

PARTIAL ROOF REPLACEMENT NORTHUMBERLAND COUNTY PUBLIC SCHOOLS' SCHOOL BOARD OFFICE BUILDING 6958 NORTHUMBERLAND HIGHWAY

HEATHSVILLE VA 22473





BID COPY

DIVISION 0 – SECTION 00002

PROJECT DIRECTORY Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway Heathsville VA 22473 Partial Roof Replacement

Owner: Attn:

Northumberland County Drew Basye Assistant County Administrator dbasye@co.northumberland.va.us

Architect/Engineer: Attn: Phone: HDH Associates, P.C. David Liebal (540) 239-8843 dliebal@hdhassociates.com

END OF SECTION 00002

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END OF SECTION 00005

NOTICE OF INVITATION FOR BIDS (IFB) Northumberland County, VA Partial Roof Replacement Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway

Sealed bids are invited for the Partial Roof Replacement, Northumberland County Public Schools' School Board Office Building, 6958 Northumberland Highway, Heathsville Virginia. This project is generally described as the tear-off of approx. 6,500SF of existing roof and the replacement with 60-mil fully adhered EPDM, as shown on the drawings meeting requirements listed in the specifications & on the drawings.

Sealed bids will be received by Northumberland County; c/o Drew Basye, Assistant County Administrator; 72 Monument Place; Heathsville VA 22473. The deadline for submitting bids is **<u>2:00 P.M. sharp, as</u> <u>determined by the Bid Officer on June 26, 2023</u>.** The bids will then be opened publicly and read aloud.

One bound original document is to be delivered by the deadline to the location indicated above along with one pdf/word edition on a memory stick. Bids are to include all required forms, fully signed, in the sealed bid envelope.

A Bid Bond and Contract Security will be required of all bidders regardless of amount.

Procedures for submitting a bid, claiming an error, withdrawing of bids and other pertinent information are contained in the Instructions to Bidders, which is part of the Invitation for Bids. Withdrawal due to error in bid shall be permitted in accordance with Section 9 of the Instructions to Bidders and §2.2-4330.A.(ii), Code of Virginia. The Owner reserves the right to reject any or all bids.

A pre-bid conference will be held at Board of Supervisor's Meeting Room, 72 Monument Place, Heathsville VA 22473 <u>at 11:30 AM on June 7, 2023</u>. Attendance shall not be a prerequisite for submitting a bid, but it is strongly recommended that all interested parties attend the pre-bid conference. After meeting, we will walk to the School Board to take a look at the roof. Bring your ladder if you want to access the roof, single story.

The contract shall be awarded on a lump sum basis as the Total Base Bid Amount including any properly submitted and received bid modifications as the Owner in its discretion decides to award in the manner set forth in paragraph 12 of the Instructions to Bidders. Contract award will be based on the **Base Bid Amounts shown above** as the Owner in its discretion decides to award. The Owner has the right to accept bids in part or whole and the right to reject all bids when in the best interest of the County.

Contractor registration is required in accordance with Title 54.1-1103, of the Code of Virginia. See the Invitation for Bids for additional qualification requirements.

All executive branch agencies are directed to advance Executive Order 35, dated July 3, 2019.

The Invitation for Bids for the above project, including the drawings and the specifications containing the information necessary for bidding, may be obtained from the office of HDH Associates, 1305 Radford Street, Christiansburg VA 24073. Phone Number 540-381-7999. Documents are without charges if they can be e-mailed to prospective bidders.

Copies of the Invitation for Bids documents, including the plans and the specifications, will also be available for inspection at the following locations:

Northumberland County Administration Office Dodge Plan Room Valley Construction News HDH Associates, P.C. Heathsville, Virginia Richmond, VA Roanoke, VA Christiansburg, VA

END OF NOTICE OF INVITATION FOR BIDS

INSTRUCTIONS TO BIDDERS

The Invitation For Bids ("IFB") consists of the Notice, these Instructions To Bidders, the Bid Form, the Pre-Bid Question Form, the General Conditions of the Construction Contract, the Supplemental General Conditions (if any), the Special Conditions (if any), the Forms to be used, and the Scope of Work as described by the Plans and Specifications, other documents listed in the Specifications, and any addenda which may be issued, all of which request qualified bidders to submit competitive prices or bids for providing the described work of the Contract.

As used herein, the terms "bidder" and "Contractor" both shall refer to the Person submitting a bid.

eVA Vendor Registration: The bidder shall be a registered vendor in eVA. See the attached eVA Vendor Registration Requirements.

- 1. CONDITIONS AT SITE OR STRUCTURE: Bidders shall visit the Site and shall be responsible for ascertaining pertinent local conditions such as location, accessibility, general character of the Site, structure or building, and the character and extent of existing conditions, improvements or work within or adjacent to the Site. No Claims shall be submitted as a result of Bidder's failure to have done so, but shall be deemed waived and will not be considered by the Owner. See Section 7 of the General Conditions entitled "Conditions at Site."
- 2. EXPLANATIONS TO BIDDERS: No oral explanation in regard to the meaning of drawings and specifications will be made and no oral instructions will be given before the award of the Contract. The Owner shall not be responsible for any conclusions, assumptions or interpretations made by bidders during the preparation of bids that are contrary to the Drawings and Specifications and their clear intent. Discrepancies, conflicts, errors, omissions or doubts as to the meaning of the Contract Documents shall be communicated in writing to the A/E for interpretation. Bidders must use the "Prebid Question Form" provided in the bid documents. Bidders must so act to assure that questions reach the A/E at least six (6) days prior to the time set for the receipt of bids to allow a sufficient time for an addendum to reach all bidders before the submission of their bids. If, however, there are two (2) weeks or less between the first bid advertisement and the time set for receipt of bids, then bidders must submit questions so that they reach the A/E no later than three (3) days prior to the time set for receipt of bids. Any interpretation made will be in the form of an addendum to the Specifications which will be forwarded to all bidders, and its receipt shall be acknowledged by the bidder on Bid Forms. If such discrepancies, conflicts, errors, omissions or doubts are reasonably apparent or should have been reasonably apparent to the bidder, and the bidder failed to submit questions to the A/E in the time and manner required herein and the Contract is awarded to the bidder, then any claims shall be deemed waived and the bidder shall not be entitled to additional compensation or time, or entitled to sue the Owner based on such discrepancies, conflicts, errors, omissions, or doubts.

3. TIME FOR COMPLETION:

(a) "Time for Completion" shall be designated by the Owner on the Invitation for Bids or other prebid documents and shall mean the number of consecutive calendar days following the issuance of the Notice to Proceed which the Contractor has to substantially complete all Work required by the Contract. In some instances, the Time for Completion may be stated in the form of a Contract Completion Date based on a stipulated date of Notice to Proceed.

Unless otherwise specified, the Contractor shall achieve Final Completion within thirty (30) days after the date of Substantial Completion.

(b) When the Notice to Proceed is issued, it will state a Contract Completion Date, which has been set by the Owner based on date of the Notice to Proceed and the Time for Completion.

- (c) The Contractor, in preparing and submitting its bid, is required to take into consideration normal weather conditions. Normal weather does not mean statistically average weather, but rather means a range of weather patterns which might be anticipated based on weather conditions and events for the past ten (10) years. Normal weather conditions shall be determined from the public historical records available, including the U.S. Department of Commerce, Local Climatological Data Sheets, Oceanic and Atmospheric Administration/Environmental Data and Information Service, National Climatic Center and the National Weather Service. The data sheets to be used shall be for the locality or localities closest to the Site. No additional compensation, costs or damages will be paid to the Contractor because of normal weather conditions, including normal adverse weather to be anticipated during the Project. An extension of time for abnormal adverse weather conditions which directly impact the Work will be considered by the Owner as set forth in the General Conditions.
- (d) If the Owner designates the public historical climatological records to be used to establish normal weather patterns, the bidder shall use those records in estimating and preparing its bid. If the Owner requests each bidder to indicate the weather pattern records used in preparation of a bid, each bidder may select the public historical climatological records upon which it will rely in preparing its bid. In the latter situation, each bidder shall designate in the space provided which of such climatological data records were used in preparing the bid. A bidder's failure to designate climatological records when submitting a bid shall not disqualify a bid, but shall constitute a waiver of any claim or request for an extension of time as the result of abnormal adverse weather. In either case, the bid submitted and the Time for Completion shall be presumed to have been based upon normal weather patterns, including normal adverse weather, as derived from the climatological records used.

4. **PREPARATION AND SUBMISSION OF BIDS:**

- (a) Bids shall be submitted on the forms furnished, or copies thereof, and shall be signed in ink, or in the case of bids submitted electronically, signatures shall be in accordance with Code of Virginia § 59.1-479 *et seq*. The Owner's agreement to accept electronic bids, if made, will be indicated in the IFB. Erasures or other changes in a bid must be explained or noted over the signature of the bidder. Bids containing any conditions, omissions, unexplained erasures, alterations or items not called for in the proposal, or irregularities of any kind, may be rejected by the Owner as being incomplete or nonresponsive.
- (b) Each bid must give the complete legal name and full business address of the bidder and be signed by the bidder, or the bidder's authorized representative. Bids by partnerships must be signed in the partnership name by one of the general partners of the partnership or an authorized representative, followed by the designation/title of the person signing, and a list of the partners. Bids by joint ventures must be signed in the joint venture name by one of the joint venturers or an authorized representative of one of the joint venturers, followed by the designation/title of the person signing, and a list of the joint venturers. Bids by corporations must be signed with the legal name of the corporation followed by the name of the state in which it is incorporated and by the signature and title of the person authorized to bind it in this matter. The name of each person signing shall be typed or printed below the signature. A signature on a bid by a person who identifies their title as "President," "Secretary," "Agent" or other designation without disclosing the principal firm, shall be held to be the bid of the individual signing. When requested by the Owner, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished. Trade or fictitious names may be referenced by using "t/a _ _ ," but bids shall be in the legal name of the person or entity submitting the bid.
- (c) Bids with the bid guarantee shall be enclosed in a sealed envelope which shall be marked and addressed as indicated by the advertisement. If a Contract is for one hundred twenty thousand

dollars (\$120,000) or more, or if the total value of all construction, removal, repair or improvements undertaken by the bidder within any twelve-month period is seven hundred fifty thousand dollars (\$750,000) or more, the bidder is required under Code of Virginia §§ 54.1-1100, *et seq.*, to be licensed in Virginia as a "Class A Contractor." If a Contract is for ten thousand dollars (\$10,000) or more, but less than one hundred twenty thousand dollars (\$120,000), or if the total value of all construction, removal, repair or improvements undertaken by the bidder within any twelve-month period is one hundred fifty thousand dollars (\$150,000) or more, but less than seven hundred fifty thousand dollars (\$150,000) or more, but less than seven hundred fifty thousand dollars (\$150,000) or more, but less than seven hundred fifty thousand dollars (\$150,000) or more, but less than seven hundred fifty thousand dollars (\$150,000), the bidder is required to be licensed in Virginia as a "Class B Contractor." The bidder shall place on the outside of the envelope containing the bid and shall place in the bid over its signature whichever of the following notations is appropriate and insert its Contractor license/registration number:

Licensed Class A Virginia Contractor No. ______ or Licensed Class B Virginia Contractor No.

If the bidder is not properly licensed in Virginia at the time the bid is submitted, or if the bidder fails to provide this information on its bid or on the envelope containing the bid and fails to promptly provide said Contractor license number to the Owner in writing when requested to do so before the opening of bids, the bidder shall be deemed to be in violation of Code of Virginia § 54.1-1115 and its bid will not be considered.

- (d) Following guidance from the Board for Contractors, the Owner may, as a part of determining whether the bidder is "responsible," require the apparent low bidder to submit a listing of its Subcontractors along with the license number and classification or specialty of each. See DEP'T OF PROF'L AND OCCUPATIONAL REGULATION, BD. FOR CONTRACTORS POLICIES & INTERPRETATIONS, No. 2959 (July 11, 2016) ("A licensed contractor may bid on work, or enter into a contract for work, which is outside the scope of [its] license classification(s) provided that [it] subcontracts that work, to properly licensed contractors, and the work of the subcontractors is incidental to the contract.").
- (e) The bidder must place its Employer Identification Number (SSN or FEIN) in the space provided on the Bid Form.
- (f) Every bidder organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership must be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia, as amended, or as otherwise required by law. Any bidder organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 must include in its bid the identification number issued to it by the State Corporation Commission. Any bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid or proposal a statement describing why the bidder is not required to be so authorized. A bidder required to be authorized to transact business in Virginia that fails to provide the required information shall not receive an award unless a waiver of this requirement and of any administrative policies and procedures established to implement Code of Virginia § 2.2-4311.2 is granted by the chief executive of the Owner.

If awarded the Contract, the bidder shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the Contract. Doing so shall be deemed to be a violation of Code of Virginia § 2.2-4311.2 and the bidder understands and agrees that the Owner may void the Contract if the bidder fails to comply with this provision.

DGS-30-055

(Rev. 07/22)

(g). *Code of Virginia*, § 2.2-4376.2 shall be applicable to the Work of the Contract.

5. **BID GUARANTEE**:

- Any bid (including the Total Base Bid plus all Additive Bid Items) which exceeds five hundred (a) thousand dollars (\$500,000) shall be accompanied by a Commonwealth of Virginia Standard Bid Bond, Form CO-10.2, payable to the Owner as obligee in an amount equal to five percent (5%) of the amount of the bid (the "Bid Bond"). The Owner agrees to accept a Bid Bond on which the Surety has utilized electronic signatures and/or electronic notarization if the electronic notarization meets the requirements of Virginia Code §§ 47.1-6.1, -7, and -12, and the Commonwealth of Virginia State Corporation Commission Bureau of Insurance and the Bid Bond contains any SURETY BOND SEAL ADDENDUM established by the Commonwealth of Virginia State Corporation Commission Bureau of Insurance. For construction contracts up to \$500,000, where bid bond requirements have been waived by Owner as stated in the IFB, prospective Contractors may be prequalified in accordance with Code of Virginia § 2.2-4317.A Bid Bond may be required for Contracts having bids of up to five hundred thousand dollars (\$500,000) if such requirement is stated in the IFB. The Bid Bond must be issued by a surety company which is legally authorized by the Virginia State Corporation Commission to do surety business in the Commonwealth of Virginia. Such Bid Bond shall guarantee the following: that the bidder will not withdraw its bid during the thirty (30) day period following the date of the opening of bids; that if the bid is accepted, the bidder will enter into the Contract with the Owner described in the IFB; that the bidder can and will submit a properly executed and authorized Standard Performance Bond and Standard Labor and Material Payment Bond on the forms included in the IFB. If the bidder withdraws its bid within the thirty (day) period following bid opening, fails to enter into the Contract, or fails to provide the required Standard Performance Bond and Standard Labor and Material Payment Bond within ten (10) days after the bidder's receipt of notice of acceptance of its bid, the bidder and the bidder's surety shall be jointly and severally be liable to the Owner for the difference between the amount specified in the bidder's bid and such larger amount for which the Owner may contract with another party to perform the work covered by said bid, up to the amount of the bid guarantee of 5% of the bidder's total bid amount, as the damage to the Owner resulting from the bidder's default. See Code of Virginia §2.2-4336.
- (b) Code of Virginia § 2.2-4338 contains provisions allowing for alternative forms of bid security in lieu of a Bid Bond. A bidder's use of an alternative form of Security as listed in Code of Virginia § 2.2-4338.B must be approved by the Owner prior to the bidder's submission of its bid on the Bid Receipt date and time to be accepted in lieu of a Bid Bond.
- (c) The Bid Bond or other alternative bid security will be returned to all but the three lowest bidders after the formal opening of bids. The remaining Bid Bonds or bid security will be returned to the bidders after the Owner and the accepted bidder have executed the Contract and the required Standard Performance Bond and the Standard Labor and Material Payment Bond for the Contract have been received and approved by the Owner.
- (d) If the Contract and required bonds have not been executed by the accepted bidder within thirty (30) days after the date of the opening of the bids, then the Bid Bond or other bid security of any bidder will be returned upon a bidder's request, provided the bidder has not been notified of the acceptance of its bid prior to the date of such request.
- 6. WITHDRAWAL OR MODIFICATION OF BIDS: Bids may be withdrawn or modified by written or telefaxed notice received at the designated location from bidders prior to the deadline fixed for bid receipt. E-mail withdrawals and modifications are not acceptable. The withdrawal or modification may be made by the person who signed the bid or by an individual(s) who is authorized by the bidder on the face of the bid. Written modifications may be made on the bid form itself, on the envelope in which the bid is enclosed, or on a separate document. Written modifications, whether the original is delivered or telefaxed, must be

signed by the person making the modification or withdrawal. The modification must state specifically what is to be modified and by what amount or it must state the item to be modified and what the corrected amount should be.

7. **RECEIPT OF BIDS**:

- (a) Bids will be received at or before the date and the hour and at the place stipulated in the IFB as may be modified by subsequent Addenda.
- (b) It is the responsibility of the bidder to assure that its bid and any bid modifications are delivered to the place designated for receipt of bids by the date and hour (deadline) set for receipt of bids. Therefore, it is the bidder's responsibility to take into account all factors which may impact on its bid deliverer / courier's ability to deliver the bid and to implement whatever actions are necessary to have the bid delivered to the proper bid receipt location prior to the bid receipt deadline. No bids or bid modifications submitted or offered after the date and hour designated for receipt of bids will be accepted or considered.
- (c) The Bid Officer is the Owner's representative designated to receive bids at the time and place noted in the IFB and to open the bids received at the appointed time.
- (d) The official time used for the receipt of responses is determined by reference to the clock designated by the Bid Officer. The Bid Officer shall determine when the Bid Receipt Deadline has arrived and shall announce that the Deadline has arrived and that no further bids or bid modifications will be accepted. All bids and bid modifications in the possession of the Bid Officer and their assistants at the time the announcement is completed are deemed to be timely, whether or not the bid envelope has been physically date/time stamped or otherwise marked by the time the Bid Officer makes the deadline announcement.
- (e) In the event the bid receipt occurs during a period of suspended state business operations, the receipt and opening will be delayed one business day.

8. **OPENING OF BIDS**:

- (a) Bids will be opened at the time and place stated in the IFB or as modified by subsequent Addenda, and their contents publicly announced. The Bid Officer shall decide when the specified time for bid opening has arrived. No responsibility will be attached to any officer or agent for the premature opening of a bid not properly addressed and identified. Bid opening shall be no sooner than twenty-four (24) hours after the time set for receipt of bids.
- (b) The provisions of Code of Virginia § 2.2-4342, as amended, shall be applicable to the inspections of bids received.
- (c) In the event the bid opening occurs during a period of suspended state business operations, the opening will be delayed until the next business day.
- **9. ERRORS IN BIDS:** A bidder may withdraw its bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.

In accordance with Code of Virginia § 2.2-4330(B)(2), the bidder must submit to the Owner its original work papers, documents and materials used in the preparation of the bid within one day after the date fixed for submission of bids. Such work papers must be submitted in an envelope or package separate and apart

from the envelope containing the bid and marked clearly as to the contents and shall be delivered to the Owner by the bidder in person or by registered mail prior to the time fixed for the opening of bids and may not be withdrawn until after the two-hour period (referred to later) has elapsed. The bids shall be opened at the time designated in the IFB, as amended by addendum. Bid opening is usually one day following the time fixed by the Owner for the submission of bids, but no sooner. Once the bids have been opened, the bidder shall have two (2) hours after the opening of bids within which to claim in writing any mistake as defined herein and withdraw its bid. The Contract shall not be awarded by the Owner until such two-hour period has elapsed. Such mistake shall be proved only from the original work papers, documents and materials delivered to the Owner prior to bid opening. This procedure in Code of Virginia § 2.2-4330(B)(2) shall not apply to when the entire bid is required to be submitted on a unit price basis.

Failure of a bidder to submit its original work papers, documents and materials used in the preparation of its bid on or before the time, date and place required shall constitute a waiver by that bidder of its right to withdraw its bid due to a mistake.

No bid may be withdrawn under this section when the result would be the awarding of the Contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five (5%) percent.

No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the Contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted. The person or firm to whom the Contract was awarded and the withdrawing bidder are jointly liable to the Owner in an amount equal to any compensation paid to or for the benefit of the withdrawing bidder without such approval.

If the apparent low bid is withdrawn under authority of this section, the lowest remaining bid shall be deemed to be the low bid on the project.

10. **REJECTION OF BIDS**: The Owner reserves the right to cancel the IFB, to reject any and all bids at its sole discretion when such rejection is in the interest of the Owner, or to reject the bid of any bidder who is determined to be not responsive or not responsible. *See* Code of Virginia § 2.2-4319.

11. DETERMINATION OF RESPONSIBILITY

Each bidder shall be prepared, if so requested by the Owner, to present evidence of its experience, qualifications and financial ability to carry out the terms of the Contract.

Prior to award of the Contract, an evaluation will be made to determine if the low bidder has the capability, in all respects, to perform fully the contract requirements and the moral and business integrity and reliability which will assure good faith performance, and who has been prequalified, if required. Factors to be evaluated include, but are not limited to:

(a) sufficient financial ability to perform the contract as evidenced by the bidder's ability to obtain payment and performance bonds from an acceptable surety;

(b) appropriate experience to perform the Work described in the bid documents;

(c) any judgments entered against the bidder, or any officers, directors, partners or owners for breach of a contract for construction;

(d) any substantial noncompliance with the terms and conditions of prior construction contracts with a public body without good cause where the substantial noncompliance is documented; or

(e) a conviction of the bidder or any officer, director, partner, project manager, procurement manager, chief financial officer, or owner in the last five years of a crime relating to

governmental or nongovernmental construction or contracting; and/or

(f) any current debarment of the contractor, any officer, director or owner, from bidding or contracting by any public body of any state, any state agency, or any agency of the federal government.

The Owner reserves the right to disqualify or refuse to accept the bid of any bidder who has been convicted, or entered a plea of guilty or nolo contendere, in any federal or state court to any charge involving any unlawful, corrupt or collusive practice involving a public contract whether federal, state, or local, or who has been determined in any judicial proceeding to have violated any antitrust, bid-rigging or collusive practice statute in connection with any public contract, or against whom such formal criminal prosecution or other judicial proceeding has been initiated.

A bidder who, despite being the apparent low bidder, is determined not to be a responsible bidder shall be notified in writing in conformance with the procedures in Code of Virginia § 2.2-4359.

12. AWARD OF CONTRACT

(a) Basis for Contract Award: The Contract, if awarded, will be awarded to the lowest responsive and responsible bidder, if any, provided its bid is reasonable and it is in the best interest of the Owner to accept it and subject to the Owner's right to reject any and all bids and to waive informality in the bids and in the bidding. The Bid Form contains a multi-part Base Bid and may contain Additive Bid Items. Determination of the lowest responsible bidder, if any, will be based on the Total Base Bid Amount entered on the Bid Form including any properly submitted bid modifications plus as many Additive Bid Items taken in sequence as the Owner in its discretion chooses to Award. Where the sum of the values entered in the multiple parts do not agree with the Total Base Bid amount, the Total Base Bid amount entered on the bid form, including any properly submitted bid modifications, shall take precedence.

In the event that the Total Base Bid from the lowest responsible bidder exceeds available funds, the Owner may negotiate the Total Base Bid amount with the apparent low bidder to obtain a Contract Price within available funds, pursuant to Code § 2.2-4318 and Section 12(c) herein.

- (b) **Informalities:** The Owner reserves the right to waive any informality in the bids when such waiver is in the interest of the Owner.
- (c) Negotiation With Lowest Responsible Bidder: If award of the Contract to the lowest responsive and responsible bidder is precluded because of limitations on available funds, under the provisions of Code § 2.2-4318 the Owner reserves the right to negotiate the Total Base Bid amount with the lowest responsive, responsible bidder to obtain a Contract Price within the available funds. This may involve changes in either the features or scope of the work included in the Base Bid. Such negotiations with the apparent low bidder may include reducing the quantity, quality, or other cost saving mechanisms involving items in the Total Base Bid. Negotiations for Additive Bid Items are excluded. The Owner shall notify the lowest responsive and responsible bidder that such a situation exists and the Owner and bidder shall then conduct their negotiations in person, by mail, by telephone or by any means they find convenient. If an acceptable Contract can be negotiated, any changes to the IFB documents agreed upon in the negotiations shall be summarized in a "Post Bid Modification" and included in the Contract. If an acceptable Contract cannot be negotiated, the Owner shall terminate negotiations and reject all bids.
- (d) Notice of Intent to Award or Notice of Award: The Notice of Award or the Notice of Intent to Award will be posted at the Agency's standard location for posting notices as shown on the "Notice of Invitation to Bid". In addition, the Agency may also post such notice on the Agency's Website and/or the DGS central electronic procurement Website. Any bidder who desires to protest the award or decision to award a contract shall submit the protest in writing to the public body no later than ten days after the posting of the Notice of Award or Notice of Intent to Award, whichever comes first. See Code of Virginia § 2.2-4360.

