 inclusive is a part of this Project Manual and is referenced to herein as the Instructions to Bidders.

EFFECT OF SUPPLEMENTARY INSTRUCTIONS

The following supplements modify, delete from, or add to, the INSTRUCTIONS TO BIDDERS. Where any article, paragraph or subparagraph in the INSTRUCTIONS TO BIDDERS is supplemented by one of the following paragraphs, the provisions of such article, paragraph or subparagraph shall remain in effect and the supplemental provisions shall be considered as added thereto. Where any article, paragraph or subparagraph in the INSTRUCTIONS TO BIDDERS is amended, voided or superseded by any of the following paragraphs, the provisions of such article, paragraph or subparagraph not so amended, voided or superseded shall remain in effect.

ARTICLE 1- DEFINITIONS

1.10 Wherever the word "ARCHITECT" appears in the INSTRUCTIONS TO BIDDERS substitute therefore "ARCHITECT/ENGINEER" ("A/E").

ARTICLE 2 - BIDDER'S REPRESENTATIONS

Add the following:

2.1.4 Bidder has secured on-site measurements for quantities upon which Bidder's proposal is based and has observed all existing conditions and limitations.

ARTICLE 3 - BIDDING DOCUMENTS

Add the following:

- 3.2.4 The organization of the Specifications into divisions, sections and articles and the arrangement of Drawings shall not control the Bidder in dividing the Work among sub-bidders or in establishing the extent of Work to be performed by any trade.
- 3.2.5 This Project Manual is, in part, of the "streamlined" type and includes incomplete sentences. Omissions of words or phrases such as "the Contractor shall," "as noted on the drawings" "according to the plans "a," "an", "all," are intentional and shall be supplied by inference by the reader. Words "shall" or "shall be" shall be supplied by inference where a colon (:) is used within a sentence or phrase. Where a manufacturer's name is mentioned, the words "as manufactured by" or "as made by" shall be understood.
- 3.2.6 A Pre-Bid Conference will be held for purposes of considering questions posed by Bidders as follows.

TIME:See Invitation to BidPLACE:See Invitation to Bid

- 3.2.6.1 All interpretations and corrections of Bidding Documents deriving from this Conference will be included in an addendum.
- 3.3.2 After "Architect's", in last sentence, add "and Owner's".

Bid No. 2018-023	
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RCP: bsa	

3.3.3 After "Architect", add "and Owner approve".

ARTICLE 4 - BIDDING PROCEDURE

4.2.1 Delete entire paragraph and replace with the following:

"Each Bid shall be accompanied by a bid security in the amount required by the Advertisement or Invitation to Bid pledging that Bidder will enter into a Contract with the Owner on the terms stated in this Bid and will, if required, furnish bonds as described hereunder in Article 7 governing the faithful performance of the Contract and the payment of all obligations arising there-under. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty".

Add the following:

4.2.4 Bid Bonds and checks will be returned to all except the three lowest bidders within ten (10) days after the formal opening of bids. The bid bond or check of the three lowest bidders will be returned within 48 hours after the Owner and Contractor have executed a Contract and the executed performance bond and payment bond has been approved by the Owner, or, if no award has been made within 60 days after the opening of bids, upon the demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of this bid.

Add the following:

4.3.1.1 South Carolina Bidder's License and Contractor's License Numbers if required should be shown on the outside of the bid envelope.

ARTICLE 5 - CONSIDERATION OF BIDS

Add the following:

5.2.1 The Owner reserves the right to disqualify bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder.

ARTICLE 6 - POST-BID INFORMATION

6.2 Delete entire paragraph.

Add the following:

6.3.5 At or before delivery of signed agreement, Bidder shall deliver to Owner the policies of insurance or certificates.

ARTICLE 7 - TIME OF DELIVERY AND FORM OF BONDS

Change Paragraph 7.2.1 to read:

7.2.1 The Bidder shall deliver the required bonds to the Owner, prior to signing of the contract.

Change 7.2.3 to read:

7.2.3 The bonds shall be dated on or before the date of the contract.

00700 - 2 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Add the following:

ARTICLE 9 - CONTRACTOR'S LICENSES

- 9.1 Each bidder (should his bid exceed \$5,000) shall obtain a Contractor's License under the provisions of the Contractor's Licensing Law (1976 Code) Volume 14, Chapter 11, Section 40-11-10 through 40-11-340 as amended. Specialty Contractor's Licenses can be obtained for the various building trades and information regarding these licenses can be obtained from the South Carolina Licensing Board for Contractors. It shall be the bidder's responsibility to provide appropriate licensing to perform the work described in the contract documents.
- 9.1.2 Any Owner hiring or contracting or having a Contract with any non-resident Contractor, where such contract exceeds \$10,000 or can be expected to exceed that amount, shall be required by law to withhold two percent (2%) of each and every payment made after January 1, 1959, to such non-resident individuals and partnerships, and foreign corporations as well.
- 9.1.3 If a Contractor has any employees earning income in South Carolina who are legal residents of another state, he also becomes a withholding agent and must withhold South Carolina Income Taxes from the earnings of the non-resident employees on the basis of tables furnished by the South Carolina Tax Commission. If a Contractor subcontracts with other non-resident Contractors, he must withhold two percent (2%) of each and every payment made to the subcontractor if the total amount of the subcontract exceeds \$10,000 or can be expected to exceed that amount. The subcontractor may obtain in the same relief as a Contractor by posting bond, per stipulations of this Act.

9.2 EXISTING UTILITIES

Each Contractor shall be responsible for the protection of underground and overhead utilities in the work area which are shown on the Drawings and/or which can be detected by a visual inspection of the job site. Each Contractor is cautioned, however, that there may exist unknown underground utilities neither visible nor shown on the Drawings. Each Contractor will take all reasonable precautions necessary to detect and preserve the services that these utilities provide. It shall be the responsibility of the Contractor to contact a utility locator service to have all utilities marked prior to commencement of work. Should additional work be caused to the Contractor by the presence of such unknown underground utilities, the cost borne by the Contractor as a result of same shall be reimbursed by the Owner through the use of a negotiated change order. Should any utility interruptions occur, the Contractor shall immediately restore these same utilities to prevent further damages or Owner inconveniences.

9.3 EXCESS EXCAVATED MATERIALS

The bidder is responsible for removing from the site all excess or unsuitable excavated material generated by these activities unless specifically provided for in the Drawings and Specifications or approved by the Program Manager.

9.4 PROHIBITION AGAINST GRATUITIES, ETC.

The Contractor's attention is directed to Section 8-13-420 of the South Carolina Code of Laws, 1976 as amended regarding the prohibition against gratuities and kickbacks, etc.

9.5 ACCESS TO PROJECT

The successful bidder will not be permitted to occupy the site of the Work or allowed on the property of the Owner until insurance and bond requirements have been accepted and approved and the written Notice to Proceed has been issued.

END OF SECTION 00700

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I. SCOPE OF SOLICITATION

Reroofing construction at Chapin Intermediate School (Phase II).

II. INSTRUCTIONS TO OFFERORS – A. GENERAL INSTRUCTIONS

DEFINITIONS, CAPITALIZATION, AND HEADINGS: CLAUSE HEADINGS USED IN THIS SOLICITAION ARE FOR CONVENIENCE ONLY AND SHALL NOT BE USED TO CONSTRUE MEANING OR INTENT. EVEN IF NOT CAPITALIZED, THE FOLLOWING DEFINITIONS ARE APPLICABLE TO ALL PARTS OF THE SOLICITATION, UNLESS EXPRESSLLY PROVIDED OTHERWISE.

AMENDMENT means a document issued to supplement the original solicitation document.

BOARD means the Board of Trustees of District Five of Lexington and Richland Counties.

BUSINESS means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity.

CHANGE ORDER means any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of any contract accomplished by mutual agreement of the parties to the contract.

CONTRACT means all types of District Five of Lexington and Richland Counties' agreements, regardless of what they may be called, for the procurement or disposal of supplies, services, equipment or construction.

CONTRACT MODIFICATION means a written order signed by the Procurement Officer, directing the contractor to make changes which the clause of the contract TITLED "Changes, "if included herein, authorizes the Procurement Coordinator to order without the consent of the contractor.

CONTRACTOR means the Offeror receiving an award as a result of this solicitation.

COVER PAGE means the top page of the original solicitation on which the solicitation is identified by number. Offerors are cautioned that Amendments may modify information provided on the Cover Page. DISTRICT means District Five of Lexington and Richland Counties.

OFFER means the bid, quote or proposal submitted in response this solicitation. The terms Bid and Proposal are used interchangeably with the term Offer.

OFFEROR means the single legal entity submitting the offer. The term Bidder is used interchangeably with the term Offeror. See bidding provisions entitled Signing Your Offer and Bid/Proposal As Offer To Contract.

PAGE TWO means the second page of the original solicitation, which is labeled Page Two.

PROCUREMENT OFFICER means the person, or his successor, identified as such on either the cover page, an amendment, or an award notice.

YOU and YOUR means Offeror.

SOLICITATION means this document, including all its parts, attachments, and any Amendments. SUBCONTRACTOR means any person you contract with to perform or provide any part of the work. WORK means all labor, materials, equipment, services, or property of any type, provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract.

AMENDMENTS TO SOLICITATION: (a) The Solicitation may be amended at any time prior to opening. All bidders requesting the bid package will be sent copies of all amendments. (b) Offerors shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on Page Two (3) by letter, or (4) by submitting a bid that indicates in some way that the bidder received the amendment. (c) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

AWARD NOTIFICATION: Notice regarding any award, cancellation of award, or extension of award will be posted at the location specified on the Cover Page. If the contract resulting from this Solicitation has a total or potential value in excess of fifty thousand dollars, in addition to the posted notice, notice of intended award will be sent to all Offerors responding to the Solicitation. Any award resulting from this Solicitation will not be effective until the eleventh day after such notice is given. When only one response is received, the notice of intended award and the ten-day delay of award may be waived.

BID/PROPOSAL AS OFFER TO CONTRACT: By submitting Your Bid or Proposal, You are offering to enter into a contract with District Five of Lexington and Richland Counties. Without further action by either party, a binding contract shall result upon final award. Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror on the Cover Page. An Offer may be submitted by only one legal entity; "joint bids" are not allowed.

BID ACCEPTANCE PERIOD: In order to withdraw Your Offer after the minimum period specified on the Cover Page, You must notify the Procurement Officer in writing.

BID IN ENGLISH and DOLLARS: Offers submitted in response to this solicitation shall be in the English language and in US dollars, unless otherwise permitted by the Solicitation.

CERTIFICATE OF INDEPENDENT PRICE DETERMINATION: GIVING FALSE, MISLEADING, OR INCOMPLETE INFORMATION ON THIS CERTIFICATION MAY RENDER YOU SUBJECT TO PROSECUTION UNDER SECTION 16-9-10 OF THE SOUTH CAROLINA CODE OF LAWS AND OTHER APPLICABLE LAWS.

(a) By submitting an offer, the Offeror certifies that:

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other Offeror or competitor relating to:

(i) Those prices;

(ii) The intention to submit an offer; or

(iii) The methods or factors used to calculate the prices offered.

(2) The prices in this offer have not been and will not be knowingly disclosed by the Offeror, directly or indirectly, to any other Offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the Offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory:

(1) Is the person in the Offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; or

(2)(i) Has been authorized, in writing, to act as agent for the Offeror's principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs

(a)(1) through (a)(3) of this certification [As used in this subdivision (b)(2)(i), the term "principals" means the person(s) in the Offeror's organization responsible for determining the prices offered in this bid or proposal];

(ii) As an authorized agent, does certify that the principals referenced in subdivision (b)(2)(i) of this certification have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification.

(c) If the Offeror deletes or modifies paragraph (a)(2) of this certification, the Offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

CERTIFICATION REGARDING DEBARMENT AND OTHER RESPONSIBILITY MATTERS:

(a)

(1) By submitting an Offer, Offeror certifies, to the best of its knowledge and belief, that-

(i) Offeror and/or any of its Principals

(A) Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or federal agency;

(B) Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) Offeror has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any public (Federal, state, or local) entity.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

(b) Offeror shall provide immediate written notice to the Procurement Officer if, at any time prior to contract award, Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) If Offeror is unable to certify the representations stated in paragraphs (a)(1), Offer must submit a written explanation regarding its inability to make the certification. The certification will be considered in connection with a review of the Offeror's responsibility. Failure of the Offeror to furnish additional information as requested by the Procurement Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly or in bad faith rendered an erroneous certification, in addition to other remedies available to the District, the Procurement Officer may terminate the contract resulting from this solicitation for default.

Check for federal disbarments at <u>www.sam.gov</u> or <u>https://procurement.sc.gov/legal/legal-suspend-debar</u>

CODE OF LAWS AVAILABLE: The District's Procurement Code is available at: <u>www.lexrich5.org</u>.

COMPLETION OF FORMS/CORRECTION OF ERRORS: All prices and notations should be printed in ink or typewritten. Errors should be crossed out, corrections entered and initialed by the person signing the bid. Do not modify the solicitation document itself (including the bid schedule).

DEADLINE FOR SUBMISSION OF OFFER: Any offer received after the Procurement Officer of the District or designee has declared that the time set for opening has arrived, shall be rejected unless the offer has been delivered to the designated District office or mailroom as instructed on the Cover page prior to the bid opening.

DISCLOSURE OF CONFLICTS OF INTEREST OR UNFAIR COMPETITIVE ADVANTAGE: You warrant and represent that your offer identifies and explains any unfair competitive advantage you may have in competing for the proposed contract and any actual or potential conflicts of interest that may arise from your participation in this competition or your receipt of an award. The two underlying principles are (a) preventing the existence of conflicting roles that might bias a contractor's judgment, and (b) preventing an unfair competitive advantage. If you have an unfair competitive advantage or a conflict of interest, the District may withhold award. Before withholding award on these grounds, an Offeror will be notified of the concerns and provided a reasonable opportunity to respond. Efforts to avoid or mitigate such concerns, including restrictions on future activities, may be considered. Without limiting the foregoing, you represent that your offer identifies any services that relate to either this solicitation or the work and that has already been performed by you, a proposed subcontractor, or an affiliated business of either.

DRUG FREE WORK PLACE CERTIFICATION: By submitting an Offer, Contractor certifies that, if awarded a contract, Contractor will comply with all applicable provisions of The Drug-free Workplace Act, Title 44, Chapter 107 of the South Carolina Code of Laws, as amended.

CONTRACT VIOLATION: During the term of the contract, contractors who violate any contract will be considered in breach and subject to cancellation for cause. Contractors may be suspended or debarred from doing business with the District. Examples of vendor violations include but are not limited to: (1) Adding items to the contract without approval. (2) Increasing contract price without approval. (3) Misrepresentation of the contract to any District entity.

DUTY TO INQUIRE: Offeror, by submitting an Offer, represents that it has read and understands the Solicitation and that its Offer is made in compliance with the Solicitation. Offerors are expected to examine the Solicitation thoroughly and should request an explanation of any ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation. Failure to do so will be at the Offeror's risk. Offeror assumes responsibility for any patent ambiguity in the Solicitation that Offeror does not bring to the District's attention.

ETHICS CERTIFICATE: By submitting an offer, the offeror certifies that the offeror has and will comply with, and has not, and will not, induce a person to violate Title 8, Chapter 13 of the South Carolina Code of Laws, as amended (ethics act). The following statutes require special attention: Section 8-13-700, regarding use of official position for financial gain; Section 8-13-705, regarding gifts to influence action of public official; Section 8-13-720, regarding offering money for advice or assistance of public official; Section 8-13-760, regarding restrictions on employment by former public official; Section 8-13-755, prohibiting public official with economic interests from acting on contracts; Section 8-13-790, regarding restrictions on contributions by contractor to candidate who participated in awarding of contract. The district may rescind any contract and recover all amounts expended as a result of any action taken in violation of this provision. If contractor participates, directly or indirectly, in the evaluation or award of public contracts; should be law to file such a statement, provide the statement required by Section 8-13-1150 to the procurement officer at the same time the law requires the statement to be filed.

CIVIL RIGHTS PROVISIONS: The contractor providing services under this invitation to bid must comply with the provisions of the Civil Rights Act of 194, as amended.

PROHIBITION AGAINST CONFLICTS OF INTERESTS, GRATUITIES AND KICKBACKS: "Any employee or any official of the school district, elective or appointive, who shall take, receive or offer to take or receive either directly or indirectly, any rebate, percentage of contract, money or other things of value, as an inducement or intended inducement, in the procurement of business, or the giving of business, for, or to, or from, any person, partnership, firm of corporation, offering, bidding for, or in open market seeking to make sales to the school district shall be deemed guilty of a felony and upon conviction such person or persons shall be subject to punishment or a fine in accord with State and/or Federal laws."

IRAN DIVESTMENT ACT - CERTIFICATION

(a) The Iran Divestment Act List is a list published by the Authority pursuant to Section 11-57-310 that identifies persons engaged in investment activities in Iran. Currently, the list is available at the following URL: http://procurement.sc.gov/PS/PS-iran-divestment.phtm (.) Section 11-57-310 requires the government to provide a person ninety-days written notice before he is included on the list. The following representation, which is required by Section 11-57-330(A), is a material inducement for the District to award a contract to you. (b) By signing your Offer, you certify that, as of the date you sign, you are not on the then-current version of the Iran Divestment Act List. (c) You must notify the Procurement Officer immediately if, at any time before posting of a final statement of award, you are added to the Iran Divestment Act List.

PROTESTS: Any prospective bidder, Offeror, contractor, or subcontractor who is aggrieved in connection with the solicitation of a contract shall protest within fifteen (15) days of the date of issuance of the applicable solicitation document at issue. Any actual bidder, Offeror, contractor, or subcontractor who is aggrieved in connection with the intended award or award of a contract shall protest within ten (10) days of the date notification of award is posted in accordance with this code. A protest shall be in writing, shall set forth the grounds of the protest and the relief requested with enough particularity to give notice of the issues to be decided, and must be received by the Chief Procurement Officer within the time provided.

PUBLIC OPENING: Offers will be publicly opened at the date/time and at the location identified on the Cover Page, or last Amendment, whichever is applicable.

QUESTIONS FROM OFFERORS: (a) Any prospective Offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing. Questions must be received by the Procurement Officer no later than five (5) days prior to opening unless otherwise stated on the Cover Page. Label any communication regarding your questions with the name of the procurement officer, and the solicitation's title and number. Oral explanations or instructions will not be binding. Any information given a prospective Offeror concerning a solicitation will be furnished promptly to all other prospective Offerors as an Amendment to the solicitation, if that information is necessary for submitting offers or if the lack of it would be prejudicial to other prospective Offerors. We will not identify you in our answer to your question. (b) The District seeks to permit maximum practicable competition. Offerors are urged to advise the Procurement Officer -- as soon as possible -- regarding any aspect of this procurement, including any aspect of the Solicitation, that unnecessarily or inappropriately limits full and open competition.

<u>Email is the preferred method for submitting questions with "Questions: Solicitation # as the subject of the email. Questions must be submitted in an easily copied format such as Word.</u>

Email: D5bids@lexrich5.org

Questions may also be submitted to the address listed on the Cover Page of this document or faxed to (803) 476-8032.

REJECTION/CANCELLATION: The District may cancel this solicitation in whole or in part. The District may reject any or all proposals in whole or in part.

RESPONSIVENESS/IMPROPER OFFERS: (a) Bid as Specified. Offers for supplies or services other than those specified will not be considered unless authorized by the Solicitation.

(b) Multiple Offers. Offerors may submit more than one Offer, provided that each Offer has significant differences other than price. Each separate Offer must satisfy all Solicitation requirements. If this solicitation is an Invitation for Bids, each separate offer must be submitted as a separate document. If this solicitation is a Request for Proposals, multiple offers may be submitted as one document, provided that you clearly differentiate between each offer and you submit a separate cost proposal for each offer, if applicable.

(c) Responsiveness. Any Offer which fails to conform to the material requirements of the Solicitation may be rejected as nonresponsive. Offers which impose conditions that modify material requirements of the Solicitation may be rejected. If a fixed price is required, an Offer will be rejected if the total possible cost to the District cannot be determined. Offerors will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Officer.

(d) Price Reasonableness: Any offer may be rejected if the Procurement Officer determines in writing that it is unreasonable as to price.

(e) Unbalanced Bidding. The district may reject an Offer as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

PROHIBITED COMMUNICATIONS AND DONATIONS: Violation of these restrictions may result in disqualification of your offer, suspension or debarment, and may constitute a violation of law. (a) During the period between publication of the solicitation and final award, *you must not communicate, directly or indirectly, with the with District or its employees, agents or officials regarding any aspect of this procurement activity,* unless otherwise approved in writing by the Procurement Officer. (b) You are advised to familiarize yourself with Regulation 19-445.2165, which restricts donation to a governmental entity with whom you have or seek to have a contract. You represent that your offer discloses any gifts made, directly or through an intermediary, by you or your named subcontractors to or for the benefit of the District during the period beginning eighteen months prior to the opening date.

SIGNING YOUR OFFER: Every Offer must be signed by an individual with actual authority to bind the Offer. (a) If the Offeror is an individual, the Offer must be signed by that individual. If the Offeror is an individual, and state that the individual is doing business as a firm. (b) If the Offeror is a partnership, the Offer must be submitted in the partnership name, followed by the words by its Partner, and signed by a general partner. (c) If the Offeror is a corporation, the Offer must be submitted in the corporate name, followed by the signature and title of the person authorized to sign. (d) An Offer may be submitted by a joint venture involving any combination of individuals, partnerships, or corporations. If the Offeror is a joint venture, the Offer must be submitted in the name of the Joint Venture and signed by every participant in the joint venture in the manner prescribed in paragraphs (a) through (c) above for each type of participant. (e) If an Offer is signed by an agent, other than as stated in subparagraphs (a) through (d) above, the Offer must state that is has been signed by an Agent. Upon request, Offeror must provide proof of the agent's authorization to bind the principal.

DISTRICT OFFICE CLOSINGS: If an emergency or unanticipated event interrupts normal processes so that offers cannot be received at the District as designated for receipt of bids by the exact time specified in the solicitation, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal processes resume. In lieu of an automatic extension, an Amendment may be issued to reschedule bid opening. If district offices are closed at the time a pre-bid or pre-proposal conference is scheduled, an Amendment will be issued to reschedule the conference. Useful information may be available at: http://www.lexrich5.org

SUBMITTING CONFIDENTIAL INFORMATION: (An available overview is at http://procurement.sc.gov/webfiles/MMO_Legal/Documents/FOIA_page.pdf) For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the word "CONFIDENTIAL" every page, or portion thereof, that Offeror contends contains information that is exempt from public disclosure because it is either (a) a trade secret or (b) privileged and confidential. For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the words "TRADE SECRET" every page, or portion thereof, that Offeror contends contains a trade secret as that term is defined by Section 39-8-20 of the Trade Secrets Act. For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the word "PROTECTED" every page, or portion thereof, that Offeror contends is protected by Section 11-35-1810. All markings must be conspicuous; use color, bold, underlining, or some other method in order to conspicuously distinguish the mark from the other text. Do not mark your entire response (bid, proposal, quote, etc.) as confidential, trade secret, or protected. If your response, or any part thereof, is improperly marked as confidential or trade secret or protected, the District may, in its sole discretion, determine it nonresponsive. If only portions of a page are subject to some protection, do not mark the entire page. By submitting a response to this solicitation or request, Offeror (1) agrees to the public disclosure of every page of every document regarding this solicitation or request that was submitted at any time prior to entering into a contract (including, but not limited to, documents contained in a response, documents submitted to clarify a response, and documents submitted during negotiations), unless the page is conspicuously marked "TRADE SECRET" or "CONFIDENTIAL" or "PROTECTED", (2) agrees that any information not marked, as required by these bidding instructions, as a "Trade Secret" is not a trade secret as defined by the Trade Secrets Act, and (3) agrees that, notwithstanding any claims or markings otherwise, any prices, commissions, discounts, or other financial figures used to determine the award, as well as the final contract amount, are subject to public disclosure. In determining whether to release documents, the District will detrimentally rely on Offeror's marking of documents, as required by these bidding instructions, as being either "Confidential" or "Trade Secret" or "PROTECTED". By submitting a response, Offeror agrees to defend, indemnify and hold harmless the District, its officers and employees, from every claim, demand, loss, expense, cost, damage or injury, including attorney's fees, arising out of or resulting from the District withholding information that Offeror marked as "confidential" or "trade secret" or "PROTECTED". (All references to S.C. Code of Laws.)

SUBMITTING YOUR OFFER OR MODIFICATION: (a) Offers and offer modifications shall be submitted in sealed envelopes or packages - (1) Addressed to the Office of Procurement Services as specified in the Solicitation; and (2) Showing the time and date specified for opening, the solicitation number, and the name and address of the bidder. (b) If you are responding to more than one solicitation, each offer must be submitted in a different envelope or package. (c) Each Offeror must submit the number of copies indicated on the Cover Page. (d) Offerors using commercial carrier services shall ensure that the Offer is addressed and marked on the outermost envelope or wrapper as prescribed in paragraphs (a)(1) and (2) of this provision when delivered to the office specified in the Solicitation. (e) Facsimile or e-mail offers, modifications, or withdrawals, will not be considered.

TAXPAYER IDENTIFICATION NUMBER: (a) If Offeror is owned or controlled by a common parent as defined in paragraph (b) of this provision, Offeror shall submit with its Offer the name and TIN of common parent.

(b) Definitions: "Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the Offeror is a member. "Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the Offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(c) If Offeror does not have a TIN, Offeror shall indicate if either a TIN has been applied for or a TIN is not required. If a TIN is not required, indicate whether (i) Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of

a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States; (ii) Offeror is an agency or instrumentality of a state or local government; (iii) Offeror is an agency or instrumentality of a foreign government; or (iv) Offeror is an agency or instrumentality of the Federal Government.

VENDOR REGISTRATION: Offerors who have not provided products/services to the District in the past or within the past three years should complete a W-9 and submit it with your offer.

WITHDRAWAL OR CORRECTION OF OFFER: Offers may be withdrawn by written notice received at any time before the exact time set for opening. If the Solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for opening. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid. The withdrawal and correction of Offers is governed by S.C. Code Section 11-35-1520 and Regulation 19-445.2085.

