INVITATION FOR BIDS

This *Invitation for Bids* is a written and published solicitation document issued by Horry County Schools (listed as "the District" throughout the bid and Contract Documents) for the purpose of procuring construction work, which shall ordinarily result in a contract award to the lowest responsive and responsible Bidder. The *Bid Conditions* with associated forms and the Contract Documents, which include the *Contract Agreement*, Exhibits A through G, associated forms, the specifications and drawings, and any other referenced documents therein, all describe the bid process and the construction work to be performed and are published as an integral part of this *Invitation for Bids* the same as if incorporated herein. Bid security and performance and payment bonds are required in accordance with the District's Procurement Code, as may be amended. Contractors and subcontractors shall be licensed in accordance with State law and requirements of the Labor, Licensing, and Regulations Board of the State of South Carolina.

In accordance with the authority granted by the Horry County Schools' Procurement Code, any prospective Bidder, Offeror, Contractor, or Subcontractor, who feels aggrieved in connection with this solicitation, any addendum to the solicitation, or the subsequent award of a contract has a right to protest and present an appeal to the District within the time frame allowed from the date of issuance of this *Invitation for Bids*, any addendum issued thereto, or the *Notice of Intent to Award*, whichever is at issue. The protest shall be in accordance with the District's Procurement Code. Contact the District's Procurement Officer for details at 843-488-6893 or email rstrickland@horrycountyschools.net .

DATE ISSUED:	7/27/2021
AGENCY/PROJECT OWNER:	Horry County Schools (the District)
SOLICITATION NUMBER:	2122-06MJ
PROJECT NAME:	MBH Metal Wall Panel Installation
PROJECT LOCATION(S):	Myrtle Beach High School 3302 Robert m Grissom Pkwy Myrtle Beach , SC 29577
PROJECT DESCRIPTION:	Structural repairs to auditorium masonry walls and installation of metal panel cladding system.
BID SECURITY:	Five Percent (5%) required per *Bid Instructions*
PERFORMANCE & PAYMENT BONDS:	One Hundred Percent (100%) of contracted amount as stated on the *Notice of Intent to Award*
CONFERENCE TYPE:	☒ *Site Visit* ☐ *Pre-Bid* ☐ MANDATORY ☒ NOT MANDATORY
CONFERENCE DATE & TIME:	8/3/2021 at 10:00 AM (EST)
CONFERENCE LOCATION:	(Out front Main Entrance) Myrtle Beach High School 3302 Robert m Grissom Pkwy Myrtle Beach , SC 29577 All visitors must sign in and out at the front desk.
QUESTIONS:	All questions must be submitted in writing to the District Bid Contact Person by 12:00pm (noon) on 8/5/2021
SUBMIT BIDS TO:	The District prefer submittals via of the website. Submit your offer on-line through the website at the following URL: https://vrapp.vendorregistry.com/Bids/View/BidsList?BuyerId=2f302e8a-69b0-407b-a21a-3368d004365e If you must submit a paper offer (See "Submitting a Paper or Modification" and Number of Copies to be submitted" provision) (Bidders are cautioned not to be late.)
BID OPENING DATE & TIME:	8/16/2021 2:00 p.m. (EST) (Unless date and time are otherwise amended by addendum.)
BID OPENING LOCATION:	Horry County Schools District Office Conference Room B308 335 Four Mile Rd. Conway, SC 29526 (Unless the location is otherwise amended by addendum.)
PUBLIC NOTICES:	All notices, the award, this solicitation and any addenda shall be posted at the following web address location: https://vrapp.vendorregistry.com/Bids/View/BidsList?BuyerId=2f302e8a-69b0-407b-a21a-3368d004365e
ARCHITECTS/ENGINEERS:	REI Engineers 2090 Executive Hall Road, st 115 Charleston , SC 29047
DISTRICT BID CONTACT PERSON:	Maurice Jackson, CPPB Phone: (843) 488-6929 Fax: (843) 488-6945 E-mail: MJackson@horrycountyschools.net

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SUMMARY OF SERVICES REQUIRED

INTRODUCTION – The purpose and intent of this Invitation for Bids is to establish a contract for the provision of services based on the attached specifications and guidelines. The project involves code upgrade renovations and alterations at the existing school identified.

SCOPE OF WORK – The scope of work requires the Contractor to furnish all labor, materials, tools, equipment, and incidentals necessary to satisfactorily complete the project as detailed in Exhibit A and associated specifications and plans as provided by Horry County School. The overall project involves the following:

SUMMARY OF WORK

A. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications into the total building system such that no leakage into the system occurs. In general, the scope of work includes:

1. Base Bid- Exterior Wall Restoration
a. Install new helical anchors where indicated in Contracts Drawings as in Section 04 05 19 “Masonry Helical Anchors”.
b. Repoint masonry mortar joints where indicated in Contract Drawings as specified in Section 04 05 24 “Masonry Repointing”.
c. Install new metal wall panels where indicated in Contract Drawings as specified in Section 07 42 13 “Metal Wall Panels”.
d. Install new associated sheet metal flashings where indicated in Contract Drawings as specified in Section 07 62 00 “Sheet Metal Flashing and Trim”.

2. Alternate No. 1
a. Install new ATAS International, Inc. Multi Purpose Panels (MPN120) where indicated in Contract Drawings as specified in Section 07 42 13 “Metal Wall Panels”.

TERM OF CONTRACT (Estimated) – Contractor has access to the site beginning 9-01-21 and shall continue through 12-20-21. Access to the site will be limited to after school hours and weekends, unless other considerations and arrangements are made with the school and the district. Noise will be the primary issue preventing work during school days, therefore this needs to be analyzed as part of the bid package. Refer to Exhibit D for additional details.

AWARD CRITERIA – Award will be made to the lowest responsive and responsible bidder. Award will be made to only one bidder.

DEFINITIONS

Following are definitions of terms used in the *Bid Instructions*. These definitions are not entire, plenary, or exhaustive of all terms used and shall not be used to construe meaning or intent. Terms may be defined where used, in the District's Procurement Code, or may be subject to normal and usual interpretation in the context used.

1. Architect/Engineer: Any individual or entity legally qualified to practice architecture or engineering in South Carolina with whom the District has a contractual agreement to provide services pertaining to construction that members of this profession or those in their employ may justifiably perform. The Architect/Engineer serves as the District's authorized representative to the extent of the contractual agreement between the Architect/Engineer and the District. Any reference to Architect/Engineer also includes any representatives, agents or employees of the Architect/Engineer.

2. Bid: Completed and properly signed offer for the price(s) stipulated on the District's *Official Bid Form* to do the work specified in the Contract Documents and in accordance with the *Bid Instructions*.

3. Bid Addendum: Written or graphic instrument issued by the District prior to the receipt of bids which modifies or interprets the Contract Documents by additions, deletions, clarifications or corrections. The addendum may reference any specification, drawing, or other document as being incorporated therein.

4. Bid Bond: Form of bid security in the amount of five percent (5%) of the sum total of the base bid and all alternate bids and executed on the District's *Bid Bond* form by the Bidder as principal and by a Surety as guarantor that the Bidder, if awarded a contract, shall enter into a contract within the specified time and furnish any required performance and payment bonds, insurance certificate(s) or other documents required by the *Notice of Intent to Award* or risk forfeiture of the bond. (Also see Bid Security.)

5. Bid Opening Date and Time: The date and time established by the District in the *Invitation for Bids*, as amended by any addendum, for receipt and opening of bids. Bids received after the established bid opening date and time are not acceptable and shall not be considered. The bid opening will occur immediately following.

6. Bid Security: A certified cashier's check or a bid bond submitted with a bid and serving to guarantee to the District that the Bidder, if awarded the contract, shall execute such contract in accordance with the Contract Documents requirements. No other forms of security are acceptable. Failure to execute the contract may result in forfeiture of the certified cashier's check or the bid bond to the District. (See District's Procurement Code for additional bid security requirements.)

7. Bidder: An individual or entity who submits a bid to do the work specified in the Contract Documents as a prime contractor and who is licensed to submit a bid and to perform such work in the State of South Carolina. A Bidder does not become a Contractor for purposes of the Contract Documents until a contract is executed.

8. Change Order: 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.

9. Construction Work: Additions, repairs, upgrading or renovating an existing District structure or the erecting of new structures and facilities. It includes the total scope of activities to be performed as provided in the Contract Documents whether performed by one or more contractors, subcontractors, the District, or any combination thereof. The scope of activities includes all labor, materials, and equipment to be provided by the Contractor to fulfill the obligations of the Contract Documents. (Also referred to as the "project.")

10. *Contract Agreement*: The written and executed *Contract Agreement* between the District and the Contractor for purposes of performing the work identified in the Contract Documents at the agreed upon contract price during the agreed upon contract time. The executed *Contract Agreement* supersedes any prior negotiations, representations, or agreements, whether written or oral, unless incorporated in the *Contract Agreement* by reference to supplementary documents, or through execution of a *Change Order*. The contract between the District and the Contractor is not to be construed as an agreement between the District and any subcontractor, material or equipment supplier, or any other individuals or entities enjoined to the Contractor for purposes of contract execution.

11. Contract Documents: Documents including all terms and conditions and forms contained in the Contract Documents as originally published as well as any published bid addenda, any referenced drawings and specifications related to the project and integral to the performance of the work, and any *Change Order* (or directive) executed after contract execution.

12. Contractor's License Number: License number issued by the South Carolina Contractors' Licensing Board and required for all general contractors (as prime contractors) and all mechanical contractors (as prime contractors or subcontractors) performing construction in excess of $5,000. (For information contact the South Carolina Contractors' Licensing Board at 803-896-4686.)

13. Contractor's Group Number: A designation by the South Carolina Contractors Licensing Board from one (1) to five (5) indicating a specific dollar value limitation on construction licenses for prime contractors and mechanical contractors. Such licensure designation limits the Contractor's or subcontractor's ability to bid on or perform the work designated in the Contract Documents.

14. Debarred: The disqualification of an individual or entity from bidding on or being awarded a contract by the State of South Carolina or any other governmental entity for a specified period of time commensurate with the seriousness of the offense or the failure or inadequacy of performance. Any individual or entity debarred by the State of South Carolina or other governmental entity is ineligible to bid on or accept any contracts with the District under the debarred name or any other name.

15. District: Horry County Schools as represented by its Board of Education, Superintendent, management staff, procurement officials, employees, or other authorized representatives or agents. The District's Construction Management Office has the authority to contract for architectural and construction services and administration of the resulting contracts in accordance with the District's Procurement Code and the directives of the Board of Education.

16. District Bid Contact Person: Designee of the District Procurement Officer assigned to officiate the bid process for construction work or other related services.

17. District Procurement Officer: The District's head of Procurement assigned to oversee procurement processes to ensure conformance to the District's Procurement Code and to facilitate protests and claims.

18. Entity: Any business, corporation, partnership, sole proprietorship, joint stock company, joint venture, or any other legally formed organization.

19. Informality or Irregularity: A bidding requirement not fully complied with by the Bidder, waived by the District or allowed to be corrected when it is merely a matter of form or an immaterial variation from the exact requirements of the *Bid Instructions* having no effect or negligible effect on total bid price, quality, quantity or delivery of supplies or performance of the contract and for which the waiver or correction would not be prejudicial to the relative standing of the other bidders.

20. *Invitation for Bids*: A written and published solicitation document issued by the District for the procurement of construction work, which shall ordinarily result in a contract awarded to the lowest responsive and responsible Bidder.

21. May: The word "may" or other such words or phrases used anywhere in the Contract Documents indicates a recommendation that is adhered to by the Bidder, Contractor, Architect/Engineer or District at his/her choice.

22. Minority or Woman Owned Business: Means a small business concern that is at least fifty-one percent (51%) unconditionally owned by one or more individuals who are both socially and economically disadvantaged or are women or a publicly owned business having at least fifty-one percent (51%) of its stock unconditionally owned by one or more socially and economically disadvantaged individuals or by women.

23. *Notice of Intent to Award*: A written notice of the District's acceptance of a Bidder's bid and the intention to award a contract. The *Notice of Intent to Award* is mailed to all bidders and posted at https://vrapp.vendorregistry.com/Bids/View/BidsList?buyerId=2f302e8a-69b0-407b-a21a-3368d004365e . The *Notice of Intent to Award* is not an authorization for commencement of work but only serves as a notice of the District's intention to enter into a contract. Such *Notice of Intent to Award* may be cancelled prior to the execution of a contract.

24. *Official Bid Form*: A form furnished by the District to be completed and signed by an authorized representative of the bidding entity and submitted by the bid opening date and time, which constitutes the Bidder's offer to furnish all materials and labor to accomplish the work at the offered prices in the time frame established by the District.

25. *Payment Bond*: A bond provided by the Contractor on the District's *Payment Bond* form in which a Surety guarantees to the District that the Contractor shall pay subcontractors and suppliers providing work or materials under the contract. (See District's Procurement Code for additional payment bond requirements.)

26. *Performance Bond*: A bond provided by the Contractor on the District's *Performance Bond* form in which a Surety guarantees to the District that the work under the contract shall be performed in accordance with the Contract Documents and in the time established as may be amended by any *Change Order*. (See District's Procurement Code for additional performance bond requirements.)

27. Pre-bid Conference: A meeting, generally conducted at the worksite location if there is an existing structure, approximately fifteen (15) days prior to the bid opening date and time for potential bidders, the Architect/Engineer, and District representatives to view and/or discuss the conditions under which the work is to be performed and to provide clarification of the Contract Documents, which shall be confirmed in a subsequent *Bid Addendum*. Normally the pre-bid conference is voluntary (non-mandatory) unless otherwise stated in the *Invitation for Bids*; however, Bidders are responsible for getting the issued addendum following the conference. If the pre-bid conference is designated as mandatory in the *Invitation for Bids*, only those bids from those bidders represented at the mandatory conference shall be considered.

28. Principal: Officers, directors, owners, partners, and individuals having primary management or supervisory responsibilities within a business entity, including project directors, financial officers or other such key personnel.

29. Product Data: Standard prepared data including such information as project specifications and installation instructions, catalog cuts, product photographs, operating and maintenance instructions, and indicating other general or standard manufacturing or fabrication characteristics.

30. Project: The total scope of work to be performed as provided in the Contract Documents whether performed by one or more contractors, subcontractors or the District itself. (Also referred to as the "work," the "work to be performed" or other such terms.)

31. Project Manager: The Contractor's designated representative to manage the flow of materials to the worksite and the timely sequencing of all sub-contracted work to ensure the continual progress of the work to meet the substantial and final completion dates established as may be amended by any *Change Order*.

32. Representative: An authorized designee of an individual or entity with formal responsibilities as specified by contract or employment agreement.

33. Shall: The word "shall" or "must" or other such words or phrases used anywhere in the Contract Documents indicates a mandate that must be adhered to by the Bidder, Contractor, Architect/Engineer or District.

34. *Special Conditions*: A part of the Contract Documents which supplements, modifies, changes, adds or deletes from the requirements of the *Bid Instructions,* the provisions of the *General Contract Conditions*, or other Contract Documents and specifies terms and conditions specific to the work to be performed.

35. Specifications: A written description of the physical, functional, or performance characteristics, or the nature of the materials, equipment, processes, construction, or work to be performed. It includes, as appropriate, construction standards, technical data, workmanship, inspection and testing requirements.

36. Subcontractor: An individual or entity, who is properly licensed to do business in the State of South Carolina, having a direct contract with the Contractor to perform a portion of the work described in the Contract Documents. Any reference to subcontractor also includes any representatives, agents, or employees of the subcontractor or any other entity enjoined to the subcontractor to perform any work in relation to the project.

37. Surety: An individual or entity who promises, in writing, to make good the debt or default of a Bidder, Contractor or other entity.

38. Suspension: Disqualification of an entity to submit a bid or receive an award of a contract from the State of South Carolina or other governmental entity for a designated period of time pending the completion of an investigation and any legal proceedings that may ensue because the entity is suspected, upon probable cause, of engaging in criminal, fraudulent, seriously improper conduct or the failure or inadequacy of performance.

39. Taxpayer Identification Number (TIN): Means the number required by the Internal Revenue Service to be used by the Bidder or Contractor in reporting income tax and other returns. (A Federal Identification Number or Social Security Number.)

40. Trivial or Negligible Effect: An increase in the amount of the base bid or a decrease in the Contractor's cost not to exceed one percent (1%).

41. Worksite: The actual location(s) where the scope of work as identified in the Contract Documents is to be performed by the Contractor.

42. Worksite Superintendent: Contractor's representative at the worksite who is responsible for continuous field supervision, coordination, and completion of the work and for the enforcement of safety regulations. The worksite superintendent performs no other duties or trade work. A secondary worksite superintendent may be required, who may or may not perform additional duties in addition to worksite superintendent activities.

End of *Definitions*

BID INSTRUCTIONS

1. Bidder Representations: By signing and submitting a bid, the bidding company's (the Bidder's) Principal represents he/she has read and understands these *Bid Instructions* as well as the work to be performed and the conditions under which the Contractor shall perform the work included in the Contract Documents (*Contract Agreement*, Exhibits A through G, specifications and drawings, forms and any other referenced documents therein) and the bid is made in accordance therewith. The Bidder's principal certifies the bid submitted is based upon the materials, equipment and systems specified in the Contract Documents, as amended by any addendum, and incorporates all costs necessary for the successful completion of the work to be performed in the stipulated time. Bidders are expected to examine the solicitation documents 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 Bidder's risk. All ambiguities, discrepancies, errors, omissions, or conflicting statements in the solicitation documents shall be interpreted to require the better quality or greater quantity of work and/or materials, unless otherwise directed by addendum. Bidder assumes responsibility for any patent ambiguity in the solicitation documents that Bidder does not bring to the District's attention.

2. Bidder Licensing: By submitting a bid, the Bidder's principal certifies, to the best of its knowledge and belief, that the Bidder has met the licensing requirements for the State of South Carolina, is not debarred or suspended by any governmental entity or the State of South Carolina, and is eligible to submit a bid to and perform construction work for Horry County Schools ("the District"). The Bidder further represents all subcontractors stated on the *Official Bid Form* or subsequently enlisted to perform a portion of the work outlined in the Contract Documents also meet all licensing requirements of the State of South Carolina as may be required, and are not debarred or suspended from submitting a bid or performing construction services for any governmental entity or the State of South Carolina. Bidders and their subcontractors are advised the District shall report Contractor Licensing Law violations to the S.C. Contractors' Licensing and Regulations Board.

3. Solicitation Information from Sources Other than Official Source: South Carolina Business Opportunities (SCBO) is the official state government publication for State of South Carolina and Horry County School District solicitations. Any information on District solicitations obtained from any other source is unofficial and any reliance placed on such information is at the Bidder's sole risk. Once the initial notice has been published in SCBO, all additional information relating to the solicitations (addenda, award notices, etc.) will be posted on the District's Procurement website at https://www.horrycountyschools.net/Page/15007.

4. Bid Documents: Any potential Bidder is solely responsible for obtaining a complete set of Bid Documents (*Bid Instructions,* bid addenda and forms) as issued by the District and including the Contract Documents, which are an integral part of the bid process, from the posted source(s) as directed in the *Invitation for Bids*. The availability of these documents does not confer a license or grant permission for any other use of any portion of the Bid Documents or Contract Documents.

5. Pre-Existing Site Conditions: Before submitting a bid, the Bidder shall carefully review all documents and examine the worksite in conjunction therewith to ascertain site conditions affecting the performance of the work. If the Bidder receives a contract award but failed to make such examinations, the Bidder shall in no way be relieved of the obligation to comply in every detail with all provisions and requirements of the Contract Documents without additional compensation or time.

6. Interpretations and Clarifications: Requests for additional information or questions regarding error, omission or clarification of any portion of the Bid Documents or the Contract Documents or any addendum, shall be submitted in writing to the District Bid Contact Person stated in the *Invitation for Bids* by e-mail or facsimile no later than five (5) days prior to the bid opening date and time unless an earlier date is stated on the *Invitation for Bids* or as may be amended. Any interpretations, corrections, or changes to the Bid Documents or the Contract Documents made in any other manner than by a written addendum shall not be binding, and Bidders shall not rely upon them. Any information given a prospective Bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an addendum to the solicitation, if that information is necessary for submitting offers of if the lack of it would be prejudicial to other prospective bidders. See clause entitled "Bidder Representations." We will not identify you in our answer to your question. The District seeks to permit maximum practicable competition. Bidders are urged to advise the Procurement Specialist – 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.

7. Pre-Bid Conference: While the District considers any scheduled pre-bid conference critical to understanding the bidding and project requirements and site conditions; attendance is non-mandatory unless otherwise stated in the *Invitation for Bids*; however, Bidders are responsible for ensuring they have received the information from the pre-bid conference site review provided in a subsequent addendum. The date, time and location of any pre-bid conference are stated in the *Invitation for Bids.*

8. Materials Standards and Substitutions: The materials, products, equipment, and processes described in the Contract Documents establish a standard of required function, dimension, appearance, quality and performance to be met. Bidders shall only bid NEW materials, products, equipment and processes unless the Contract Documents clearly state otherwise.

9. Addenda: Addenda shall be issued prior to the bid opening date and time for the purposes of modifying or interpreting the Contract Documents through additions, deletions, clarifications or corrections. No addendum shall be issued later than four (4) days prior to the bid opening date except to a) withdraw the *Invitation for Bids*, or b) to postpone the bid opening date and time. When an addendum is issued for the purposes of postponing the bid opening date and time, the addendum shall establish the new bid opening date and time no earlier than five (5) days after the addendum issue date. Addenda shall be posted on the on-line bidding source(s) stated in the *Invitation for Bids*. A Bidder shall acknowledge receipt of all addenda issued by identifying the addendum number and the date of issuance with the Bidder's initials in the spaces provided on the *Official Bid Form* or the bid shall be found non-responsive in accordance with the District's Procurement Code. If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

10. Authorization of Bidder: The legal name of the Bidder and the signature of the Bidder's Principal shall be affixed on the *Official Bid Form* and other documents requiring signature as part of the bid submission along with required notarizations. A bid submitted by an agent shall have a current written power of attorney attached certifying the agent's authority to bind the Bidder. Unsigned bidding forms shall render the bid non-responsive in accordance with the District's Procurement Code.

11. *Official Bid Form*: Bids shall be presented on the District's *Official Bid Form* or an identical copy. Bids submitted in response to this solicitation shall be in the English language and in US Dollars, unless otherwise permitted by the solicitation. To ensure a bid is considered responsive, a) all blanks or information requested shall be completed, b) any blanks not applicable to the bid or the Bidder shall have inserted in the blank the words "N/A" (not applicable) or "none" or other such designation, c) all issued addenda shall be acknowledged, and d) all insertions, alterations and/or erasures shall be initialed by an official representative of the Bidder. The base bid and any other pricing required shall be expressed only in numbers written legibly in ink. Non-legible numbers shall be subject to District interpretation, and the determination is final. Any modification to the requirements of the Contract Documents or any other Bidder conditions may render the bid non-responsive in accordance with the District's Procurement Code.

12. Bid Alternates: Bid alternates listed on the *Official Bid Form* constitute required pricing for additions, reductions, or modifications to the work specified in the base bid. Bidders shall bid all requested alternates listed and indicate whether the pricing is in addition to or a deduction from the base bid pricing or whether there is no change if the bid alternate is accepted by the District. If a Bidder fails to bid any alternate, the bid shall be found non-responsive. Bidders shall include in each bid alternate price all costs necessary to provide a complete, operable, functional, and fully integrated portion of work with the work in the base bid including any bonding, overhead and profit. Pricing shall not be conditioned upon the acceptance of any other bid alternate unless specifically stated by the District. The District reserves the right to reject any or all bid alternates or accept bid alternates in any order or combination.

13. Unit / Incremental Pricing: A Bidder shall stipulate all unit/incremental pricing requested on the *Official Bid Form* for potential additional work in unforeseen circumstances. Unit/incremental pricing shall be the installed price including all costs to the District such as, by way of illustration and not limitation, materials, labor, equipment, fees, taxes, or other such direct costs. Bonding, overhead and profit costs shall not be included in the pricing as these costs will be added when a *Change Order* is processed. The District shall have the right to require the Bidder to amend the unit/incremental pricing prior to contract award if, in the estimation of the District, the pricing provided appears inflated in relation to pricing of other bids submitted.

14. Allowances: Allowances specified by the District in the Contract Documents for a specified product purchase or work to be completed shall be included in the base bid or applicable alternate bid when computing the pricing. An allowance is a reimbursement, dollar for dollar, for actual costs incurred for the product purchase or performance of the work specified. Application of bonding, overhead and profit shall also be included in the pricing when incorporating the allowance.

15. Subcontractor Disclosure: The Bidder shall name on the *Official Bid Form* those subcontractors required by the District to be named. Any subcontractor who will perform a

portion of the work equal to or greater than three percent (3%) of the Contractor's bid shall be disclosed to the District prior to the execution of a contract. When the Bidder intends to perform any trade listed with the Bidder's own forces, the Bidder shall be named in the place of any subcontractor required to be listed. Failure to complete the list or listing a subcontractor that is not properly licensed (if required by LLC) shall render the bid non-responsive and is not subject to cure by substitution. Listing more than one (1) subcontractor or the Bidder and a subcontractor shall only be done when the work will be shared by both. All subcontractors, whether or not listed on the *Official Bid Form,* must meet the licensing and experience requirements stated in these *Bid Instructions* as applicable.

16. Subcontractor Conflicts of Interest: A Bidder shall not list as a subcontractor any representative, agent, or employee of the District or the Architect/Engineer without written approval of the District, in advance. No representative, agent or employee of the District or the Architect/Engineer shall have more than a five percent (5%) interest in the Bidder's or any subcontractor's business used in the performance of the work without approval of the District. No representative, agent or employee of the District or the Architect/Engineer having official responsibility in the procurement process shall receive any payment, loan, subscription, advance, deposit of money, services, offer of employment or anything else of greater than a nominal value (in excess of $25.00). The Bidder, nor any subcontractor proposed in the *Official Bid Form*, shall have provided any consultant services related to the designs of the work to be performed or product specifications which would render that entity ineligible to bid in accordance with the District's Procurement Code.

17. Subcontractor Substitution: The District shall have the right to reject any subcontractor that ordinarily appears to meet the requirements but, unknown to the Bidder, is not acceptable to the District at the time of bid submission. Substitution of an unacceptable subcontractor shall be in accordance with the District's Procurement Code. If, at the bid opening, the Contractor lists a subcontractor who, at the time the bid was submitted, was not sufficiently licensed under State law to perform the work for which it was listed as the subcontractor, the bid shall be considered non-responsive unless allowed by the District under Paragraph 30.

18. Use of Minority and Economically Disadvantaged Subcontractors: The District encourages the Bidder's use of minority-owned and women-owned businesses as subcontractors provided they meet all the requirements of the *Bid Instructions*, as applicable.

19. Bid Security: Each bid shall be accompanied by bid security pledging the Bidder shall enter into a contract with the District on the terms stated in the Contract Documents and has the ability to furnish bonds covering the faithful performance of the contract and payment of all obligations arising thereto. Bid security shall be in an amount not less than five percent (5%) of the total bid price including all allowances and bid alternates and shall be made payable to the District. Each Bidder shall maintain such bid security in full force and effect until such time as a) the Contract Agreement has been executed and a *Performance Bond* and *Payment Bond* have been furnished to the District, b) the specified acceptance period has elapsed and the Bidder has refused the District's request to extend the acceptance period at the same bid price, or c) the District has rejected all bids. A Bidder who submits a bid security not meeting the requirements herein or in the District's Procurement Code shall be considered non-responsive except as may otherwise be provided for in the District's Procurement Code.

20. Bid Bond Requirements: Any bid bond submitted with a bid of one hundred thousand dollars ($100,000) or more shall be issued by a surety company licensed to conduct business in the State of South Carolina with an "A" minimum rating of performance as stated in the most current publication of "Best Key Rating Guide, Property Liability" and show a financial strength rating of at least five (5) times the total bid price including all allowances and alternates. For projects less than one hundred thousand dollars ($100,000), the issuing surety company shall have a "B+" minimum rating of performance and a financial strength of at least four (4) times the total bid price. The attorney-in-fact that executes the bid bond on behalf of the surety shall affix to the bid bond a current certified power of attorney.

21. Bid Security Forfeiture: Refusal or failure of the Bidder to a) enter into a contract; b) furnish a *Performance Bond* and *Payment Bond* as required; c) correct any bid deficiency; or d) provide any additional information when requested for determination of responsibility shall cause forfeiture of the amount of the bid security to the District.

22. Bid Submission: Bids delivered orally or via telephone, telegraph, e-mail, facsimile, or other such methods are not sealed bids and are unacceptable. Bids submitted in any other way than as required in these *Bid Instructions* shall be considered non-responsive in accordance with the District's Procurement Code.

23. Receipt of Bids: Bids shall be received at the location stated in the *Invitation for Bids* no later than the date and time published in the *Invitation for Bids*, as they may be amended by any addendum. Timely submission of a fully completed bid is solely the responsibility of the Bidder. It is the Bidder's responsibility to synchronize submission time with the District's official bid clock at the bid opening location to avoid late submissions.

24. Sealed Bid Packaging: *If hard bids are being accepted via hand-delivery or through the mail*, the documents required for bid submission shall be enclosed in a sealed, opaque envelope before delivery, mailing, or insertion into any express carrier envelope or packaging. The exterior of the sealed, opaque envelope shall be clearly marked with a) the project name and project/bid number, b) the Bidder's name and address, c) the Bidder's Contractor license number, and d) the words "SEALED BID" in bold print. The Bidder shall assume full responsibility for the correct packaging and identification of the sealed bid to prevent exposure of bid pricing prior to the official bid opening date and time. Any pre-mature opening of a bid shall be handled in accordance with the District's Procurement Code.

25. Vendor Registration Mandatory: The District has implemented an online, electronic bidding system to receive bids and proposals from prospective offerors. In order to submit offers in response to posted solicitations, prospective offerors must be registered through this electronic system. Registration can be completed through the following link: https://vrapp.vendorregistry.com/Vendor/Register/Index/horry-county-schools-sc-vendor-registration . Once registered, suppliers must keep their information current.

26. On-Line Bidding Instructions: (a) Mandatory Registration: You must register before you can submit an offer online. See clause entitled "Vendor Registration Mandatory". To register or submit and offer, please visit the following site: https://vrapp.vendorregistry.com/Vendor/Register/Index/horry-county-schools-sc-vendor-registration . (b) Once registered and signed into the system, choose the solicitation you wish to respond to. The system will provide the necessary steps to obtain the required information from the Bidder. (c) To confirm your offer has been submitted, you should receive an email notification from cservice@vendorregistry.com with the subject line "Vendor Bid File Submittal". Only offers with an email status of "Vendor Bid File Submittal" have been received by the District.

If you experience any issues, contact Vendor Registry Support Team by email at cservice@vendorregistry.com or toll free at 844-802-9202. PLEASE NOTE: Do NOT wait until the last minute to enter your submission. Registration for new contractors can take up to three (3) days.

27. Submitting a Paper or Modification: Paper offers are not the preferred method of submission. Unless specifically instructed otherwise in the solicitation, you should submit your offer or modification electronically. See clauses titled "VENDOR REGISTRATION MANDATORY" and "ON-LINE BIDDING INSTRUCTIONS."

If you must submit a paper offer or modification the following instructions apply: (a) 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 bid schedule). (b) (1) All copies of the offer or modification, and any other documents required to be submitted with the offer shall be enclosed in a sealed, opaque envelope or package. (2) Submit your offer or modification to one of the following address and as provided on the Official Submission Form:

MAILING ADDRESS:	PHYSICAL ADDRESS:
Horry County Schools	Horry County Schools
Attn: Procurement Office/ B300	Attn: Procurement Office/ B300
PO Box 260005	335 Four Mile Road
Conway, SC 29528	Conway, SC 29526

The envelope or package must show the time and date specified for opening, the solicitation number, and the name and address of the bidder. If the offer or modification is sent by mail or special delivery service (UPS, Federal Express, etc.), the outermost envelope or wrapper must be labeled "OFFER ENCLOSED" on the face thereof. The District is only receiving packages via of delivery service on Tuesdays and Thursdays. (c) If you are responding to more than one solicitation, submit each offer in a separate envelope or package. (d) If the solicitation is a Request For Proposal or Request for Qualifications, refer to Section Proposal Special instructions # 3. (e) Facsimile or e-mail offers, modifications, or withdrawals, will not be considered unless authorized by the Solicitation.

The Districts's Mail Services picks up all mail from the US Postal Service daily, around 9:00AM (excluding weekends and holidays), and disseminates the mail to the Procurement Services office normally by 12:00 PM. See provision entitled Deadline for Submission

28. Electronic Files – Required Media and Format: Documents and/or electronic files submitted shall contain the solicitation number and the offeror's name and be compatible with Microsoft Office (version 2003 or later) or Adobe Acrobat or equivalent Portable Document Format (.pdf) viewer. The Procurement Officer must be able to view, search, and print electronic documents without a password. If required by the solicitation, your business and technical proposals must be within separate files.

29. Deadline For Submission of Offer: Any offer received after the Procurement Officer of Horry County Schools or designee has declared that the time set for opening has arrived, shall be rejected unless the offer has been delivered to the designated Horry County Schools Office of Procurement as instructed on the Cover page prior to the bid opening or the governmental body's mail room which services that purchasing office prior to the opening. [R.19-445.2070(G)].

30. Bid Acceptance Period: Any bid submitted shall be binding on the Bidder and irrevocable by the Bidder for forty-five (45) days following the bid opening date and time. No required Bid Documents, including any bid security, shall be modified, withdrawn or cancelled by the Bidder during this acceptance period. In order to withdraw a bid after the minimum time period specified, the Bidder must notify the Procurement Officer in writing.

31. Withdrawal or Modification of a Bid: Withdrawal or modification of a bid prior to or after the bid opening date and time shall only be done in accordance with the District's Procurement Code. Negligence or error on the part of any Bidder in preparing a bid confers no right of withdrawal or modification after the bid opening date and time. No Bidder who, at the District's discretion, is permitted to withdraw a bid shall in any way benefit from the contract later awarded.

32. Bidder Responsiveness: For a bid to be considered by the District, the Bidder shall first be determined by the District to be responsive to the bid requirements. Any bid which fails to conform in all material respects to the essential requirements of the *Bid Instructions* and the required forms shall be considered non-responsive and rejected as provided for in the District's Procurement Code. A bid may be rejected if the Procurement Officer determines in writing that it is unreasonable as to price. The District may also reject a bid as unresponsive 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. A bid is also non-responsive if, at the bid opening, the Contractor lists a subcontractor who, at the time the bid was submitted, was not sufficiently and appropriately licensed under State law to perform the work, and such non-responsiveness is not subject to cure by substitution. Any bid which the District is prohibited by law from considering shall be rejected as non-responsive unless allowed by the District under Paragraph 30.