- 13. CONTRACT SECURITY: For contracts which exceed five hundred thousand dollars (\$500,000), the Standard Performance Bond (CO-10) and the Standard Labor and Material Payment Bond (CO-10.1) shall be required, as specified in the IFB. For construction contracts up to \$500,000, where Bid Bond requirements are waived, prospective contractors may be prequalified in accordance with Code of Virginia § 2.2-4317. See General Conditions and Code of Virginia § 2.2-4337 and § 2.2-4338. The Owner reserves the right to require such bonds for contracts up to five hundred thousand dollars (\$500,000). If the Owner so elects, the requirement shall be set forth in the IFB.
- 14. CERTIFICATION: The bidder, by its signature on the Bid Form, certifies that neither its organization nor any of its officers, directors, partners or owners is currently barred from bidding on contracts by any Agency of the Commonwealth of Virginia, or any public body or agency of another state, or any agency of the federal government. *See* "Disqualification of Contractors" in the Bid Form.
- **15. ETHICS IN PUBLIC CONTRACTING:** The provisions, requirements and prohibitions as contained in Code of Virginia §2.2-4367 *et seq.*, pertaining to bidders, offerors, contractors, and subcontractors are applicable to this project.
- 16. **BUILDING PERMITS**: Because this is a Project of the Commonwealth of Virginia, codes or zoning ordinances of local political subdivisions do not apply. However, the Virginia Uniform Statewide Building Code shall apply to the Work and shall be administered by the Building Official for State-owned Buildings. The Building Permit will be obtained and paid for by the Owner. All other permits, local license fees, business fees, taxes, or similar assessments imposed by the appropriate political subdivision shall be obtained and paid for by the Contractor. *See* Section 25 of the General Conditions for utility connection fees and services.
- 17. UTILIZATION OF SMALL BUSINESSES: It is the policy of the Commonwealth of Virginia to maximize the participation of small businesses in state contracting. The participation of these businesses directly and through partnerships, joint ventures, subcontracts and other contractual opportunities may be encouraged for this Project based on the Owner's requirements (if applicable) on the Bid Form. Bidders shall provide a Small Business Procurement Plan in conjunction with their sealed bid. The Small Business Procurement Plan shall identify the bidder's proposed percentage of participation by small businesses in the Total Base Bid amount, and is indicated on the Bid Form. An entry on the line for "Contractor's Proposed Small Business, the proposed percentage of small business participation shall be entered as 100%. A bidder may enter a proposed percentage of small business participation of 0% and be considered responsive unless the Bid Form states that the Owner requires a specific percentage of small business participation, in which case the bidder shall enter a percentage equal to or greater than the Owner's required small business participation percentage for the bid to be considered responsive.
- 18. BID DOCUMENTS: Bid Documents are the property of the Owner and a deposit in an amount as stated in the Invitation for Bids is required for each paper set or for each set provided on removable electronic media as a guarantee of the safe return of the documents within ten (10) days of bid opening. This deposit will be refunded in full on not more than two paper sets or sets provided on removable electronic media to each bidder who submits a Contract bid and who returns the documents in good condition. Refund will be made on paper sets and sets provided on removable electronic media to non-bidders and Subcontractors in the amount of half of the deposit when the sets are returned in good condition within 10 days. A deposit is not required for downloading of electronic construction documents through an FTP site. A non-refundable shipping charge may be required for paper sets or sets provided on removable electronic media if stated in the Notice or the IFB.
- **19. GENERAL CONDITIONS:** The General Conditions are incorporated in the bid documents. If a copy of the General Conditions is not included in the bid documents, the bidder may obtain a copy of the current edition of the General Conditions at no cost by written request to the A/E and/or the Agency where the bid

documents are obtained. Copies may also be obtained from the DGS Forms Center (available online at http://forms.dgs.virginia.gov).

- **20. PREBID CONFERENCE**: See the IFB for requirements for a prebid conference and whether such conference is mandatory or optional.
- **21. INSPECTION OF BID DOCUMENTS:** Copies of the IFB documents including Plans and Specifications and the General Conditions will be available for inspection at the Agency, at the A/E's office, and at the locations listed in the Notice of the IFB.
- 22. DRUG-FREE WORKPLACE REQUIRED: Bidders are reminded that Code of Virginia § 2.2-4312 requires that the during the performance of the Contract resulting from this solicitation, the Contractor agrees to: (i) provide a drug-free workplace for the Contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every Subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each Subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific Contract awarded to a Contractor in accordance with this solicitation, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

NOTE: These CO-7A, Instructions to Bidders, have been created specifically for the use of agencies of the Commonwealth of Virginia, which may not alter their provisions without the express written approval of the Virginia Department of General Services, Division of Engineering and Buildings. These Instructions to Bidders have significant legal implications and shall not be altered or modified. Nothing in the CO-7A, Instructions to Bidders, shall be amended or deleted or its intent changed, except by an approved and properly issued 'Supplemental Instruction to Bidders'. The Commonwealth makes no representation as to their suitability for any other purpose. Paragraphs which have been added or revised since prior edition are identified with a line to the left of the paragraph.

PREBID QUESTION FORM

(Use separate Form for each question submitted.)

Date:	
-------	--

Project Title: Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway Partial Roof Replacement

Question to be submitted by 5:00 pm (Eastern Time) on June 19, 2023 (6 days prior to receipt of bids)

The following question concerns Drawing Sheet (number)_____

The following question concerns Specifications Section (number)_____, page _____, paragraph _____:

All responses to questions will be made by Addendum.

Question submitted by:____

Name

Organization

_:

Bidders shall submit form to:

David C. Liebal HDH Associates, P.C. dliebal@hdhassociates.com

END OF SECTION 00110

DIVISION 0 - SECTION 00310

ADOPTION AGREEMENT

For this project (Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway ; Partial Roof Replacement), The County of Northumberland VA has adopted the use of the Commonwealth of Virginia, General Conditions and all the applicable state forms, in their entirety, unless otherwise specified in the Supplemental General Conditions. They are part of the Contract Documents.

END OF SECTION 00310

DIVISION 0 – SECTION 00300

BID FORM

DATE:

Project Title: Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway Partial Roof Replacement

To: Northumberland County c/o Mr. Drew Basye, Assistant County Administrator 72 Monument Place Heathsville VA 22473.

In compliance with and subject to your Invitation for Bids and the documents therein specified, all of which are incorporated herein by reference, the undersigned bidder proposes to furnish all labor, equipment, and materials and perform all work necessary for construction of this project, in accordance with the Plans and Specifications dated May 17, 2023 and the Addenda noted below, as prepared by HDH Associates, P.C., 1305 Radford Street, Christiansburg, Virginia, for the consideration of the following amount:

BASE BID PART A:

Lump sum price for partial roof replacement and at Northumberland County Public Schools' School Board Office Building, 6958 Northumberland Highway, Heathsville, VA; complete in accordance with Plans, Specifications and Addendum

BASE BID PART B.

Replacement of any damaged wood decking material. Contractor to provide material and labor complete in accordance with Plans, Specifications and Addendum.

640 SF @_____\$/SF = \$____

Base Bid PART B = _____ Dollars (\$ _____).

BASE BID PART C.

Replacement of broken slate. Contractor to replace 50 broken/missing slate using reclaimed slate from the demo of the drive-thru. Contractor to provide slate hooks and labor to remove and install replacement slate complete in accordance with Plans, Specifications and Addendum.

50 @	\$/each = \$		
Base Bid PART C =		Dollars (\$).
TOTAL BASE BID AMOU	NT (Sum of DADTS A D &	7) IG .	

TOTAL BASE BID AMOUNT (Sum of PARTS A, B & C) IS:

_____ DOLLARS (\$______).

Contract award will be based on the **Base Bid Amounts shown above** as the Owner in its discretion decides to award. The Owner has the right to accept bids in part or whole and the right to reject all bids when in the best interest of the County.

The bidder has relied upon the following public historical climatological records: <u>National Weather Service in Heathsville</u> for <u>Heathsville</u>, <u>Virginia</u>.

Code of Virginia, § 2.2-4376.2 shall be applicable to the Work of the Contract.

The undersigned understands that time is of the essence and agrees that the time for Substantial Completion of the entire project shall be <u>60 consecutive calendar days</u> from the date of commencement of the Work as specified in the Notice to Proceed, and Final Completion shall be achieved within 30 consecutive calendar days after the date of Substantial Completion as determined by the A/E.

Acknowledgment is made of receipt of the following Addenda:

If notice of acceptance of this bid is given to the undersigned within 30 days after the date of opening of bids, or any time thereafter before this bid is withdrawn, the undersigned will execute and deliver a contract in the prescribed form (Commonwealth of Virginia Contract Between Owner and Contractor, Form CO-9) within 10 days after the contract has been presented to him for signature. The required payment and performance bonds, on the forms prescribed, shall be delivered to the Owner along with the signed Contract.

Immigration Reform and Control Act of 1986: The undersigned certifies that it does not and shall_not during the performance of the Contract for this project violate the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens, or knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

DISQUALIFICATION OF CONTRACTORS: By signing this bid or proposal, the undersigned certifies that this Bidder or any officer, director, partner or owner is not currently barred from bidding on contracts by any Agency of the Commonwealth of Virginia, or any public body or agency of another state, or any agency of the federal government, nor is this Bidder a subsidiary or affiliate of any firm/corporation that is currently barred from bidding on contracts by any of the same. We have attached an explanation of any previous disbarment(s) and copies of notice(s) of reinstatement(s).

Either the undersigned or one of the following individuals, if any, is authorized to modify this bid prior to the deadline for receipt of bids by writing the modification and signing his name on the face of the bid, on the envelope in which it is enclosed, on a separate document, or on a document which is telefaxed to the Owner:

I certify that the firm name given below is the true and complete name of the bidder and that the bidder is legally qualified and licensed by the Virginia Department of Professional and Occupational Regulation, Board for Contractors, to perform all Work included in the scope of the Contract.

Virginia License No.:	Bidder:
Contractor Class:	By:
	(Signature)
Specialty:	Valid until:
FEIN/SSN:	_Title:

If Corporation, affix Corporate Seal &

list State of Incorporation State:

(Affix Seal)

Virginia State Corporation Commission ID No.: _____; or

If Contractor is a foreign business entity not required to be authorized to transact business in the Commonwealth under Titles 13.1 or 50 of the Code of Virginia, or as otherwise required by law, please provide an explanation as to why such entity is not required to be so authorized:

Bid for Northumberland County Public Schools' School Board Office Building Partial Roof Replacement

CERTIFICATION OF NO CRIMES AGAINST CHILDREN

Contractor acknowledges that the implementation of this Contract requires Contractor, Contractor's employees or other persons that will provide services under this Contract to have direct contact with **Northumberland County Public Schools** students. Therefore, Contractor hereby certifies that neither Contractor, Contractor's employees nor any person that will provide services under this Contract who will have direct contact with students on school property during regular school hours or during school-sponsored activities have been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child.

Contractor understands that, pursuant to Code of Virginia § 22.1-296.1. making a materially false statement regarding offenses which are required to be included in the certification referenced above is a Class I misdemeanor and, upon conviction, the fact of such conviction shall be grounds for the revocation of the contract to provide such services and, when relevant, the revocation of any license required to provide such services. **Northumberland County Public Schools nor Northumberland County** shall not be liable for materially false statements regarding the certifications required under this Contract.

Have you, your employees, or any person who will have direct contact with students under this contract been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child?

NO

YES (please explain)

END OF SECTION 00300

COMMONWEALTH OF VIRGINIA



GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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PLEASE NOTE: These General Conditions of the Construction Contract (CO-7) ("General Conditions"), have been created specifically for the use of agencies of the Commonwealth of Virginia, which may not alter any provisions without the express written approval of the Virginia Department of General Services, Division of Engineering and Buildings. The General Conditions have significant legal implications and shall not be altered or modified. Nothing in the General Conditions shall be amended or deleted or its intent changed, except by an approved and properly issued Supplemental General Conditions. The Commonwealth of Virginia makes no representation as to their suitability for any other purpose. Note: Governmental entities not subject to DGS purview intending to modify the General Conditions for their use should consult with their legal counsel.

1. **DEFINITIONS**

Whenever used in in the Contract Documents, the following terms have the meanings indicated, which are applicable to both the singular and plural variations thereof:

Agency: The Agency, institution or department which is a party to the Contract. For purposes of the Contract, the term Owner shall include such Agency, whether or not the Agency owns the site or the building.

A/E Services: The entirety of the services required of the A/E pursuant to the A/E's contract with the Owner for the Project.

As-Built Drawings: The As-Built Drawings is a set of all Drawings, Specifications, addenda, approved Shop and setting Drawings, Change Orders and other modifications which are updated by the Contractor throughout the performance of the Work to contemporaneously record all changes and variations made during construction. The representation of such variations shall be neatly and clearly marked in color and shall include such supplementary notes, symbols, legends, and details as may be necessary to clearly show the as-built construction of the Work.

Architect/Engineer ("A/E"): The Virginia licensed Architect or Engineer that contracts with the Owner to provide the A/E Services for the Project. The A/E is a separate contractor and not an agent of the Owner. The term includes any subcontractors, associates or consultants employed by the A/E to assist in providing the A/E Services.

Beneficial Occupancy: The time, following Substantial Completion, at which the Project or portion thereof, is sufficiently complete and systems operational such that the Owner could, after obtaining necessary approvals and certificates, occupy and utilize the space for its intended use. Guarantees and warranties applicable to that portion of the Work begin on the date the Owner accepts and occupies the Project, or a portion thereof, unless otherwise specified in the Supplemental General Conditions or by separate agreement.

Change Order: A document (CO-11) issued on or after the effective date of the Contract which is agreed to by the Contractor and approved by the Owner, and which authorizes an addition, deletion or revision in the Work, including any adjustment in the Contract Price and/or the Contract Completion Date. The term Change Order shall also include initiating and confirming change orders issued pursuant to Section 38(a)(3). A Change Order, once signed by all parties, is incorporated into and becomes a part of the Contract.

Code of Virginia: *Code of Virginia* (1950), as amended. Sections of the Code referred to herein are noted by § xx-xx.

Commissioner of Labor and Industry: The Commonwealth of Virginia Commissioner of Labor and Industry.

Construction: The term used to include new construction, reconstruction, renovation, restoration, major repair, demolition and all similar work upon buildings and ancillary facilities, including any draining, dredging, excavation, grading or similar work upon real property.

Contract: The Contract between Owner and Contractor, (CO-9 series) and the Contract Documents incorporated therein.

Contract Completion Date: The date by which the Work must achieve Substantial Completion. The Contract Completion Date is established in the Notice to Proceed, based on the Time for Completion, or set forth as a specific date in the Contract.

Contract Documents: The Contract and any documents expressly incorporated therein. Such incorporated documents customarily include the bid submitted by the Contractor, the General Conditions, any Supplemental General Conditions, any Special Conditions, the Plans and the Specifications, and all modifications, including addenda and subsequent Change Orders.

Contract Price: The total compensation payable to the Contractor for performing the Work in accordance with the Contract Documents, subject to modification by Change Order.

Contractor: The person or entity with whom the Owner has entered into the Contract for the Work.

Critical Path: The longest continuous sequential duration of dependent activities from the Date of Commencement to the Contract Completion Date that defines the minimum overall time necessary to complete the Project, such that a delay of any activity along the Critical Path will result in a delay of the Contract Completion Date unless the duration of a subsequent activity on the Critical Path is reduced to offset the delay and maintain the Contract Completion Date.

Date of Commencement: The date as indicated in the written Notice to Proceed, the receipt of the earliest Building Permit, or a date mutually agreed to between the Owner and Contractor in writing, whichever is the latest.

Day: Calendar day unless otherwise noted.

Defective: An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, deficient, does not conform to the Contract Documents or does not meet the requirements of inspections, standards, tests or approvals required by the Contract Documents, or Work that has been damaged prior to the A/E's recommendation of Final Payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion or Beneficial Occupancy).

DGS: Virginia Department of General Services.

Drawing: A page or sheet of the Plans which presents a graphic representation, usually drawn to scale, showing the technical information, design, location, and dimensions of various elements of the Work. The graphic representations include, but are not limited to, plan views, elevations, transverse and longitudinal sections, large and small scale sections and details, isometrics, diagrams, schedules, tables and/or pictures.

DSBSD: Virginia Department of Small Business and Supplier Diversity.

Emergency: Any unforeseen situation, combination of circumstances, or a resulting state that poses imminent danger to health, life or property.

Field Order: A written order issued by the A/E which clarifies or explains the Plans or Specifications, or any portion or detail thereof, without changing the design, the Contract Price, the Time for Completion or the Contract Completion Date.

Final Completion: Completion and full performance of all Work in accordance with the terms and requirements of the Contract Documents, including the completion of all items identified on punch lists generated through the inspections set forth in Section 44(b) and submission of all information, manuals, warranties and documentation required by the Contract.

Final Completion Date: The date of the Owner's acceptance of the Work following Final Completion.

Final Compliance Report: A report where the Contractor shall certify and report on its compliance with the Small Business Procurement Plan, submitted by the Contractor in its Bid for the Contract, to the Owner through DGS' eVA system

Final Payment: The final payment that the Contractor receives pursuant to the applicable provisions of Section 36, except in the event no final payment is made due to termination of the Contract under either Sections 41 or 42. In the event of a termination for cause under Section 41, the Final Payment shall be when the termination became effective. In the event of a termination for convenience under Section 42, the Final Payment shall be either the payment of compensation for termination that the Contractor receives according to the provisions of Section 42(a), or the Owner's determination that no compensation for termination is due the Contractor under Section 42(a), as the case may be.

Float: The excess time included in a construction schedule to accommodate such items as inclement weather and associated delays, equipment failures, and other such unscheduled events. It is the contingency time associated with a path or chain of activities and represents the amount of time by which the early finish date of an activity may be delayed without impacting the Critical Path and delaying the Contract Completion Date. Any difference in time between the Contractor's approved early completion date and the Contract Completion Date shall be considered a part of the Float.

Float, Free: The time (in Days) by which an activity may be delayed or lengthened without impacting the start day of any successor activity.

Float, Total: The difference (in Days) between the maximum time available within which to perform an activity and the duration of an activity. It represents the time by which an activity may be delayed or lengthened without impacting the Contract Completion Date.

General Conditions: The General Conditions of the Construction Contract (CO-7 series).

Limited Renovation: Renovations that do not involve structural work (including, but not limited to, foundations, supports, beams, exterior roof supports, load bearing walls) and that do not involve Hot Work (as defined by the Virginia Statewide Fire Prevention Code) with the exception of brazing, soldering, and grinding.

Major Renovation: Renovations that do not meet the definition of Limited Renovation.

Notice: Notice required by the Contract shall be given in writing to the email address or physical delivery location identified in the Contract Documents for receipt of Notice by the receiving party. A Notice is deemed to have been properly given and effective at the time such Notice is: (i) deposited with a nationally recognized overnight delivery service using no more than two (2) business day delivery service for delivery to the Notice address; (ii) hand delivered to the Notice address; (iii) enclosed in a postage prepaid envelope addressed to the Notice address and delivered to a United States Postal Service for delivery by prepaid certified or registered mail; or (iv) sent via email to the email address identified for Notice in the Contract Documents.

Notice to Proceed: A written Notice given by the Owner to the Contractor fixing the date on which the Time for Completion will commence for the Contractor to begin the execution of the Work. The Notice to Proceed will identify the Contract Completion Date if not otherwise established by the Contract.

Owner: The public body with whom the Contractor has entered into the Contract for the Work. The term Owner shall also mean the Agency.

Person: This term includes any individual, corporation, partnership, association, company, business, trust, joint venture, or other legal entity.

Plans: The term used to describe the group or set of project-specific Drawings which are included in the Contract Documents.

Prevailing Wage Rate: Prevailing Wage Rate means that rate, amount, or level of wages, salaries, benefits and other remuneration prevailing for a classification of mechanics, laborers, or workers employed

CO-7

Project: The term used instead of the specific or proper assigned title of the entire undertaking which includes, but is not limited to, the Work and the A/E Services.

Project Inspector: One or more persons employed by the Owner to inspect the Work for the Owner and/or to document and maintain records of activities at the Site to the extent required by the Owner. The scope of the Project Inspector's authority with respect to the Contractor is limited to that indicated in Section 16 (e) and (f) of the General Conditions and as supplemented by the Owner in writing to the Project Inspector and to the Contractor.

Project Manager: The Project Manager shall be the Owner's designated representative on the Project. The Project Manager shall be the person through whom the Owner generally conveys written decisions and instructions. All Notices to the Owner and all information required to be conveyed to the Owner shall be conveyed to the Project Manager unless otherwise stated in the Contract. The scope of the Project Manager's authority is limited to that authorized by the Owner. The Owner may change the Project Manager from time to time and may, in the event that the Project Manager is absent, disabled or otherwise temporarily unable to fulfill their duties, appoint an interim Project Manager.

Provide: Shall mean furnish and install ready for its intended use.

Record Drawings: Record Drawings are a final compilation set of drawings showing the "as built" condition of the Work, including all conditions, locations and dimensions based on the Contractor's As-Built Drawings. The Record Drawings shall contain the Plans, Specification, Addenda, approved shop drawings, and any other information needed to show the final condition of the work, actual location of piping and utilities, the depths of pilings or caissons if pilings or caissons were in the construction, and the integration of all Change Orders to the Work.

Recycled: Equipment, materials, and accessories which have been previously used and that have been processed to form a new product deemed an equal per Section 26.b.

Service Disabled Veteran-Owned Business: A business that meets the definition of "Service disabled veteran business" as set forth in *Code of Virginia*, § 2.2-4310.

Schedule of Values: That portion of Form CO-12 prepared by the Contractor and acceptable to the Owner which indicates the portion of the Contract Price to be paid for each trade or major component of the Work.

Shop Drawings: The drawings, diagrams, illustrations, schedules, installation descriptions and other data prepared by or for the Contractor to provide detailed information for the fabrication, location, erection, installation, connection and methodology associated with the Work. Shop Drawings are intended to aid in the preparation and installation of materials and to ascertain that the materials proposed by the Contractor conform to the requirements of the Contract Documents.

Site: The location at which the Work is performed or is to be performed.

Small Business: A business certified as a small business by the DSBSD.

Small Business Procurement Plan: The proposed type and percentage of small business participation in the Total Base Bid Amount submitted by the Contractor as part of its Bid.

Special Conditions: That part of the Contract Documents which describes special or additional requirements or procedures applicable to the Project. The Special Conditions do not amend or supersede the General Conditions.

Specifications: That part of the Contract Documents containing the written administrative requirements

and the technical descriptions of materials, equipment, construction systems, standards, and workmanship for the Work.

Subcontractor: A person or firm having a direct contract with Contractor or with any other Subcontractor for the performance of the Work. Subcontractor includes any person or firm who provides on-Site labor but does not include a Supplier.

Submittals: All Shop, fabrication, setting and installation drawings, diagrams, illustrations, schedules, samples, and other data required by the Contract Documents which are specifically prepared by or for the Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by the Contractor to illustrate material or equipment conformance of some portion of the Work with the requirements of the Contract Documents. Submittal as used herein includes Shop Drawings.

Substantial Completion: The stage in the progress of the Work at which the Owner agrees that the Work or a specific portion thereof, is sufficiently complete, in accordance with the Contract Documents, so that it can be utilized by the Owner for the purposes for which it was intended. The Owner at its sole discretion may, after obtaining the necessary approvals and certificates, take Beneficial Occupancy at this time or choose to wait to occupy until after Final Completion is achieved.

Supplemental General Conditions: An amendment or modification which amends or supplements the General Conditions.

Supplier: A manufacturer, fabricator, distributor, supplier or vendor who provides material or equipment for the Project but does not provide on-Site labor.

SWaM/SDV Business: All subcategories of Small Businesses certified by the DSBSD including Micro Business, Minority-Owned Business, Service-Disabled Veteran-Owned Business, Small Business, and/or Women-Owned Business together as a group.

Time for Completion: The number of consecutive Days following the Date of Commencement within which the Contractor must achieve Substantial Completion of the Work in accordance with the Contract Documents.

Total Contract Amount: The total compensation payable to the Contractor for performing the Contract, subject to modification by Change Order.

Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which are or have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Work: The construction and services required by the Contract Documents, whether completed or partially completed, including, but not limited to, furnishing labor, furnishing and incorporating materials and equipment into the Construction. The Work includes the entire completed Construction, or the various separately identifiable parts thereof, required to be provided under the Contract Documents or which may reasonably be expected to be provided as part of a complete, code compliant and functioning system for those systems depicted in the Plans and Specifications.

2. CONTRACT DOCUMENTS

The Contract Documents consist of the Contract and all other documents identified therein as Contract Documents as more precisely defined above.

3. LAWS AND REGULATIONS

- a. The Contractor shall comply with the Virginia Uniform Statewide Building Code and all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work and shall give all notices required thereby. The Contractor shall assure that all Subcontractors and tradespeople who perform Work on the Project are properly licensed by the Department of Professional and Occupational Regulation as required by Title 54.1, Chapter 11, and Article 1 of the *Code of Virginia* and by applicable regulations.
- b. This Contract and all other contracts and Subcontracts are subject to the provisions of Article 3, Chapter 4, Title 40.1, *Code of Virginia*, relating to labor unions and the "right to work." The Contractor and its Subcontractors, whether residents or nonresidents of the Commonwealth, who perform any Work related to the Project shall comply with all of the said provisions.
- c. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By signing this Contract, the Contractor certifies that it does not and shall not during the performance of this Contract knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986, or otherwise violate its provisions.
- d. E-VERIFY PROGRAM: Pursuant to *Code of Virginia*, § 2.2-4308.2, any employer with more than an average of 50 employees for the previous 12 months entering into a contract in excess of \$50,000 with any agency of the Commonwealth to perform work or provide services pursuant to such contract shall register and participate in the E-Verify program to verify information and work authorization of its newly hired employees performing work pursuant to such public contract. Any such employer who fails to comply with these provisions may be debarred from contracting with any agency of the Commonwealth for a period up to one year. Such debarment may cease upon the employer's registration and participation in the E-Verify program. If requested, the employer shall present a copy of their Maintain Company page from E-Verify to prove that they are enrolled in E-Verify.
- e. In performing the Work under this Contract, the Contractor shall comply with the provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia and as issued by the Department of Labor and Industry under Title 40.1 of the *Code of Virginia*. Inspectors from the Department of Labor and Industry shall be granted access to the Work for inspection without first obtaining a search or administrative warrant.
- f. Building Permit: Because this Project is on Commonwealth of Virginia property, codes or zoning ordinances of local political subdivisions do not apply to Work at the Site. The Virginia Uniform Statewide Building Code applies to the Work and is administered by the Building Official for State-owned buildings and real property. The Building Permit will be obtained and paid for by the Owner. All other permits, local license fees, business fees, taxes, or similar assessments imposed by the appropriate political subdivision and the Department of Environmental Quality shall be obtained and paid for by the Contractor. See Section 25 of these General Conditions for utility connection fees and services.
- g. The Contractor shall include in each of its Subcontracts a provision requiring each Subcontractor to include or otherwise be subject to the same payment and interest requirements in Subsections (a), (b), and (c) of Section 37 of these General Conditions with respect to each lower-tier Subcontractor and Supplier.
- h. The Contractor, if not licensed as an asbestos abatement contractor in accordance with *Code of Virginia*, § 54.1-514, shall have all asbestos-related Work performed by Subcontractors who are duly licensed as asbestos contractors for the Work required.