II. INSTRUCTIONS TO OFFERORS – B. Special Instructions

Award of this project is subject to approval by the School Board of School District Five of Lexington and Richland Counties.

CLARIFICATION: Pursuant to Section 11-35-1520(8), the Procurement Officer may elect to communicate with you after opening for the purpose of clarifying either your offer or the requirements of the solicitation. Such communications may be conducted only with Offerors who have submitted an offer which obviously conforms in all material aspects to the solicitation. Clarification of an offer must be documented in writing and included with the offer. Clarifications may not be used to revise an offer or the solicitation.

BACKGROUND CHECKS: Any and all persons with whom vendor/contractor employs, contracts, or otherwise causes to be located on District property shall have passed a South Carolina and Nationwide criminal background check, to include the nationwide Sex Offender Registry. Successful completion of the criminal background checks shall occur prior to such individuals being present on District property. The contractor/vendor is solely responsible for any and all fees and/or charges associated with completion of the background check(s) required herein. The District reserves the right to deny access to any employee, contractor of person caused to be present on District property by the vendor/contractor. Removal of employees on this basis shall not disrupt the project schedule or cost.

SHIPPING AND HANDLING: Shipping and handling must be included in the cost. The District will not pay a separate shipping and handling charge.

PROTEST – CPO - DISTRICT ADDRESS: Any protest must be addressed to the Chief Procurement Officer, District Five of Lexington and Richland Counties, and submitted in writing at 1020 Dutch Fork Road, Irmo, SC 29063.

EVERY RESULTING CONTRACT IS SUBJECT TO ALL TERMS OF THE DISTRICT PROCUREMENT CODE INCLUDING LIMITATIONS AS TO DURATION, RIGHTS OF THE DISTRICT TO TERMINATE AND MEANS OF DISPUTE RESOLUTION. NO RESULTING CONTRACT IS RENEWABLE EXCEPT TO THE EXTENT PROVIDED IN THE SOLICITATION. NO VENDOR TERMS TAKE PRECEDENCE OVER THE SOLICITATION AND DISTRICT PROCUREMENT CODE.

III. SCOPE OF WORK / SPECIFICATIONS

SCOPE OF WORK: Reroofing construction at Chapin Intermediate School per the drawings, plans, specifications and special conditions prepared by Shepard and Associates, LLC.

QUALITY OF PRODUCT: Unless otherwise indicated in this bid, it is understood and agreed that any item offered or shipped on this bid shall be new and in first class condition, that all containers shall be new and suitable for storage or shipment, and that prices include standard commercial packaging.

DELIVERY LOCATION: After award, all deliveries shall be made, and all services provided to the location specified in the purchase order.

BRAND NAME: Items included in this solicitation are brand name and model specific.

OPERATIONAL MANUALS: Unless otherwise specified, contractor shall provide (2) two operational manuals for each item acquired.

SPECIFICATIONS: Per the plans, drawings, specifications and special conditions prepared by Shepard and Associates, LLC.

IV. INFORMATION FOR OFFERORS TO SUBMIT

INFORMATION FOR OFFERORS TO SUBMIT – GENERAL: Offeror shall submit a signed Cover Page, Page Two, and Amendments (if applicable). Offeror should submit all other information and documents requested in this part and in parts II.B. Special Instructions; III. Scope of Work; V. Qualifications; VIII. Bidding Schedule; and any appropriate attachments addressed in section IX. Attachments to Solicitations.

V. QUALIFICATIONS

QUALIFICATION OF OFFEROR: (1) To be eligible for award of a contract, a prospective contractor must be responsible. In evaluating an Offeror's responsibility, the District's standards of responsibility and information from any other source may be considered. An Offeror must, upon request of the District, furnish satisfactory evidence of its ability to meet all contractual requirements. Unreasonable failure to supply information promptly in connection with a responsibility inquiry may be grounds for determining that you are ineligible to receive an award.

VI. AWARD CRITERIA

AWARD BY LOT: Award will be made by lump sum base bid.

AWARD CRITERIA: Award will be made to the lowest responsive and responsible bidder.

AWARD TO ONE OFFEROR: Award will be made to one Offeror.

VII. TERMS AND CONDITIONS – A. General

ASSIGNMENT, NOVATION, AND CHANGE OF NAME, IDENTITY, OR STRUCTURE

(a) Contractor shall not assign this contract, or its rights, obligations, or any other interest arising from this contract, or delegate any of its performance obligations, without the express written consent of the responsible procurement officer. The foregoing restriction does not apply to a transfer that occurs by operation of law (e.g., bankruptcy; corporate reorganizations and consolidations, but not including partial asset sales). Notwithstanding the foregoing, contractor may assign monies receivable under the contract provided that the District shall have no obligation to make payment to an assignee until thirty days after contractor (not the assignee) has provided the responsible procurement officer with (i) proof of the assignment, (ii) the identity (by contract number) of the specific District contract to which the assigned payments should be made. (b) If contractor amends, modifies, or otherwise changes its name, its identity (including its trade name), or its corporate, partnership or other structure, or its FEIN, contractor shall provide the procurement officer prompt written notice of such change. (c) Any name change, transfer, assignment, or novation is subject to the conditions and approval required by Regulation 19-445.2180, which does not restrict transfers by operation of law.

BANKRUPTCY: (a) Notice. In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the District. This notification shall be furnished within two (2) days of the initiation of the proceedings relating to the bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of all District contracts against which final payment has not been made. This obligation remains in effect until final payment under this Contract. (b) Termination. This contract is cancellable and subject to immediate termination by the District upon the contractor's insolvency, including the filing of proceedings in bankruptcy.

CHOICE-OF-LAW: The Agreement, any dispute, claim, or controversy relating to the Agreement, and all the rights and obligations of the parties shall, in all respects, be interpreted, construed, enforced and governed by and under the laws of the State of South Carolina, except its choice of law rules. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by the solicitation.

CONTRACT DOCUMENTS & ORDER OF PRECEDENCE: (a) Any contract resulting from this solicitation shall consist of the following documents: (1) a Record of Negotiations, if any, executed by you and the Procurement Officer, (2) documentation regarding the clarification of an offer , if applicable, (3) the solicitation, as amended, (4) modifications, if any, to your offer, if accepted by the Procurement Officer, (5) your offer, (6) any statement reflecting the District's final acceptance (a/k/a "award"), and (7) purchase orders. These documents shall be read to be consistent and complimentary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above. (b) The terms and conditions of documents (1) through (6) above shall apply notwithstanding any additional or different terms and conditions in either (i) a purchase order or other instrument submitted by the District or (ii) any invoice or other document submitted by Contractor. Except as otherwise allowed herein, the terms and conditions of all such documents shall be void and of no effect. (c) No contract, license, or other agreement containing contractual terms and conditions will be signed by the District. Any document signed or otherwise agreed to by persons other than the Procurement Officer or designee shall be void and of no effect.

DISCOUNT FOR PROMPT PAYMENT: (a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award and will be taken if payment is made within the discount period indicated in the offer by the Offeror. As an alternative to offering a discount for prompt payment in conjunction with the offer, Offerors awarded contracts may include discounts for prompt payment on individual invoices. (b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office

receives a proper invoice, provided the District annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or a legal holiday when Federal Government offices are closed, and Government business is not expected to be conducted, payment may be made on the following business day.

DISPUTES: (1) Choice-of-Forum. All disputes, claims, or controversies relating to the Agreement shall be resolved exclusively by the appropriate Chief Procurement Officer in accordance with Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws, or in the absence of jurisdiction, only in the Court of Common Pleas for, or a federal court located in, Richland County, State of South Carolina. Contractor agrees that any act by the Government regarding the Agreement is not a waiver of either the Government's sovereign immunity or the Government's immunity under the Eleventh Amendment of the United States Constitution. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by the solicitation. (2) Service of Process. Contractor consents that any papers, notices, or process necessary or proper for the initiation or continuation of any disputes, claims, or controversies relating to the Agreement; for any court action in connection therewith; or for the entry of judgment on any award made, may be served on Contractor by certified mail (return receipt requested) addressed to Contractor at the address provided as the Notice Address on Page Two or by personal service or by any other manner that is permitted by law, in or outside South Carolina. Notice by certified mail is deemed duly given upon deposit in the United States mail.

EQUAL OPPORTUNITY: Contractor is referred to and shall comply with all applicable provisions, if any, of Title 41, Part 60 of the Code of Federal Regulations, including but not limited to Sections 60-1.4, 60-4.2, 60-4.3, 60-250.5(a), and 60-741.5(a), which are hereby incorporated by reference.

FALSE CLAIMS: According to the S.C. Code of Laws § 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime.

FIXED PRICING REQUIRED: Any pricing provided by contractor shall include all costs for performing the work associated with that price. Contractor's price shall be fixed for the duration of this contract, including option terms, except as otherwise provided in this solicitation. This clause does not prohibit contractor from offering lower pricing after award.

NO INDEMNITY OR DEFENSE: Any term or condition is void to the extent it requires the District to indemnify, defend, or pay attorney's fees to anyone for any reason anyone.

NOTICE: (A) After award, any notices shall be in writing and shall be deemed duly given (1) upon actual delivery, if delivery is by hand, (2) upon receipt by the transmitting party of automated confirmation or answer back from the recipient's device if delivery is by telex, telegram, facsimile, or electronic mail, or (3) upon deposit into the United States mail, if postage is prepaid, a return receipt is requested, and either registered or certified mail is used. (B) Notice to contractor shall be to the address identified on Cover Page. Notice to the District shall be to the Procurement Officer's address on the Cover Page. Either party may designate a different address for notice by giving notice in accordance with this paragraph.

PAYMENT & INTEREST: (a) Unless otherwise provided in this Solicitation, the District shall pay the Contractor, after the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified herein, including the purchase order, payment shall not be made on partial deliveries accepted by the District. (b) Unless otherwise provided herein, including the purchase order, payment will be made by check mailed to the payment address on "page Two." (c) Notwithstanding any other provision, payment shall be made in accordance with S.C. Code Section 11-35-45 or or Chapter 6 of Title 29 (real property improvements) when applicable, which provides the

Contractor's exclusive means of recovering any type of interest from the Owner. Contractor waives imposition of an interest penalty unless the invoice submitted specifies that the late penalty is applicable. Except as set forth in this paragraph, the District shall not be liable for the payment of interest on any debt or claim arising out of or related to this contract for any reason. (d) Amounts due to the District shall bear interest at the rate of interest established by the South Carolina Comptroller General pursuant to Section 11-35-45 ("an amount not to exceed fifteen percent each year"), as amended unless otherwise required by Section 29-6-30 (e) Any other basis for interest, including but not limited to general (pre- and post-judgment) or specific interest statutes, including S.C. Code Ann. § 34-31-20, are expressly waived by both parties. If a court, despite this agreement and waiver, requires that interest be paid on any debt by either party other than as provided by items (c) and (d) above, the parties further agree that the applicable interest rate for any given calendar year shall be the lowest prime rate as listed in the first edition of the Wall Street Journal published for each year, applied as simple interest without compounding. (f) The District shall have all of its common law, equitable and statutory rights of set-off.

PUBLICITY: Contractor shall not publish any comments or quotes from District employees or include the District in either news releases or a published list of customers, without the prior written approval of the Procurement Officer.

PAYMENT FOR GOODS AND SERVICES: Payment for goods and services received by the District shall be processed in accordance with the District Procurement Code. A purchase order will be issued and must be referenced on all invoices presented for payment.

PURCHASE ORDERS: <u>CONTRACTOR SHALL NOT PERFORM ANY WORK PRIOR TO THE</u> <u>RECEIPT OF A PURCHASE ORDER FROM THE DISTRICT</u>. The District shall order any supplies or services to be furnished under this contract by issuing a purchase order. Purchase orders may be used to elect any options available under this contract, e.g., quantity, item, delivery date, payment method, but are subject to all terms and conditions of this contract. No particular form is required. An order placed pursuant to the purchasing card provision qualifies as a purchase order.

ITEM SUBSTITUTION: (This clause does not apply to solicitations for service requirements). No substitutes will be allowed on purchase orders received from the District without permission from the Procurement Official.

IRAN DIVESTMENT ACT – ONGOING OBLIGATIONS: (a) You must notify the procurement officer immediately if, at any time during the contract term, you are added to the Iran Divestment Act List. (b) Consistent with Section 11-57-330(B), you shall not contract with any person to perform a part of the Work, if, at the time you enter into the subcontract, that person is on the then-current version of the Iran Divestment.

SURVIVAL OF OBLIGATIONS: The Parties' rights and obligations which, by their nature, would continue beyond the termination, cancellation, rejection, or expiration of this contract shall survive such termination, cancellation, rejection, or expiration, including, but not limited to, the rights and obligations created by the following clauses: Indemnification - Third Party Claims, Intellectual Property Indemnification, and any provisions regarding warranty or audit.

SWMBE PARTICIPATION: District Five of Lexington and Richland Counties encourages SWMBE businesses to participate in the Solicitation process. All business conducted with SWMBE businesses certified by the South Carolina Governor's Office of Small and Minority Business Assistance is recorded in an annual report submitted to the Board of Trustees. In order to be included in this report, you must submit a copy of your certificate with your proposal.

TAXES: Any tax the contractor may be required to collect or pay upon the sale, use or delivery of the products shall be paid by the District, and such sums shall be due and payable to the contractor upon acceptance. Any personal property taxes levied after delivery shall be paid by the District. It shall be solely the District's obligation, after payment to contractor, to challenge the applicability of any tax by negotiation with, or action against, the taxing authority. Contractor agrees to refund any tax collected,

which is subsequently determined not to be proper and for which a refund has been paid to contractor by the taxing authority. In the event that the contractor fails to pay, or delays in paying, to any taxing authorities, sums paid by the District to contractor, contractor shall be liable to the District for any loss (such as the assessment of additional interest) caused by virtue of this failure or delay. Taxes based on Contractor's net income or assets shall be the sole responsibility of the contractor.

TERMINATION DUE TO UNAVAILABILITY OF FUNDS: Payment and performance obligations for succeeding fiscal periods shall be subject to the availability and appropriation of funds therefore. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period, the contract shall be canceled. In the event of a cancellation pursuant to this paragraph, contractor will be reimbursed the resulting unamortized, reasonably incurred, nonrecurring costs. Contractor will not be reimbursed any costs amortized beyond the initial contract term.

THIRD PARTY BENEFICIARY: This Contract is made solely and specifically among and for the benefit of the parties hereto, and their respective successors and assigns, and no other person will have any rights, interest, or claims hereunder or be entitled to any benefits under or on account of this Contract as a third-party beneficiary or otherwise.

WAIVER: The District does not waive any prior or subsequent breach of the terms of the Contract by making payments on the Contract, by failing to terminate the Contract for lack of performance, or by failing to strictly or promptly insist upon any term of the Contract. Only the Procurement Officer has actual authority to waive any of District's rights under this Contract. Any waiver must be in writing.

VII. TERMS AND CONDITIONS – B. SPECIAL

CHANGES: (1) Contract Modification. By a written order, at any time, and without notice to any surety, the Procurement Officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:

(a) Drawings, designs, or specifications, if the supplies to be furnished are to be specially manufactured for the District in accordance therewith;

(b) Method of shipment or packing;

(c) Place of delivery;

(d) Description of services to be performed;

(e) Time of performance (i.e., hours of the day, days of the week, etc.); or,

(f) Place of performance of the services.

Subparagraphs (a) to (c) apply only if supplies are furnished under this contract. Subparagraphs (d) to (f) apply only if services are performed under this contract.

(2) Adjustments of Price or Time for Performance. If any such change increases or decreases the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, an adjustment shall be made in the contract price, the delivery schedule, or both, and the contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the Price Adjustment Clause of this contract. Failure of the parties to agree to an adjustment shall not excuse the contractor from proceeding with the contract as changed, provided that the District promptly and duly make such provisional adjustments in payment or time for performance as may be reasonable. By proceeding with the work, the contractor shall not be deemed to have prejudiced any claim for additional compensation, or an extension of time for completion.

(3) Time Period for Claim. Within 30 days after receipt of a written contract modification under Paragraph (1) of this clause, unless such period is extended by the Procurement Officer in writing, the contractor shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the contractor's claim unless the District is prejudiced by the delay in notification.

(4) Claim Barred After Final Payment. No claim by the contractor for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.

CISG: The parties expressly agree that the UN Convention on the International Sale of Goods shall not apply to this agreement.

COMPLIANCE WITH LAWS: During the term of the contract, contractor shall comply with all applicable provisions of laws, codes, ordinances, rules, regulations, and tariffs.

CONTRACT LIMITATIONS: No sales may be made pursuant to this contract for any item or service that is not expressly listed. No sales may be made pursuant to this contract after expiration of this contract. Violation of this provision may result in termination of this contract and may subject contractor to suspension or debarment.

CONTRACTOR'S LIABILITY INSURANCE(General):

(a) Without limiting any of the obligations or liabilities of Contractor, Contractor shall procure from a company or companies lawfully authorized to do business in South Carolina and with a current A.M. Best rating of no less than A: VII, and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work and the results of that work by the contractor, his agents, representatives, employees or subcontractors.

(b) Coverage shall be at least as broad as:

(1) Commercial General Liability (CGL): Insurance Services Office (ISO) Form CG 00 01 12 07 covering CGL on an "occurrence" basis, including products-completed operations, personal and advertising injury, with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, the general aggregate limit shall be twice the required occurrence limit. This contract shall be considered to be an "insured contract" as defined in the policy.

(2) Auto Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Contractor has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limits no less than \$1,000,000 per accident for bodily injury and property damage.

(3) Worker's Compensation: As required by the State of South Carolina, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.

(c) The District and its officers, officials, employees and volunteers must be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used.

(d) For any claims related to this contract, the Contractor's insurance coverage shall be primary insurance as respects the District and its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the District and its officers, officials, employees and volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

(e) Prior to commencement of the work, the Contractor shall furnish the District with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this section. All certificates are to be received and approved by the District before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by this section, at any time.

(f) Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. In addition, the Contractor shall notify the District immediately upon receiving any information that any of the coverages required by this section are or will be changed, cancelled, or replaced.

(g) Contractor hereby grants to the District and all of its officers, officials, employees and volunteers a waiver of any right to subrogation which any insurer of said Contractor may acquire against the District by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement

that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.

(h) Any deductibles or self-insured retentions must be declared to and approved by the District. The District may require the Contractor to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

(i) The District reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

CONTRACTOR PERSONNEL: The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

CONTRACTOR'S OBLIGATION – GENERAL: The contractor shall provide and pay for all materials, tools, equipment, labor and professional and non-professional services, and shall perform all other acts and supply all other things necessary, to fully and properly perform and complete the work. The contractor must act as the prime contractor and assume full responsibility for any subcontractor's performance. The contractor will be considered the sole point of contact with regard to all situations, including payment of all charges and the meeting of all other requirements.

CONTRACTOR'S USE OF DISTRICT PROPERTY: Upon termination of the contract for any reason, the District shall have the right, upon demand, to obtain access to, and possession of, all District properties, including, but not limited to, current copies of all District application programs and necessary documentation, all data, files, intermediate materials and supplies held by the contractor. Contractor shall not use, reproduce, distribute, display, or sell any data, material, or documentation owned exclusively by the District without the District's written consent, except to the extent necessary to carry out the work.

DEFAULT: (a)(1)The District may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to-

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see paragraph (a)(2) of this clause); or

(iii) Perform any of the other material provisions of this contract (but see paragraph (a)(2) of this clause). (2) The District's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Procurement Officer) after receipt of the notice from the Procurement Officer specifying the failure.

(b) If the District terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Procurement Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the District for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the State in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, may require the Contractor to transfer title and deliver to the District, as directed by the Procurement Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Procurement Officer, the Contractor shall also protect and preserve property in its possession in which the District has an interest.

(f) The District shall pay contract price for completed supplies delivered and accepted. The Contractor and Procurement Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property; if the parties fail to agree, the Procurement Officer shall set an amount subject to the Contractor's rights under the Disputes clause. Failure to agree will be a dispute under the Disputes clause. The District may withhold from these amounts any sum the Procurement Officer determines to be necessary to protect the District against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the District, be the same as if the termination had been issued for the convenience of the District. If, in the foregoing circumstances, this contract does not contain a clause providing for termination for convenience of the District, the contract shall be adjusted to compensate for such termination and the contract modified accordingly subject to the contractor's rights under the Disputes clause.

(h) The rights and remedies of the District in this clause are in addition to any other rights and remedies provided by law or under this contract.

DISPOSAL OF PACKAGING: Contractor shall dispose of all wrappings, crating, and other disposable materials pertaining to this contract at the end of each working day and upon completion of installation. Contractor may not dispose of any waste created by or associated with this project in district owned waste receptacles.

DEFECTIVE GOODS: Any item delivered in an unacceptable condition will not be accepted. Successful bidder agrees to pay for return shipment of goods that arrive in a defective or inoperable condition. Offeror must agree to arrange for return shipment of damaged goods.

DESCRIPTIVE LITERATURE – LABELING: Include offeror's name on the cover of any specifications or descriptive literature submitted with your offer.

ILLEGAL IMMIGRATION: (An overview is available at www.procurement.sc.gov) By signing your offer, you certify that you will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agree to provide to the District upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable to you and your subcontractors or subsubcontractors; or (b) that you and your subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both." You agree to include in any contracts with your subcontractor's language requiring your subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in

their contracts with the sub-subcontractor's language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14. [07-7B097-1]

INDEMNIFICATION - THIRD PARTY CLAIMS - General: Notwithstanding any limitation in this agreement, and to the fullest extent permitted by law, Contractor shall defend and hold harmless Indemnitees for and against any and all suits or claims of any character (and all related damages, settlement payments, attorneys' fees, costs, expenses, losses or liabilities) by a third party which are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property arising out of or in connection with the goods or services acquired hereunder or caused in whole or in part by any act or omission of contractor, its subcontractors, their employees, workmen, servants, agents, or anyone directly or indirectly employed by them or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by an Indemnitee, and whether or not such claims are made by a third party or an Indemnitee; however, if an Indemnitee's negligent act or omission is subsequently determined to be the sole proximate cause of a suit or claim, the Indemnitee shall not be entitled to indemnification hereunder. Contractor shall be given timely written notice of any suit or claim. Contractor's obligations hereunder are in no way limited by any protection afforded under workers' compensation acts, disability benefits acts, or other employee benefit acts. This clause shall not negate, abridge, or reduce any other rights or obligations of indemnity which would otherwise exist. The obligations of this paragraph shall survive termination, cancelation, or expiration of the parties' agreement. This provision shall be construed fairly and reasonably, neither strongly for nor against either party, and without regard to any clause regarding insurance. As used in this clause, "Indemnitees" means District Five of Lexington and Richland Counties, its instrumentalities, agencies, departments, boards, and all their respective officers, agents and employees.

INTELLECTUAL PROPERTY: (a) Without limitation and notwithstanding any provision in this agreement, Contractor shall, upon receipt of notification, defend and indemnify the District, its instrumentalities, agencies departments, boards, political subdivisions and all their respective officers, agents and employees against all actions, proceedings or claims of any nature (and all damages, settlement payments, attorneys' fees (including inside counsel), costs, expenses, losses or liabilities attributable thereto) by any third party asserting or involving an IP right related to an acquired item. The District shall allow Contractor to defend such claim so long as the defense is diligently and capably prosecuted. The District shall allow Contractor to settle such claim so long as (i) all settlement payments are made by Contractor, and (ii) the settlement imposes no non-monetary obligation upon the District. The District shall reasonably cooperate with Contractor's defense of such claim.

(b) In the event an injunction or order shall be obtained against the District's use of any acquired item, or if in Contractor's opinion, the acquired item is likely to become the subject of a claim of infringement or violation of an IP right, Contractor shall, without in any way limiting the foregoing, and at its expense, either: (1) procure for the District the right to continue to use, or have used, the acquired item, or (2) replace or modify the acquired item so that it becomes non-infringing but only if the modification or replacement does not adversely affect the specifications for the acquired item or its use by the District. If neither (1) nor (2), above, is practical, the District may require that Contractor remove the acquired item from District, refund to the District any charges paid by District therefore and take all steps necessary to have the District released from any further liability.

(c) Contractors obligations under this paragraph do not apply to a claim to the extent (i) that the claim is caused by Contractor's compliance with specifications furnished by the District unless Contractor knew its compliance with the District's specifications would infringe an IP right, or (ii) that the claim is caused by Contractor's compliance with specifications furnished by the District if the District knowingly relied on a third party's IP right to develop the specifications provided to Contractor and failed to identify such product to Contractor.

(d) As used in this paragraph, these terms are defined as follows: "IP right(s)" means a patent, copyright,

trademark, trade secret, or any other proprietary right. "Acquired item(s)" means the rights, goods, or services furnished under this agreement. "Specification(s)" means a detailed, exact statement of particulars such as a statement prescribing materials, dimensions, and quality of work. (e) Contractor's obligations under this clause shall survive the termination, cancellation, rejection, or expiration of this Agreement.

LICENSES AND PERMITS: During the term of the contract, the Contractor shall be responsible for obtaining, and maintaining in good standing, all licenses (including professional licenses, if any), permits, inspections and related fees for each or any such licenses, permits and /or inspections required by the State, county, city or other government entity or unit to accomplish the work specified in this solicitation and the contract.

MATERIAL AND WORKMANSHIP: Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended.

PRICE ADJUSTMENTS: (1) Method of Adjustment. Any adjustment in the contract price made pursuant to a clause in this contract shall be consistent with this Contract and shall be arrived at through whichever one of the following ways is the most valid approximation of the actual cost to the Contractor (including profit, if otherwise allowed):

(a) By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;

(b) By unit prices specified in the Contract or subsequently agreed upon;

(c) by the costs attributable to the event or situation covered by the relevant clause, including profit if otherwise allowed, all as specified in the Contract; or subsequently agreed upon;

(d) in such other manner as the parties may mutually agree; or,

(e) in the absence of agreement by the parties, through a unilateral initial written determination by the Procurement Officer of the costs attributable to the event or situation covered by the clause, including profit if otherwise allowed, all as computed by the Procurement Officer in accordance with generally accepted accounting principles, subject to the provisions of Title 11, Chapter 35, Article 17 of the S.C. Code of Laws.