33. Bidder Responsibility: For a *Contract Agreement* to be executed, the Bidder shall also be determined by the District to be responsible. The District may make any and all reasonable investigations deemed necessary and proper to determine the ability of the Bidder to perform the work timely and to the satisfaction of the District. A determination of responsibility focuses on whether the Bidder has the necessary facilities, resources, qualifications, and ability to provide the work specified in the Contract Documents in a satisfactory and timely manner. For a Bidder to be deemed responsible, it must have the capability in all respects to fully perform the contract requirements, and have the integrity and reliability to assure timely good faith performance, which may be substantiated by past performance. Factors used to assess responsibility may include, by way of illustration and not limitation, a) availability of appropriate finances, material, equipment, facilities, expertise, and personnel resources, or the ability to obtain them, necessary to meet all contractual requirements; b) a satisfactory record of performance and integrity with the District and other governmental entities; c) no outstanding debts owed nor any judgments in the past five (5) years or currently pending with the District or any other entity; d) the capability of legally contracting with the District or the State of South Carolina; e) Bidder and subcontractors being properly qualified and eligible to contract for the work as stated in the next paragraph; f) supplying all necessary, required and requested information within forty-eight (48) hours of the request by the District; and g) submit to a very detailed bid evaluation process administered by the District which includes all subcontractors.

34. Minimum Contractor Qualifications Required: The District reserves the right to reject any Bidder as non-responsible if the evidence submitted by the Bidder or any investigation of the Bidder fails to satisfy the District of the responsibility factors in the previous paragraph and, by way of illustration and not limitation, the following:

A. The Bidder's experience, skill, and ability, to perform the work required as well as the experience, skill, and ability of key personnel. At least one principal of the business shall have a minimum of ten (10) years of documented commercial construction experience or an equivalent of five (5) years of documented school construction experience. The Contractor's project manager and worksite superintendents as well as all subcontractors shall each have a minimum of five (5) years of documented commercial construction experience or as required in the *Contract Agreement*.

   The Project Manager (and Project Superintendents) are to be 100% assignable to this Horry County Schools project. The proposed Manager and Superintendent must have worked a minimum of two (2) years for the General Contractor naming them in their bid. Both must have experience working on construction projects in close proximity to and/or within occupied and operating facilities.

   The District understands the importance of good planning and management. As such, the qualifications for both the Project Manager and the Superintendent will be a significant portion of the Contractor evaluation in determining "responsibility" as it relates to the selection process of the selected General Contractor. Therefore it is the District's anticipation that the Project Manager will be familiar enough with the project and project demands that he/she can organize and oversee the responses during the District's evaluation process for the General Contractor as specified in paragraph 27 of the *Bid Instructions*.

   The District requirements for staffing the project listed in the *Contract Agreement* are to be considered the minimum amount of key supervisory staff assigned to the project. The Contractor, with his in-depth knowledge of building facilities projects must allocate the necessary personnel to deliver the project in a timely, safe, and quality manner.

B. The Bidder and subcontractors having and maintaining a valid Contractor's license with the South Carolina Contractors' Licensing and Regulations Board at an appropriate level for the project being bid or the portion of work to be performed, as may be required. Contractors and subcontractors shall have been licensed by the South Carolina Contractors' Licensing Board (or contractors' licensing agency of another state, in equivalent categories) for a minimum of five (5) consecutive years immediately prior to the bid submission in the construction field or discipline the Contractor or subcontractor will be performing.

C. The Bidders' ability to meet the required insurance and bonding requirements. The Contractor shall have a minimum aggregate available bonding capacity of at least twice the value of the project being bid and shall provide proof of such available bonding capacity as part of the bid submission. The insurance coverage shall be specific to the project as stated in the *Contract Agreement* with the District and Architect/Engineer listed as additionally insured. The Contractor must also have an experience modifier rate (EMR) not greater than 1.00 unless allowed by the District under Paragraph 30.

D. The demonstrated ability of the Bidder and the listed subcontractors to perform construction work promptly within the time specified, without delay or potential default.

E. The character, integrity, reputation, judgment, experience, and efficiency of the Bidder and the listed subcontractors and their key employees, owners, directors, officers or others associated with them.

F. The quality of the Bidder's and listed subcontractors' past and present performance on other contracts entered into and the Bidder's experience with projects similar to the one identified in the Contract Documents.

G. Any current contract between the District and the Bidder or any listed subcontractor in compliance with all terms and conditions of the contract.

H. The Bidder or any listed subcontractor not currently debarred from doing business with the State of South Carolina, the District or any other governmental entity.

I. Any amounts due and payable to the District by the Bidder or any listed subcontractor paid in full prior to the bid submission.

35. Right of Waiver: The District reserves the right to waive any requirements of the previous *paragraph(s)* or any informalities or irregularities in any bid received and award a contract which, in the District's judgment, is in the best interests of the District and in accordance with the District's Procurement Code.

36. Notice of Intent to Award: It is the intent of the District to award a contract to the lowest responsive and responsible Bidder provided the funds are appropriated by the Horry County Board of Education, and the bid does not exceed the funds available. The District expects to post a *Notice of Intent to Award* for this project electronically within thirty (30) calendar days of the bid opening date and time on the District's website page as provided on the Cover Page Public Notice section and any other bid posting locations stated in the *Invitation for Bids*. A *Notice of Intent to Award* with bid tabulation shall also be faxed or e-mailed to all Bidders at the time of posting.

37. Contract Award: A *Contract Agreement* shall not be executed between the Contractor and the District until one (1) business day after the completion of the protest period. The *Notice of Intent to Award* is not an authorization for commencement of work but only serves as a public notice of the District's intention to award a contract. A *Notice of Intent to Award* may be rescinded if a) funds for the project become unavailable or the project pricing exceeds the available funding as determined by the Horry County Board of Education; b) further information is brought to the District's attention leading to a determination of Bidder non-responsibility; or c) a protest decision requires rescinding of the *Notice of Intent to Award* or rebidding. The successful Bidder providing services without a fully executed *Contract Agreement* does so at its own risk and expense, and the District shall not be liable for payment of any work performed or the cost of any materials unless the fully executed *Contract Agreement* has been issued to the Bidder.

38. Vendor Application: Bidders who have not provided products/services to Horry County Schools in the past or have not updated your company's profile with the District via a completed vendor application and W-9 within the past three (3) years, please complete the vendor application along with the W-9 and submit with your offer. The forms are online at: https://www.horrycountyschools.net/Page/10671 .

39. Governing Law: The bidding process and any subsequent contract executed shall be governed by the District's Procurement Code and the laws of the State of South Carolina. A copy of the Procurement Code is available on the District's website at: https://www.horrycountyschools.net/cms/lib/SC02209139/Centricity/Domain/3189/Procure

ment_Code.pdf. All Bidders are encouraged to read the Procurement Code as it relates to the construction bidding and contracting processes prior to submitting a bid.

40. Ethics Certificate: By submitting a bid, the Bidder certifies that the Bidder 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 official gain; Section 8-17-705, regarding gifts to influence action of public official; Section 8-13-720, regarding offering money for advice or assistance of public official; Sections 8-13-755 and 8-13-760, regarding restrictions on employment by former public official; Section 8-13-790, regarding recovery of kickbacks; Section 8-13-1150, regarding statements to be filed by consultants; and Section 8-13-1342, 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, including without limitation, change orders or task orders regarding a public contract, contractor shall, if required by 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.

41. Prohibited Communications and Donations (modified): 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, potential and actual Offerors (including any subcontractors or sub-consultants) must not communicate, directly or indirectly, with the District or its employees, agents, or officials (including members of the School Board and/or the District Selection Committee) regarding any aspect of this procurement activity, unless otherwise approved in writing by the Procurement Specialist. All communications must be solely with the Procurement Specialist. (b) You are advised to familiarize yourself with Regulation 19-445.2165, which restricts donations 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.

42. Non-Collusion Clause: By submitting a signed bid, the Bidder certifies the prices submitted in response to the solicitation have been arrived at independently and without, for the purpose of restricting competition, any consultation, communication, or agreement with any other Bidder or competitor relating to those prices, the intention to submit a bid, or the methods or factors used to calculate the bid prices. The Bidder further certifies the Bidder is not party to any collusive action or any action which may be in violation of any federal or state antitrust act, nor has the Bidder offered or received any kickbacks or inducements from any other Bidder, supplier, manufacturer, or subcontractor in connection with the bid to be offered to the District. Any and all bids shall be rejected if there is any reason for believing collusion exists among the Bidders which may be a violation of Federal or State antitrust acts. The District may or may not, at its discretion, accept future bids for similar work from Bidders suspected of collusion.

43. Bidding Expenses: All costs associated with a) ordering documents, b) attendance at any pre-bid conference(s) or other bid meetings, c) worksite observations, d) preparation and presentation of a bid, e) supplying any documentation required by the District for purposes of determining Bidder responsibility or in relation to any protest or appeal, or f) any other costs incurred prior to execution of a *Contract Agreement* is solely the responsibility of the Bidder.

44. Protest Procedure: Any prospective bidder, Offeror, consultant, subconsultant contractor, or subcontractor who is aggrieved in connection with the solicitation of a contract shall protest within fifteen 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 fifteen 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.

Any actual bidder, offeror, contractor or subcontractor who is aggrieved in connection with this solicitation or the intended award or award of a contract under this solicitation may protest to the Horry County Schools in accordance with the Horry County Procurement Code Article XII LEGAL AND CONTRACTUAL REMEDIES §11-35-4210 at: CPO, Office of Procurement Services, 335 Four Mile Road, B300, Conway SC 29526. EMAIL: rstrickland@horrycountyschools.net. 843.488.6893

End of *Bid Instructions*

LONG FORM CONTRACT AGREEMENT

THE DISTRICT: Horry County Schools 335 Four Mile Road, P.O. Box 260005 Conway, South Carolina 29528-6005 Phone: 843-488-6929	CONTRACTOR: Phone:	CONTRACT DATE: PROJECT NAME: MBH Metal Wall Panel Installation PROCUREMENT No.: 2122-06MJ CONTRACT VALUE:

The following terms and conditions are applicable to this *Contract Agreement* between the parties listed above for the Scope of Work (Exhibit A) established:

1. Contract Validity: The *Contract Agreement* shall be executed by a responsible signatory of the District and the Contractor and, along with all the Exhibits and the documents referenced therein forming the Contract Documents, represents the full and complete agreement between the parties. All Contract Documents are intended to be complementary and what is required by one shall be as binding as if required by all. In the case of apparent ambiguity or contradiction, these terms and conditions shall take precedence. Divisions of the Contract Documents into sections and paragraphs shall not interpret or alter the meaning or intent of any provision.

2. Authority for Changes: Neither the Architect's nor the District's representatives, agents or employees have any independent authority, either expressed or implied, to amend the Contract Documents, either orally or in writing. To be official and binding, amendments shall only be made in writing as a *Construction Change Directive (CCD) or a Change Order* based upon the requirements in Exhibit E.

3. Contract Forms: Forms contained in the Contract Documents are the official forms intended for the specified use in preparation and administration of the contract. Any similarly intended forms as distributed by AIA, ACCORD or any other source shall not be substituted except as approved by the District; however, any deficiencies or variances in terms and conditions of those substituted forms from the District's approved forms shall not be applicable or binding upon the District but shall be superseded by the language contained in the District's required forms.

4. Ownership of Documents: Under separate contract with the Architect, the District has ownership of all specifications and drawings in relation to the project. Neither the Contractor nor any other entity shall claim ownership or copyright of any drawings, specifications or other Contract Documents prepared by the District or the Architect nor shall they be used on any other projects without written consent of the District. This requirement survives completion or termination of the *Contract Agreement.*

5. Non-Waiver of Rights: Failure by the District to enforce any provision of the Contract Documents shall not be construed as a waiver of any such provision and shall not affect the validity of the *Contract Agreement* or any part thereof or the right of the District to enforce any provision at any time. No action or failure to act by the District or the Contractor shall constitute a waiver of a right or duty afforded them under the Contract Documents nor shall such action or failure to act constitute approval of or acquiescence to a breach, except as may be specifically agreed to in writing signed by both parties.

6. Maintenance and Auditing of Contractor's Records: The Contractor shall prepare and maintain project records as required by the District, acceptable accounting standards, and applicable laws for a period of three (3) consecutive years following completion of the project as evidenced by the date of final payment to the Contractor. The District, the Office of General Services of the State of South Carolina, and any auditor under contract with the District has the right to audit the Contractor's records related to the *Contract Agreement* at any time. The Contractor shall ensure all records are available for inspection at the location specified by the District within seventy-two (72) hours of notice by the District at no additional cost to the District. This requirement shall survive termination or completion of the contract.

7. Contractor Performance: Performance by the Contractor shall be required only to the extent consistent with the *Contract Agreement*, including all *Change Orders (Exhibit E)* necessary to produce the intended result.

8. Acts, Errors, Omissions, and Inconsistencies: The Contractor shall be responsible to the District for acts, errors and omissions of the Contractor, subcontractors and suppliers who perform any portion of the work or supply any materials, equipment or processes to be incorporated into the work. The Architect and the District shall at no time be legally responsible for any negligence or other acts by the Contractor, any subcontractor, any supplier, or anyone enjoined to them.

9. Independent Contractor Status: The Contractor shall be legally considered an independent contractor and neither the Contractor nor any subcontractor or supplier shall, under any circumstances, be considered employees, representatives, or agents of the District or the Architect.

10. District Representatives' Authority: The District's assigned Project Manager and project representative(s) as identified in the *Scope of Work (Exhibit A)* shall provide administration of the *Contract Agreement* and associated Contract Documents and shall act on behalf of the District only to the extent of a) the terms and conditions of the Contract Documents; b) their respective duties; and c) the authority granted to them in accordance with their respective positions with the District or through a contractual agreement.

11. Required Meetings: A pre-construction conference with the District and the Architect shall be scheduled prior to work commencement. At a minimum, the Contractor, the Contractor's Worksite Superintendent(s), and a representative of each subcontractor listed in the bid shall be in attendance. Construction meetings during the progress of the work shall be held by the District as often as required in the *Scope of Work (Exhibit A)* and, at a minimum, the Contractor's Worksite Superintendent(s) and a representative of any subcontractor currently performing work or scheduled to begin performing work shall be in attendance. At the meetings, the Contractor shall provide a) a progress report as it relates to the established substantial completion date and approved construction schedule, b) any scheduling changes conforming to the established completion date, c) performance issues, problems or delays encountered and resolutions to avoid failure in meeting the completion date, d) the District's scheduled activities or other needs at the worksite, and e) any other aspects of the work deemed to have a potential impact on the date of substantial completion. Other meetings may be required with regulatory authorities or the District's Board of Education. All such meeting requirements shall be adhered to by the Contractor at no additional cost to the District.

12. Reporting of Errors, Omissions or Inconsistencies: Errors, omissions, and inconsistencies discovered in the Contract Documents not previously recognized in the bidding process shall be reported to the District, in writing, within twenty-four (24) hours of discovery for appropriate resolution. If the Contractor performs any construction activity involving a recognizable error, omission, or inconsistency without first notifying the District for a determination, the Contractor shall assume responsibility for such performance and shall bear an appropriate amount of the costs for correction.

13. Building Permit and Other Permits and Fees: No general building permit is required in accordance with § 6-9-110 of the South Carolina Code of Laws; however, the Contractor shall be required to provide mechanical, electrical, plumbing and other such permits which may be required for purposes of inspection at no additional cost to the District. Except for permits and fees which are the responsibility of the Contractor in the Contract Documents, the District shall secure and pay for necessary approvals, easements, assessments, utility impact fees, permits, and such charges required for the successful completion of the work.

14. Verification of Worksite Measurements and Conditions; Surveys: The Contractor shall take worksite measurements and verify worksite conditions and shall carefully compare such measurements, conditions and other information known to the Contractor with all Contract Documents before commencing with the work. The Contractor shall establish all working lines, grades, and bench marks, appropriate to the work being performed, and shall be responsible for accuracy of same. The District shall furnish any necessary land surveys describing physical characteristics, legal limitations and utility locations for the worksite, if necessary to the performance of the work. From the information provided by the District, the Contractor shall develop and make all detailed surveys, as needed, for the performance of the work such as, by way of illustration and not limitation, slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets. The Contractor shall carefully preserve benchmarks, reference points and stakes and, in case of willful or careless destruction, shall be responsible for any mistakes which may be caused by the unnecessary loss or disturbance.

15. Conformance to Applicable Laws: The Contractor shall comply with and give notices as required by all applicable laws bearing on construction of school facilities including, by way of illustration and not limitation, the following:

A Most current international building, plumbing, mechanical, gases, and fire prevention codes (i.e., International Building Code effective in year 2003, as may be amended).
B National Electrical Code, as may be amended.
C South Carolina Energy Conservation and Efficiency Act of 1992, as may be amended.
D OSHA Standards, as may be amended and applicable to the construction industry.
E SC Department of Transportation Access and Roadside Management Standards, as may be amended.
F Where such requirements are inadequate, the Contractor shall use the most current NFPA Standards, American National Standards Institute or other recognized national standards.

If the Contractor performs work knowing it to be contrary to these or any other applicable laws without first notifying the District, in writing, for a determination, the Contractor shall assume full responsibility for such work and shall bear the costs of correction.

16. Project Time and Work Commencement: By executing the *Contract Agreement*, the Contractor confirms the time limits established in the *Project Schedule (Exhibit D)* are reasonable periods of time for performing all work required. The Contractor shall proceed expeditiously with adequate forces to achieve the established completion date. The Contractor shall not prematurely commence operations on the site or elsewhere prior to the a) commencement date established in Exhibit D, b) effective date of insurance required and evidenced by a valid *Certificate Of Insurance (Exhibit G)* provided to the District, or c) securing of SLED background checks on all Contractor and subcontractor worksite personnel, whichever is later. The date established for completion of the project shall not change should the effective date of any insurance or the acquiring of SLED background checks delay the commencement of the work.

17. Construction Schedule: The Contractor shall, within ten (10) days of the date of the *Notice of Intent to Award*, prepare and submit to the District an itemized construction schedule. The construction schedule shall a) incorporate the entire work to be performed; b) indicate the dates for start and completion of various elements of the work conforming to the time frames in *Project Schedule (Exhibit D)*; c) be affirmed or revised as required by the conditions of the work with District approval; and d) not exceed the time limit established by the District for substantial completion of the project stated in the *Project Schedule (Exhibit D)*. The construction schedule and any revisions thereto must be approved by the District through a *Change Order* or *CCD* and used in monitoring the progress of the work. When the progress of the work, at the District's sole determination, does not conform to the last approved construction schedule, the District shall have the right to withhold payment from the Contractor until the work is compliant with the approved construction schedule and the District is certain there is no further potential for slippage in the construction schedule impacting the substantial completion date.

18. Submittals: The Contractor shall conform to any requirements for submittals stated in the Contract Documents and shall prepare within ten (10) days from the date of the *Contract Agreement* a schedule of submittals, which shall be maintained throughout the term of the *Contract Agreement* and coordinated with the construction schedule to allow adequate time for the Architect and District to review and respond to the submittals. The Contractor shall review and approve and submit to the Architect all shop drawings, product data, samples and similar submittals at least thirty (30) days prior to use to avoid delay in the work. By submission to the Architect, the Contractor warrants the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, and has checked and coordinated the information contained within such submittals with the requirements of the work and the Contract Documents. Submittals shall be marked with the name of the project and bear the signed and dated stamp of approval of the Contractor as evidence the submittals have been reviewed. Any delay in the progress of the work due to the Contractor's delay in submitting such documents in sufficient time for review shall incur no additional costs to the District or extension in contract time but may result in delayed payment to the Contractor. Work performed shall be in conformance with the accepted submittals. The Contractor shall not be relieved of responsibility for errors or omissions in submittals by the acceptance of the Architect or District.

19. Shop Drawings: Shop drawings shall be accurate to a scale sufficiently large enough to show all pertinent aspects of the equipment and its connections. Shop drawings shall be submitted to the Architect for review in the number of copies and on medium required by the Architect at least thirty (30) days prior to intended use. The review of submittals and shop drawings by the Architect and the District shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences or procedures. The acceptance of a single item shall not indicate acceptance of an assembly of which the item is a component. The Contractor is in no manner relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's or District's acceptance of shop drawings, product data, samples or similar submittals unless the District has given specific written approval after written notification by the Contractor of the specific deviation.

20. Maintenance of Record Drawings: The Contractor shall maintain at the worksite one (1) record copy of the Contract Documents including approved changes in good order and marked currently to record changes and selections made during performance of the work. A copy of submittals accepted by the District shall also be maintained at the worksite. These items shall be available to the Architect and District when present at the worksite. When required by the Contract Documents, the Contractor shall provide record drawings on all increments of the work such as, by way of illustration and not limitation, plumbing, electrical, mechanical, and all systems, such as fire and security systems, incorporated into the work. The Contractor shall furnish an electronic and paper copy of record drawings of "as-built" detail to the Architect at final completion of all work, excluding punch list items as required by the Contract Documents.

21. Professional Certifications: When professional certification of performance criteria for materials, systems, or equipment is required by the Contract Documents, the District shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

22. Contractor's Quality Control Program: The Contractor shall institute and maintain throughout the contract term a quality control program, designed to ensure the work performed is in accordance with the Contract Documents, including any changes, at all times and in all respects. The program shall include providing daily supervision and conducting frequent inspections by the Worksite Superintendent(s).

23. Award of Multiple Contracts: The District reserves the right to bid and award separate contracts for portions of the project, perform work with its own forces, or perform construction or operations in conjunction with the work of the Contractor. When the District performs work with its own forces, the District shall be deemed a separate contractor subject to the same obligations and having the same rights. The District shall coordinate the activities of the District's own forces and of each separate contractor with the work of any other contractors. The Contractor shall participate with other contractors, the Architect, and the District in reviewing construction schedules and making any revisions after a joint review, mutual agreement and approval of the revisions by the District. If part of the Contractor's work depends upon construction or operations of the District or a separate contractor, the Contractor shall, prior to proceeding with that portion of the work, promptly report to the District apparent discrepancies or defects in the other construction which would render it unsuitable for the Contractor's work. Failure of the Contractor to report such defects shall constitute an acknowledgment the District's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's portion of the work, except as regards latent defects. If any dispute arises between the Contractor and the District's own forces or other contractors, the District shall mediate such disputes and equitably charge any costs to the responsible parties.

24. Assignment and Coordination of Separate Contractors: In order to ensure continuity and quality, the District reserves the right to award separate contracts for certain trades such as low-voltage wiring, HVAC controls, security and fire alarm systems. The District further reserves the right to assign any separately procured contracts to the Contractor for coordination, supervision, and scheduling of work. If the contract is fully assigned, the trade contractor shall become a subcontractor of the Contractor in all respects. The District may also partially assign the trade contractor to the Contractor such that the Contractor schedules and supervises the trade contractor; however, the District administers the contract, holds the performance and payment bonds, processes change orders and payments directly to the trade contractor with approval of the Contractor. Upon execution of the assignment, the Change Order (Exhibit E) shall add the value of the awarded contract price plus a five percent (5%) markup for a fully-assigned contract.

25. Cutting and Patching: The Contractor and separate contractors shall a) be responsible for cutting, fitting or patching required to complete the work or to make its parts fit together properly with other construction or with existing structures; b) not damage or endanger a portion of the work or any portion of present or completed construction of another entity by cutting, patching or otherwise altering such construction or structures or by excavation; and c) not cut or otherwise alter such construction or structures of the another entity without consent, and such consent shall not be unreasonably withheld.

26. Supervision and Labor: The Contractor shall provide and pay for all labor necessary for proper execution and completion of the work identified in the *Scope of Work (Exhibit A)*. The day-to-day supervision and control of the Contractor's employees is the sole responsibility of the Contractor. The Contractor shall not employ or contract with illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986, as may be amended or any State of South Carolina immigration and alien work requirements, including any requirements for reporting illegal aliens. A minimum of two (2) employees in addition to the Worksite Superintendent(s) shall be fluent in spoken and written English.

27. Work Scheduling: The Contractor shall maintain a full crew of competent employees and subcontractors on the project full time. At a worksite with an occupied building under repair or renovation or other facilities used on a regular or intermittent basis, normal working hours may vary. The District reserves the right to adjust work hours when such work in progress interferes with the educational process, athletic events, District operations or traffic patterns; therefore, work scheduling shall be flexible to include weekends and evening hours when necessary without additional cost to the District. The Contractor shall ensure this requirement is a part of any subcontract agreements.

28. Davis-Bacon Act: The Contractor shall ascertain whether any federal funds shall be used in payment of the work to be performed and, if so, shall abide by all federal provisions and requirements of the Davis-Bacon Act, as may be amended.

29. Drug-Free Workplace: The Contractor shall be responsible for initiating, maintaining and supervising all drug-free programs conforming to Title 44, Chapter 107, § 44-107-10 through § 44-107-90 of the South Carolina Code of Laws, as may be amended.

30. Conflict of Interest: The Contractor shall not employ any owner, director, representative, agent or employee of the Architect or the District to perform any work, directly or indirectly, full-time or part-time related to the requirements of the Contract Documents without approval of the District.

31. Compliance with Employment Laws: By entering into a *Contract Agreement*, the Contractor agrees to abide by all applicable laws pertaining to employment including, by way of illustration and not limitation, the following:

A. Title VII of the Civil Rights Act of 1964, as may be amended.
B. Age Discrimination in Employment Act of 1964, as may be amended.
C. Title I of the Americans Disabilities Act of 1990, as may be amended.
D. Equal Pay Act of 1963, as may be amended.
E. Fair Labor Standards Act, as may be amended.
F. South Carolina Wages Act, Code 37-10-10 et seq., as may be amended.
G. South Carolina Worker's Compensation Act, Code 42-1-10 et seq., as may be amended.

The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a bona fide occupational qualification reasonably necessary for normal operations of the Contractor. The Contractor, in all solicitations or advertisements for employees, shall state the Contractor is an "Equal Opportunity Employer." The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause and shall include the provision of this paragraph in every subcontract or purchase agreement of more than $10,000.

32. Employment Taxes and Benefits: The District shall not withhold from the contract payments any Federal or State income taxes, or any employment-related taxes normally withheld on the District's employees. Further, the District shall not provide any employment related insurances or other benefits such as worker's compensation for the benefit of any Contractor, subcontractor or supplier employees.

33. Project Key Staff – Project Manager: The Contractor shall assign a skilled, experienced, and dedicated Project Manager to the project and identified in Exhibit A. The Project Manager shall secure the materials of proper quality and quantity to meet the Contract Documents and manage the appropriate timing of all materials, sub-contracted work, and Contractor provided labor to ensure the continual progress of the work to meet the substantial completion date. The Contractor shall not change the Project Manager identified in the *Scope of Work (Exhibit A)* or the duties and status of the Project Manager during the course of the project without approval of the District.

34. Project Key Staff -- Worksite Superintendent(s): The Contractor shall employ at least one (1) full-time, competent Worksite Superintendent and, if required by the Contract Documents, an additional part-time or full-time, competent secondary Worksite Superintendent if expedient for the size and scope of the project. Exhibit A identifies the Worksite Superintendent(s). No less than one (1) Worksite Superintendent shall be in attendance at the worksite at all times during performance of any work by the Contractor's own forces or subcontractors and during delivery of any materials. The Worksite Superintendent shall not perform the work of any trade or other duties; however, the secondary Worksite Superintendent may perform part-time work of a trade or the duties of OSHA Compliance Officer or fireguard, if approved by the District. The Contractor shall not change any Worksite Superintendent identified in the *Scope of Work (Exhibit A)* or the duties or status of same during the course of the project without approval of the District. The Worksite Superintendent(s) shall enforce strict discipline and good order among the Contractor's representatives, agents, employees, subcontractors and suppliers.

35. Worksite Communications: The Project Manager and Worksite Superintendent(s) are representatives of the Contractor and communications given to them, either orally or in writing, shall be as binding as if given to the Principal of the Contractor.

36. Subcontractor & Supplier Relationship to the District: Nothing in the Contract Documents shall infer any contractual relationship between the District and any subcontractor, supplier or other entity under agreement to the Contractor except as it relates to warranties or specifically provided for elsewhere.

37. Subcontractor Administration and Contractual Requirements: Within ten (10) days from the date of the *Contract Agreement* the Contractor shall provide to the District and the Architect a list of all subcontractors along with addresses, contact information, trade or portion of work responsible for, and minority status. The Contractor shall not change a subcontractor during the term of the *Contract Agreement* without written approval of the District. Any change in subcontractors shall be in accordance with the District's Procurement Code. The Contractor shall warrant to the District, by execution of the *Contract Agreement,* each subcontract shall a) preserve and protect the rights of the District with nothing prejudicing those rights, b) assume all the obligations and responsibilities the Contractor assumes under the Contract Documents, and c) assume all rights, remedies and redresses against the Contractor which the Contractor has against the District in the Contract Documents. The Contractor shall make available to each subcontractor, prior to execution of a subcontract, a copy of this *Contract Agreement* to which the subcontractor shall be bound.

38. Contractor Legal Requirements Pertaining to Subcontractors: The Contractor shall abide by all applicable laws pertaining to the treatment and payment of subcontractors including, but not limited to, a) South Carolina Code of Laws §29-6-30 regarding timely payment of subcontractors; and b) South Carolina Code of Laws §29-6-230 regarding timely payment of subcontractors when payment to the Contractor may be withheld. If the Contractor is not abiding by applicable laws regarding subcontractor payment, the District shall have the right to a) withhold payment from the Contractor until such breach is corrected, and b) report such failure to the proper authority including the Contractor's Surety. The District shall have the right, upon request, to furnish any subcontractor a copy of the Contractor's payment bond and information regarding percentage of work completed and amounts applied for and paid to the Contractor by the District relative to portions of the work done by the subcontractor. Regardless of the rights expressed herein, the District shall not be obligated to pay any subcontractor except as otherwise required by applicable laws.

39. Provision of Materials and Equipment: The Contractor shall provide and pay for all materials, equipment, tools, construction equipment and machinery, water, heat, utilities, sanitation, transportation, waste disposal and other facilities, sales tax, shipping and handling, and any other goods or services necessary for proper execution and completion of the work, whether temporary or permanent, unless otherwise provided by the District and specifically stated in the Contract Documents.

40. Materials Conformance: By execution of the *Contract Agreement*, the Contractor warrants to the District that the materials and equipment to be incorporated into the work shall a) be of good quality, undamaged, and new (not used or remanufactured unless otherwise required or permitted by the Contract Documents); b) be free from defects (excluding latent defects); and c) conform to the Contract Documents. Materials and equipment not conforming to the Contract Documents, including substitutions not properly pre-approved and authorized by the District, shall be considered defective. Such non-conforming materials or equipment shall be replaced by the Contractor at no additional cost to the District and no extension of contract time. The Contractor warrants the Worksite Superintendent(s) shall inspect and perform random testing of all materials and equipment to ensure quality and conformance with the Contract Documents. The Contractor shall also not allow use of: a) asbestos containing products, temporary or permanent, even if they are non-friable, contain only minimal amounts of asbestos, and can be legally installed; and b) lead materials in paints or public water applications. "Lead-free" solder, flux, and pipe containing less than two-tenths of one percent (0.2%) lead and valves, pipes and appurtenances containing less than eight percent (8.0%) lead shall be used in all public drinking water applications as outlined in the 1986 amendments to the Safe Drinking Water Act.

41. Stored Materials: For purposes of this *Contract Agreement,* stored materials and equipment refers only to those purchased for incorporation into, and becoming an integral part of, the completed work. Such materials and equipment shall be suitably stored to ensure the preservation of their quality and fitness for the work. The Architect and the District shall have full access to all stored materials for verification of quality and quantity. The District reserves the right to designate "lay down" locations at the worksite where materials and equipment shall be stored, and such lay down areas shall be completely fenced and secured at all times. The Contractor shall not store materials in a concentrated area on the roof of any building. Tarps may be used to prevent damage by weather conditions; however, polyethylene shall not be used in lieu of tarps. Materials and equipment maintained off-site shall be suitably stored in a bonded, insured warehouse, at no additional cost to the District, and proof of warehouse bonding, insurance, quality, quantity and value shall be provided with any Payment Request for which the Contractor expects to be reimbursed for off-site materials and equipment. Bonding and insurance shall remain in force for the duration of time the materials, equipment or processes are stored off site.

42. Certification of Authorized Installer: All manufactured or fabricated materials and equipment shall be applied, installed, connected, erected, cleaned, conditioned and handled in strict accordance with the requirements of the manufacturer, fabricator or supplier so as not to nullify any warranties provided. Upon request of the District in the *Scope of Work (Exhibit A)* or otherwise, the Contractor shall supply a letter from the manufacturer, fabricator or supplier stating the Contractor or subcontractor is an approved and authorized installer of the materials or equipment.

43. Title to Materials, Equipment and Processes: Any property acquired or constructed under this *Contract Agreement* is considered public property and is, therefore, not subject to any mechanics liens or other such claims. The Contractor warrants, at the time each *Payment Request (Exhibit F)* is submitted for payment, title to materials and equipment suitably stored off site, on site, and incorporated into the work shall pass to the District. This provision shall not be construed as a waiver of the District's right to require the fulfillment of all terms of the contract or as relieving the Contractor of the sole responsibility for the a) care, protection and proper storage of the materials or equipment upon which payment has been requested or made; b) correction of any deficiencies; and c) restoration or replacement of any damaged or improperly installed materials or equipment.

44. Worksite Access: The Contractor shall confine operations at the worksite to areas permitted by applicable laws, consistent with the Contract Documents, or designated by the District, and shall not unreasonably encumber the worksite with materials or equipment which would hamper ingress to or egress from the worksite or its buildings and facilities. The Contractor shall limit access of the Contractor, subcontractors and suppliers to designated areas where the work is in progress. Access to other occupied areas of buildings and facilities shall only be for the purposes of spotting, clean-up, damage inspection, or

communication with the Principal in the event of an emergency. No other communication with any occupants of an existing building or facility shall occur. All site communications shall be made with the Architect or District project representatives only.

45. Worksite Clean-Up: The worksite premises shall be maintained in a neat and orderly condition and kept free of accumulations of refuse materials and debris during the entire performance of the work. The Worksite Superintendent shall ensure all refuse materials and debris are deposited in commercial refuse containers at the end of each working day and removed from the worksite at least weekly or at such intervals necessary to prevent overflow. It is the sole responsibility of the Contractor to arrange for legal removal and disposal of all refuse materials or debris at no additional cost to the District. At completion of the project, portable sanitary or other temporary facilities, construction refuse containers, debris, and all Contractor/subcontractor tools, equipment, machinery, surplus materials, or other such items shall be removed from the worksite. If the Contractor fails to clean up the worksite at least weekly or at such times as the District or Architect feels appropriate for safety or other reasons or at the completion of the work, the District may provide for cleanup and disposal, and deduct such costs from the Contractor's payment.