- i. Lead-Based Paint Activities: If the Contract Documents indicate that lead-based paint is present on existing materials, components, or surfaces, the Contractor shall conform to the following:
 - 1. The requirements set forth in 40 CFR 745.233 Lead-Based Paint Activities Requirements in selecting and performing the means, methods and procedures for performing the Work. This includes, but is not limited to, training of personnel, lead abatement, encapsulation of lead-containing materials, removal and handling of lead-containing materials, and methods of disposal.
 - 2. The requirements for employee protection contained in 29 CFR Part 1926, Subpart D, and the requirements for record-keeping contained 29 CFR Part 1910.
 - 3. The Virginia Department of Labor and Industry's (DLI) Regulation Concerning Certified Lead Contractors Notification, Lead Project Permits and Permit Fees published in the Virginia Administrative Code, 16 VAC25-35, requiring, among other things, that a permit be issued to the lead abatement contractor, or any subsequent regulation issued by DLI pertaining to lead-based paint abatement.
- j. If the Contractor violates laws or regulations that govern the Project, the Contractor shall take prompt action to correct or abate such violation and shall indemnify and hold the Owner harmless against any fines and/or penalties that result from such violation. The Contractor also shall indemnify and hold the Owner harmless against any third-party claims, suits, awards, actions, causes of action or judgments, including but not limited to attorney's fees and costs incurred thereunder, that arise or result from Contractor's violation of laws or regulations.
- k. If the Work includes any land-disturbing activities, the Contractor shall have on-Site an individual certified by the Department of Environmental Quality as a Responsible Land Disturber in accordance with *Code of Virginia*, § 62.1-44.15:51.
- 1. Unless otherwise specified in the Supplemental General Conditions, the Contractor is neither required nor prohibited from entering into or adhering to agreements with one or more labor organizations, or otherwise discriminating against Subcontractors for becoming or refusing to become, or remaining signatories to or otherwise adhering to, agreements with one or more labor organizations. This section does not prohibit Contractor or Subcontractors from voluntarily entering into agreements with one or more labor organizations. Both the Agency and Contractor are entitled to injunctive relief to prevent any violation of this section.

This section does not apply to any public-private agreement for any construction in which the private body, as a condition of its investment or partnership with the state agency, requires that the private body have the right to control its labor relations policy and perform all work associated with such investment or partnership in compliance with all collective bargaining agreements to which the private party is a signatory and is thus legally bound with its own employees and the employees of its contractors and subcontractors in any manner permitted by the National Labor Relations Act, 29 U.S.C. § 151 *et seq.*, or the Railway Labor Act, 45 U.S.C. § 151 *et seq.*

This section does not prohibit an employer or any other person covered by the National Labor Relations Act or the Railway Labor Act from entering into agreements or engaging in any other activity protected by law.

This section shall not be interpreted to interfere with the labor relations of persons covered by the National Labor Relations Act or the Railway Labor Act.

m. Payment of Prevailing Wages Pursuant to Virginia Code 2.2-4321.3

Code of Virginia § 2.2-4321.3 and the following requirements shall be applicable to the Work of the Contract if the Contract Price is greater than \$250,000.00:

- 1. The Contractor agrees that all remuneration to any individual providing labor for the Project or the Work as a mechanic, laborer, worker or equivalent shall be paid at a rate not less than the Prevailing Wage Rate beginning upon the individual's first day of work at or for the Project.
- 2. Upon award of the Contract, the Contractor shall certify, under oath, to the Commissioner of Labor and Industry the pay scale for each craft and trade to be employed for, or to provide labor for, the Project or the Work by the Contractor and any Subcontractors. The Contractor's certification shall include all information required by *Code of Virginia* § 2.2-4321.3(G). The Contractor shall provide a copy of this certification to the Owner at the time it is provided to the Commissioner of Labor and Industry.
- 3. The Contractor shall ensure that each individual providing labor as a mechanic, laborer, worker or equivalent shall be accurately classified in conformance with the Prevailing Wage Rate determinations.
- 4. The Contractor and all Subcontractors shall keep, maintain, and preserve all records relating to the occupation, work classification, wages paid to and hours worked for each individual providing labor for the Project or the Work as a mechanic, laborer, worker or equivalent in a manner which complies with the requirements of *Code of Virginia* § 2.2-4321.3(H). The Contractor and all Subcontractors shall retain these and any other required payroll records for the period required by *Code of Virginia* § 2.2-4321.3(H). The Contractor and its Subcontractors shall make available to the Owner all records required by *Code of Virginia* § 2.2-4321.3(H) for inspection and copying within five (5) days of Owner's request.
- 5. The Contractor and all Subcontractors shall post all Prevailing Wage Rates applicable to the Project and the Work in a prominent and easily accessible place at the Site. The Contractor and all Subcontractors shall timely make all postings, updates to postings, and certification required by *Code of Virginia* § 2.2-4321.3(I). The Contractor shall provide the Owner with a copy of each certification made to the Commissioner of Labor and Industry pursuant to *Code of Virginia* § 2.2-4321.3(I) at the time the certification is provided to the Commissioner of Labor and Industry.
- 6. The Contractor shall indemnify and hold harmless the Owner from any fines, demands, claims, suits and damages, including any attorney's fees incurred by the Owner, resulting from or relating to the Contractor's or any Subcontractor's failure to pay the Prevailing Wage to a mechanic, laborer, worker or equivalent individual or to comply with the requirements of *Code of Virginia* § 2.2-4321.3.
- n. *Code of Virginia*, § 2.2-4376.2 shall be applicable to the Work of the Contract.

4. NONDISCRIMINATION

- a. Contractor shall comply with the Federal Civil Rights Act of 1964, as amended, the Virginia Fair Employment Contracting Act of 1975, as amended, the Virginia Human Rights Act, as amended, and the laws of the Commonwealth of Virginia and all Executive Orders in effect at the time of the Work which safeguard individuals from unlawful discrimination in employment.
- b. *Code of Virginia* § 2.2-4311 and executive orders currently in effect shall be applicable to the Work of the Contract. During the performance of this Contract, the Contractor agrees as follows:

- 1. The Contractor shall not discriminate against any employee or applicant for employment, subcontracting, and delivery of goods and services because of race, religion, color, sex, national origin, age, disability, or other basis prohibited by state law or executive order relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such Contractor is an equal opportunity employer.
- 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 4. The Contractor shall include the provisions of the foregoing subparagraphs 1, 2 and 3 in every Subcontract or purchase order over \$10,000, so that the provisions will be binding upon each Subcontractor and Supplier.
- c. *Code of Virginia*, § 2.2-4201 shall be applicable to the Work of the Contract. During the performance of this Contract, the Contractor agrees as follows:
 - 1. The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause, including the names of all contracting agencies with which the Contractor has contracts over \$10,000.
 - 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that Contractor is an equal opportunity employer. However, notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this chapter
 - 3. If the Contractor employs more than five (5) employees, the Contractor shall: (i) provide annual training on the Contractor's sexual harassment policy to all Contractor's supervisors and employees providing services in the Commonwealth of Virginia, except such supervisors or employees who are required to complete sexual harassment training provided by the Commonwealth of Virginia Department of Human Resource Management; and (ii) post the Contractor's sexual harassment policy in: (a) a conspicuous public place in each building located in the Commonwealth that the Contractor owns or leases for business purposes; and (b) the Contractor's employee handbook.
 - 4. The Contractor shall include the provisions of the foregoing subparagraph 1, 2 and 3 in every Subcontract and purchase order over \$10,000, so that the provisions will be binding upon each Subcontractor and Supplier.
- d. Where applicable, the Virginians with Disabilities Act and the federal Americans with Disabilities Act shall apply to the Contractor and all Subcontractors and Suppliers.
- e. The Owner does not discriminate against faith-based organizations as defined in *Code of Virginia* § 2.2-4343.1(B).

5. PROHIBITION OF ALCOHOL AND OTHER DRUGS

- a. The Contractor shall establish a written policy to maintain and enforce a drug-free workplace, to specify actions that will be taken against persons for violations of the policy, and to require that such policy be binding on each of its employees, Subcontractors, and Suppliers performing Work of the Contract.
- b. The Contractor's policy shall prohibit the following acts by all Contractor, Subcontractor, and Supplier personnel at the Site:
 - 1. The manufacture, distribution, dispensation, possession, or use of a controlled substance or marijuana, except possession and medically prescribed use of prescription drugs; and
 - 2. The impairment of judgment or physical abilities due to the use of a controlled substance or marijuana, including impairment from prescription drugs.
- c. The Contractor shall post a copy of this policy in a conspicuous place at the Site and assure that all personnel, including potential hires, are advised of the policy. A violation of this policy will be recognized as a breach of Contract and may result in termination of the Contract.
- d. The Contractor shall include in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace.
- e. The Contractor shall include the foregoing provisions as binding upon each Subcontractor and Supplier in every subcontract or purchase order over \$10,000.
- f. For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

6. TIME FOR COMPLETION

- a. The Contractor shall achieve Substantial Completion on or before the Contract Completion Date. Unless otherwise specified, the Contractor shall achieve Final Completion within thirty (30) Days after the Contract Completion Date.
- b. The Contractor acknowledges and agrees that the Owner is relying upon the Time for Completion and Contract Completion Date for planning the use and Beneficial Occupancy of the Work and for all other purposes. If the Contractor fails to achieve Substantial Completion by the Contract Completion Date, the Contractor shall be subject to payment of actual damages incurred by the Owner or liquidated damages, if provided for in the Contract.
- c. The Contractor, in submitting its bid or proposal, acknowledges that the Time for Completion is a reasonable duration and period for performing the Work and that it has taken into consideration normal weather conditions for the period of performance. Normal weather does not mean statistically average weather, but rather means a range of weather patterns which might be anticipated based on weather conditions and events for the past ten (10) years. Normal weather conditions shall be determined from the public historical records available, including the U.S. Department of Commerce, Local Climatological Data Sheets, National Oceanic and Atmospheric Administration / Environmental Data and Information Service, National Climatic Center and National Weather Service. The data sheets to be used shall be those for the locality or localities closest to the Site. No additional compensation, costs or damages will be paid to the Contractor

because of normal weather conditions, including normal adverse weather to be anticipated during the Project. An extension of time for abnormal adverse weather conditions which directly impact the Work will be considered by the Owner upon under the following conditions, all of which must be strictly complied with and demonstrated by the Contractor:

- 1. A request for extension of time-based on abnormal adverse weather conditions must be made in writing within fourteen (14) Days of the completion of the calendar month during which the abnormal adverse weather conditions impacted the Work at the Site. The request for additional time shall be substantiated by weather data collected during the period of delay at the Site. Said data must demonstrate an actual departure from weather conditions that could have been anticipated at the Site during the dates in question.
- 2. The abnormal adverse weather must have caused a delay to the Contract Completion Date as a result of a delay to the Critical Path as depicted on the accepted "critical path method" schedule or the approved bar graph schedule current at the time of the weather event. No extension will be considered for any portion of any delay which consumes only Float.
- 3. All of the evidence and data supporting the request (including both historical data and the recordings at the Site during the time of delay) must be furnished to the Owner before the end of the calendar month following the month for which the request is made.

Compliance with the requirements of this section is a condition precedent to the Contractor's entitlement to any change or adjustment to the Contract Completion Date for impacts from abnormal weather conditions.

d. The Contractor's execution of the Contract is a representation and agreement that the Contractor has visited the Site and reviewed the requirements of the bid documents, the Contract Documents, local conditions, availability of materials, equipment, and labor, the reasonable time required for the Owner to respond to Submittals, and any other factors which may affect the performance of the Work, and has taken all these factors into consideration in submitting its bid and executing this Contract.

7. CONDITIONS AT SITE

- a. The Contractor shall have visited the Site prior to bidding or submitting its proposal and is totally responsible for having ascertained pertinent local conditions such as location, accessibility and general character of the Site, and the character and extent of existing conditions, improvements and work within or adjacent to the Site. The Contractor shall not submit any claims or any request for adjustments of the Contract Price or Contract Completion Date which result from its failure to consider such conditions.
- b. If in the performance of the Work the Contractor encounters (i) hidden physical conditions of a building being modified which are materially different from those ordinarily encountered or generally recognized as inherent in the activities being performed or (ii) subsurface or concealed latent conditions which are materially different from those frequently present in the locality or from those indicated in the Contract Documents, the Contractor shall promptly provide Notice to the Owner and A/E before the conditions are disturbed and not later than seven (7) Days after discovery. The A/E shall promptly review the conditions and propose such changes or adjustments, if any, in the Contract Documents that may be necessary to address the conditions. The Contractor must request any change in the Contract Price or Contract Completion Date for such conditions. Compliance with the requirements of this section is a condition precedent to the Contractor's entitlement to any change or adjustment in the Contract Price or Contract Completion Date as a result of such Site conditions.

c. If the Contractor, during the course of the Work, observes the existence of any material which he knows, should know, or has reason to believe is hazardous to human health, the Contractor shall promptly notify the Owner in writing before the material is disturbed further or the affected work is performed. The Owner will provide the Contractor with instructions regarding the disposition of the material. The Contractor shall not perform any Work involving the material or any Work causing the material to be less accessible prior to receipt of special instructions from the Owner. The Contractor must request any change in the Contract Price or Contract Completion Date for such conditions pursuant to the applicable requirements in Sections 38, 39 and 43 of these General Conditions. Compliance with the requirements of this section is a condition precedent to the Contractor's entitlement to any change or adjustment in the Contract Price or Contract Completion Date as a result of such Site conditions.

8. CONTRACT SECURITY

- For contracts with a value exceeding Five Hundred Thousand Dollars (\$500,000) or as required by a. the Owner on the CO-9, the Contractor shall deliver to the Owner or its designated representative, a Commonwealth of Virginia Standard Performance Bond, DGS-30-084 (CO-10) and a Commonwealth of Virginia Standard Labor and Material Payment Bond, DGS-30-088 (CO-10.1), each fully executed by the Contractor and one or more surety companies legally licensed to do business in Virginia and each in an amount equal to one hundred percent (100%) of the Contract Price. If more than one Surety executes a bond, each shall be jointly and severally liable to the Owner for the entire amount of the bond. Sureties shall be selected by the Contractor, subject to approval by the Owner. No payment on the Contract shall be due and payable to the Contractor until the bonds have been approved by the Owner and the Office of the Attorney General of Virginia. To facilitate review of the bonds by the Office of the Attorney General, the power of attorney from the surety company to its agent who executes the bond shall be attached to the bond, or, if not so attached, prior to the execution of the bonds by the surety, recorded in the Office of the Clerk of Court for the City of Richmond, Virginia, at the John Marshall Court Building, 400 North Ninth Street, Richmond, VA 23219.
- b. For the purposes of all Standard Labor and Material Payment Bonds entered into, the term "subcontractors" as used in § 2.2-4337(A)(2)of the *Code of Virginia* is interpreted to mean any Subcontractors at any tier who participated in the prosecution of the Work undertaken by the Contractor (referred to in § 2.2-4337(A)(2) of the *Code of Virginia* as the "prime contractor"), whether such Subcontractor had a direct contract with the Contractor (prime contractor) or another Subcontractor, regardless of whether there were one or more other intervening Subcontractors contractually positioned between it and the Contractor (prime contractor).
- c. *Code of Virginia* § 2.2-4338 allows for alternative forms of security in lieu of payment and/or performance bonds. No alternative forms of security shall be allowed unless approved in writing by Owner prior to Contractor's submission of its Bid or proposal.
- d. Mechanic's liens may not be filed or recorded on Owner, Agency, or Commonwealth property. The Contractor shall keep the Owner's property free and clear from all mechanic's liens. The Contractor shall, upon Notice from the Owner, cause any liens filed or recorded to be released within ten (10) Days from Notice at its cost and expense; and if the Contractor fails to do so, the Owner shall have the right, but not the obligation, to cause such lien to be released by bonding or otherwise, and the Contractor shall indemnify and hold harmless the Owner from all costs and expenses incurred or to be incurred as a result, including bond premiums, court costs and attorneys' fees arising from or related to such liens. At the Owner's option, it may withhold payment of any sums due the Contractor until any such liens are released, and may deduct such costs or expenses from any payment then due or thereafter becoming due from the Owner to the Contractor.

9. SUBCONTRACTS

- a. The Contractor shall, as soon as practicable after the signing of the Contract, notify the Owner and A/E in writing of the names of all Subcontractors proposed for the principal parts of the Work and of such others as the A/E may direct. Where the Specifications establish qualifications or criteria for Subcontractors, manufacturers, or individuals performing Work on the Project, the Contractor shall be responsible for ascertaining that those proposed meet the criteria or qualifications. The Contractor shall not employ any Subcontractor that the Owner may, within a reasonable time, object to as unsuitable. Neither the Owner nor the A/E shall direct the Contractor to contract with any particular Subcontractor unless provided in the Specifications or Invitation for Bids.
- b. The Owner may select a particular Subcontractor for a certain part of the Work and designate on the Invitation for Bids or Request for Proposal that the Subcontractor shall be used for the part of the Work indicated and that the Subcontractor has agreed to perform the Work for the subcontract amount stipulated on the bid or Proposal form. The Contractor shall include the stipulated amount plus its markups in the bid or Proposal. In such case, the Contractor shall be responsible for that Subcontractor and its work and the Subcontractor shall be responsible to the Contractor for its work just as if the Contractor had selected the Subcontractor. If the Contractor has a reasonable objection to the Subcontractor. The Owner, at its sole discretion, may accept the Contractor's bid or proposal with the exception noted and contract separately with the Subcontractor under the provisions of Section 10 of the Contract or designate a different Subcontractor.
- c. The Owner shall, on request, furnish to any Subcontractor, if practicable, the amounts of payments made to the Contractor, the Schedule of Values and Requests for Payment submitted by the Contractor, and any other documentation submitted by the Contractor which would tend to show what amounts are due and payable by the Contractor to the Subcontractor.
- d. The Contractor shall be fully responsible to the Owner for all acts and omissions of its agents and employees and all tiers of Subcontractors and Suppliers performing or furnishing any of the Work. Nothing in the Contract Documents shall create any contractual relationship between Owner or A/E and any Subcontractor, Supplier or other Person, nor shall it create any obligation on the part of Owner or A/E to pay for or to see to the payment of any moneys due any Subcontractor, Supplier or other Person, except as may otherwise be required by law.
- e. The Contractor shall be fully responsible for its invitees at the Site and for those of its Subcontractors, Suppliers, and their employees, including any acts or omissions of such invitees.
- f. The Contractor agrees that it is responsible for all dealings and coordination with Subcontractors and Suppliers, and their subcontractors, employees and invitees, including, but not limited to, the Subcontractors' or Suppliers' claims, demands, actions, disputes and similar matters unless specifically provided otherwise by the Contract or by statute.

10. SEPARATE CONTRACTS

a. The Owner reserves the right to let other contracts in connection with the Project, the work under which may proceed simultaneously with the execution of this Contract. The Contractor shall afford separate contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work. The Contractor shall cooperate with them and shall take all reasonable action to coordinate its Work with that of separate contractors. If the Owner has listed other separate contracts in the Invitation for Bids or Requests for Proposal which it expects to proceed simultaneously with the Work of the Contractor, and has included the estimated timing of such other contracts in the Invitation for Bids or Requests for Proposal, the Contractor shall integrate the schedule of those separate contracts into its scheduling. The Contractor shall make every reasonable effort to assist the Owner in maintaining the schedules for all separate contracts. If the work performed by a separate contractor is Defective or performed so as to prevent or threaten to prevent the Contractor from carrying out its Work according to the Contract, the Contractor shall immediately notify the Owner and the A/E upon discovering such conditions.

b. If a dispute arises between the Contractor and any separate contractor(s) as to their responsibility for cleaning up the Site, the Owner may clean up and charge the cost thereof to the respective contractors in proportion to their responsibility. If the Contractor disputes the Owner's apportionment of clean-up costs, it shall be the Contractor's burden to demonstrate and prove the correct apportionment.

11. CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

- a. The Contractor shall not commence Work under this Contract until all insurance required hereunder has been obtained from an insurer authorized to do business in Virginia and such insurance has been approved by the Owner. The Contractor shall provide to the Owner Certificates of Insurance for all required coverage and, upon request, shall provide full copies of the Contractor's insurance policies. Approval of insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.
- b. The Contractor shall procure and maintain, as required herein, the following insurance coverages:
 - 1. Workers' Compensation and Employer's Liability Insurance to cover all employees engaged in the Work of a type and in an amount to meet all Commonwealth of Virginia statutory requirements and regulations to provide all benefits to which employees may be entitled, including Employers Liability, with limits no less than \$1,000,000 bodily injury by accident or disease, each employee. Where applicable, coverage shall be extended to cover any claims under the United States Longshoreman's Act and Harbor Workers Act and Jones Act as may be appropriate for the work.
 - 2. Comprehensive General Liability insurance, including coverage for Broad Form Contractual, Premises/Operations, Product and Completed Operations, Independent Contractor's Liability, and Personal Injury Liability, with limits of at least \$2,000,000 per occurrence and \$2,000,000 aggregate, applicable on a per-project basis. The policy shall not exclude or limit the amount of coverage for the Work of the Project or for explosion, collapse, underground operations, mold, or exterior insulation and finish system ("EIFS").
 - 3. Automobile Liability Insurance with a limit of not less than \$1 million combined single limit for bodily injury and property damage per occurrence, covering all owned, non-owned, hired and borrowed vehicles, whether on-Site or off-Site.
 - 4. Contractor or the Asbestos Subcontractor shall provide occurrence-based liability insurance with asbestos coverages in an amount not less than \$1,000,000. The following shall be named as additional insureds on this policy: the Commonwealth of Virginia, its officers, employees and agents; the A/E (if not the Asbestos Project Designer); and the Contractor (where the asbestos work is being performed by the Asbestos Subcontractor).
- c. Unless otherwise specified, Contractor shall ensure that all insurance required by Subsection (b) above contains the following provisions:
 - 1. With the exception of Workers' Compensation insurance, the Commonwealth of Virginia, the Owner, and their officers, employees and agents shall be named as additional insureds on all policies. The additional insureds as stated for the asbestos coverage shall be as stated in Section 11(b)(4).
 - 2. All insurance coverage shall be considered primary and non-contributory with respect to

other insurance that might be available to the Contractor, A/E, Owner, or Agency.

- 3. All insurers shall waive rights of subrogation against the Commonwealth of Virginia, Owner and Agency for any claims covered by the insurance required herein.
- 4. All deductibles or self-insured retentions shall be the sole responsibility of the Contractor.
- d. No insurance will be canceled, dropped, replaced, or materially changed without at least thirty (30) Days' prior written Notice to and consent of the Owner.
- e. Contractor shall require each Subcontractor to carry the same insurance, and in the same amounts, required by Section 11(b)(1)-(3) above. The Contractor shall not allow any Subcontractor to commence Work on the Project until all insurance required of the Subcontractor by this Contract has been obtained by the Subcontractor and approved by the Contractor.
- f. Prior to award of the Contract, the Contractor shall submit, on the form provided by the Owner, a Certificate of Coverage verifying Workers' Compensation insurance is in place. The Contractor shall likewise obtain a Certificate of Coverage for Workers' Compensation insurance from each Subcontractor and shall provide a copy to the Owner prior to the Subcontractor beginning Work at the Project.

12. "ALL-RISK" BUILDER'S RISK INSURANCE TO INCLUDE AN INSTALLATION FLOATER

- a. The Contractor shall procure and maintain, at its cost, "all-risk" Builder's Risk insurance with minimum coverage and limits as follows:
 - 1. **New Construction, Addition, or Major Renovation:** When the Work is new construction, addition, or Major Renovation, the Contractor shall maintain "all-risk" Builder's Risk insurance for the Work and the entire structure or structures, if any, on which the Work is to be done with a minimum limit of not less than the insurable value of the structure(s) plus one hundred percent (100%) of the Contract Price and the value of all Change Orders, to represent the total value of the structure(s) and the Work on a replacement cost basis.
 - 2. Limited Renovation: When the Work is Limited Renovation to an existing structure, the Contractor shall maintain "all risk" Builder's Risk insurance in an amount equal to one hundred percent (100%) of the Contract Price and the value of all Change Orders, to represent the total value of the Work on a replacement cost basis.

When a project is an addition with Limited Renovation to an existing structure, then the insurable value of the existing structure shall not be included.

b. Builder's risk insurance shall be provided on an "all risk" or equivalent policy form and shall include, without limitation, insurance against all perils. The insurance shall cover the costs of debris removal, temporary buildings, legal requirements, and compensation for A/E services and Contractor services required following an insured loss. The insurance shall cover portions of the Work stored off-Site, Work in transit, and all materials, supplies, equipment, machinery, and fixtures that are or will be part of the Project. The policy shall include coverage for mold resulting from a covered peril, property in transit or temporary storage, equipment breakdown/course of construction, and soft costs within the aggregate or blanket limit of the of the policy. If not otherwise covered by the Builder's Risk policy, Contractor also shall provide an installation floater to cover all equipment and materials intended for installation at the Project.

In the event the policy includes any coverages where the limit is less than the aggregate or blanket limit of the policy (sub limits), the coverage shall be no less than the stated minimum sub-limits for the following perils:

-	Flood	\$2,000,000
-	Earth Movement	\$2,000,000
-	Debris Removal	\$2,000,000
-	Extra or Expediting Expense	\$250,000
-	Interior Water Damage	\$2,000,000
-	Loss of Income/Extra Expense	12 Months
-	Soft Costs	Blanket or Aggregate Limit/14 Day Waiting Period

The Certificate of Insurance provided to the Owner shall disclose all sub-limits, stating the peril and limit applying to each. In the event that the aggregate policy limit is less than the sub-limits identified above, coverage for all perils must be provided within the aggregate or blanket limit of the policy.

c. Builder's risk insurance may include a deductible provision if the Owner so provides in the Supplemental General Conditions, in which case the Contractor will be liable for such deductible whenever a claim arises. Any loss payable under the Builder's Risk insurance shall be payable to the Owner, in accordance with its interests, as they may appear, and then to any other persons insured thereunder.

Written evidence of this insurance and a copy of the policy shall be provided to the Owner no later than thirty (30) Days following the award of the Contract. The policy shall not be canceled, dropped, replaced, or materially changed without at least thirty (30) Days' prior written Notice to and consent of the Owner.