(2) Submission of Price or Cost Data. Upon request of the Procurement Officer, the contractor shall provide reasonably available factual information to substantiate that the price or cost offered, for any price adjustments is reasonable, consistent with the provisions of Section 11-35-1830.

RECORDS RETENTION AND RIGHT TO AUDIT: The District has the right to audit the books and records of the contractor as they pertain to this contract, both independent of, and pursuant to, the District Procurement Code. Such books and records shall be maintained for a period of three (3) years from the date of final payment under the contract.

RELATIONSHIP OF THE PARTIES: Neither party is an employee, agent, partner, or joint venturer of the other. Neither party has the right or ability to bind the other to any agreement with a third party or to incur any obligation or liability on behalf of the other party.

RELATIONSHIP OF USING GOVERNMENTAL UNITS: Each School District's obligations and liabilities are independent of every other District's obligations and liabilities. No District shall be responsible for any other District's act or failure to act.

SHIPPING / RISK OF LOSS: F.O.B. Destination. Destination is the shipping dock of the District's designated receiving site, or other location, as specified herein.

INSTALLATION: Price includes the equipment being delivered, uncrated, removal of all material, set in place, leveled if applicable, sanitized and ready for final connections by others.

PERFORMANCE PERIOD: Work shall be complete one hundred and ten (110) calendar days after the Notice to Proceed has been issued.

TERMINATION FOR CONVENIENCE (SHORT FORM): The Procurement Officer may terminate this contract in whole or in part, for the convenience of the District. In such a termination, the Procurement Officer may require the contractor to transfer title and deliver to the State in the manner and to the extent directed by the Procurement Officer: (a) any completed supplies; and (b) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing material") as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract. Upon such termination, the contractor shall (a) stop work to the extent specified, (b) terminate any subcontracts as they relate to the terminated work, and (c) be paid the following amounts without duplication, subject to the other terms of this contract: (i) contract prices for supplies or services accepted under the contract, (ii) costs incurred in performing the terminated portion of the work, and (iii) any other reasonable costs that the contractor can demonstrate to the satisfaction of the District, using its standard record keeping system, have resulted from the termination. The contractor shall not be paid for any work performed or costs incurred that reasonably could have been avoided. As a condition of payment, contractor shall submit within three months of the effective date of the termination a claim specifying the amounts due because of the termination. The absence of an appropriate termination for convenience clause in any subcontract shall not increase the obligation of the District beyond what it would have been had the subcontract contained such a clause.

WARRANTY – STANDARD: Contractor must provide the manufacturer's standard written warranty upon delivery of product. Contractor warrants that manufacturer will honor the standard written warranty provided.

ADDITIONAL SPECIAL CONDITIONS

- 1. A pre-bid conference will be held at **2:00 PM on January 31, 2018**. The meeting will be held at Chapin Intermediate School 1130 Old Lexington Highway Chapin, SC 29036.
- 2. Drawings and plans are available on the districts web site under <u>www.lexrich5.org/Page/9173</u> or through Shepard and Associates, LLC., 3547 Dreher Shoals Road, Suite 6 Irmo, SC 29063.
- 3. The contractor shall provide all labor, equipment, materials and supplies necessary to perform the work.
- Questions pertaining to the solicitation or requests for substitutions shall be submitted in writing by 2:00 PM on February 5, 2018. Questions shall be submitted to the following email address: <u>d5bids@lexrich5.org</u>, mailed or delivered to 1020 Dutch Fork Road Irmo, SC 29063 attention Purchasing Department.
- 5. Sealed bids will be received until 11:00 AM on February 12, 2018.
- 6. S.C. law requires that contractors awarded contracts in excess of \$5,000 be licensed by the S.C. Contractors Licensing Board if required for the project. The contractor's S.C. General Contractor's license number must be clearly indicated on the face of the envelope of bids exceeding this amount.
- 7. Perspective bidders may inspect the site. Bidders are required to check in at the main office at Chapin Intermediate School prior to entering onto the property.
- 8. All bids over \$50,000 must be accompanied by a 5% Bid Bond with Power of Attorney.
- 9. The successful bidder will be required to submit a Performance and Payment Bond in the amount of 100% of the contract amount.

ADDITIONAL SPECIAL CONDITIONS

10. Insurance: Contractor shall provide and maintain during the entire performance period minimum insurance limits of **Low Risk** as shown in the Minimum Insurance Limits Guideline.

Minimum Insurance Limits Guidelines				
FORM	BASIS	HIGH RISK	MEDIUM RISK	LOW RISK
CGL	Occurrence	\$5 Million	\$2 Million	\$1 Million
	Aggregate	\$10 Million	\$5 Million	\$2 Million
	Products-Completed Operation Aggregate	\$10 Million	\$5 Million	\$2 Million
	Personal/Advertising Injury	\$5 Million	\$2 Million	\$1 Million
Employees	BI -	\$1 Million	\$500,000	\$250,000
Liability	Occurrence			
	Disease - Occurrence	\$1 Million	\$500,000	\$250,000
	Disease - Aggregate	\$2 Million	\$1 Million	\$500,000
	Aggregate			
Business Automobile Liability	Occurrence	\$2 Million	\$2 Million	\$1 Million
Workers Comp		Statutory	Statutory	Statutory



District Five of Lexington and Richland Counties

Invitation for Bid

Solicitation #	2018-023
Date Issued	January 24, 2018
Procurement Official	Lynda Robinson
Phone	(803) 476-8140
E-Mail Address	D5bids@lexrich5.org

DESCRIPTION Roof Replacement Project at Chapin Intermediate School (Phase II)

The Term "Offer" Means Your "Bid" or "Proposal"

SUBMIT OFFER BY	11:00 AM on February 12, 2018
QUESTIONS MUST BE RECEIVED BY	2:00 PM on February 5, 2018
NUMBER OF COPIES TO BE SUBMITTED	

Offers must be submitted in a sealed package. Solicitation number & Opening Date must appear on package exterior.

SUBMIT YOUR SEALED OFFER TO:

District Five of Lexington and Richland Counties Purchasing Office 1020 Dutch Fork Road Irmo, SC 29063

CONFERENCE TYPE: Pre-Bid Conference DATE & TIME: January 31, 2018 at 2:00 PM (EST) As appropriate, see "Conferences - Pre-Bid/Proposal" & "Site Visit" provisions LOCATION: Chapin Intermediate School 1130 Old Lexington Highway Chapin, SC 29036

AWARD & AMENDMENTS	This solicitation, any amendments, and award will be posted at the following web address: www.lexrich5.org				
You must submit a signed copy of this form with Your Offer. By submitting a bid or proposal, You agree to be bound by the terms of the Solicitation. You agree to hold Your Offer open for a minimum of sixty (60) calendar days after the Opening Date.					
NAME OF OFFEROR (Full legal name of business submitting the offer)			OFFEROR'S TYPE OF ENTITY: (Check one) Sole Proprietorship Partnership Corporation (tax-exempt) Corporate entity (not tax-exempt) Government entity (federal, state,		
AUTHORIZED SIGNATURE (Person signing must be authorized to submit binding offer to enter contract on behalf of Offeror					
named above.) TITLE	(Business title of person signing above)		or local) ☐Other (See "Signing Your Offer" provision.)		
PRINTED NAME (Printed	I name of person signing above)	DATE SIGNED			
Instructions regarding Offeror's name: Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror above. The entity named as the Offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, <i>i.e.</i> , a separate corporation, partnership, sole proprietorship, etc.					
STATE OF INCORPORAT	ON identify the state of Incorporation.)	TAXPAYER IDENTIFICATION	NO.		
COVER PAGE		<u>I</u>			

PAGE TWO (Return Page Two with Your Offer)

HOME OFFICE ADDRESS (Address for Offeror's home office / principal place of business)			NOTICE ADDRESS (Address to which all procurement and contract related notices should be sent.)				
				Area Code:	Number:	Extension:	Facsimile:
				E-Mail Address:			
PAYMENT ADDRESS (Address to which payments will be sent.				ORDER ADDRESS (Address to which purchase orders will be sent)			
	s same as Home s same as Notice		conly one)	Order E-Mail Address:			
			 Order Address same as Home Office Address Order Address same as Notice Address (check only one) 				
ACKNOWLEDG number and its d		ENDMENTS:	Offerors ackno	owledges rece	ipt of amendme	nts by indicat	ing amendment
Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date	Amendment N	lo. Amendment Issue Date	Amendment No.	Amendment Issue Date
DISCOUNT FOR PROMPT PAYMENT 10 Calendar Days (%)			20 Calendar Days(%)	30 Calenda Days (%)	r <u>C</u> al	iendar Days (%)	
MINORITY PARTIC	PATION						
Please answer th	e following que	estion:					
 Are you certified as a MOB/WOB (minority-owned business/woman-owned business) by the State of South Carolina? Yes No If yes, provide certification number: 							
PAGE TWO		Er	nd of Page Two				

BID FORM

ROOF REPLACEMENT PROJECT AT CHAPIN INTERMEDIATE SCHOOL ORIGINAL BUILDING (Phase II)
Ms. Lynda Robinson, Coordinator of Purchasing District Five of Lexington and Richland Counties 1020 Dutch Fork Road

Irmo. SC 29063

BID SUBMITTED FROM:

- 1. The undersigned BIDDER agrees, if this Bid is accepted, to enter into an agreement with OWNER, in the form included in the Bidding Documents, to perform and furnish the Work as specified or indicated in the Bidding Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:
 - a. This Bid will remain subject to acceptance for 90 calendar days after the day of Bid opening;
 - b. The Owner has the right to reject this Bid;
 - c. BIDDER accepts the provisions of the Instructions and Supplementary Instructions to Bidders regarding disposition of Bid Security;
 - d. BIDDER has examined copies of all the Bidding Documents, Drawings, and Specifications prepared by Shepard & Associates, LLC dated January 2018.
 - e. BIDDER has visited the site and become familiar with the general, local, and site conditions;
 - f. BIDDER is familiar with federal, state, and local laws and regulations;
 - g. BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the Bidding Documents, and additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
 - h. This Bid is genuine and not made in the interest of or on behalf of an undisclosed person, firm, or corporation and is not submitted in conformity with an agreement or rules of a group, association, organization, or corporation; BIDDER has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; BIDDER has not solicited or induced a person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself an advantage over another BIDDER or over OWNER.
 - i. The BIDDER certifies that it will provide a "Drug-Free Workplace" as that term is defined in Section 44-107-30 of the SC Code of Laws and shall comply with the requirements set forth is Title 44, Chapter 107.

- j. The BIDDER certifies that it is in compliance with the "SC Illegal Immigration Reform Act of 2008" as defined in Title 8, Chapter 14 of the South Carolina Code of Laws and agrees to provide to the State upon written request any documentation required to establish that you and your subcontractors or subsubcontractors are in compliance with Title 8, Chapter 14.
- k. BIDDER has received the following Addenda, receipt of which is hereby acknowledged;

NUMBER	DATE	NO. OF PAGES
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3. <u>PRICES</u>

BASE BID WORK – Chapin Intermediate School Original Building (Phase I):

3.1.1 <u>Roof Areas 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, C1, C2</u> <u>& C3 (Approximately 53,029 SF):</u>

The work generally consists of the complete removal and disposal of the existing: aggregate surfaced Built-Up Roofing (BUR) assembly down to the surface of the existing metal roof deck, metal & bituminous flashings, metal coping cap and overflow scupper liner; removal and disposal of abandoned equipment curbs;

disconnection, raising and reconnection of existing curb mounted equipment and sanitary vents; infill of abandoned openings in decking; installation of drain bowl extensions at overflow roof drains; inspection of substrate metal deck, making repairs as necessary;

and the new installation of: wood blocking, mechanically attached flat and tapered insulation, adhered gypsum insulation cover board, cold application two ply modified asphalt roofing system with cool roof cap sheet surfacing, metal, bituminous and acrylic resin flashings, metal wall panel assembly, metal coping cap, overflow scupper liners, condensate drain piping and supports, and associated miscellaneous work, as specified.

BIDDER will complete the Work in accordance with the Contract Documents for the following price:

LUMP SUM BASE BID:

\$_____LS

4. UNIT PRICES

Provide UNIT PRICES for only the items listed. The UNIT PRICES shall indicate the amount to be added to or deducted from the Contract sum for each item. Unit Prices shall include all costs including charges for materials, labor (removals and installation), equipment, fees, taxes, insurance, bonding, overhead, profit, etc. The Owner reserves the right to include or not include any of the following UNIT PRICES in the Contract.

Bid No. 2018-023 PF 3006.036.004 January 2018 RCP: bsa

BID FORM

a. BASE BID #1

			ADD or DEDUCT
<u>No.</u>	ITEM	<u>UNIT</u>	<u>(one price)</u>
1.	Wood Blocking	Board Foot	
2.	Steel Decking Cleaning and Priming	Square Foot	
3.	Steel Decking Replacement	Square Foot	

5. <u>SUBCONTRACTS</u>

We (do) (do not) intend to subcontract certain items of work on this project.

ITEMS TO BE SUBCONTRACTED	SUBCONTRACTOR	LOCATION

6. <u>COMPLETION DATE</u>

We understand that scheduling and speed of construction are of prime importance in the completion of the Work. Demolition, Ground Preparation and New Construction shall commence as established in the Notice to Proceed. BIDDER agrees that the BASE BID WORK will be substantially complete and ready for final payment in accordance with the General Conditions within 110 calendar days after Notice to Proceed. BIDDER acknowledges that in case of inclement weather during normal work days, weekend work may be required to complete the Work within the allotted time.

7. <u>LIQUIDATED DAMAGES</u>

Step one Liquidated Damages will be assessed in the amount of \$200.00 for each calendar day the actual Contract Time for Substantial Completion exceeds the specified Contract Time.

Step two Liquidated Damages will be assessed in the amount of \$250.00 for each calendar day the actual Contract Time for Final Completion exceeds 30 days following Date of Substantial Completion.

8. <u>ATTACHMENTS</u>

The following documents are attached to and made a condition of this Bid:

- (a) Required Bid Security with Power of Attorney
- (b) Executed SLED Background Check and National Sexual Predator Database Requirements (Attached)
- (c) Minority Participation Affidavit

000T 1-

SLED Background Check Requirements

All individuals who the individual or company anticipates working in the after-school program must be cleared through a SLED check to be authorized to be around children in the school. The individual or company offered a contract will be responsible for providing proof of a proper SLED background report for those who work in the after-school program associated with the company or individual.

National Sexual Predator Database Requirements

Contractor/Subcontractors must stipulate that they are responsible for running a National Sex Offender Registry check on their employees who work in schools.

By signing below, the bidder agrees to prohibit any employees or sub-contractor employees from performing work or services at School District Five of Lexington and Richland Counties if they are deemed to be Registered Sex Offenders or pose a known criminal danger to children or staff. The vendor hereby agrees to run a National Sex Offender Registry check

(<u>http://www.nsopr.gov/</u>) or equivalent on all employees or sub-contractor employees who may be in the proximity of school children or staff. This check must be done by the vendor prior to performing any work or services at School District Five of Lexington and Richland County.

Authorized Signature: _____ Date: _____

MINORITY PARTICIPATION AFFIDAVIT

Is the bidder a South Carolina Certified Minority Business? [] Yes [] No

Is the bidder a Minority Business certified by another governmental entity? [] Yes [] No

If so, please list the certifying governmental entity:

Will any of the work under this contract be performed by a SC certified Minority Business as a subcontractor? [] Yes [] No

If so, what percentage of the total value of the contract will be performed by a SC certified Minority Business as a subcontractor?

Will any of the work under this contract be performed by a minority business certified by another governmental entity as a subcontractor? [] Yes [] No

If so, what percentage of the total value of the contract will be performed by a minority business certified by another governmental entity as a subcontractor?

If a certified Minority Business is participating in this contract, please indicate all categories for which the Business is certified:

- [] Traditional minority
- [] Traditional minority, but female
- [] Women (Caucasian females)
- [] Hispanic minorities
- [] DOT referral (Traditional minority)
- [] DOT referral (Caucasian female)
- [] Temporary certification
- [] SBA 8 (a) certification referral
- [] Other minorities (Native American, Asian, etc.)

(If more than one minority contractor will be utilized in the performance of this contract, please provide the information above for each minority business.)

The Department of Administration, Division of Small and Minority Business Contracting and Certification, publishes a list of certified minority firms. The Minority Business Directory is available at the following URL: http://osmba.sc.gov/directory.html [04-4015-3]

SUBMITTED on _____, 20____.

We operate as a corporation incorporated in the State of ______

We operate as a co-partnership: Name of Partners:

I operate as an individual doing business under the trade name of:

My South Carolina Number is:	Contractor's No.	
	CONTRACTOR:	
WITNESS:	SIGNED:	
	TYPED NAME:	
	TITLE:	
	TELEPHONE NUMBER:	
If Contractor is a Corporation:		
ATTEST:		
TYPED NAME:		
SECRETARY:		
CORPORATE SEAL:		

END OF BID FORM

AIA DOCUMENT A101-2007 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR IS A PART OF THESE BID DOCUMENTS AS IF PRINTED HEREIN IN ITS ENTIRETY. DOCUMENT IS AVAILABLE FOR REVIEW AT THE OFFICE OF

Shepard & Associates, LLC 3547 Dreher Shoals Road, Suite 6 Irmo, SC 29063 803-407-8284

AIA DOCUMENT A201-2007 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION IS A PART OF THESE BID DOCUMENTS AS IF PRINTED HEREIN IN ITS ENTIRETY. DOCUMENT IS AVAILABLE FOR REVIEW AT THE OFFICE OF

Shepard & Associates, LLC 3547 Dreher Shoals Road, Suite 6 Irmo, SC 29063 803-407-8284

SCHOOL DISTRICT FIVE OF LEXINGTON AND RICHLAND COUNTIES

ROOF REPLACEMENT PROJECT AT CHAPIN INTERMEDIATE SCHOOL ORIGINAL BUILDING (Phase II)

SUPPLEMENTARY CONDITIONS TO THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

A201 (2007 EDITION)

GENERAL CONDITIONS

INCORPORATION OF DOCUMENTS

The "General Conditions of the Contract for Construction," AIA Document A201, 2007 Edition, Articles 1 through 15 inclusive, is part of this Contract and is hereinafter referred to as "GENERAL CONDITIONS."

EFFECT OF SUPPLEMENTARY CONDITIONS

The following supplementary conditions modify, delete and/or add to the GENERAL CONDITIONS. Where any article, paragraph, or subparagraph in the GENERAL CONDITIONS is supplemented by one of the following paragraphs, the provisions of such article, paragraph, or subparagraph shall remain in effect and the supplemental provisions shall be considered as added thereto. Where any article, paragraph, or subparagraph in the GENERAL CONDITIONS is amended, voided, or superseded by any of the following paragraphs, the provisions of such article, paragraph, or subparagraph not so amended, voided, or superseded shall remain in effect.

ARTICLE I – GENERAL PROVISIONS:

Add the following:

"1.1.1.1 The Contractor's Bid shall be part of the Contract Documents."

"1.1.1.2 Form of "Agreement" shall be AIA Document A101, 'Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment is a Stipulated Sum,' 2007 Edition, modified to delete Article 5.1.7."

"1.1.6.1 In the event of conflict between the specifications and drawings, the provisions of the specifications shall govern."

"1.1.2.1 By executing the Contract, the Contractor represents that he has reviewed all Contract Documents, including architectural, structural, mechanical and electrical divisions of the plans and specifications, the cost of all materials and equipment shown in the Contract Documents have been included in the Contract Sum, and that all costs for materials and labor associated with the installation of such equipment have been included in the Contract Sum."

Add the following:

"1.4.1 In the event of conflicts or discrepancies among the Contract Documents,

interpretations will be based on the following priorities: (1) The agreement; (2) Addenda, with those of later date having precedence over those of earlier date; (3) Supplementary Conditions; (4) The General Conditions of the Contract for Construction; (5) Specifications, and; (6) Drawings."

"1.4.2 Wherever the word "ARCHITECT" appears in the GENERAL CONDITIONS substitute therefore: "ARCHITECT/ENGINEER ("A/E")."

ARTICLE 2 - OWNER:

Modify the following:

2.1.1 Last line delete "authorized" and substitute therefore "designated."

Delete the following:

2.1.2 Delete subparagraph 2.1.2 in its entirety.

2.2.5 Delete subparagraph 2.2.5 in its entirety and substitute the following:

"2.2.5 The A/E will furnish to the Contractor free of charge, five (5) copies of the Drawings and Specifications and will furnish at actual cost of reproduction as many additional copies as he may require."

Add the following:

"2.4.2 The Owner reserves the right to perform any work on the site, whether within or without the scope of this Contract, necessary to correct any conditions which at the sole discretion of the Owner pose a hazard to the health or safety of pupils, teachers, staff, administrators, or the general public. Such work will only be done on an emergency basis. If practical under the circumstances, the Contractor shall be given notice of any such conditions and given a reasonable opportunity to correct them. If work is done by the Owner pursuant to this subparagraph which is necessitated by any act or failure to act of the Contractor, the costs associated with such work shall be deducted from any sums due to Contractor and a written Change Order adjusting the Contract Sum will be issued."

ARTICLE 3 - CONTRACTOR:

Add the following:

"3.2.2.1 The following principles shall govern the settlement of disputes which may arise over discrepancies in the drawings: (a) as between figures given on drawings and the scaled measurements, the figures shall govern - no measurements should be taken by scale as working dimensions except on large-scale drawings not dimensioned in detail; and (b) as between large-scale drawings, the larger scale shall govern."

"3.6.1 The Contractor's attention is directed to Title 12, Chapter 9, Code of Laws of South Carolina 1976, as amended, concerning withholding tax for non-residents, employees, contractors and subcontractors."

"3.7.1.1 The Owner shall secure and pay for water and sewer tap fees.

"3.7.1.2 In order that the inspection services of municipal or county building departments might be made available for plumbing, heating, air conditioning, and electrical work, the Contractor shall require that each Subcontractor for these specialty Contracts apply for, obtain, and pay the cost of permit and inspection fees for that specialty for which he is a Subcontractor; provided that his project is to be constructed within a municipality or county offering such services."

Add the following:

"3.7.3.1 If the Contractor observes that portions of the Contract Documents are at variance with applicable laws, statutes, ordinances, building codes, and rules and regulations, the Contractor shall promptly notify the Architect and Owner in writing."

"3.8.4 The amount due the Contractor for any allowance shall be based upon certified copies of invoices from suppliers and Sub-contractors and shall not include any costs provided for in Paragraph 3.8.2.2."

"3.9.2.1 The Superintendent shall maintain a written daily log of the progress of the work. This log shall be kept at the job site, made available for inspection upon request by the A/E or Owner, and faxed daily or copies mailed to the Owner upon accumulating three (3) days of reports. The reports shall contain as a minimum: Date, Day, Low & High Temperatures, Record of Precipitation, Quantity of General Contractor and Subcontractor Personnel on Site, General Description of Work Activities Performed, List of Items Needed from General Contractor's Office and from the Architect (that are currently schedule sensitive), any other comments that pertain to job progress and quality, and a record of verbal instructions/interpretations given to the Contractor."

"3.10.1.1 This schedule shall indicate the dates for the starting and completion of various stages of construction and shall be revised monthly as required by the conditions of the work. This schedule shall be broken down into work items as the Owner may require for proper review."

"3.10.1.2 If the original Contract Sum exceeds One Million Dollars, the Contractor shall prepare a time-scaled Critical Path Method ("CPM") schedule and shall update this schedule monthly. Copies of the original schedule and all updates shall be provided to the Owner. A copy shall be maintained at the job site office. Additionally, a two-week look ahead or similar schedule shall be used and maintained at the job site office."

"3.10.1.3 The Contractor shall submit, along with the initial progress schedule, a shop drawing schedule showing items requiring review or approval by the A/E. The shop drawing schedule shall allow ten (10) working days for A/E's review and shall show the date receipt of approval is required."

"3.12.11 At completion of construction, the Contractor shall furnish Owner with two (2) copies of all final field use shop drawings, manufacturer's diagrams, literature, etc., for his permanent files."

"3.12.12 At the completion of construction, the Contractor shall furnish the Owner with two (2) sets of Maintenance Instructions for all items including name and address of supplier and name, address and telephone number of individual to contact for service, all compiled in indexed hard cover binders."

"3.14.1.1 It is Contractor's duty to coordinate with his Subcontractors in advance so that pipe holes, sleeves, inserts, etc., can be installed as work progresses."

ARTICLE 4 - ARCHITECT:

Modify as follows:

4.1.2 Second line following "-----Owner" delete "the Contractor."

Add the following:

"4.1.4 In the Specifications or on the Drawings, where the words "as directed," "as required," "as approved," "as permitted" or words of like effect are used, Contractor shall understand that direction, requirement, approval, or permission of the A/E is intended. Similar words "approved," "acceptable," "satisfactory," or words of like import mean approved by, acceptable to or satisfactory to the A/E."

Modify as follows:

4.2.4 Add the following sentence: "The Owner's designated representative shall have the right to communicate directly with the Contractor."

4.2.10 Delete this subparagraph and insert the following in lieu thereof:

"If a Project Representative is provided; his duties, responsibilities and limitations of authority shall be as set forth in ARCHITECTURAL SERVICES: ON-SITE PROJECT REPRESENTATION, AIA DOCUMENT B207- 2008, latest edition, copy of which will be provided to Owner, Contractor and Project Representative."

ARTICLE 6 - CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTOR:

6.2.5 Add the following:

"6.2.5.1 If such separate Contractor sues or initiates an arbitration proceeding against the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall defend such proceedings at the Contractor's expense and, if any judgment or award against the Owner arises there from, the Contractor shall pay or satisfy it." **ARTICLE 7 - CHANGES IN THE WORK:**

Add the following:

"7.1.2.1 Change Orders and Construction Change Directives are effective only after approval by the Owner. Board approval may be required on change orders and construction change directives greater than \$5,000."