46. Contractor Supplied Equipment and Facilities: The Contractor shall provide and pay for, by way of illustration and not limitation:

A. A worksite office or construction trailer where the plans, specifications and other construction documents are located, where high-speed internet access and e-mail are available, where site meetings can occur, for temporary shelter from inclement weather, heated/cooled as appropriate for the nature and duration of the project.
B. All tools, scaffolding, fencing, signage, rented or owned construction equipment and machinery or other such equipment necessary for proper execution of the work.
C. Potable (drinking) water as well as temporary water for the project separate from any existing building's water source.
D. Temporary lighting and power including temporary power panels, wiring, lamps, outlets for power equipment, or other such needs for electrical power.
E. Telephones or other communication equipment; office equipment or other utilities and services appropriate to the nature and duration of the project.
F. Sanitation facilities and access to food and drink vending, as appropriate.
G. Transportation and delivery.
H. Any other materials, equipment, facilities and services necessary for the proper execution and completion of the work.

Approval of any use of District facilities shall be identified in the *Scope of Work (Exhibit A)*.

47. Existing Building Safeguards: When renovations or repairs are required to an existing building, the Contractor shall be solely responsible for protecting the existing building and its contents from inclement weather and damage resulting from the work being performed. The Worksite Superintendent shall inspect the existing premises daily to ensure there is no damage in progress. Immediate corrective action shall be taken upon observation of any damage in progress, and the Contractor shall notify the District project representative immediately when such damage is identified. The Contractor shall also be responsible for safeguarding any other out buildings, athletic or other facilities at the worksite from damage, either directly or indirectly, as a result of the work being performed, the delivery or storage of materials and equipment, the use of construction equipment, or other Contractor, subcontractor and supplier activities.

48. Damages Remedy: The Contractor shall remedy all damages to the exterior or interior of any buildings or facilities, including building contents, due to the failure of the Contractor, any subcontractor or supplier to take sufficient precautions, either directly or indirectly, to safeguard the buildings and facilities from inclement weather conditions, water infiltration, the work being performed, or other causes of damage. The Contractor shall be responsible for all costs associated with such remedy, including insurance deductibles, which are not recoverable from the Contractor's or subcontractors' insurance carrier or the District's insurance carrier, if applicable. Likewise any building, lawn, landscaping, parking lot, canopies, athletic facilities, fences, signs or other District property damaged by the Contractor, any subcontractor or supplier while in the performance of the work shall be restored to no less than the condition prior to damage and to the satisfaction of the District.

49. Responsibility for Work in Progress: The Contractor shall be solely responsible for coordinating all portions of the work and shall have control over construction means, methods, techniques, sequences and procedures implemented to accomplish the work unless the Contract Documents give specific instructions concerning these matters. The Contractor shall supervise and direct all aspects of the work to be performed using the Contractor's best skill and attention, whether the services are performed by the Contractor or any subcontractor. The Architect, the District or any regulatory authority shall, at any time, have the right to inspect the progress of the work for quality of workmanship and conformance to the Contract Documents and applicable laws.

50. Demolition and Salvage of Materials and Equipment: The Contractor shall notify DHEC of all demolition activities in conjunction with any renovations even if asbestos is not suspected. The District reserves the right, before demolition, to salvage useable materials, equipment and processes from any building, or portion thereof, when such salvaging does not interfere with demolition activities or the progress of the work. After salvage by the District, the Contractor shall have the right to remove or sell any remaining materials, equipment or processes provided it does not delay the demolition or the work. The Contractor shall be responsible for removal from the worksite and disposal of all demolition debris.

51. Underground Utilities and Shutdowns: The Contractor shall abide by the Underground Utilities Damage Prevention Act, South Carolina Statute 58-35-10, as may be amended, and shall include this same requirement in all subcontract agreements. For worksites with an occupied building, prior to any shutdown of any electrical, mechanical, security, fire or other such systems, the Contractor shall notify the District's project representative not less than five (5) days prior to the shutdown. No shutdown shall occur without notification to, coordination with, and approval by the District. Shutdown of fire alarm and security systems shall not intentionally occur while the building is occupied. The Contractor shall notify the District's project representative immediately of any accidental termination of electrical, mechanical, security or other such systems. The Contractor shall take immediate remedial action to bring such systems to full functionality. Fire alarm and security systems shall have priority.

52. Tests, Inspections and Approvals: Tests, inspections and approvals required by the Contract Documents or any applicable laws shall be made in a timely matter to avoid delay in the construction schedule or progress of the work. Unless otherwise provided in the Contract Documents, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory, the appropriate public authority, or the District's approved provider of IBS inspections. The Contractor shall give the District and Architect timely notice of when and where tests and inspections are to be made so they may observe such procedures. Any required certificate of testing, inspection or approval shall be provided promptly to the District. The Contractor shall also be responsible for tests and inspections of portions of the work already performed to determine such portions are in proper condition to receive subsequent work and conform to the Contract Documents. The Contractor shall not be relieved of the obligation to perform the work in accordance with the Contract Documents by activities or duties of the Architect or District or certifications required by any regulatory authority. The District shall have the right to require additional inspection or testing of the work, whether or not such work is fabricated, installed or completed, if the Architect or the District considers it necessary or advisable for implementation of the intent of the Contract Documents. The Contractor shall cooperate with any additional inspection or testing of the work without any change in contract price or contract time.

53. Costs of Tests, Inspections and Approvals: The Contractor shall bear all related costs for tests, inspections and approvals, except for IBS inspections or those tests, inspections or approvals required of others in the Contract Documents and for which the District is responsible for payment. If tests or inspections reveal failure of the portions of the work to comply with requirements, the Contractor shall bear all costs necessary for correction, including repeated testing and inspection as well as for the additional costs to the Architect, the District, and any regulatory authorities required as a result of the Contractor's failure. Should the Architect or District determine assistance to the Contractor is necessary to obtain timely tests, inspections or approvals to avoid delays in the work or due to Contractor failure in obtaining such tests, inspections or approvals in a timely manner, the Contractor shall reimburse the District one hundred and fifty dollars ($150) per hour per person for the Architect's assistance and seventy-five dollars ($75) per hour per person for District assistance including travel time.

54. Architect, District and Contractor Inspections: The Architect and the District shall have a) access to and the right to observe and inspect the worksite, progress of the work, the materials, equipment, and workmanship for quality and conformance with the Contract Documents; b) access to and the right to inspect off-site stored materials and equipment for quantity and quality; and d) access to the Contractor's records related to the work including, but not limited to, quality control reports, OSHA reports, payrolls, personnel records, SLED criminal background checks, materials and equipment invoices, receiving documents or other project relevant data, documents, or records. The Worksite Superintendent(s) shall perform random testing of work completed to ensure a) the quality and quantity of work completed; b) subcontractor requests for payment do not exceed the actual percentage of work completed; and, c) the appearance of work completed is a true representation of actual work completed. The District shall have authority to require additional inspection or testing of the work, whether or not such work is fabricated, installed or completed, if the Architect or the District considers it necessary or advisable for implementation of the intent of the Contract Documents. No amount of review or inspection by the District or the Architect shall relieve the Contractor of the responsibility for conformance to the Contract Documents or constitutes approval of any defective materials, equipment, process, or work.

55. Sub-Surface Conditions: If conditions are encountered at the worksite which are a) sub-surface or latent physical conditions differing materially from those indicated in the Contract Documents; or b) unknown physical conditions of an unusual nature or differing materially from those ordinarily encountered and generally recognized as inherent in the work to be performed, then the Contractor shall notify the Architect of such conditions before they are disturbed within twenty-four (24) hours of first observation. The Architect shall investigate and, if the condition requires a change in contract price or contract time, a *Change Order* will be processed.

56. Contractor Responsibility for Defective Work: Neither a) final payment, nor b) any decision, approval or acceptance by the Architect or the District, nor c) any other provision in the Contract Documents shall relieve the Contractor of responsibility for rectifying faulty materials, equipment, workmanship or omission of a portion of the work to be performed. The Contractor shall remedy any defects or supply any omissions and pay for any damage to other work resulting from such remedy. This responsibility shall survive completion or termination of the *Contract Agreement*.

57. Right of Rejection and to Stop Work: The District or the Architect shall have authority to reject work not conforming to the Contract Documents. Rejection of any non-conforming work by the District or Architect shall be corrected by the Contractor within ten (10) days at the expense of the Contractor or subcontractor, whichever is at fault, and without any contract time adjustment. The District shall have the right to stop the work at any time and for any reason. If the work performed by the Contractor or any subcontractor is considered by the District or the Architect not to conform to the Contract Documents or creates a condition that threatens the health, safety, or welfare of the Contractor, subcontractors, suppliers, the District or the Architect, the occupants of any District building or facility or members of the public, the District has the right to stop the work until the Contractor corrects the non-conforming work or condition creating the threat to safety. Any additional costs incurred as a result of the District's stoppage of work shall be the responsibility of the Contractor when the stoppage is precipitated by, but not limited to, action, non-action, omission, error, illegal conduct of the Contractor or any subcontractor or supplier or anyone enjoined to or under agreement to them, or any non-conforming work or unsafe condition. The making of any decision in good faith either to exercise or not to exercise such authority shall not give rise to a duty or responsibility of the District to exercise such authority on behalf of the Contractor, any subcontractor or supplier.

58. Uncovering Work: If a portion of the work is covered (not visible due to the application of additional work) contrary to the requirements or request of the Contract Documents, applicable laws, or the District or Architect to facilitate inspection, that portion of the work shall be uncovered for inspection and be replaced at the Contractor's own expense and time. If applicable laws, the District or the Architect, or the Contract Documents do not request or require observation prior to that portion of the work being covered or for which no testing or inspections are required, it shall be uncovered by the Contractor, and costs of uncovering and replacement shall be paid by the District unless omitted, defective or non-conforming work of the Contractor or any subcontractor is revealed.

59. Contractor Removal and Correction of Work: The Contractor shall, within ten (10) days, supply omitted work or remove from the site portions of work not in conformance with the Contract Documents and correct, remedy, replace or re-execute work rejected by the District or the Architect for failing to conform to the Contract Documents or to pass tests or inspections, whether or not fabricated, installed, completed or performed by the Contractor or any subcontractor. The Contractor shall bear all costs to correct, remedy, replace or re-execute the work, including the costs of rectifying damage to the work of separate contractors, costs of additional tests or inspections, and any additional costs of regulatory authorities, the District or the Architect made necessary as a result.

60. District-Supplied Correction of Omitted or Deficient Work: In the event the Contractor fails, after notice, to supply omitted work or remove and correct deficient work within ten (10) days, the District shall have the right to supply omitted work, remove defective work and store any salvageable materials or equipment at the Contractors expense, order the correction of the defective work by separate contract or with its own resources at the expense of the Contractor, and notify the Surety and any appropriate authorities. If the District supplies, corrects, remedies, replaces or re-executes the omitted or deficient work of the Contractor or any subcontractor, a *Change Order* shall be issued deducting the cost from the Contractor's contract price, including any compensation for the additional services of the District, the Architect or any regulatory authorities, and additional tests and inspections made necessary by such default or failure. If remaining contract funds do not cover the costs, the District shall sell the salvaged materials and equipment and account for the proceeds thereof, and deduct remaining costs and damages including compensation expenses made necessary thereby. Any costs still unpaid shall be the responsibility of the Contractor to reimburse the District and shall survive termination of the *Contract Agreement*.

61. Changes Required in the Work: All difficulties inherent in construction activities cannot be foreseen during design and solicitation of a project; therefore, the District reserves the right to make changes in the work without invalidating the *Contract Agreement*. These changes many include, by way of illustration and not limitation, a) changes in the original design or increasing/decreasing the scope of the project; b) adding an additional alternate originally excluded at the time of *Contract Agreement* execution or the deletion of an accepted alternate from the *Contract Agreement*; c) correction of errors in designs, plans, specifications or drawings not reasonably discernable at the time of bidding; d) implementation of new construction techniques, materials, equipment or processes; e) adapting unanticipated site conditions or other unforeseeable events; and/or f) other necessary changes in requirements. (Requirements for any *Change Order* or *CCD* are provided in Exhibit E.)

62. Excusable Delays: If the Contractor is delayed in the progress of the work by an excusable event such as, by way of illustration and not limitation: a) government acts in a sovereign or contractual capacity; b) fire; c) epidemics or quarantine restrictions; d) freight embargoes; e) acts of a public enemy; or f) other causes which the District determines, then the contract time may be extended by a *Change Order* or *CCD* for such reasonable time as the District may determine, but in no event shall the extension of time be more than one (1) full day for each full day of excusable delay and not to exceed five (5) full days per calendar week. An excusable delay does not automatically entitle the Contractor to an equivalent extension of time unless the District determines the delay directly impacted the worksite location such that no work could reasonably be in progress during the event and was a) unforeseeable, b) beyond the control of the Contractor, and c) not the fault of the Contractor or any subcontractor or supplier, whether directly or indirectly. To warrant an excusable delay, the Contractor shall support the time extension request by a) establishing causation, b) demonstrating the negative impact on the construction schedule, the work in progress, and the established completion date of the project, and c) making every effort to mitigate the potential effect of the delay.

63. Weather Delays: When adverse weather conditions are the basis for a request for additional time, such request shall be documented by data substantiating the weather conditions a) were abnormal for a period of time which could not have been reasonably anticipated; b) had an adverse effect on the work scheduled, and alternate work unaffected by the weather could not have been done; and c) had an adverse effect on the construction schedule such that the loss of work time will adversely impact the established completion date. The Contractor must make every effort to mitigate the potential effect of the weather on the construction schedule including, but not limited to, rescheduling of subcontractors, pumping water from work areas, rescheduling work hours to alternate work days within the work week, or other such actions. Such time extension request shall be in writing and submitted to the District for approval within ten (10) days from the end of the event causing the impact on the construction schedule. An extension of time not requested within the appropriate time period shall not be considered. The approved extension of time shall be incorporated in the next *Change Order*.

64. Anticipated Weather Delays: A total of five (5) days per calendar month (non-cumulative) shall be anticipated by the Contractor as "adverse weather," and such time shall not be considered justification for an extension of time. Such anticipated adverse weather days are established only for normally scheduled work days, excluding Saturdays, Sundays and major holidays, unless such adverse weather conditions on those days are severe enough to impact the scheduled work on the following work day. If adverse weather days beyond the five (5) days anticipated are substantiated and the Contractor could not mitigate the impact of the additional adverse weather days, an extension of time may be allowed only to the extent of the actual impact on the last approved construction schedule and only to the extent of one (1) full day of extended time for each full working day of adverse weather conditions which prevented a forty-hour work week within a seven (7) day calendar week. A request for adverse weather extension shall not be allowed after the date established for substantial completion.

65. Remedy for Delays: Claims for delays shall be remedied only by an extension of contract time, except for delays caused by fraud, misrepresentation or other bad faith on the part of the District or gross negligence by the District or the Architect. Claims for extended or indirect overhead or lost profits as a result of the delay shall not be allowed. No extension of time shall be considered when a delay is caused by a) conditions existing at the time bids were received and of which the Contractor might be reasonably expected to have full knowledge of at the time of bidding; b) failure on the part of the Contractor to anticipate properly the requirements of the work contracted for, as to materials, labor and equipment; c) failure on the part of the Contractor to properly schedule materials and subcontractors; or d) other such failures of the Contractor to properly administer the contract or mitigate conditions resulting in delays.

66. Liquidated Damages: The Contractor acknowledges and agrees the District is a public entity performing an essential public function and failure of the Contractor to comply with the *Contract Agreement* may cause general, special or consequential damages to the District, to those who shall occupy the completed work, and to the public at large. Failure of the Contractor such as, by way of illustration and not limitation, breach, default, delays, or repudiation of the *Contract Agreement* may cause the need to, by way of illustration and not limitation, a) crowd other premises, b) limit educational services and opportunities to students, c) extend occupancy or procure other premises or temporary facilities , d) rectify damages due to a third party, e) pay fines, penalties or other such sums to regulatory or judicial authorities for failure to meet requirements of applicable laws, codes or legal judgments, f) store, delay shipments of, or require suppliers to restock furniture, fixtures and equipment ordered, and/or g) acquire or require services or additional work of the Architect, consultants, other contractors and District staff to mitigate the failure of the Contractor. Should the Contractor fail to complete the project within the contract time, as may be extended by any *Change Order* or *CCD (Exhibit E)*, the District shall have the right to assess liquidated damages as a measure of damages reasonably expected by the District to be incurred and shall not be considered a penalty or retainage. The District shall not be responsible for any additional costs incurred by the Contractor to bring the progress of the work in conformance with the last approved construction schedule such as, by way of illustration and not limitation, a) additional employees or subcontractors, b) overtime payment to employees, c) expediting material or equipment deliveries, d) expediting subcontractor work scheduling, e) substitution of subcontractors or suppliers as addressed elsewhere, or f) other such courses of action. Liquidated damages shall be assessed at the rate specified in the *Scope of Work (Exhibit A)* or actual costs attributable to such failure or

delay, whichever is greater. The parties to this *Contract Agreement* hereby acknowledge the difficulty of ascertaining the actual damages to be suffered by District upon Contractor's default. The parties further agree that any measure of liquidated damages provided for herein is not intended as a penalty but constitutes a good faith estimate of the potential damages arising from Contractor's default. Unless the District specifically elects the remedy of liquidated damages in regard to a default hereunder, it shall not be barred from pursuing any other remedy to which it may be entitled herein.

67. Schedule of Values: The Contractor shall submit to the District a detailed *Schedule of Values* in accordance with Exhibit C within ten (10) days from the date of the *Notice of Intent to Award* allocating the entire contract sum to various portions of the work and subcontracts as well as material costs allocated to either.

68. Payment Requests: The Contractor shall forward two (2) original copies of the *Payment Request (Exhibit F)*, including supporting documentation, to the District for approval and processing no later than the 25th day of the month of the dated *Payment Request*. The itemized *Payment Request (Exhibit F)* submitted shall contain: a) Contractor's original signature with appropriate notarization; b) the updated/highlighted schedule of values; c) the last approved construction schedule with any requested changes highlighted; d) any invoices for which payment is being requested under an allowance, e) proof of insurance and bonding for any off-site warehouse containing stored materials for which payment is being requested, f) each subcontractor's invoice to substantiate the payment requested by the Contractor for those portions of work; and g) any other supporting documentation required by the *Contract Agreement* or the District to substantiate the request, which may include, but is not limited to, invoices or delivery tickets from suppliers, proof of payment to subcontractors and suppliers to date, receipts for rental equipment, labor sheets to support additional labor or additional hours of work, or other documentation.

69. Payment Certification: The presentation of a *Payment Request* constitutes a representation by the Contractor that the Contractor a) is entitled to payment in the amount requested and substantiated, b) is requesting payment for subcontractor work that is not in dispute and funds received will be used to pay subcontractors entitled to payment in accordance with applicable laws, c) is not requesting payment for work that does not conform to the requirements of the Contract Documents, d) is requesting payment for materials, equipment and processes in conformance to the Contract Documents, received and suitably stored, and funds received will be used to pay suppliers, and e) has not included work anticipated to be completed but not completed at the time the *Payment Request (Exhibit F)* is submitted. The approval of a payment shall not, however, represent the District or Architect has a) made exhaustive or continuous on-site inspections to check the quality or quantity of the work, b) reviewed construction means, methods, techniques, sequences or procedures, c) made examinations to ascertain how or for what purpose the Contractor has used the monies previously paid; or d) approved defective or non-conforming work.

70. Approval of Payment: If, upon review of the *Payment Request (Exhibit F)* and based upon the best determination of the District, the Payment Requested does not accurately represent the progress of the completed work and stored materials, the District shall have the right to adjust the payment to more accurately reflect the percentage of completed work. The District shall approve and authorize payment to the Contractor no more often than once monthly. Payment by the District shall be made by the 15th of the following month of the dated *Payment Request* or within thirty (30) days from the date the District receives the *Payment Request (Exhibit F)* except as may be provided for elsewhere in the *Contract Agreement*.

71. Retainage: The District requires a retainage of three and one-half percent (3.5%) of the total contract price, as may be amended by any approved *Change Order (Exhibit E),* to be withheld from the Contractor's payments throughout the term of the *Contract Agreement* and payable at the time of final payment after a) full completion of all work to be performed and all requirements established in the *Contract Agreement* and acceptance by the District, b) submittal of all closeout documents, and c) submittal of an affidavit of payment of debts/claims, if requested by the District, for every subcontractor who performed work on the project evidencing they have received final payment of undisputed work and retainage withheld. As a condition of the contract, no more than three and one-half percent (3.5%) shall be retained from the progress payments of any subcontractor by the Contractor until final completion of that portion of the work. Prompt payment of retainage to all subcontractors at final completion of their acceptable work regardless of timing during the contract is mandatory. The Contractor shall, at final completion, ensure no amount of the Contractor's retained funds is allocable to the completed and accepted work of any subcontractor nor to materials or equipment purchased from any supplier unless such amounts are in dispute and the Contractor has not requested payment for such disputed amounts to date. Such amounts in dispute shall be identified on the Contractor's affidavit of payment of debts/claims submitted with final documents.

72. Substantial Completion: A request, shall be submitted to the District for substantial completion ten (10) days prior to the requested inspection to allow the Architect and District to schedule and conduct a review to ensure the project has reached substantial completion and verify all work is complete or make appropriate revisions. Should the Architect or the District determine that all requirements for substantial completion have not been met to allow for regulatory authority inspection or the potential punch list represents more work than can be accomplished within the final completion period and, therefore, does not accurately represent substantial completion, the District shall have the right to a) notify the Contractor's Surety; b) assess liquidated damages, c) withholding payment, and d) any other remedies available to the District.

73. Substantial Completion Inspection: Once the actual substantial completion date has been established, the Architect shall coordinate with representatives of the District and regulatory authorities a mutually acceptable date for project inspection. The Contractor shall not notify the Architect and District the project is ready for inspection until, at a minimum, all the following life safety requirements have been completed properly, if included in the work to be performed, and are fully operational according to applicable laws:

A. Fire alarm system with required strobe lights is operational and connected to a supervised monitoring station and any sprinkler system.
B. All fire doors and related hardware, smoke detectors and "hold open" devices are installed and operational.
C. All exit lights, emergency lights and emergency power systems with strobe lights are installed and operational.
D. Fire suppression systems are installed and operational in kitchen hood systems, classrooms and any other facilities with special requirements.
E. Fire extinguishers are installed throughout all buildings, including portable classrooms.
F. All rated walls are properly constructed and identified (stenciled) at proper intervals and sealed to the structure above and it can be demonstrated effectively that proper sealant materials were used.
G. All doors in rated walls are installed with the correct hardware, glazing and labels and are operational.
H. All rated ceilings and floor/ceiling assemblies are properly installed.
I. All penetrations such as, by way of illustration and not limitation, pipes, conduit, and ducts in rated walls and floor/ceiling assemblies are properly installed using appropriate methods and materials.
J. Fire protection of columns, beams, ceilings, roof and floor decking in Type II and Type IV one-hour construction is of adequate depth and properly installed.
K. All required seismic bracing of walls, equipment, hoods, pipes, ducts and ceiling grids is present and properly installed.
L. Smoke testing of all plumbing has been completed in addition to any other testing, and approval to put water and sanitation systems into service has been obtained.
M. Kitchen facilities have been approved for use by DHEC.
N. ADA handicapped accessibility requirements have been met.

74. Additional Substantial Completion Requirements: In addition, the Contractor shall have all mechanical, electrical and plumping installed and operational and all finishes complete, if included in the work to be performed. By way of clarification and not limitation, the following items must be completed before notifying anyone the work is ready for inspection:

A. Installation of all roofing, flashing, drains and downspouts, masonry, sealants.
B. Installation and testing of all windows, doors and hardware and the required sets of tagged keys produced.
C. Installation and testing of boilers, HVAC equipment, ductwork and controls.
D. Completion of all carpentry, including finish work, and painting.
E. Installation and testing of all electrical work, lighting, surge protection, converged network systems and low-voltage wiring.
F. Installation and testing of security system.
G. Installation of all hall lockers, video and audio equipment, stage curtains, auditorium seating, TV brackets, white boards and other wall fixtures.
H. Installation and testing of all gym equipment, lockers and bleachers.
I. Installation and finishing of all flooring, carpeting, and rubber wall base.
J. Completion of retention pond, and installation of landscaping, fencing, covered walkways, and storm water drainage.
K. Installation of all athletic facilities, scoreboards, goal posts, bleachers, concession and storage, baseball backdrops and other such athletic facilities.
L. Completion of all sidewalks, paving and striping.

75. Punch List Completion: At the time of substantial completion inspection by the Architect and District, the punch list shall be reviewed and revised, as appropriate. Punch list items are expected to be relatively inconsequential items that can be completed easily and quickly prior to the final completion date established. Failure of the Architect or District to include an item on the punch list does not alter the responsibility of the Contractor to complete all work in accordance with the *Contract Agreement*. The Contractor shall proceed promptly to complete and correct items on the final punch list within the time frame provided for final completion.

76. Occupancy and Keys: The District may occupy or use any completed or partially completed portion of the work or occupy the worksite location during any substantially completed stage of the work provided the Contractor is aware of such occupancy and any appropriate regulatory authorities have approved such occupancy and use. Partial or full occupancy or use of the work shall not constitute acceptance of any work not complying with the requirements of the Contract Documents. The District may receive deliveries of furniture, equipment and supplies and store them in a designated portion of the worksite prior to the final completion date. Once District staff or a third party has secured the deliveries, the Contractor shall be responsible for maintaining the security of such items and may be held responsible for any theft or misappropriation of such items. The Contractor

shall provide to the District at substantial completion, three (3) complete sets of door keys with tags indicating the number or description of the door or room each key is intended to fit. The Contractor shall also provide to the District with the key sets an itemized key schedule listing door/room number, serial number of the key and number of keys delivered for that door/room.

77. Final Completion: The Contractor has a defined timeframe as indicated in the *Project Schedule (Exhibit D)* from the date of substantial completion to complete all final project requirements shall be the number of days stated in the *Project Schedule (Exhibit D)*. When the Contractor considers all work is completed, including all punch list items, the Contractor shall submit a final *Payment Request (Exhibit F)*, with all final documents to the District for approval. The Contractor shall cooperate fully with the Architect to facilitate closeout of the project as required. The Contractor is cautioned that occupancy of the premises and delay in completion may cause the distinction between punch list items, normal maintenance of the premises, and any warranty issues to become indecipherable and thus incur possible additional unnecessary costs to the Contractor. The District shall not be responsible for costs incurred by the Contractor related to the Contractor's failure to facilitate completion in the time specified and in the manner required in the Contract Documents. Should the Contractor fail inspection requiring re-inspection or fail to achieve final completion within the time period established in the *Project Schedule (Exhibit D)*, the final payment of retainage shall be reduced for additional services required of the Architect at the rate of one hundred and fifty dollars ($150) per person per hour and the District at the rate of seventy-five dollars ($75.00) per person per hour including travel time. When the final *Payment Request* (Exhibit F) is received from the Contractor, a final inspection of the work shall be completed by the Architect and District to ensure the project is complete. Certification of the final payment by the District shall indicate that a) final inspection is satisfactory; b) all documents have been adequately prepared and submitted; c) the Contractor is entitled to final payment of all retainage and other funds withheld by the District excluding any amounts remaining in dispute or owed to the District or Architect. The final *Payment Request* shall not be processed for payment until all final documents/items are received, complete and accepted by the District. Neither completion of the final inspection nor certification of the final payment shall constitute acceptance of any work not complying with the requirements of the Contract Documents.

78. Final Payment and Release of Claims: Upon receipt and acceptance of all final documents by the District, the final payment shall be authorized less a) any amounts owed to the District including, but not limited to, liquidated damages; b) amounts owed to the District by the Contractor's or any subcontractor's failure to meet the conditions of the *Contract Agreement;* c) additional expenses incurred by the District and/or the Architect from failure of the Contractor to meet required inspections or the need for subsequent inspections; and/or d) amounts owed to third parties reasonably expected to be paid as a result of the Contractor's or any subcontractors' failure to meet the requirements of the *Contract Agreement*. Final payment shall not constitute a waiver of any claim by the District for faulty workmanship identified after the final payment, a release of any obligations of the Contractor, any subcontractor, or any supplier under any warranty agreements, or a waiver of any other requirements of the *Contract Agreement* including those obligations of the Contractor's Surety in the *Contract Agreement*, which may survive termination or completion of the project. Acceptance of the final payment by the Contractor shall be a release to the District of all claims and liability of the Contractor for all materials, equipment and work performed and every act, omission and neglect of the District, the Architect, and others related to or arising out of the work except as may be provided for elsewhere in the *Contract Agreement* or granted by applicable laws.

79. Contractor Warranty: The Contractor shall warrant to the District that any and all work performed, whether by the Contractor or any subcontractor, conforms to the requirements of the Contract Documents or any amendment thereto, and such obligation shall survive termination or completion of the work and acceptance and final payment by the District. If any of the work is found not to be in accordance with any of the Contract Documents or defective during the warranty period, the Contractor shall correct such work within ten (10) days from receipt of written notice from the District unless the District has previously given the Contractor a specific written acceptance of such non-conforming work. If the Contractor fails to correct such non-conforming work within ten (10) days from receipt of the District's written notification or fails during that ten (10) days to propose, in writing, to the District the process by which the work shall commence and be in total compliance with all Contract Documents within thirty (30) days from receipt of written notice of non-conforming or defective work from the District, the District shall have the right to seek other means to correct such non-conforming work at the expense of the Contractor. Any costs to the District shall be reimbursed by the Contractor immediately, or the District has the right to deduct such amount from any other current contract between the District and the Contractor or to find the Contractor non-responsible in any bid submitted until such time as the Contractor has paid in full.

80. Contractor Warranty Terms: The Contractor shall warranty the entire project beginning the day after the date of substantial completion as evidenced by a document prepared by the Contractor and approved by the District, for the period of time stated in the *Scope of Work (Exhibit A)*. In the event of phased work required by the District for early occupancy, the Contractor's warranty shall begin upon substantial completion of each phase of construction. The beginning date of any required phased warranty period shall be documented in a *Change Order* for that phase of work. The warranty shall permit direct enforcement by the District against any subcontractor, or supplier whose guaranty or warranty is called for and the Contractor shall a) be severally liable with such subcontractors or suppliers for purposes of performance under the *Contract Agreement*; b) be furnished by the District with a written notice of any breach of warranty, which shall be sufficient to invoke the terms of the warranty; and c) so bind any subcontractor or supplier to the terms of said warranty. The remedies under warranty are in addition to the remedies otherwise available to the District. The *Contractor's Warranty* shall exclude remedy for damage or defect caused by a) abuse or vandalism; b) modifications to materials, equipment or systems after acceptance of the work by the District; c) proof of improper or insufficient maintenance; d) proof of improper operation of equipment or systems; or e) normal wear and tear under normal usage.

81. Safety Programs and Protection: The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs including all OSHA construction safety standards and requirements. Up to three (3) years of current OSHA (Form 300) reporting logs of accidents shall be provided to the District within forty-eight (48) hours, upon request. The Contractor shall take reasonable precautions for safety of and shall provide reasonable protection to prevent damage, injury or loss to, by way of illustration and not limitation:

A. The Contractor and Contractor's property at the worksite.
B. The District, the Architect, or their property while at the worksite.
C. Other contractors, subcontractors, students, parents, visitors, and other third parties or their property while at the worksite.
D. The work, materials, and equipment under the care, custody, or control of the Contractor or anyone enjoined by or under agreement to the Contractor while located at the worksite either stored or incorporated into the work to be performed.
E. Any other District or neighboring property located at the worksite or adjacent thereto to include, by way of illustration and not limitation, trees, shrubs, lawns, walks, pavements, roadways, parking lots, portable classrooms, sheds, canopies, walkway coverings, structures, utilities or other such items not designated for demolition, removal, relocation or replacement in the course of the work being performed.

82. Safety Precautions: The Contractor shall furnish, install, erect and maintain, as required by existing conditions and performance of the *Contract Agreement*, reasonable safeguards meeting all applicable laws, including by way of illustration and not limitation:

A. Posting directional signs necessary for ingress and egress roads, danger signs and other warnings against hazards, and erecting barricades, fencing, scaffolding, steps, ramps, bridges, platforms, as necessary. Directional and warning signs and protective barricades shall be provided around cranes, hoists, or other such mechanical equipment.
B. Erecting entrance/exit or other overhead protection in accordance with applicable laws to prevent debris or materials falling on employees, students or others. This protection shall be completely removed from the site upon completion of construction, and all holes and damage made as a result of such devices shall be refilled and repaired to the same condition as prior to commencement of the work.
C. Avoiding loading materials on any roof endangering the occupants of any building or facility. Any placement of heavy equipment or materials on the roof of any existing building shall be accomplished prior to or after building occupancy or the Contractor shall make arrangements with the District to vacate classrooms directly affected by such activity.
D. Promulgating safety regulations.
E. Notifying the District and any users of adjacent facilities of safety hazards.

If, at any time during the contract term, the work performed by the Contractor or any subcontractor is considered by the District to create a condition which threatens the health, safety, or welfare of any persons or property, the Contractor shall immediately, correct such condition.

83. Mandatory Safety and Conduct Requirements: The safety and security of District staff, students and the general public are of utmost priority to the District. To that end, the Contractor shall be responsible for ensuring the Contractor, any subcontractor or any supplier comply with the following:

A. No drugs, alcohol, knives, firearms or other weapons on the worksite, whether or not there is an existing occupied building.
B. No fraternizing with, threats to, or use of abusive or profane language in the presence of students, parents, visitors, Architect or District representatives, agents, or employees at the worksite location.
C. No improper attire or actions while on any District premises.
D. No tobacco products or alternative nicotine products on District premises.
E. No direct communication with building occupants at the worksite, including the Principal, unless an emergency occurs. All communication shall be made directly to and through the Architect or the District's representatives assigned to the project.
F. Take all necessary precautions to separate worksite activities from the occupied portion of any building and secure all work areas and equipment with safety fencing and appropriate signage.
G. Take all necessary precautions to ensure minimal loss of utilities and facilities required by the occupants of an existing building and minimal disruption of the educational process as required by the District.

H. Secure SLED (State Law Enforcement Division) criminal background checks on all Contractor and subcontractor employees, agents, and representatives performing work at the worksite. The Contractor shall ensure no person having committed violent crimes, crimes against children, or crimes of moral turpitude are allowed access to the worksite. Such SLED criminal background checks shall be made available to appropriate District personnel or the District's legal counsel immediately upon request.
I. Take all necessary precautions to protect students, parents, visitors, Architect and District representatives, agents, or employees as well as the property belonging to those individuals at the worksite location during the contract term.
J. Ensure the Contractor's and subcontractor's employees located at the worksite, whether full-time, part-time, or occasionally employed, wear identification tags specifically identifying them as part of the Contractor's or subcontractor's workforce.