- d. Builder's risk insurance shall include the interest of the Contractor, the Owner, the Commonwealth, and all Subcontractors and Sub-subcontractors. Contractor shall maintain the builder's risk insurance until Final Payment by the Owner or until no person other than the Owner has an insurable interest in the Work, whichever is later.
- e. Any insurance provided through the Department of Treasury, Division of Risk Management, on buildings, construction, additions or renovations will not extend to Contractor's nor Subcontractors' buildings, equipment, materials, tools or supplies unless these items are to become property of the Owner upon completion of the Project and the Owner has assumed responsibility for such items at the time of the loss.

13. TAXES, FEES AND ASSESSMENTS

The Contractor shall, without additional expense to the Owner, pay all applicable federal, state, and local taxes, fees, and assessments arising out of the Work, except the taxes, fees and assessments on the real property comprising the Site. If the State Building Official elects to have the local building official inspect the Work as provided by *Code of Virginia* § 36-98.1, the Owner shall pay the resulting fees to the local building official.

14. PATENTS

The Contractor shall obtain all licenses necessary to use any invention, article, appliance, process or technique of whatever kind and shall pay all royalties and license fees. The Contractor shall indemnify and hold harmless the Owner, its officers, agents and employees, against any loss or liability for or on account of the infringement of any patent rights in connection with any invention, process, technique, article or appliance manufactured or used in the performance of the Contract, including its use by the Owner, unless such invention, process, technique, article or appliance is specifically named in the Specifications or Plans as acceptable for use in carrying out the Work. If, before using any invention, process, technique, article or appliance specifically named in the Specifications or Plans as acceptable for use in carrying out the Work. If, before using any invention, process, technique, article or appliance specifically named in the Specifications or Plans as acceptable for use in carrying out the Work. If, before using any invention, process, technique, article or appliance specifically named in the Specifications or Plans as acceptable for use in carrying out the Work, the Contractor has or acquires information that the same is covered by letters of patent making it necessary to secure the permission of the patentee, or other, for the use of the same, the Contractor shall promptly advise the Owner and the A/E. The Owner may direct that some other invention, process, technique, article or appliance be used. Should the Contractor have reason to believe that the invention, process, technique, article or appliance so specified is an infringement of a patent, and fails to inform the Owner and the A/E, the Contractor shall be responsible for any loss or liability due to the infringement.

15. ARCHITECT/ENGINEER'S STATUS

- a. The A/E shall have authority to endeavor to secure the faithful performance of the Work by Contractor. The A/E shall review the Contractor's Submittals for conformance to the requirements of the Contract Documents and return copies to the Contractor with appropriate notations. The A/E shall interpret the requirements of the Plans and Specifications and issue Field Orders to the Contractor as may be required. The A/E shall recommend to the Owner suspension of the Work (in whole or in part) whenever such suspension may be necessary to ensure the proper execution of the Work or the requirements of the Contract. The A/E shall have authority to reject, in writing, Work, including material, installation or workmanship, which does not conform to the Contract Documents or is Defective. The A/E shall determine the progress and quality of the Work, subject to the right of the Owner to make an overriding decision to the contrary. Upon request by the Contractor, the A/E shall confirm, in writing within fourteen (14) Days, any verbal order or determination made by the A/E.
- b. The A/E shall have no authority to approve or order changes in the Work which alter the design concept or which call for an extension of the Contract Completion Date or Final Completion or a change in the Contract Price.
- c. The Owner shall have the right, but not the duty, to countermand any decision of the A/E and to follow or reject the advice of the A/E, including but not limited to acceptance of the Work, as it deems best in its sole discretion. In those instances where the A/E has been given authority to act, the A/E shall promptly do so, but in the case of disagreement between the A/E and the Owner, the decision of the Owner shall be final. The Contractor shall not be bound by any determination, interpretation or decision of the A/E contrary to the A/E's authority or that is not consistent with the Contract Documents. The party taking issue with the determination, interpretation or decision of decision is communicated by the A/E. In the actual performance of the Work, the Contractor shall proceed in accordance with instructions given by the A/E unless the Owner and the Contractor mutually agree in writing or by Change Order that the Contractor shall proceed otherwise.
- d. All orders from the Owner to the Contractor shall either be transmitted through the A/E or communicated directly to the Contractor and the A/E by the Owner.
- e. Should the Owner choose to employ another or different A/E, the status of the A/E so employed shall be the same as that of the former A/E.
- f. The A/E shall provide a progress report to the Owner and the Contractor after each A/E visit to the

Site. The report shall be in writing indicating the date, time of day, weather conditions and the names of the persons representing the A/E who participated in the visit. The report shall advise the Owner of any problems that were noted or observed and shall compare the A/E's observations of the actual progress of the Work with that reported by the Contractor. On the basis of its on-Site observations, the A/E will make every reasonable effort to guard the Owner against delays, defects, and deficiencies in the Work of the Contractor. The A/E shall have the authority to inspect the Work, to note and report Defective Work and deviations from the Contract Documents to the Owner, to reject Work, and to recommend to the Owner the suspension of the Work when necessary to prevent Defective Work from proceeding or being covered.

- g. The A/E shall not be responsible for construction means, methods, techniques, sequences or procedures (other than those expressly specified in the Contract Documents), or for safety precautions and programs in connection with the Work. The A/E shall not be responsible for the Contractor's failure to carry out the Contractor's own responsibilities.
- h. The A/E generally conveys written decisions and Notices to the Contractor through the Project Manager and shall generally receive information and Notices from the Contractor through the Project Manager unless otherwise agreed. The Owner may delegate from the A/E to the Project Manager certain inspection, verification, acceptance, rejection, and administrative duties and authority, but any such delegation shall be in writing and a copy thereof provided to the Contractor.
- i. The provisions of this Section are included as information only to describe the relationship between the Owner, A/E, and Contractor. No failure of the A/E to act in accordance with this Section shall relieve the Contractor from its obligations under the Contract or create any rights in favor of the Contractor against the Owner.

16. INSPECTION

- a. All material and workmanship shall be subject to inspection, examination and testing by the Owner, the A/E, the Project Inspector, authorized inspectors and authorized independent testing entities at any and all times during manufacture and/or construction. The A/E and the Owner shall have authority to reject Defective Work and non-conforming material and require its correction. Rejected workmanship shall be satisfactorily corrected and rejected material shall be satisfactorily replaced with proper material without charge therefore, and the Contractor shall promptly segregate and remove the rejected material from the Site. If the Contractor fails to proceed at once with replacement of rejected material and/or the correction of Defective Work, the Owner may replace such material and/or correct such Work and charge the cost to the Contractor, or may terminate the Contract as provided in Section 41 of these General Conditions, the Contractor and surety being liable for any damage to the same extent as provided in Section 41 for termination thereunder.
- b. Site inspections, tests conducted on Site and tests of materials gathered on Site which the Contract requires to be performed by independent testing entities shall be contracted and paid for by the Owner. Examples of such tests are the testing of cast-in-place concrete, foundation materials, soil compaction, pile installations, caisson bearings and steel framing connections. The Contractor shall promptly furnish, without additional charge, all reasonable facilities, labor and materials necessary and convenient for making such tests. Except as provided in (d) below, whenever such examination and testing finds Defective Work or non-conforming materials or equipment, the Contractor shall reimburse the Owner for the cost of reexamination and retesting. Although conducted by independent testing entities, the Owner will not contract and pay for tests or certifications of materials, manufactured products or assemblies which the Contract, codes, standards, etc., require to be tested and/or certified for compliance with industry standards such as Underwriters Laboratories, Factory Mutual or ASTM. If fees are charged for such tests and certifications, they shall be paid by the Contractor. The Contractor shall also pay for all inspections, tests, and certifications which the Contract specifically requires the Contractor to

perform or to pay, together with any inspections and tests which it chooses to perform for its own purposes, but which are not required by the Contract.

- c. Where Work is related to or dependent on Defective Work, the Contractor shall stop such related or dependent Work until the Defective Work is corrected or an alternative solution is presented that is satisfactory to the Owner. Where Work is rejected as Defective, the Contractor shall stop like Work in other areas or locations on the Project until the Owner has approved corrective measures.
- d. Should it be considered necessary or advisable by the Owner or the A/E at any time before the Final Completion Date to make an examination of any part of the Work already completed, by removing or tearing out portions of the Work, the Contractor shall promptly furnish all necessary facilities, labor and material to expose the Work to be tested to the extent required. If such Work is found to be Defective in any respect, the Contractor shall bear all the expenses of uncovering the Work, of examination and testing, and of satisfactory reconstruction and correction of the Defective Work. If, however, such Work is found to meet the requirements of the Contract, the actual cost of the Contractor's labor and material necessarily involved in uncovering the Work, the cost of examination and testing, and Contractor's cost of material and labor necessary for replacement of the examined Work including a markup of fifteen (15%) percent for overhead and profit, shall be paid to the Contractor and, if the Contract Completion Date was delayed thereby, a time extension equivalent to the impact on the Critical Path shall be issued by Change Order. Notwithstanding the foregoing, the Contractor shall be responsible for all costs and expenses in removing and replacing the Work if the Contractor had covered the Work prior to any inspection or test required by the Contract Documents or contrary to the instructions of the A/E, Owner, Project Inspector, or Building Official.

The Project Inspector has the authority to recommend to the A/E and the Owner that the Work be suspended when in his or her judgment the Contract Documents are not being followed. Any such suspension shall be continued only until the matter in question is resolved to the satisfaction of the Owner. The cost of any such Work stoppage shall be borne by the Contractor unless it is later determined that the Work in question was in full compliance with the Contract Documents.

- e. The Project Inspector has the right and the authority to:
 - 1. Inspect all construction materials, equipment, and supplies for quality and for compliance with the Contract Documents and/or approved shop drawings and Submittals.
 - 2. Inspect workmanship for compliance with the standards described in the Contract Documents.
 - 3. Observe and report on all tests and inspections performed by the Contractor.
 - 4. Recommend rejection of Work which does not conform to requirements of the Contract Documents or is Defective.
 - 5. Keep a record of construction activities, tests, inspections, and reports.
 - 6. Attend all Site construction meetings and inspections held by the Owner and/or the A/E with the Contractor.
 - 7. Check materials and equipment, together with documentation related thereto, delivered for conformance with approved Submittals and the Contract.
 - 8. Check installations for proper workmanship and conformance with shop drawings and installation instructions.

- 9. Assist in the review and verification of the Form CO-12, Schedule of Values and Certificate for Payment, submitted by the Contractor each month.
- 10. Do all things for or on behalf of the Owner as the Owner may direct in writing.
- f. The Project Inspector has no authority to:
 - 1. Authorize deviations from the Contract Documents;
 - 2. Enter into the area of responsibility of the Contractor's superintendent;
 - 3. Issue directions relative to any aspect of construction means, methods, techniques, sequences or procedures unless specifically required by the Contract Documents or in regard to safety precautions and programs in connection with the Work;
 - 4. Authorize or suggest that the Owner occupy the Project, in whole or in part; or
 - 5. Issue a certificate for payment.
- g. The duties of the Project Inspector are for the benefit of the Owner only and not for the Contractor. The Contractor may not rely upon any act, statement, or failure to act on the part of the Project Inspector, nor shall the failure of the Project Inspector to properly perform his or her duties in any way excuse Defective Work, improper performance of the Work, or noncompliance with the Contract Documents by the Contractor.

17. SUPERINTENDENCE BY CONTRACTOR

- a. The Contractor shall have a competent foreman or superintendent, satisfactory to the A/E and the Owner, on the Site at all times during the performance of the Work. The superintendent shall be familiar with and be able to read and understand the Contract Documents and be capable of communicating verbally and in writing with the Owner's representatives, the A/E, and the Contractor's workers. The Contractor shall be responsible for all construction means, methods, techniques, sequences and procedures, for coordinating all portions of the Work except where otherwise specified in the Contract Documents, and for all safety and worker health programs and practices. The Contractor shall notify the Owner, in writing, of any proposed change in foreman or superintendent, including the reason therefore, prior to making such change.
- b. The Contractor shall, at all times, enforce strict discipline and good order among the workers on the Project, and shall not employ on the Work, or contract with, any unfit person, anyone not skilled in the Work assigned to him or her, or anyone who will not work in harmony with those employed by the Contractor, the Subcontractors, the Owner or the Owner's separate contractors and their subcontractors or anyone who will not interact appropriately with the public.
- c. The Owner may, in writing, require the Contractor to remove from the Site any employee or Subcontractor's employee the Owner deems to be incompetent, careless, not working in harmony with others on the Site, not interacting appropriately with the public, or otherwise objectionable, but the Owner shall have no obligation to do so.

18. CONSTRUCTION SUPERVISION, METHODS AND PROCEDURES

a. The Contractor shall be solely responsible for supervising and directing the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract. The Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction and for coordinating all portions of the Work, except where otherwise specified in the Contract Documents. The Contractor shall not be responsible for the negligence of others in the design or

selection of a specific means, method, technique, sequence or procedure of construction expressly required by the Contract. The Contractor is solely responsible to the Owner that the finished Work complies with the Contract Documents.

The Contractor shall be solely responsible for health and safety precautions and programs for workers and others in connection with the Work. No inspection by, knowledge on the part of, or acquiescence by the A/E, the Project Inspector, the Owner, the Owner's employees and agents, or any other Person shall relieve the Contractor from its sole responsibility for compliance with the requirements of the Contract and its sole responsibility for health and safety programs and precautions for the Work.

- b. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, the Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the A/E, subject to the Owner's right to disapprove. The Contractor must submit its written request for the substitution to the A/E with sufficient information to allow the A/E to determine that the substitute proposed is equivalent to that indicated or required by the Contract.
- c. The Plans and Specifications are divided into several parts, or sections, for convenience only and because the entirety of the Plans and Specifications must be considered and construed as a whole. The divisions of the Plans and Specifications are not intended to control the Contractor in dividing the Work among Subcontractors or to limit the Work performed by any trade. The Contractor shall be solely responsible for the coordination of the trades, Subcontractors and vendors engaged in the Work and for the compensation of the trades, Subcontractors and vendors for the Work performed.

19. SCHEDULE OF THE WORK

a. **General:** The Contractor is responsible for the scheduling and sequencing of the Work, for coordinating the Work, for monitoring the progress of the Work, and for taking appropriate action to keep the Work on schedule to finish on or before the Contract Completion Date. The Contractor may attempt to achieve Substantial Completion before the Contract Completion Date and receive payment in accordance with Section 36 for the Work completed each period. However, the Contract Completion Date shall be used in all schedules and schedule updates as the deadline for which Substantial Completion is to be achieved. The time (in Days) between the Contractor's planned early completion and the Contract Completion Date is part of the Float. Extensions of time allowed pursuant to Sections 38, 39, and 43, the determination of any compensation for compensable delay, and all other matters between the Owner and the Contractor will be determined using the Contract Completion Date, not an earlier Substantial Completion date planned by the Contractor.

Within two (2) weeks after the Contractor signs the Contract, unless otherwise extended by the Owner at the time of the signing, the Contractor shall prepare and submit to the Owner, with a copy to the A/E, a schedule for achieving Substantial Completion by the Contract Completion Date. The preliminary schedule shall be in sufficient detail to show the sequencing of the various trades for each floor level, wing or work area. The Owner will notify the Contractor of any comments on the preliminary schedule within fifteen (15) Days of receipt by the Owner.

A fully complete Project schedule meeting the requirements set forth below in subparagraph (1) or (2), as applicable, must be submitted no later than sixty (60) Days after the Contract is signed by the Owner.

1. For Contracts with a Contract Price less than \$1,500,000, a "critical path method" or bar graph schedule may be utilized. The schedule shall indicate the estimated starting and completion dates for each major element of the work and satisfy the requirements of Section 19 (b) below.

2. For Contracts with a Contract Price of \$1,500,000 or more, a "critical path method" schedule shall be utilized to control the planning and scheduling of the Work. The "critical path method" schedule shall be the responsibility of the Contractor and shall be paid for by the Contractor and shall satisfy the requirements of Section 19(c) below.

It is the Contractor's responsibility to submit a schedule that shows Substantial Completion of the Work by the Contract Completion Date and completion of any portions of the Work by any interim deadlines established by the Contract.

The Contractor shall allow sufficient time in the schedule for the A/E to conduct all reviews and inspections required under the A/E Contract with the Owner. If the A/E and the Contractor are unable to agree as to what constitutes sufficient time, the Owner shall determine the appropriate duration for such A/E activities.

The Owner and A/E review schedules and schedule-related submittals solely for compliance with the requirements of this Section. The Owner's failure to reject or its acceptance of any schedule, graph, chart, recovery schedule, updated schedule, plan of action, monthly status report, or similar schedule-related submittals, shall not constitute a representation, admission, or warranty by the Owner, including but not limited to a representation, admission, or warranty that the schedule is feasible or practical or that contents therein are true or accurate, nor shall any such acceptance or failure to reject relieve the Contractor from sole responsibility for completing the Work by the Contract Completion Date.

No progress payments will be payable to the Contractor until after it has submitted a preliminary schedule which is acceptable to the Owner. Neither the second progress payment nor any subsequent payment shall be payable to the Contractor until it has submitted a fully complete Project schedule accepted by the Owner. No subsequent progress payments will be payable to the Contractor unless it submits each monthly Project report required by Section 19(d) in a form accepted by Owner and each recovery schedule required by Owner pursuant to Section 19(e).

Failure to provide a satisfactory preliminary schedule, fully complete Project schedule, or monthly Project report within the time limits stated above shall be a material breach for which the Owner may terminate the Contract in the manner provided in Section 41 of these General Conditions.

- b. **Bar Graph Schedule:** Where a bar graph schedule is allowed, it shall be time-scaled in weekly increments, shall indicate the estimated starting and completion dates for each major element of the Work by trade and by area, level, or zone, and shall schedule dates for all salient features and activities, including but not limited to the placing of orders for materials, submission of Shop Drawings and other Submittals for review, approval of Shop Drawings and Submittals by A/E, the manufacture and delivery of material, the testing and the installation of materials, supplies and equipment, and all Work activities to be performed by the Contractor. Each Work activity will be assigned a duration by the Contractor. One Day shall be the time unit used. The bar graph shall establish and show the Critical Path for the Work.
- c. **Critical Path Method Schedule:** Where a Critical Path method schedule is required, it shall be in the time-scaled precedence format using the Contractor's logic and time estimates. The Critical Path method schedule shall be drawn or plotted with activities grouped or zoned by Work area or Subcontract rather than random (or scattered) format.

The Critical Path method schedule shall be time-scaled on a weekly basis and shall be drawn or plotted at a level of detail and logic which will schedule all salient features and activities of the Work, including not only the actual construction Work for each trade, but also the submission of Shop Drawings and Submittals for review, approval of Shop Drawings and Submittals by the A/E, placing of orders for materials, the manufacture and delivery of materials, the testing and installation of materials and equipment, and all Work activities to be performed by the Contractor.

The Critical Path method schedule shall have no line-item activities longer than thirty (30) Days in duration, and activities shall be included to provide sufficient detail for effectively managing the sequence of the Work. Failure to include any element of Work required for the performance of this Contract shall not excuse the Contractor from completing all Work required within the Time for Completion and by the Contract Completion Date and any interim deadlines established by the Contract. Each Work activity will be assigned a duration by the Contractor.

When completed, the Critical Path method schedule shall be submitted to the A/E and the Owner for review. The Critical Path method schedule will identify and describe each activity, state the duration of each activity, the calendar dates for the early and late start and the early and late finish of each activity, any constraints placed upon the activity, and clearly depict all activities on the Critical Path for the Work. Float and Free Float shall be indicated for all activities. Float, whether Free Float or Total Float, shall not be considered for the exclusive use or benefit of either the Owner or the Contractor, but must be allocated in the best interest of completing the Work by the Contract Completion Date.

On contracts with a price over \$5,000,000, each activity on the Critical Path method schedule shall also be attributable to, and correlate with, each activity on the Schedule of Values, the sum of which for all activities shall equal the Contract Price.

When accepted by the Owner and the A/E as compliant with the requirements of this Section, the schedule shall become the baseline Critical Path method schedule for the Project. Acceptance of the schedule by the Owner does not indicate agreement with, nor responsibility for, the proposed or actual duration of any activity or logic shown on the accepted schedule.

- d. Monthly Project Reports: The Contractor shall review progress of the Work not less than each month, but as often as necessary to properly manage the Project and stay on schedule to finish before the Contract Completion Date. The Contractor shall collect and preserve information on Change Orders, including extensions of time. The Contractor shall evaluate this information and update the latest accepted schedule as often as necessary to finish before the Contract Completion Date. The Contractor shall submit to the A/E along with each Certificate for Payment a copy of the bar graph schedule annotated to show the current progress or, for projects requiring a Critical Path method schedule, a monthly report of the status of all activities. The bar graph schedule or monthly status report submitted with each Certificate for Payment shall show the Work completed to date in comparison with the Work scheduled for completion, including but not limited to the dates for the beginning and completion of the placing of orders and the manufacture, testing and installation of materials, supplies and equipment. The form for these reports shall be approved by the A/E and the Owner prior to submission of the first Certificate for Payment. If any elements of the Work are behind schedule, regardless of whether they may prevent the Work from being completed on time, the Contractor must indicate in writing in the report what measures it is taking and plans to take to bring each such element back on schedule and to ensure that the Work is completed before the Contract Completion Date.
- e. **Progress Delay:** Should any of the following conditions exist, the Owner may require that the Contractor prepare, at no extra cost to the Owner, a plan of action and a recovery schedule for completing the Work by the Contract Completion Date:
 - 1. The Contractor's monthly project report indicates delays that, in the judgment of the A/E or the Owner, call into question the Contractor's ability to complete the Work by the Contract Completion Date;
 - 2. The Critical Path method schedule sorted by early finish dates shows the Contractor to be thirty (30) or more Days behind on the Critical Path schedule at any time during the Work, up to thirty (30) Days prior to the Contract Completion Date;
 - 3. The Contractor desires to make changes in the logic or sequencing of Work activities or

the planned duration of future activities of the Critical Path method schedule which, in the judgment of the A/E or the Owner, are of a significant departure from those of the baseline schedule or prior schedule updates.

The plan of action and recovery schedule, when required, shall contain a narrative explanation and display how the Contractor intends to regain compliance with the most current and Owner accepted Critical Path method schedule, as updated with approved Change Orders, if any.

The plan of action shall be submitted to the Owner for review within two (2) business days of the Contractor receiving the Owner's written request. The recovery schedule, when required, shall be submitted to the Owner within five (5) Days of the Contractor's receiving the Owner's written request.

f. **Early Completion of Project:** The Contractor may attempt to achieve Substantial Completion before the Contract Completion Date. However, such planned early completion shall be for the Contractor's convenience only and shall not create any additional rights of the Contractor or obligations of the Owner under this Contract, nor shall it change the Time for Completion or the Contract Completion Date. The Contractor shall not be required to pay damages to the Owner because of the Contractor's failure to achieve Substantial Completion by any planned earlier date. Likewise, the Owner shall not pay the Contractor any additional compensation for achieving Substantial Completion prior to the Contract Completion Date nor will the Owner owe the Contractor any compensation should the Owner, its officers, employees, or agents cause the Contractor not to achieve Substantial Completion earlier than the Contract Completion Date.

Contractor may request or propose to change the Contract Completion Date to reflect an earlier Substantial Completion date. The Owner may, but is not required to, accept such proposal. However, a change in the Time for Completion or the Contract Completion Date shall be accomplished only by Change Order. If the Contractor's proposal to change the Time for Completion or the Contract Completion Date is accepted, a Change Order will be issued stating that all references in the Contract, including these General Conditions, to the Time for Completion or the Contract Completion Date shall thereafter refer to the date as modified, and all rights and obligations, including the Contractor's liability for actual damages, delay damages and/or liquidated damages, shall be determined in relation to the date, as modified.

20. SCHEDULE OF VALUES AND CERTIFICATE FOR PAYMENT

a. Before submittal of the first Certificate for Payment, the Contractor shall prepare for review and approval of the A/E and the Owner the Schedule of Values listed by trades or by Specifications sections for the Work, the total for which equals the Contract Price. Where the Work has multiple parts or phases, the Contractor shall prepare appropriate Schedules of Values to facilitate reviews of Certificate for Payment submitted for each part or phase.

All Certificates for Payment shall be made in the ASTM Uniformat II structure on the Form CO-12, Schedule of Values and Certificate for Payment.

- b. If the Contractor requests, or intends to request, payment for materials stored in an approved and secure manner, the Schedule of Values must indicate the amount for labor and the amount for materials, and in a supplement thereto must include an itemized list of materials for that trade or Work section. The material breakdown shall be in sufficient detail to allow verification of the quantities required for the Project, the quantities delivered, the Work completed, and the quantities stored on or off-Site.
- c. The Contractor shall complete the "Value of Work Completed" portion of the Form CO-12, complete and sign the Contractor's certification, and attach all substantiating material each Certificate for Payment. Such substantiating material includes, but is not limited to, invoices for materials, delivery tickets, timesheets, payroll records, daily job logs/records, and similar materials

which, in the opinion of the Owner and the A/E, are necessary or sufficient to justify payment of the amount requested.

- d. The labor progress for any task or activity shall be calculated based upon the percentage of Work complete up to fifty percent (50%) of the completion of the task or activity. Thereafter, the evaluation of labor progress will be based upon the effort required to complete that task or activity. The material progress shall be calculated as the invoiced dollar cost of materials used in relation to the amount estimated as necessary to complete a particular element of Work. When calculating material progress, credit shall be given for installed material as well as that stored on the Site and any material stored off-Site which has been certified by the A/E in accordance with Section 36 of these General Conditions.
- e. Should Work included in previous Certificates for Payment, and for which payment has been made, subsequently be identified by tests, inspection, or other means, as Defective or not acceptable or not conforming to the Contract Documents, the "Value of Work Completed" portion of the first Certificate for Payment submitted after such identification shall be modified to reduce the "completed" value of that Work to a percentage reflecting only that work which is not Defective or nonconforming.

21. ACCESS TO WORK

The A/E, the Owner, the Project Manager, the Owner's inspectors and other testing personnel, the Building Official, inspectors from the Department of Labor and Industry, and others authorized by the Owner, shall have access to the Work at all times. The Contractor shall provide proper facilities for access and inspection.