"7.3.8.1 In determining the total cost or credit to the Owner resulting from a change in the work, the allowances for overhead and profit combined, including the total cost to the Owner, shall not exceed the percentages herein scheduled, as follows:

- 1. For the Prime Contractor, for any work performed by his own forces, 17% of the direct cost;
- 2. For each Subcontractor involved, work performed by his own forces, 17% of the

direct cost;

3. For the Prime Contractor, for work performed by his Subcontractor, 10% of the amount due the Subcontractor."

"7.3.10.1 The Contractor agrees that when it executes a Change Order, it is prohibited from seeking any further damages or time extensions for the matters contained in the Change Order and that it has been fully compensated for all aspects of this work including those items listed as direct costs and overhead in subparagraph 7.3.7."

ARTICLE 8 - TIME:

Modify as follows:

8.3 Delay and Extension of Time: Delete in its entirety and substitute therefore the following:

"8.3 Delay and Extension of Time:"

"8.3.1 Completion time stipulated under other sections of the Contract Documents may be extended by Change Order or Construction Change Directive to provide one (1) additional work day for each full work day that the Contractor is prevented from working by reason of one or more of the following causes:

- 1. Unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not limited to, catastrophes and/or acts of God, acts of another Contractor in the performance of a separate Contract with the Owner, epidemics, quarantine restrictions, strikes or freight embargoes;
- 2. An unusual amount of severe weather to such an extent as to be definitely abnormal and beyond conditions that may be reasonably anticipated. For the purpose of this Contract, a total of FIVE (5) working days per calendar month shall be anticipated as "normally bad or severe weather," and such time will not be considered justification for an extension of time. Weather related time extensions shall be determined on a monthly basis upon proper notification. The FIVE (5) days each month shall not be aggregated for the entire project for the purpose of determining weather related time extensions;
- 3. Stoppage of work ordered by Owner or A/E for reasons over which Contractor has no control."

"8.3.2 The Contractor shall, within ten (10) days after the beginning of such delay notify the Owner and A/E, in writing, of the cause of the delay. The A/E will then ascertain the facts and extent of delay and notify the Contractor within ten (10) days of the Owner's decision in the matter. Notice of delay and requests for extension of time shall set forth the cause, and number of additional working days Contractor desires Contract extended."

"8.3.3 No claims for extension of time will be considered when based on delays caused by conditions existing at the time bids were received, and of which the Contractor might be reasonably expected to have full knowledge at the time of bidding, or upon delays caused by failure on the part

of the Contractor to anticipate properly the requirements of the work contracted for as to materials, labor and equipment. All claims for extension of time shall be made in writing to the A/E with the next application for payment; otherwise they shall be waived."

"8.3.4 Completion date stipulated under other sections of the Contract Documents may be extended by Change Order to compensate for additional work that may be ordered by Owner, provided such work is over and beyond scope of work covered by original Contract and is of such nature as to materially affect date of completion."

"8.3.5 The Contractor shall not be entitled to any damages because of hindrances or delays from any cause whatsoever, but if occasioned by any act of God, or by any act or omission on the part of the Owner, such act, hindrance, or delay may entitle the Contractor to an extension of time in which to complete the work which shall be determined by the A/E provided that the Contractor gives notice in writing of the cause of such act, hindrance or delay within ten (10) days after its occurrence."

ARTICLE 9 - PAYMENT AND COMPLETION

Modify as follows:

9.3.1 Fifth line following "notarized" delete "if required."

Add the following:

"9.3.1.3 The A/E will authorize, as provided in Paragraphs 9.4 and 9.5, monthly payments equal to ninety-six and one-half percent (96.5%) of the portion of the Contract Sum properly allocable to labor, material and equipment suitably stored until the work is fifty percent (50%) complete. When the work is fifty percent (50%) complete, the Owner may authorize remaining partial payments to be paid in full provided acceptable performance and scheduling has been maintained."

"9.3.1.4 Contractor's Application for Payment shall be on AIA Documents G702 & G703 or equivalent."

"9.3.2.1 Rental equipment such as, but not limited to, mobile equipment, pans, forms, scaffolding, compressors, etc., shall not be considered material stored."

Add the following:

"9.11 Nonresident Contractor's attention is directed to Title 12, Chapter 9, Code of Laws of South Carolina 1976, as amended, concerning withholding tax on nonresident employees, contractors and subcontractors."

"9.12 The Contractor's attention is directed to Title 29, Chapter 7, Code of Laws of South Carolina, 1976, as amended, concerning laborers' liens."

Add the following:

"9.13 Final Payment including retainages shall not be due until the following have been submitted and approved by the A/E. These requirements are conditions precedent to final payment:

SUPPLEMENTARY CONDITIONS

- a. the final punch list has been completed and a copy of the list submitted showing the disposition of each item,
- b. a final inspection has been conducted,
- c. Certificate of Substantial Completion has been properly approved and filed,
- d. an affidavit has been provided that all payrolls, bills for materials and equipment, and other indebtedness conducted with the work for which the Owner or its property might in any way be responsible, have been paid or otherwise satisfied,
- e. the consent of the Surety, if any, to final payment is provided,
- f. two (2) complete sets of specifications, including all addendums, are provided,
- g. two (2) copies of all final field use shop drawings on material, equipment, etc., are provided,
- h. two (2) sets of maintenance instructions for all items, name and address of supplier, name address and telephone number of persons to contact for service, all compiled in indexed hard cover binders are provided. These materials will be submitted to the A/E who will forward them to the Owner,
- i. A master list of all subcontractors with address and telephone numbers. Organize the list by CSI specification numerical order."

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY:

Add the following:

"10.2.8.1 The Owner reserves the right to perform any work on the site necessary to correct any conditions which pose a hazard to the health or safety of pupils, teachers, staff, administrators, or the general public."

Delete the following:

Delete subparagraph 10.3.3 in its entirety.

ARTICLE 11 - INSURANCE AND BONDS:

Add the following:

"11.1.2.1 Minimum limits of liability for the following types of insurance are required (B.I. = Bodily Injury; P.D. = Property Damage; limits are shown in thousands of dollars).

- 1. Workers' Compensation, including:
 - a. Workers' Compensation Insurance State Minimum Coverage

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SUPPLEMENTARY CONDITIONS

- b. Employers' Liability
- 2. Comprehensive General Liability, including:

a.	Premises and Operations	1,000,000 B.I.;	100 P.D.
b.	Elevator Liability	1,000,000 B.I.;	100 P.D.
C.	Contractor's Protective		
	Liability	1,000,000 B.I.;	100 P.D.
d.	Products Liability,		
	including completed	4 000 000 B L	
	operations coverage	1,000,000 B.I.;	100 P.D.

3. Comprehensive Automobile Liability, including:

a.	All owned Automobiles	250/500 B.I.;	100 P.D.
b.	Non-owned Automobiles	250/500 B.I.;	100 P.D.
C.	Hired Car Coverage	250/500 B.I.;	100 P.D."

"11.1.2.2 In addition to Contractual Liability including the indemnification provision, Bodily Injury, and Property Damage coverage under both Comprehensive General and Comprehensive Automobile forms, shall include "occurrence" basis wording, which means an event, or continuous or repeated exposure to condition which unexpectedly causes injury or damage during the policy period."

"11.1.2.3 Contractor shall either (a) require each of its Subcontractors to procure and maintain during the life of its Subcontract, Subcontractor Comprehensive General Liability, Automobile Liability, and Property Damage Liability Insurance of the type and in the same amounts as specified in this Subparagraph, or (b) insure the activities of its Subcontractors in its own policy."

"11.1.2.4 If excavation is required, Contractor shall obtain underground hazard coverage in addition to those shown above."

Add the following:

"11.4.1.1 Contractor shall provide and pay the cost of Performance and Payment Bonds, in the form of AIA Document A312 "PERFORMANCE BOND AND LABOR AND MATERIAL BOND." Each shall be in the full amount of the Contract Sum, issued by a Surety company licensed in South Carolina, with an "A" minimum rating of performance as stated in the most current publication of Best's Key Rating Guide, Property Liability, which shall show a financial strength rating of at least five (5) times the Contract Price. Each Bond shall be accompanied by a "Power of Attorney" authorizing the attorney-in-fact to bind the Surety and certified to include the date of the Bond."

"11.4.1.2 The Owner reserves the right to accept or reject the qualifications of any bonding company submitted by the Contractor."

ARTICLE 13 - MISCELLANEOUS PROVISIONS:

Add the following:

"13.1.1 By executing a Contract for the project, the Contractor agrees to submit itself to the jurisdiction of the courts of the State of South Carolina for all matters arising or to arise hereunder,

including but not limited to performance of the Contract and payment of all licenses and taxes of whatever nature applicable thereto."

Delete the following:

13.6 Interest: Delete Paragraph 13.6 in its entirety.

ARTICLE 14 - TERMINATION OR SUSPENSION OF THE CONTRACT:

Add the following:

"14.2.2.3.1 The Owner shall not be required to proceed in completing the work at the lowest possible cost."

"14.2.2.3.2 The costs of finishing the work may include, but not be limited to: (1) cost of labor and material, (2) additional Architectural services, (3) costs of advertising or bidding, (4) attorneys' fees, (5) administrative costs, and (6) all other costs or expenses directly or indirectly relating to the termination."

"14.2.5 Allowing the Contractor to re-enter the Project and continue the work shall not constitute a rescission of the seven (7) day notice previously given. If the Contractor fails or refuses to correct the conditions which gave rise to the termination notice, the Owner may terminate the Contract without any additional notice."

ARTICLE 15 – CLAIMS AND DISPUTES:

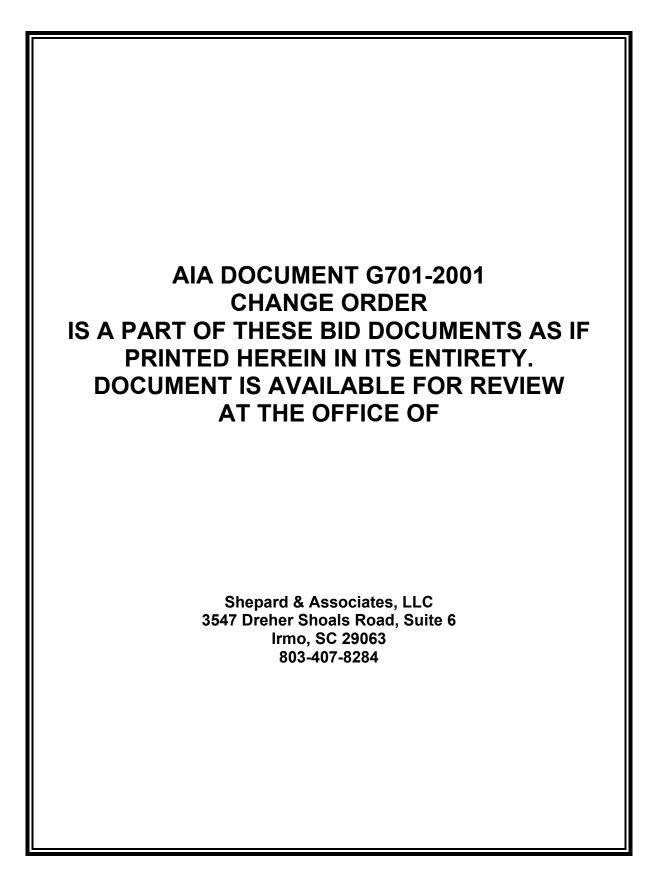
Add the following:

15.4 Add the following to the end of subparagraph 15.4.1:

"The Owner and Contractor shall agree on the number and selection of arbitrators. If they cannot agree, American Arbitration Association shall determine the appropriate number and shall select the arbitrators. If the arbitration is consolidated with another arbitration, American Arbitration Association shall determine the number and select the arbitrators."

15.4.5 If any disputes under this agreement are decided by arbitration, the prevailing party shall be entitled to recover all reasonable costs and expenses incurred, including reasonable attorney's fees. The prevailing party shall be determined by the procedures provided in South Carolina Code Annotated §29-5-20(b), as amended.

END OF SECTION 00800



AIA DOCUMENT G702 and G703 - 1992 APPLICATION AND CERTIFICATE FOR PAYMENT IS A PART OF THESE BID DOCUMENTS AS IF PRINTED HEREIN IN ITS ENTIRETY. DOCUMENT IS AVAILABLE FOR REVIEW AT THE OFFICE OF

Shepard & Associates, LLC 3547 Dreher Shoals Road, Suite 6 Irmo, SC 29063 803-407-8284

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.1 WORK INCLUDED

- 1.1.1 Work covered by this contract includes furnishing all labor, materials, tools, devices, appliances, and equipment necessary to perform all the work described in the Contract Documents.
- 1.1.2 All work is located at Chapin Intermediate School, 1130 Old Lexington Highway, Chapin, SC 29036. Refer to drawing K1.
- 1.2 BASE BID WORK Chapin Intermediate School Original Construction
 - 1.2.1 <u>Roof Areas 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, C1, C2</u> <u>& C3 (Approximately 53,029 SF):</u>

The work generally consists of the complete removal and disposal of the existing: aggregate surfaced Built-Up Roofing (BUR) assembly down to the surface of the existing metal roof deck, metal & bituminous flashings, metal coping cap and overflow scupper liner; removal and disposal of abandoned equipment curbs;

disconnection, raising and reconnection of existing curb mounted equipment and sanitary vents; infill of abandoned openings in decking; installation of drain bowl extensions at overflow roof drains; inspection of substrate metal deck, making repairs as necessary;

and the new installation of: wood blocking, mechanically attached flat and tapered insulation, adhered gypsum insulation cover board, cold application two ply modified asphalt roofing system with cool roof cap sheet surfacing, metal, bituminous and acrylic resin flashings, metal wall panel assembly, metal coping cap, overflow scupper liners, condensate drain piping and supports, and associated miscellaneous work, as specified herein.

1.3 UNIT PRICES

- 1.3.1 Do include in the BASE BID the following quantities of unit price materials:
 - 1.3.1.1 <u>Unit Price 1</u> Removal and replacement of any damaged or deteriorated wood blocking. 1,000 BF
 - 1.3.1.2 <u>Unit Price 2</u> Rust and scale removal and application of rust-preventive primer to corroded steel roof decking 2,500 SF
 - 1.3.1.3Unit Price 3 Removal and replacement of any damaged or deteriorated
metal decking.120 SF

1.4 CONTRACT METHOD

1.4.1 Construct the work as a single lump sum contract. For the items that are bid on a unit price basis, follow procedure indicated on the Bid Form and as specified in Section 01025 MEASUREMENT AND PAYMENT.

1.5 REFERENCE STANDARDS

1.5.1 For products specified by the association or trade standards, comply with requirements of the standard except when more rigid requirements are specified or are required by applicable codes.

1.6 EXISTING SITE CONDITIONS

- 1.6.1 Information in this section is provided only to establish a general description and is not necessarily accurate. The Contractor is responsible for visiting the site and satisfying himself as to the existing conditions, size of existing roof areas, metal components, etc. before submitting his bid.
- 1.6.2 Chapin Intermediate School Original Building:

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Roof Area 12	 approximately 	1,336 SF
Roof Area 13	- approximately	3,275 SF
Roof Area 14	- approximately	3,342 SF
Roof Area 15	- approximately	8,830 SF
Roof Area 16	- approximately	3,266 SF
Roof Area 17	- approximately	535 SF
Roof Area 18	- approximately	533 SF
Roof Area 19	- approximately	3,617 SF
Roof Area 20	- approximately	3,729 SF
Roof Area 21	- approximately	5,686 SF
Roof Area 22	- approximately	2,716 SF
Roof Area 23	- approximately	533 SF
Roof Area 24	- approximately	5,070 SF
Roof Area 25	- approximately	6,095 SF
Roof Area 26	- approximately	1,063 SF
Roof Area 27	- approximately	535 SF
Roof Area C1	- approximately	781 SF
Roof Area C2	- approximately	585 SF
Roof Area C3	- approximately	1,502 SF
Total Roof Area	- approximately	53,029 SF

- 1.6.3 Roof Areas 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 & 27:
 - 1.6.3.1 Existing roof system assembly consists of an aggregate surfaced Built-Up Roofing (BUR) assembly, adhered in hot asphalt to a ³/₄" fiberglass cover board, adhered in hot asphalt to a 1" polyisocyanurate, mechanically attached to a metal "B" deck. Metal deck is supported by bar joists.
 - 1.6.3.2 Roof height above finished grade varies by RA and is approximately 16' at all RAs.
 - 1.6.3.3 Water drains to internal main 4" roof drains. Secondary drainage is Bid No: 2018-023

provided by overflow scuppers at building perimeter and overflow roof drains where perimeter overflow is not available.

- 1.6.3.4 Slope in the structure is approximately ¹/₄" per foot.
- 1.6.3.5 Roof areas are generally polyangular in shape.
- 1.6.3.6 Equipment Roof Area 12:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (1) TV Antenna
- 1.6.3.7 Equipment Roof Area 13:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (1) TV Antenna
- 1.6.3.8 Equipment Roof Area 14:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (1) Curb Mounted HVAC Unit
 - d. (1) Pipe Housing
 - e. (1) Sanitary Vent
- 1.6.3.9 Equipment Roof Area 15:
 - a. (6) 4" Main Roof Drains
 - b. (4) Through Wall Overflow Scuppers
 - c. (2) Overflow Roof Drains
 - d. (1) Curb Mounted HVAC Unit
 - e. (2) Power Ventilators
 - f. (1) Roof Hatch
 - g. (12) Sanitary Vents
- 1.6.3.10 Equipment Roof Area 16:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (1) Curb Mounted HVAC Unit
 - d. (2) Sanitary Vents

1.6.3.11 Equipment Roof Area 17:

- a. (1) 4" Main Roof Drains
- b. (1) Through Wall Overflow Scuppers
- c. (1) Sleeper Mounted HVAC Unit
- d. (1) Pipe Penetration
- e. (1) Sanitary Vents

- 1.6.3.12 Equipment Roof Area 18:
 - a. (1) 4" Main Roof Drains
 - b. (1) Through Wall Overflow Scuppers
 - c. (1) Sleeper Mounted HVAC Unit
 - d. (1) Pipe Penetration
- 1.6.3.13 Equipment Roof Area 19:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
- 1.6.3.14 Equipment Roof Area 20:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (3) Sleeper Mounted HVAC Unit
 - d. (3) Pipe Housings
- 1.6.3.15 Equipment Roof Area 21:
 - a. (5) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (2) Overflow Roof Drain
 - d. (1) Sleeper Mounted HVAC Unit
 - e. (1) Pipe Housing
 - f. (1) Roof Hatch
 - g. (1) Power Ventilator
 - h. (1) TV Antenna
 - i. (7) Sanitary Vents
 - j. (1) Abandoned Equipment Curb
- 1.6.3.16 Equipment Roof Area 22:
 - a. (2) 4" Main Roof Drains
 - b. (2) Through Wall Overflow Scuppers
 - c. (1) Curb Mounted HVAC Unit
 - d. (1) Sanitary Vents
- 1.6.3.17 Equipment Roof Area 23:
 - a. (1) 4" Main Roof Drains
 - b. (1) Through Wall Overflow Scuppers
 - c. (1) Sleeper Mounted HVAC Unit
 - d. (1) Pipe Housing
 - e. (1) Sanitary Vents
- 1.6.4 Roof Areas C1, C2 & C3:
 - 1.6.4.1 Existing roof system assembly consists of an aggregate surfaced coal tar pitch Built-Up Roofing system, adhered in pitch to a perlite cover board, adhered in pitch to a 1" polyisocyanurate, mechanically attached to a

metal "B" deck. Metal deck is supported by bar joists.

- 1.6.4.2 Roof height above finished grade is approximately 12'.
- 1.6.4.3 Water drains to through gravel stop scuppers to grade below. Overflow provisions are over gravel stop fascia to grade below.
- 1.6.4.4 There is minimal to no slope in the existing roof assembly.
- 1.6.4.5 Roof areas C1 and C2 are generally rectilinear in shape. Roof Area C3 is triangular in shape.
- 1.6.4.6 Equipment Roof Areas C1, C2 & C3:
 - a. none

1.7 WORK SEQUENCE

- 1.7.1 Work shall proceed in an orderly sequence. Phased construction is unacceptable.
- 1.7.2 The Contractor shall strive to cause a minimum of disruption to the building operations and occupancy during construction activities.

1.8 COMPLETION DATE

1.8.1 Scheduling and speed of construction are of prime importance in the completion of the Work. Demolition, Preparation and New Construction shall commence as established in the Notice to Proceed. BIDDER agrees that the BASE BID WORK will be substantially complete and ready for final payment in accordance with the General Conditions within 110 calendar days after Notice to Proceed. BIDDER acknowledges that in case of inclement weather during normal work days, weekend work may be required to complete the Work within the allotted time.

1.9 LIQUIDATED DAMAGES

- 1.9.1 Step one liquidated damages will be assessed in the amount of \$200.00 for each calendar day the actual Contract Time for Substantial Completion exceeds the specified Contract Time.
- 1.9.2 Step two liquidated damages will be assessed in the amount of \$250.00 for each calendar day the actual Contract Time for Final Completion exceeds 30 days following Date of Substantial Completion.

1.10 CONTRACTOR USE OF PREMISES

- 1.10.1 Limit use of premises for construction operations to allow for Owner occupancy.
- 1.10.2 Coordinate use of premises under direction of Owner.
- 1.10.3 The Contractor shall be held liable for any damages to the building, the building contents, or its occupants resulting from work under this contract. The Contractor shall take all precautions necessary to protect the occupants and the building

during the construction period.

- 1.10.4 The Contractor is to maintain the existing building in a safe, weather tight, and secure condition throughout the construction period. The Contractor is to repair any damage caused by him or any of his subcontractors. Should damage be to finishes or construction that is not defined in these Contract Documents, then repairs shall be made to the specifications approved by and at the sole discretion of the Owner.
- 1.10.5 The Contractor is to confine his operations to the site of the building. The site beyond this building is not to be disturbed. The Owner will identify parking for the Contractor and his employees.
- 1.10.6 The Contractor is to keep existing driveways and entrances serving the premises clear and available at all times. Do not use for parking or storage of materials or equipment. The stockpiling of materials must be confined to the area identified by the Owner.
- 1.10.7 The Contractor and his personnel are to lock their vehicles and other mechanical or motorized construction equipment when parked and unattended. Do not leave vehicles or equipment unattended with motor running or ignition key in place.
- 1.10.8 Open fires will not be permitted on the premises.
- 1.10.9 Utilities and Services: The Contractor will be provided water to the extent of the existing sources. The Contractor shall be responsible for any taps or connections that may be needed or desired by him. He is also responsible for getting the service to any location where needed or desired. The Contractor will be provided without charge reasonable quantities of available utilities; however, if the services are abused, they will be withdrawn. The Contractor shall provide temporary portable electric generators for electricity required during construction.
- 1.10.10 Asbestos Products:
 - 1.10.10.1 No products containing asbestos fibers are present in the work covered in the Base Bid at Chapin Middle School Original Building.
 - 1.10.10.2 No asbestos bearing materials are to be incorporated into the work as a part of this contract. No existing asbestos containing material is to be left or incorporated into the work of this contract.
 - 1.10.10.3 In the event the Contractor finds asbestos containing materials not previously identified, then Contractor shall stop all work in the affected area and notify the Owner and Architect. Contractor shall provide all materials necessary to temporarily dry-in the affected area in the Base Bid. Additional work caused by the discovery, if authorized by the Owner, will be handled as a Change Order to this contract.
- 1.10.11 Contractor's Conduct: The following requirements are expressed to the Contractor, and he is asked to ensure that all employees, subcontractors, and suppliers are aware of these warnings.

- 1.10.11.1 No drugs, alcohol, or firearms will be permitted on the grounds of the facility.
- 1.10.11.2 There will be no favors or fraternizing with students, faculty and staff, or employees of the facility.
- 1.10.11.3 Contractors, subcontractors and their employees are required to wear appropriate work wear, hard hats and safety footwear, as the case may be, while on campus. Articles of clothing must be neat and tidy in appearance, and cannot display offensive or inappropriate language, symbols or graphics. The Owner has the right to decide if such clothing is inappropriate.
- 1.10.11.4 Contractor and sub-contractors are to take necessary precautions to protect all occupants and employees of the facility, Contractor personnel, and personal property from any damage from their operations.
- 1.10.11.5 The Contractor, subcontractors, and material suppliers are to be careful during placement of materials and equipment. The Owner will in no way be responsible for equipment and materials lost as the result of being left unattended or misplaced.
- 1.10.11.6 The use of foul, obscene, or abusive language by the Contractor's or subcontractor's employees is prohibited on the grounds of the facility. Violations of this policy may result in the dismissal of the Contractor.
- 1.10.11.7 Smoking or use of any tobacco products by the Contractor's or subcontractor's employees is prohibited on the grounds of the facility. Violations of this policy may result in the dismissal of the Contractor.

1.11 OWNER OCCUPANCY REQUIREMENTS

1.11.1 Owner will occupy premises during entire period of construction for conducting normal operations. Contractor is to cooperate with the Owner's operations.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SUMMARY

- 1.1.1 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.
- 1.1.2 All sums received by the 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 the Contractor, shall constitute trust funds held for the use and benefit of Owner.
- 1.1.3 Contractor shall submit with payment request lien releases from material suppliers which state that suppliers have been paid for materials supplied to the project. Payment requests may be delayed if not received in a timely manner.
- 1.1.4 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 the 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.
- 1.1.5 Contractor shall submit with payment application all claims for weather related delays on a monthly basis.

1.2 APPLICATION FOR PAYMENT

- 1.2.1 Monthly Application for Payment shall be submitted in triplicate to Architect for review and forwarding to Owner on AIA Documents G702 and G703. Provided an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment to the Contractor not later than the last day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner no later than 30 days after the Architect receives the Application for Payment. Contractor shall be furnished copy of Owner's Payment Schedule indicating payment dates and outline for receipt of payment requests.
- 1.2.2 Ninety-six and one-half percent (96.5%) of the value of materials stored at the site and 96.5% of work accomplished, less previous payments, shall be paid by Owner to Contractor in monthly installments upon Architect's certification.
- 1.2.3 Final payment shall be made 30 days after Architect has certified completion to the Owner, and specified warranties are provided in accordance with Section 01740.