Failure to meet the requirements of conduct stated in this paragraph may result in arrest and/or removal of the offending individual(s) from the worksite, stoppage of the work until corrective action is taken, or any other action deemed expedient by the District with no increase in contract price or change in contract time.

84. Traffic Control On-Site and Off-Site: The Contractor shall conduct its operations in a manner to not interrupt pedestrian or vehicle traffic except as approved by the District and the South Carolina Department of Transportation. The worksite shall be confined to the smallest area possible allowing maximum use of streets, sidewalks, parking areas or other pedestrian areas and reduce to a minimum any hazard to traffic or pedestrians. The Contractor shall use worker and traffic control signs and devices necessary to comply with Section VI of U.S. Department of Labor, Federal Highway Administration, Manual on Uniform Traffic Control Devices for Streets and Highways (Washington, DC: GPO) as may be amended, to facilitate traffic control on public roads, streets, or highways when work performed obstructs public traffic. When such traffic areas are obstructed to any extent by work in progress, workers equipped with flags shall direct vehicle and pedestrian traffic. The workers so designated shall not be assigned any other duties while engaged in directing traffic.

85. Safety Designee: The Contractor shall designate a competent individual at the worksite whose duty shall be the prevention of accidents and the implementation and monitoring of all OSHA construction safety standards and requirements. The competent individual shall serve as spotter where there is exposure of pedestrians, students, parents, or visitors to falling debris and, in addition, shall ensure on a daily basis that all fencing or other safety barriers are in an upright position to prevent ingress and egress to "lay down" areas or work areas by unauthorized individuals.

86. Fire Protection: Special precautions shall be taken regarding fire protection and use of open flames from welders or other such equipment. Appropriate fire extinguishers shall be provided around open flames at all times. A fireguard shall be stationed at and beneath the points where open flames are being used. The fireguard shall be equipped with a water hose no smaller than one-half inch (1/2") in diameter with constant availability of water. The fireguard shall continue the fire watch for a minimum of one (1) hour after use of open flames, welders or other such equipment has ceased and shall remove cleaning agents, gasoline, or other such flammable liquids from the work at the end of each working day and store such items in a safe, secure area inaccessible to unauthorized personnel.

87. Hazardous Materials: When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the work, the Contractor shall exercise utmost care and such activities shall be under the supervision of properly qualified personnel. If reasonable precautions are inadequate to prevent foreseeable bodily injury or death to individuals resulting from a material or substance encountered on the worksite, the Contractor shall, upon recognizing the condition, immediately stop work in the affected area and report the condition to the District for resolution. The District is responsible for obtaining the services of a licensed laboratory to verify the presence or absence of the material or substance (including asbestos or polychlorinated biphenyl products) and to verify that it has been rendered harmless or the District shall furnish a qualified entity to perform the task of removal or safe containment of such material or substance, if necessary. The District shall have the right to stop work, evaluate the premises, conduct abatement activities, and take other measures to render the worksite harmless so work can continue, and shall adjust the construction schedule and established completion date through an approved *Change Order (Exhibit E)* for the delay.

88. SDS Sheets: The Contractor shall maintain on the worksite all SDS sheets for any materials with a chemical compound base used during execution of the work required. Safety precautions used in conjunction with any such materials or safety procedures used in the event of an accident shall be in accordance with SDS instructions and OSHA requirements.

89. Emergencies: The Contractor shall provide the Architect and the District with telephone numbers or other direct means of communication with the Contractor and the Worksite Superintendent in the event of an emergency. The Architect or the District shall have the determination as to what constitutes an emergency that must be responded to by the Contractor or the Worksite Superintendent or others. In an emergency affecting the safety of individuals or property, the Contractor shall take immediate action to prevent and mitigate damage, injury or loss. Notice of any emergency shall be given to the District's Project Manager as soon as practicable but in no event more than eight (8) hours after the Contractor is first aware of such emergency conditions.

90. Hold Harmless Agreement: The Contractor shall indemnify and hold harmless the District and the Architect from and against all claims, damages, losses and expenses, including attorney fees, arising out of or resulting from the performance of the work, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease, or death, or the injury to or destruction of tangible property, including the loss of use resulting there from, and is caused in whole or in part by any negligent, omission, or act of the Contractor, any subcontractor or supplier. The obligation of the Contractor shall not extend to the liability of the District or the Architect arising out of the preparation of maps, opinions, reports, surveys, project changes, designs, or specifications except as may be stated elsewhere in the *Contract Agreement*. The Contractor shall indemnify and hold harmless the District and the Architect from and against all claims arising out of lawful demands of subcontractors, laborers, workmen, mechanics, material men, suppliers, fabricators, and furnishers of machinery and laborers, equipment, tools and supplies, incurred in the furtherance of the performance of the work. If the Contractor fails to do so, the District may, after having notified the Contractor, withhold from the Contractor's unpaid contract price a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payment to the Contractor shall be resumed, but in no event shall the provisions of this paragraph be construed to impose any obligations upon the District to either the Contractor, the Contractor's Surety, subcontractors, suppliers, or any third party.

91. Remedy of Damages: The Contractor shall promptly remedy damage and loss to property caused in whole or in part, directly or indirectly, by the Contractor or by anyone for whose acts the Contractor may be liable except damage or loss attributable to acts or omissions of the District or the Architect and not attributable to the fault or negligence of the Contractor.

92. Insurances: Adequate insurance coverage is deemed critical to the award of a *Contract Agreement*. The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in South Carolina such insurance to protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the *Contract Agreement* and for which the Contractor may be legally liable:

A. Claims under worker's compensation, disability benefit and other similar employee benefit acts resulting from the work being performed.
B. Claims for damages, bodily injury, sickness, disease, or death of the Contractor's employees or other individuals.
C. Claims for damages insured by usual personal injury liability coverage which are sustained by a) an individual as a result of an offense directly or indirectly related to employment of such individual by the Contractor, or b) another individual.
D. Claims for damages injury to or destruction of tangible property (other than to the work being performed), including loss of use resulting there from.
E. Claims for bodily injury, death or damages to property arising out of ownership, maintenance or use of a motor vehicle including loading and unloading of vehicles.
F. Claims for damages, injury or death applicable to the Contractor's liability for products and completed operations.
G. Claims involving contractual liability insurance applicable to the Contractor's obligations under the hold harmless agreement stated in the *Contract Agreement*.

If a Contractor cannot obtain adequate insurance coverage as required herein, a contract shall not be awarded. Maintenance of insurance coverage, without lapse, is required throughout the term of the *Contract Agreement* and as may be required after the completion of the work and final payment. Should the Contractor or any subcontractor be found by the District to be in non-conformance with the insurance requirements, the District shall have all rights of redress available under the *Contract Agreement* and the laws of the State of South Carolina up to and including cancellation of the contract for default.

93. Minimum Insurance Requirements: The insurance requirements stated herein are minimum requirements and the Contractor's coverage shall be written for not less than the limits stated herein:

A. Commercial General Liability:
   1) $1,000,000 limit for bodily injury and property damage (each occurrence)
   2) Premises Operation and Independent Contractor's Protection of $1,000,000
   3) Products and Completed Operations of $1,000,000 to be maintained for one (1) year following established completion of the project.
   4) Commercial Broad Form Property Damage of $1,000,000 including Owned/Non-owned and Hired Motor Vehicles with combined minimum single limit of $600,000
   5) Personal and Advertising Injury of $1,000,000
   6) Contractual each occurrence of $1,000,000
   7) Fire Damage (any single fire) of $100,000
   8) Medical Expense (any single individual) of $5,000
B. Commercial Umbrella Liability in excess of other coverage with minimum limits of:
   1) $5,000,000 (per occurrence)
C. Automobile Liability with $1,000,000 for bodily injury and property damage (per occurrence) including all owned, hired, and non-owned vehicles
D. Worker's Compensation as required by the State of South Carolina to include:
   1) Employer's Liability (per single accident) of $500,000

2) Disease (per single individual) of $100,000
3) Disease (policy limit) of $500,000

Any out-of-state Contractor shall ensure coverage is provided for those employees in South Carolina working on this project, whether residents of South Carolina or of another state, which conforms to the requirements in this *Contract Agreement*.

94. Builder's Risk Insurance: Where necessary, the District shall provide builder's risk coverage on the work in progress and materials and equipment to be incorporated into the work and located at the worksite as well as any other appropriate insurance coverage for the existing facilities at the worksite. The Contractor shall comply with the following regarding District provided insurance coverage:

A. Provide and maintain any additional insurance coverage the Contractor deems necessary to safeguard the work in progress or the Contractor's liability in relation to the work in progress which may be excluded from coverage under the builder's risk or building coverage provided by the District.
B. Provide and maintain insurance coverage against loss, damage or theft of tools, materials, trailers, scaffolding or other equipment owned by the Contractor, which is not intended to be incorporated into the work but located at the worksite.
C. Store any off-site materials or equipment to be incorporated into the work in a bonded, insured warehouse and provide proof of same to the District when requesting payment for such stored materials and equipment.

Provision by the District of builder's risk or other insurance coverage to protect the work in progress or existing facilities at the worksite does not prejudice any rights of the District to remedies by the Contractor for losses or damages incurred due to criminal intent, negligence, action or failure to act of the Contractor, any subcontractor or any supplier.

95. Insurance Carrier Requirements: Each of the insurances required shall be issued by a company licensed in the State of South Carolina for the applicable line of insurance and shall be an insurer with a "Best Policyholder's Rating" of "A-" or better and with a financial size rating of Class V or greater. Any aggregate limits of insurance shall apply, in total, to this *Contract Agreement* only and shall be so indicated on the *Certificate of Insurance*. The District and the Architect shall be named as an additional insured with a cross liability clause on the Comprehensive General Liability and the Automobile Liability policies. An original *Certificate of Insurance (Exhibit G)* shall be provided to the District by the insurance carrier(s) prior to commencement of the work with the provisions stated on the form.

96. Failure to Provide Certificate of Insurance: The Contractor is responsible for any delay resulting from the failure of the insurance carrier to furnish a valid, original *Certificate of Insurance (Exhibit G)* as proof of existing coverage in the prescribed form or for any lapse or cancellation of coverage which results in stoppage of the work by the District until such insurance coverage has been replaced or reinstated. Any delay in the work resulting from the failure of the Contractor to maintain the required insurance coverage or the insurance company's failure to provide a valid, original *Certificate of Insurance (Exhibit G)* shall not result in an increase in contract price or time.

97. Losses: The Contractor shall report all losses related to Contractor-provided insurances within twenty-four (24) hours to the Contractor's insurance agent or carrier as may be appropriate to facilitate adjustment of the claim. The Contractor shall also notify the District's Project Manager within the same period of time the nature and estimated value of the loss or liability exposure incurred. The Contractor shall comply with the following regarding any loss or damage to the work in progress or to the District's buildings or other facilities:

A Report losses promptly to the appropriate authorities (police department, fire department, etc.) and secure a police report.
B Prepare or assist in preparation of any claim forms, affidavits, statements of loss, or other documents required by the District's or the Contractor's adjuster to facilitate claim processing as well as present immediately any estimates, invoices, payrolls or other proofs of loss or damage incurred to facilitate prompt settlement of the claim.
C Immediately, upon knowledge of the loss or damage incurred to the work in progress or the District's existing facilities, safeguard or temporarily repair the work, facilities and premises from further loss or damage until the insurance adjuster has made necessary observations of the damage. The Contractor shall notify the District of action taken to safeguard the work, facilities, and premises or temporary repairs performed until such time as clean-up, permanent repair, replacement or other such activities are authorized. In the event safeguarding the work in progress or temporary repairs would negate or cover up the damage from observance by the insurance adjuster(s), the Contractor shall take photographs of the damage prior to performing temporary repairs and provide them to the District and the adjuster(s).
D Prepare for approval by the District, any necessary *Change Order (Exhibit E)* detailing such costs required to facilitate clean-up, repair, replacement of all damaged or destroyed materials, equipment or processes when the loss is the responsibility of the District's insurer and, upon approval of the *Change Order (Exhibit E)* take immediate action to perform such activities related to correction of the loss.
E Accept any insurance proceeds as full restitution for all work of the Contractor and all subcontractors, and repair or replacement of all materials, equipment and processes damaged or destroyed by the loss to be re-incorporated into the work in progress or to correct damage or loss to the existing facilities.
F Perform any additional work or changes to the work deemed by the District to be appropriate as a direct or in-direct result of the damage or loss incurred. Such changes or additions to the work along with any approved change in contract price or contract time shall be incorporated into a *Change Order (Exhibit E)*.
G Pay all deductibles required by the Contractor's insurance or the District's builder's risk insurance and provide promptly to any subcontractors or suppliers their just shares of any insurance proceeds received by the Contractor upon performance of the work resulting from the loss.

98. Performance and Payment Bonds: The Contractor shall furnish bonds covering faithful performance of the *Contract Agreement* and payment of obligations arising there under. Nothing in the *Contract Agreement* shall preclude the District from requiring any other bonds in conjunction with the work to be performed or any claim or other activity connected thereto. The Contractor shall provide and pay the cost of performance and payment bonds. Each shall be in the full amount of the contract price including any accepted alternates, issued by a Surety 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" and 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. Upon request, the Contractor or the District shall promptly furnish a copy of the payment bond to any individual or entity appearing to be a potential beneficiary of the bond without any requirement to establish the legitimacy of such claim.

99. Complaints / Claims Process: Any formal complaint or contract controversy arising out of the interpretation of the *Contract Agreement* between the Contractor and the District shall not be subject to arbitration or mediation but shall be subject to the District's Procurement Code and subsequently, after exhausting the processes therein, the judgments of the Court of Common Pleas of Horry County, South Carolina. The Contractor shall have the right to make an informal request for redress by the District's Project Manager, in writing, regarding interpretation of any condition of the Contract Documents or a decision regarding other condition(s) existing which may impede progress of the work. Such requests shall be made within ten (10) days of the occurrence, the Contractor's first knowledge of the need for an interpretation or decision, or the event precipitating the need for redress. The Project Manager shall, within ten (10) days, provide a written interpretation or decision to the Contractor. The Project Manager's decisions on matters relating to aesthetic effect shall be final if consistent with the intent of the *Contract Agreement*. For all other decisions not resolved by the District's Project Manager, the Contractor shall have the right to submit a formal claim in accordance with the requirements of the District's Procurement Code. The Contractor irrevocably waives any and all rights the Contractor may have to a trial by jury in any action, proceeding or claim of any nature relating to this *Contract Agreement* or any other Contract Document. The Contractor acknowledges that the foregoing waiver is knowing and voluntary. In addition, any costs to the District for litigation in the Court of Common Pleas of Horry County, South Carolina shall be borne by the claimant including all attorney fees, courts costs or other such costs related to the litigation if the judgment of the court is made in favor of the District.

100. Recovery of Sums Owed: Whenever any sum of money shall be recoverable from or payable by the Contractor to the District (whether for the benefit of the District, the Architect, any regulatory authority or another contractor), the same amount may be deducted from any payment due to the Contractor under the *Contract Agreement* or under any other *Contract Agreement* between the Contractor and the District at that time. Should the amount owed by the Contractor be greater than the amounts yet payable to the Contractor under any *Contract Agreement*, the Contractor shall reimburse the District for all remaining amounts. The District shall have the right to declare any business entity operated by the Contractor as non-responsible from receiving another bid award until all amounts due to the District are paid in full. These rights of the District are in addition and without prejudice to any other rights the District may have to claim the amount of any loss or damage suffered by the District as a result of acts or omissions of the Contractor from the Contractor's Surety.

101. Contract Governance: This contract shall be governed by the District's Procurement Code and any applicable laws of the State of South Carolina. Duties and obligations imposed by the *Contract Agreement* and rights and remedies available there under shall be in addition to, and not a limitation of, duties, obligations, rights and remedies otherwise imposed or available under the District's Procurement Code or by law. The Office of School Facilities (OSF) shall determine the enforcement and interpretation of all the applicable codes and referenced standards on school buildings. The Contractor specifically affirms by execution of this *Contract Agreement* that the Contractor is charged with the knowledge of the District's Procurement Code and OSF regulations.

102. Written Notices: Written notice is deemed to have been duly served if delivered in person to the officer, director, owner, or other employee of the entity for which it was intended and from whom signature is secured, or if sent by registered or certified mail to the last business address known to the party giving written notice.

103. Taxes: The Contractor shall pay sales, consumer, use and similar taxes, which are legally enacted when bids are received or negotiations concluded, for the work or portions thereof and all materials and equipment provided by the Contractor, whether or not such tax requirements are yet effective or merely scheduled to be effective during the contract term

and whether or not the Contractor is aware of the requirements at the time the bid is submitted or negotiations completed.

104. Non-Resident Withholdings: The Contractor's attention is directed to Title 12, Chapter 9, of the South Carolina Code of Laws, "Withholding Agents and Withholdings" dealing with South Carolina Tax Commission withholdings for nonresidents. The Contractor shall ensure the Contractor and any subcontractors performing work under the *Contract Agreement* conform to all requirements pertaining thereto, including by way of illustration and not limitation, securing a non-resident exemption or posting the required non-resident bond for two percent (2%) of the contract price with the South Carolina Tax Commission.

105. Statutory Limitation Periods: As to acts or failures to act occurring prior to the date of substantial completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the established date of substantial completion. As to acts or failures to act occurring subsequent to the date of substantial completion and prior to issuance of the final payment any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of the Contractor's final *Payment Request (Exhibit F)* submitted. As to acts or failures to act occurring after the relevant date of the final *Payment Request (Exhibit F)* any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to the warranty provided, the date of any correction of the work or failure to correct the work by the Contractor, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or District, whichever occurs last.

106. Royalties and Patents: If the Contractor uses any design, device, or materials covered by patent or copyright, it is mutually agreed and understood, without exception, the contract price includes all royalties or costs arising from the use of such design, device, or materials in the work to be performed. The Contractor shall defend suits or claims for infringement of patents or copyright rights or unpatented invention, process, or article manufactured or used in the performance of the contract and shall hold the District, its representatives, agents, employees or others harmless against all claims, loss, damage, injury, fines, penalties and costs, including court costs and attorney's fees, charges, liability, and exposure, however caused on account thereof, including the use by the District. The Contractor shall not be responsible for such defense or loss when a particular design, process or product of a particular supplier is required by the Contract Documents without substitution. However, if the Contractor has reason to believe the required design, process or product or use thereof is an infringement of a patent, the Contractor shall notify the Architect of such information in writing within twenty-four (24) hours of first discovering the potential infringement.

107. Contract Termination By Contractor: The Contractor may terminate the contract if the work is stopped for a period of ninety (90) days or more through no act or fault of the Contractor, any subcontractor or supplier, for a) issuance of an order of a court or other public authority having jurisdiction; b) an act of government, such as a declaration of national emergency, making materials unavailable; or c) if repeated suspensions, delays or interruptions by the District constitute in the aggregate more than one hundred percent (100%) of the total number of days scheduled for completion, or one hundred twenty (120) days in any one (1) year period, whichever is less. If one of the above reasons exists, the Contractor may, upon fifteen (15) days written notice to the District, terminate the *Contract Agreement* and recover from the District payment for work executed in accordance with the *Contract Agreement* to date, and for substantiated direct loss in materials, equipment, and processes to be incorporated into the work, including reasonable overhead and damages less any amounts recoverable from the Contractor as stated in the *Contract Agreement*.

108. District Termination: The District may terminate the contract or pursue any other rights and remedies afforded in the *Contract Agreement* or under applicable laws if the Contractor fails to perform or otherwise materially breaches any requirement of the *Contract Agreement*. The District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor's Surety ten (10) days written notice, terminate the contract with the Contractor and may, subject to any prior rights of the Surety, a) take possession of the site and of all materials, equipment, tools, and construction equipment and machinery located thereon owned by the Contractor; b) require and accept assignment of sub-contracts; and/or c) finish the work by whatever reasonable method the District may deem expedient. Further the District may terminate the contract, without cause, should funds become unavailable.

109. Payment at Termination: When termination is predicated upon cause, the Contractor shall not be entitled to further payment until all other obligations related to completion of the work by the Surety or the District are fulfilled and it is determined by the District a balance of the contract price is remaining and the Contractor is entitled to such payment for performance of work in accordance with the *Contract Agreement* prior to termination. If costs to finish the work exceed the unpaid balance, the Contractor or the Surety shall pay the difference to the District. The amount to be paid to or by the Contractor, the District or the Surety, as the case may be, shall survive termination of the *Contract Agreement*. In all other cases of termination, the Contractor shall be entitled to payment of the portion of the contract price for the percentage of work completed to the time of termination and accepted by the District in accordance with the *Contract Agreement*, excluding any anticipatory profits.

110. Cessation of Work: After receipt of a notice of termination, except as otherwise directed, the Contractor shall a) stop work on the date specified in the notice of termination, b) place no further orders or subcontracts for materials, equipment, labor or other services except as necessary for completion of such portion of the work not terminated, c) terminate all supplier orders and assign all existing subcontracts to the District or the Surety in accordance with the *Contract Agreement* unless otherwise directed by the District, and d) settle all outstanding liabilities and claims.

111. Right to Extend Remedy Period: The District shall have the right to extend any period of time given to the Contractor by the *Contract Agreement* to remedy any correction of work, default or other circumstance, if it is deemed in the best interests of the District to do so. The right of the District to extend such time shall not give rise to a duty on the part of the District to exercise this right.

112. Assignment: The District and the Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto in respect to covenants, agreements and obligations contained in the *Contract Agreement*. Neither party to the *Contract Agreement* shall assign the *Contract Agreement* in whole or in part without written consent of the other party. If either party attempts to make such an assignment without consent, that party shall nevertheless remain legally responsible for all obligations under the *Contract Agreement*.

113. Definitions: The following definitions of terms used in the Contract Documents are as follows:

A. Acceptance: The District's acceptance of the completed work from the Contractor when all work appears to be completed in a satisfactory manner and in accordance with the Contract Documents. Acceptance is confirmed by the final payment of all retainage less any amounts owed to the District, the Architect and any regulatory authority. Acceptance does not relieve the Contractor of responsibilities for conditions that survive final completion of the project.
B. Allowance: An amount specified by the District in the Contract Documents for a specified product purchase or work to be completed by the Contractor or a subcontractor. An allowance is a reimbursement, dollar for dollar, of actual costs incurred for the product purchase or performance of the work specified.
C. Applicable Laws: Any local, federal or South Carolina laws, statutes, ordinances, rules, regulations, administrative guidelines, codes, or other lawful orders that may apply to or regulate the work or the performance of the work, whether or not reference is specifically made to such laws, statutes, ordinances, rules, regulations, administrative guidelines, or other lawful orders in the Contract Documents. Also includes applicable construction standards.
D. Architect: Any individual or entity legally qualified to practice architecture in South Carolina with whom the District has a contractual agreement to provide architecture or other services pertaining to construction that members of this profession or those in their employ may justifiably perform. The Architect serves as the District's authorized representative to the extent of the contractual agreement between the Architect and the District. Any reference to Architect also includes any representatives, agents or employees of the Architect.
E. Claim: A demand or assertion by one of the parties to the contract or by a third party seeking, as a matter of right, an adjustment or interpretation of contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract Documents, the work being performed, or actual damages sustained. Any claim shall be in conformance to the requirements of the District's Procurement Code.
F. Construction Change Directive (CCD): A directive issued by the District which shall have the same force and effect as a *Change Order* on the Contractor's performance and in effecting the change to the *Contract Agreement*.
G. Contractor: The individual or entity with whom the District has executed a *Contract Agreement* for the work to be performed and who is licensed to conduct construction activities in the State of South Carolina. Any reference to Contractor also includes any representatives, agents or employees of the Contractor or any other entity enjoined to the Contractor.
H. Complaint: A verbal or written request to the District's Project Manager by the Contractor or a third party seeking a) redress of any condition existing that may impede progress of the work, b) relief from an untenable situation arising during the performance of the work through no fault of the complainant, c) interpretation of any condition of the Contract Documents, d) removal of restrictions or requirements not in accordance with the Contract Documents, or e) additional compensation for changes in work.
I. Day: Shall mean a calendar day unless otherwise specifically designated as business or work day. In computing any period of time, the day of the event from which the designated period of time begins to run is not included. If the final day of the designated period falls on a Saturday, Sunday or a legal holiday for the District, then the period shall run to the end of the next calendar day.
J. Drawings: Graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the work to be performed. Such drawings constitute an integral portion of the Contract Documents.

K. Emergency: A sudden, unexpected occurrence or set of circumstances demanding immediate action to ensure the health and safety of any building occupants or to prevent further damage to the work or property of the District and others, which may include, but not be limited to, fire, security risk, impending structural collapse, fire alarm or security alarm malfunction, loss of utilities. Action taken by the Contractor during an emergency shall be limited to such action necessary to ensure the safety of the building's occupants and to mitigate, contain and/or prevent further damage to the work in process, the District's property or the property of others.

L. Latent Defect: A latent defect in materials, equipment or processes is not reasonably detected through careful observation or inspection.

M. May: The word "may" or other such words or phrases indicate a recommendation that is adhered to by the Contractor, Architect or District at his/her choice.

N. Minority Status: Means the qualification of a small business concern that is at least fifty-one percent (51%) unconditionally owned by one or more individuals who are both socially and economically disadvantaged or are women or a publicly owned business having at least fifty-one percent (51%) of its stock unconditionally owned by one or more socially and economically disadvantaged individuals or by women, which may or may not be State of South Carolina certification.

O. Project: The total scope of work to be performed whether performed by one or more contractors, subcontractors or the District itself. (Also referred to as the "work," the "work to be performed," the "work in process," or other such terms.)

P. Regulatory Authority: Any agency of the federal government or the State of South Carolina which has jurisdiction over the District, its procurement of design and construction services, or the work being performed under contract.

Q. Shall: The word "shall" or "must" or other such words or phrases indicate a mandate that must be adhered to by the Contractor, Architect or District.

R. Shop Drawings: Drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the Contractor, a subcontractor, manufacturer, supplier, or distributor, which illustrates how specific portions of the work shall be fabricated and/or installed.

S. Specifications: A written description of the physical, functional, or performance characteristics, or the nature of the materials, equipment, processes, construction, or work to be performed. It includes, as appropriate, construction standards, technical data, workmanship, inspection and testing requirements.

T. Subcontractor: An individual or entity, who is properly licensed to do business in the State of South Carolina, having a direct contract with the Contractor to perform a portion of the work described in the Contract Documents. Any reference to subcontractor also includes any representatives, agents, or employees of the subcontractor or any other entity enjoined to the subcontractor to perform any work.

U. Substantial Completion: The date or conclusion of consecutive days established in the Contract Documents for sufficient completion of the work such that the District may occupy and utilize the project for its intended use. The health and safety systems shall be inspected and approved for occupancy by OSF and all other system functionality and work shall be completed as stipulated in the Contract Documents. The determination as to whether the Contractor has reached substantial completion of the work by the date established, as may be amended, is solely the District's.

V. Supplier: Any individual, business, manufacturer, fabricator, vendor or other entity that supplies materials, equipment, or items fabricated to a special design needed for the work to be performed but who does not perform any direct labor. Any reference to supplier also includes any representatives, agents or employees of the supplier or any other entity enjoined to the supplier.

W. Surety: An individual or entity who promises, in writing, to make good the debt or default of a Contractor or other entity.

114. 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 state, county, city, or other government entity or unit to accomplish the work specified in this solicitation and the contract.

115. Ownership of Data & Materials: All data, material and documentation either prepared for HCS pursuant to this contract shall belong exclusively to HCS.

IN WITNESS THEREOF:
This agreement is entered into as of the day and year first written above.

CONTRACTOR	THE DISTRICT
Name & Title of Authorized Signatory: Date: Signature:	Name & Title of Authorized Signatory: John K. Gardner, Chief Financial Officer, Fiscal Services Date: Signature:

Attachments:
Exhibit A: Scope of Work
Exhibit B: Contract Documents List
Exhibit C: Schedule of Values
Exhibit D: Project Schedule
Exhibit E: Change Order Procedures
Exhibit F: Payment Procedures
Exhibit G: Certificate of Insurance

SCOPE OF WORK (Exhibit A)

PROJECT NUMBER: 2122-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

The following information and terms and conditions are provided specific to the project identified in this contract:

DISTRICT PROJECT MANAGER:	Name: Frank S. Smith, Telephone: 843-488-6574 Fax: 843-488-6714 E-mail: fsmith001@horrycountyschools.net Mobile: 917-440-7672
OTHER PROJECT REPRESENTATIVE(S):	Name: Joe W. Burch, BA, MA Telephone: 843-488-6712 Fax: 843-488-6714 E-mail: jburch@horrycountyschools.net Mobile: 843-421-3285
DISTRICT PROCUREMENT OFFICER:	Robin Strickland, CPPB, at rstrickland@horrycountyschools.net or 843-488-6893
CONTRACTOR'S PRINCIPAL/OWNER:	Name: Telephone: Fax: E-mail: Mobile:
CONTRACTOR'S PROJECT MANAGER: (if required)	Name: Telephone: Fax: E-mail: Mobile:
CONTRACTOR'S WORKSITE SUPERINTENDENT:	Name: Telephone: Fax: E-mail: Mobile:
CONTRACTOR'S SECONDARY WORKSITE SUPERINTENDENT: (if required)	Name: Telephone: Fax: E-mail: Mobile:
APPROVAL OF CONTRACTOR USE OF DISTRICT FACILITIES (as checked):	☒ Water ☒ Electrical Power ☐ Restroom Facilities ☐ Vending Machines ☐ Debris and Recycle Containers ☐ Other: ☐ No use of District facilities allowed.
LIQUIDATED DAMAGES:	$ 500.00 per day
RETAINAGE TO BE WITHHELD:	☒ 3.5% from every payment until final completion of the work in accordance with the contract documents ☐ None
CONSTRUCTION WORKSITE MEETINGS HELD:	☐ Weekly ☒ Every Two Weeks ☐ Twice Monthly ☐ Once Monthly
SOURCE OF PROJECT FUNDS:	☐ Federal Source ☒ Other Sources (non-Federal)
CONTRACTOR WARRANTY TERMS:	☐ 60 days ☐ 90 days ☐ 180 days ☐ 365 days (1 year) ☒ 730 days (2 years)

The Contractor shall provide, at the time the *Contract Agreement* is executed by the Contractor and returned to the District, the following checked items:

- ☒ A copy of business licenses valid in the jurisdiction where the construction work will be performed for the Contractor.
- ☒ A copy of contractor licenses issued by the South Carolina Licensing and Regulation Board for the Contractor and each subcontractor.
- ☒ A valid, original Certificate of Insurance.
- ☒ SLED checks maintained in the Contractor's file on all Contractor and subcontractor employees, agents and representatives who will access the worksite during performance of the construction work or other services. (Do not submit to the District until requested.)
- ☐ Certification of Approved Installer (on manufacturer's, fabricator's or supplier's letterhead) for
- ☐ Other:
- ☐ Other:

PERMITS, INSPECTIONS, APPROVALS OF REGULATORY AUTHORITY AND ASSIGNED RESPONSIBILITY:
As may be required for proper asbestos identification and remediation. There is none to the knowledge of the district at these locations per a 2018 report on record with the District.

DETAILED DESCRIPTION OF WORK TO BE PERFORMED:
SCOPE OF WORK – The scope of work requires the Contractor to furnish all labor, materials, tools, equipment, and incidentals necessary to satisfactorily complete the project as detailed in Exhibit A and associated specifications and plans as provided by Horry County School. The overall project involves the following:

SUMMARY OF WORK

A. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications into the total building system such that no leakage into the system occurs. In general, the scope of work includes:

1. Base Bid- Exterior Wall Restoration
   a. Install new helical anchors where indicated in Contracts Drawings as in Section 04 05 19 "Masonry Helical Anchors".
   b. Repoint masonry mortar joints where indicated in Contract Drawings as specified in Section 04 05 24 "Masonry Repointing".
   c. Install new metal wall panels where indicated in Contract Drawings as specified in Section 07 42 13 "Metal Wall Panels".
   d. Install new associated sheet metal flashings where indicated in Contract Drawings as specified in Section 07 62 00 "Sheet Metal Flashing and Trim".
2. Alternate No. 1
   a. Install new ATAS International, Inc. Multi Purpose Panels (MPN120) where indicated in Contract Drawings as specified in Section 07 42 13 "Metal Wall Panels".

CONSTRUCTION SCHEDULE:
Contractor has access to the site beginning 9-01-21 and shall continue through 12-20-21. Access to the site will be limited to after school hours and weekends, unless other considerations and arrangements are made with the school and the district. Noise will be the primary issue preventing work during school days, therefore this needs to be analyzed as part of the bid package.

SCOPE OF WORK: See attached plans and specifications

The Contractor and District agree to the Scope of Work and other terms identified herein as an integral part of the *Contract Agreement*.

End of Exhibit A___

CONTRACT DOCUMENT LIST (Exhibit B)

PROJECT NUMBER: 2021-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

The following documents listed below constitute an integral portion of the contract documents for the work to be performed.

DRAWINGS LISTING DRAWINGS PREPARED BY: REI Engineers

SHEET NO.	TITLE	DATE	IDENTIFICATION
XE-001	Cover Sheet	7-16-21	REI Engineers
XE-101	Above roof partial elevations		
XE-201	Metal wall panel details		

SPECIFICATIONS LISTING SPECIFICATIONS PREPARED BY: REI engineers

SECTION NO.	TITLE	DATE	IDENTIFICATION	PAGES
1,4,6,7	PROJECT MANUAL	7-16-21	Rei Proj # 21CHS-026	64

ADDENDA LISTING ADDENDA PREPARED BY: n/a

ADDENDUM NO.	TITLE	DATE	IDENTIFICATION	PAGES

End of Exhibit B

SCHEDULE OF VALUES (Exhibit C)

PROJECT NUMBER: 2122-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

The *Schedule of Values* for the Contract Agreement allocating the entire contract sum to various portions of the work is indicated below. The Contractor shall use the schedule of values sheet (page two of the payment request form) to prepare the initial *Schedule of Values* for District approval. Once approved by the District, this schedule shall be used as a basis for reviewing Contractor pay requests and the work in progress. Each subcontract shall be listed on one or more lines of the schedule for the phases of work to be performed or materials required. The "general conditions" portion (fee, overhead, supervision, management, etc) of the schedule shall be listed separately and not distributed within other scheduled values. Allowances shall be listed as separate line items. Bonding premium shall be listed as a separate line item. Each approved Change Order shall be listed separately and itemized by the District. The Schedule of Values shall be in sufficient detail to be acceptable to the District.