22 SURVEYS AND LAYOUT

- a. The Owner shall furnish the Contractor documents showing property lines and the location of existing buildings and improvements at the Site. The Contractor shall provide competent surveying and engineering services to execute the Work and shall be responsible for the accuracy of those surveying and engineering services.
- b. The Owner shall provide the general reference points and benchmarks on the Site as required of it by the Plans and Specifications. If the Contractor finds that any previously established reference points have been lost or destroyed, it shall promptly notify the A/E.
- c. The Contractor shall protect and preserve the established benchmarks and monuments and shall make no changes in locations without prior written Notice to the A/E and prior written approval from the Owner. Benchmarks and monuments that are lost or destroyed or which require shifting because of necessary changes in grades or locations shall, subject to prior written approval of the Owner, be replaced and accurately located by the Contractor.

23. PLANS AND SPECIFICATIONS

a. The general character and scope of the Work are illustrated and described by the Plans and the Specifications. If the Contractor deems additional detail or information to be needed, the Contractor shall request the same in writing from the A/E. The request shall precisely state the detail or information needed and shall explain why it is needed. The Contractor shall also indicate a date by which the requested information is required. The A/E shall provide by Field Order such further detail and information as is necessary by the date required so long as the date indicated is reasonable. Any additional drawings and instructions supplied to the Contractor shall be consistent with the Contract Documents, shall be true developments thereof, and shall be so prepared that they can be reasonably interpreted as a part thereof. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions at no additional cost to the Owner and with no time extension.

- b. If the Contractor finds a conflict, error, omission, or other discrepancy in the Plans or Specifications, he shall notify the A/E in writing as soon as possible, but before proceeding with any Work that is or may be impacted by the matter. The A/E shall issue a clarification by Field Order to the Contractor stating the correct requirements. If the Contractor deems the Field Order requires additional or extra Work, it shall provide Notice of its request for additional time and/or compensation to the Owner and A/E prior to proceeding with that Work. The Contractor also shall submit a request for Change Order along with a detailed substantiating cost proposal through the A/E to the Owner within fourteen (14) Days of the receipt of the Field Order or before proceeding with the Work, whichever is earlier.
- c. If a conflict, error, omission or other discrepancy in Plans or Specifications was reasonably apparent or with reasonable diligence should have been apparent to the Contractor prior to submitting its bid or Proposal, and the Contractor failed to submit a question to the A/E in the time and manner required by the Instructions to Bidders, then the Contractor shall not be entitled to additional compensation or time or entitled to bring a claim against the Owner based on such conflict, error, omission or other discrepancy. If the Contractor performs any Work, or is delayed in performing any Work, where such Work involves a conflict, error, omission, or other discrepancy in the Plans or Specifications that the Contractor failed to provide Notice to the A/E and Owner as required, the Contractor shall assume full responsibility for the Work or delay and shall bear all costs attributable to correcting any Work requiring correction or to any delay, and such conflict, error, omission, or other discrepancy shall not be the basis for a claim against or any recovery from the Owner.
- d. In case of differences between a small and large scale Drawing, the large scale Drawing shall govern. Where on a Drawing a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other like portions of the Work.
- e. Where the word "similar" appears on a Drawing, it shall be interpreted in its general sense and not as meaning "identical," and all details shall be worked out in relation to their location and their connection with other parts of the Work.
- f. Measurements or dimensions shown on the Drawing for Site features, utilities, buildings, structures, or improvements shall be verified at the Site by the Contractor before commencing the Work. The Contractor shall not scale measurements or dimensions from a Drawing. If there are discrepancies among Drawings or the Plans, the Contractor shall notify and request clarification from the A/E before proceeding with the impacted Work. If new Work is to connect to, match with or be provided in existing facilities, buildings, or improvements, the Contractor shall verify the actual existing conditions and necessary dimensions prior to ordering or fabrication of materials or construction.
- g. As-Built Drawings: The Contractor shall maintain at the Site for the Owner one copy of the As-Built Drawings in good order and marked to record all changes as they occur during construction. These shall be available to the A/E, the Owner, the Project Inspector, the Owner's other inspectors and to the Owner's testing personnel
- h. Preparation of Record Drawings: Upon completion of the Work and prior to the final inspection, the Contractor shall deliver to the A/E, for preparation of the Record Drawings, one complete set of "As Built" Drawings depicting the Work in its as-built condition at Final Completion.

24. SUBMITTALS AND PROJECT RECORDS

a. The Contractor shall submit a listing of all Submittals required by the A/E or which the Contractor identifies as necessary, stating the dates for the submission of each Submittal. The listing shall be in a format acceptable to the A/E. The Contractor shall identify all Submittals with the Owner's

Project Code Number as required by Section 24(e).

b. Submittals shall be forwarded to the A/E for approval if required by the Specifications or if requested by the A/E or the Owner. No part of the Work dealt with by a Submittal shall be ordered, fabricated or installed by the Contractor, except at its own risk, until the Submittal for that Work has been approved.

Working drawings, Shop Drawings and/or Submittals for fire protection, fire alarm, fire detection and security systems shall be submitted to, and approved by, first the A/E and then the Building Official prior to ordering, fabricating or installing such systems. The Contractor shall be solely responsible for obtaining such approvals. No part of the Work involving such systems shall be ordered, fabricated or installed by the Contractor until such approvals have been obtained.

- c. The Contractor shall furnish to the A/E for approval, the name of the manufacturer, the model number, and other identifying data and information respecting the performance, capacity, nature and rating of the machinery and mechanical and other equipment which the Contractor contemplates incorporating in the Work. When Submittals are required by this Contract for materials, the Contractor shall furnish full information concerning the material or articles which the Contractor intends to incorporate in the Work. When required, samples shall be submitted for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material and articles installed or used without required approval shall be at the risk of subsequent rejection.
- d. Unless otherwise indicated or required by the Specifications, Shop Drawings shall be submitted in the form of one reproducible tracing and three blue-line or black-line prints. Catalog cuts, product data and other non-reproducible literature, except certificates, shall be submitted in six (6) copies minimum, of which three (3) will be retained by the A/E and the remainder will be returned to the Contractor. The Contractor shall maintain one copy of all approved Shop Drawings and Submittals in the construction trailer for use by inspectors. If agreed by the Owner, A/E, and Contractor, Submittals may be provided in electronic format in lieu of hardcopy format.
- e. Submittals shall be accompanied by a letter of transmittal which shall list the Project Code Number, the Submittals included, and the date. Submittals shall be complete in every respect and bound in sets. Each Submittal shall be clearly marked to show each item, component and/or optional feature proposed to be incorporated into the Work. Each Submittal shall contain specific references to the sections of the Plans and Specifications to which the item or component that is the subject of the Submittal relates.
- f. The Contractor shall check Submittals for compliance with the requirements of the Contract Documents. The Contractor shall clearly note in writing any and all items which deviate from the requirements of the Contract Documents. Reasons for deviation shall be included with the Submittal. The Contractor shall be solely responsible for checking all dimensions and coordinating all materials and trades to ensure that the components or products proposed, individually or in combination, will fit in the space available and that they will be compatible with other components or products provided.

g. After checking each Submittal, the Contractor shall stamp each sheet of the Submittal with the Contractor's review stamp. Data submitted in a bound volume or on one sheet printed on two sides, may be stamped on the front of the first sheet only. The Contractor's review stamp shall be worded as follows:

The equipment and material shown and marked in this Submittal is proposed to be incorporated into this Project, is in compliance with the Contract Plans and Specifications unless otherwise shown in bold-face type or lettering and listed on a page or pages captioned "DEPARTURES FROM PLANS AND SPECIFICATIONS", and can be installed in the allocated spaces.

Reviewed by

Date

The person signing the review stamp shall be the person designated in writing by the Contractor as having that authority. The identity of such individual shall be forwarded to the A/E prior to or with the first Submittal. The signature on the review stamp shall be handwritten in ink, or in the case of electronic submittals, electronically signed in accordance with *Code of Virginia* § 59.1-479 *et seq.* Stamped signatures are not acceptable.

- h. The Contractor shall forward all Submittals sufficiently in advance of construction activities and requirements to allow sufficient time for checking, correcting, resubmitting and rechecking each Submittal.
- i. If a Submittal indicates a departure from the Contract Documents, the A/E may reject the Submittal or recommend it to the Owner, who shall approve or reject it as the Owner, in its sole discretion, sees fit. Any departure from the Contract Documents must be authorized by a Change Order if it results in adjustment of the Contract Price or the Contract Completion Date.
- j. The A/E is responsible to the Owner, but not to the Contractor, to verify that the information, equipment and materials depicted in Submittals conform to the design concept and functional requirements of the Plans and Specifications, that the detailed design portrayed in Shop Drawings and proposed equipment and materials shown in Submittals are of the quality specified and will function properly, and that the Submittals comply with the Contract Documents.
- k. The Work shall be in accordance with approved Submittals. Approval of the Contractor's Submittals by the A/E does not relieve the Contractor from responsibility for complying with the Contract Documents.
- 1. The Plans and/or Specifications may indicate that the A/E designed or detailed a portion of the Work-around a particular product. Should a different product be proposed by the Contractor and accepted, all modifications, rerouting, relocations and variations required for proper installation and coordination to comply with the design concept and requirements of the Contract Documents shall be the responsibility of the Contractor and shall be made at no extra cost to the Owner. If the plans were noted as designed or detailed around a particular product and/or if a product is named when a "brand name or equal" requirement has been used, other products may be utilized following Section 26 of these General Conditions.
- m. Additional Submittal requirements are shown in the Specifications.
- n. Ownership of all materials and documentation including Shop Drawings, BIM models, copies of any calculations and analyses prepared and other Project-specific details of building components created during the Submittal process shall belong exclusively to the Owner. These materials and documentation, whether completed or not, shall be the property of the Commonwealth of Virginia, whether the Work for which they are made is executed or not. The Contractor shall not use these materials on any other work or release any information about these materials without the express written consent of the Owner.

Such material may be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by a bidder, offeror, or contractor in connection with a procurement transaction shall not be subject to disclosure under the Virginia Freedom of Information Act, provided the bidder, offeror, or contractor timely invoked the protections of *Code of Virginia* § 2.2-4342(F).

- o. The Contractor shall maintain comprehensive records of all documentation produced in the performance of the Work and maintain a records management system to provide for document tracking, organization, storage and archiving of such documentation. The Contractor's records management system shall provide for the electronic storage and transmission of Project documents and information through one or more of the following methods: (1) web accessible project management software; (2) electronic files shared utilizing removable electronic media; (3) paper copies of documentation; or (4) in such manner agreed to by the Owner and Contractor. Such records shall be retained by the Contractor for a period of five (5) years following the Final Completion Date. The Contractor shall make the project documentation available to the Owner within five (5) Days of request in an orderly, indexed manner to allow individual documents to be easily located and reviewed. The Contractor shall ensure all documentation is kept current and stored in the records management system in a timely manner.
- p. The Contractor's Project documentation shall include regular construction photographs to show progress of the Work and items that are or may be the subject of Contractor or Subcontractor claims. The photographer shall label each photograph with, at a minimum, the Project name, building name/number, City, State, name of Contractor/Subcontractor(s) whose work is depicted, date and time the photograph was taken, description of weather conditions, subject matter and viewpoint of the photograph, name of the photographer, and the names of any observers.

25. FEES, SERVICES AND FACILITIES

- a. The Contractor shall obtain all permits, except the Building Permit, and pay for all fees and charges necessary for temporary access, public right-of-way blockage or use, temporary connections to utilities, and the use of property (other than the Site) for storage of materials and other purposes, unless otherwise specifically stated in the Contract Documents.
- b. Certain projects such as renovations and interior modifications of existing buildings will usually have water and electric service to the building. In those instances, water and electric power, if required for the Work under the Contract, will be furnished by the Owner subject to reasonable use by the Contractor, but only to the extent and capacity of present services. The Contractor shall be responsible for providing required connections, temporary wiring, piping, etc. to these services in a safe manner and in accordance with applicable codes. All temporary wire, pipe, etc. shall be removed before the Substantial Completion inspection. Acceptance by the Contractor of the use of Owner's water and electricity constitutes a release to the Owner of all claims and of all liability to the Contractor for any damages which may result from the use of such utilities and power and water outages or voltage variations.
- c. The Owner shall pay any connection charges for permanent utility connections directly to the utility Supplier. The Contractor shall coordinate such connections with the utility Supplier.
- d. It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor, either directly or through its Subcontractors, shall provide and pay for all material, labor, tools, equipment, water, light, power, telephone and other services or facilities of every nature whatsoever necessary to execute completely and deliver the Work before the Contract Completion Date.
- e. The Contractor shall provide all required temporary facilities, including Contractor's office space,

Owner's Project Inspector's office space (if required by the Specifications), sanitary facilities, and storage space, as required for the operations and the protection of the materials and the Work. Number, sizes and locations shall be subject to approval of the Owner. Sanitary facilities shall be plumbed into an approved waste treatment system or shall be an approved type of chemical toilet and shall be regularly serviced.

f. Use and occupancy of the construction site as the Owner's Project Inspector's office or as a work or meeting space for other than contractor employees prior to receipt of a Certificate of Use and Occupancy is prohibited.

26. EQUALS

- a. **Brand names:** Unless otherwise stated in the Specifications, the identification of a certain brand, make or manufacturer denotes the characteristics, quality, workmanship, economy of operation and suitability for the intended purpose of the article to be supplied, but does not restrict the Contractor to the specific brand, make, or manufacturer indicated. Rather, the information conveys to the Contractor the general style, type, character and quality of the article to be supplied.
- b. **Equal materials, equipment or assemblies:** Whenever in these Contract Documents a particular brand, make of material, device or equipment is shown or specified, such brand, make of material, device or equipment shall be regarded merely as a standard. Any other brand, make or manufacturer of a product, assembly or equipment which in the opinion of the A/E is the equal of that specified, considering quality, capabilities, workmanship, configuration, economy of operation, useful life, compatibility with design of the Work, and suitability for the intended purpose, will be accepted unless rejected by the Owner as not being equal.
- c. **Substitute materials, equipment or assemblies:** The Contractor may propose to substitute a material, product, equipment, or assembly which deviates from the requirements of the Contract Documents but which the Contractor deems will perform the same function and have equal capabilities, service life, economy of operations, and suitability for the intended purpose. The proposal must include any cost differentials proposed. The Owner will have the A/E provide an initial evaluation of such proposed substitutes and provide a recommendation on acceptability and indicate the A/E's redesign fee to incorporate the substitution into the Contract Documents. The Owner shall have the right to limit or reject substitutions at its sole discretion.
- d. The Contractor shall be responsible for making all changes in the Work necessary to adapt and accommodate any equal or substitute product approved for use by Owner. The necessary changes shall be made at the Contractor's expense.

27. AVAILABILITY OF MATERIALS

If a brand name, material, product, or model number included in the Contract Documents is not available on the present market, alternate equal materials, products or model numbers may be proposed by the Contractor through the A/E for approval by the Owner through the process set forth in Section 26.

28. CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the Work shall be purchased by the Contractor, or by any Subcontractor or Supplier, subject to any security interest, installment or sales contract or any other agreement or lien by which an interest in the materials or supplies is retained by the seller or is given to a secured party. The Contractor warrants that it has clear and good title to all materials and supplies used in the Work or for which the Contractor accepts payment in whole or in part.

29. STANDARDS FOR MATERIALS INSTALLATION & WORKMANSHIP

- a. Unless otherwise specifically provided in the Contract, all equipment, material, and accessories incorporated in the Work are to be new or Recycled and in first-class condition.
- b. Unless specifically approved by the Owner or required by the Contract, the Contractor shall not incorporate into the Work any materials containing asbestos or any material known by the industry to be hazardous to the health of building construction workers, maintenance workers, or occupants, or harmful to other building components, materials or products. If the Contractor becomes aware that a material required by the Contract contains asbestos or other hazardous or harmful materials, it shall notify the Owner and the A/E immediately and shall take no further steps to acquire or install any such material without first obtaining Owner approval.
- c. All workmanship shall be of the highest quality found in the building industry in every respect. All items of Work shall be done by Persons skilled in the particular task or activity to which they are assigned. In the acceptance or rejection of Work, no allowance will be made for lack of skill on the part of Persons performing the Work. Poor or inferior workmanship (as determined by the A/E, the Owner or other inspecting authorities) shall be removed and replaced at Contractor's expense such that the Work conforms to the highest quality standards of the trades concerned, or otherwise corrected to the satisfaction of the A/E, the Owner, and other inspecting authority, as applicable.
- d. Where materials, supplies or equipment are supplied with the manufacturer's printed instructions, recommendations, or directions for installation, or where such instructions, recommendations, or directions are available, installation of the items shall be in strict accordance with the manufacturer's printed instructions unless those instructions contradict the Plans or Specifications, in which case the Contractor shall notify the A/E of the inconsistency and obtain written guidance form the A/E before proceeding with any Work involving the item.
- e. Where the Specifications or Plans refer to specific codes or standards governing the installation of specified items, installation shall in all cases be in strict accordance with the referenced codes and standards. Where no reference is made to specific codes or standards, installation shall conform to the generally recognized applicable standards for first-class installation of the specific item to be installed. Contractors are expected to be proficient and skilled in their respective trades and knowledgeable of the Codes and Standards of the National Fire Protection Association ("NFPA"), National Electric Code ("NEC"), Occupational Safety and Health Act ("OSHA") and other codes and standards applicable to installations and associated work by trade.
- f. Where the manufacturer's printed instructions are not available for installation of specific items, where specific codes or standards are not referenced to govern the installation of specific items, or where there is uncertainty on the part of the Contractor concerning the installation procedures to be followed or the quality of workmanship to be maintained in the installation of specific items, the Contractor shall consult, in advance, with the A/E for approval of the installation procedures or the specific standards governing the quality of workmanship the Contractor proposes to follow or maintain during the installation of the items in question.
- g. During and/or at the completion of installation of any items, the tests designated in the Plans or Specifications necessary to assure proper and satisfactory functioning for its intended purpose shall be performed by the Contractor or by its Subcontractor responsible for the completed installation. All costs for such testing are to be included in the Contract Price. If required by the Contract Documents, the Contractor shall furnish prior to final inspection the manufacturers' certificates evidencing that products meet or exceed applicable performance, warranty and other requirements, and certificates that products have been properly installed and tested.

30. WARRANTY OF MATERIALS AND WORKMANSHIP

a. The Contractor warrants that, unless otherwise specified, all materials and equipment incorporated in the Work shall be new or Recycled, in first-class condition, and in accordance with the Contract

Documents. The Contractor further warrants that the Work shall be of the highest quality and in accordance with the Contract Documents and shall be performed by Persons qualified at their respective trades.

- b. Work not conforming to these warranties shall be considered Defective.
- c. This warranty of materials and workmanship is separate and independent from and in addition to any of the Contractor's other guarantees and obligations in the Contract Documents and under Virginia law.

31. USE OF SITE AND REMOVAL OF DEBRIS

- a. The Contractor shall:
 - 1. Perform the Work in such a manner as not to interrupt or interfere with the operation of any existing activity on, or in proximity to, the Site or with the Work of any other separate contractor;
 - 2. Store its apparatus, materials, Supplies and equipment in such orderly fashion at the Site of the Work as will not unduly interfere with the progress of its Work or the work of any other separate contractor; and
 - 3. Place upon the Work or any part thereof only such loads as are consistent with the safety of that portion of the Work.
- b. The Contractor expressly undertakes, either directly or through its Subcontractor(s), to effect all cutting, filling or patching of the Work required to make the same conform to the Plans and Specifications, and, except with the consent of the A/E, not to cut or otherwise alter the work of any other separate contractor. The Contractor shall not damage or endanger any portion of the Work or Site, including existing improvements, unless called for by the Contract.
- c. The Contractor expressly undertakes, either directly or through its Subcontractor(s), to clean up frequently all refuse, rubbish, scrap materials and debris caused by its operations, to ensure that at all times the Site shall present a neat, orderly and workmanlike appearance. No refuse, rubbish, scrap material or debris shall be left within the completed Work nor buried on the Site, but shall be removed from the Site and properly disposed of in a licensed landfill or otherwise as required by law.
- d. The Contractor expressly undertakes, either directly or through its Subcontractor(s), before Final Payment or such prior time as the Owner may require: to remove all surplus material, false Work, temporary structures, including foundations thereof, plants of any description and debris of every nature resulting from its operations and to put the Site in a neat, orderly condition; to thoroughly clean and leave reasonably dust-free all finished surfaces, including all equipment, piping, etc., on the interior of all buildings; and to clean thoroughly all glass installed under the Contract, including the removal of all paint and mortar splatters and other defacements.

If the Contractor fails to clean up as required herein, the Owner may do so and charge the costs incurred thereby to the Contractor in accordance with Section 10 (b).

e. The Contractor shall have, on-Site, an employee certified by the Department of Environmental Quality as a Responsible Land Disturber who shall be responsible for the installation, inspection and maintenance of erosion control and stormwater management measures and devices. The Contractor shall identify this employee to the Owner and the A/E in writing prior to any land disturbance on Site. The Contractor shall prevent Site soil erosion, the runoff of silt and/or debris carrying water from the Site, and the blowing of debris off the Site in accordance with the applicable requirements and standards of the Contract and the Virginia Department of

Environmental Quality's Erosion and Sediment Control Regulations and the Virginia Stormwater Management Regulations.

32. TEMPORARY ROADS

Temporary roads, if required, shall be established and maintained until permanent roads are accepted, then removed and the area restored to the conditions required by the Contract Documents. Crushed rock, paving and other road materials from temporary roads shall not be left on the Site unless written permission is received from the Owner to bury the same at a location and depth approved by the Owner.

33. SIGNS

The Contractor may, at its option and without cost to the Owner, erect signs acceptable to the Owner on the Site for the purpose of identifying and giving directions to the Project. No signs shall be erected without prior approval of the Owner as to design, content and location.

34. PROTECTION OF PERSONS AND PROPERTY

- a. The Contractor expressly undertakes both directly and through its Subcontractors, to take every reasonable precaution at all times for the protection of all Persons and property at or near the Site or which may be affected by the Contractor's Work.
- b. The Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Any violation of safety requirements or duties or any potential safety hazard that is known to the Contractor or which is brought to the attention of the Contractor by the A/E, the Owner, or any other Persons shall be immediately abated.
- c. The provisions of all rules and regulations governing health and safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the *Code of Virginia*, shall apply to all Work under this Contract.
- d. The Contractor shall continuously maintain adequate protection of all the Work and Site from damage and shall protect the Owner's property from injury or loss arising in connection with the Work. The Contractor shall make good any damage, injury or loss caused by its operations or the Work, except as may be directly and solely due to errors in the Contract Documents or caused by agents or employees of the Owner. The Contractor shall adequately protect adjacent property to prevent any damage to it or loss of use and enjoyment by its owners. The Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for protection of Persons and the Site and the Work as required by public authority, local conditions, or the Contract.
- e. In an emergency affecting the health, safety, or life of Persons, or threatening loss or damage to the Work or adjoining property, the Contractor, without special instruction or authorization from the A/E or the Owner, shall act promptly, at its discretion, to prevent such threatened loss or injury. The Contractor shall carry out any instructions or directives issued by the A/E or Owner, to prevent threatened loss or injury, immediately, without appeal. Any additional compensation or extension of time claimed by the Contractor on account of any emergency actions or measures shall be submitted and determined as provided by Section 38.
- f. When necessary for the proper protection of the Work, temporary heating of a type compatible with the Work must be provided by the Contractor, at the Contractor's expense, unless otherwise specified.

35. CLIMATIC CONDITIONS

The Contractor shall suspend activity on and protect any portion of the Work that may be subject to damage by climatic conditions.

36. PAYMENTS TO CONTRACTOR

- Unless otherwise provided in the Contract, the Owner will make partial payments to the a. Contractor on the basis of a duly certified and approved Schedule of Values and Certificate for Payment (CO-12), showing the estimate of the Work performed during the preceding calendar month or work period, as recommended by the A/E. When evaluating the Contractor's Certificate for Payment, the A/E will consider the value of the Work in place, the value of approved and properly stored materials, the status of the Work in relation to the Contract Completion Date, and the estimated value of the Work remaining to achieve Final Completion. The A/E will schedule a monthly pay meeting to occur no earlier than the 25th day of the month represented by the Certificate for Payment and no later than the 5th day of the following month. The Contractor shall submit its Certificate for Payment so that it is received by the A/E and the Owner's Project Manager at least one work day prior to the date scheduled by the A/E for the monthly pay meeting. The Owner will review the estimate with the A/E and the Contractor at the monthly pay meeting, which shall be considered the receipt date, and may approve to pay any or all of the Certificate for Payment. In preparing estimates, the material delivered to the Site and preparatory Work done shall be taken into consideration, if properly documented as required by Section 20 of these General Conditions, or as may be required by the A/E, so that actual quantities supplied or performed may be verified. Materials or equipment purchased specifically for the Project, but stored off the Site within the Commonwealth of Virginia, may be considered for payment provided all of the following are accomplished prior to the submission of the Certificate for Payment in which payment for such item is requested:
 - 1. The Contractor must notify the Owner in writing, at least ten (10) Days prior to the submission of Certificate for Payment that specific items will be stored off-Site in a designated, secured place within the Commonwealth of Virginia. The Schedule of Values must be detailed to indicate separately both the value of the material and the labor/installation for trades requesting payment for stored materials. By giving such notification and by requesting payment for material stored off-Site, the Contractor warrants that the storage location is safe and suitable for the type of material stored and that the materials are identified as being the property of the Contractor, and agrees that loss of materials stored off the Site shall not relieve the Contractor of the obligation to timely furnish these materials for the Project and to achieve the Contract Completion Date. If the storage location is more than 20 miles from the Site, the Contractor may be required to reimburse the Owner for the cost incurred for travel to the storage location by Owner and/or the A/E to verify the Contractor's Certificate for Payment for materials stored off-Site. A supplementary agreement, acceptable to Owner, shall be required for payment for materials or equipment stored at a location that is not within the Commonwealth of Virginia.
 - 2. Contractor's notification and Certificate of Payment regarding stored materials shall:
 - a. Itemize the quantity of such materials and document with invoices showing the cost of said materials;
 - b. Indicate the identification markings used on the materials, which shall clearly reference the materials as for the Project;
 - c. Identify the specific location of the materials, which must be within reasonable proximity to the Site and within the Commonwealth of Virginia;

- d. Include a letter from the Contractor's Surety which confirms that the Surety on the Performance Bond and the Labor and Material Payment Bond has been notified of the request for payment of materials stored off the Site and agrees that the materials are covered by the bonds; and
- e. Include documentation establishing that the stored materials are covered by allrisk builder's risk insurance in an amount not less than the fair market value of the materials, which insurance shall include the Owner as an additional insured.
- 3. The A/E shall indicate, in writing, to the Owner that Submittals for materials stored off-Site have been reviewed and meet the requirements of the Contract Documents, that the stored materials meet the requirements of the Plans and Specifications, and that such materials conform to the approved Submittals. Should the A/E deem it necessary to visit the storage site to make such review, the Contractor shall bear the costs incurred therewith
- 4. The Owner, through the A/E, shall notify the Contractor in writing of its decision whether to pay for materials stored off-Site.
- 5. The Contractor shall notify the Owner in writing, through the A/E, when the materials are to be transferred to the Site and when the materials are received at the Site.
- b. Payment will not be made for materials or equipment stored on or off the Site which are not scheduled for incorporation into the Work within the six months next following submission of the Certificate for Payment without the prior written consent of the Owner, which consent may be withheld by the Owner if, in the Owner's sole discretion, it is not necessary to procure the materials more than six months in advance of use to assure their availability when needed.
- c. No payment shall be made to the Contractor until:
 - 1. The Contractor furnishes to the Owner its Social Security Number (SSN), if an individual, or its Federal Employer Identification Number (FEIN), if a proprietorship, partnership, corporation or other legal entity.
 - 2. Certificates of Insurance and required evidence of compliance by the Contractor with all the requirements of Section 11 and Section 12, if applicable, have been delivered to the Owner.
 - 3. Certificates of Insurance and required evidence of compliance by each Subcontractor with the requirements of Section 11 and Section 12, if applicable, have been delivered to the Owner for payments based on Work performed by a Subcontractor.
 - 4. The Contractor has: (i) submitted a preliminary schedule which is acceptable to the Owner in accordance with Section 19(a); (ii) submitted a fully complete Project schedule accepted by the Owner in accordance with Section 19(a); (iii) submitted all monthly Project reports required by Section 19(d); and (iv) timely provided a recovery schedule pursuant to Section 19(e), if requested by the Owner.
- d. The Owner shall withhold five percent (5%) of each progress payment to the Contractor until the Final Payment, unless otherwise provided by any law, regulation or program of the federal government. Such retainage shall be held to assure faithful performance of the Contract and may also be used as a fund to deduct amounts due to or claimed by the Owner, including, but not limited to, payment to the Owner of all moneys due for deductive change orders, credits, uncorrected Defective Work, interest, damages, and the like. (*Code of Virginia* § 2.2-4333). The Owner may, at its sole discretion, agree on an item by item basis to release the retainage on items which are fully 100% complete and which have been accepted by the Owner as being tested and

complete and on which no further action or work will be required. Retainage which is released by the Owner shall be distributed by the Contractor in conformance with Section 37.