1.3 UNIT PRICES

- 1.3.1 A Unit Price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.
- 1.3.2 Before proceeding with work, Contractor shall survey the work to be covered under Unit Prices in the presence of the Architect for verification of quantities for the Project.
- 1.3.3 Unit Price Schedule: Unit Prices shall include costs of materials, delivery, labor (to remove and replace), insurance, rental of tools and equipment, overhead and margin of profit.
 - 1.3.3.1 Include <u>1,000</u> board feet in the Base Bid costs for replacement of any damaged or deteriorated wood blocking members. Quote a separate unit price (per board foot) for such work. The final contract amount will be adjusted by change order increasing or decreasing the final contract price based on the actual replacement made during the course of the work using the quoted unit price.
 - 1.3.3.2 Include <u>2,500</u> square feet in the Base Bid costs for rust and scale removal and application of rust-preventive primer to corroded steel roof decking. Quote a separate unit price (per square foot) for such work. The final contract amount will be adjusted by change order increasing or decreasing the final contract price based on the actual replacement made during the course of the work using the quoted unit price.
 - 1.3.3.3 Include <u>120</u> square feet in the Base Bid costs for removal, disposal and replacement of any damaged or deteriorated metal decking. Quote a separate unit price (per square foot) for such work. The final contract amount will be adjusted by change order increasing or decreasing the final contract price based on the actual replacement made during the course of the work using the quoted unit price.
- 1.3.4 Contractor shall maintain a daily log showing dates, location, and exact quantities of unit price work. Copies of log and appropriate change order forms shall be submitted with each request for payment from the contractor unless no unit price work is accomplished during the payment period. If appropriate, Payment Applications containing unit price work will not be processed unless unit price logs are attached.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

SUBMITTALS

PART 1 GENERAL

1.1 PROCEDURES

- 1.1.1 Each transmitted document shall identify the project name and Contractor. Material submittals shall also identify the type and trade name of materials, material manufacturer, intended use, and specification number. Deviations from Contract Documents shall be identified.
- 1.1.2 Submittals shall bear the Contractor's stamp and indicate approval and date.
- 1.1.3 After Architect's review of materials, revise and resubmit as required, identifying changes made since previous submittal.

1.2 BID SUBMITTALS

- 1.2.1 Refer to Invitation to Bid, Instructions to Bidders, & Supplementary Instructions to Bidders.
- 1.2.2 Drug-Free Workplace Statement (a part of bid form agreements).
- 1.2.3 Illegal Immigration Reform Act of 2008 (a part of bid form agreements).
- 1.2.4 SLED Background Check and National Sexual Predator Database Requirements (a part of bid form agreements).
- 1.3 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
 - 1.3.1 Contractor submittals shall be forwarded to Architect within 14 calendar days after receipt of signed Contract. The successful Contractor shall submit 5 copies of the required information to the Architect. Two copies will be returned to the Contractor for their use.
 - 1.3.2 Refer to Section 01340 "Shop Drawings, Product Data and Samples."

1.4 CONTRACTOR INFORMATION

- 1.4.1 Submit to Architect on or before Pre-Construction Conference the following documents:
 - 1.4.1.1 A letter from the Contractor identifying the brand name, manufacturer and material proposed for use and include a statement that all proposed materials meet the specification requirements. Obtain Owner's approval before placing orders.
 - 1.4.1.2 Emergency contact information including phone numbers of principals, superintendent, foreman, and project manager.

- 1.4.1.3 A Manufacturer's Certificate clearly stating that the specified roof covering meets the requirements for an Underwriter's Laboratories, Inc. Class A roof covering.
- 1.4.1.4 Foreman's Statement (copy attached).
- 1.4.1.5 Material Safety Data Sheets (3 copies).
- 1.4.2 If Project Specifications indicate that removal and disposal of Asbestos Containing Material (ACM) is required, copies of the Application for an Asbestos Disposal Permit and the SCDHEC Asbestos Disposal Permit for this Project shall be furnished to the Project Architect prior to start of roof removal work.
- 1.4.3 Submit with each Monthly Payment Application a fully executed Contractor's Affidavit of Payment of Debts and Claims, AIA G706, and Contractor's Affidavit of Waiver of Release of Liens, AIA G706A.
- 1.4.4 Submit to Architect within 2 weeks of project startup and must be approved prior to Contractor's First Application for Payment:
 - 1.4.4.1 A copy of AIA Document G703 listing each phase of the work and its scheduled value for approval.
 - 1.4.4.2 Submit for each bulk shipment of asphalt a Manufacturer's Certificate clearly stating type of asphalt and compliance with referenced standard.
 - 1.4.4.3 Furnish Manufacturer's Certificates of Compliance with materials' specifications for materials to be incorporated into the work. Certificates are to be signed by a responsible officer of the manufacturing firm and notarized.
- 1.4.5 Submit to Architect upon completion of the work and prior to Contractor's Final Application for Payment:
 - 1.4.5.1 Certificate of Substantial Completion, AIA G704.
 - 1.4.5.2 Architect's Final Punchlist
 - 1.4.5.3 List of Subcontractors by specialty, including address and telephone number.
 - 1.4.5.4 Consent of Surety to Final Payment, AIA G707.
 - 1.4.5.5 Contractor's Affidavit of Payment of Debts and Claims, AIA G706.
 - 1.4.5.6 Contractor's Affidavit of Release of Liens, AIA G706A.
 - 1.4.5.7 "No Asbestos" Certification (Statement on Contractor's letterhead that no asbestos containing materials were used in the completion of the Work.)
 - 1.4.5.8 Contractor's 2-year Watertight warranty to Owner.

1.4.5.9 Roof Manufacturer's 20-year NDL Labor & Material Warranty to Owner.

PART 2 PRODUCTS

Not Used.

- PART 3 EXECUTION
- 3.1 TIMING
 - 3.1.1 Make all submittals in accordance with schedules specified herein.
 - 3.1.2 A minimum of 10 calendar days shall be allowed for review by the Architect following his receipt of the submittal.
 - 3.1.3 If a submittal contains more than 10 shop drawings, Contractor shall indicate which drawings must be returned within 10 calendar days. Architect shall have an additional 10 days to return the balance of submittals.
 - 3.1.4 Delays caused by tardiness in receipt of submittals shall not be an acceptable basis for extension of the Contract completion date.

3.2 REVIEW

- 3.2.1 Review by the Architect shall be directed to the general method of construction and shall not be construed as a complete check nor shall the review relieve the Contractor from responsibility for errors and/or omissions which may exist.
- 3.2.2 The notations "Reviewed" or "Make Corrections as Noted" shall authorize the Contractor to proceed with fabrication, purchase, or both subject to the revisions, if any, required by the Architect's review comments.
- 3.2.3 The Contractor shall make all revisions as required. If the Contractor considers any required revisions to constitute a change, he shall notify the Architect under the provisions of the General Conditions.
- 3.2.4 Only those revisions directed or approved by the Architect shall be shown on the resubmittal.
- 3.2.5 After a submittal has been approved by the Architect, substitution of materials, equipment, and/or procedures shall not be considered unless accompanied by an acceptable explanation for the substitution.

END OF SECTION 01300

ENCLOSURE: Foreman's Statement Form

FOREMAN'S STATEMENT

A PROJECT MANUAL FOR ROOF REPLACEMENT AT

CHAPIN INTERMEDIATE SCHOOL

ORIGINAL BUILDING (PHASE II)

JANUARY 2018

I, _____ (Print Name), an employee of

_____ (Print Contractor Name) hereby

state that I have my own personal copy of the above referenced project specifications and drawings, have thoroughly read them, and have visited the work sites.

Ву _____

Date _____

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 GENERAL

1.1 SHOP DRAWINGS

- 1.1.1 Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data prepared by the Contractor, Subcontractor, manufacturer, supplier, or distributor which illustrates some portion of the Work.
- 1.1.2 Shop drawings are to be submitted by transmittal letter with the following information:
 - 1.1.2.1 Architect's Project Number
 - 1.1.2.2 Submittal Data
 - 1.1.2.3 Submittal Number
 - 1.1.2.4 Project Title
 - 1.1.2.5 Name of Contractor and Approval Date
 - 1.1.2.6 Reference to Specification Section, Paragraph and/or Drawing
 - 1.1.2.7 The location of the work covered by the shop drawing
 - 1.1.2.8 Any qualification, deviation or departure from Contract
 - 1.1.2.9 Any additional information required by the Specifications for the particular material being furnished
- 1.1.3 Each shop drawing shall be numbered. The same numbering system shall be retained through all revisions. Each drawing shall have a clear space for the approval stamps of Contractor and Consultant.
- 1.1.4 In submitting shop drawings for approval, all associated shop drawings related to a complete assembly shall, where possible, be submitted at the same time so that each may be checked in relation to the entire proposed assembly.
- 1.1.5 Contractor shall prepare composite shop drawings and installation layouts, when required, to depict proposed solutions for tight field conditions.
- 1.1.6 With respect to standard manufactured items, Contractor shall submit to Architect manufacturer's illustrated cuts of the items to be furnished showing details, sizes and dimensions, and all other pertinent information. Sufficient copies of cuts shall be furnished so that Architect may maintain a minimum of 2 copies and return to Contractor the number required for Contractor's use.
- 1.1.7 Contractor shall submit 5 copies of each drawing. Two final approved copies will be returned to the Contractor.
- 1.1.8 Submit shop drawings for the following details:
 - 1.1.8.1 Wood blocking attachment at interior and perimeter parapet walls.

Bid No: 2018-023 PF 3006.036.004 January 2018 RCP: bsa

- 1.1.8.2 Coping cap, drain flashing, sanitary vent flashing, counter flashing, overflow scupper liners, pipe housings and pipe supports. Provide complete with flashings and attachment method.
 - 1.1.8.2.1 Minimum required components include wood blocking, fasteners, insulation, cover board, cants, tapered edge strips, adhesives, cements, membrane plies, cap sheet, metal, bituminous and acrylic resin flashings and sealant.
- 1.1.8.3 Tapered insulation layout for crickets and saddles.

1.2 PRODUCT DATA

- 1.2.1 On Contractor's letterhead, in a list form, submit a complete description of the materials to be used on the project including roofing system and all its components, the respective manufacturer, and a statement that all the listed items meet the requirements of the project specifications.
- 1.2.2 Submit each manufacturer's technical specifications and installation procedures for each major roofing component required.

1.3 SAMPLES

1.3.1 Submit two 6-inch long samples of each metal shape to be used on this Project to Architect for approval. Metal shapes are to be constructed in accordance with approved shop drawings and will be used for establishment of quality standards during installation.

1.4 RELATED SECTIONS

1.4.1 Section 01300 "Submittals."

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

QUALITY CONTROL

PART 1 GENERAL

1.1 QUALITY CONTROL – CONTRACTOR

1.1.1 Maintain quality control over products, services, site conditions, and workmanship to produce work of specified quality.

1.2 QUALITY CONTROL – OWNER

- 1.2.1 The Owner reserves the right, at his discretion, to retain the services of an independent construction monitoring representative to provide full or periodic inspection of the project. If Owner engages this service, the Contractor will be informed. Testing may be performed to determine any deficiencies in the assembly.
- 1.2.2 Work found in violation of the Specifications or not in conformance with acceptable workmanship practices/standards shall be subject to rejection, including complete removal and replacement with new materials at Contractor's expense.
- 1.2.3 Failure of Owner or Architect to discover or reject defective work, or work not in accordance with the Contract, shall not be deemed an acceptance thereof, or 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 a waiver by Owner or any of Owner's rights pursuant to this Contract or otherwise.
- 1.2.4 Contractor may be made to uncover work in-place to determine the quantity and quality of material and workmanship. Contractor photographs may or may not be accepted to validate fasteners, fastener frequency, unit price work, and other elements of the work concealed by project finishes.

1.3 QUALITY ASSURANCE

- 1.3.1 Roofing Contractor Qualifications: A Roofing Contractor experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance. Installer shall employ workers trained and approved by manufacturer. The Roofing Contractor shall be licensed as a specialty roofing contractor with at least 5 years of contracting experience in the type of work involved in this project, and must have performed work similar to the proposed scope of work. Evidence of qualifications must be available by the Contractor upon request of the Owner.
- 1.3.2 Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.

1.4 QUALITY CONTROL

- 1.4.1 Owner Responsibilities: Owner will provide inspections during the work. Such inspections may be daily or periodic.
- 1.4.2 Contractor Responsibilities: Unless otherwise indicated, provide quality-control inspections with Contractor's own work force. Repair or replace nonconforming work.
- 1.4.3 Associated Services: Cooperate with agencies performing inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Provide the following:
 - 1.4.3.1 Access to the Work.
 - 1.4.3.2 Incidental labor and materials necessary to facilitate inspections.
- 1.4.4 Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate inspections.
- PART 2 PRODUCTS

Not Used.

- PART 3 EXECUTION
- 3.1 REPAIR AND PROTECTION
 - 3.1.1 General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 3.1.1.1 Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 - 3.1.1.2 Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
 - 3.1.2 Protect construction exposed by or for quality-control service activities.
 - 3.1.3 Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 DESCRIPTION

- 1.1.1 Contractor shall provide for temporary facilities and controls required for the performance of the project except as otherwise noted. Such items include, but are not necessarily limited to, water, electricity, and telephone; sanitary facilities; protection, security and safety materials; and enclosures such as tarpaulins, barricades, fences and canopies.
- 1.1.2 All equipment furnished by Contractor shall comply with all pertinent safety requirements.
- 1.1.3 Ladders, planks, hoists, chutes and all similar items furnished in the execution of the work are to comply with all requirements of OSHA and any other regulatory agency having jurisdiction over this project.
- 1.1.4 All temporary facilities will be subject to the Owner's approval.

1.2 PRODUCT HANDLING

- 1.2.1 Contractor shall exercise all means necessary to maintain temporary facilities and controls in proper and safe condition throughout the progress of the project.
- 1.2.2 All required connections to existing utility systems shall be made with minimum disruption. If disruption of existing service is required, notice shall be given to the Owner and connections shall not be made without Owner's approval. If necessary, Contractor shall provide for alternate temporary service.

PART 2 PRODUCTS

2.1 TEMPORARY UTILITIES

- 2.1.1 Electricity: Owner will not furnish electricity to the Contractor during this project. Contractor to provide temporary power as necessary to complete the work of this project.
- 2.1.2 Water: The Contractor will be provided water to the extent of the existing sources. The Contractor shall be responsible for any additional water that may be needed or desired by them. The Contractor is also responsible for getting the water to any location where needed or desired.
- 2.1.3 Telephone: The project foreman and superintendent must have a cell phone, and it must be active the entire construction period.
- 2.1.4 Connects and Disconnects: In the event it is necessary to disconnect any electrical wiring or connections, plumbing lines, gas lines, or other building services, notify the Owner 72 hours in advance to provide sufficient advance time to minimize disruption of service. Contractor shall not disconnect or connect services unless

authorized in writing by Owner.

2.2 TEMPORARY FACILITIES

- 2.2.1 Sanitary Facilities: The Contractor shall provide and maintain proper temporary self-contained sanitary facilities in the quantity required for use of all personnel. All facilities shall be maintained in a sanitary condition at all times.
- 2.2.2 Ventilated Storage Facilities: Provide, as required, facilities to maintain specific storage conditions as described within this Specification and as recommended by the materials' manufacturers for use in construction.

2.3 CONSTRUCTION AIDS

- 2.3.1 Roof Access: The Contractor shall provide equipment for access to the roof unless otherwise directed by Owner.
- 2.3.2 Ladders: The Contractor shall remove all ladders from the roof and site at the end of work each day. Ladders may be stored in locked storage trailer.
- 2.3.3 Fire Extinguishers: Contractor shall provide adequate sized fire extinguishers for the project site.
- 2.3.4 Contractor is to insure all moving equipment has a "Kill Switch" or emergency stop button. Switch is designed to disengage movement of equipment instantly.
- 2.3.5 Enclosures: The Contractor shall provide fencing, barricades, warning signs, and all necessary safeguards to warn and prevent workers, pedestrians, and Owner's personnel from being exposed to dangers or hazards created by this project.
- 2.3.6 Temporary Construction: The Contractor shall furnish, install, and maintain for the duration of the project all scaffolds, ladders, tarpaulins, platforms, bridges, canopies, steps, and other temporary construction required to properly facilitate completion of the project in compliance with all safety and other regulations.
- 2.3.7 Signs: No signs or advertising of any kind shall be allowed on the project site unless approved in advance by Owner.
- 2.3.8 Parking: Contractor's construction vehicles shall enter the project site and park in areas as directed by the Owner. The Contractor shall be responsible for coordination of traffic by his subcontractors, suppliers, etc., so as not to disrupt ongoing operations of the Owner.

PART 3 EXECUTION

Not Used.

CONSTRUCTION CLEANING

PART 1 GENERAL

1.1 SECTION INCLUDES

- 1.1.1 Scrap, debris, waste material, and other items from all operations shall not be allowed to accumulate on the Project site. Debris shall be removed and properly disposed of daily in accordance with all Federal, State, and Local regulations in a manner which prevents injury or damage to persons, adjoining properties and public rights-of-way.
- 1.1.2 The buildings and site shall be maintained in a clean condition throughout the duration of the Project. Contractor shall comply with all requirements for cleanliness described in other sections of these Specifications.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- 2.1.1 Contractor shall provide all required manpower, material, and equipment to maintain the specified standard of cleanliness.
- 2.1.2 Contractor shall use only those materials and equipment which are compatible with the surface being cleaned as recommended by the manufacturer or approved by the Architect.

PART 3 EXECUTION

3.1 PROGRESS CLEANING

- 3.1.1 Contractor shall conduct daily inspections to ensure that the requirements for cleanliness are being met. Roof surface, building interiors, and grounds in work area shall be cleaned before close of work each day.
- 3.1.2 Contractor shall provide storage containers for all items awaiting removal from the site. Storage containers and locations shall be approved by the Architect and promptly disposed of when at capacity.

3.2 STORED MATERIALS

- 3.2.1 Stored items shall be kept in an orderly arrangement allowing maximum access and shall not impede drainage or traffic.
- 3.2.2 Contractor shall inspect all arrangements of materials stored on the Project site on a minimum weekly basis and shall service all arrangements in accordance with the requirements of paragraph 3.1.1 of this Section.

STORAGE AND PROTECTION

PART 1 GENERAL

1.1 FACILITY PROTECTION

- 1.1.1 Limit size of work sections to safeguard adjacent materials, structures, etc. and to minimize dust and noise.
- 1.1.2 Protect existing facilities from damage during work. Do not overload existing paving, curbs, sidewalks, etc. with vehicle traffic. Do not overload new or existing construction with demolition debris, equipment, new materials etc.
- 1.1.3 Protect existing facilities from fire. Contractor shall provide suitable and adequate fire extinguishers conveniently located on the premises at staging areas, storage areas, and at areas of equipment. Competent operators shall be in attendance at all times and shall be properly trained or instructed in fire protection. At all times during the application of hot bitumen, appropriate fire extinguishers shall be located at the kettle and on the roof.
- 1.1.4 Plywood, minimum 3/4-inch-thick, or other suitable materials shall be used to protect roof areas from damage that may be caused by concentrated equipment loads and foot traffic.
- 1.1.5 Site and roof traffic shall be confined to work areas. Contractor shall be responsible for leaks that develop in traffic areas during and after Project completion. Grounds damaged by work shall be restored to pre-work condition and shall include, but are not limited to, hauling in new acceptable fill dirt material and reseeding of the affected site.
- 1.1.6 Contractor shall protect interior operations from adverse weather during roofing operations. This requirement extends beyond the immediate project scope of work to adjacent contiguous roof areas.
- 1.1.7 The Contractor is responsible and shall be held liable for any damages to the adjacent roof assemblies, building, building contents, its occupancy, grounds, or landscaping resulting from work under the Contract. In the event of damage, Contractor will restore property to a condition equivalent to that at the time the Project started. Restoration may be necessary to construction assemblies not specified in this project manual. In such cases, repair methods and materials are subject to approval by Owner.
- 1.1.8 The Contractor shall keep existing drainage facilities clear of debris during construction.

1.2 MATERIAL PROTECTION

1.2.1 Products shall be transported by methods which avoid damage. Damaged

material shall be subject to rejection by the Architect.

- 1.2.2 Store roll good materials in covered trailers or trailers with materials covered with tarps.
- 1.2.3 Materials stored in open shall be placed on pallets with wood blocks underneath to provide ventilation.
- 1.2.4 It is the responsibility of the Contractor to ensure roofing material and other products are adequately protected from damage.
- 1.2.5 Damaged materials will be designated by spray painting and must be removed from the project site within 24 hrs.

1.3 STORAGE

- 1.3.1 Contractor shall be responsible for proper storage of equipment, materials, and devices furnished by themselves and/or their subcontractors and suppliers.
- 1.3.2 All storage areas are subject to approval by the Owner or their authorized representative.
- PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

CONTRACT CLOSEOUT

PART 1 GENERAL

1.1 FINAL CLEANING

- 1.1.1 Except as specifically provided otherwise, "clean" shall be interpreted as meaning the level of cleanliness generally attainable by skilled cleaners using commercially available building maintenance equipment and materials.
- 1.1.2 Execute cleaning prior to final inspection.
- 1.1.3 Unless otherwise directed by the Architect, the Contractor shall clean all adjacent areas on the site and completely remove all resultant debris.
- 1.1.4 Clean all roof areas and drainage systems. Clean interior and exterior surfaces exposed to view; remove stains and foreign substances. Such work shall be accomplished at no additional cost to the Owner.
- 1.1.5 Clean equipment as required.
- 1.1.6 Clean site; sweep paved areas; rake clean other areas.
- 1.1.7 All tools, equipment, construction materials, scrap, debris, and waste shall be removed from the project site.
- 1.1.8 Restore grass areas by filling ruts, compacting soil, raking, seeding, and fertilizing. Replace any damaged sidewalks or pavement.
- 1.1.9 Remove portable sanitary facilities from site. Clean and disinfect area as necessary to ensure sanitary health conditions.

1.2 FINAL INSPECTION

- 1.2.1 Architect's representative will conduct a final inspection with Owner's representative and the Contractor's representative.
- 1.2.2 Any scheduled inspection reports by the roof system manufacturer's representative or Local Jurisdiction Inspectors, if required, shall be furnished prior to Final Inspection and Contract Closeout.

1.3 WARRANTIES AND BONDS

1.3.1 Refer to Section 01740 "Warranties and Bonds" for requirements.

1.4 CLOSE-OUT

- 1.4.1 Final payment will be made to the Contractor only after the following have been submitted. Please provide (3) copies of the following documents.
 - 1.4.1.1 Certificate of Substantial Completion, AIA G704.
 - 1.4.1.2 List of Subcontractors by specialty, including address and telephone number.
 - 1.4.1.3 Consent of Surety to Final Payment, AIA G707.
 - 1.4.1.4 Contractor's Affidavit of Payment of Debts and Claims, AIA G706.
 - 1.4.1.5 Contractor's Affidavit of Release of Liens, AIA G706A.
 - 1.4.1.6 "No Asbestos" Certification (Statement on Contractor's letterhead that no asbestos containing materials were used in the completion of the Work.)
 - 1.4.1.7 Contractor's 2-year Watertight warranty to Owner.
 - 1.4.1.8 Roof Manufacturer's 20-year NDL Labor & Material Warranty to Owner.
- PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

WARRANTIES, INSURANCE, AND BONDS

PART 1 GENERAL

1.1 SECTION INCLUDES

- 1.1.1 Upon completion of the work and prior to the final payment, the Contractor shall submit the following items to the Architect.
 - 1.1.1.1 Copies of all manufacturers' punch lists and documentation of completion.
 - 1.1.1.2 Copies of all punch lists prepared by the Architect and documentation of completion.
 - 1.1.1.3 Contractor's 2-year Watertight warranty to Owner.
 - 1.1.1.4 Manufacturer's 20-year NDL warranty to Owner.
 - 1.1.1.5 Asbestos Free Warranty

1.2 RELATED SECTION

1.2.1 Submit all items required by this Section as part of Contract Closeout, Section 01700.

1.3 WARRANTIES

- 1.3.1 Contractor's Warranty: Comply with the General Conditions of the Contract concerning warranties and bonds. The Contractor shall agree that the work covered under this Contract shall remain free from any water penetration and physical defects caused by defective workmanship or materials for a period of 2 years from the date of final acceptance by Owner. Warranty shall be in the form enclosed at the end of this section.
 - 1.3.1.1 Emergency repairs to defects and leaks shall be performed within two working days of receiving notice from Owner. As soon as weather permits, permanent repairs and restoration of affected areas shall be accomplished in a manner in conformance with the original Contract requirements. This work shall be done without additional cost to the Owner, except if it is determined that such leaks and defects were caused by abuse, lightning, hurricane, tornado, hail storm, or other unusual phenomena.
 - 1.3.1.2 In addition, the Contractor and Owner's representative shall conduct an inspection approximately 30 days prior to the end of the Contractor's warranty to determine the present physical condition of the roofing system. The Owner's representative shall then submit a written report as to the findings of this inspection. The Roofing Contractor, at his own expense, shall repair any defects covered under the scope of this contract.

- 1.3.1.3 The warranties shall also state that the Owner has the right, at any time during the 2-year Contractor's warranty period and the Manufacturer's warranty period, to make emergency repairs to protect the contents of the building or the building itself from damage due to leaking. The cost of emergency repairs made during the first two years of the warranty period shall be borne by the Contractor and action by the Owner shall not invalidate the warranty.
- 1.3.2 Roof Manufacturer's Warranty: Contractor shall furnish Owner the Roof Manufacturer's No Dollar Limit Unlimited Roofing System Guarantee with flashing endorsement covering all workmanship and materials issued by the roofing materials manufacturer for a period of 20 years from the date of substantial completion.
- 1.3.3 Asbestos Free Warranty: Contractor shall obtain and submit an ASBESTOS FREE WARRANTY from each subcontractor, material supplier, and equipment manufacturer upon completion of the work and prior to final payment. Each shall be in the form of that found at the end of this section and shall be properly executed and printed on the Contractors' or material and/or equipment suppliers' standard letterhead.