End of Exhibit C

PROJECT SCHEDULE (Exhibit D)

PROJECT NUMBER: 2122-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

The following project schedule is incorporated into the *Contract Agreement*:

PROJECT COMMENCEMENT DATE: 9-01-21 (or as soon as awarded)

The Contractor shall not prematurely commence activities prior to the a) commencement date established above, b) receipt by the District of a valid, original *Certificate Of Insurance* (Exhibit G) issued by the Contractor's insurance provider/agent, or c) securing SLED background checks on all Contractor and subcontractor worksite personnel, whichever is later. The established date for completion of the work shall not change should these conditions not be completed by the project commencement date.

CONSECUTIVE NUMBER OF CALENDAR DAYS FOR SUBSTANTIAL COMPLETION OF THE WORK: 120 days +/-

PROJECT SUBSTANTIAL COMPLETION DATE: 12-10-21

The consecutive number of calendar days for completion of the work and the project completion date established cannot be changed except by an executed *Change Order*.

FINAL COMPLETION PERIOD: ☒ 10 days ☐ 15 days ☐ 20 days ☐ 30 days

The consecutive number of calendar days immediately following the date established for substantial completion, in which the Contractor shall complete any punch list items and submit all final documents required by the District and a final *Payment Request*.

DESCRIPTION OF MILESTONES AND DELIVERABLES WITH DELIVERY DATE:

MILESTONES / DELIVERABLES	DELIVERY DATE
Substaintial completion of work	12-10-21
Final completion of all work /punch lists	12-20-21

The Contractor and District agree to the project schedule identified herein as an integral part of the *Contract Agreement*.

End of Exhibit D

CHANGE ORDER PROCEDURES (Exhibit E)

PROJECT NUMBER: 2122-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

Following are the requirements for *Change Order* procedures:

Changes Required in the Work: All difficulties inherent in construction work cannot be foreseen during design and solicitation of a project; therefore, the District reserves the right to make changes in the work without invalidating the *Contract Agreement*. The *Contract Agreement* shall not be substantially amended or varied nor shall a change in contract price or contract time be effected without execution of a *Change Order*. In the absence of total agreement between the Contractor and the District on the terms of any *Change Order*, the District has the right to issue a *Construction Change Directive (CCD)* as a directive which shall have the same force and effect as a *Change Order* on the Contractor's performance and in effecting the change to the *Contract Agreement.* Any changes authorized shall be performed under applicable provisions of the *Contract Agreement,* and the Contractor shall proceed promptly to execute the work as described. If the Contractor defaults or neglects to execute a change in the work, the District shall have all remedies stated in the contract documents and afforded by the District's Procurement Code and the law, including notification to the Surety.

Change Order Cost Adjustments: When the District determines a change to the work is necessary, a request for pricing will be submitted to the Contractor. The Contractor shall reply promptly with an itemized cost to complete such work using the *Contract Change Pricing* form herein. The District shall have the right to make any changes to the pricing deemed appropriate and in accordance with prevailing industry rates and other requirements of the contract documents. Any adjustment to the contract price shall approximate the actual, un-inflated costs to the Contractor or subcontractor with all costs justifiable with prevailing standards including reasonable overhead and profit and shall be based on:

A. A total sum properly itemized and supported by sufficient substantiating data to permit evaluation, adjustment, and approval by the District.
B. Unit or incremental pricing stated in the original quote as negotiated and agreed upon between the District and the Contractor.
C. Any allowances for Contractor's purchase of materials, equipment or processes or for other specified work as established in the contract documents or otherwise required by the District through a properly executed *Change Order* for which the Contractor shall supply invoices of actual costs for reimbursement by the District.

If the Contractor does not respond promptly with an itemized estimate of the change in contract price or contract time when notified by the District of the change in work, the method and amount of the adjustment shall be determined by the District on the basis of reasonable costs or savings attributable to the change in work. If the Contractor does not agree with the change in contract price or contract time stated in the issued directive and cannot resolve the disagreement through the informal complaints process with the District's Construction Manager, the Contractor may pursue the steps for a contract controversy as outlined in the District's Procurement Code. Disagreement with any change in contract price or the initiation by the Contractor of the complaint or contract controversy claims process shall not give rise to a right on the part of the Contractor or any subcontractor to delay or postpone the work described in the *Change Order (or directive)*.

Change Order Allowable Pricing: For any change in contract price, the Contractor shall provide, itemize, and justify with appropriate supporting data, direct costs attributable to the change. Direct costs attributable to the change in work shall be limited to the following:

A. Costs of materials, equipment and processes to be incorporated into the work including costs of shipping, handling, fabricating, sales tax (8% required in Horry County and 9% within certain incorporated parts of the City of Myrtle Beach as of August 1, 2009), or other such costs inherent in the provision and delivery of such materials, equipment and processes by the supplier or manufacturer.
B. Costs of direct labor based on actual hourly labor rates multiplied by the actual work hours required to accomplish the change in work when such change in work results in additional contract time or labor. No Contractor or subcontractor shall ask for direct labor costs, when work required can be accomplished with the existing work force, in conjunction with other concurrent work, and during the current approved contract time. The hourly labor rate for any additional contract time or laborers shall be actual hourly rates not to exceed thirty dollars ($30) per hour unless documented proof of payment of a higher hourly rate for a specific skilled laborer is approved by the District prior to *Change Order* execution.
C. Costs of fringe benefits for additional direct labor, including social security, unemployment or other taxes, health and workers' compensation insurances, or other benefits required by agreement, custom or applicable laws. Such fringe benefit rate shall not exceed twenty-eight percent (28%) and the District has the right to request itemized documentation proving the fringe benefit rate used.
D. Costs of machinery or equipment rented or leased in the short term specifically for completion of the additional work to be performed. Such equipment rented/leased shall not customarily be owned by the Contractor or any subcontractor affected by the change but shall be necessary to the accomplishment of the work required. Copies of invoices for such rental shall be provided to document the cost of rental or lease of machinery or equipment. The District shall not pay for use of Contractor- or subcontractor-owned equipment or machinery, which costs are included in the overhead computation.
E. Costs of permits or inspection fees directly attributable to the change in work and not included as part of the Contractor's requirements nor attributable to the Contractor's non-performance or non-conformance to the *Contract Agreement*.
F. Other such direct costs directly attributable to the work and approved by the District.
G. Any additional cost resulting from an amendment to performance and payment bonds but in no event more than one percent (1%) after application of overhead and profit provided for elsewhere. The Contractor shall be responsible for notifying the Surety of any changes in the contract price, if required by the Surety.

Costs itemized shall not exceed the unit costs as listed in the most current issue of Means Construction Cost Data or actual costs justified to the satisfaction of the District.

Unallowable Costs: Any costs which may be perceived by the Contractor to be indirectly attributable to a change in work shall not be included in direct costs but shall be considered part of the overhead and profit rate applied to direct costs. Such costs not to be included in direct costs shall be, by way of illustration and not limitation:

A. Labor hours and fringe benefit costs of the worksite superintendent(s) when such costs were included, or should have been included, in the original bid submitted or result from the Contractor's inability to meet the approved schedule or required completion date. The Contractor must prove, to the satisfaction of the District, such additional costs are directly attributable to any extension of time beyond the last approved completion date. An increase in contract price for additional site supervision shall be at the District's sole discretion.
B. Perceived additional costs attributable to the Project Manager or supervision and coordination of subcontractors, suppliers or Contractor employees.
C. Costs related to use, rental, purchase or replacement of equipment generally or customarily necessary to accomplish the work but not to be incorporated into the work such as, by way of illustration and not limitation, hand tools, generators, cleaning equipment, scaffolding, signage, fencing, vehicles, fuel, and so forth.
D. Transportation or travel costs related to the transporting of hired or contracted supervisors, workers or subcontractors to and from the worksite or between worksites or to pick-up and deliver materials, equipment and processes to the worksite by the Contractor's or subcontractor's own forces including parking, tolls, fines, meals, per diem, hotel, living expenses, or other such costs.
E. Costs attributable to expediting delivery of materials, equipment or processes including telephone calls, facsimile transmissions, copying, employee labor and benefits, and so forth.
F. Costs attributable to maintaining a local office, home office or corporate office as well as office staffing, equipment and consumables, and so forth.
G. Costs for maintaining on-site facilities, including work trailers, telephones, computers, licenses, temporary utilities, and so forth.
H. Contracted services such as accountants, payroll service providers, attorneys, catering and so forth.
I. Catering or vending services, portable toilets, dumpsters, and so forth.
J. Other such indirect costs of doing business or costs normally considered inclusive in overhead.

Allowable Overhead and Profit Charges: Additional overhead and profit attributable to the change in contract pricing shall not exceed the following:

A. For work performed by the Contractor's own forces, a maximum of ten percent (10%) of the allowable direct costs or the unit pricing negotiated at the time of award.
B. For work performed by a subcontractor's own forces, a maximum of ten percent (10%) of the allowable direct costs.
C. For work performed by a subcontractor, overhead and profit of a maximum of five percent (5%) is allowable by the Contractor for administration of the sub-contract.

End of Exhibit E (Except for Forms Provided)

CONTRACT CHANGE PRICING

NAME OF CONTRACTOR OR SUBCONTRACTOR: _____

NAME OF PROJECT: MBH Metal Wall Panel Installation CHANGE NUMBER: _____

BRIEF DESCRIPTION OF WORK: _____

Materials – Name of Items	Quantity	Unit Price	Extended Price
		SUB-TOTAL MATERIALS:	
		Shipping/Delivery:	
		Miscellaneous Materials (Not to exceed $100):	
		South Carolina Sales Tax (7%):	
		Credit on Returned Items (Including Sales Tax):	
		(A.) TOTAL ALL MATERIALS:	

Equipment Leased / Rented	No. Hours	Cost Per Hour	Extended Price
		SUB-TOTAL EQUIPMENT:	
		South Carolina Sales Tax (7%):	
		Credit on Returned Items (Including Sales Tax):	
		(B.) TOTAL ALL EQUIPMENT:	

Other Costs (Specify)	Cost
(C.) TOTAL ALL OTHER COSTS:	

Contractor Initials: _____ District Initials: _____

Classification of Laborer	No. Hours	Rate of Pay	Extended Cost
		SUBTOTAL LABOR COSTS:	
		Labor Burden (FICA, insurances, Workers Comp., etc.) (Maximum 28%):	
		(D.) TOTAL ALL LABOR COSTS:	

(A. + B. + C. + D. = E.) TOTAL ALL DIRECT COSTS (Sub-contractor or Contractor):

(FOR SUBCONTRACTORS ONLY)	
(F.) SUBCONTRACTOR OVERHEAD & PROFIT ON TOTAL DIRECT COSTS (Maximum 10%):	
(E. + F. = G.) TOTAL SUBCONTRACTOR DIRECT COSTS, OVERHEAD & PROFIT:	
(H.) APPLICATION OF SUBCONTRACTOR BOND PREMIUM (If bond required by Contractor.) (Maximum 1%):	
(G. + H. = I.) GRAND TOTAL SUBCONTRACTOR COSTS:	

(FOR GENERAL CONTRACTOR ONLY)	
List all Subcontractors performing a portion of the change for which itemized costs are provided:	Cost (Total I. for Each)
1.	
2.	
3.	
(J.) TOTAL PROJECT COSTS FOR ALL SUBCONTRACTORS:	
(K.) OVERHEAD & PROFIT ON SUBCONTRACTED WORK (Maximum 5% of J.):	
(L.) OVERHEAD & PROFIT ON DIRECT COSTS OF CONTRACTOR PERFORMED WORK (Maximum 10% of E.):	
(E. for Contractor work only +J. + K. + L. = M.) TOTAL CONTRACTOR DIRECT COSTS, OVERHEAD & PROFIT:	
(N.) APPLICATION OF CONTRACTOR BOND PREMIUM (Maximum 1% of M.):	
(M.+N.) GRAND TOTAL ALL PROJECT COSTS:	

Contractor Initials: _____ District Initials: _____

CHANGE ORDER

PROJECT NUMBER (if any): 2122-06MJ	EFFECTIVE DATE:	
PROJECT NAME: MBH Metal Wall Panel Installation		
CONTRACTOR NAME:	CHANGE ORDER NO:	

DETAILED DESCRIPTION OF CHANGE TO THE PROJECT OR TO THE TERMS, CONDITIONS, SPECIFICATIONS OR DRAWINGS:

CHANGE IN CONTRACT PRICE:

Total original contract price:	$	
Cumulative change in contract price, excluding this change order: [increase / (decrease)]	$	
Revised total contract price, prior to this change order:	$	
Total change in contract price for this change order: [increase / (decrease)]	$	
Total revised contract price including this change order:	$	
Total current number of days for substantial completion:		
Total change in number of days for substantial completion for this change order: [increase / (decrease)]		
Total revised number of days for substantial completion including this change order:		

The above changes as defined and agreed to by the Contractor and the District shall become, upon execution, an integral part of the *Contract Agreement* for the project identified herein and the Contractor shall proceed promptly with the change in work/services identified herein. In the absence of total agreement, this Change Order shall constitute a directive, upon signature and transmission to the Contractor, and the Contractor shall proceed promptly with the change in work/services.

Contractor Initials: _____ District Initials: _____

PAYMENT PROCEDURES (Exhibit F)

PROJECT NUMBER: 2122-06MJ	PROJECT NAME: MBH Metal Wall Panel Installation

Payment Requests:

An itemized payment request shall be submitted to the District by the 25th day of each month that payment is being requested and at completion of the project, using the form provided by the District. The payment request shall not include a) any work anticipated to be completed but not completed by the end of each month being requested; b) any materials not incorporated into the work to be performed except those properly stored as stated in the *Contract Agreement*; c) any damaged, used, inferior or substituted materials not meeting the requirements and standards of the contract; nor d) any amounts the Contractor does not intend to pay to any subcontractor or supplier, where performance or material quality is in question or any other dispute is pending.

If, upon review of the payment request and based upon the best determination of the District, the amount requested does not accurately represent, in the District's opinion, the progress of the completed work to be performed in the Scope of Work (Exhibit A), the District shall have the right to adjust the payment request to more accurately reflect the percentage of completed work/services. The District shall approve and authorize payment to the Contractor no more often than once monthly. For projects less than forty-five (45) days in duration, payment shall be made once upon completion of the work and clean-up of the worksite.

Payment by the District of undisputed amounts shall be made by the 15th day of the following month if request is received by Contractor by the 25th of the month. If payment request is not received by the 25th, the payment will be made within thirty (30) days from the date the District receives the payment request.

Payment Withholding:

The District may decide not to approve or process the Contractor's payment request or, because of subsequently discovered evidence or observations, may nullify the payment request, in whole or in part, to such extent as may be necessary to protect the District from loss. The District shall notify the Contractor the reason for non-payment. The payment request in dispute or amount withheld shall remain unpaid, without interest accrual, until such time as the Contractor and the District resolve the dispute or the conditions resulting in non-payment.

Payment at Project Completion:

When the Contractor considers all work in the Scope of Work (Exhibit A) completed, the Contractor shall submit a final payment request along with all final documents required by the District. The District shall inspect the work and, if the District agrees that all work is complete and appears to be in conformance with the contract documents, the District shall process the final payment, less any amounts the Contractor may owe to the District, the Engineer or regulatory authority.

Payment at Termination:

When termination is predicated upon cause, the Contractor shall not be entitled to further payment until all other obligations related to completion of the work by the District are fulfilled and it is determined by the District a balance of the contract price is remaining and the Contractor is entitled to such payment for performance of work in accordance with the contract documents prior to termination. If costs to finish the work exceed the unpaid balance, the Contractor shall pay the difference to the District. The amount to be paid the District, shall survive termination of the *Contract Agreement* as addressed below.

Recovery of Sums Owed:

Whenever any sum of money is recoverable from or payable by the Contractor to the District, the Engineer or any regulatory authority, the amount may be deducted from any payment to the Contractor under this contract or any other contract between the Contractor and the District at the time. Should the amount owed/recoverable be greater than the amounts yet payable to the Contractor, the Contractor shall reimburse the District for all remaining amounts. The District shall have the right to declare any business entity operated by the Contractor as non-responsible from any future contract awards until all amounts due to the District are paid in full.

The Contractor and District agree to the payment request procedures identified herein as an integral part of the *Contract Agreement*.

End of Exhibit F (Except for Form Provided)

APPLICATION FOR PAYMENT

TO: HORRY COUNTY SCHOOLS
1160 E HWY 501
CONWAY, SC 29526

PROJECT: MBH Metal Wall Panel Installation

APPLICATION DATE:

PERIOD TO:

FROM:

PROJECT NO: 2122-06MJ

APPLICATION FOR PAYMENT-SUMMARY

Application is made for payment, as shown below, in connection with the contract.

1. ORIGINAL CONTRACT AMOUNT:	
2. NET CHANGES TO CONTRACT:	
3. TOTAL CONTRACT AMOUNT (Line 1 +2):	$ -
4. TOTAL COMPLETED AND STORED TO DATE: ..... (Column G on Schedule)	
5. RETAINAGE:	
a. % of Completed Work (Columns D + E on Schedule)	
b. % of Stored Material (Column F on Schedule)	
Total Retainage: (Line I on Schedule)	$ -
6. TOTAL COMPLETED AND LESS RETAINAGE: ..... (Line 4 less Line 5 total)	$ -
7. LESS PREVIOUS APPLICATIONS:	
8. CURRENT PAYMENT DUE:	$ -
9. BALANCE TO FINISH INCLUDING RETAINAGE: ..... (Line 3 less Line 6)	$ -

EXTRA WORK SUMMARY	ADDITIONS	DEDUCTIONS
Changes From Previous Applications:		
Changes From This Application:		
Total:	0	0
Net Changes:		

I, the undersigned, certify that to the best of my knowledge, informationand belief ALL WORK covered by this request for payment has been completed in accordance with any applicable contract documents or District standards and that the payment requested herein is now due and payable. I further certify that I am authorized by the Company stated below to make sure certifications and request the payment herein on behalf of said Company in lieu of the authorized person so indicated.

ARCHITECT/GC:

By: Date:

State of: County of:

Subscribed and sworn to me this day of

The above personally appeared before me, the undersigned notary public and provided satisfactory evidence of identification.

Notary Public: My Commission expires:

ACCEPTED/APPROVED BY: HORRY COUNTY SCHOOLS

ACCEPTED BY: DATE:

APPROVED BY: DATE:

This approved application is not negotiable. The amount approved for payment is payable only to the Architect/GC named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the District or the Architect/GC under any applicable contract agreement

Contractor Initials _____ District Initials _____

CONTINUATION SHEET

SCHEDULE OF VALUES

INVOICE NO: 1

PERIOD NO:

(Thru end of the month)

PROJECT NO: 2122-06MJ MBH Metal wall panel installation

A	B	C	D	E	F	G		H	I
			WORK COMPLETED						
ITEM NO:	DESCRIPTION OF WORK	SCHEDULED VALUE	FROM PREVIOUS APPLICATIONS (D+E)	THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G/C)	BALANCE TO FINISH (C-G)	RETAINAGE (IF VARIABLE RATE)
1						$ -		$ -	
2						$ -			
3						$ -		$ -	
4						$ -		$ -	
5						$ -		$ -	
6						$ -		$ -	
7						$ -		$ -	
8						$ -		$ -	
9						$ -		$ -	
10						$ -		$ -	
11						$ -		$ -	
12						$ -		$ -	
13						$ -		$ -	
14						$ -		$ -	
15						$ -		$ -	
16						$ -		$ -	
17						$ -		$ -	
18								$ -	
TOTALS		$ -	$ -	$ -	$ -	$ -		$ -	$ -

A-Line Item number

B-Brief Item Description

C-Total Value of Item

D-Total of D and E fromPrevious Application(s) (if any)

E-Total Work Completed for this Application

F-Materials Purchased and Stored for Project

G-Total of All Work Completed and Materials Stored for Project

H-Remaining Balance of Amount to Finish

I-Amount Withheld form G

Contractor Initials _____ District Initials _____

CERTIFICATE OF INSURANCE (Exhibit G)

PRODUCING AGENT: (Name and Business Address) Contact Person: Phone: Best Policy Holder Rating: ☐ A+ ☐ A ☐ A- ☐ B+ ☐ B Financial Strength Rating: ☐ Class III ☐ Class IV ☐ Class V	CONTRACTOR (INSURED): (Name and Business Address) Contact Person: Phone:
ADDITIONAL INSURED (CERTIFICATE HOLDER): Horry County Schools 335 Four Mile Road, P.O. Box 260005 Conway, SC 29528-6005 Contact Person: Maurice Jackson, CPPB Phone: 843-488-6929	PROJECT / BID NUMBER: 2122-06MJ PROJECT NAME: MBH Metal wall panel installation

Type of Insurance	Policy No.	Policy Inception & Expiration Dates (MM/DD/YY)	Deductible Amt.	Insurance Company Providing Coverage
Commercial General Liab.				

Limits:	Single Limit (per occurrence)	$	Products & Completed Operations	$
	General Aggregate	$	Personal & Advertising Injury	$
	Premises Operations	$	Contractual	$
	Independent Contractor's Protection	$	Owned /Non-owned Vehicles	$
	Broad Form Property Damage	$	Medical Expense	$

Commercial Auto Liability				
Limits:	Bodily Injury (per occurrence)	$	Property Damage (per occurrence)	$
Worker's Compensation & Employer's Liability				
Limits:	Worker's Compensation	Statutory Limit	Disease (each employee)	$
	Each Accident	$	Disease (aggregate)	$
Other: (specify)				
Limits: (specify)		$		$
		$		$

Such insurance as is herein certified (a) applies to all insurance issues in connection with the work/services required by Horry County Schools forming the *Contract Agreement*, (b) is written in accordance with the company's regular policies and endorsements, subject to the company's applicable manuals or rules and rates in effect, (c) has been issued on behalf of the insured Contractor named above, and (d) shall apply in total to the above named project. The District and its contracted Engineer (if any) shall be included as additional insured as its interests may appear. Each policy shall be endorsed to provide that the policy shall not be cancelled, changed, allowed to lapse, or allowed to expire until thirty (30) calendar days after the District has received written notice thereof as evidenced by proof of mailing notice to: Procurement Coordinator, Horry County Schools, P.O. Box 260005, Conway, SC 29528-6005.

By signature below, I, the agent, certify that I have been fully informed of the insurance requirements of the Contractor's contract with the District and such insurance as named herein is in force as of the date of this certificate.

Name & Title of Authorized Representative:

Signature of Authorized Representative: _____

Date Certificate Prepared & Signed:

OFFICIAL BID FORM

BID NUMBER: 2122-06MJ

PROJECT NAME: MBH Metal Wall Panel Installation

FULL COMPLETION OF THIS FORM IS MANDATORY FOR A BID TO BE CONSIDERED. (This *Official Bid Form* and all requested documentation shall be submitted through the website at the following URL https://vrapp.vendorregistry.com/Bids/View/BidsList?BuyerId=2f302e8a-69b0-407b-a21a-3368d004365e , mailed, expressed or hand delivered to the location(s) specified in the *Invitation for Bids* no later than the bid opening date and time, as may be amended by addendum.)

BASIC SUBMITTER INFORMATION:

Name of Submitting Company: _____

Mailing Address of Company: _____

Taxpayer Identification Number: _____

Qualifier's Name: _____ Phone Number: _____

Contractor's License Number: _____ Fax Number: _____

Contractor's Group Number: _____ Dollar Limitation of License: $

Email Address: _____

Company's Minority Status: ☐ Minority Owned Business ☐ Woman Owned Business ☐ Not Applicable
(Must be certified by the State of South Carolina and will be used for statistical purposes only. Check if State certified: ☐)

ADDENDA ACKNOWLEDGEMENT: *(Acknowledgement of all addenda issued is required.)*

ADDENDA NO.	ADDENDA DATE	BIDDER'S INITIALS	ADDENDA NO.	ADDENDA DATE	BIDDER'S INITIALS

BID PRICING: Having carefully examined the Contract Documents with all corresponding terms, conditions, requirements, specifications, drawings, forms or other such descriptions of the work to be performed as well as the worksite and conditions affecting the work, the undersigned proposes to furnish all materials, labor, equipment and processes necessary for the base bid and bid alternates listed below. *(Failure of the Bidder to bid any alternate listed shall render the bid non-responsive. Check box to indicate addition, reduction, or no change from base bid.) Round all bids to the nearest dollar.*

BASE BID (Lump Sum): The base bid shall include all work illustrated on the drawings and described within the specifications unless otherwise noted. (Include any allowances) Dollars: $ _____

BID ALTERNATES:

1. Alternate No. 1. Install new ATAS International, Inc. Multi Purpose Panels (MPN120) where indicated in Contract Drawings as specified in Section 07 42 13 "Metal Wall Panels". ☐ No Change ☐ Add ☐ Deduct Dollars: $ _____

(CAUTION: Bidders are required to include ALL costs in the above Base Bid and each Bid Alternate, if any. If the bid is accepted, the District will not contract for more than the amounts shown. The District reserves the right to accept bid alternates in any order or combination that serves its best interests and is within budget. If any numbers are illegible, the District's interpretation of the number is final.)

UNIT / INCREMENTAL PRICING: Unit pricing must be provided in the event a *Change Order* is necessary for the following types of work due to unforeseen circumstances. These unit prices shall be the installed price including all costs to the District. Unit costs shall not include bonding, overhead and profit, which shall be added at time of *Change Order*. The District reserves the right to negotiate any of the unit prices listed and, at the District's discretion, to use the same rates for deduct work under a *Change Order*.

SUBCONTRACTOR DISCLOSURE: As stipulated in the *Bid Instructions*, subcontractors who shall perform the trades listed below must be identified. When the Bidder intends to perform any trade listed with the Bidder's own forces, the Bidder shall be named in the place of any subcontractor required to be listed. Listing any subcontractor that does not meet the qualifications stated in the *Bid Instructions* or does not meet the licensing requirements of the State of South Carolina shall render the bid non-responsive.

Base Bid:

TRADE	SUBCONTRACTING COMPANY NAME	LICENSE NUMBER

Alternate 1:

TRADE	SUBCONTRACTING COMPANY NAME	LICENSE NUMBER

CONFLICTS OF INTEREST IDENTIFICATION: Identify any employee, agent or representative of the Architect/Engineer or District (including members of the Horry County Board of Education) with more than a five percent (5%) interest in the Contractor's business. ☐ Not applicable

Names: _____

Identify any employee, agent or representative of the Architect/Engineer or District (including members of the Horry County Board of Education) that will be subcontracting any work for the project. ☐ Not applicable

Names: _____

ACKNOWLEDGEMENT:

1. Have you clearly listed any deviations from the requested specifications and fully explained such deviations? ☐ Yes ☐ No ☐ N/A – No Deviations

BID CERTIFICATION: I, the undersigned, certify that I am an authorized signatory for the bidding company identified in this bid form with authority to submit bids and obligate the company to a contract for the work identified in the Contract Documents provided by Horry County Schools. I have read and fully understand the Contract Documents such that I have full knowledge of all of the work to be performed and the terms, conditions, and requirements the company I represent must comply with if a contract is awarded. I further understand that the bidding company I represent must comply with all applicable local, state and federal laws related to the work to be performed and to the payment of subcontractors. I certify that the information included on this form or as attached supplementary information is true and accurate to the best of my knowledge, understanding, and belief. I understand that misrepresentation of any information on this form shall result in the bid being considered non-responsive.

BIDDER:	NOTARY:	CORPORATE SEAL:
Name & Title of Authorized Signatory:	State of: County of: Subscribed and sworn to before me on this date:	
Signature:	Signature: _____ My Commission Expires:	

REMINDER: The following documents must be submitted with this *Official Bid Form*:

1. A fully executed *Bid Bond*, including power of attorney, or other approved security.
2. Other documents as checked and identified below:
   - ☐
   - ☐

BID BOND

PRINCIPAL (BIDDER): *(Name and Business Address)* Contact Name: Phone:	TYPE OF ORGANIZATION: ☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation Principal organized under the laws of the State of:
OWNER (THE DISTRICT): (Name and Business Address) Horry County Schools 335 Four Mile Road, P.O. Box 260005 Conway, South Carolina 29528-6005 Contact Name: Frank Smith Phone: 843-488-6574	BID IDENTIFICATION: Project / Bid Number: 2122-06MJ Project Name: MBH Metal Wall Panel Installation
SURETY: [Name and Business Address) Contact Name: Phone:	Surety's Best Key Rating: Surety's Financial Strength Rating: Surety organized under the laws of the State of:

PENAL SUM OF BOND IS FIVE PERCENT (5%) OF TOTAL BASE BID PLUS ALL ALTERNATES NOT TO EXCEED: $

OBLIGATION:
We, the Principal and Surety are firmly bound to Horry County Schools (hereinafter called the District) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally.

CONDITIONS:
The Principal has submitted the bid referenced and identified above.

THEREFORE:
The above obligation is void if the Principal, upon acceptance by the District of the bid identified above within forty-five (45) days from the bid opening date and time as amended by any addendum to the bid, is found by the District to be a responsive and responsible Bidder, and who a) executes the *Contract Agreement*, b) provides to the District a fully executed *Performance Bond* and *Payment Bond*, c) has its insurance provider submit a bona-fide *Certificate of Insurance* and, d) provides all other documents required by the terms of the bid and by the date stated in the *Notice of Intent to Award* or, in the event of failure to execute one or more of the contractual documents or in the event of refusal of the Principal to comply with other such requirements of the *Bid Instructions*, pays the District for any cost of procuring the work which exceeds the amount of the Principal's bid not to exceed the penal sum so stated.

Such Surety executing this instrument agrees that its obligation is not impaired by any extension of the time for acceptance of the bid that the Principal may grant to the District. Notice to the Surety of any extension of time is waived; however, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the forty-five (45) calendar days originally allowed for acceptance of the bid.

WITNESS:
The Principal and Surety executed this bid bond and affixed their seals on this date of:

PRINCIPAL'S SIGNATORY

NAME & TITLE:

SIGNATURE: _____

Corporate Seal

SURETY SIGNATORY

NAME & TITLE:

SIGNATURE: _____

Corporate Seal

A fully executed Power of Attorney must accompany this bond when submitted with the *Official Bid Form*.

PROJECT MANUAL

FOR

Myrtle Beach High School Wall Repairs

3302 Robert M. Grissom Pkwy,
Myrtle Beach, South Carolina 29577

REI Project No. 21CHS-026

July 16, 2021

PREPARED FOR:

Horry County Schools
335 Four Mile Road
Conway, South Carolina 29528-6005

PREPARED BY:

REI ENGINEERS

Engineering solutions for tomorrow®

2090 Executive Hall Road
Suite 115
Charleston, South Carolina 29407

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SEALS PAGE

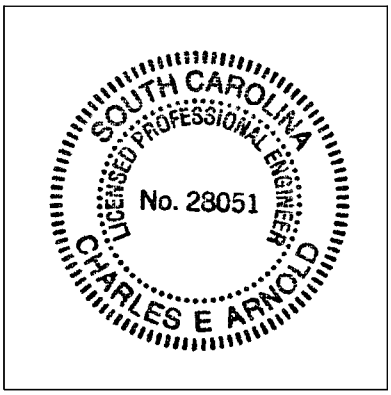
PART 1 - GENERAL

1.1 SUMMARY

A. Design Firm: REI Engineers, Inc., 2090 Executive Hall Road, Suite 115, Charleston, SC 29407.

B. Design Professional for Myrtle Beach High School Wall Repairs with Project Manual dated July 16, 2021.

Professional Engineer



Registered Exterior Wall Consultant

END OF SECTION 00 01 07

SECTION 011000 - SUMMARY

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Contract description.
2. Summary of Work
3. Work by Owner or other Work at the Site.
4. Owner-furnished products.
5. Contractor's use of Site and premises.
6. Future work.
7. Work sequence.
8. Owner occupancy.
9. Permits.
10. Specification conventions.

1.2 CONTRACT DESCRIPTION

A. Work of the Project includes construction or alteration per the project drawings.

B. Contract with Owner according to Conditions of Contract.

1.3 SUMMARY OF WORK

A. This work includes the provision of labor, material, equipment, supervision and administration to integrate the work outlined in these specifications into the total building system such that no leakage into the system occurs. In general, the scope of work includes:
1. Base Bid- Exterior Wall Restoration
a. Install new helical anchors where indicated in Contracts Drawings as specified in Section 04 05 19 “Masonry Helical Anchors”.
b. Repoint masonry mortar joints where indicated in Contract Drawings as specified in Section 04 05 24 “Masonry Repointing”.
c. Install new metal wall panels where indicated in Contract Drawings as specified in Section 07 42 13 “Metal Wall Panels”.
d. Install new associated sheet metal flashings where indicated in Contract Drawings as specified in Section 07 62 00 “Sheet Metal Flashing and Trim”.
2. Alternate No. 1
a. Install new ATAS International, Inc. Multi Purpose Panels (MPN120) where indicated in Contract Drawings as specified in Section 07 42 13 “Metal Wall Panels”.

1.4 WORK BY OWNER OR OTHERS

A. If Owner-awarded contracts interfere with each other due to work being performed at the same time or at the same Site, Owner will determine the sequence of work under all contracts according to "Work Sequence" and "Contractor's Use of Site and Premises" Articles in this Section.

B. Coordinate Work with utilities of Owner and public or private agencies.

C. Work under this Contract includes:
   1. Work as indicated on Drawings.

D. Items noted NIC (Not in Contract) will be furnished and installed by Owner.

1.5 OWNER-FURNISHED PRODUCTS

A. Owner's Responsibilities:
   1. Upon delivery, inspect products jointly with Contractor.
   2. Submit claims for transportation damage and replace damaged, defective, or deficient items.

B. Contractor's Responsibilities:
   1. Arrange for and deliver to Owner Shop Drawings, Product Data, and Samples to Contractor.
   2. Arrange and pay for delivery to Site.
   3.
   4. Review Owner-reviewed Shop Drawings, Product Data, and Samples.
   5. Receive and unload products at Site; inspect for completeness or damage jointly with Owner.
   6. Handle, store, install, and finish products.
   7. Repair or replace items damaged after receipt.
   8. Arrange for manufacturers' warranties, inspections, and service.

1.6 CONTRACTOR'S USE OF SITE AND PREMISES

A. Limit use of Site and premises to allow:
   1. Owner occupancy.
   2. Work by Owner.

B. Construction Operations: Limited to areas indicated on Drawings.
   1. Noisy and Disruptive Operations (such as Use of Jack Hammers and Other Noisy Equipment): Not allowed in close proximity to existing building during regular hours of operation. Coordinate and schedule such operations with Owner to minimize disruptions.

C. Utility Outages and Shutdown:
   1. Coordinate and schedule electrical and other utility outages with Owner.
   2. Outages: Allowed only at previously agreed upon times. In general, schedule outages at times when facility is not being used.