- e. All material and Work for which progress payments are made shall thereupon become the sole property of the Owner, but this provision shall not relieve the Contractor from the sole responsibility for all materials and Work, including those for which payment has been made, or for the restoration of any damaged materials or Defective Work. No payment shall waive any right of the Owner to require Contractor to fulfill all of the terms and conditions of the Contract Documents
- f. The Final Payment, which shall include the retainage, less any amounts due to or claimed by the Owner, shall not become due until the A/E and the Owner agree that Final Completion has been achieved and until the Contractor shall deliver to the Owner through the A/E a Certificate of Completion by the Contractor (CO-13.2) and an Affidavit of Payment of Claims (CO-13), stating that all Subcontractors and Suppliers of either labor or materials have been paid all sums claimed by them for Work performed and materials furnished in connection with this Project less retainage. Amounts due the Owner which may be withheld from the Final Payment may include, but are not limited to, amounts due pursuant to Section 3(i), Section 16(a)-(d), Section 31(d), costs incurred to repair or replace Defective Work, costs incurred as a result of the Contractor's negligent acts or omissions or omissions of those for whom the Contractor is responsible, delay damages under Section 43(h), and any liquidated or actual damages.

If all Subcontractors and Suppliers of labor and materials have not been paid the full amount claimed by them, the Contractor shall list each to which an agreed amount of money is due or which has a claim in dispute. With respect to all such Subcontractors and Suppliers, the Contractor shall provide to the Owner, along with the Affidavit of Payment of Claims (CO-13), an affidavit from each such Subcontractor and Supplier stating the amount of their Subcontract or supply contract, the percentage of completion, the amounts paid to them by the Contractor and the dates of payment, the amount of money still due if any, any interest due the Subcontractor or Supplier, and whether satisfactory arrangements have been made for the payment of said amounts. If no agreement can be reached between the Contractor and one or more Subcontractors or Suppliers as to the amounts owed to the Subcontractors or Suppliers, the Owner may, in its discretion, interplead such portion of the moneys due to the Contractor which is claimed by the Subcontractor or Supplier into a Virginia Court or Federal Court sitting in Virginia, in the manner provided by law. Said interpleader and payment into court shall be deemed a payment to the Contractor. Nothing in this Section shall be construed as creating any obligation or contractual relationship between the Owner and any Subcontractor or Supplier, and the Owner shall not be liable to any Subcontractor or Supplier on account of any failure or delay of the Owner in complying with the terms hereof.

- g. Upon successful completion of the final inspection and all Work required by the Contract, including but not limited to the delivery of Record Drawings, equipment manuals, written warranties, acceptance of the Work by the Owner and the delivery of the affidavits required in Section 36(f), the A/E shall deliver the written Certificate of Completion by the A/E (CO-13.1) to the Owner, with a copy to the Contractor, stating the entire amount of Work performed and compensation earned by the Contractor. The Owner may accept the Work for occupancy or use while asserting claims against the Contractor, disputing the amount of compensation due to the Contractor, disputing the quality of the Work, disputing Final Completion, disputing Contractor's compliance with the Contract Documents, or any other reason.
- h. Unless there is a dispute about the compensation due to the Contractor, Defective Work, quality of the Work, compliance with the Contract Documents, Final Completion, claims by the Owner, other matters in contention between the parties, or unless monies are withheld pursuant to the Comptroller's Debt Setoff Program, within thirty (30) Days after receipt and acceptance of the Certificate for Payment in proper form by the A/E at the monthly pay meeting, the Owner shall pay to the Contractor the amount approved by the A/E, less all prior payments and advances

whatsoever to or for the account of the Contractor. In the case of Final Payment, the completed Affidavit of Payment of Claims (CO-13), the Certificate of Completion by the Contractor (CO-13.2) and the Certificate of Completion by the A/E (CO-13.1) shall accompany the final Certificate for Payment which is forwarded to the Owner for payment. The date on which payment is due shall be referred to as the Payment Date. Payment shall be mailed on or before the Payment Date for amounts and Work not in dispute, subject to any set offs claimed by the Owner; provided, however in instances where further appropriations are required by the General Assembly or where the issuance of further bonds is required, in which case, payment shall be made within thirty (30) Days after the effective date of such appropriation or within thirty (30) Days after the receipt of bond proceeds by the Owner. All prior estimates and payments, including those relating to extra Work, may be corrected and adjusted in any payment and shall be corrected and adjusted in the Final Payment. In the event that any Certificate for Payment contains a defect or impropriety, the Owner shall notify the Contractor of any defect or impropriety which would prevent payment by the Payment Date within five (5) Days after receipt of the Certificate for Payment by the Owner from the A/E.

- i. Interest shall accrue on all amounts owed by the Owner to the Contractor which remain unpaid seven (7) Days following the Payment Date. Said interest shall accrue at the discounted ninetyday U.S. Treasury bill rate as established by the Weekly Auction and as reported in the publication entitled The Wall Street Journal on the weekday following each such Weekly Auction. During the period of time when the amounts due to the Contractor remain unpaid following the seventh (7) Day after the Payment Date, the interest accruing shall fluctuate on a weekly basis and shall be that established by the immediately prior Weekly Auction. It shall be the responsibility of the Contractor to gather and substantiate the applicable weekly interest rates to the satisfaction of the Owner and to calculate to the satisfaction of the Owner the interest due. In no event shall the rate of interest charge exceed the rate of interest charged pursuant to Code of Virginia § 58.1-1812. No interest shall accrue on retainage or when payment is delayed because of a dispute or disagreement between the Owner and the Contractor regarding the quantity, quality or timeliness of the Work, including, but not limited to, compliance with Contract Documents or the accuracy of any Certificate for Payment. This exception to the accrual of interest stated in the preceding sentence shall apply only to that portion of a payment which is withheld and shall apply only for the duration of the dispute. Nothing contained herein shall be interpreted to prevent the withholding of retainage to assure faithful performance of the Contract. These same provisions relating to payment of interest to the Contractor shall apply also to the computation and accrual of interest on any amounts due from the Contractor to the Owner for deductive change orders and to amounts due on any claims by the Owner. The date of mailing of any payment by the U.S. Mail is deemed to be the date of payment to the addressee. No interest penalty shall be paid to any debtor on any payment, or portion thereof, withheld pursuant to the Comptroller's Debt Setoff Program, as authorized by the Virginia Debt Collection Act (§ 2.2-4800 et seq.), commencing with the date the payment is withheld. If, as a result of an error, a payment or portion thereof is withheld, and it is determined that at the time of setoff no debt was owed to the Commonwealth, then interest shall accrue at the rate specified above on amounts withheld that remain unpaid after seven Days following the Payment Date.
- j. The acceptance by the Contractor of the Final Payment shall be and operate as a release to the Owner of all claims by the Contractor, its Subcontractors and Suppliers, and of all liability to the Contractor whatever, including liability for all things done or furnished in connection with the Work, except for things done or furnished which are the subject of unresolved claims for which the Contractor has filed a timely written Notice of intent and all other Notices and documentation required by the Contract Documents and provided a claim is submitted no later than sixty (60) Days after Final Payment. Acceptance of any interest paid by the Contractor shall be a release of the Owner from claims by the Contractor for late payment.
- k. No Certificate for Payment authorized by the A/E, and no payment, final or otherwise, no certificate of completion, nor partial or entire use or occupancy of the Work by the Owner, shall be an acceptance of any Work or materials not in accordance with the Contract, nor shall the same

relieve the Contractor of responsibility for nonconforming materials or Defective Work, or operate to release the Contractor or its Surety from any obligation under the Contract, the Standard Performance Bond and the Standard Labor and Material Payment Bond.

37. PAYMENTS BY CONTRACTOR (Code of Virginia, § 2.2-4354)

Under Code of Virginia § 2.2-4354, the Contractor is obligated to:

- a. Within seven (7) Days after receipt of amounts paid to the Contractor by the Owner for Work performed by the Subcontractor or Supplier under this Contract, the Contractor shall:
 - 1. Pay the Subcontractor or Supplier for the proportionate share of the total payment received from the Owner attributable to the Work performed by the Subcontractor or the materials furnished by the Supplier under this Contract; or
 - 2. Notify the Owner and the Subcontractor or Supplier, in writing, of the Contractor's intention to withhold all or a part of the Subcontractor or Supplier's payment with the reason for nonpayment.
- b. The Contractor shall pay interest to its Subcontractor or Supplier on all amounts owed by the Contractor that remain unpaid after seven (7) Days following receipt by the Contractor of payment from the Owner for Work performed by the Subcontractor or materials furnished by the Supplier, except for amounts withheld as allowed under subsection (a) (2) of this Section. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month.
- c. The Contractor shall include in each subcontract a provision requiring the Subcontractor to include in each of its subcontracts a provision requiring each of its subcontractors to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor. Each Subcontractor shall include with its invoice to, or request for payment from, the Contractor, a certification that that Subcontractor has paid each of its suppliers and lower-tier subcontractors their proportionate share of previous payments received from the Contractor attributable to the Work performed or the materials furnished by it under this Contract.

The Contractor's obligation to pay interest to the Subcontractor or Supplier pursuant to subsection (b) of this Section is not an obligation of the Owner. A modification to this Contract shall not be made for the purpose of providing reimbursement for such interest charge. A Contractor's cost reimbursement claim shall not include any amount for reimbursement of any interest charge.

38. CHANGES IN THE WORK

a. The Owner may at any time, by written order utilizing the Change Order (CO-11) and without Notice to the sureties, make changes in the Work which are within the general scope of the Contract, except that no change will be made which alone will increase the total Contract Price to an amount more than twenty percent (20%) in excess of the original Contract Price without Notice to sureties. At the time of the Preconstruction Meeting described in Section 50(b), the Contractor and the Owner shall advise each other in writing of their designees authorized to accept and/or approve Change Orders and of any limits to each designee's authority. Should any designee change or the limits of their authority change, the party initiating such change in designee or authority shall give written Notice to the other Party and the A/E within seven (7) Days. The Contractor agrees and understands that the authority of the Owner's designee is limited by *Code of Virginia*, § 2.2-4309 and any other applicable statute.

Change Orders shall be effective when signed by both parties, unless Governor approval (or by his or her designee) is required, in which event the Change Order shall be effective when signed by the Governor or his or her designee.

In any Change Order adjusting the Contract Price, the increase or decrease in the Contract Price shall be determined by one of the following methods as selected by the Owner:

- 1. **Fixed Price:** By a mutually agreed fixed amount adjustment to the Contract Price. The Change Order shall be substantiated by documentation from the Contractor itemizing the estimated quantities and costs of all labor, materials, and equipment required as well as any mark-up used. Any increase in the Contract Price shall include the Contractor's reasonable overhead and profit, including overhead for any unreasonable delay arising from or related to the Change Order and/or the change in the Work. See Subsections (d), (e) and (f), below.
- 2. **Unit Price:** By using unit prices and calculating the number of net units of Work in each part of the Work which is changed, either as the Work progresses or before Work on the change commences, and by then multiplying the calculated number of units by the applicable unit price set forth in the Contract or multiplying by a mutually agreed unit price if none was provided in the Contract. No additional percentage markup for overhead or profit shall be added to the unit prices.
- 3. **Cost Reimbursement:** The Owner may require the Contractor to perform change in the Work on a cost-reimbursement basis by issuing two Change Orders citing this Subsection: (a) an initiating Change Order, authorizing the changed Work; and (b) a confirming Change Order approving any adjustment in the Contract Price or the Contract Completion Date as a result of the change in the Work. The initiating Change Order shall:
 - a. Describe the scope or parameters of the change in the Work;
 - b. Describe the cost items to be itemized and verified for payment and the method of measuring the quantity of work performed;
 - c. Address the impact on the Critical Path and any adjustment to the Contract Completion Date;
 - d. Order the Contractor to proceed with the change to the Work;
 - e. Order the Contractor to keep in a form acceptable to the Owner, an accurate, itemized account of the actual cost of the change in the Work, including, but not limited to, the actual costs of labor, materials, equipment, and supplies;
 - f. Order the Contractor to annotate a copy of the Project schedule to accurately show the status of the Work at the time the initiating Change Order is issued, to show the start and finish dates of the changed Work, and the status of the Work when the changed Work is completed; and
 - g. State that a confirming Change Order will be issued to reflect any increase or decrease to the Contract Price and any change in the Contract Completion Date directly resulting from the change in the Work.

The Contractor shall sign the initiating Change Order acknowledging it will proceed with the change in the Work. The Contractor's signature on an initiating Change Order citing this Subsection 38(a)(3) shall not constitute the Contractor's agreement on the cost or time impact of the change in the Work.

Except as otherwise may be agreed to in writing by the Owner, costs incurred due to a change in the Work pursuant to this subsection 38(a)(3) shall not exceed those prevailing for the trades or crafts (based upon rates established by the U.S. Department of Labor,

Bureau of Labor Statistics, or other generally recognized cost data publication), materials, and equipment in the locality of the Project, may include only those items listed as allowable in Subsection 38(e), and shall not include any of the costs listed as not allowable in Subsection 38(f). The Owner shall be permitted, on a daily basis, to verify the Contractor's cost records and may require such additional records as are necessary to determine the cost of the change to the Work.

Within fourteen (14) Days after the completion of the change in the Work, the Contractor and the Owner shall review and reconcile all cost records and schedule information regarding the change in the Work. The parties shall prepare a confirming Change Order addressing: (i) any change in the Contract Price resulting from the change in the Work, based on the records kept and the Contractor's allowance for overhead and profit determined in accordance with the provisions set forth in Subsections 38(d), (e), and (f) below; and (ii) any change in the Contract Completion Date as a result of the change in the Work's impact on the Critical Path. If agreement on the confirming Change Order is not reached within the fourteen (14) Day period following completion of the change in the Work, the Contractor may submit a claim for the disputed cost or time as provided for in Section 47.

- 4. The Owner may issue a unilateral Change Order for any change in the Work stating the change in the Contract Price and/or change in the Contract Completion Date deemed appropriate by the Owner for the Work. If the Contractor objects to adjustments reflected in the unilateral Change Order, the Contractor may submit a claim for the disputed costs or time as provided for in Section 47.
- b. The Contractor shall review any Owner proposed change in the Work and shall respond in writing within fourteen (14) calendar Days after receipt of the proposed change (or such other reasonable time as the Owner may direct), stating the effect of the proposed change upon its Work, including any increase or decrease in the Contract Price or Contract Completion Date that the Contractor requests as a result of the proposed change. The Contractor shall furnish to the Owner an itemized breakdown of the quantities and prices used in computing the proposed change in Contract Price. Any change in the Contract Completion Date shall be justified as set forth in Subsection 38(g).

The Owner shall review the Contractor's proposal and respond to the Contractor within thirty (30) days of receipt. If a change to the Contract Price and Contract Completion Date are agreed upon, both parties shall sign the Change Order. If a revised Contract Price and/or Contract Completion Date are not agreed upon, the Owner may direct the Contractor to proceed pursuant to Subsections 38(a)(3) or 38(a)(4).

- c. In figuring changes, any instructions for measurement of quantities set forth in the Contract shall be followed.
- d. Overhead and profit for both additive and deductive changes in the Work (other than changes covered by unit prices) shall be paid by applying the specified percentage markups only on the <u>net</u> cost of the changed Work (i.e. difference in cost between original and changed Work excluding overhead and profit). Said percentages for overhead and profit shall reasonably approximate the Contractor's overhead and profit, but shall not exceed the percentages for each category listed below:
 - 1. If a Subcontractor does all or part of the changed Work, the Subcontractor's mark-up for overhead and profit on the Work it performs shall be a maximum of fifteen percent (15%). The Contractor's mark-up for overhead and profit on the Subcontractor's price shall be a maximum of ten percent (10%).
 - 2. If the Contractor does all or part of the changed Work, its markup for overhead and profit on the changed Work it performs shall be a maximum of fifteen percent (15%).

- 3. If a Sub-subcontractor at any tier does all or part of the changed Work, the Subsubcontractor's markup on that Work shall be a maximum of fifteen percent (15%). The markup for overhead and profit on a Sub-subcontractor's Work by the Contractor and all intervening tiers of Subcontractors shall not exceed a total of ten percent (10%).
- 4. Where Work is deleted from the Contract prior to commencement of that Work without substitution of other similar Work, one hundred percent (100%) of the Contract Price attributable to that Work shall be deducted from the Contract Price. However, in the event that equipment, product or material Submittals have been approved and orders placed for said equipment, products or materials, a lesser amount, but in no case less than eighty percent (80%) of the Contract Price attributable to that Work, shall be deducted from the Contract Price. The credit to the Owner for reduced premiums on Standard Labor and Material Payment Bonds and Standard Performance Bonds shall in all cases be one hundred percent (100%).
- e. Allowable costs for changes in the Work may include but are not limited to the following:
 - 1. Labor costs for employees directly employed in the change in the Work, including salaries and wages plus the cost of payroll charges and fringe benefits and overtime premiums, if such premiums are explicitly authorized by the Owner.
 - 2. Materials incorporated into the change to the Work, including costs of transportation and storage, if applicable. If applicable, all cash discounts shall accrue to the Contractor, unless the Owner deposits funds with the Contractor to make such payments. All trade discounts, rebates, refunds, and returns from the sale of surplus materials shall accrue to the Owner.
 - 3. Equipment incorporated in the changed Work or equipment used directly in accomplishing the Work. If rented expressly for accomplishing the change in the Work, the cost shall be the rental rate according to the terms of the rental agreement, which the Owner shall have the right to approve. If owned by the Contractor, the costs shall be a reasonable price based upon the life expectancy of the equipment and the purchase price of the equipment. If applicable, transportation costs may be included.
 - 4. Costs of increases in premiums for the Standard Labor and Material Payment Bond and the Standard Performance Bond, provided coverage for the cost of the change in the Work results in such increased costs. At the Owner's request, the Contractor shall provide proof of his notification to the Surety of the change in the Work and of the Surety's agreement to include such change in its coverage. The cost of the increase in premium shall be an allowable cost but shall not be marked up.
 - 5. Contractor and Subcontractor overhead costs as set forth in Subsection (d) markups above.
 - 6. Agreed Compensation for Overhead for Changes to Time for Completion or Contract Completion Date for Changes to the Work: If the change in the Work also changes the Contract Completion Date by adding Days to complete the Work, an itemized accounting of the following direct Site overhead and home office overhead and other indirect overhead expenses set forth in subparagraphs (a) and (b) below may be considered as allowable costs for compensation in addition to those shown above:
 - a. **Direct Site Overhead Expenses:** The Contractor's per diem expenses, as shown by the itemized accounting, for the following allowable direct Site overhead expenses: The Site superintendent's pro-rata salary, temporary Site office trailer, and temporary Site utilities including basic telephone service,

electricity, heat, water, and sanitary / toilet facilities for each Day added. All other direct expenses are covered by and included in the Subsection 38(d) markups above.

b. **Home Office and Other Indirect Overhead Expenses:** A five percent (5%) markup on the above direct Site overhead expenses will be allowed as compensation for the Contractor's home office overhead and all other direct or indirect overhead expenses for Days added to the Time for Completion or the Contract Completion Date for a change in the Work. All other overhead and other direct or indirect overhead expenses are covered by and included in this markup and the Subsection (d) markups above.

No direct Site, home office, or other indirect overhead shall be paid if the changed Work is done on a unit price basis unless the Contractor can demonstrate that the unit price does not include direct and indirect overhead costs.

- 7. Any other costs directly attributable to the change in the Work with the exception of those set forth in Subsection 38(f) below.
- f. Allowable costs for changes in the Work shall not include the following:
 - 1. Costs due to the negligence of the Contractor, any Subcontractor, Supplier, their employees, or other persons for whom the Contractor is responsible, including, but not limited to, costs for the correction of Defective Work, for improper disposal of material, for equipment wrongly supplied, for delay in performing the Work, or for delay in obtaining materials or equipment.
 - 2. Home office expenses including payroll costs for the Contractor's officers, executives, administrators, accountants, counsel, timekeepers, clerks, and other similar administrative personnel employed by the Contractor, whether at the Site or in the Contractor's principal or branch office for general administration of the Work. These costs are deemed overhead included in the percentage markups allowable in Subsections 38(d) above.
 - 3. Home and field office expenses not itemized in Subsection 38(e) (6) above. Such items include, but are not limited to, expenses of Contractor's home and branch offices, Contractor's capital expenses, interest on Contractor's capital used for the Work, charges for delinquent payments, small tools, incidental job costs, rent, utilities, telephone and office equipment, and other general overhead expenses.
 - 4. Other items reasonably determined by the Owner to not be allowed.
- g. All Change Orders, except initiating Change Orders authorizing work pursuant to Subsection 38(a)(3) procedures, must state that the Contract Completion Date is not changed or is either increased or decreased by a specific number of Days. The old Time for Completion and, if changed, the new Time for Completion also must be stated.

If the Contractor requests an extension to the Contract Completion Date, it must provide written justification for the extension to the A/E and to the Owner. No extension to the Contract Completion Date shall be allowed unless, and then only to the extent that, the additional or changed Work increases the length of the Critical Path beyond the Contract Completion Date. Extensions to the Contract Completion Date will be granted only when an excusable delay exceeds the Total Float in the activity or path of activities affected by the Change Order. If approved, the increase in time required to complete the Work shall be added to the Contract Completion Date.

The Owner may decrease, by Change Order, the Contract Completion Date when an Ownerrequested deletion from the Work results in a decrease in the actual time required to achieve Substantial Completion of the Work. The Contractor may submit a request for an earlier Contract Completion Date under the procedures and subject to the considerations set forth in Section 19(f). No request for an earlier Contract Completion Date shall be considered for approval unless the proposed shorter schedule is otherwise acceptable under Sections 19(b) or (c), whichever is applicable.

With the exception of Change Orders under Subsection 38(a) (3), which shall arrive at a change to the Contract Price and Contract Completion Date using the procedures set forth therein, each Change Order shall include all time and monetary impacts of the change, whether the Change Order is considered alone or with all other changes during the course of the Project. Change Orders issued without a change to the Contract Completion Date and/or Contract Price conclusively establish that the change in the Work reflected by that Change Order had no impact on the Contract Price and/or Contract Completion Date. The parties may mutually agree in writing to postpone a determination of the time-related impacts of a change in the Work for a period of not more than forty-five (45) Days following completion of the change in the Work to give the Contract Completion Date or Contract Price. During any such postponement, all Work shall proceed, unless the Owner agrees otherwise. The Contractor's failure to submit all required substantiating documentation during a forty-five (45) Day postponement shall conclusively establish that the change in the Work did not impact nor require an adjustment of the Contract Price Price and Contract Completion Date.

If at any time there is a delay in the Critical Path of the Work due to a postponement, the Contractor's efforts to justify an extension of the Contract Completion Date or an increase in the Contract Price, or the Contractor's refusal to proceed with any of the Work, such delay and any Contractor costs resulting from it shall not serve as the basis for the extension of the Contract Completion Date or for an increase in the Contract Price.

- h. The acceptance by the Contractor of any payment made by the Owner under a Change Order shall be and operate as a release to the Owner of all demands and claims by the Contractor to additional compensation or an adjustment of the Contract Price or Contract Completion Date for all things done or furnished in connection with the Work described in the Change Order. The execution of any Change Order by the Owner shall not be an acceptance of any Work or materials not in accordance with the Contract Documents, nor shall it relieve the Contractor of responsibility for faulty materials, Defective Work or poor workmanship or operate to release the Contractor or its surety from any obligation arising under the Contract, the Standard Performance Bond, or the Standard Labor and Material Payment Bond.
- i. Payments will not be made for any Work, labor, or materials performed on a unit price or a Subsection 38(a)(3) basis until the Contractor has furnished the Owner documents, certified as true and correct by an authorized officer or agent of the Contractor, evidencing the cost of such Work, labor, and materials. The Owner may require any or all of the following documentation to be provided by the Contractor.