1.4 INSURANCE AND BONDS

- 1.4.1 Reference Supplemental Conditions Page 8 Article 11 INSURANCE AND BONDS.
- 1.4.2 There is a requirement for Bid Bonds in an amount equal to 5% of the Contract Base Bid price issued by a surety authorized to do business in the State of South Carolina.
- 1.4.3 Successful Contractor shall be required to provide Performance Bond in the amount of 100% of the contract for construction issued by a surety authorized to do business in the State of South Carolina.
- 1.4.4 Successful Contractor shall be required to provide Labor and Materials Payment Bond in the amount of 100% of the contract for construction issued by a surety authorized to do business in the State of South Carolina.
- PART 2 PRODUCTS Not Used.

PART 3 EXECUTION

- 3.1 Roofing Installer's Warranty and Asbestos Free Warranties
 - 3.1.1 Following this section there are sample Roofing Installer's Watertight Warranty and ASBESTOS FREE WARRANTY forms. Prior to final payment, submit these documents as written on the corporate letterhead of the appropriate party.

END OF SECTION 01740

ENCLOSURES: Contractor's Two Year Warranty ASBESTOS FREE WARRANTY

01740 - 2 WARRANTIES, INSURANCE, AND BONDS

(CONTRACTOR'S LETTERHEAD) TWO YEAR WARRANTY

Known all men by these presents, that we, (<u>Insert Contractor Name</u>), having installed flat and tapered insulation, gypsum coverboard, two ply modified asphalt Built-Up Roofing (BUR) assembly, bituminous, metal and fluid applied flashings, sheet metal work and having accomplished certain other work on the **Roof Replacement Project at Chapin Intermediate School Original Building (Phase II)** under contract between **School District 5 of Lexington and Richland Counties** and (<u>Insert Contractor Name</u>), warrant to **School District 5 of Lexington and Richland Counties** with respect to said work that for a period of two years from date of final acceptance of said work, the roofing systems including insulation, modified bitumen built-up roofing assembly, bituminous, metal and acrylic resin flashings, sheet metal copings, and overflow scupper liners shall be absolutely watertight and free from all leaks, provided however that the following are excluded from this warranty:

- a. Defects or failures resulting from abuse by the Owner.
- b. Defects in design involving failure of (1) structural frame, (2) load-bearing walls, and (3) foundations.
- c. Damage caused by fire, tornado, hurricane, acts of God, wars, riots, or civil commotion.

We, (<u>Insert Contractor Name</u>), agree that should any leaks occur in the roofing, we will promptly remedy said leaks in a manner to restore the roof to a watertight condition by methods compatible to the system and acceptable under industry standards and general practice.

We, <u>(Insert Contractor Name</u>), further agree that for a period of two years from date of final acceptance referred to above, we will make repairs at no expense to the Owner to any defects which may develop in the work including, but not limited to, blisters, wrinkles, ridges, splits and loose membrane and/or metal flashings, sheet metal copings, scuppers, conductor heads, and outlets in a manner compatible to the system and acceptable under industry standards and general practice.

We, (<u>Insert Contractor Name</u>), also agree that the Owner has the right, at any time during the twoyear warranty period, to make emergency repairs to protect the contents of the building or the building itself from damage due to leaking. The cost of emergency repairs made during the first two years of the warranty period shall be borne by the Contractor, and action by the Owner shall not invalidate the warranty.

IN	WITNESS	WHEREOF,	we	have	caused	this	instrument	to	be	duly	executed,	this
	_ day of		20_									

CONTRACTOR:

WITNESS:

by ___

President (Owner)

Notary Public

Asbestos Free Warranty

Owner:	School District 5 of Lexington and Richland Counties						
Location of Buildings:	1130 Old Lexington Highway, Chapin, SC						
Name of Buildings:	Chapin Intermediate School Original Building (Phase II)						
Date of Substantial Completion:							

Know all men by these presents that we, _____

(Contractor, Subcontractor, Material Supplier or Equipment Manufacturer)

having furnished labor, materials, equipment and/or supplies; accomplished roof replacement at Chapin Intermediate School Original Building (Phase II) including removals of existing roofing, flashings, and/or miscellaneous roof system components; and installation of new modified asphalt roof assembly with cap sheet surfacing, gypsum cover board, flat and tapered insulation, flashings and/or miscellaneous roof system components as under contract between: School District 5 of Lexington and Richland Counties

Chool District 5 of Lexington and Richland Counties (Owner and/or Contractor)

and

(Contractor and/or Subcontractor, Material Supplier or Equipment Supplies)

warrant to Owner with respect to said work that no materials containing asbestos fibers were incorporated into the work, and that to our knowledge and belief, no materials containing asbestos remain in or are covered by the work.

Exceptions:

If there are no exceptions, state "No Exceptions" here. (RA 26) (RA 2) RA 24 (RA 20) RAIS RAID RAZD (AD AD (A 1) RA2D RA 16 (RA 12) CHAPIN INTERMEDIATE SCHOOL KEY PLAN IN WITNESS WHEREOF, we have caused this instrument to be duly executed, this _____ day of _____, 20____. WITNESS: Company By Notary Public

ROUGH CARPENTRY

PART 1 GENERAL

RELATED DOCUMENTS

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

1.2 SUMMARY

- 1.2.1 This Section includes but is not limited to the following:
 - 1.2.1.1 Wood blocking.
 - 1.2.1.2 Plywood blocking.
- 1.2.2 Related Sections include the following:
 - 1.2.2.1 Division 7 Section 07550 "Modified Bitumen Membrane Roofing".
 - 1.2.2.2 Division 7 Section 07591 "Reroofing Removal & Preparation".

1.3 DEFINITIONS

- 1.3.1 Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1.3.1.1 NLGA National Lumber Grades Authority.
 - 1.3.1.2 SPIB Southern Pine Inspection Bureau.
 - 1.3.1.3 ALSCBR American Lumber Standards Committee Board of Review

1.4 SUBMITTALS

- 1.4.1 Material Certificates: Prior to start of work, submit manufacturer's Certificate of Compliance with the material specifications of this section, signed by a responsible officer of the manufacturing firm and notarized.
 - 1.4.1.1 Certify as to Treatment Process; Treatment Chemical; and Chemical Retention.

1.5 QUALITY ASSURANCE

1.5.1 Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, with the experience and capability to conduct the testing indicated as documented.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- 2.1.1 Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 2.1.1.1 Lumber:
 - 2.1.1.1.1 Boise Cascade Corporation.
 - 2.1.1.1.2 Georgia-Pacific Corporation.
 - 2.1.1.1.3 Louisiana-Pacific Corporation.
 - 2.1.1.1.4 International Paper Corp.

2.2 WOOD PRODUCTS, GENERAL

- 2.2.1 Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
 - 2.2.1.1 Factory mark each piece of lumber with grade stamp of grading agency.
 - 2.2.1.2 Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified.
 - 2.2.1.3 Provide dressed lumber, S4S, unless otherwise indicated.
 - 2.2.1.4 Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal (38-mm actual) thickness or less, unless otherwise indicated.

2.3 MISCELLANEOUS LUMBER

2.3.1 For concealed boards, provide lumber with 19 percent maximum moisture content and of the following species and grades:

2.3.1.1 Mixed southern pine, No. 2 grade; SPIB.

- 2.3.2 Do not use material that is warped or does not comply with requirements for untreated material.
- 2.3.3 Application: Treat all rough carpentry for use "above grade" to include, but not limited to, the following:
 - 2.3.3.1 Nailers, curbs, blocking, stripping, and similar members in connection with roofing, flashing, and waterproofing.

2.4 PLYWOOD BACKING PANELS AND BLOCKING

- 2.4.1 Miscellaneous Backing Panels: CDX, DOC PS 1, Exterior Exposure 1, C-D Plugged, 3/4 inch thickness indicated or, if not indicated, not less than 1/2 inch (12.7 mm) thick.
- 2.4.2 Sheathing: CDX, DOC PS 1, Exterior Exposure 1, C-D Plugged, thickness indicated or, if not indicated, not less than 3/4 inch (12.7 mm) thick.
- 2.4.3 Do not store sheathing outdoors or expose to moisture.

2.5 FASTENERS

- 2.5.1 Reference Division 7 Section 07591 "Reroofing Removal & Preparation".
- 2.5.2 All fasteners, connections, clips or strap anchors for wood and plywood shall be either hot-dipped zinc coated galvanized steel or stainless steel (Type 304 or 316 SS).

PART 3 EXECUTION

- 3.1 INSTALLATION, GENERAL
 - 3.1.1 Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate blocking and similar supports to comply with requirements for attaching other construction.
 - 3.1.2 Separate any aluminum metal component from preservative treated lumber with minimum divorcing layer of 15 lb asphalt saturated building paper. Use appropriate ring-shank, stainless steel fasteners.
 - 3.1.3 Never use aluminum fasteners with preservative treated wood. Only use hotdipped galvanized or stainless-steel fasteners with treated wood.
 - 3.1.4 All wood nailers shall be of sufficient thickness so as to finish flush with the adjacent insulation. Securely anchor wood blocking with appropriate fasteners a minimum of two (2) for every 16". Perimeter wood blocking and blocking at openings shall be a minimum nominal width of 6".
 - 3.1.5 Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
 - 3.1.6 Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 3.1.6.1 Published requirements of metal framing anchor manufacturer.
 - 3.1.6.2 Table 2304.9.1, "Fastening Schedule," in the International Building Code.

3.1.7 For wood to wood connections use ring shanked, hot dipped galvanized nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.

MODIFIED BITUMEN MEMBRANE ROOFING

PART 1. GENERAL

- 1.1. SECTION INCLUDES:
 - 1.1.1. Two Ply Roof Membrane Application
 - 1.1.2. Roof Flashing Application
 - 1.1.3. Incorporation of Sheet Metal Flashing Components and Roofing Accessories into the Roof System
- 1.2. RELATED SECTIONS
 - 1.2.1. Section 01300 Submittals
 - 1.2.2. Section 06100 Rough Carpentry
 - 1.2.3. Section 07620 Sheet Metal Flashing and Trim
 - 1.2.4. Section 07591 Roof Removal and Preparation

1.3. REFERENCE STANDARDS

- 1.3.1. References in these specifications to standards, test methods and codes, are implied to mean the latest edition of each such standard adopted. The following is an abbreviated list of associations, institutions, and societies which may be used as references throughout these specifications.
 - 1.3.1.1. ASTM American Society for Testing and Materials, Philadelphia, PA
 - 1.3.1.2. FM Factory Mutual Engineering and Research, Norwood, MA
 - 1.3.1.3. NRCA National Roofing Contractors Association, Rosemont, IL
 - 1.3.1.4. OSHA Occupational Safety and Health Administration, Washington, DC
 - 1.3.1.5. SMACNA Sheet Metal and Air Conditioning Contractors National Association, Chantilly, VA
 - 1.3.1.6. UL Underwriters Laboratories, Northbrook, IL

1.4. DESCRIPTION OF WORK

1.4.1. Description of Work: Work required in this specification is referenced below and is based on Siplast Roofing Systems Products and Specifications. A SBS modified bitumen roof system from Johns Mansville (JM) or Soprema (S) installed in accordance with the requirements and procedures listed in this Specification will be

accepted. Acceptable JM and Soprema products are listed in parentheses following listed Siplast products in Part 2 of this Spec Section.

- 1.4.1.1. Roof System:
 - 1.4.1.1.1. Cold Applied Modified Bitumen such as:

1.4.1.1.1.1. Siplast Paradiene 20/30 IH-A1.4.1.1.1.2. Johns Manville 2CID-CA1.4.1.1.1.3. Soprema IS-25/41 SG

1.5. SUPERVISION

- 1.5.1. Contractor shall assign a full-time, English speaking, qualified Roofing Sup't. to the project to coordinate the various aspects of the work; to provide Quality Control Services for the project; and to serve as liason with the Owner's representative.
- 1.5.2. The roofing crew shall be supervised at all times by Contractor's full-time, English speaking Foreman.
- 1.6. SUBMITTALS
 - 1.6.1. Refer to Section 01300 of these Specifications for a Listing of Other Submittals required for this Project.
 - 1.6.2. All submittals which do not conform to the following requirements will be rejected.
 - 1.6.3. Submittals Prior to Contract Award:
 - 1.6.3.1. Letter from the proposed primary roofing manufacturer confirming that the bidder is an acceptable Contractor authorized to install the proposed system.
 - 1.6.3.2. Letter from the primary roofing manufacturer stating that the proposed application will comply with the manufacturer's requirements in order to qualify the project for the specified guarantee/warranty.
 - 1.6.4. Submittals Prior to Start of Work if Asbestos Containing Materials (ACM) are found in existing roof system:
 - 1.6.4.1. Application for SC DHEC Asbestos Disposal License.
 - 1.6.4.2. SC DHEC Asbestos Disposal License.
 - 1.6.5. Submittals Prior to Project Closeout: Final payment will be made to the Contractor only after the following have been submitted. Please provide three (3) copies of the following documents.
 - 1.6.5.1. Manufacturer's printed recommendations for proper maintenance of the specified roof system including inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

- 1.6.5.2. Certificate of Substantial Completion, AIA G704.
- 1.6.5.3. List of Subcontractors by specialty, if any, including address and telephone number.
- 1.6.5.4. Contractor's Affidavit of Payment of Debts and Claims, AIA G706.
- 1.6.5.5. Contractor's Affidavit of Release of Liens, AIA G706A.
- 1.6.5.6. Consent of Surety to Final Payment, AIA G707.
- 1.6.5.7. "No Asbestos" Certification (Statement on Contractor's letterhead that no asbestos containing materials were used in the completion of the Work.)
- 1.6.5.8. Contractor's 2 year watertight warranty to Owner.
- 1.6.5.9. Material Manufacturer's 20 Year NDL Workmanship and Material warranty to the Owner.

1.7. QUALITY ASSURANCE

- 1.7.1. Acceptable Products: Primary roofing products, including each type of sheet, all manufactured in the United States, shall be supplied by a single manufacturer which has been successfully producing the specified types of primary products for not less than 10 years. The primary roofing products shall have maintained a consistent composition for a minimum of five years.
- 1.7.2. Product Quality Assurance Program: Primary roofing materials shall be manufactured under a quality management system that is monitored regularly by a third party auditor under the ISO 9001:2000 audit process. A certificate of analysis for reporting/confirming the tested values of the actual material being supplied for the project will be required prior to project close-out.
- 1.7.3. Roof System Manufacturer Quality Control Inspections: Provide as a part of the Contractor's Base Bid price the following level of roofing system inspections by the roofing system manufacturer during the installation of the new roofing system:
 - 1.7.3.1. Attend the Pre-Roofing Conference with Owner's Agent, Architect, Installing Roofing Contractor, Manufacturer's Representative and General Contractor.
 - 1.7.3.2. Manufacturer's Inspector shall be present along with Architect at initial project startup, 25%, 50%, 75% and 100% inspections.
- 1.7.4. Work found in violation of the Specifications, or not in conformance with acceptable workmanship practices/standards, shall be subject to rejection including complete removal and replacement with new materials at Contractor's expense.
- 1.7.5. Failure of Owner or Architect to discover or reject defective work, or work not in accordance with the Contract, shall not be deemed an acceptance thereof, or 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 a waiver by Owner or any of Owner's rights pursuant to this Contract or otherwise.

- 1.7.6. Contractor may be made to uncover work in-place to determine the quantity and quality of material and workmanship. Contractor photographs may or may not be accepted to validate fasteners, fastener frequency, unit price work and other elements of the work concealed by project finishes.
- 1.7.7. Owner Responsibilities: Owner will provide inspections during the work. Such inspections may be daily or periodic.
- 1.7.8. Contractor Responsibilities: Unless otherwise indicated, provide quality-control inspections with Contractor's own work force. Repair or replace nonconforming work.
 - 1.7.8.1. Associated Services: Cooperate with agencies performing inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Provide the following:
 - 1.7.8.1.1. Access to the Work.
 - 1.7.8.1.2. Incidental labor and materials necessary to facilitate inspections.
 - 1.7.8.2. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate inspections.
 - 1.7.8.3. Agency Approvals: The proposed roof system shall conform to the following requirements. No other testing agency approvals will be accepted. Underwriters Laboratories Class A acceptance of the proposed roofing system, including cold adhesive, without additional requirements for gravel or coatings.
 - 1.7.8.4. Acceptable Contractor: Contractor shall have a minimum of 4 years experience in successfully installing the same or similar roofing materials and be certified in writing by the roofing materials manufacturer to install the primary roofing products.
 - 1.7.8.5. Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings and furnish competent and full time supervision, experienced roof mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the roof installation in accordance with this specification. Comply with the latest written application instructions of the manufacturer of the primary roofing products. In addition, application practice shall comply with requirements and recommendations contained in the latest edition of the Handbook of Accepted Roofing Knowledge (HARK) as published by the National Roofing Contractor's Association, amended to include the acceptance of a phased roof system installation.
 - 1.7.8.6. Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction, including, but

not limited to, permitting of work and licensing of contractors performing the work

1.7.8.7. Manufacturer Requirements: Ensure that the primary roofing materials manufacturer provides direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conducts a final inspection upon successful completion of the project.

1.8. PRODUCT DELIVERY STORAGE AND HANDLING

- 1.8.1. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.
- 1.8.2. Storage: Store materials out of direct exposure to the elements. Store roll-goods on a clean, flat and dry surface. All material stored on the roof overnight shall be stored on pallets. Rolls of roofing must be stored on ends. Store materials on the roof in a manner so as to preclude overloading of deck and building structure. Store materials such as solvents, adhesives and asphalt cutback products away from open flames, sparks or excessive heat. Cover all material using a breathable cover such as a canvas. Polyethylene or other non-breathable plastic coverings are not acceptable.
- 1.8.3. Handling: Handle all materials in such a manner as to preclude damage and contamination with moisture or foreign matter. Handle rolled goods to prevent damage to edges or ends.
- 1.8.4. Damaged Material: Any materials that are found to be damaged or stored in any manner other than stated above will be automatically rejected, removed and replaced at the Contractor's expense.

1.9. PROJECT/SITE CONDITIONS

- 1.9.1. Requirements Prior to Job Start
 - 1.9.1.1. Pre-Roofing Conference: Roofing Contractor shall schedule a pre-roofing construction conference to be conducted by the Project Architect or his Representative, and attended by the installing roofing contractor, the roofing system manufacturer, the Owner's representative and sub-contractors engaged in the work of this project.
 - 1.9.1.2. Notification: Give a minimum of 5 days notice to the Owner, Project Architect, and Manufacturer prior to commencing any work and notify all parties on a daily basis of any change in work schedule.
 - 1.9.1.3. Permits: Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.
 - 1.9.1.4. Safety: Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NRCA and other industry or local governmental groups.

- 1.9.2. Asbestos Products
 - 1.9.2.1. No products containing asbestos fibers are present in the work covered in the Base Bid at Chapin Intermediate School Original Building.
 - 1.9.2.2. No Asbestos Containing Materials are to be incorporated into the work as a part of this contract. No existing asbestos containing material is to be left or incorporated into the work of this contract. In the event the Contractor finds asbestos containing materials not previously identified, then Contractor shall stop all work in the affected area and notify the Owner and Architect. Contractor shall provide all materials necessary to temporarily dry-in the affected area in the Base Bid. Additional work caused by the discovery, if authorized by the Owner, will be handled as a Change Order to this Contract.
- 1.9.3. Environmental Requirements
 - 1.9.3.1. Precipitation: Do not apply roofing materials during precipitation or in the event there is a probability of precipitation during application. Take adequate precautions to ensure that materials, applied roofing, and building interiors are protected from possible moisture damage or contamination.
 - 1.9.3.2. Temperature Restrictions cold adhesive: At low temperatures, the specified cold adhesive becomes more viscous, making even distribution more difficult. The optimal temperature of the adhesive at point of application is 70°F (21°C). To facilitate application when ambient temperatures are below 50°F (10°C), store the adhesive and roll goods in a warm place immediately prior to use. Suspend application in situations where the adhesive cannot be kept at temperatures allowing for even distribution. Roll or broom base ply and finish ply sheets across their full width to ensure contact with the underlying adhesive.
- 1.9.4. Protection Requirements
 - 1.9.4.1. Membrane Protection: Provide protection against staining and mechanical damage to newly applied roofing and adjacent surfaces throughout this project.
 - 1.9.4.2. Limited Access: Prevent access by the public to materials, tools and equipment during the course of the project.
 - 1.9.4.3. Debris Removal: Remove all debris daily from the project site and take to a legal dumping area authorized to receive such materials.
 - 1.9.4.4. Site Condition: Complete, to the Owner's satisfaction, all job site clean-up including building interior, exterior and landscaping where affected by the construction.
 - 1.9.4.5. Facility Protection:
 - 1.9.4.5.1. Limit size of work sections to safeguard adjacent materials, structures, etc., and to minimize dust and noise.

- 1.9.4.5.2. Protect existing facilities from damage during work. Do not overload existing paving, curbs, sidewalks, etc. with vehicle traffic. Do not overload new or existing construction with demolition debris, equipment, new materials etc.
- 1.9.4.5.3. Protect existing facilities from fire. Contractor shall provide suitable and adequate fire extinguishers conveniently located on the premises at staging areas, storage areas and at areas of equipment. Competent operators shall be in attendance at all times and shall be properly trained or instructed in fire protection.
- 1.9.4.5.4. Plywood, minimum 3/4 inch thick, or other suitable materials shall be used to protect roof areas from damage that may be caused by concentrated equipment loads and foot traffic.
- 1.9.4.5.5. Site and roof traffic shall be confined to work areas. Contractor shall be responsible for leaks that develop in traffic areas during and after Project completion.
- 1.9.4.5.6. Contractor shall protect interior operations from adverse weather during roofing operations. This requirement extends beyond the immediate project scope of work to adjacent contiguous roof areas.
- 1.9.4.5.7. The Contractor is responsible and shall be held liable for any damages to the adjacent roof assemblies, building, building contents, its occupancy, grounds or landscaping resulting from work under the Contract. In the event of damage, Contractor will restore property to a condition equivalent to that at the time the Project started. Restoration may be necessary to construction assemblies not specified in this project manual. In such cases, repair methods and materials are subject to approval by Owner.
- 1.9.4.6. The Contractor shall keep existing drainage facilities clear of debris during construction.

1.10. CONTRACTOR'S TWO YEAR WARRANTY

1.10.1. All new materials and workmanship covering work provided under this section of the specifications shall be guaranteed in writing by the contractor to maintain in a watertight condition without cost to the Owner for a period of two (2) years after date of substantial completion.

1.11. MANUFACTURER'S 20 YEAR GUARANTEE/WARRANTY

1.11.1. Roof System Guarantee: Upon successful completion of the project, and after all post installation procedures have been completed, furnish the Owner with the roof system manufacturer's 20 year, No Dollar Limit, Labor and Materials Total Roof System Guarantee. The roof system guarantee shall include both the modified bitumen roofing, surfacing, and flashing membranes, catalyzed resin flashing

system, roof insulation, insulation overlay, insulation adhesives, insulation fasteners, flashing adhesives, and accessory roofing materials.

- 1.12. All repair or replacement costs covered under the guarantee shall be borne by the roofing membrane manufacturer. The guarantee shall be a term type, without deductibles or limitations on coverage amount, and be issued at no additional cost to the Owner.
- PART 2. PRODUCTS
- 2.1. ROOFING SYSTEM ASSEMBLY/PRODUCTS
 - 2.1.1. ROOF INSULATION
 - 2.1.1.1. Polyisocyanurate Roof Insulation 1.5" and 2" Flat: ASTM C 1289 Type II such as Siplast Paratherm (JM: E'NERG'Y 3; S: Sopra-Iso) 4' x 8' maximum size for mechanical attachment.
 - 2.1.1.2. Tapered Polyisocyanurate Insulation:
 - 2.1.1.2.1. At canopies, provide factory-tapered polyisocyanurate roof insulation boards fabricated to ¼" per foot slope, with 1/2" starting thickness, as indicated on Project Drawings.
 - 2.1.1.2.2. Provide factory-tapered polyisocyanurate insulation boards fabricated to slope of ½ inch per 12 inches at all backslopes, saddles and crickets. Use monolithic board only, factory laminated board is not acceptable.
 - 2.1.1.2.3. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain and to provide constant eave height where indicated and as necessary. Fabricate to slopes indicated.
 - 2.1.1.3. Insulation Overlayment: Georgia Pacific DensDeck Prime; ¼" x 4' x 4'; furnished by manufacturer as part of the guaranteed roof system (USG Securock; ¼" x 4' x 4') (Invinsa ® JM ¼"x4x4) (Soprema Sopraboard 1/8" x 4' x 4').
 - 2.1.1.4. Cant Strips: Siplast: Mineral perlite board cut to fit at 45 degrees with 5" face.
 - 2.1.1.5. Tapered Edge Strips: Mineral perlite in full range as provided by Manufacturer from $\frac{1}{2}$ inch to 2 inch at thick edge; Provide 0" $\frac{1}{2}$ " x 6" tapered edge strip at leading edge of tapered insulation saddles.
 - 2.1.1.6. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain and to provide constant eave height where indicated and as necessary. Fabricate to slopes indicated.

2.1.2. Base Ply

- 2.1.2.1. Siplast Paradiene 20: 62# / 100 sq. ft. minimum weight, applied to coverboard with hot asphalt (JM: DynaBase; S: Elastophene Sanded).
- 2.1.3. Finish Ply
 - 2.1.3.1. Siplast Paradiene 30 FR CR, white: 75# / 100 sq. ft. minimum weight, applied to Base Ply with cold adhesive and heat welded laps (JM: DynaGlas FR CR; S: Elastophene LS FR GR SG).
- 2.1.4. Flashing Membrane
 - 2.1.4.1. Siplast Veral Aluminum: aluminum clad asphalt elastomer sheet: 96# / 100 sq. ft. minimum weight, applied with solvent-free adhesive (JM: DynaClad; S: Sopralast 50 TV ALU sanded).
- 2.1.5. Fluid Applied Flashing Systems
 - 2.1.5.1. Siplast Parapro 123 Flashing System: A Catalyzed Acrylic Resin Flashing System: A specialty flashing system consisting of a liquid-applied, fully reinforced, multi-component acrylic membrane installed over a prepared or primed substrate. The flashing system consists of a catalyzed acrylic resin primer, basecoat and topcoat, combined with a non-woven polyester fleece. The resin and catalyst are pre-mixed immediately prior to installation. The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application. (JM: PermaFlash; S: Alsan Flashing).