D. Construction Plan: Before start of construction, submit three copies of construction plan regarding access to Work, use of Site, and utility outages for acceptance by Owner. After acceptance of plan, construction operations shall comply with accepted plan unless deviations are accepted by Owner in writing.

1.7 PERMITS

A. These Specifications are written in imperative mood and streamlined form. This imperative language is directed to Contractor unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01210

ALLOWANCES PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SECTION INCLUDES

A. Allowances indicated in the Bid Proposal Form to be included in Contract Amount.

1. Selected materials and equipment, and in some cases, their installation, are shown and specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. Additional requirements, if necessary, will be issued by change order.
2. Allowances may be used in lieu of metering for temporary construction site utility services or to reimburse project related work performed by University forces, for example, keying.

1.3 RELATED SECTIONS

A. Refer to product Specifications Sections identified in Allowance description.

1.4 GENERAL REQUIREMENTS FOR ALLOWANCES

A. Contractor shall submit cost data and other descriptive data to establish basis used by Contractor for determining costs in Contract Amount attributable to each Allowance.

B. Any amount not fully consumed shall be adjusted by change order.

1. The Contractor will be credited for his actual cost of labor, materials, and other actual costs WITHOUT mark-up.
2. Any unused allowances shall be returned to the Owner using a credit change order for the full amount of the value unused.
3. Should the Contractor's actual costs exceed the specified allowance, the Contractor's Contract Amount will be adjusted by change order in accordance with Contract.

PART 2 - PRODUCTS

2.1 LUMP SUM ALLOWANCES

CONTINGENCY ALLOWANCE:

a. The Contractor shall include a contingency **allowance of $30,000.00**in their proposal.

PART 3 - EXECUTION

3.1 SELECTION OF PRODUCTS

A. Owner's Representative and Architect will:
   1. Consult with Contractor for considerations to be given in selection of products, suppliers and qualified installers.
   2. Make selection in consultation with HCS Facility staff. Obtain written direction by HCS's Representative designating:
      a. Product, color, design and finish.
      b. Accessories and attachments.
      c. Suppliers and qualified installers, as applicable.
      d. Allowance amount to be included in Contract Amount.
      e. Construction Contract warranty and manufacturer's guarantee provisions.

B. Contractor shall:
   1. Assist HCS Facility staff's Representative and Architect in determining qualified suppliers or installers.
   2. Obtain proposals from suppliers and installers.
   3. Make cost and constructability recommendations to Owner's Representative and Architect for consideration in product, supplier and qualified installer selections.
   4. Notify Owner's Representative and Architect promptly of:
      a. Reasonable objections Contractor may have against any supplier or party under consideration for installation.
      b. Effects on Construction Schedule anticipated by selections under consideration.

3.2 CONTRACTOR'S RESPONSIBILITIES

A. Upon notification of selection, Contractor shall execute purchase agreement with designated supplier and enter into contract with designated qualified installer, as applicable.

B. Contractor shall make all arrangements for and submit shop drawings, product data and samples as required.

C. Contractor shall make all arrangements for pick-up, delivery, handling and storage of products.

D. Upon delivery, Contractor shall promptly inspect products for damage or defects. Should damage or defects be found, Contractor shall effect return, replacement or repair of products, as appropriate, and process claims for transportation damage.

E. Contractor shall apply, install and finish products in compliance with requirements

of applicable Sections of Specifications.

3.3 ADJUSTMENT COSTS

A. Should the net cost of the Allowance be more or less than the amount included in the Contract Amount, the Contract Amount shall be adjusted in accordance with provisions of the Contract General Conditions and a Change Order shall be executed.

B. Adjustment shall be made only for:
   1. Increase or decrease in handling costs at site, labor, installation costs, overhead, profit, and other expenses resulting from final selection under Allowance.
   2. Increase or decrease in product cost resulting from final selection under Allowance.
   3. Increase or decrease in product, application, installation and finishing costs resulting from change in quantity stated in Allowance.

END OF SECTION

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 CONTRACT DOCUMENT

A. The **Contract Agreement** with referenced attachments, technical specifications and drawings including all project addenda constitute the Scope of the Work.

B. Specific project requirements are included in the Contract Agreement and contain, but may include more than the following:

1. Pre-Construction Meeting
2. Construction Management
3. Conformance to applicable Codes and Laws
4. Project Schedule
5. SLED Background checks
6. Submittals
7. Record Drawings
8. Quality Control
9. Cut and Patching
10. Jobsite Supervision
11. Work site control and clean-up.
12. Material testing and Inspections
13. Warranties and Guarantees
14. Traffic Control and Safety

C. Important safety and specific Horry County School requirements are contained in the Contract Agreement and specifically Section 83 "Mandatory Safety and Conduct Requirements."

1.2 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Requirements:

1. Those work restrictions and limitations listed on the **Scope of Work (Exhibit A)** and the **Contract Agreement**.

1.3 UTILITY USE AND CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless specifically noted otherwise within the Scope of Work (Exhibit A) to the Contract Agreement. Allow other entities to use temporary

services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.

B. Requirement for temporary utilities if paid for by the Owner:

1. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations at no cost to the Owner.
2. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations at no cost to the Owner.
    a. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
    b. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.4 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

1.6 DEFINITIONS

A. Included within the **Contract agreement** and within each specific specification section.

PART 2 - PRODUCTS

2.1 TEMPORARY FENCING

A. Chain-Link Fencing: Minimum 2-inch , 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-

inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top rails.

B. Portable Chain-Link Fencing: Minimum 2-inch , 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide galvanized-steel bases for supporting posts.

2.2 TEMPORARY FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect**,** and construction personnel office activities and to accommodate Project meetings specified in **Contract agreement**. Keep office clean and orderly.

C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 017700 "Closeout Procedures".

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

1. Locate facilities to limit site disturbance.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

D. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits indicated on Drawings.

1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.

C. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

D. Parking: Provide temporary parking areas for construction personnel.

E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.

1. Identification Signs: Provide Project identification signs as indicated on Drawings.
2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.

    a. Provide temporary, directional signs for construction personnel and visitors.

3. Maintain and touchup signs so they are legible at all times.

F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

E. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.

F. Site Enclosure Fence: Prior to commencing earthwork, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations and / or as indicated on Drawings.
2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.

G. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized

entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.

H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

I. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

J. Covered Walkway: Erect protective, covered walkway for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction and requirements indicated on Drawings.

1. Construct covered walkways using scaffold or shoring framing.
2. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
3. Paint and maintain appearance of walkway for duration of the Work.

K. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Operate Project-identification-sign lighting daily from dusk until 12:00 midnight.

D. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

E. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 013100

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. Installation of the Work.
4. Cutting and patching.
5. Coordination of Owner-installed products.
6. Progress cleaning.
7. Starting and adjusting.
8. Protection of installed construction.

1.2 INFORMATIONAL SUBMITTALS

1.3 QUALITY ASSURANCE

A. Acceptable Contractor:
1. Be certified in writing for a minimum of two years by the materials manufacturer to install the primary products.
2. Have an Experience Modification Rate (EMR) of 0.9 or less when averaged over the last three (3) years.
3. Have a minimum of five (5) years' experience in installing the same or similar materials specified under the same firm name as that submitting the bid. If requested, submit a copy of firm's Articles of Incorporation to verify years in business. Also, all crew workers on site are to be experienced and have a working knowledge of the system being installed.
4. Principals of the firm to have a minimum of ten (10) years' experience in the estimating, supervision, management and administration of a contracting firm engaged in the application of building envelope involving removal of the existing building envelope systems.
5. Licensed by state work is occurring in for the type and dollar amount of work contemplated by these Contract Documents.
6. Never filed bankruptcy or filed for protection from creditors.
7. At any time during the construction and completion of work covered by these Specifications, if the conduct of any workman of the various crafts be determined unsuitable or a nuisance to the Owner or Engineer, or if the workman be considered incompetent or detrimental to the work, the Contractor shall order such party removed immediately from the grounds with the person not returning at any time during the course of work on the project.

8. During the performance of any work by the Contractor or subcontractors, the Contractor shall provide for the entire length of the project a foreman meeting the following requirements:
    a. Foreman shall be in attendance at the project site at all times during the progress of the work.
    b. Fluent in the English language (i.e. reading, writing and speaking).
    c. In possession of mobile telephone at all times.
9. During the performance of any work by the Contractor or subcontractors, the Contractor shall provide for the entire length of the project a full-time onsite superintendent/representative meeting the following requirements:
    a. For the purpose of these Specifications the designation “superintendent” is hereby defined as the individual present on the job site at all times while work is being performed, and whose primary responsibility is to supervise and direct the performance of the Work.
    b. The superintendent shall be in attendance at the project site at all times during the progress of the work and his duties as superintendent shall be limited to this project only. The superintendent shall supervise and instruct workmen without engaging in the work process. Should the superintendent be absent temporarily from the project at any time, he shall designate a competent foreman to assume duties. During the superintendent’s absence the foreman shall not engage in the work process but shall supervise and instruct only. Likewise, any communications given to the foreman shall be as binding as if given to the Contractor.
    c. It shall be the superintendent’s responsibility to communicate all matters pertaining to the Work with the Owner and/or Engineer. In case of emergency or safety, superintendent shall communicate directly with the Owner and/or Engineer. No decisions regarding changes in the Work will be made without the Owner’s knowledge.
    d. Decision making authority and ability.
    e. Able to demonstrate knowledge of work being installed.
    f. Fluent in the English language (i.e. reading, writing and speaking).
    g. In possession of mobile telephone at all times.
    h. Employed by the Contractor at least six months prior to project commencement.
    i. Owner and Engineer approval.
    j. Once approved, the superintendent will not be changed except with the consent of the Owner unless either prove to be unsatisfactory to the Owner or Contractor or cease to be in the Contractor’s employment.
    k. The superintendent shall have had a minimum of five (5) years continuous experience as a job superintendent.
10. No later than ten days prior to the pre-construction conference, Contractor shall provide the Owner, in writing, the names of the proposed project manager, superintendent, and foreman for approval. If he so determines, the Owner, without giving cause, may request an additional name, or names, be submitted for approval. The Owner will notify the Contractor of his acceptance at least 48 hours prior to the pre-construction conference.

B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, **mechanical and electrical systems,** and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to **local utility and to Owner** that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines,

services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Owner.

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Engineer **and Owner** promptly.

3.4 FIELD ENGINEERING

A. Identification: Owner will identify existing benchmarks, control points, and property corners.

B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect **or Owner**. Report lost or destroyed permanent benchmarks or control points promptly.
2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

END OF SECTION 017300

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Construction waste management plan.
   2. Construction waste recycling.
   3. Construction waste adaptive reuse.

1.2 PLAN REQUIREMENTS

A. Develop and implement construction waste management plan as approved by Architect/Engineer for compliance with the following:

   1. USGBC LEED for Schools.

B. Intent:
   1. Divert construction, demolition, and land-clearing debris from landfill disposal.
   2. Redirect recyclable material back to manufacturing process.
   3. Generate cost savings or increase minimal additional cost to Project for waste disposal.

1.3 SUBMITTALS

A. Construction Waste Management Plan: Submit construction waste management plan describing methods and procedures for implementation and monitoring compliance including the following:
   1. Transportation company hauling construction waste to waste processing facilities.
   2. Recycling and adaptive reuse processing facilities and waste type each facility will accept.
   3. Construction waste materials anticipated for recycling and adaptive reuse.
   4. On-Site sorting and Site storage methods.

1.4 CONSTRUCTION WASTE MANAGEMENT PLAN

A. Construction Waste Landfill Diversion: Minimum 50 percent by weight of construction waste materials for duration of Project through resale, recycling, or adaptive reuse.

B. Implement construction waste management plan at start of construction.

C. Review construction waste management plan at preconstruction meeting and progress meetings.

D. Distribute approved construction waste management plan to Subcontractors and others affected by plan requirements.

E. Oversee plan implementation, instruct construction personnel for plan compliance, and document plan results.

F. Purchase products to prevent waste by:

1. Ensuring correct quantity of each material is delivered to Site.
2. Choosing products with minimal or no packaging.
3. Requiring suppliers to use returnable pallets or containers.
4. Requiring suppliers to take or buy back rejected or unused items.

1.5 CONSTRUCTION WASTE RECYCLING

A. Use source separation method or comingling method suitable to sorting and processing method of selected recycling center. Dispose nonrecyclable trash separately into landfill.

B. Source Separation Method: Recyclable materials separated from trash and sorted into separate bins or containers, identified by waste type, prior to transportation to recycling center.

C. Comingling Method: Recyclable materials separated from trash and placed in unsorted bins or container for sorting at recycling center.

D. Materials suggested for recycling include:
1. Packing materials including paper, cardboard, foam plastic, and sheeting.
2. Recyclable plastics.
3. Organic plant debris.
4. Earth materials.
5. Native stone and granular fill.
6. Asphalt and concrete paving.
7. Wood with and without embedded nails and staples.
8. Glass, clear and colored types.
9. Metals.
10. Gypsum products.
11. Acoustical ceiling tile.
12. Carpet.
13. Equipment oil.

1.6 CONSTRUCTION WASTE ADAPTIVE REUSE

A. Arrange with processing facility for salvage of construction material and processing for reuse. Do not reuse construction materials on-Site except as allowed by Architect/Engineer.

B. Materials suggested for adaptive reuse include:
1. Concrete and crushed concrete.
2. Masonry units.
3. Lumber suitable for re-sawing or refinishing.
4. Casework and millwork.
5. Doors and door frames.
6. Windows.
7. Window glass and insulating glass units.
8. Hardware.
9. Acoustical ceiling tile.
10. Equipment and appliances.
11. Fluorescent light fixtures and lamps.
12. Incandescent light fixtures and lamps.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 CONSTRUCTION WASTE COLLECTION

A. Collect construction waste materials in marked bins or containers and arrange for transportation to recycling centers or adaptive salvage and reuse processing facilities.

B. Maintain recycling and adaptive reuse storage and collection area in orderly arrangement with materials separated to eliminate co-mingling of materials required to be delivered separately to waste processing facility.

C. Store construction waste materials to prevent environmental pollution, fire hazards, hazards to persons and property, and contamination of stored materials.

D. Cover construction waste materials subject to disintegration, evaporation, settling, or runoff to prevent polluting air, water, and soil.

3.2 CONSTRUCTION WASTE DISPOSAL

A. Deliver construction waste to waste processing facilities. Obtain receipt for deliveries.

B. Dispose of construction waste not capable of being recycled or adaptively reused by delivery to landfill, incinerator, or other legal disposal facility. Obtain receipt for deliveries.

END OF SECTION

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Final cleaning.
5. Repair of the Work.

1.2 ACTION SUBMITTALS

A. Product Data: For cleaning agents.

B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.3 CLOSEOUT SUBMITTALS

A. Certificates of Release: From all authorities having jurisdiction.

B. Certificate of Insurance: For continuing coverage.

C. Completed and signed Engineers Punch List.

D. Warranties:
1. Warranties to commence on the date of Substantial Completion of the project.
2. Metal Wall Panel finish warranty as outlined in Section 07 42 13 “Metal Wall Panels”.
3. Pre-finished Sheet Metal finish warranty as outlined in Section 07 62 00 “Sheet Metal Flashing and Trim”.
4. Contractor’s Warranty
    a. Five-Year Warranty: Attend two post construction field inspection: the first no earlier than twenty-three (23) months and no later than twenty-four (24) months after the date of Substantial Completion and the second not earlier than fifty-nine (59) months and no later than sixty (60) months after the date of Substantial Completion. Complete corrective action requested by Owner, Engineer, or Manufacturer at no additional cost to the Owner.
        1) Performance Bond limited to the first two years of the Contractor’s five (5) year warranty period.

1.4 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 5 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
2. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
3. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of **5** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
2. Complete final cleaning requirements, including touchup painting.
3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of **5** days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect, Engineer and Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect and Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by the Architect and Engineer, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected. Contractor shall compensate Architect and Engineer at the firm’s standard billing rates for additional reinspection’s beyond the first.
2. Results of completed inspection will form the basis of requirements for final completion.

1.5 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
2. Certified List of Incomplete Items: .
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 5 days prior to date the work will be completed and ready for final inspection and tests. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
   1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected. Contractor shall compensate Architect and Engineer at the firm's standard billing rates for additional reinspection's beyond the first.

1.6 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.

B. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

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

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

C. Construction Waste Disposal: Comply with waste disposal requirements specified.

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

END OF SECTION 017700

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for project record documents, including the following:

1. Record Drawings.
2. Record Specifications.
3. Record Product Data.
4. Miscellaneous record submittals.

1.2 CLOSEOUT SUBMITTALS

1. Record Drawings: Comply with the following:

2. Number of Copies: Submit **one** set(s) of marked-up record prints.
3. Number of Copies: Submit copies of record Drawings as follows:

    a. Initial Submittal:

        1) Submit **one** paper-copy set(s) of marked-up record prints.
        2) Engineer will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.

    b. Final Submittal:
        1) Submit PDF electronic files of scanned record prints and one set of prints.
        2) Print each drawing, whether or not changes and additional information were recorded.

B. Record Specifications: Submit **one paper copy** of Project's Specifications, including addenda and contract modifications.

C. Record Product Data: Submit **one paper copy and annotated PDF electronic files and directories** of each submittal.

1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit **one paper copy and annotated PDF electronic files** of each submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.

    a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    b. Accurately record information in an acceptable drawing technique.
    c. Record data as soon as possible after obtaining it.
    d. Record and check the markup before enclosing concealed installations.

2. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
4. Mark important additional information that was either shown schematically or omitted from original Drawings.
5. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

2.2 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
5. Note related Change Orders**, record Product Data,** and record Drawings where applicable.

B. Format: Submit record Specifications as **scanned PDF electronic file(s) of marked-up paper copy of Specifications**.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.

B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Engineer's **and Owner's** reference at all times work is being performed.

END OF SECTION 017839

SECTION 04 05 00

MORTAR AND GROUT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Provide mortar for replacement masonry.
2. Provide mortar for repointing.

1.2 RELATED DOCUMENTS

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

1. Section 04 05 24 "Masonry Repointing"
2. Section 04 20 00 "Unit Masonry"

1.3 REFERENCES

A. Refer to the following references for specification compliance:
1. 2018 South Carolina Building Code
2. ASTM International

a. C40 - Organic Impurities in Fine Aggregates for Concrete
b. C91 - Masonry Cement
c. C109 - Compressive Strength of Hydraulic Cement Mortars
d. C144 - Aggregate for Masonry Mortar
e. C150 - Portland Cement
f. C207 - Hydrated Lime for Masonry Purposes
g. C270 - Mortar for Unit Masonry
h. C307 - Tensile Strength of Chemical Resistant Mortar, Grouts, and Monolithic Surfacing
i. C321 - Bond Strength of Chemical Resistant Mortars
j. C348 - Flexural Strength of Hydraulic Cement Mortars
k. C404 - Aggregate for Masonry Grout
l. C476 - Grout for Masonry
m. C595 - Blended Hydraulic Cement
n. C780 - Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
o. C979 - Pigments for Integrally Colored Concrete
p. C1019 - Sampling and Testing Grout
q. C1329 - Mortar Cement

3. International Masonry Institute (IMI)
4. Brick Industry Association (BIA)

1.4 SUBMITTALS

A. Refer to Section 01 33 00 "Submittal Procedures".

B. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

C. Manufacturer's Instructions: Latest edition of the Manufacturer's current material specifications and installation instructions.

D. Samples: Furnish mortar color samples to match existing mortar for acceptance by Engineer and Owner.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver masonry materials in original sealed containers marked with name of manufacturer and identification of contents.

B. Store masonry materials under waterproof covers on planking clear of ground, and protect damage from handling, dirt, stain, water and wind.

1.6 MORTAR SAMPLING AND TESTING

A. Sample and submit mortar for testing and analysis by a qualified testing firm to determine mortar mix requirements prior to work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Masonry Cements: ASTM C 91, Type N

B. |Sand: ASTM C 144

1. Light colored sand for mortar for laying face brick.
2. Test sand for color value in accordance with ASTM C40. Sand producing color darker than specified standard is unacceptable.

C. Admixtures:

1. No calcium Chloride permitted.
2. No air-entraining admixtures or material containing air-entraining admixtures.
3. No antifreeze compounds added.
4. No admixtures containing added.

D. Water: Clean and potable.

2.2 MORTAR AND GROUT MIXES

A. Masonry Cement: Conform to ASTM C270, Type N.
1. Compressive strength: min. 750 psi at 28 days.

2. Water retention: Min. 75%
3. Air Content Max: 14%
4. Aggregate Ration: Not less than 2 1/4 and not more than 3 1/2 the sum of the separate volumes of cementitious materials.

PART 3 - EXECUTION

3.1 MIXING

A. Mix in a mechanically operated mortar mixer for at least three minutes but not more than five minutes.

B. Measure ingredients by volume. Measure all ingredients using a container with a known capacity.

C. Mix water with dry mortar ingredients in sufficient amount to provide a workable mixture which will adhere to vertical surfaces of masonry units.

D. Mix water with grout dry ingredients in sufficient amount to bring grout mixture to a pouring consistency.

E. Mortar that has stiffened because of loss of water through evaporations:

1. Re-tempered by adding water to restore to proper consistency and workability.
2. Discard mortar that has reached its initial set or has not been used within two hours.

F. Pointing Mortar:

1. Mix dry ingredients with enough water to produce a damp mixture of workable consistency which will retain its shape when formed into a ball.
2. Allow mortar to stand in dampened condition for one to 1-1/2 hours.
3. Add water to bring mortar to a workable consistency prior to application.

3.2 MORTAR USE LOCATION

A. Use Type N mortar for other masonry work.

B. Use Type N mortar for repointing work.

END OF SECTION 04 05 00

SECTION 04 05 24

MASONRY REPOINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Repointing of damaged or deteriorated mortar joints.

1.2 RELATED DOCUMENTS

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

1. Section 04 05 00 "Mortar and Grout"
2. Section 04 20 00 "Unit Masonry"

1.3 REFERENCES

A. Refer to the following references for specification compliance:

1. ASTM International
2. International Masonry Institute (IMI)
3. Brick Industry Association (BIA)

1.4 PROJECT CONDITIONS

A. Protect newly pointed joints from rain, until pointed joints are sufficiently hard enough to prevent damage.

B. Cold Weather Protection:

1. Repointing may be performed in freezing weather when methods of protection are utilized.
2. Comply with applicable sections of "Recommended Practices for Cold Weather Construction" as published by International Masonry Industry All Weather Council.
3. Maintain surfaces at temperatures to prevent mortar from freezing or causing other damage to mortar.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Repointing Mortar: Refer to Section 04 05 00 "Mortar and Grout" for mortar requirements.

PART 3 - EXECUTION

3.1 REMOVAL OF EXISTING MORTAR JOINTS

A. Cut out existing mortar joints, both bed and head joints, and remove by means of a toothing chisel or a special pointer's grinder, to a uniform depth of 3/4-inch, or until sound mortar is reached. Take care to not damage edges of existing masonry units to remain.

B. Remove dust and debris from the joints by brushing, blowing with air or rinsing with water. Do not rinse when temperature is below freezing.

3.2 INSTALLATION

A. Prior to application of mortar, dampen joints to be repointed. Prior to application of pointing mortar, allow masonry units to absorb surface water.

B. Tightly pack mortar into joints in thin layers, approximately 1/4-inch thick maximum.

C. Allow layer to become "thumbprint hard" before applying next layer.

D. Pack final layer flush with surfaces of masonry units. When mortar becomes "thumbprint hard", tool joints.

E. Tooling of Joints

1. Tool joints with a jointing tool to produce a smooth, compacted, concaved joint.
2. Tool joints in patch work with a jointing tool to match the existing surrounding joints.

3.3 CLEANING

A. Clean exposed masonry surfaces on completion.

B. Remove mortar droppings and other foreign substances from wall surfaces.

C. First wet surfaces with clean water then wash down with a solution of soapless detergent specially prepared for cleaning brick.

D. Brush with stiff fiber brushes while washing, and immediately thereafter hose down with clean water.

E. Free clean surfaces from traces of detergent, foreign streaks or stains. Protect materials during cleaning operations including adjoining construction.

F. Use of muriatic acid for cleaning is prohibited.

END OF SECTION 04 05 24

SECTION 04 20 00

UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Provide brick masonry for the areas shown on drawings.

1.2 RELATED DOCUMENTS

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

1. Section 04 05 00 "Mortar and Grout"
2. Section 04 05 24 "Masonry Repointing"

1.3 SUBMITTALS

A. Refer to Section 01 33 00 "Submittal Procedures".

B. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

C. Samples: Review Owners existing veneer and match new veneer to existing for Engineer and Owner approval.

PART 2 - PRODUCTS

2.1 BRICK

A. General: Provide shapes indicated and as follows for each form of brick.

1. Provide units without cores or frogs and with exposed surfaces finished for ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces.

B. Provide special shapes for applications requiring brick of size, form, color and texture on exposed surfaces that cannot be produced by sawing.

1. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes and lintels.
2. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.

C. Face Brick: ASTM C 216 and as follows:

1. Grade: SW
2. Initial Rate of Absorption: Between 5 and 20 g/30 sq in per minute when tested per ASTM C 67.
3. Surface Coloring: Brick with surface coloring, other than flashing or sand-finished brick, withstand 50 cycles of freezing and thawing per ASTM C 67 with no observable difference in the applied finish when viewed from 10 feet.
4. Type: FBS
5. Size: Bricks manufactured to the following actual dimensions within tolerances specified in ASTM C 216.

    a. Modular: 3-1/2 to 3-5/8 inches thick by 2-1/4 inches high by 7-1/2 to 7-5/8 inches long. Provide solid uncored brick where holes would normally be exposed.
    b. Utility: 3-1/2 to 3-5/8 inches thick by 3-1/2 to 3-5/8 inches high by 11-1/2 to 11-5/8 inches long.

6. Where shown to "match existing", provide face brick matching color, texture, and size of existing adjacent brickwork.

D. Subject to full compliance with the requirements, provide units from a single source.

1. Manufacturers:

    a. General Shale Brick
    b. Ashe Brick Co.
    c. Boren Brick Co.
    d. Cherokee Sanford Group, Inc.
    e. Statesville Brick
    f. Boral Brick Co.
    g. Taylor Clay Products
    h. Triangle Brick
    i. Lee Brick
    j. Engineers accepted equivalent

2.2 MASONRY ANCHORS

A. Bent Wire Ties: Rectangular units with closed ends and not less than 4 inches wide. Z-shaped ties with ends bent 90 degrees to provide hooks not less than 2 inches long.

1. Fabricate wire from 1/4 inch diameter, hot-dip galvanized steel wire.
2. Where coursing between wythes does not align, use adjustable ties composed of 2 parts; 1 with pintles, the other with eyes; with maximum misalignment of 1-1/4 inches.

B. Corrugated Wall Ties: Minimum 22-gauge hot dipped galvanized steel with corrugations and minimum width of 7/8 inch.

C. Adjustable Masonry Veneer Anchors: Provide two-piece assemblies that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall, for attachment over sheathing to wood or metal studs or CMU, and as follows:

1. Structural Performance Characteristics: Capable of withstanding a 100-lbf load in both tension and compression without deforming or developing play in excess of 0.05 inch.

2.3 MASONRY ACCESSORIES

A. Weep Vent: One-piece, flexible extrusion manufactured from ultraviolet-resistant polypropylene copolymer, designed to weep moisture in masonry cavity to exterior, sized to fill head joints with outside face held back 1/8 inch from exterior face of masonry, in color selected from manufacturer's standard.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions for compliance with requirements for installation tolerances and other conditions affecting performance.

B. Prepare written report the listing conditions detrimental to performance.

C. Verify that foundations are within tolerances specified.

D. Verify that reinforcing dowels are properly placed.

E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Build cavity and composite walls and other masonry construction to the full thickness shown.

B. Build single-wythe walls to the actual widths of masonry units, using units of widths indicated.

C. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units to provide a continuous pattern and to fit adjoining construction. Where possible, use full-size units without cutting. Install cut units with cut surfaces and, where possible, cut edges concealed.

D. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.

E. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.

F. Wetting of Brick: Wet brick before laying if the initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested per ASTM C 67. Allow units to absorb water so they are damp but not wet at the time of laying.

3.3 REPLACEMENT OF MASONRY UNITS

A. Cut out mortar joints surrounding masonry units that are to be replaced.

1. Units removed may be broken and removed, providing surrounding units to remain are not damaged.
2. Once the units are removed, carefully chisel out the old mortar and remove dust and debris.
3. If units are located in exterior wythe of a cavity or veneer wall, exercise care to prevent debris falling into cavity.

B. Dampen surfaces of the surrounding units before units are placed.

1. Allow masonry to absorb surface moisture prior to starting installation of the replacement units.
2. Butter contact surfaces of existing masonry and replacement masonry units with mortar.
3. Center replacement masonry units in opening and press into position.
4. Remove excess mortar with a trowel.
5. Point around replacement masonry units to ensure full head and bed joints.
6. When mortar becomes "thumbprint hard", tool joints.

3.4 CONSTRUCTION TOLERANCES

A. Comply with tolerances in ACI 530.1/ASCE 6/TMS 602 and the following:

B. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet, nor 1/2 inch maximum.

C. For exposed bed and head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.

3.5 MORTAR BEDDING AND JOINTING

A. Lay hollow masonry units as follows:

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

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

3.6 CAVITIES

A. Keep cavities clean of mortar droppings and other materials during construction. Strike joints facing cavities flush.

B. Installing Cavity-Wall Insulation:

1. Place small dabs of adhesive, spaced approximately 12 inches o.c. both ways, on inside face of insulation boards, or attach with plastic fasteners designed for this purpose.
2. Fit courses of insulation between wall ties and other confining obstructions in cavity, with edges butted tightly both ways.
3. Press units firmly against inside wythe of masonry or other construction.
4. Fill cracks and open gaps in insulation with additional insulation or minimal-expanding spray foam with a low-pressure build.

3.7 ANCHORING MASONRY VENEERS

A. Anchor masonry veneers to wall framing with masonry-veneer anchors to comply with the following requirements:

1. Fasten each anchor through sheathing to wall framing/to CMU back-up wall with fasteners provided by anchor manufacturer suitable for back-up wall substrate.
2. Embed tie sections in masonry joints.
3. Locate anchor sections to allow maximum vertical differential movement of ties up and down.
4. Space anchors no more than 18 inches on center vertically and 24 inches on center horizontally, with not less than 1 anchor for each 2 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 8 inches, around the perimeter.
5. Provide wall ties anchored to the back-up wall spaced at 24 inches on center maximum along the top course of the replacement masonry for the through wall flashing system replacement.

3.8 REPAIR

A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.

B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application.

3.9 CLEANING

A. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

B. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Engineer's approval of sample cleaning before proceeding with cleaning of masonry.

3. Clean brick by the bucket-and-brush hand-cleaning method described in BIA Technical Notes No. 20, using job-mixed detergent solution.
4. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2 applicable to type of stain on exposed surfaces.

3.10 DISPOSAL

A. Remove masonry waste and legally dispose.

END OF SECTION 04 20 00

SECTION 06 10 00

ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Rough Carpentry work required to facilitate installation of roof assembly including:

   a. Provide pressure treated wood blocking and plywood sheathing.
   b. Resecure rough carpentry to remain in place.
   c. Replace damaged, rotted or deteriorated rough carpentry with pressure treated rough carpentry.

1.2 RELATED DOCUMENTS

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

1. Section 07 62 00 "Sheet Metal Flashing and Trim"

1.3 REFERENCES

A. Refer to the following references, current edition for specification compliance:

1. 2018 South Carolina Building Code
2. American Society for Testing and Materials (ASTM)
3. American Wood-Protection Association (AWPA)

   a. AWPA E12 - Standard Method of Determining the Corrosion of Metal in Contact with Wood.
   b. AWPA M4 - Standard for the Care of Preservative Treated Wood Products.
   c. AWPA P5 - Standard for Waterborne Preservatives.
   d. AWPA P23 - Standard for Chromated Copper Arsenate Type C (CCA-C).
   e. AWPA P25 - Standard for Inorganic Boron (SBX).
   f. AWPA P26 - Standard for Alkaline Copper Quat Type A (ACQ-A).
   g. AWPA P27 - Standard for Alkaline Copper Quat Type B (ACQ-B).
   h. AWPA P28 - Standard for Alkaline Copper Quat Type C (ACQ-C).
   i. AWPA P29 - Standard for Alkaline Copper Quat Type D (ACQ-D).
   j. AWPA P47 - Standard for DCOI/Imidacloprid/Stabilizer, Waterborne (EL2).
   k. AWPA P48 - Standard for Copper Azole Type C (CA-C).
   l. AWPA T1 - Use Category System: Processing and Treatment Standard.
   m. AWPA U1 - Use Category System: User Specification for Treated Wood.

4. American Plywood Association (APA)
5. American National Standard

    a. ANSI/SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems

6. Underwriters Laboratories, Inc. (UL)
7. FM Global (FM)

    a. Data Sheet 1-49 Perimeter Flashing

1.4 DEFINITIONS

A. Rough Carpentry includes carpentry work not specified as part of other Sections and generally not exposed.

B. KDAT: Kiln Dried After Treatment.

1.5 SUBMITTALS

A. Refer to Section 01 33 00 "Submittal Procedures".

B. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

1.6 QUALITY ASSURANCE

A. Inspect wood to be installed for damage, warping, splits, and moisture content as defined by the applicable wood products industry standards. Reject materials that do not comply.

B. Rough carpentry to present a smooth, consistent substrate for roof system and flashing installation.

C. Qualifications of workers: Provide sufficient, competent and skilled carpenters in accordance with accepted practices and supervisors present at all times during execution of the work. Be thoroughly familiar with type of construction involved and related work and techniques specified.

D. Moisture Content:

1. Kiln Dry After Treatment (KDAT).
2. Do not store or install treated lumber used in the roofing assembly in a manner exposing it to rain.
3. Treated lumber: 19% or less before being covered/enclosed into roofing assembly.
4. Plywood: 18% or less before being covered/enclosed into roofing assembly.

E. Label: Bear the stamp of the AWPA Quality Mark, indicating compliance with the requirements of the AWPA Quality Control Program.

F. Lumber Standards: Comply with PS 20 and applicable rules of respective grading and inspecting agencies for species and products indicated.

G. Plywood Product Standards: Comply with PS 1 (ANSI A 199.1) or, for products not manufactured under PS 1 provisions, with applicable APA Performance Standard for type of panel indicated.

H. Installation of rough carpentry for roofing and flashing terminations to ensure plumb, uniform and level metal flashings.

I. Install rough carpentry to ensure roof membrane flashing transitions are smooth for complete roof drainage and appearance.