For Work performed on a Unit Price basis:

- 1. Certified measurements of authorized and approved excavations, over-excavations, fills and/or backfills, and similar work; and/or
- 2. Certified measurements of piling installed, caissons installed, and similar work; and/or
- 3. Daily records of waste materials removed from the Site and/or fill materials imported to the Site.
- 4. Other measurements as appropriate to establish the actual quantities of work being performed on a Unit Price basis.

For Work performed on a Subsection 38(a)(3) basis:

- 1. Certified payroll records showing the name, classification, date, daily hours, total hours, rate, and extension for each laborer, foreman, supervisor, or other worker;
- 2. Equipment type & model, dates, daily hours, total hours, rental rate, or other specified rate and extension for each unit of equipment;
- 3. Invoices for materials showing quantities, prices, and extensions;
- 4. Daily records of waste materials removed from the Site and/or fill materials imported to the Site;
- 5. Certified measurements of over-excavations, piling installed and similar work;
- 6. Transportation records for materials, including prices, loads, and extensions.

Requests for payment shall be accompanied and supported by invoices for all materials used and for all transportation charges claimed. If materials come from the Contractor's own stock, then an affidavit may be furnished, in lieu of invoices, certifying quantities, prices, etc. to support the actual cost.

39. EXTRAS

If the Contractor claims that any instructions given to him by the A/E or by the Owner, by drawings or otherwise, require extra work outside the scope of the Contract, then, except in emergencies endangering life or property, he shall give the A/E and the Owner written Notice thereof before proceeding to execute the extra work. Said Notice shall be given promptly enough to avoid delaying the Work and in no instance later than fourteen (14) Days after the receipt of such instructions. If it is not immediately clear to the Contractor that a request or instruction involves extra Work outside the scope of the Contract, then written Notice shall be sufficient if it's given as soon as possible after Contractor's realization that a request or instruction involves extra Work, but in no event later than fourteen (14) Days after the extra work and any additional compensation shall be determined by one of the methods provided in Subsection 38(a), as selected by the Owner. If the Owner does not agree, then the Contractor may submit a claim for the disputed cost or time as provided for in Section 47. No claim for additional compensation for extra work will be considered unless the Contractor timely has provided the required Notice.

40. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE THE CONTRACT

If the Work should be stopped under an order of any court or other public authority for a period of ninety (90) Days through no fault of the Contractor or anyone employed by it, or if the Owner should fail to pay to the Contractor within thirty (30) Days any sum certified by the A/E when no dispute exists as to the sum due or any requirement of the Contract, then the Contractor may, upon ten (10) Days written Notice to the Owner and the A/E, stop Work or terminate the Contract and recover from the Owner payment for the cost of the Work actually performed, together with overhead and profit thereon, but profit on the Work performed shall be recovered only to the extent that the Contractor can demonstrate that it would have had profit on the entire Contract if it had completed the Work. The Contractor may not receive profit or any other type of compensation for parts of the Work not performed. The Contractor may recover the reasonable cost of physically closing down the Site, but no other costs of termination. The Owner may offset any claims it may have against the Contractor against the amounts due to the Contractor. In no event shall termination of the Contract by the Contractor terminate the obligations of the Contractor's surety on its payment and performance bonds.

41. OWNER'S RIGHT TO TERMINATE THE CONTRACT FOR CAUSE

- a. If the Contractor should be adjudged as bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, the Owner may terminate the Contract. If the Contractor should refuse or should repeatedly fail, except in cases for which extension of time is provided, to supply enough properly skilled tradespeople or laborers or proper materials and equipment, or if it should fail to perform the Work in a diligent, efficient, workmanlike, skillful, or careful manner, or if it should fail or refuse to perform the Work in accordance with the Contract Documents, or if it should fail to make prompt payment to Subcontractors or Suppliers of material or labor, or if it should disregard laws, ordinances, building codes or the written instructions of the A/E or the Owner, or otherwise be in substantial, willful or repeated violation of any provision of the Contract, then the Owner may terminate the Contract.
- Prior to termination of the Contract, the Owner shall give the Contractor and its surety ten (10) b. Days' Notice of such termination and allow ten (10) Days during which the Contractor and/or its surety may rectify the basis for the Notice. If rectified to the satisfaction of the Owner within said ten (10) Days, the Owner may rescind its notice of termination. If the basis for the termination is not rectified within said ten (10) Days, the termination for cause shall become effective at the end of the ten (10) Day period without further Notice to the Contractor. At any time, the Owner may, in writing, postpone the effective date of the termination for cause, at its sole discretion, if it should receive reassurances from the Contractor and/or its surety that the basis for the termination will be remedied in a time and manner which the Owner finds acceptable. If at any time after such a postponement, the Owner determines that Contractor and/or its surety has not or is not likely to rectify the causes of termination in an acceptable manner or to do so within the time allowed, then the Owner may immediately terminate the Contract for cause, without the necessity of further ten (10) Day Notice, by notifying the Contractor and its surety in writing of the termination. In no event shall termination for cause terminate the obligations of the Contractor's surety on its payment and performance bonds.
- c. Upon termination of the Contract becoming effective, the Owner shall take possession of the Site and of all materials, tools and equipment thereon and shall proceed as follows:
 - 1. **No Security or Bonds Provided:** If no security has been required pursuant to Section 8, the Owner shall finish the Work by whatever method the Owner deems reasonable or expedient. If the expense of finishing the Work, including compensation for additional managerial and administrative services, shall exceed the unpaid balance of the Contract Price, the Contractor shall pay the difference to the Owner, together with any other expenses of terminating the Contract and having it completed by others.
 - 2. Security or Bonds Provided: If security has been required and provided pursuant to Section 8 herein, the Owner shall provide Notice to the Surety that termination of the Contract became effective and proceed as set forth in the Standard Performance Bond (CO-10), and the Terms and Conditions therein. If the expense of finishing the Work, including compensation for additional managerial and administrative services, shall exceed the unpaid balance of the Contract Price and all amounts due under the Standard Performance Bond, the Contractor shall pay the difference to the Owner, together with any other expenses of terminating the Contract and having it completed by others.
- d. If it should be judicially determined that the Owner improperly terminated this Contract for cause, then the termination shall be deemed to be a termination for the convenience of the Owner and the Contractor's rights and remedies shall be solely limited to those provided by Section 42 of these General Conditions.
- e. Termination of the Contract for cause is in addition to and without prejudice to any other right or remedy of the Owner. Any actions by the Owner permitted herein shall not be deemed a waiver of

any other right or remedy of the Owner under the Contract or under the law. The Owner may offset any claims it may have against the Contractor against the amounts due to the Contractor. The provisions of this Section shall survive termination of the Contract.

f. The provisions of Sections 3(j), 9(e), 14, 30 and 45 also shall survive termination of the Contract for cause.

42. TERMINATION BY OWNER FOR CONVENIENCE

- a. The Owner may terminate this Contract, in whole or in part, at any time without cause upon giving the Contractor written Notice of such termination. Upon Notice of termination for convenience, the Contractor shall immediately cease Work and remove from the Site all of its labor forces, equipment and such of its materials as Owner elects not to purchase or to assume in the manner hereinafter provided. The Contractor also shall take such steps as Owner may require to assign to the Owner the Contractor's interest in all Subcontracts and purchase orders designated by Owner. After all such steps have been taken to Owner's satisfaction, the Contractor shall receive as full compensation the following:
 - 1. Amounts due for Work performed in accordance with the Contract subsequent to the latest approved Schedule of Values and Certificate for Payment (CO-12) through the date of termination; and
 - 2. All amounts due under Contract for Work completed prior to the date of termination; and
 - 3. Reasonable compensation for the actual cost of demobilization incurred by the Contractor as a direct result of termination for convenience, plus overhead not to exceed 15 percent (15%) of the direct costs of demobilization.

The Contractor agrees it shall not be entitled to any additional compensation, including but not limited to loss of revenue, income, profit, business, reputation, or bonding capacity, consequential damages or lost profits, but shall only receive payment upon termination for convenience as stated in this Subsection 42(a). The Owner may offset any claims it may have against the Contractor against the amounts due to the Contractor. Upon payment of the amounts stated in this Subsection 42(a), Owner shall have no further obligations to Contractor of any nature.

- b. In no event shall termination for the convenience of the Owner terminate the obligations of the Contractor's surety on the payment and performance bonds. The provisions of Sections 3(j), 9(e), 14, 30 and 45 also shall survive termination of the Contract for convenience.
- c. Any actions by the Owner permitted herein shall not be deemed a waiver of any other right or remedy of the Owner under the Contract or under the law. The provisions of this Section shall survive termination of the Contract.

43. DAMAGES FOR DELAYS; EXTENSION OF TIME

a. **Excusable Non-Compensable Delays:** If the Critical Path is delayed by strikes, fires, unusual delays in transportation, unavoidable casualties, or other causes outside the control of the Owner and the Contractor, with the exception of delays caused by weather which are addressed in Section 6, and the Contractor seeks an extension of the Contract Completion Date, then the Contractor shall give the Owner and A/E written Notice of the delay not later than fourteen (14) Days following the inception of the delay. The Contractor shall give written Notice to the Owner and A/E of the termination of the delay event not later than fourteen (14) Days after the delay has ceased. Within twenty (20) Days after the delay event has ceased, Contractor shall submit to the Owner and the A/E, the Contractors' written request for an extension of the Contract Completion Date, specifically stating the cause of the delay, the number of days of extension requested, and an analysis of the delay event's impact on the Critical Path. If the Owner agrees that the Critical Path

has been impacted by the delay event, the Owner shall extend the Contract Completion Date for the length of time that the Critical Path was delayed. The Contractor shall not be charged with liquidated or actual damages for such period of Critical Path delay nor shall the Contractor be due compensation or damages of any kind, under any theory of law, as a result of such Critical Path delay, the impact of such delay, or its acceleration of Work as a result of such delay.

- b. Excusable Compensable Delays: If the Critical Path unreasonably is delayed by acts or omissions of the Owner, or its agents, contractors, or employees due to causes within the Owner's control, and the Contractor seeks an extension of the Contract Completion Date and/or additional compensation due to the unreasonable delay, then the Contractor shall notify the Owner and the A/E immediately at the time of the occurrence giving rise to the delay by the fastest means available. The Contractors also shall give written Notice to the Owner and A/E no later than two (2) business days after inception of the delay. The Contractor's written Notice shall specify the nature of the delay claimed by the Contractor, the cause of the delay, and the impact of the delay on the Critical Path. The Owner shall have three (3) business days to respond to the Contractor's Notice with a resolution, remedy, direction to alleviate the delay, or rejection of the Contractor's requested relief. The Owner's failure to respond within the time required shall be deemed to be a denial of the Contractor's entitlement to an extension of the Contract Completion Date and additional compensation. The Contractor shall also give written Notice to the Owner and A/E of the termination of the delay event not later than fourteen (14) Days after the delay has ceased. Within twenty (20) Days after the delay event has ceased, Contractor shall submit to the Owner and the A/E, the Contractor's written request for an extension of the Contract Completion Date, specifically stating the cause of the delay, the number of days of extension requested, a calculation of the additional compensation sought, and an analysis of the delay event's impact on the Critical Path. Requests for additional compensation must be substantiated by itemized data and records demonstrating that the costs incurred by the Contractor are directly attributable to the delay and shall be calculated from the Contract Completion Date, not using any early completion planned or scheduled by the Contractor unless a Change Order has been executed pursuant to Section 19(f) changing the Contract Completion Date to reflect such early completion. If and to the extent that a delay is caused by or due to the Owner or A/E taking any actions permitted or required by the Contract, the Contractor shall be entitled to an extension of the Contract Completion Date or additional compensation only for the portion of the delay that is unreasonable, if any.
- c. Non-Excusable Non-Compensable Delays: The Contractor shall not be entitled to an extension of the Contract Completion Date or to any additional compensation if and to the extent a delay is: (1) caused by acts, omissions, fault, or negligence of the Contractor or its Subcontractors, agents or employees; (2) arises from foreseeable causes within the control of the Contractor or its Subcontractors, agents or employees, including, but not limited to, Defective Work, poor workmanship, improper or inferior materials, Defective Work which must be corrected before dependent work can proceed, Defective Work for which corrective action must be determined before like work can proceed, from incomplete, incorrect, or unacceptable Submittals or samples, or the failure to furnish enough or properly skilled workers, proper materials or necessary equipment to perform the work in a timely manner in accordance with the Project schedule; or (3) due to causes that would entitle the Owner to recover delay costs or other damages from Contractor.
- d. No extension of time or additional compensation will be allowed unless the Contractor demonstrates that the delay directly impacted the Critical Path of the most current approved Project schedule and that all Float has been consumed. No extension of time or additional compensation will be allowed if the Contractor failed to provide all Notice and information in the manner and within the time periods set forth in Subsections 43(a) or (b) above, whichever applies. Failure to timely provide all required information and Notices shall preclude an extension of the Contract Completion Date or payment of additional compensation based upon that cause.
- e. If the Contractor makes a claim against the Owner for costs or damages, the Contractor shall be liable to and shall pay to the Owner that percentage of all costs incurred by the Owner in

investigating, analyzing, negotiating, and litigating or arbitrating that percentage of the claim which is determined through litigation or arbitration to be false or to have no basis in law or in fact. (*Code of Virginia*, § 2.2-4335).

- f. Any change in the Time for Completion or Contract Completion Date shall be accomplished only by issuance of a Change Order.
- g. Agreed Compensation/Liquidated Damages for Contractor Delay: If liquidated damages are not established in the Supplemental General Conditions, the Contractor shall be liable for any and all actual damages sustained by Owner as a result of a delay for which Contractor is responsible. In addition to damages for delay, whether liquidated or actual, the Contractor shall also be liable for any and all actual damages sustained by the Owner as a result of any other breach of the Contract, including, but not limited to, Defective Work or abandonment of the Contract.

44. INSPECTION FOR SUBSTANTIAL COMPLETION & FINAL COMPLETION

a. The Contractor shall advise the Owner using the Certificate of Partial or Substantial Completion by the Contractor (CO-13.2a) of the date when the Work or designated portion thereof will be substantially complete and ready for inspection and testing by Owner to determine if Substantial Completion has been achieved. Contractor shall deliver Form CO-13.2a to the A/E at least ten (10) Days in advance of the date identified on the Form CO-13.2a. The A/E shall then attach his or her written endorsement as to whether the Work will be ready for inspection and testing on the date identified on the Form CO-13.2a. The A/E's endorsement is a convenience to the Owner only and shall not relieve the Contractor of its responsibility nor shall the A/E's endorsement be deemed to evidence or establish that the Work was substantially complete or ready for inspection and testing. Inspection and testing shall take place at a time(s) mutually agreeable to the Contractor, Owner, A/E, and Building Official.

The inspection shall include a demonstration by the Contractor that all equipment, systems and operable components of the Project function properly and in accordance with the Contract Documents. The Contractor shall furnish access for the inspection and testing as provided in Section 21 of these General Conditions. The inspection and testing shall determine whether Substantial Completion has been accomplished and shall result in a written list of unfinished Work and Defective Work, commonly referred to as a "punch list", which must be completed and corrected prior to Final Completion.

If, after successful completion of all testing, the Architect/ Engineer determines that the Work, either in whole or in part, has achieved Substantial Completion, the A/E shall notify the Owner of such, in writing, using the Certificate of Partial or Substantial Completion by the A/E (CO-13.1a).

The Owner shall notify the Contractor, in writing, of the date the Owner accepts the Work, or the specified portion thereof, as having achieved Substantial Completion or, if it is not, shall notify the Contractor of the deficiencies to be corrected or completed before such Work will be accepted as substantially complete.

b. The Contractor shall advise the Owner, in writing using the Certificate of Completion by the Contractor (CO-13.2) of the date when the Work has reached or will reach Final Completion and will be ready for final inspection and testing. Contractor shall deliver Form CO-13.2 to the A/E at least five (5) Days in advance of the date identified on the Form CO-13.2. The A/E shall then attach his or her written endorsement as to whether the Work will be ready for inspection and testing on the date identified on Form CO-13.2. The A/E shall then attach his or her written endorsement as to whether the Work will be ready for inspection and testing on the date identified on Form CO-13.2. The A/E's endorsement is a convenience to the Owner only and shall not relieve the Contractor of its responsibility nor shall the A/E's endorsement be deemed to evidence or establish that the Work achieved Final Completion. Final Completion inspection and any necessary testing shall be conducted in the same manner as the inspection for Substantial Completion. The Owner shall not establish the Final Completion Date until the Work is finally and totally complete, including the completion of punch list items,

submission of all required documentation, and elimination and correction of all Defective Work.

- c. Representatives of the Contractor, Owner, A/E, and Building Official will participate in the Substantial Completion and/or Final Completion inspections. The A/E shall conduct and document the inspections. The Owner may elect to have other persons of its choosing also participate in the inspections. If one or more Substantial or Final Completion re-inspections are required, the Contractor shall reimburse the Owner for all costs of re-inspection or, at the Owner's option, the costs may be deducted from payments due to the Contractor.
- d. A representative of the State Fire Marshal's Office will either be present at the Substantial and Final Completion inspections or otherwise inspect the completed Work and report any fire safety deficiencies to the Building Official. The State Fire Marshal will advise the Owner and Contractor of those deficiencies.
- e. Approval of Work at or as a result of any inspection required herein shall not release the Contractor or its surety from responsibility for complying with the Contract.

45. GUARANTEE OF WORK AND INDEMNIFICATION

- a. Except as otherwise specified or required, the Contractor guarantees all Work, materials, equipment, and workmanship conform to the requirements of the Contract Documents and are free from defects, imperfections, or non-conformities, normal wear and tear excepted, for a period of one (1) year from the Final Completion Date. Equipment and facilities which have seasonal limitations on their operation (e.g. heating or air conditioning units) shall be guaranteed for one (1) full year from the date of the equipment's first seasonally appropriate test and acceptance, in writing, by the Owner. Where the Owner agrees to take Beneficial Occupancy of a portion or phase of the Work which has been determined to be substantially complete before the entire Work achieves Final Completion, the guarantee for that portion or phase shall begin on the date that the Owner takes Beneficial Occupancy, unless otherwise specified in the Supplemental General Conditions, Special Conditions, or by separate agreement. This guarantee is separate and apart from any manufacturers' warranties and the warranty set forth in Section 30. At six (6) months and eleven (11) months after Substantial Completion, the Contractor shall meet with the Owner to review the status of and assign value to any unresolved warranty, guarantee, and punch list items.
- b. If, within any guarantee period, Work which is not in accordance with the Contract, Defective Work, or inferior material, equipment or workmanship is noted by the Owner or A/E which requires or renders necessary repairs or changes in connection with the guaranteed Work, the Contractor shall, promptly upon receipt of Notice from the Owner, such Notice being given not later than two weeks after the guarantee period expires, and without expense to the Owner:
 - 1. Correct, repair, replace or otherwise place in satisfactory condition all Defective Work, defects, nonconformity, inferior materials, equipment or workmanship;
 - 2. Make good all damage to the structure or Site or equipment or contents thereof, which, in the opinion of the Owner or the A/E, is the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the requirements of the Contract; and
 - 3. Make good any Work or materials or the equipment and contents of structures and/or Site disturbance that results from fulfilling the requirements of the guarantee.
- c. In any case when in fulfilling the requirements of the Contract and this guarantee or any other guarantee or warranty the Contractor disturbs any work performed by a separate contractor, the Contractor shall restore such work to a condition satisfactory to the A/E and Owner and guarantee such restored work to the same extent as if it was guaranteed under this Contract.

- d. If the Contractor, after Notice, fails to proceed promptly to comply with the obligations of this Section 45, and the surety, after Notice, fails to cure the Contractor's default as provided in Section 41, the Owner may undertake all needed corrections or repairs and the Contractor and its surety shall be liable for all expenses incurred.
- e. All special warranties and guarantees applicable to definite parts of the Work that may be stipulated in or required by the Contract Documents shall be subject to the terms of this Section during the first year of such special warranty or guarantee. The guarantee of this Section shall be in addition to and not in lieu of all other warranties, express or implied, applicable to or arising from this Contract or by law.
- f. Nothing contained in this Section shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including liability for Defective Work under Section 30, for indemnity or for breach of the Contract. This Section relates only to the specific obligation of the Contractor to correct the Work and does not limit the time within which its obligation to comply with the Contract Documents otherwise may be enforced, nor the time within which legal proceedings may be commenced to establish the Contractor's liability with respect to its obligations under the Contract Documents.
- g. In the event the Work of the Contractor is to be modified by another contractor, either before or after the Final Inspection, the Contractor shall remain responsible in all respects under this Section's Guarantee of Work and under any other warranties or guarantees, express or implied, applicable to or arising from this Contract or by law. However, the Contractor shall not be responsible for any defects in material or workmanship introduced by another Contractor modifying Contractor's Work. The Contractor and any contractor making modifications shall each be solely responsible for its respective work. A contractor modifying the Contractor's Work shall be responsible for any damage to or defect introduced into the Work by its modification.

If Contractor claims that a subsequent contractor has introduced defects of materials and/or workmanship into its Work, Contractor shall demonstrate clearly the nature and extent of such introduced defects and the other contractor's responsibility for those defects. Any contractor modifying the work of another shall have the same burden if it asserts that defects in its work were caused by the contractor whose work is modified.

h. The Contractor shall indemnify and hold harmless the Commonwealth of Virginia, the Owner and the Owner's consultants, representatives, agents and employees from and against any and all claims, causes of action, losses, costs, expenses or damages, including but not limited to attorney's fees, of any kind or nature whatsoever, arising from or relating to any bodily injury, including sickness, disease or death, any property damage, and any monetary loss, that results from or arises out of the Work performed by the Contractor, or by or in consequence of the Contractor's neglect in safeguarding the Work, its use of unacceptable materials in the Work, or resulting from any act, omission, negligence, or misconduct of the Contractor, any of its subcontractors, anyone directly or indirectly employed by them or anyone for whose acts the Contractor is or may be liable. The Owner may retain as much of the monies due the Contractor under the Contract as the Owner considers necessary to ensure that a fund will be available to pay a settlement or judgment of such suits, actions, or claims. If insufficient monies are or will become due, the Contractor's surety and/or insurers will not be released from liability until all such claims and actions have been settled and suitable evidence to that effect has been furnished the Owner.

46. ASSIGNMENTS

Neither party to the Contract shall assign the Contract in whole or any part without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without the prior written consent of the Owner. Consent to assignment shall not be unreasonably withheld. No assignment shall relieve any party from its obligations under the Contract.

47. CONTRACTUAL DISPUTES (Code of Virginia, § 2.2-4363)

- Contractual claims, whether for money or for other relief, shall be submitted, in writing, no later a. than sixty (60) Days after Final Payment; however, written Notice of the Contractor's intention to file such claim must be given to the Owner within fourteen (14) Days of the time of the occurrence or beginning of the Work upon which the claim is based. Such Notice shall state that it is a "notice of intent to file a claim" and include a written statement describing the act or omission of the Owner or its agents that allegedly caused or may cause damage to the Contractor and the nature of the claimed damage. Verbal notice, the Owner's actual knowledge, or a written notice given more than fourteen (14) Days after the occurrence or beginning of the Work upon which the claim is based, shall not be sufficient to satisfy the requirements of this Section. All claims shall state that they are "claims" pursuant to this Section, be submitted along with all practically available supporting evidence and documentation and the certification required by Subsection 47(f), and request a final decision. Certificates for payment, applications for payment, vouchers, invoices and similar requests for payment submitted for work done by the Contractor in accordance with the expected contract performance are routine submissions and are not claims under this Section. Proposed or requested Change Orders, demands for monetary compensation or other relief, and correspondence and e-mails to the Owner or its representatives, which do not strictly comply with the requirements of this Section, are not claims under this Section. Failure to timely provide notice of intent to submit a claim shall preclude any relief to the Contractor, including but not limited to an extension of the Contract Completion Date or payment of additional compensation.
- b. Although the Contractor may be required to submit certain classes of claims prior to Final Payment, and the Contractor is not prevented from submitting claims during the pendency of the Work, the Owner shall not be obligated to render a final written decision on any claim until after Final Payment. No written decision denying a claim or addressing issues related to the claim shall be considered a denial pursuant to this Section unless the written decision makes express reference to this Section and is signed by the Agency head or his or her designee. The Contractor may not institute legal action prior to receipt of the Owner's final written decision on the claim unless the Owner fails to render such a decision within ninety (90) Days of Final Payment, whichever is later.
- c. The decision of the Owner shall be final and conclusive unless the Contractor within six (6) months of the date of the final decision on a claim, initiates legal action as provided in *Code of Virginia* § 2.2-4364. Failure of the Owner to render a timely decision on a claim shall not result in the Contractor being awarded the relief claimed nor shall it result in any other relief or penalty. The sole result of the Owner's failure to render a timely decision shall be the Contractor's right to immediately institute legal action. No administrative appeals procedure pursuant to § 2.2-4365 of the *Code of Virginia* has been established for contractual claims under this Contract.
- d. Pursuant to *Code of Virginia*, § 2.2-4366, Alternative Dispute Resolution, the Owner may enter into an agreement with the Contractor to submit disputes arising from the performance of this Contract to arbitration and utilize mediation and other alternative dispute resolution procedures. However, such procedures entered into by the Owner, the Commonwealth, or any department, institution, division, commission, board or bureau thereof, shall be non-binding and subject to *Code of Virginia* § 2.2-514, as applicable. The details for the implementation of Alternative Dispute Resolution are provided in CPSM Section 3.2.7.
- e. In the event that a dispute, claim or controversy between the Owner and the Contractor arises regarding the requirements of the Contract, the performance of the Work, payment due the Contractor, the terms of any Change Order, or otherwise, the Contractor shall not stop, suspend or delay the Work or any part of the Work to be performed under the Contract, or under any Change Order, or as ordered by the Owner. The Contractor shall continue to diligently prosecute the Work to completion, including work required in any Change Order or as directed by the Owner.