2.2. ASPHALT MATERIALS

- 2.2.1. Asphalt Primer: ASTM D41.
- 2.3. AUXILIARY ROOFING MATERIALS
 - 2.3.1. Adhesives
 - 2.3.1.1. Adhesive for Membrane Plies: Siplast PA-311 M Adhesive. (JM: MBR Cold Application Adhesive; S: Colply Adhesive VOC).
 - 2.3.1.2. Adhesive for Membrane Plies at Pipe Penetrations Receiving Catalyzed Resin Flashing System: Siplast Solvent Free Adhesive. (JM: MBR Cold Application Adhesive; S: Colply Adhesive VOC).
 - 2.3.1.3. Insulation Overlayment Adhesive
 - 2.3.1.3.1. Siplast: ParaStik (JM: Dow Instastik QS; S: Duotack)
 - 2.3.2. Bituminous Cutback Materials
 - 2.3.2.1. Mastic: Siplast PA-1021 Plastic Cement (JM: MBR Utility Cement; S: FM Adhesive (VOC) Trowel Grade)

- 2.3.3. Sealant at Membrane/metal junctions:
 - 2.3.3.1. Siplast PS-304 Elastomeric Sealant
- 2.3.4. Reflective Coating for Liquid Applied Membrane and Adhesive Overruns:
 - 2.3.4.1. Siplast #11 Roofing Granules (JM: Mineral Granules white; S: SG Granules).
- 2.3.5. Walk Pad:
 - 2.3.5.1. At locations designated on Roof Plan:
 - 2.3.5.1.1. Industrial Anti Fatigue Mat, Wet Areas, Size 38 x 64 In, Color Black, Orange Border, 7/8 In Thick Rubber

Item #4YJ18 as distributed by Grainger

- 2.3.5.2. At HVAC units, gas pipe and duct supports:
 - 2.3.5.2.1. Siplast Paradiene 40 FR, white: 99# / 100 sq. ft. minimum weight, applied to Cap Sheet with cold adhesive and heat welded laps (JM: DynaKap FR; S: Elastophene LS FR GR SG).

2.4. ROOF ACCESSORIES

- 2.4.1. Fasteners
 - 2.4.1.1. Insulation Fasteners for Metal Roof Decks: Insulation fasteners shall be approved and furnished by the manufacturer of the selected roof system. Fasteners shall be treated with a corrosion resistant coating exceeding FM Approval Standard #4470 and shall be installed with 3" diameter, round, premium Galvalume metal plates.
 - 2.4.1.2. Capped Nails: Hot-dip galvanized ring shank or Stainless Steel ring shank nail as manufactured by Maze Nails or Simplex.
 - 2.4.1.3. Fasteners for miscellaneous attachments not specified: Hot-dipped galvanized Ring Shank or Stainless Steel Roofing Nails as mfg. by Maze Nails. Only stainless steel nails may be used in conjunction with aluminum sheet and aluminium fabrications.
 - 2.4.1.4. Masonry Expansion Fasteners: Rawl Zamac Nailin® drive anchor w/ Type 304 stainless steel nail ¼" x 1 ¼".

PART 3. EXECUTION

3.1. PREPARATION

3.1.1. Refer to Section 07591 for work required prior to removal of existing roof system, and preparations required to receive new roofing.

- 3.1.2. General: After removal of existing roof system and deck preparation is complete, remove all dirt, dust, debris and foreign substances from roof deck and ribs of roof deck, prior to commencement of roofing.
- 3.1.3. Examine roof deck to verify deck is in sound condition without visible damage or rust. Repair or replace existing roof deck as specified in Section 07591 of these specifications.
- 3.1.4. Examine all metal roof deck at roof perimeter to confirm edge of roof deck is fastened to structure at maximum 6" centers. Install missing fasteners and replace damaged fasteners at the perimeter of all roof areas as specified in Section 07591 of these specifications.

3.2. GENERAL INSULATION APPLICATION

- 3.2.1. Minimum required roof insulation 4 feet from roof drain valley or building perimeter shall be R-20, as required by ASHRAE 90.1-2007 and current building code. In no case shall the minimum R-Value be less than that stated on Form F-3 on the Key Plan for each construction type.
- 3.2.2. Edges of adjacent insulation boards shall be in moderate contact, without forcing.
- 3.2.3. Gaps in insulation joints over $\frac{1}{4}$ wide shall be filled.
- 3.2.4. Broken corners and edges of any insulation board shall be cut out and repaired with square-cut pieces of insulation no less that 8" x 8" in size.
- 3.2.5. Insulation boards shall be cut neatly to fit tight against vertical surfaces.
- 3.2.6. Insulation surface shall present a smooth surface to receive the roof membrane.
- 3.2.7. All joints of insulation board layer above base layer insulation shall be offset 24" from joints in base layer or fill insulation, below.
- 3.2.8. All joints in insulation overlay shall be offset 24" from joints of flat and tapered insulation, below.
- 3.3. INSULATION ATTACHMENT TO METAL DECKS (ROOF AREAS 12-27)
 - 3.3.1. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
 - 3.3.2. Comply with roofing system manufacturer's written instructions for installing roof insulation.
 - 3.3.3. Apply insulation with end joints staggered approximately one-half the length of the units.
 - 3.3.4. Apply insulation with long dimension of units across deck ribs. On open rib steel decks, ends of units must bear on deck surface.
 - 3.3.5. Form 4' insulation sumps with tapered polyisocyanurate insulation at main roof drains as shown on Project Drawings.

- 3.3.6. Loose lay one layer of 2" polyisocyanurate insulation, offsetting joints of adjacent insulation boards, between rows and layers, a minimum of 12".
- 3.3.7. Loose lay one layer of 1.5" polyisocyanurate insulation over the previously installed 2" insulation, offsetting joints of adjacent insulation boards, between rows and layers, a minimum of 12".
- 3.3.8. After installation of the base insulation, install ½" tapered insulation backslope from the drain valley to the roof perimeter.
- 3.3.9. Mechanically gang fasten through both base layers of insulation to metal deck substrate with specified fasteners using pattern as found in FM Property Loss Prevention Data Sheets 1-29.
 - 3.3.9.1. At Roof Field: 12 fasteners per 4' x 8' insulation board.
 - 3.3.9.2. At Roof Perimeter (12'): 15 fasteners per 4' x 8' insulation board
 - 3.3.9.3. At Roof Corners (12 'x 12'): 24 fasteners per 4' x 8' insulation board.
- 3.3.10. Partial insulation units less than 2 square feet in area must be fastened with a minimum of two fasteners.
- 3.3.11. Form crickets along the upslope side of all curb mounted equipment with base widths exceeding 18" using factory tapered polyisocyanurate insulation (1/2":12"), fill units and tapered edge strips.
 - 3.3.11.1. Adhere tapered insulation in ribbons of foamed, insulation adhesive, spaced at 12" centers in the field and 6" O.C. at perimeter and 4" O.C. at corner conditions.
 - 3.3.11.2. Crickets, saddles and tapered edge strips must be installed before application of insulation overlayment.
- 3.4. INSULATION ATTACHMENT TO METAL DECKS (ROOF AREAS C1, C2 & C3)
 - 3.4.1. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
 - 3.4.2. Comply with roofing system manufacturer's written instructions for installing roof insulation.
 - 3.4.3. Apply insulation with end joints staggered approximately one-half the length of the units.
 - 3.4.4. Apply insulation with long dimension of units across deck ribs. On open rib steel decks, ends of units must bear on deck surface.
 - 3.4.5. Loose lay one layer of 1.5" polyisocyanurate insulation over the existing metal deck, offsetting joints of adjacent insulation boards, between rows and layers, a minimum of 12". Then loose lay 1/4" tapered polyisocyanurate insulation over the base insulation.

- 3.4.6. Mechanically gang fasten through both base layers of insulation to metal deck substrate with specified fasteners using pattern as found in FM Property Loss Prevention Data Sheets 1-29.
 - 3.4.6.1. At Roof Field: 12 fasteners per 4' x 8' insulation board.
 - 3.4.6.2. At Roof Perimeter (4'): 15 fasteners per 4' x 8' insulation board
 - 3.4.6.3. At Roof Corners (4 'x 4'): 24 fasteners per 4' x 8' insulation board.
- 3.4.7. Partial insulation units less than 2 square feet in area must be fastened with a minimum of two fasteners.

3.5. INSTALLATION OF INSULATION OVERLAYMENT

- 3.5.1. Adhere each overlayment board, approved and furnished by manufacturer of selected roof system, in ribbons of foamed, insulation adhesive, spaced at 12" centers.
 - 3.5.1.1. At perimeter (12' edge condition), decrease adhesive spacing to 6" centers. At corner (12' x 12'), decrease adhesive spacing to 4" centers.
- 3.5.2. Size adhesive ribbons in accordance with manufacturer's instructions.
- 3.5.3. Space ribbons approx. 3" in from sides of insulation and overlay boards and extend ribbons to within 3" of board ends
- 3.5.4. Lay boards onto adhesive ribbons, without sliding across roof surface to position in final location.
- 3.5.5. Walk all boards down immediately after installation, before adhesive has set.
- 3.5.6. Completely remove excess adhesive from surface of overlay boards to provide a plane surface for membrane above.
- 3.5.7. Offset insulation and overlayment joints a minimum of 12", in both directions, in each layer and between layers.

3.6. ROOF MEMBRANE INSTALLATION

- 3.6.1. Membrane Application: Apply roofing in accordance with roofing system manufacturer's current instructions and the following requirements. Application of roofing membrane components shall immediately follow application of insulation overlay, as a continuous operation.
- 3.6.2. Aesthetic Considerations: An aesthetically pleasing overall appearance of the finished roof application is a standard requirement for this project. Make necessary preparations, utilize recommended application techniques to apply the specified materials, and exercise care in ensuring that the finished application is acceptable to the Owner.

- 3.6.3. Priming: Prime metal, concrete, and masonry surfaces, and both sides of metal flashings, in contact with bituminous products, with a uniform coating of the specified asphalt primer.
- 3.6.4. Membrane Adhesive Application: Membrane adhesive can be applied by roller, squeegee or spray unit, as recommended by manufacturer of roofing system. Apply cold adhesive in a smooth, even, continuous layer without breaks or voids. Utilize an application rate of 1 1/2 to 2 gal/sq for interply applications. Utilize an application rate of 2 to 2 1/2 gal/sq over irregular or porous substrates.
- 3.6.5. Adhesive and Primer Consistency: Thinning or alterations of adhesives, primer, and sealants will not be permitted.
- 3.6.6. Roof Membrane Application: Apply all layers of roofing free of wrinkles, creases or fishmouths. Exert sufficient pressure on the roll during application to ensure prevention of air pockets. Broom base ply and top ply across their full width and along its full length.
 - 3.6.6.1. Apply all layers of roofing perpendicular to the slope of the roof, starting installation at valleys and working upslope. Extend all layers of roof membrane across hips of tapered insulation system. Offset base ply and finish ply end laps at hips.
 - 3.6.6.2. Apply all layers of the roof membrane without backwater or side-hill laps.
 - 3.6.6.3. Fully bond the base ply to the surface of the adhesive adhered cover board. Install with minimum 3 inch side laps and 6" end laps. Apply each sheet directly behind the cold adhesive applicator.
 - 3.6.6.4. Extend base ply past roof edge and turn down over face of perimeter wood blocking. Extend bottom edge of base ply ³/₄" past bottom of perimeter wood blocking or fascia board. Fasten base ply to face of wood blocking using capped. stainless steel nails, spaced at 12" centers.
 - 3.6.6.5. Cut a dog ear angle at the end laps of the base ply, on overlapping selvage edges. Using a clean trowel, apply top pressure to seal T-laps immediately following sheet application. Stagger end laps a minimum of 3 feet.
 - 3.6.6.6. Adhere cant strips to surface of roof insulation and to vertical face of curbs.
 - 3.6.6.7. Extend the base ply, dry, across the face of all cant strips, and cut off at top of cant strips.
 - 3.6.6.8. Before installation of the finish ply begins, install an additional, fully adhered layer of base ply, as reinforcing sheet, across the cant strip, using specified flashing cement, extending 3" above the cant strip and 3" onto the surface of the previously installed base ply, in accordance with system manufacturer's instructions.
 - 3.6.6.9. At wood substrates, extend the backer ply, dry, above the cant strip, to the height of the finished base flashing and fasten to the substrate at 6" centers, in both directions, using specified, capped nails..

- 3.6.6.10. Before installation of finish ply begins, install all flanged flashings over base ply as outlined in Paragraph 3.6 Roof System Interface with Related Components, below.
- 3.6.6.11. Fully bond the finish ply to the base ply, utilizing minimum 3 inch side and 6" end laps. Apply each sheet directly behind the cold adhesive applicator. Stagger end laps of the finish ply a minimum 3 feet.
- 3.6.6.12. Cut a dog ear angle, at the end laps of the finish ply, on overlapping selvage edges. Using a clean trowel, apply top pressure to top seal T-laps immediately following sheet application.
- 3.6.6.13. Offset side laps of the finish ply 18 inches from side laps in the underlying base ply. Stagger end laps of the finish ply a minimum 3 feet from end laps in the underlying base ply and from the adjacent sheets of finish ply.
- 3.6.7. Adhesive and Cement Overruns: Cover all adhesive and cement overruns on the finish ply surface with specified granules while the adhesive is soft, to ensure a monolithic surface color.
- 3.6.8. Base Flashing Application: Flash walls and curbs using the reinforcing sheet and the aluminum clad flashing sheet, applied in specified flashing cement.
 - 3.6.8.1. Except as noted above for wood substrates, fully adhere the reinforcing sheet to the base ply and other substrates using specified flashing cement, prior to installation of the finish ply. Incorporate minimum 3 inch side laps; extending the sheets a minimum of 3 inches onto the base ply surface and 3 inches up the wall or curb, above the cant, unless otherwise required by roof system manufacturer.
 - 3.6.8.2. Terminate the finish ply at the top of the cant. Cut the specified surface flashing sheet across the width of each roll, maintaining the selvage edge along one side of the cut flashing sheet.
 - 3.6.8.3. Apply a uniform coat of the specified flashing cement to the area to receive flashing coverage and to the backside of the precut section of base flashing. Set the flashing in place while exerting pressure on the flashing sheet to ensure complete contact with the wall/roof surfaces and to prevent air pockets. Check and seal all loose laps and edges.
 - 3.6.8.4. Fasten the top edge of the flashing sheet to wood blocking or to wood substrates using 1-1/4", stainless steel, capped, ring shank nails spaced at 4" centers.
- 3.6.9. Catalyzed Acrylic Resin Flashing System (Interply Application Required): Install the liquid-applied primer and flashing system in accordance with the system manufacturer's printed installer's guidelines for an interply application. Observe all other applicable written recommendations as provided by the manufacturer.
 - 3.6.9.1. Remove all bitumen, debris, rust, scale and other foreign matter from surfaces receiving catalyzed flashing system, prior to installation. Use scrapers, wire brush and/or grinders, as necessary.

- 3.6.9.2. Treat cleaned areas receiving ParaPro Flashing with Siplast Pro-Prep and allow to dry.
- 3.6.9.3. Apply Siplast ParaPro ProFleece to prepared surface of roof and penetrations thru roof in strict accordance with manufacturer's written instructions, including pre-saturation of ProFleece laps with the Catalyzed Acrylic Resin.
- 3.6.9.4. Apply base coat and top coat of catylzed acrylic resin to ParaPro fleece. Allow manufacturer's instructions regarding drying and curing time between coats.
- 3.6.10. Covering of Adhesive and Cement Overruns: Cover all adhesive and flashing cement overruns on the base flashing or finish ply surface with specified reflective coating while the adhesive or cement is still soft to ensure a monolithic surface color.
- 3.6.11. Water Cut-Offs: At end of each day's work, or when precipitation is imminent, construct water cut-offs at all open edges. Cut-offs can be built using asphalt or plastic cement and roofing felts, and shall be constructed so as to withstand protracted periods of service. Cut-offs must be completely removed prior to the resumption of roofing.
- 3.6.12. Walk pads: Install specified walk pads over finish ply, at designated locations, using specified flashing adhesive.

3.7. ROOF SYSTEM INTERFACE WITH RELATED COMPONENTS

- 3.7.1. Miscellaneous Flanged Flashings
 - 3.7.1.1. Coat both top and bottom surfaces of miscellaneous flanged flashing with asphalt primer and allow to dry. When dry, set primed flange over field membrane plies in solid bed of black plastic roof cement.
 - 3.7.1.2. If flange width exceeds 12 inches, secure it to previously installed wood blocking with suitable fasteners placed near each corner and at the center of each side.
 - 3.7.1.3. Seal flange with one base ply to field membrane ply. Fit stripping ply snugly to vertical flanges. Extend stripping ply at least six inches beyond the flange.
 - 3.7.1.4. Extend flashing sleeves a minimum height of 8" above the roof surface.
- 3.7.2. Lead Drain Flashings: Completely prime both sides of the 30" x 30" sheet lead drain flashing and allow to dry prior to installation. After the base ply has been applied, set the lead flashing sheet in a full bed of roof cement and form the lead sheet to turn down 1-1/2" inside of the drain bowl. Strip-in the lead flashing using a layer of the base ply or base sheet material, overlapping the outside perimeter of the lead a minimum of 6 inches. Terminate the finish ply so as to extend beneath the clamping ring. Install the clamping with all bolts set in place and tightened.
- 3.7.3. Walk tread: Adhere the walk tread to the finish ply using the specified plastic cement. Apply the specified cement in a 3/8 inch thickness to the back of the product in 5 inch

by 5 inch spots in accordance with the pattern as supplied by the walk tread manufacturer. Walk-in each sheet after application to ensure proper adhesion. Use a minimum spacing of 2 inches between sheets to allow for proper drainage.

- 3.7.4. Sealant: Apply a smooth continuous bead of the specified sealant at the exposed edges of the finish ply at the transition to all metal flashings incorporated into the roof system.
- 3.7.5. Condensate Drain Piping: Support PVC piping at 5' O.C. with specified condensate pipe stands. Set pipe stand in a bed of utility cement on a sacrificial cap sheet membrane, which extends a minimum of 4" beyond the pipe support base in all directions. Sacrificial cap sheet membrane shall be spot adhered to the cap sheet surfacing.

3.8. FIELD QUALITY CONTROL AND INSPECTIONS

- 3.8.1. Site Condition: Leave all areas around job site free of debris, roofing materials, equipment and related items after completion of job.
- 3.8.2. Schedule required manufacturer's progress inspections at specified intervals. Notify Project Architect of scheduled inspection dates. Provide Project Architect with copies of manufacturer's inspection reports in a timely fashion. Provide pertinent information regarding proposed and completed repairs required by the manufacturer.
- 3.8.3. Notification of Completion: Notify the manufacturer by means of manufacturer's printed Notification of Completion form of job completion in order to schedule a final inspection date.
- 3.8.4. Final Inspection
 - 3.8.4.1. Notify Project Architect of scheduled time and date of manufacturer's final inspection.
 - 3.8.4.2. Post-Installation Meeting: Hold a meeting at the completion of the project, attended by all parties that were present at the pre-job conference. A punch list of items required for completion shall be compiled by the Contractor and the manufacturer's representative. Complete, sign, and mail the punch list form to the manufacturer's headquarters and to the Project Architect.
- 3.8.5. Issuance of The Guarantee: Complete all post installation procedures and meet the manufacturer's final endorsement for issuance of the specified guarantee.

END OF SECTION 07550

SECTION 07591

REROOFING REMOVALS & PREPARATION

PART 1 GENERAL

1.1 SUMMARY

- 1.1.1 This Section includes the following:
 - 1.1.1.1 Existing Roof System Assembly Removals
 - 1.1.1.2 Preparing the Existing Substrate Decking for Reroofing Construction
 - 1.1.1.3 Installation of New Wood Blocking at Parapet Walls
 - 1.1.1.4 Installation of New Adjustable Extensions at Existing Overflow Drains
 - 1.1.1.5 Existing Abandoned Equipment Curb Removals
 - 1.1.1.6 Existing Roofing System Assemblies Disposal

1.2 RELATED WORK SPECIFIED ELSEWHERE

- 1.2.1 Allowances: Refer to Division 1 Section 01021 "Cash Allowances" for description of Work in this Section affected by allowances.
- 1.2.2 Unit Prices: Refer to Division 1 Section 01025 "Measurement and Payment" for description of Work in this Section affected by unit prices.
- 1.2.3 Wood Blocking: Refer to Division 6 Section 06100 "Rough Carpentry" for description of Work in this Section affected by wood blocking installation.

1.3 SUBMITTALS

- 1.3.1 Product Data: Reference Section 01300 "Submittals."
- 1.3.2 Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.

1.4 QUALITY ASSURANCE

- 1.4.1 Installer Qualifications: Reference Section 01400 "Quality Control."
- 1.4.2 Pre-roofing Conference: Prior to the work beginning, conduct a pre-construction conference with the Owner and Architect at Chapin High School with the Contractor's project foreman and project manager in attendance.

1.5 PROJECT CONDITIONS

- 1.5.1 Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
- 1.5.2 Coordinate work activities daily with Owner so Contractor can place protective dust or water leakage covers over sensitive equipment or furnishings, shut down HVAC and fire-alarm or detection equipment if needed, and evacuate occupants from below the work area if desired.
- 1.5.3 Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated prior to proceeding with work over the impaired deck area.
- 1.5.4 Protect building to be reroofed, building interiors, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations. Repair affected areas to original existing condition previous to reroofing project.
- 1.5.5 Protect occupants and property below roofing activity at all times until work overhead is complete to the point that protection is no longer required.
- 1.5.6 Maintain access to existing walkways, corridors and other occupied or used facilities.
 - 1.5.6.1 Do not close or obstruct walkways, corridors and other occupied or used facilities without written permission from authorities having jurisdiction.
- 1.5.7 Limit construction loads on roof to 20 lbs/SF for uniformly distributed loads which includes rooftop equipment wheel loads.
- 1.5.8 Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.

PART 2 PRODUCTS

2.1 AUXILIARY REROOFING MATERIALS

- 2.1.1 General: Auxiliary reroofing preparation materials recommended by roofing system manufacturer for intended use and compatible with components of new roofing systems.
- 2.1.2 Wood blocking to wood substrate: Stormguard® hot dipped galvanized ring shanked or spiral decking nails with minimum 3/8" head as manufactured by Maze Nails.

- 2.1.3 Wood to Wood Screws: Shall be ITW Buildex DEC-KING[™] Climacoat[™] bugle head, size for length required 6x1- 1/4" (part No. 2176500) for sheathing to sheathing application.
- 2.1.4 Wood blocking to structural steel: Corrosion resistant, self tapping, self-drilling screw with low profile head such as TRAXX[™] 4.5 by ITW Buildex where length will allow; and where greater length is required countersink head and utilize TRAXX[™] 5 by ITW Buildex. Acceptable equal alternates as manufactured by Construction Fasteners, Rawl, Olympic and Tru-Fast must be submitted for approval.
- 2.1.5 Wood to Metal Screws: Shall be ITW Buildex TRAXX[™] Climacoat[™] flat head 12-24X2 ½" (part No. 1094000).
- 2.1.6 Wood blocking to masonry wall: hot dipped, galvanized 3/8" diameter threaded rod embedded a minimum of 4" into the masonry and set in fast curing epoxy.
- 2.1.7 Fast Curing Epoxy: ASTM C881-90, Type IV, Grade 3, Class A, B and C, twopart, fast curing epoxy such as C6 Fast Curing Epoxy, as manufactured by Epcon.
- 2.1.8 One-Piece, Vibration Resistant Masonry Anchor: Shall be Powers SPIKE® ¹/₄ inch diameter manufactured from high grade carbon steel (ASTM B 633) with mushroom head at one end and a specially designed "S" shaped expansion mechanism on the working end. Perma-Seal Fluoropolymer Coating. Pre-drill hole 1/2-inch depth greater than SPIKE length. Johns Manville CD-10 Fastener w/ CR-10 coating approved equal.
- 2.1.9 Metal Primer: High performance, corrosion resistant and fast drying metal primer such as Interior/Exterior Flat Rusty Metal Primer Paint and Primer in One, as manufactured by Rust-Oleum.
- 2.2 OVERFLOW ROOF DRAIN EXTENSION
 - 2.2.1 Quick Adjustable Drain Top Assembly, including all gaskets, bolts and threaded adjustable drain extension, such as Part No. 1015EK Extension Kit Complete as manufacturer by J.R. Smith.

2.3 DECKING FOR INFILL AT ABANDONED CURBS

- 2.3.1 1/8" thick steel plate.
- 2.3.2 $\frac{1}{4}x^2x^2$ and $\frac{1}{4}x^3x^3$ miscellaneous steel angle.
- 2.3.3 22 gage steel metal "B" deck: 1 ¹/₂'" deep, intermediate rib, structural roof deck unit that provides a support surface for various types of roofing materials.
 - 2.3.3.1 Profile to match existing metal deck.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

- 3.1.1 Protect existing roofing systems that are indicated not to be reroofed.
- 3.1.2 Coordinate with Owner to shut down air intake equipment in the vicinity of the Work. Cover air intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
 - 3.1.2.1 Contractor is responsible for disconnection of existing roof mounted equipment and electrical wiring, as well as all reconnections and testing.
- 3.1.3 Check all internal roof drains for clear passage of storm water. Report any clogged drains to OWNER prior to the start of reroofing work. Contractor's start of work is regarded as Contractor's acceptance of clear drainage. Contractor will be responsible for all work required to clear drainage path after work under this contract has begun.
 - 3.1.3.1 Replace any plastic, damaged or missing drain strainer baskets with new cast iron strainer baskets.
 - 3.1.3.2 Replace any damaged or broken drain clamping rings or bolt fasteners.
- 3.1.4 Raise mechanical equipment and curbs as necessary to maintain minimum 8" base flashing height.
 - 3.1.4.1 Extend sanitary vents as necessary to a minimum height of 8" above the finished roof surface.
- 3.1.5 Maintain roof drainage path in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drainage path and conductors. For internal drainage systems, use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
- 3.1.6 It is not anticipated that hazardous materials will be encountered in the work of this project. There are no existing products containing asbestos fibers. Reference Section 01010 Summary of Work.
 - 3.1.6.1 If encountered materials are suspected of containing hazardous materials, do not disturb; immediately notify Architect and Owner. Hazardous materials not currently identified in the contract documents will be removed by Owner as a Change Order to the Contract or under separate contract with separate specialty contractor.
- 3.1.7 Storage or sale of removed items or materials on–site will not be permitted.
- 3.1.8 Utility Service: Maintain existing utilities in service and protect them against damage during the selective demolition operations.
 - 3.1.8.1 Maintain security and fire protection facilities in service during selective demolition operations.