J. Installation of all fasteners and associated materials to secure rough carpentry as detailed and specified.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Store a minimum of four inches above ground on framework or blocking. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks. Cover with protective waterproof covering providing for adequate air circulation and ventilation

B. Avoid exposure to precipitation during shipping, storage or installation. If material does become wet, replace or permit to dry prior to covering or enclosure by other roofing, sheet metal or other construction materials (except for protection during construction).

C. Immediately upon delivery to job site, place materials in area protected from weather.

D. Do not store seasoned materials in wet or damp portions of building.

E. Protect sheet materials from corners breaking and damaging surfaces, while unloading.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Lumber:

1. No. 2 or better spruce or southern yellow pine.
2. Sound, thoroughly seasoned, dressed to nominal finish dimension, and free of warpage, cupping, and bowing.
3. Dimensions determined by job conditions or as indicated in detail drawings.

B. Plywood Sheathing:

2.2 FASTENERS

A. General:

1. Stainless steel or as accepted by Engineer.
2. Fasteners securing pressure treated lumber manufactured for corrosion resistance and exposures associated with pressure treated wood applications.

3. Do not use nails at roof edges to fasten rough carpentry, lumber, plywood, etc. Use screws, anchors, and/or machine bolts to secure rough carpentry at roof perimeter edges.
4. Do not use masonry screws, spikes, and drive-pins shall to fasten edge/perimeter nailers to concrete. Utilize minimum 1/2 inch diameter anchors or bolts to secure roof edge nailers to concrete.
5. Do not secure or fasten edge/perimeter wood nailers to hollow core concrete masonry; grout concrete masonry units and provide minimum embedment of fasteners to meet anchor manufacturer's installation instructions.
6. Do not secure edge/perimeter wood nailers to brick masonry as the primary securement method.

B. Screws: No. 10 or greater, stainless steel wood screws with flat head, or insulation screws. Length to embed into base substrate a minimum of 1-1/2 inches.

C. Self-Drilling Screws:

1. For steel deck and light gauge steel framing (16-ga. or less): #14-13 DP1, pancake or panhead, corrosion resistant, ASTM A153, FM Approved, self-drilling and self-tapping screw, length to provide minimum 3 pitches of thread through metal thicknesses.

    a. Manufacturers:

        1) ITW Buildex Teks
        2) Triangle Fasteners
        3) SFS Intec
        4) Engineers accepted equivalent.

2. For structural steel (greater than 12-gauge): #12-24 DP5 (for steel thickness up to 1/2 inch) or DP4 (for steel thickness from 1/8 inch to 3/8 inch), flat or hex head, corrosion resistant, self-drilling/self-tapping fastener of length to provide minimum 3 pitches of thread through metal thicknesses.

    a. Manufacturers:

        1) ITW Buildex Teks
        2) SFS Intec
        3) Blazer
        4) Engineers accepted equivalent

D. Epoxy Adhesive Anchor System: Minimum 1/2-inch diameter, corrosion resistant threaded rods supplied by the anchoring system manufacturer, length to provide minimum embedment as required by fastener manufacturer based upon substrate being secured. Screen for substrate provided by fastener manufacturer. Corrosion resistant nut and 1-1/2 inch diameter flat washer.

1. Products:

    a. Hilti Hit Hy-10 Plus
    b. Powers Fasteners, Inc. AC100 Anchoring System
    c. Red Head Epcon C6 Fast Curing Epoxy
    d. Engineers accepted equivalent

E. Concrete/Masonry Anchors: Sleeve-Type, or Wedge-Type, Expansion Anchor: Minimum 1/2-inch diameter, Type 304 or 316 Stainless Steel, Expansion Anchor Bolt Assembly of length as required to provided minimum embedment as required by fastener manufacturer based upon substrate being secured but not less than minimum 5 inch embedment.

1. Products:

a. Lok/Bolt, Power Bolt or Power-Stud by Powers Fasteners
b. Redi-Bolt, Dynabolt or Trubolt by Red Head Anchoring Systems
c. Kwik Bolt by Hilti
d. Engineers accepted equivalent.

F. Masonry Screws: 1/4-inch minimum diameter, Type 410 stainless steel with flat head. Length to provide minimum 1 inch embedment into substrate.

1. Products:

a. Tapcon by ITW Buildex,
b. KWIK-CON II by Hilti
c. Powers Fasteners Tapper+
d. Engineers accepted equivalent.

G. Grouted Bolts:

1. Bolt: Corrosion resistant threaded J bolt meeting ASTM A 307, Grade A with ASTM A 563 hex nuts and flat washers, diameter of 1/2 inch.
2. Grout: High strength, non-metallic, non-shrink grout for precision grouting and general construction Conform to ASTM C476 and ASTM C 1107.

a. Products:

1) Commercial Grade Quikrete
2) Precision Grout
3) Kauffman SureGrout
4) Engineers accepted equivalent.

b. Grout type proportioned by volume as follows:

1) Portland cement or blended hydraulic cement: one part.
2) Hydrated lime: 0 to 1/10 part.
3) Fine aggregate: 2-1/4 to three times sum of volumes of cement and lime used.
4) Coarse aggregate: one to two times sum of volumes of cement and lime used.
5) Sum of volumes of fine and coarse aggregates: Do not exceed four times sum of volumes of cement and lime used.

H. Toggle Bolt: 1/4 inch diameter toggle bolt consisting of machine screw and spring wing toggle with flat mushroom head, length as required by conditions.

I. Washers: Fasteners heads for screws, anchors and bolts terminating at the surface of nailers provided with a minimum 5/8 inch diameter, stainless steel or similar corrosion resistance flat washer provided by fastener manufacturer, unless washer is provided from factory as part of the fastener assembly.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Inspect substrates to receive rough carpentry, and ensure substrates are in satisfactory condition prior to installation of rough carpentry.

B. Inspect rough carpentry including fasteners for material condition before proceeding with installation. Replace deteriorated, rotted, damaged, split, warped, twisted or wet materials.

1. Refer to Section 01 22 00 "Unit Prices".

C. Remove cants, tapered edge strips, debris, fasteners, etc. that interfere with the installation of rough carpentry.

D. Notify Engineer in writing of unsatisfactory conditions.

E. Commencement of work signifies acceptance of substrates. Correct defects in work resulting from accepted substrates at no additional expense to the Owner.

3.2 PREPARATION

A. Steel/Metal Substrates:

1. Coat steel and metal with a uniform, heavy application of asphalt primer, or separate by membrane or other acceptable means to prevent contact between steel/metal and treated wood products.

B. Roof Deck and Structure:

1. Adjust substrates to receive rough carpentry to ensure completed rough carpentry installation is acceptable for roofing and sheet metal flashings.
2. Coat steel decking with a uniform, heavy application of asphalt primer, or separate by membrane or other acceptable means to prevent contact between steel and treated wood products.
3. Do not allow treated lumber to make direct contact with steel decking.

C. Masonry Walls:

1. Epoxy Adhesive Anchor System:

a. Follow adhesive anchor manufacturer's published instructions for preparation and installation.
b. Pre-drill hole for adhesive anchors.
c. Use compressed air to blow-out and remove dust and moisture before installing adhesive anchors.

2. Grouted Bolts:

   a. Follow grout manufacturers published instructions for preparation and installation.
   b. Clean masonry cavity and install grout stop to prevent grout from entering below the desired cavity area.

3.3 INSTALLATION

A. Replace damaged or deteriorated wood blocking, nailers, and curbs.

B. Re-secure wood nailers at roof edges that are to remain with fastener type and spacing to comply wiht this section.

C. Install wood blocking, nailers, and curbs to achieve a minimum 8 inch flashing height above the roof membrane.

D. Install wood nailers at perimeter roof edges and low profile expansion joints to match insulation height while maintaining a constant nailer height along perimeter edges.

E. Install wood blocking and nailers concurrently with roof system installation. Removal of insulation and/or folding back of roof membrane to install wood blocking and nailers at a later date is not acceptable.

F. Set rough carpentry to required levels and lines, with members plumb, true to line, material cut to fit, and braced to hold work in proper position. Use a belt sander to remove any obtrusive surface irregularities. Drive nails and spikes home; and pull bolt nuts tight with heads and washers in close contact with the wood.

G. Fit rough carpentry to other construction, scribe and cope for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction. Joints between wood shall be installed for a smooth transition.

H. Attachment:

1. Consult the fastener manufacturer's published literature and follow the recommended requirements for pre-drilling, cleaning, placement and compatibility of substrates. Follow manufacturer's requirements for fasteners spacing, substrate preparation and substrate embedment where not specified.
2. Securely attach rough carpentry work to substrate with fasteners. Anchor to resist a minimum force of 300 lbs/lineal foot in any direction.
3. Meet the requirements herein and that of the current FM Loss Prevention Data Sheet 1-49, Perimeter Flashing, for rough carpentry attachment.
4. Install bolts flush with the top surface of nailers where possible to avoid countersinking. Bolt bottom nailers then fasten above nailers where possible. Countersink bolts, nuts and screws flush with wood surfaces only as detailed; countersink a maximum of one half the board thickness.
5. Install fasteners without splitting wood. Pre-drill where necessary. Replace split or damaged wood to provide acceptable conditions.
6. For anchors, pre-drill concrete and masonry units to prevent damage or cracking of the masonry. Consult fastener manufacturer's published guides. Repair or replace damaged masonry with fasteners re-installed in an acceptable location.

7. Fastener spacing: Staggered in two rows 1/3 the board width when board is wider than 6 inches and installed within 3 to 4 inches of each end.

   a. Screws: Securing wood to wood spaced as indicated below, staggered, with two screws installed within 3 to 4 inches of each end of nailer lengths to prevent wood from twisting at board joints.

      1) Field of Roof Pressure greater than 52.5 psf and less than or equal to 75 psf:

         a) Perimeter (Zone 2) spacing of 9 inches maximum.
         b) Corner (Zone 3) spacing of 6 inches maximum.

      2) Field of Roof Pressure greater than 75 psf and less than or equal to 97.5 psf:

         a) Perimeter (Zone 2) spacing of 6 inches maximum.
         b) Corner (Zone 3) spacing of 4 inches maximum.

      3) Field of Roof Pressure greater than 97.5 psf:

   b. Self-Drilling Screws: Securing wood to steel spaced as indicated below, staggered, with one screw within 3 to 4 inches of each end of nailer lengths to prevent wood from twisting at board joints.

      1) Field of Roof Pressure less than or equal to 75 psf: maximum spacing of 12 inches.
      2) Field of Roof Pressure greater than 75 psf: maximum spacing of 6 inches.

   c. Epoxy Adhesive Anchors System: Spaced as indicated below, staggered and an additional fastener within 3 to 4 inches of each end of nailer to prevent boards from twisting at board joints.

      1) Field of Roof Pressure greater than 67.5 psf and less than or equal to 97.5

         a) Perimeter (Zone 2) spacing 36 inches max.
         b) Corner (Zone 3) spacing 24 inches max.

      2) Field of Roof Pressure greater than 97.5 psf.

   d. Concrete/Masonry Anchors: Spaced as indicated below, staggered and an additional fastener within 3 to 4 inches of each end of nailer to prevent boards from twisting at board joints.

      1) Field of Roof Pressure greater than 67.5 psf and less than or equal to 97.5

         a) Perimeter (Zone 2) spacing 36 inches max.
         b) Corner (Zone 3) spacing 24 inches max.

      2) Field of Roof Pressure greater than 97.5 psf.

e. Masonry Screws: Securing wood to concrete or masonry units spaced 12 inches on center maximum, staggered, with fasteners installed within 3 to 4 inches of each end of nailer lengths to prevent wood from twisting at board joints.

8. Plywood Sheathing Securement: Secure at 12 inches on center in Perimeter (Zone 2) and 6 inches on center in Corner (Zone 3) staggered each direction.

I. Select fasteners of size and length that will not be exposed from the building interior and/or from the ground, or remove protruding fasteners, paint or finish to eliminate exposure.

J. Thickness of wood nailers flush with adjacent insulation and other materials. Install additional fasteners to ensure nailers are flush.

K. Unless otherwise detailed, install plywood used as blocking or shim below dimensional lumber such that the fastener head terminates at the dimensional lumber surface.

L. Do not utilize wood nailers at roof perimeters, expansion joints, roof area dividers, etc. less than 3 feet long.

M. When multiple nailers are installed stacked two high or more, offset nailers no less than 12" such that joints at nailer end do not line-up vertically.

N. Fasten each end of nailers with additional fasteners to ensure a smooth transition at butted joints, and to prevent warping and/or twisting.

O. Shims:

1. Provide plywood and lumber shims as required for the specified height and thickness.
2. Shims to make full contact with stacked rough carpentry. Partial shim contact, and small shim pieces spaced apart are not acceptable.

P. Curbs:

1. Adjust wood curbs to support rooftop piping, ducts, equipment, etc.
2. Raise equipment to provide required flashing height for roofing.

3.4 CLEANING

A. Ensure the site and building are cleaned to meet pre-construction conditions, as accepted by the Owner.

B. Clean the site and building of saw dust from lumber, fasteners and other debris.

C. Repair or replace damages to the building, grounds, equipment and site to meet pre-construction conditions, as accepted by the Owner.

END OF SECTION 06 10 00

SECTION 07 42 13

METAL WALL PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Provide prefinished, prefabricated nonstructural flush seam wall panels with interlocking seams providing cladding protection of a weather barrier substrate.

1.2 RELATED DOCUMENTS

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

1. Section 06 10 00 "Rough Carpentry"
2. Section 07 62 00 "Sheet Metal Flashing and Trim"

1.3 REFERENCES

A. ASTM International

1. A750/A 750 M - Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil Coating Process for Exterior Exposed Building Products.
2. A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
3. A792 - Standard Specification for Steel Sheet, 50 percent Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
4. B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
5. D523 - Standard Test Method for Specular Gloss.
6. D659 - Standard Guide for Testing Industrial Water-Reducible Coatings.
7. D822 - Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.
8. D2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.

B. American Architectural Manufacturer's Association (AAMA) 605.2 - Voluntary Specification for High Performance Organic Coatings.

C. National Roofing Contractors Association (NRCA) - Roofing Manual.

D. Sheet Metal and Air Conditioning Contractors National Association, 1nc. (SMACNA) - Architectural Sheet Metal Manual.

E. Underwriters Laboratories (UL) - Building Materials Directory.

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:

1. Provide factory preformed wall panel system tested and certified by the manufacturer to comply with specified requirements under installed conditions.
2. Max panel length of 20- ft or less if required by the panel manufacturer. .
3. Provide continuous interlocking seams with open hem male legs that inherently increases load span capability, stiffness, and flexural stress handling.

B. Attachment of Panels as determined in accordance with ASTM E 1592 along with holding strength of fasteners to existing structure in accordance with submitted test data, provided by fastener manufacturer, based on length of embedment and properties of materials.

1. Do not exceed 4 feet on center for fastener spacing for attachment of panels.

1.5 SUBMITTALS

A. Refer to Section 01 33 00 "Submittal Procedures".

B. Product Data: Manufacturer's Product Data Sheets for materials specified certifying material complies with specified requirements.

C. Manufacturer's Instructions: Latest edition of the Manufacturer's current material specifications and installation instructions.

D. Shop Drawings: Show details to include, trim pieces, transitions, clips, panel fasteners, and closures necessary to install wall panels and withstand wind pressures.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Minimum of 10 years' experience supplying metal siding to the region where the work is to be done.

B. Installer Qualifications:

1. Acceptable to, licensed or certified by manufacturer.
2. Not less than 3 years' experience with systems.

C. Regulatory Requirements:

1. Comply with local Building Code requirements if more restrictive than those specified.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Protect against damage and discoloration.

B. Handle panels with non-marring slings.

C. Do not bend panels.

D. Store panels above ground, with one end elevated for drainage.

E. Protect panels against standing water and condensation between adjacent surfaces.

F. If panels become wet, immediately separate sheets, wipe dry with clean cloth, and allow to air dry.

G. Remove strippable film coating prior to installation and do not allow it to remain on the panels in extreme cold, heat or in direct sunlight.

H. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 WARRANTY

A. Finish Warranty: Provide manufacturer's written panel finish warranty against deterioration of factory applied finishes.

1. Warranty Period: Minimum period of thirty (30) years from date of Substantial Completion.
2. Prorated Conditions: None.
3. Limitations of liability: Not less than value of material and labor to replace.
4. Do not include "hold harmless" clause, nor limit liability of Contractor.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers:
1. ATAS International, Inc.
2. DMI
3. Fabral
4. Firestone Building Products
5. IMETCO
6. MBCI
7. McElroy
8. Merchant & Evans
9. Metal Roofing Systems
10. Metal Sales
11. Morin
12. Ultra Seam

2.2 PRODUCTS

A. Flush Seam Wall Panels:

1. Base Metal: .040 inch, Aluminum coated metal meeting or exceeding ASTM B209.
2. Face: Manufactured with two radii stiffening ribs.

3. Panel size: 12 inches in width.
4. Seam size: Nominal 1 inch deep interlocking seams with a structurally qualifying open hem on the male leg.

B. Alternate No. 1- Bases of Design

1. ATAS International, Inc- Multi Purpose Panel 120 (MPN120)
2. Base Metal: 0.40 inch Aluminum coated metal meeting or exceeding ASTM B209.
3. Panel Size: 12 inches in width
4. Seam: Semi- Standing Seam (MPN Code)

C. Engineers Accepted Equivalent

2.3 RELATED MATERIALS

A. Fasteners:

1. Flush Seam Panel Screws:

a. For metal: #10-16 x 1" long self-drilling, self-tapping pancake head Phillips drive screws.

2. Blind Rivets: Solid-threaded, sealed stem type with EPDM washer under head and factory painted heads to match wall panel finish color.

B. Accessories:

1. Provide manufacturer's standard accessories and other items essential to completeness of roof installation including anchor clips, trim, ridge and hip caps, closures, flashing, and fascia.
2. Form flashings, closure, and trim from same gauge and finish as roof panels.

C. Metal Wall Panel Underlayment: A non-perforated, nonwoven, non-absorbing, breathable, spunbonded, polyolefin membrane that resists air flow, bulk water and wind driven rain and channels water and moisture to the outside of the building envelope. It has microscopic pores that allow moisture vapor to escape from inside walls. Attach with manufacturer's recommended fasteners for substrate.

D. Hat Channel Sub Framing:

1. 1-1/4 inch x 6 inch, 18-gauge, galvanized steel hat channel.

E. Hat Channel Anchors: Hollow masonry anchor, min 1/2" diameter by length required for minimum embedment depth into CMU backup wall, stainless steel material. Design basis is Titen HD by Simpson Strong-Tie.

F. Masonry screws, 1/4 inch minimum diameter, Type 410 stainless steel with hex head. Length to provide minimum 1” embedment into substrate. Acceptable manufacturers include:

1. Tapcon by ITW Buildex
2. KWIK-CON II by Hilti
3. Powers Fasteners Tapper

4. Engineers accepted equivalent

G. Sealant: Refer to Section 07 62 00 "Sheet Metal Flashing and Trim". Sealant color to match wall panel.

H. Metal Wall Panel Closures: Refer to Section 07 62 00 "Sheet Metal Flashing and Trim".

2.4 FABRICATION

A. Steel to be correctively leveled and handled to minimize stress and waviness of sheet steel.

B. Form and fabricate sheets, seams, strips, clips, valleys, ridges, edge treatments, integral flashings, and other components of the metal roofing to the profiles, patterns, and drainage arrangements as determined by Engineer, to provide permanent leakproof construction, with no oil canning or panel distortion.

1. Fabricate panels in full lengths with no end laps.
2. Fabricate exposed items of prefinished sheet metal, color to match panels.
3. Hem exposed edges on underside 1/2-inch miter and seam corners.
4. Provide for thermal expansion and contraction of the Work.
5. Seal joints to achieve leak proof construction per manufacturer's detail.

C. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.

D. Unless otherwise shown on drawings or specified herein, provide full length panels. Fabricate flashings and accessories in longest practical lengths.

E. Factory form panels. Field formed panels are not acceptable.

2.5 FINISH

A. Exterior Finish:

1. Full 70 percent Kynar 500/Hylar 5000 for a total 1.0 mil dry film thickness with a specular gloss of 10-15 percent when tested in accordance with ASTM D523 at 60 degrees.

B. Interior Finish:

1. Primer Coat Material: Corrosion-resistant primer; primer coat dry film thickness: 0.15 mils; finish coat material: polyester paint, finish coat dry film thickness: 0.35 mils.
2. Total Interior Dry Film Thickness: 0.50 mils.
3. Color: Off-White.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Substrate:

1. Examine substrate to ensure that it is properly secured and prepared to receive metal wall panels.
2. Ensure substrate is installed flat, free from objectionable warp, wave, and buckle.

3.2 INSTALLATION

A. Hat Channel Sub-Framing:

1. Install hat channels horizontally spaced 3'-0" maximum on center.
2. Secure top side of hat channel through masonry to backup wall with hat channel anchors at 18" on center maximum spacing and in accordance with fastener manufacturer's installation instructions.
3. Secure bottom side of hat channel into masonry with masonry screws at 36" on center maximum spacing and in accordance with fastener manufacturer's installation instructions. stagger from anchors on top side.

B. Metal Wall Panels:

1. Follow panel manufacturer's directions.
2. Install panel seams vertically.
3. Lap panels away from prevailing wind direction.
4. Do not stretch or compress panel side-laps.
5. Secure panels without warp or deflection.
6. Clean and dry surfaces prior to applying sealant.
7. Exposed fasteners are not allowed, except to fasten flashings, at fixed points, or as indicated on Drawings.
8. Field apply sealant to penetrations, transitions, and other locations necessary to prevent water infiltration.
9. Leave 1/4 inch space between bottom of metal wall panels and receiver flashing.

C. Flashing:

1. Follow manufacturer's directions and Engineer accepted Shop Drawings.
2. Install flashings to allow for thermal movement.
3. Remove strippable protective film, if used, immediately preceding flashing installation.
4. Make end cuts and install sealant and flashings to achieve weathertight installation.

D. Cutting and Fitting:

1. Neat, square and true. Torch cutting, electric saws and grinders with abrasive wheels are prohibited where cut is exposed to final view.
2. Openings 6 inches and larger in any direction: Shop fabricate and reinforce to maintain original load capacity.
3. Where necessary to saw-cut panels, debur cut edges.

E. Dissimilar Metals:

1. Where sheet metal is in contact with dissimilar metals, execute juncture to facilitate drainage and minimize possibility of galvanic action.
2. At point of contact with dissimilar metal, coat metal with protective paint or tape which can be placed between metals.

3.3 PROTECTION

A. Protect work as required to ensure metal wall panel system will be without damage at time of final completion.

END OF SECTION 07 42 13

SECTION 07 62 00

SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes

1. Sheet metal flashings and trim to provide a permanently watertight condition.

1.2 RELATED DOCUMENTS

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

1. Section 06 10 00 "Rough Carpentry"
2. Section 07 41 13 "Metal Wall Panels"

1.3 REFERENCES

A. Refer to the following references for specification compliance:

1. 2018 South Carolina Building Code
2. ASTM International
3. National Roofing Contractors Association (NRCA)
4. Sheet Metal and Air Conditioning Contractors National Association (SMACNA)
    a. Architectural Sheet Metal Manual, Seventh Edition - January 2012
5. ANSI/SPRI ES-1
6. FM Global
    a. Data Sheet 1-49, Perimeter Flashing

1.4 SUBMITTALS

A. Refer to Section 01 33 00 "Submittal Procedures".

B. Product Data: Manufacturer's Product Data Sheets for all materials specified certifying material complies with all specified requirements.

C. Manufacturer's Instructions: Latest edition of the Manufacturer's current material specifications and installation instructions.

D. Shop Drawings: For any transitions and/or terminations not depicted in Contract Drawings.

1.5 QUALITY ASSURANCE

A. Install in accordance with the Contract Drawings.

B. Ensure work is free of leaks.

C. Fabricate metal edge (where no gutter is present) and coping in accordance with ANSI/SPRI ES-1 requirements.

D. Provide first-class workmanship. Assemble and secure sheet metal work in accordance with these specifications, roof system manufacturer's requirements and referenced standards.

1.6 DELIVERY, STORAGE AND HANDLING

A. Delivery: Deliver materials in the manufacturer's original sealed and labeled containers and in quantities required to allow continuity of application.

B. Storage: Store materials within areas designated by the Owner. Ensure materials remain dry, covered and not in contact with the ground.

C. Handling: Handle material in such manner as to preclude damage and contamination with moisture or foreign matter.

1.7 PROJECT CONDITIONS

A. Environmental: Protect building and its components from the elements.

B. Coordination and Scheduling: Coordinate phases of work to allow continuity of work without delays.

1.8 WARRANTY

A. Provide pre-finished sheet metal manufacturer's thirty (30) year finish warranty from the date of substantial completion.

PART 2 - PRODUCTS

2.1 PRIMARY SHEET METAL

A. Pre-finished Aluminum: 040 inch (40-mil), ASTM B209 Aluminum Alloy Sheet and Plate, alloy and temper 3003-H14, primed and finished on one side with Kynar/Hylar based fluoropolymer coating of 1.0 mil total dry film thickness, and on the reverse side, with a wash coat of 0.3 to 0.4 mil dry film thickness. A strippable plastic film should protect the finish during fabrication and installation. Manufacturer's standard color to be selected by Owner.

1. Receiver Flashing
2. Counterflashing
3. Coping
4. Scupper Face Plate

2.2 GALVALUME

A. 22-gauge, galvalume coated steel meeting or exceeding AZ50 per ASTM A792:

1. Continuous Cleat

2.3 POLYMER CLAD METAL

A. Heat-weldable, 24 gauge, AISI G90 galvanized steel sheet with a [20-mil][35-mil] unsupported [thermoplastic][TPO] membrane coating to match the flashing membrane composition laminated on one side. Polymer-Clad metal manufactured by, and included in the warranty of, the single-ply membrane Manufacturer utilized in Color selected by Owner.

1. Products:

a. Scupper Liner

2.4 FASTENERS

A. Roofing Nails: Minimum 12-gauge stainless steel ring shank roofing nails with diamond point, minimum 3/8 inch diameter head and length as required to penetrate substrate a minimum of 1-1/4 inches.

B. Screws:

1. Sheet metal to wood attachment (exposed): #12 stainless steel, 5/16 HWH with length to penetrate substrate a minimum of 1-1/2 inches. Provide with bonded EPDM washer or washer specified below. Factory painted heads to match the sheet metal color.
2. Sheet metal to wood attachment (concealed): #10 stainless steel, low profile pancake head with length to penetrate substrate a minimum of 1-1/2 inches.
3. Sheet metal to sheet metal attachment (exposed): 1/4 inch x 7/8 inch carbon steel, self-drilling point, self-tapping, zinc alloy hex head screws with bonded EPDM tubular washer under head of fastener; screw heads to match color of wall panel by means of factory applied coating. Factory painted heads to match the sheet metal color.
4. Sheet metal to light gauge steel attachment (concealed): #14-13 DP1 stainless-steel low-profile pancake head of length as required for three threads to penetrate metal substrate or min. 1 inch penetration though wood substrates.

C. Concrete and Masonry Anchors: 1/4 inch diameter metal-based expansion anchor with stainless steel pin of length to penetrate substrate a minimum of 1-1/2 inches. Factory painted heads to match the sheet metal color.

D. Washers: Stainless steel with neoprene gasket backing.

1. 9/16 inch diameter for use with #12 screws
2. 5/8 inch diameter for use with 1/4 inch diameter concrete and masonry anchors.

E. Rivets: #44 stainless steel rivets with stainless steel mandrel and factory painted head to match adjacent sheet metal. Length to properly fasten particular sheet metal components.

2.5 RELATED MATERIALS

A. Polyurethane Sealant: One-component elastomeric gun grade polyurethane sealant conforming to ASTM C 920, Type S, Grade NS, Class 25, and use NT, M, A, G, or O as required by substrate conditions. Color to match sheet metal color selected by Owner.

B. Silicone Sealant: One-component, non-sag, neutral cure, low-modulus, UV resistant, high performance silicone sealant meeting ASTM C 920, Type S, Grade NS, Class 100/50, Use NT, M, G, A or O. Color to match sheet metal color selected by Owner. Acceptable Manufacturers include:

1. Dow 790 Building Sealant
2. Pecora 890 NST Silicone
3. Sikasil-WS 290
4. Triangle Fastener Corporation Ultra 1000

C. Sealant Tape: Minimum 1/2 inch wide, non-skinning, butyl sealant tape.

D. Butyl Sealant: Gun grade, non-skinning, non-hardening, flexible blend of butyl rubber and polyisobutylene sealant.

E. Backer Rod: Closed-cell polyethylene or polyurethane rods sized approximately 25% larger than joint opening.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Coordinate with other work for correct sequencing of items which make up the entire system.

B. Ensure substrates are installed, secured and modified to accommodate sheet metal flashings.

C. Report deficiencies associated with the sheet metal substrates to Engineer before beginning sheet metal work. Correct deficiencies before installing sheet metal flashings.

3.2 INSTALLATION

A. General:

1. Joints to be locked and sealed or soldered.
2. Provide for thermal movement (expansion and contraction) of sheet metal.
3. Where dissimilar metals contact, prevent galvanic action by means of heavy coat of asphalt primer or separate with sheet metal underlayment.
4. Install metal flanges on top of membrane, adhere and fasten as indicated in detail drawings, specified herein, and in accordance with membrane manufacturer's requirements.
5. Provide uniform sheet metal sections with corners, joints and angles mitered, sealed and secured.
6. Hem (return) exposed edges for strength and appearance.

7. Fit sheet metal close and neat.
8. Provide cleats or stiffeners and other reinforcements to make sections rigid and substantial.
9. Fabricate, support, cleat, fasten and join sheet metal to prevent warping, "oil canning", and buckling.
10. Provide redundancy with sheet metal including but not limited to sheet metal underlayment and sealants. Install, seal and lap underlayment to ensure a redundant layer of protection to shed moisture infiltration behind sheet metal.

B. Sheet Metal Laps: Unless otherwise indicated:

1. Notch and lap ends of adjoining sheet metal sections not less than 4 inches; apply sealant tape or two bead of butyl sealant between sections.
2. Lap miters at corners a minimum of 1 inch and apply sealant between laps. Rivet at 2 inches on center.

C. Sheet Metal Underlayment:

1. Fully adhere to substrates where indicated in Contract Drawings.
2. Lap adjoining sections a minimum of 3 inches and fully adhere.
3. Extend beyond wood blocking a minimum of 1 inch at roof edges, parapet walls and curbs.

D. Fasteners:

1. Size and type required.
2. Fasteners to be rust resistant and compatible with materials to be joined.
3. Exposed Fasteners:

    a. Install screws with 5/16 inch predrilled, oversized holes.
    b. Install Concrete and Masonry Anchors with 11/32 inch predrilled, oversized holes.
    c. Exposed horizontal surface fasteners are not acceptable.

E. Coping:

1. Fabricate coping in 10 foot lengths. Fabricate coping a maximum of 1/2 inch wider than the width of the wall; field verify parapet wall width prior to sheet metal fabrication. Refer to SMACNA Architectural Sheet Metal Manual Figure 3-4A.
2. Install tapered edge strip mechanically attached or set in foam adhesive to top of wood blocking.
3. Install sheet metal underlayment up and over parapet extending a minimum of 1 inch below wood blocking.
4. Install continuous cleat fastened to substrate 6 inches on center in vertical leg. Locate fasteners no greater than 2 inches from the bottom hem.
5. Lock outside face of coping onto continuous cleat and secure inside face as follows:

    a. For coping widths greater than 12 inches, secure inside face with continuous cleats. Secure cleat through vertical face of cleat to blocking with fasteners at 6 inches on center. Locate fasteners no greater than 2 inches from the bottom hem.

6. Coping Seams:

   a. Provide 1 inch high single lock standing seam at adjoining coping sections. Provide sealant on both sides of 1 inch turn up for standing seam. Refer to SMACNA Architectural Sheet Metal Manual Figure 3-2, type 22.

7. Provide one-piece coping section at corners, four-way intersections and tee intersections. Locate joints within 24 inches from inside corner.
8. Turn coping ends up a minimum of 2 inches at elevation walls and cover termination with surface mounted counterflashing.

F. Through Wall Scupper:

1. Fabricate through wall scupper flange, liner, and faceplate as shown in detail drawings. Scuppers dimensions as indicated in the Contract Drawings.
2. Hot-air weld stripping membrane at seams of the flange and liner.
3. Install sheet metal underlayment through scupper opening prior to installing scupper liner to seal wall cavity.
4. Provide flange which extends a minimum of 4 inches on top and sides of scupper and extends a minimum of 4 inches out onto the horizontal membrane. Mechanically fasten the horizontal flange into structural deck 8 inches on center or a minimum of two fasteners per scupper with specified fasteners.
5. Strip-in flange as specified in Contract Drawings.
6. Provide faceplate which extends 1.5 inches around the entire scupper and secure to wall substrate with four fasteners. Set faceplate in a bead of sealant.
7. Extend scupper liner 1 inch beyond the exterior wall face and lock onto faceplate.

3.3 CLEANING AND PROTECTION

A. Clean sheet metal work of asphalt, flux, scrapes and dust.

B. Replace sheet metal components with scratches through the metal finish.

END OF SECTION 07 62 00

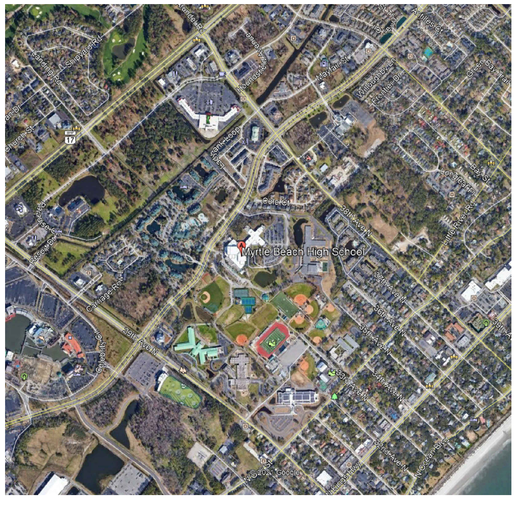
HORRY COUNTY SCHOOLS

MYRTLE BEACH HIGH SCHOOL WALL REPAIR

3302 ROBERT M GRISSOM PKWY
MYRTLE BEACH, SC 29577

REI PROJECT NO. 21CHS-026

DATE: 07/16/2021



A VICINITY MAP
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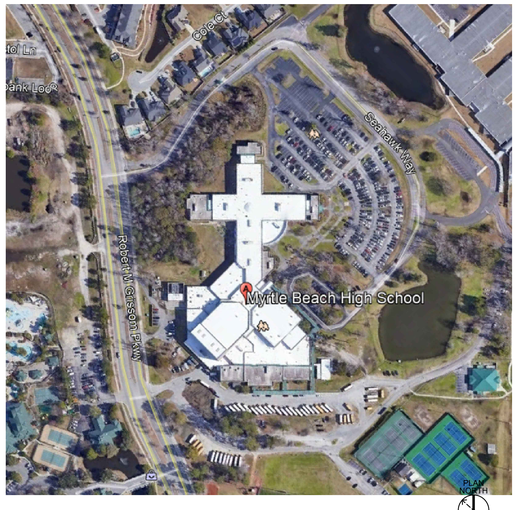

B SITE PLAN
SCALE: N.T.S.