- 3.1.8.2 When unanticipated mechanical, electrical or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit in writing a report to the Architect.
- 3.1.8.3 Verify that rooftop utilities and service piping have been shut off before commencing work which may not be safe if service is left on.
- 3.1.8.4 Coordinate shutdown or disconnect of rooftop utilities or service piping with Owner, no less than 72 hours before shutdown or disconnect are scheduled.
- 3.1.9 Site Access and Temporary Controls: Conduct removals, preparations and roofing installation operations to ensure minimum interference with roads, streets, walks, walkways and other adjacent occupied and used facilities.
 - 3.1.9.1 Do not close or obstruct roads, streets, walks, walkways and other adjacent occupied and used facilities without written permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
 - 3.1.9.2 Erect temporary protection where required by authorities having jurisdiction.
- 3.1.10 Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 3.1.10.1 Provide Temporary toilet facilities on site in location to be determined by Owner and Architect.
 - 3.1.10.2 Provide chain link fencing for kettle with temporary standards. Do not penetrate existing pavement to support fencing or temporary barricades.
- 3.1.11 Examination of Roof Drains
 - 3.1.11.1 Remove all asphalt or misc. sealant accumulations from interior of all drain and overflow drain bowls prior to start of roof removals. Water test all prepared drain bowls and overflow drain bowls to locate any existing defects in drain casting.
 - 3.1.11.2 Verify integrity of anchor lugs or threaded attachment points for drain clamping rings.
 - 3.1.11.3 Advise Project Architect of any defect found in drain assemblies prior to start of roof removal. Contractor is responsible for all drains once new roof assembly is applied.

3.2 EXISTING ROOF SYSTEM ASSEMBLY REMOVALS:

- 3.2.1 General: Notify Owner each day of extent of removals or roof tear-off proposed and obtain authorization to proceed from Owner's point of contact.
- 3.2.2 Remove existing aggregate surfaced, Built-Up Roof system assembly, metal and bituminous flashings and other roofing system components, down to the existing metal deck and discard in accordance with SCDHEC regulations.
- 3.2.3 Remove, discard and repair remaining substrate surface at any obstruction which may interfere with the proper application of new materials.
- 3.2.4 Remove and discard all abandoned equipment curbs and caps.
- 3.2.5 Remove and discard existing through wall metal scupper liner.
- 3.2.6 Remove and discard existing metal parapet coping.

3.3 PREPARING THE EXISTING SUBSTRATE DECKING FOR REROOFING CONSTRUCTION:

- 3.3.1 Inspect roof deck, daily, during and after tear-off of BUR roofing system. Provide fall-thru protection over known or suspected areas of deteriorated roof deck
- 3.3.2 Remove any existing deteriorated roof deck and replace with new decking to match existing profile and thickness. Maintain and submit daily log of deck replacement work.
- 3.3.3 Do not proceed with installation of new roof decking until the Architect or Owner are notified and direction is given to proceed with the work.
- 3.3.4 Extend wood blocking at equipment curbs, parapet walls and expansion joints as necessary to maintain minimum 8" base flashing heights. Expand wood blocking at equipment curbs as necessary to maintain a ½" overlap of equipment base vertical face.
- 3.3.5 Application of new materials constitutes approval by the installing roofing contractor that the substrate conditions are satisfactory.
- 3.3.6 Metal Deck:
 - 3.3.6.1 Replace missing, broken, or loose side lap fasteners that secure deck panels to one another, using specified fasteners. Maximum spacing of side lap fasteners shall be 20" OC.
 - 3.3.6.2 At roof deck perimeter 8' edge, decrease fastener spacing of the existing roof deck to structural supports by installing additional specified, self-drilling fasteners spaced such that the maximum distance between fasteners is 6".
 - 3.3.6.3 Use a rotary wire brush to remove scale and rust from steel roof deck. Coat prepared areas with one coat of Rust-Oleum Rusty Metal Primer. Maintain and submit daily log of unit price work. See Section 01010 of

these specifications for Unit Price Quantities to include in Base Bid for removal of rust and scale and for treatment of rusted deck.

- 3.3.6.4 Remove any existing deteriorated steel roof deck and replace with new steel roof deck of like gauge and profile. Maintain and submit daily log of unit price work. See Section 01010 of these specifications for Unit Price Quantities to include in Base Bid for metal deck replacement.
- 3.3.6.5 Do not proceed with installation of new roof decking until Architect or Owner are notified and direction is given to proceed with the work.
- 3.3.7 Confirm that all items to be removed, have been, and that appropriate substrate has been installed and appropriately attached to structure for support of the new roofing system.
- 3.3.8 CORRECT ALL UNSATISFACTORY SUBSTRATE CONDITIONS PRIOR TO THE APPLICATION OF NEW ROOF SYSTEM MATERIALS. RENAIL EXISTING AND ADD NEW NAILS TO ROOF SHEATHING TO ASSURE SOLID, SECURE DECK.
- 3.4 INSTALLATION OF NEW WOOD BLOCKING AT PARAPET WALLS:
 - 3.4.1 Remove and discard existing coping cap and metal flashings, leaving existing blocking in place.
 - 3.4.2 Secure existing blocking with additional epoxy anchors as necessary to decrease fastener spacing to 16" O.C.
 - 3.4.3 Install new 2x12 and cut 2x8 blocking over the existing blocking and fasten with two screws every 16" O.C. into each board
 - 3.4.4 Cut a slight taper to the 2x12 and 2x8 wood blocking, providing slope to the interior side of the parapet wall.
 - 3.4.5 Attach new metal locking cleat to the inside and outside face of the parapet wall with fasteners spaced 6" O.C. staggered.
 - 3.4.6 Cover top of the coping cap with 20 mil PVC, extending over the locking cleat on the inside and outside face of the parapet wall.
- 3.5 INSTALLATION OF NEW ADJUSTABLE EXTENSIONS AT EXISTING OVERFLOW DRAINS:
 - 3.5.1 Remove existing clamping ring, 2" overflow collar and dome from the overflow drain bowl and store for reinstallation.
 - 3.5.1.1 Replace any plastic, damaged or missing overflow drain components with new cast iron parts to match existing.
 - 3.5.1.2 Replace any damaged or broken drain clamping rings or bolt fasteners.

- 3.5.2 Install new adjustable extension to the drain body and adjust to match the height of the adjacent new roof assembly.
- 3.5.3 After the new roof assembly has been installed, reinstall existing clamping ring, 2" overflow collar and dome to the new adjustable extension.
- 3.6 EXISTING ABANDONED EQUIPMENT CURB REMOVALS:
 - 3.6.1 Remove and discard abandoned equipment curbs and caps.
 - 3.6.2 Where openings in the existing roof deck are less than 18", install a 1/8" steel plate over the opening, extending a minimum of 6" beyond the opening in all directions.
 - 3.6.2.1 Fasten steel plate to the roof deck with a minimum of 3 fasteners per side.
 - 3.6.3 Where openings in the roof deck are larger than 18" but less than 36", install new 3" x 3" x 5/16" miscellaneous steel angle to existing steel angle framing the opening with (2) ITW Buildex, Traxx fasteners on each end. The top flange of angle shall be flush with the bottom of the roof deck.
 - 3.6.4 Where openings in the roof deck are larger than 36" x 36", install miscellaneous steel angle perpendicular to existing angles or bar joists at opening ends and 30" O.C. maximum intermediate spacing. Secure to top chord of existing bar joist angle with (2) ITW Buildex, Traxx fasteners on each end.
 - 3.6.5 Install new 22-gauge galvanized steel "B" deck to miscellaneous steel angles and attach with hex-headed, self tapping fasteners at 6" O.C.
 - 3.6.5.1 New metal decking shall cover a minimum of 3 spans.
- 3.7 EXISTING ROOFING SYSTEM ASSEMBLIES DISPOSAL:
 - 3.7.1 Collect and place demolished materials in containers daily. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
 - 3.7.2 For Asbestos Containing Material (ACM) use protocol as required by all regulatory agencies having jurisdiction. Utilize disposal site as selected by the Owner.
 - 3.7.3 Do not burn demolished material on site.
 - 3.7.4 Transport demolished materials off Owner's property and dispose of legally.

END OF SECTION 07591

SECTION 07620

FLASHING AND SHEET METAL

PART 1 GENERAL

1.1 WORK INCLUDED

- 1.1.1 Fabrication and installation of coping cap and locking cleats.
- 1.1.2 Fabrication and installation of new counter flashings and receivers.
- 1.1.3 Installation of roof drain flashing.
- 1.1.4 Fabrication and installation of new overflow scupper liner.
- 1.1.5 Fabrication and installation of new expansion joint cover.
- 1.1.6 Fabrication and installation of new pipe housing.
- 1.1.7 Fabrication and installation of new equipment rail cap.
- 1.1.8 Fabrication and installation of new miscellaneous flanged flashings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- 1.2.1 Rough Carpentry Section 06100
- 1.2.2 Modified Bitumen Membrane Roofing Section 07550
- 1.2.3 Reroofing Removals & Preparations Section 07591
- 1.3 QUALITY ASSURANCE
 - 1.3.1 Qualifications of the Manufacturer: Products used in the work of this section shall be produced by manufacturers regularly engaged in the manufacture of similar items and with a history of successful production acceptable to the Architect.
 - 1.3.2 Qualifications of the Installers: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and are completely familiar with the specified requirements and the methods needed for the proper performance of the work in this section.

1.4 SHOP DRAWINGS

- 1.4.1 Submit shop drawings for all metal component shapes in accordance with specifications.
- 1.4.2 Indicate material profile, jointing pattern, jointing details, fastening methods, and installation details.

1.5 SUBMITTALS

1.5.1 Refer to Shop drawings, Product Data and Samples - Section 01340

1.6 STORAGE AND HANDLING

- 1.6.1 Store materials dry in accordance with Specifications.
- 1.6.2 Stack material to prevent twisting, bending, or abrasion.
- 1.6.3 During storage prevent material contact with any substance that would discolor or stain, including soil and water.

1.7 SCHEDULING

- 1.7.1 All new sheet metal work shall be closely coordinated with the installation of the new roofing membrane such that roofing membrane terminations will not be left unprotected by metal.
- 1.7.2 New sheet metal components shall be installed directly after roofing work such that roofing membrane terminations will not be left unprotected by metal.
- 1.7.3 Immediately after installation of new sheet metal work install all bituminous flashings such that moisture is not trapped under new metal components.

1.8 GUARANTEE

1.8.1 All new materials and workmanship for work provided under this section of the specifications shall be guaranteed in writing by the contractor to be maintained in a watertight condition without cost to the Owner for a period of five (5) years after date of final completion.

PART 2 PRODUCTS

2.1 SHEET METAL MATERIAL

- 2.1.1 Pre-finished Metal: Smooth 0.040 aluminum, ASTM B204, primed both sides and factory finished on one side with Kynar based fluoropolymer coating. Metal to be masked with protective plastic film. Color to be selected by Owner from the manufacturer's premium color chart. Accepted manufacturers are Vincent Metals and Petersen Aluminum.
- 2.1.2 Aluminum, Sheet: Conforming to ASTM B09. Note: Divorce from any preservative treated lumber with at a minimum one layer of 15 Lb. asphalt saturated felt.
- 2.1.3 Mill Finish Aluminum Sheet: Aluminum sheets conforming to ASTM B209. Note: Divorce from any preservative treated lumber with at a minimum one layer of 15 Lb. asphalt saturated felt.
- 2.1.4 Stainless steel: 24 gage, Type 302/304 Mill Rolled Finish No.2D or 2B, Conforming to ASTM A167, Federal Specification QQ-S-766C.

- 2.1.5 Solder for Stainless Steel: Solder joints with stainless steel type flux, 50/50 solder, neutralize flux after soldering.
- 2.1.6 METAL COMPONENT WEIGHT & FINISH SUMMARY:

2.1.6.1	coping cap	.040 pre-finished aluminum
2.1.6.2	locking cleats	.050 mill finished aluminum
2.1.6.3	counter flashing	.040 mill finished aluminum
2.1.6.4	expansion joint cap and flange	.040 pre-finished aluminum
2.1.6.5	lead flashings	4 Lb. soft
2.1.6.6	overflow scupper liner	24 ga. stainless steel
2.1.6.7	pipe housing	24 ga. stainless steel
2.1.6.8	equipment rail cap	24 ga. stainless steel

2.2 ACCESSORY MATERIALS

- 2.2.1 All miscellaneous clamps, straps and supports, not otherwise designated above, to be stainless steel.
- 2.2.2 Nails: Shall be hot-dipped galvanized or stainless-steel ring shank nails, size as required by construction. Use only stainless-steel nails with aluminum fabrications.
- 2.2.3 Metal to Metal Screws: Shall be ITW Buildex SCOTS stainless steel 12-14x1" (Part No. 1165209) with bonded washer.
- 2.2.4 Wood to Metal Screws: Shall be ITW Buildex TRAXX[™] Climacoat[™] flat head 12-24X2 ½" (part No. 1094000).
- 2.2.5 Caulking: Sealant shall be Sikaflex 1a, manufactured by Sika Corporation; Chem-Calk 900, manufactured by Bostik, Inc.; or Sonolastic NP-1, manufactured by Sonneborn Building Products or approval equal. Color shall be selected by Owner.
- 2.2.6 Cleaner: For Sikaflex 1a, cleaner shall be Xylol, Toluol, Methly ethyl ketone or commercial solvent recommended by the sealant manufacturer.
- 2.2.7 Primer: Shall be as recommended by sealant manufacturer.
- 2.2.8 Flexible Vinyl Flashing: Shall be 20 mil PVC, width as required, such as that manufactured by BMCA, a division of GAF.

2.3 FABRICATION, GENERAL

2.3.1 Fabricate and install sheetmetal sections in 10-foot lengths except where shorter lengths are required by construction.

- 2.3.2 Form sections square, true, and accurate to size, free from distortion, sharp edges, and other defects detrimental to appearance or performance.
- 2.3.3 Junctures, intersections, corners, and unions of sheet metal fabrications shall be formed with 18-inch legs.
- 2.3.4 Interior and exterior corners and joints of coping cap shall be formed with 1-inch standing seams.
- 2.3.5 All Sheet Metal Requirements and Details are referenced to SMACNA Architectural Sheet Metal Manual, Seventh Edition.

PART 3 EXECUTION

3.1 INSPECTION

3.1.1 Inspect all surfaces to which metal is to be applied to verify they are clean, smooth, and free of depressions, waves, or projections and have solidly supported joints. Do not install metal unless surfaces are even, sound, clean, dry and free from defects that might affect the application of the new material.

3.2 REMOVALS

3.2.1 See Reroofing Removals & Preparations – Section 07591

3.3 FABRICATION AND INSTALLATION

- 3.3.1 Dissimilar metals shall be kept separated to prevent galvanic action. Preventative measures shall include separation by suitable electrolosis breaking material.
- 3.3.2 Separate any aluminum components from preservative treated lumber with a minimum divorcing layer of 15 lb. asphalt saturated building felt. NEVER USE ALUMINUM FASTENERS IN PRESERVATIVE TREATED LUMBER.
- 3.3.3 All metal flanges shall be installed on top of membrane in accordance with membrane manufacturer's written installation instructions.
- 3.3.4 Flash in metal flanges per roofing system manufacturer's written recommendations unless in conflict with contract documents and/or detail drawings. Resolve any conflict with Architect, prior to installation of stripping plys.
- 3.3.5 Install metal to be water and weather tight with lines, arises, and angles sharp and true with plane surfaces free of waves or buckles.
- 3.3.6 Form and install new counterflashing metal as shown in detail drawings. Lap joints 3 inches.
- 3.3.7 All exposed edges of sheet metal shall be folded back, or hemmed, on concealed surfaces (minimum $\frac{1}{2}$).
- 3.3.8 All hemmed edges to be engaged in locking cleats shall have 3/4" hem with a

folded back return of 5/8". Hem angle maximum 30°. Reference SMACNA Architectural Sheet Metal Manual (Seventh Edition) Figure 2-1 Detail 1.

- 3.3.9 Install shop formed gravel stops, fascias, coping caps, control joints and expansion joint covers in 10 foot lengths, maximum, with a minimum number of pieces for each straight run. Adjust joint spacing so that no metal fabrication less than 5' in length is required.
- 3.3.10 All locking cleats to be one gauge heavier than metal fabrication being secured by the cleat.

3.4 NEW METAL COPING CAP INSTALLATION:

- 3.4.1 Form and install new metal coping cap in accordance with SMACNA Architectural Sheet Metal Manual Figure 3-4 A.
- 3.4.2 Attach new continuous metal locking cleat to the inside and outside face of the parapet wall with fasteners spaced 6" O.C.
- 3.4.3 Prior to the application of the metal coping cap, install a strip of 20 mil PVC flashing in as long a strip as practical over the wood blocking and metal locking cleats. Lap ends 6" minimum and cement with flashing cement.
- 3.4.4 Use maximum 10' sections with minimum number of sections in each straight run. Form 1" standing seam at ends of sections and seal.
- 3.4.5 Engage the coping cap with locking cleats on the interior and exterior face of the parapet wall.
- 3.4.6 Continuously crimp the hem of the coping cap to the locking cleat on the exterior and interior sides of the parapet wall.

3.5 NEW COUNTERFLASHING INSTALLATION:

- 3.5.1 Form and install new counterflashing metal with lap in joints a minimum of 3 inches and lock joint lap. Notch and lap counterflashing sections a minimum of 3 inches.
- 3.5.2 At equipment curbs, form counter flashings with a minimum 1-½" flange that rests on top of the curb and secure to the top of the curb with roofing nails spaced at 6" O.C.
- 3.5.3 At masonry walls, remove existing fry reglet mounted counter flashing to receive new metal counter flashing.
- 3.5.4 Pop rivet new counterflashing to receiver at 6" O.C.

3.6 NEW DRAIN FLASHING INSTALLATION:

3.6.1 Prior to the installation of the new modified bitumen cap sheet, install new drain flashings at existing roof drains and overflow drain over the base ply.

- 3.6.2 Use 4 lb. Lead sheet 3'x3' or at least large enough to extend a minimum of 12" outside the drain flashing flange.
- 3.6.3 Cut hole in the center of the lead flashing with a diameter 2" less than the inside diameter of the flashing flange.
- 3.6.4 Prior to the application, prime top and bottom surface of lead flashing with asphalt primer, center over drain and set in a bed of black plastic roofing cement. Install drain clamping ring over lead sheet and pull it down uniformly and tight.
- 3.6.5 Trim excess lead from inside flashing flange leaving approximately 1-1/2" of lead extending into the drain bowl. Mallet lead to conform to shape of drain bowl. Remove and install new lead flashing if flashing is torn or cut.
- 3.6.6 Where bolts penetrate lead flashings assure holes are punched through lead flashings at a smaller diameter than that of bolts. Apply clamping flange and secure uniformly and tight.
- 3.6.7 Cover lead flashing sheet with one stripping ply base ply. Extend the ply at least12" beyond the lead flashing. Stripping plies to be the same as membrane plies.
- 3.7 FABRICATION AND INSTALLATION OF NEW METAL OVERFLOW SCUPPER LINER
 - 3.7.1 Form and install new metal Overflow Scupper in accordance with SMACNA Architectural Sheet Metal Manual Figure 1-30 and Project Drawings. Lock and solder all joints and seams.
 - 3.7.1.1 Scupper liners are to be a minimum of 8"" x 12"
 - 3.7.2 Secure scupper flanges to the inside face of parapets with specified fasteners spaced 6" O.C.
- 3.8 FABRICATION AND INSTALLATION OF NEW EXPANSION JOINT COVER:
 - 3.8.1 Between RA 24 and Not In Contract (NIC) RA, install expansion joint flange and cover in accordance with the Project Drawings and similar to SMACNA Architectural Sheet Metal Manual (7th Ed.) Figure 5-6 B.
 - 3.8.1.1 Install new metal expansion joint flange and fasten to substrate with fasteners at 4"O.C. staggered.
 - 3.8.1.2 Install new fiberglass batt insulation inside polyethylene envelope fold between the existing expansion joint structure the adjacent construction.
 - 3.8.1.3 Prior to the application of the expansion joint cover, install a strip of 20-mil PVC flashing in as long a strip as practical over the flange and insulation envelope. Lap ends 6" minimum and cement with flashing cement.
 - 3.8.1.4 Attach vertical face of the expansion joint cover to substrate masonry with masonry fasteners at maximum spacing of 12" O.C. and do not attach

through end laps.

- 3.8.1.5 Tong the expansion joint cap over the expansion flange, leaving 1" between the flange and the cap to allow for structural movement.
- 3.8.1.6 Tonged end of the expansion joint cover should have a 1.5" coverage over the expansion flange and 1" between the edge of the expansion joint cover and inside face of the curb.
- 3.8.1.7 Use maximum 10' sections with minimum number of sections in each straight run. Lap ends of sections 4" and apply three (3) parallel rows of sealant between the laps of the sloped and vertical faces of the cover.
- 3.8.1.8 After new expansion joint cap has been installed, install new metal twopiece counterflashing receiver and metal counterflashing as described in this section.

3.9 FABRICATION AND INSTALLATION OF NEW METAL PIPE HOUSING:

- 3.9.1 Fabricate new pipe housing in accordance with Project Drawings.
- 3.9.2 Fabricate new pipe housing with a water-tight, removable top, fastened to the housing with sheet metal screws with metal capped neoprene washers, spaced at 8" centers.
- 3.9.3 Fabricate pipe housing with all services penetrating the sides or ends of the housing. No penetrations will be permitted thru the top of the housings.
- 3.9.4 Fabricate with all joints and seams locked and soldered.
- 3.9.5 Fabricate with 4" wide horizontal flanges. Prime top and bottom of flanges with asphalt primer and allow to dry prior to installation.
- 3.9.6 Install new pipe housing on top of new base ply in a solid bed of roof cement.
- 3.9.7 Fasten thru base ply to previously installed wood blocking using minimum 1-1/4" ring shank, stainless steel nail, spaced at 3" centers, staggered.
- 3.9.8 Strip pipe housing flange with one stripping ply and cover with the cap sheet membrane, both applied in manufacturer's recommended flashing adhesive.

3.10 FABRICATION AND INSTALLATION OF NEW METAL EQUIPMENT RAIL CAP:

- 3.10.1 Form and install new metal equipment rail cap in accordance with SMACNA Architectural Sheet Metal Manual Figure 3-4 A.
- 3.10.2 Attach new continuous metal locking cleat to the inside and outside face of the equipment rail with fasteners spaced 6" O.C.
- 3.10.3 Prior to the application of the metal rail cap, install a strip of 20 mil PVC flashing in as long a strip as practical over the wood blocking and metal locking cleats. Lap

ends 6" minimum and cement with flashing cement.

- 3.10.4 Form each metal rail cap using one sheet of metal.
- 3.10.5 Engage the rail cap with locking cleats on the interior and exterior face of the equipment rail.
- 3.10.6 Continuously crimp the hem of the rail cap to the locking cleat on the exterior and interior sides of the equipment rail.
- 3.11 FABRICATION AND INSTALLATION OF NEW MISCELLANEOUS FLANGED FLASHINGS.
 - 3.11.1 Prime with asphalt primer top and bottom surfaces, set flange over base ply membrane in solid bed of black plastic roof cement. If flange width exceeds 12 inches, secure it to previously installed plywood sheathing with suitable fasteners placed near each corner and at the center of each side.
 - 3.11.2 Install one stripping ply of base ply membrane. Fit stripping plies snugly to the vertical flange. Extend ply at least six inches beyond the flange.
 - 3.11.3 Extend flashings a minimum height of 8" up the vertical surface.

END OF SECTION 07620

SECTION 15882

CONDENSATE DRAIN PIPING FOR HVAC

PART 1 GENERAL

1.1 SUMMARY

1.1.1 This Section includes condensate drain piping for HVAC units.

1.2 SUBMITTALS

1.2.1 Product Data: For each product indicated include a material and manufacturers list on Contractor's letterhead with appropriate minimum standards referenced.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 1" and 2" Schedule 40 PVC piping and appropriate, reducers, enlargers, 90° elbows, and pre-manufactured P-traps, as required; as manufactured by NIBCO, Elkhart, IN, 800-234-0227 or equal.

PART 3 EXECUTION

3.1 ASSEMBLY

- 3.1.1 At the condensate pan drain, install a 90° elbow, outlet down. Connect to premanufactured ¾" "P" trap and utilize reducers immediately before and after "P" trap. Provide cold connection to 1" drain piping collection system. Terminate 1" drain piping at internal roof drains or at gutters with 90° elbows, outlet down. Secure pipe to drain strainer basket or to gutter spacers with stainless steel wire.
- 3.1.2 If more than one condensate drain can be tied together, provide cold connection of 1" PVC drain line into 2" PVC drain piping collection system and terminate drain piping at internal roof drains or at gutters with 90° elbows, outlet down. Secure pipe to drain strainer basket or to gutter spacers with stainless steel wire.
- 3.1.3 Support 1" and 2" drain piping collection system at 5' O.C. using MIRO 1.5 supports, as manufactured by MIRO Industries, Sandy, Utah, 800-768-6978.
- 3.1.4 Set condensate drain support stand in a bed of utility cement on a sacrificial cap sheet membrane, which extends a minimum of 2" beyond the condensate drain pipe support base in all directions. Sacrificial cap sheet membrane shall be spot adhered to the cap sheet surfacing.

END OF SECTION15882