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3. ONLY ONE DETAIL INDICATOR MAY BE SHOWN FOR EACH TYPE OF ROOF PENETRATION. ALL OTHER SIMILAR PENETRATIONS ARE TO BE FLASHED AS REQUIRED BY THE TYPICAL DETAIL INDICATOR, UNLESS OTHERWISE NOTED.
4. NOTES ARE INTENDED TO PROVIDE TYPICAL LOCATIONS OF WORK. IT IS THE CONTRACTORS RESPONSIBILITY TO QUANTIFY ALL LOCATIONS.

DETAIL NOTES
1. LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.

ELEVATION NOTES
1. ELEVATIONS ARE PROVIDED FOR REFERENCE. ACTUAL CONDITIONS MAY VARY ON EACH BUILDING ELEVATION. CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRESENT ON EACH ELEVATION.

STRUCTURAL NOTES
1. AT ALL TIMES THE EXISTING & NEW STRUCTURES SHALL BE SHORED AS NECESSARY TO ENSURE THEIR STABILITY DURING CONSTRUCTION.
2. ANY FIELD CONDITIONS OR DAMAGES DISCOVERED DURING THE PERFORMANCE OF WORK THAT WOULD CAUSE CONSTRUCTION TO DEVIATE FROM THE WORK SPECIFIED SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING WITH THE WORK.

DRAWING INDEX

XE-001	COVER SHEET
XE-101	ABOVE ROOF PARTIAL ELEVATIONS
XE-201	METAL WALL PANEL DETAILS

ABBREVIATION LIST

ALUM.	ALUMINUM
DS	DOWNSPOUT
EJ	EXPANSION JOINT
EX.	EXISTING
GALV.	GALVANIZED
GA.	GAUGE
MAX.	MAXIMUM
MIN.	MINIMUM
N.I.C.	NOT IN CONTRACT
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
S.S.	STAINLESS STEEL
SIM.	SIMILAR
TERM.	TERMINATION
TYP.	TYPICAL

BUILDING CODE COMPLIANCE REFERENCE LIST

2018 SC BUILDING CODE
2009 IECC
2018 SC EXISTING BUILDING CODE
2018 SC FIRE CODE
2018 SC FUEL GAS CODE
2018 SC MECHANICAL CODE
2018 SC PLUMBING CODE

C GENERAL NOTES AND INFORMATION
SCALE: N.T.S.

SUMMARY OF WORK

A. THIS WORK INCLUDES THE PROVISION OF LABOR, MATERIAL, EQUIPMENT, SUPERVISION AND ADMINISTRATION TO INTEGRATE THE WORK OUTLINED IN THESE SPECIFICATIONS INTO THE TOTAL BUILDING SYSTEM SUCH THAT NO LEAKAGE INTO THE SYSTEM OCCURS. IN GENERAL, THE SCOPE OF WORK INCLUDES:

1. BASE BID- EXTERIOR WALL RESTORATION
   a. INSTALL NEW HELICAL ANCHORS WHERE INDICATED IN CONTRACTS DRAWINGS AS SPECIFIED IN SECTION 04 05 19 "MASONRY HELICAL ANCHORS".
   b. REPOINT MASONRY MORTAR JOINTS WHERE INDICATED IN CONTRACT DRAWINGS AS SPECIFIED IN SECTION 04 05 24 "MASONRY REPOINTING".
   c. INSTALL NEW METAL WALL PANELS WHERE INDICATED IN CONTRACT DRAWINGS AS SPECIFIED IN SECTION 07 42 13 "METAL WALL PANELS".
   d. INSTALL NEW ASSOCIATED SHEET METAL FLASHINGS WHERE INDICATED IN CONTRACT DRAWINGS AS SPECIFIED IN SECTION 07 62 00 "SHEET METAL FLASHING AND TRIM".

2. ALTERNATE NO. 1
   a. INSTALL NEW ATAS INTERNATIONAL, INC. MULTI PURPOSE PANELS (MPN120) WHERE INDICATED IN CONTRACT DRAWINGS AS SPECIFIED IN SECTION 07 42 13 "METAL WALL PANELS".

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SEALS:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 28051 CHARLES E ARNOLD

PROJECT NAME:
HORRY COUNTY SCHOOLS
MYRTLE BEACH HIGH SCHOOL WALL REPAIR
3302 ROBERT M GRISSOM PKWY
MYRTLE BEACH, SC 29577

PROJ. NO:	DATE:
21CHS-026	07/16/2021

REVISIONS:

NO.	DATE	DESCRIPTION

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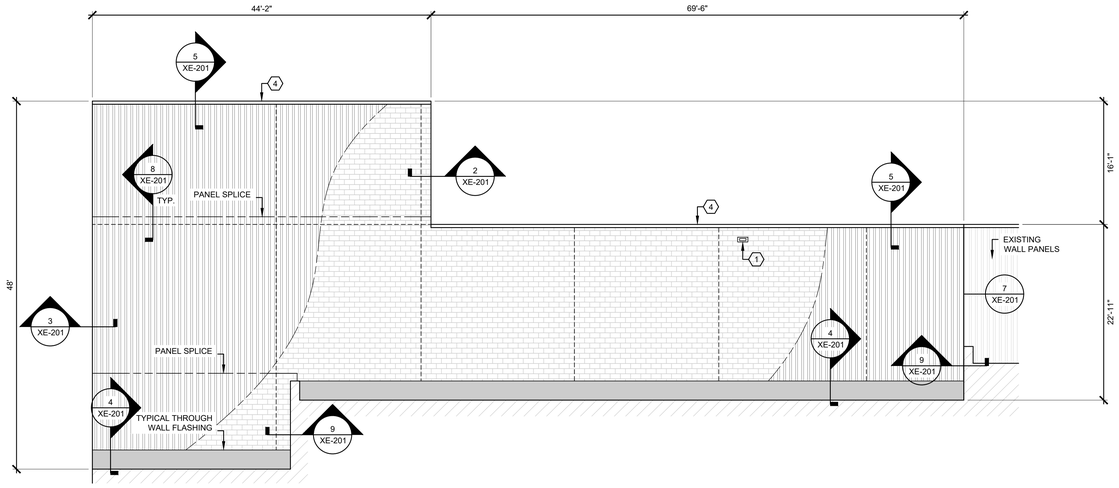
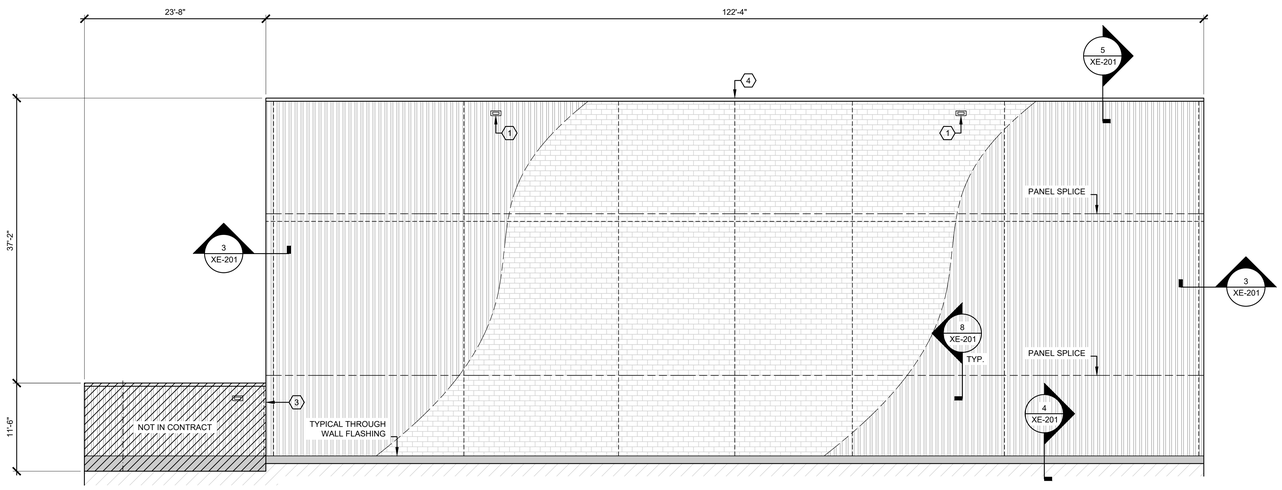
SHEET TITLE:
COVER SHEET

DRAWING:
XE-001



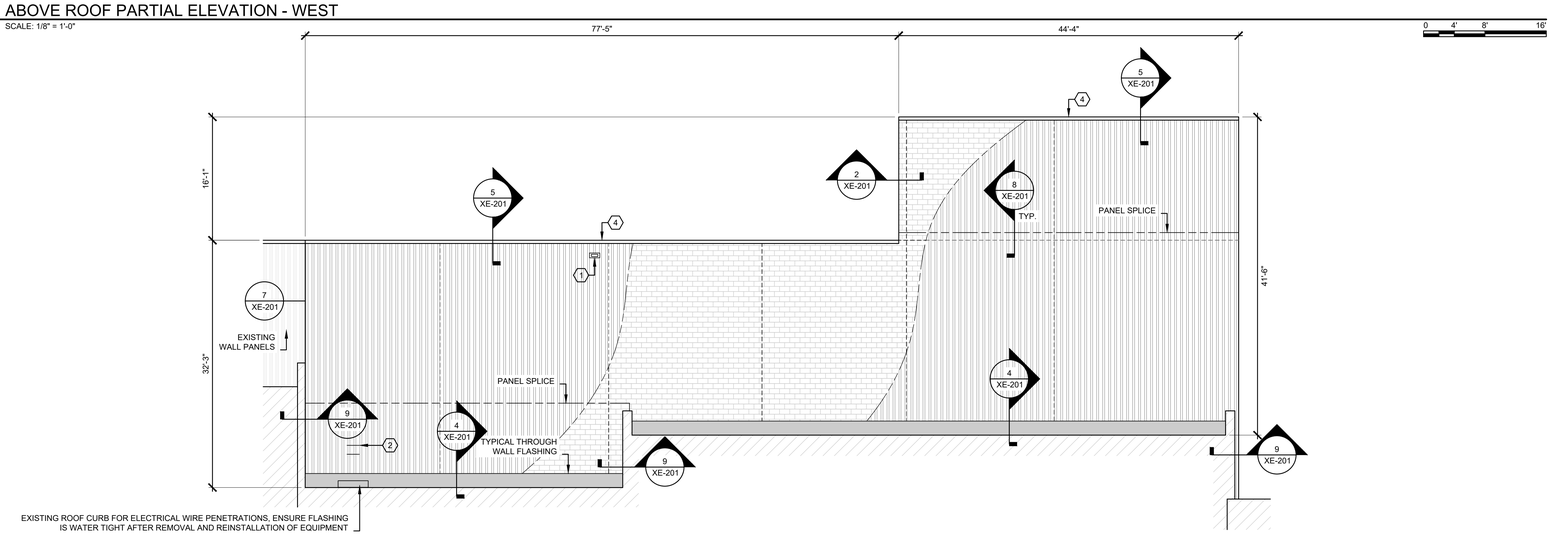
C ABOVE ROOF PARTIAL ELEVATION - SOUTH

SCALE: 1/8" = 1'-0"



B ABOVE ROOF PARTIAL ELEVATION - WEST

SCALE: 1/8" = 1'-0"



A ABOVE ROOF PARTIAL ELEVATION - NORTH

SCALE: 1/8" = 1'-0"

SHEET KEY NOTES

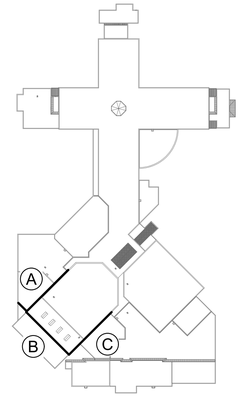
(#)

1. REMOVE AND REPLACE EXISTING SCUPPER LINER TO EXTEND SCUPPER TO FACE OF NEW METAL WALL PANELS, REFER TO DETAIL "6/XE-201".
2. TEMPORARILY REMOVE EXISTING EQUIPMENT AS NEEDED TO INSTALL NEW METAL WALL PANELS. PROVIDE ADDITIONAL SUPPORTS AS NEEDED TO MOUNT EQUIPMENT ON THE FACE OF THE NEW METAL WALL PANELS.
3. REMOVE EXISTING DAMAGED BRICK AT CORNER, REINSTALL BRICK PRIOR TO HAT CHANNEL INSTALLATION.
4. REMOVE AND REPLACE EXISTING COPING TO ACCOMMODATE ADDITIONAL WALL PANEL THICKNESS.

LEGEND

- OVERFLOW SCUPPER
- EXISTING CONSTRUCTION JOINT IN BRICK
- PANEL SPLICE
- WALL MOUNTED CONDUIT
- BRICK
- METAL WALL PANELS
- ROOF FLASHING AT THROUGH WALL

KEY PLAN



PLAN NORTH

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 23051 CHARLES E ARNOLD

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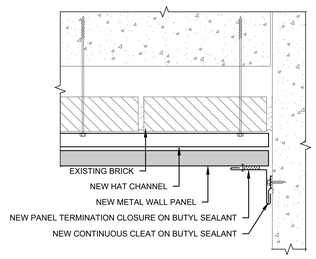
SHEET TITLE:

ABOVE ROOF PARTIAL ELEVATIONS

DRAWING:

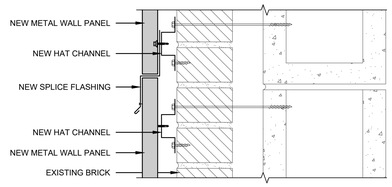
XE-101



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

9 METAL WALL PANEL - MASONRY WALL TERMINATION

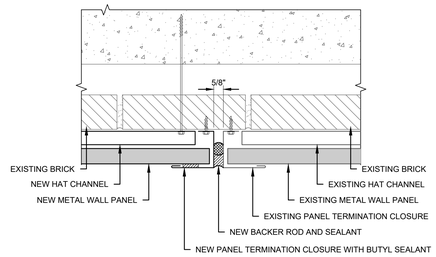
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

8 METAL WALL PANEL - PANEL SPLICE

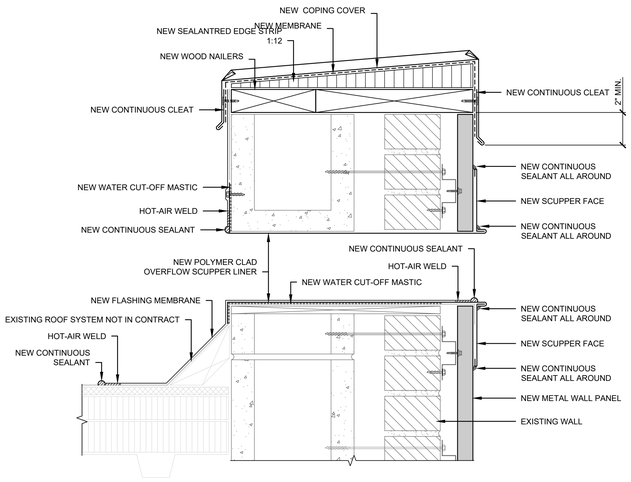
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

7 METAL WALL PANEL - NEW TO EXISTING PANEL TRANSITION

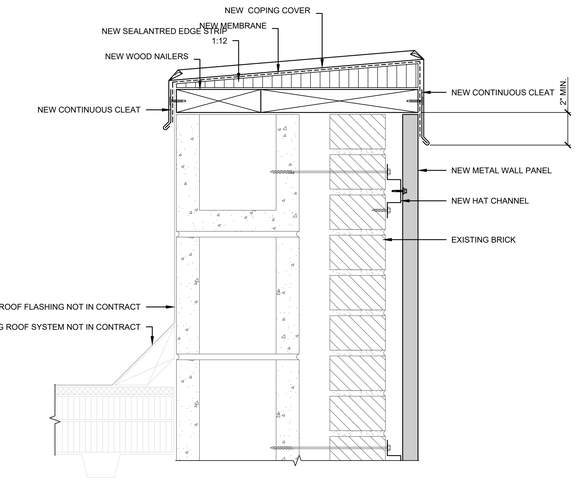
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

6 METAL WALL PANEL - OVERFLOW SCUPPER

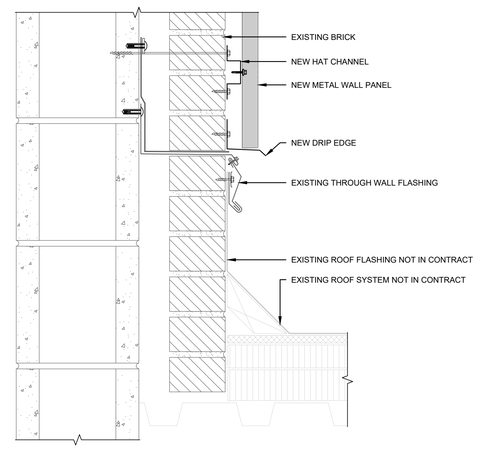
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

5 METAL WALL PANEL - COPING

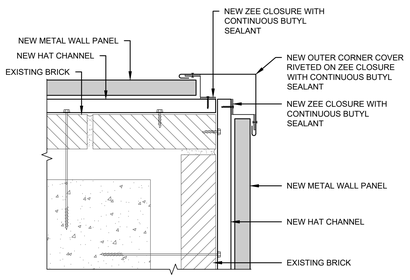
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

4 METAL WALL PANEL - EXISTING THROUGH WALL FLASHING

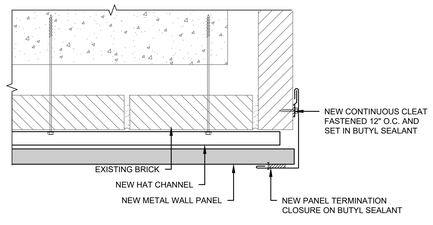
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

3 METAL WALL PANEL - OUTER CORNER

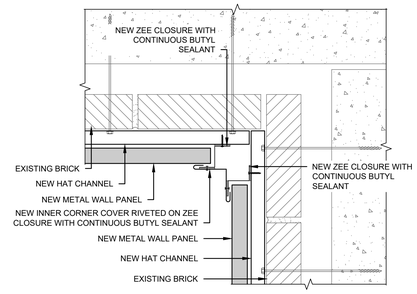
SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

2 METAL WALL PANEL - END TERMINATION

SCALE: 3" = 1' - 0"



NOTE:
1. UNDERLAYMENT MAY NOT BE SHOWN FOR CLARITY.

1 METAL WALL PANEL - INNER CORNER

SCALE: 3" = 1' - 0"

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SEALS:

PROJECT NAME:

HORRY COUNTY SCHOOLS

MYRTLE BEACH HIGH SCHOOL WALL REPAIR

3302 ROBERT M GRISSOM PKWY
MYRTLE BEACH, SC 29577

PROJ. NO:	DATE:
21CHS-026	07/16/2021

REVISIONS:

NO.	DATE	DESCRIPTION

THIS LINE IS 1 INCH ON THE ORIGINAL DRAWING

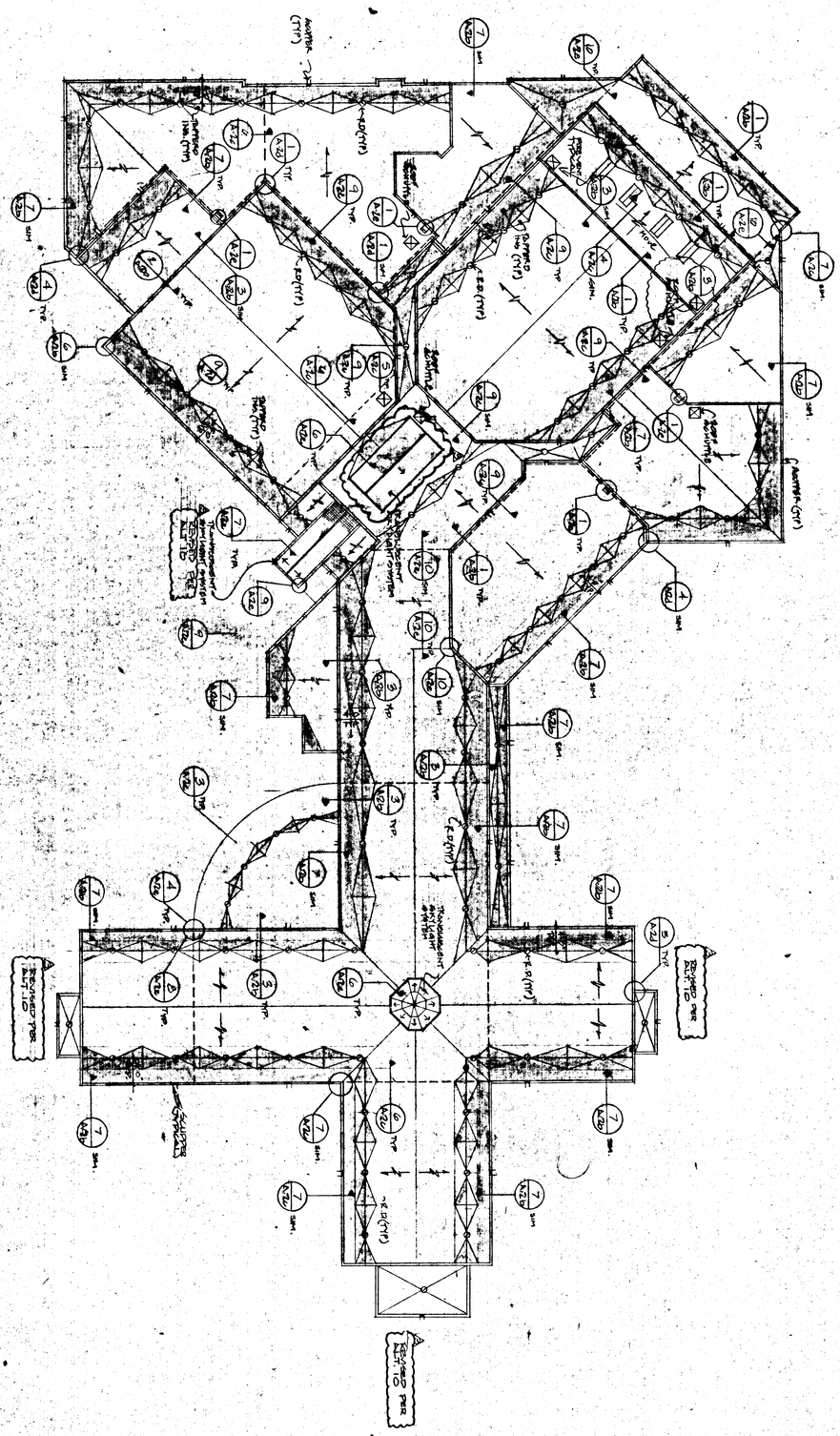
IF IT IS NOT 1 INCH ON THIS PAGE, SCALE DRAWING ACCORDINGLY.

SHEET TITLE:

METAL WALL PANEL DETAILS

DRAWING:

XE-201



ROOF PLAN
SCALE: 1/32" = 1'-0"

MRHA2A86

ROOF PLAN

A-2

OF

H.G. Reynolds Co., Inc. certifies that to the best of our knowledge, these record documents are accurate and complete." (5-23-89)

TIMBES WILUND USRY ARCHITECTS

5001 NORTH KINGS HIGHWAY RAINBOW HARBOR SUITE 203 MYRTLE BEACH S.C. 449-5204

MYRTLE BEACH HIGH SCHOOL
Myrtle Beach, S. C.
Horry County Board of Education

PROJ. NO.	2385
SET NO.	
DATE	1/26/90
DRAWN BY	
CHECKED BY	

REVISIO	NO.	DATE
ADDENDU REVISIONS	1	

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1/32" SECOND LEVEL FLOOR PLAN

TIMBES WILLOUGHBY USRY ARCHITECTS

H.G. Reynolds Co., Inc. certifies that to the best of our knowledge, these record documents are accurate and complete.

5-23-89

5001 NORTH KINGS HIGHWAY RAINBOW HARBOR SUITE 203 MYRTLE BEACH S.C. 449-5204

A-1b

OF

MYRTLE BEACH HIGH SCHOOL
Myrtle Beach, S. C.
Horry County Board of Education

PROJ. NO.	2385
SET NO.	
DATE	12/28/88
DRAWN BY	
CHECKED BY	

NO.	DATE	REVISION
1	5-9-89	ADDENDUM NO. 2 - CLASSROOM ADDITION
2	6-16-89	ADDENDUM NO. 3 - BLOCK WALL CHANGE & MISC. CLARIFY.

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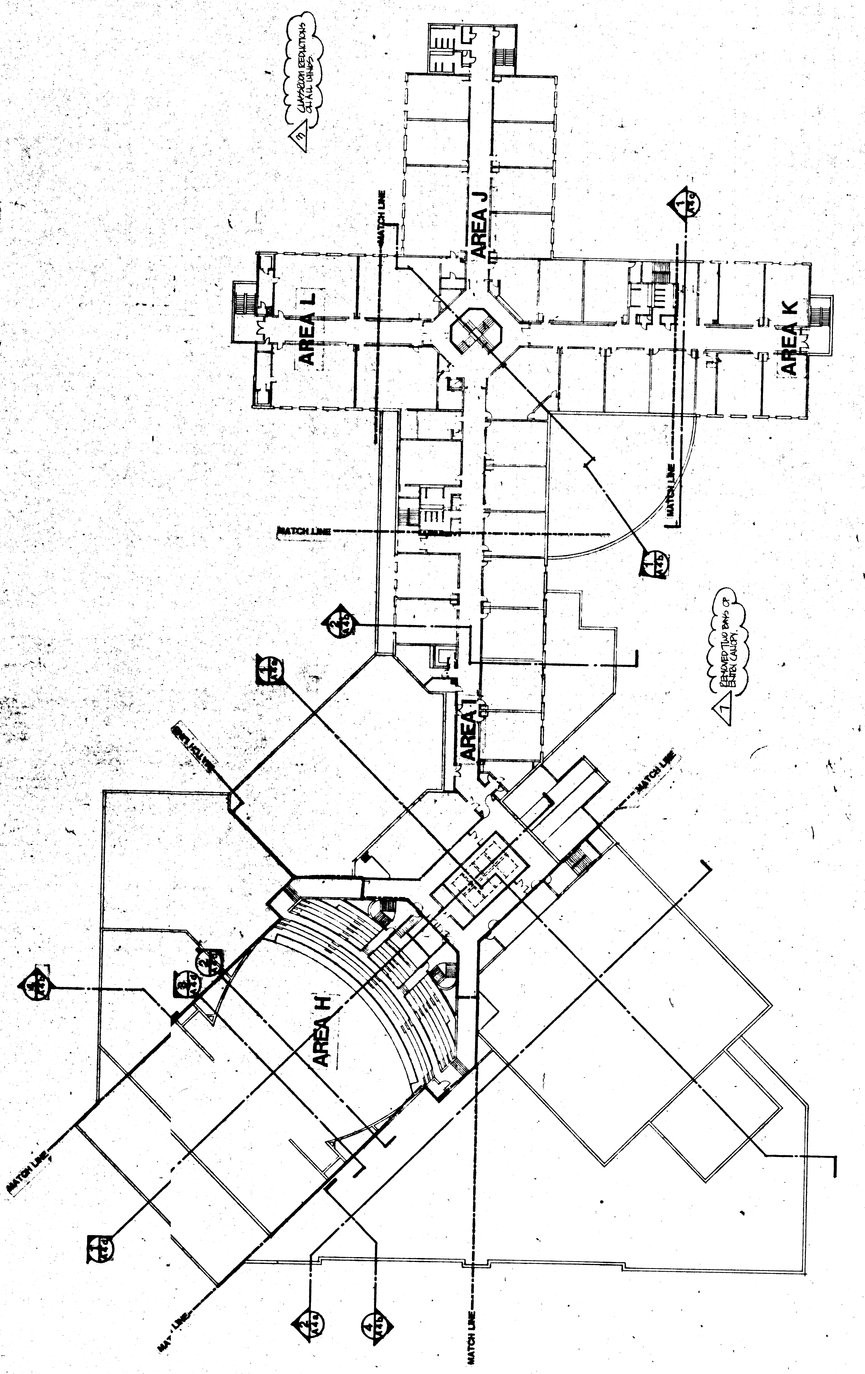
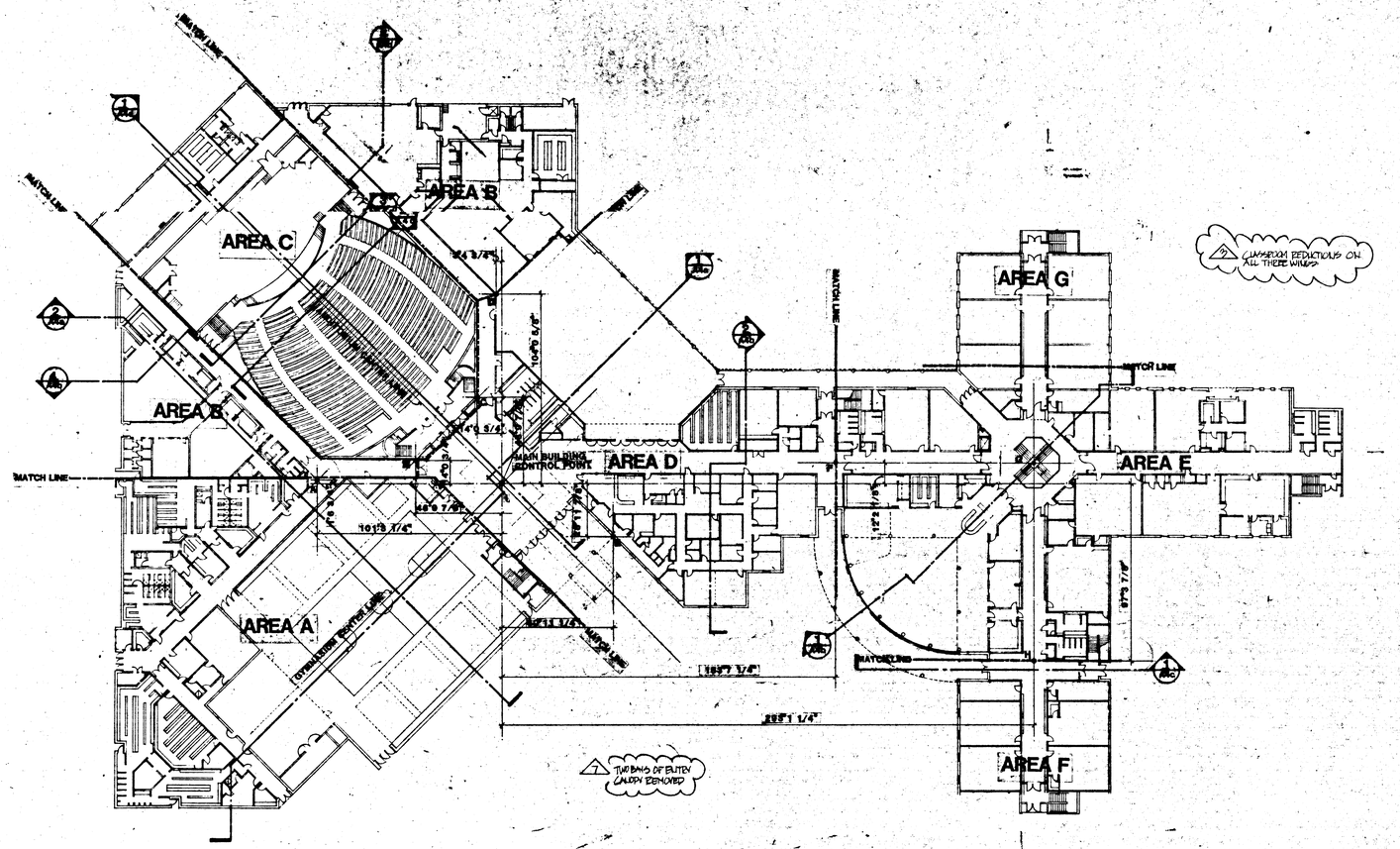
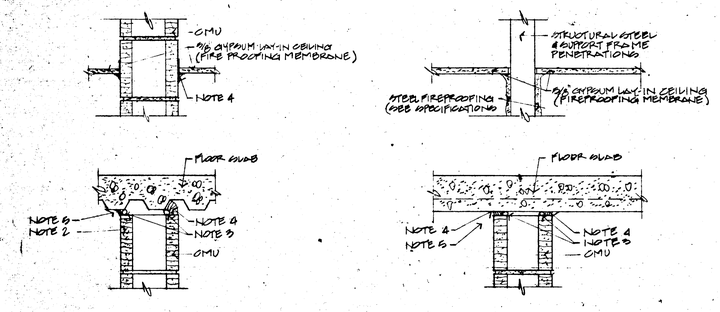


SECOND LEVEL FLOOR PLAN

SCALE: 1/32" = 1'-0"

MBH A/B 86





FIRE RATED CLOSURES

SCALE: 1 1/2" = 1'-0"

NOTES:
1. ALL PENETRATIONS THROUGH FIRE-RATED WALLS, FLOORS OR ROOF SYSTEMS SHALL BE SEALED TO MAINTAIN THE FIRE-RATED INTEGRITY.
2. FIRE RATED WALL, FLOOR OR ROOF.
3. COMPRESSIBLE BACKING MATERIAL.
4. FIRESTOP SEALANT.
5. THE TOP OF ALL FIRE RATED PARTITIONS SHALL CONTINUE UP TO THE UNDERSIDE OF THE STRUCTURAL DECK. PROVIDE FIRESTOP SEALANT AT TOP OF PARTITIONS.

GROUND LEVEL FLOOR PLAN

SCALE: 1/32" = 1'-0"

MBH A1A 86

NO.	DATE
1	5-2-86
2	5-23-86

PROJ. NO.	2358
SET NO.	
DATE	2/28/86
DRAWN BY	
CHECKED BY	

REVISIN
1 ADDENDUM - CLASSROOM PEDIATRICS
2 ADDENDUM - BLACKWOOD REVISED TWO BANKS OF LOCKERS

MYRTLE BEACH HIGH SCHOOL
Myrtle Beach, S. C.
Horry County Board of Education

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1/32" GROUND LEVEL FLOOR PLAN

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