- f. The Contractor shall submit a Contractor's Claim Certification (DGS-30-234) certifying that the claim is a true and accurate representation of the claim. Claims submitted without the Contractor's Claim Certification will be deemed incomplete and will not be considered.
- g. The compensation expressly provided for by this Contract shall be the Contractor's sole available compensation for the acts, omissions or breaches by the Owner. These remedies shall survive termination or breach of the Contract.

48. ASBESTOS

a. This subsection applies to projects involving existing buildings where asbestos abatement is not a part of the Work, when the scope of the Project has been reviewed and a comprehensive survey conducted by an individual licensed by the Virginia Department of Professional and Occupational Regulation to conduct building inspections for asbestos-containing materials in buildings, and where the Owner has attempted to remove or encapsulate all asbestos-containing material that may become friable or damaged during this Project.

Prior to commencement of Work, the results of the comprehensive survey or any other asbestos survey shall be made available to the Contractor, who shall be responsible for performing his Work so as not to disturb any remaining asbestos, encapsulated or otherwise, identified in such survey or surveys.

If the Contractor discovers or inadvertently disturbs any material that he knows, should have known or has reason to believe, may contain asbestos that has not been previously identified, was overlooked during the removal, was deemed not to be friable or was encapsulated, the Contractor shall stop Work in the area containing or suspected to contain the asbestos, secure the area, and notify the Owner and the A/E immediately by telephone or in-person with written Notice as soon as possible. The Owner will have the suspect material sampled.

If the sample is positive and must be disturbed in the course of the Work, the Owner shall have the material repaired or removed and shall pay for the bulk sample analysis.

Except as provided in *Code of Virginia* § 11-4.1, if the material disturbed is not within the Contractor's authorized Work and/or Work area or under this Contract, the Contractor shall pay for all associated sampling and abatement costs.

- b. If asbestos abatement is included as a part of the Work, the Contractor shall assure that the asbestos abatement work is accomplished by those duly licensed as described in Section 3 of these General Conditions and in accordance with the specific requirements of the Contract and all applicable laws and regulations.
- c. If asbestos abatement is included as part of the Work, the licensed asbestos Subcontractor shall obtain the insurance required under Section 11(b)(4) of these General Conditions.

49. TRAINING, OPERATION AND MAINTENANCE OF EQUIPMENT

- a. As a part of the Work, the Contractor in conjunction with his Subcontractors and Suppliers shall provide the Owner's operations and maintenance personnel with adequate instruction and training in the proper operation and maintenance of any equipment, systems, and related controls provided or altered in the Work. The training requirements may be further defined in the Specifications.
- b. The Contractor shall provide the Owner with a minimum of two (2) copies of operating, maintenance and parts manuals for all equipment and systems provided in the Work. Further specific requirements may be indicated in the Specifications.

50. **PROJECT MEETINGS**

- a. The intention of this Section is that the Contractor, the Owner and the A/E have timely exchange of information and cooperate to accomplish the Work as required by the Contract Documents. The Contractor is responsible for managing the Work, obtaining approvals and requesting clarifications on a timely basis. The Owner and A/E are responsible for making a reasonable effort to provide timely responses to the Contractor.
- b. **Preconstruction Meeting:** Prior to the start of construction and no later than 15 Days after the Notice to Proceed, a "Preconstruction" meeting shall be held with attendees to include the Owner's Project Manager and Project Inspector, the A/E's project manager and representatives of each design discipline involved in the Project, the Regional Fire Marshal, the Contractor's project manager and superintendent (and scheduler, if Contractor desires), and representatives of the Contractor's major Subcontractors. The purpose of the meeting is to clarify and discuss the specifics related to, but not limited to, the following:
 - 1. Persons involved from each entity and their chain of authority including the names of persons authorized to sign Change Orders and any limits to their authority. Name of Contractor's on-site certified Responsible Land Disturber.
 - 2. Names, addresses, email addresses, telephone numbers and FAX numbers to be used for Requests for Information (RFI), Requests for Clarification (RFC), Requests for Proposals (RFP), shop drawings, Submittals, and Notice.
 - 3. Contractor's proposed construction schedule, the requirements for schedule updates and recovery schedules, assessment and management of risks to on-time and on-budget completion, and Owner's sequencing requirements, if any.
 - 4. Schedule of Values and Certificate for Payment (CO-12) requirements and procedures.
 - 5. Procedures for shop drawings, product data and Submittals.
 - 6. Procedures for handling Field Orders and Change Order (CO-11).
 - 7. Procedures for Contractor's request for time extension, if any.
 - 8. Construction Site requirements, procedures and clarifications to include:
 - Manner of conducting the Work
 - Site specialties such as dust and erosion control, stormwater management, project signs, clean up and housekeeping, temporary facilities, utilities, security, and traffic
 - Safety
 - Layout of the Work
 - Quality control, testing, inspections, and notices required
 - Site visits by the A/E and others
 - Owner's Project Inspector duties
 - Running Punch List
 - As-Built Drawings
 - 9. Procedures and documentation of differing or unforeseen Site conditions.
 - 10. Monthly Pay Meeting.
 - 11. Assignment of responsibility for generation of meeting minutes of all project meetings.
 - 12. Project Close-Out requirements and procedures.

- 13. Project records.
- 14. Requirements for the Contractor to furnish the Owner a list of hazardous materials that may be brought onto the job site, and 48- hour notification requirement.
- c. **Monthly Pay Meeting:** Section 36 establishes the requirement for a monthly pay meeting which will usually be held at or near the Site. In addition to Owner, A/E and Contractor representatives, the following representatives, at a minimum, should be available to attend portions of the meeting, as applicable or necessary:
 - Owner's Project Inspector
 - Contractor's project superintendent
 - A/E representative of each discipline where Work was performed for the current pay request or where Work is projected to be performed in the coming month.
 - A representative of each subcontractor who performed work included in the current pay request.
 - A representative of each subcontractor who is projected to perform work in the coming month.

The following topics should be included, as a minimum, in the monthly pay meeting:

- 1. Observations of status, quality and workmanship of Work in progress
- 2. Validation of the Schedule of Values and Certificate for payment
- 3. Status of progress of the Work and conformance with proposed construction schedule and recovery schedule, if any
- 4. Outstanding Requests for Information, Requests for Clarification and Requests for Proposal
- 5. Submittals with action pending
- 6. Status of pending Change Orders
- 7. Status of Running Punch List items
- 8. Work proposed for coming pay period
- 9. Discussions of any problems or potential problems which need attention
- d. **Other Meetings:** Requirements for other meetings, such as progress meetings, coordination meetings, pre-installation meetings and/or partnering meetings, may be included in the Contract Documents.

51. SMALL BUSINESS PROCUREMENT PLAN

If the Total Contract Amount of the Contract is greater than \$10,000 and the Contractor is a SWaM/SDV Business; then the Contractor shall include a Small Business Procurement Plan in its Bid (if subcontracting work is intended by the Contract as part of its performance of the Work).

If the Total Contract Amount of the Contract is greater than \$100,000, then the Contractor shall include in its Bid a Small Business Procurement Plan and report on the involvement of SWaM/SDV Businesses in the Contractor's performance of the Contract as follows:

- 1. **Periodic Progress Reports**: The Contractor shall report on involvement of SWaM/SDV Business with each periodic invoice submitted by the Contractor. The report shall identify each subcontract or agreement with a SWaM/SDV Business, including the total contract value, and state the total amounts paid to each SWaM/SDV Business in connection with the Contract as of the report date. The report shall provide this information separately for each type of SWaM/SDV Business and shall clearly indicate those SWaM/SDV Businesses which were identified in the Contractor's Small Business Procurement Plan submitted by the Contractor in the procurement phase for the Contract. The Contractor shall provide two (2) copies of each periodic report to the Owner. Failure to submit the report with each invoice will result in the invoice being rejected by the Owner without payment.
- 2. **Final Compliance Report**: Prior to or with its final invoice for payment, the Contractor shall certify and report on its compliance with the Small Business Procurement Plan, submitted by the Contractor in its Bid for the Contract, to the Owner through DGS' eVA system. In the Final Compliance Report, the Contractor shall:
 - Provide a written explanation to the Owner of any variances between the Contractor's Small Business Procurement Plan and the actual participation of SWaM/SDV Businesses in the Contractor's performance of the Contract; and
 - Report on the involvement of other SWaM/SDV Businesses in the Contractor's performance of the Contract, including the contract value, the type of SWaM/SDV Business, a comparison of the actual amount paid with the planned amounts, the total amount paid to each type of SWaM/SDV Business, and a calculation of the percentage of the Total Contract Amount paid to SWaM/SDV Business.

A format for the Final Compliance Report will be provided by the Owner.

The Owner may withhold final payment to the Contractor until the Contractor has complied with the requirements of its Small Business Procurement Plan submitted by the Contractor in the procurement phase for the Contract.

* * * E N D O F G E N E R A L C O N D I T I O N S * * *

CONTRACTOR'S GUARANTEE

Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway Heathsville VA 22473 Partial Roof Replacement

This _____ day of ______, 2023, ______ (insert name and address of the Contractor) hereinafter called "Contractor" hereby guarantees the materials and workmanship associated with the gutters, flashings and sheet metal work incidental to the total guttering system of the above referenced building, hereinafter called "Project", against leaks and any other defects due to faulty materials or workmanship for a period of two (2) years from the date of written acceptance by the Owner. If it can be proven by the Contractor that the Owner caused the damage, the guarantee shall not continue until the end of the two (2) years period. This date of acceptance, established at the final inspection, is _____. This guarantee expires on

(Contractor)

(Authorized Signature)

(Business Address)

OWNER'S AGREEMENT

The following Owner's Agreement shall be provided on the Contractor's guarantee form:

"The undersigned named Owner for The County of Northumberland agrees, from the date of acceptance of the project, to maintain the roof in accordance with the manufacturer's written requirements and agrees to avoid damage to the roof surface by any parties under his control working or walking on the roof. The Owner recognizes his responsibility to inspect the roof semiannually."

Owner's Authorized Agent

Title

SPECIAL CONDITIONS

The following additional articles supplement or clarify the Supplemental General Conditions, Special Conditions and General Conditions of the Contract.

- 1.01 SAFETY:
 - A. No Crimes Against Children Contractor acknowledges that the implementation of the Contract Documents requires Contractor, Contractor's employees or other persons that will provide services under this Contract to have direct contact with Northumberland County Public Schools students. This form to be completed and included in the bid form.
 - B. Tobacco and Tobacco Products: The Northumberland County School Board has designated all of its buildings and grounds tobacco free areas. Smoking or use of tobacco products is forbidden at all times.
 - C. State Occupational Safety and Health Standards including Fall Protection shall apply to this project. The Owner and A/E shall not be held responsible for enforcement of safety conditions. Particular attention to the following subparts must be observed:
- 1.02 LADDERS AND SCAFFOLDS:

All ladders, scaffolds, or temporary work platforms to be kept in locked storage or removed from the job site when not in use or when unattended.

- 1.03 CRANES, DERRICKS, HOISTS, ELEVATORS, AND CONVEYORS:
 - A. Cranes are to be guarded and/or secured at all times when on the job site so as to avoid becoming a hazard to the public, students, and faculty.
 - B. Material hoists, lifts, or conveyors are to be secured so as to avoid becoming a hazard when unattended.
- 1.04 MOTOR VEHICLES AND MECHANIZED EQUIPMENT:
 - A. Keys must be removed and secured from vehicles and other mobile equipment when not in use or unattended.
 - B. Vehicles and mobile equipment with door locking capability will be locked when not in use.
- 1.05 DEMOLITION:

Pay particular attention to safe procedures for demolition and removal of debris, (if demolition is required) so as not to create a hazard to the public, students, and faculty. The disposal of solid waste in open dumps is prohibited. Contractor is also to make every necessary effort to avoid contamination of existing building air systems.

- 1.06 ADDITIONAL SAFETY REQUIREMENTS:
 - A. No firearms, alcohol or drugs may be brought onto the project at any time.
 - B. All poisonous or otherwise hazardous material will be kept in locked containers when not in use or left unattended.

- C. Contractor's personnel will strictly adhere to all traffic regulations, traffic patterns, and speed limits.
- D. If any hot work, including but not necessarily limited to, welding, burning, or torch cutting is required, the Contractor will station a watchman inside the building with proper fire extinguisher equipment.

<u>SAFETY</u>: All contractors must maintain an adequate safety program to ensure the safety of contractor employees, subcontractor employees, and all other individuals working under this contract. The Virginia Occupational Safety and Health Administration (VOSHA) provides for safety and health protection for employees on the job. The contractor is required to comply with the VOSHA standards.

- NOTE: Contractor shall conduct product safety meeting and explain Material Safety Data Sheets (MSDS) to all employees on the project. Contractor to review all safety procedures, especially those related to requirements relating to hazardous communications information.
- 1.07 ASBESTOS AND ALL MATERIALS CONTAINING ASBESTOS:
 - A. The work area has been inspected for asbestos and all materials known to contain asbestos (if any) have been noted on the drawings.
 - B. If the Contractor should suspect other existing materials involved in the work of containing asbestos, he shall immediately notify the A/E and the Owner who will provide confirmation and procedural instructions. If the material contains hazardous levels of asbestos, compliance with all applicable Federal and State laws, rules and regulations is mandatory. The Owner reserves the right to engage the services of another Contractor to accomplish asbestos abatement.
 - C. If the work is delayed for asbestos abatement, no additional costs shall be paid for the delay in the work by the Owner.
- 1.08 APPLICABLE STANDARDS AND CODES:

Standards referenced by the Virginia Uniform Statewide Building Code (VUSBC) shall be the edition listed in the VUSBC. Other standards shall be the edition in effect as of the date of the Contract Documents, unless otherwise stated. The following is a list of typical abbreviations which may be used in the specifications and the organizations to which they refer:

ANSI	-	American National Standards Institute
ASTM	-	American Society for Testing and Materials
UL	-	Underwriters Laboratories, Inc.
NEC	-	National Electrical Code
USBC	-	Uniform Statewide Building Code (Virginia)
VBPVRR	-	Virginia Boiler and Pressure Vessel Rules and Regulations
SARA	-	Super Fund Amendments and Reauthorization Act (Section 311)
VERC	-	Virginia Emergency Response Council
LFD	-	Local Fire Department
LEPC	-	Local Emergency Planning Commission
MSDS	-	Material Safety Data Sheets

1.09 FIRE PROTECTION:

The Contractor shall not use flammable liquids or gases, stoves, salamanders, tar pots, etc., in and on the building unless approved by the A/E. Where welding, cutting or burning are necessary, incombustible shields shall be used and suitable fire extinguishing equipment shall be maintained nearby. Paints, oils, turpentine and similar materials shall be stored in well ventilated spaces, and no other materials shall be stored therein. The arrangement for storage must have written approval of the Owner. The Contractor shall provide and maintain an adequate number of fire extinguishers throughout the construction period.

Free and unobstructed access shall be maintained at all times to fire extinguishing equipment and fire hydrants.

The Contractor shall designate a regular supervisory employee as a Fire Warden, and he shall be responsible for all fire prevention, fire protective matters, and posting of fire protection procedures at the work site.

If any hot work, including but not necessarily limited to, welding, burning, or torch cutting is required, the Contractor will station a watchman inside the building with proper fire extinguisher equipment.

1.10 PREVENTION OF NUISANCE FROM NOISE, ETC.:

The Contractor shall be responsible for curtailing noise, smoke, fumes or other nuisances resulting from his operations within the limitations set by law and as directed by the Owner or A/E.

1.11 PROVIDE AND MAINTAIN SUITABLE TEMPORARY:

Sidewalks, closed passageways, fences, or other structures required by law so as not to obstruct or interfere with traffic in entry ways, alley ways, or private right-of-way. Leave an unobstructed way along public and private places for pedestrians and vehicles.

1.12 PROVIDE WALKS:

Over and around all obstructions in public places. Maintain from the beginning of twilight, through whole of every night, sufficient light and guards to protect persons from injury.

1.13 PROTECTION:

Should be provided including, but not necessarily limited to, proper barricades and signage as required to protect the general public from falling materials for the duration of the project. Note: The Owner will continue to occupy the building during construction activities.

1.14 ROOF PROTECTION:

Before moving equipment or materials over a roof, the Contractor must protect the roof from damage during roofing work. Movement of equipment and materials without roof protection shall be cause for the Owner or A/E to stop work until the protection is provided and any damage is corrected. The Owner's roofing inspector shall record all such violations.

1.15 EXISTING ROOF - NOT IN CONTRACT (NIC):

Contractor to not place any construction materials or debris on existing adjacent roof which is not intended to be re-roofed (i.e., not in contract).

1.16 CONTRACTOR'S ROOFING SYSTEM(S) GUARANTEE:

The Roofing Contractor shall submit a 2-year written guarantee covering the roofing system(s) specified herein. The guarantee shall stipulate that the General Contractor shall, throughout a period of 2 years from the date of acceptance and at no cost to the Owner, maintain the entire roof system(s) in a completely watertight condition. The guarantee shall cover the roofing membrane and flashing, metal flashing, parapet coping, and all detailed penetrations of the roofing membrane for such things as plumbing stacks, ventilator curbs, expansion joints, etc., which exist when the work is performed. This is in addition to the manufacturers warranties.

1.17 Neither HDH Associates, P.C. nor HDH Technical, Inc. is responsible for the means and methods of construction; also, neither HDH Associates, P.C. nor HDH Technical, Inc. is responsible for safety monitoring during construction.

- 1.18 Roofing Contractor is to have a cellular phone operated by a responsible person on the roof at all times during construction for emergencies, etc. In addition, Contractor's personnel, as well as any Subcontractors' personnel, shall at a minimum, be clothed in long pants, shirt and appropriate shoes at all times while on the jobsite.
- 1.19 An English speaking supervisor shall be on site at all times.

LIST OF DRAWINGS

PART 1 - GENERAL

- 1.01 RELATED DOCUMENTS
 - A. Drawings and general provisions of Contract, including General Conditions, Special Conditions, Supplemental General Conditions and other Division 1 Specification Sections, apply to this Section.
- 1.02 LIST OF DRAWINGS

<u>Sheet No.</u>	<u>Contents</u>
T-1	Title Sheet
A-1	Roof Plan, Schedule & Notes
A-2	Details

- PART 2 PRODUCTS (Not Applicable)
- **PART 3 EXECUTION** (Not Applicable)

SUMMARY OF WORK

PART 1- GENERAL

1.01 DESCRIPTION

This project is generally described as the tear-off of approx. 6,500SF of existing roof (to the deck) and the replacement with 60-mil fully adhered EPDM, as shown on the drawings meeting requirements listed in the specifications, on the drawings and all addendum issued. Included is the Demo of the existing drive through.

CONTRACTOR'S USE OF THE PREMISES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DESCRIPTION:

This section applies to situations in which the Contractor or his representatives including, but not necessarily limited to, suppliers, sub-contractors, employees, and field engineers, enter upon the Owner's property. All coordination shall be made with Owner, the project is being conducted on school grounds.

1.03 QUALITY ASSURANCE:

- A. Promptly upon award of the Contract, notify all pertinent personnel regarding requirements of this section.
- B. Require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with requirements of this section.

1.04 SUBMITTALS:

Submit to the Owner a record of names and identification of all persons who will be entering upon the Owner's property in connection with the work of this Contract.

1.05 CONTRACTOR'S VEHICLES:

Parking for Contractor's vehicles and vehicles belonging to employees of the Contractor, and all other vehicles entering upon the Owner's property in performance of the work of the Contract shall only use the parking and access route as authorized by the Owner. Parking is limited on site. There will be a necessity for some off-site parking.

1.06 SECURITY:

- A. Restrict the access of all persons entering upon the Owner's property in connection with the work to the access route and to the actual site of the work. Refer to Section 34 of the "General Conditions."
- B. All contractor employees and sub-contractors are required to wear name badges at all times while on campus.

1.07 CONTRACTOR'S USE OF EXISTING BUILDINGS:

A. Use of existing buildings will not be permitted, except in the actual area of the work. The Contractor shall not allow the use of the Owner's toilet facilities by the Contractor's personnel, sub-Contractor personnel, or other persons upon entering the Owner's buildings in connection with the work unless otherwise specified. Refer to Section 31 of the "General Conditions."

- B. The Contractor shall keep public areas free from accumulation of waste materials, rubbish, trash, and all forms of construction debris. The Contractor is required to remove all accumulation of waste materials, rubbish, trash, and all forms of construction debris daily.
- C. Contractor shall restore to original condition any planting, grassed areas, utilities, roads, structures and other damages to Various Buildings as a result of his operations, at no additional cost to the Owner, except as otherwise noted.

1.08 TIME OF WORK:

- A. Unless otherwise permitted, no construction work shall be done between the hours of 6:00 P.M. and 7:00 A.M. at the prevailing time standard, nor on Saturday, Sunday, or holidays, except as necessary for the protection of the public and the proper care of work already performed.
- B. Should it become imperative to perform work beyond the time limits stipulated above, the Contractor is to coordinate with the Owner for approval of variance of time schedule. The Contractor shall obey all local ordinances and shall obtain any waivers necessary for working beyond the time limits specified.

SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DESCRIPTION:

A. Work Included:

Make submittals required by the Contract Documents and revise or resubmit as necessary to establish compliance with the specified requirements.

B. Related Documents:

Individual requirements for submittals may be described in other sections of these specifications.

1.03 QUALITY ASSURANCE:

- A. Coordination of Submittals:
 - 1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
 - 2. By affixing the Contractor's signature to each submittal, certify that this coordination has been performed.
 - 3. Materials or equipment ordered, fabricated, or shipped or any work performed until the Owner returns to the Contractor the submissions herein required marked either "Approved" or "Approved as Corrected" is at the Contractor's own risk.
- B. Substitutions:
 - 1. The Contract is based on the standards of quality established in the Contract Documents. Refer to Section 26 of the "General Conditions".
 - 2. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved in writing for this work by the A/E.
- C. "Or Equal":
 - 1. Where the phrase "or equal" or "or equal as approved" occurs in the Contract Documents, do not assume that the materials, equipment, or method will be approved as equal unless the item has been specifically so approved for this work by the A/E.
 - 2. The decision of the Owner shall be final.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

- 3.01 SUBMITTALS:
 - A. Refer to Section 24, "Submittals" of the "General Conditions".
 - B. Submission Procedures:
 - 1. Approval of working and/or shop drawings by the Owner will constitute approval of the subject matter for which the drawing was submitted and not for any other structure, material, equipment or appurtenances indicated as shown.
 - 2. The A/E's review of the Contractor's submissions shall in no way relieve the Contractor of any of his responsibilities under the Contract. An approval of a submission shall be interpreted to mean that the Owner has no specific objections to the submitted material, subject to conformance with the Contract Documents.

3.02 SHOP DRAWINGS:

A. Scale and Measurements:

Make shop drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.

B. Types of Prints Required:

Submit shop drawings in the form of one sepia transparency of each sheet plus four blue line or black line prints of each sheet.

3.03 MANUFACTURER'S LITERATURE:

- A. Where the contents of submitted literature from manufacturers include data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review. Clearly mark specific products, model numbers and options intended to be provided under the Contract.
- B. Submit four copies of manufacturers' literature.

3.04 SAMPLES:

- A. Provide a sample or samples identical to the precise article proposed to be provided. Identify as described under "Identification of Submittals" in this section.
- B. Number of Samples Required:

Unless otherwise specified, submit samples in the quantity required in the specifications.

3.05 IDENTIFICATION OF SUBMITTALS:

Maintain an accurate submittal log for the duration of the work, showing the current status of all submittals at all times. Make the submittal log available to the Owner for his review upon request.

3.06 TIME OF SUBMITTALS:

- A. Make submittals far enough in advance of scheduled dates for installation to provide time required for reviews for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
- B. In scheduling, allow at least ten working days for review by the Owner following his receipt of the submittal.

3.07 OWNER REVIEW:

- A. Review by the A/E does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
- B. Revisions:
 - 1. Make revisions required by the Owner.
 - 2. If the Contractor considers any required revision to be a change, he shall so notify the Owner as provided in the General Conditions.
 - 3. Make only those revisions directed or approved by the Owner.

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

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

1.02 DESCRIPTION:

A. Work Included:

Provide temporary facilities and controls needed for the work including, but not necessarily limited to the following:

- 1. Sanitary facilities.
- 2. Enclosures such as tarpaulins, barricades, canopies and safety signage.
- B. Related Work and Documents:
 - 1. Equipment furnished by Sub-Contractors shall comply with the requirements of safety regulations. Equipment normally furnished by the individual trades in execution of their own portions of the work are not part of this section.
 - 2. Permanent installation and hookup of the various utilities lines are not described in this section.
 - 3. Acceptance by the Contractor of the use of the Owner's utilities constitutes a release to the Owner of any and all liability to the Contractor for whatever damages resulting from utility outages, including damages from loss of services and voltage variations.
 - 4. Safety signage is mandatory for this project. Coordinate with Owner on location of signage.

1.03 PRODUCT HANDLING:

Maintain temporary facilities and controls in proper and safe condition throughout progress of the work.

PART 2 - PRODUCTS

- 2.01 UTILITIES:
 - A. Water:

Water, if required for work under the contract, will be furnished by the Owner subject to reasonable use by the Contractor, only to the extent and capacity of present services.

- B. Electricity:
 - 1. Provide necessary temporary wiring and, and upon completion of the work, remove such temporary constructions. Contractor installed temporary wiring shall comply with all applicable codes and be installed in a safe manner.
 - 2. Electricity, if required for the work under the contract, will be furnished by the Owner subject to reasonable use by the Contractor, only to the extent and capacity of present services.
- C. Heating:

The Contractor shall not employ temporary heating devices which use open flames or produce harmful gases in the interior space of the Owner's facilities. If electric heating devices are to be used, the Contractor shall arrange meter and bear all costs for electrical services.

- 2.02 TEMPORARY FACILITIES:
 - A. Sanitary Facilities:
 - 1. Provide temporary sanitary facilities in the quantity required for use by all Contractor personnel.
 - 2. Maintain all temporary sanitary facilities in a clean, serviceable, and sanitary condition at all times.

PART 3 - EXECUTION

- 3.01 MAINTENANCE AND REMOVAL:
 - A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the work.
 - B. Remove such temporary facilities and controls as soon as the progress of the work will permit, or as directed by the A/E.

PRODUCT SELECTION AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

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

PART 2 - PRODUCTS

- 2.01 PRODUCT SELECTION:
 - A. For products specified by reference standard, select any product meeting the standard.
 - B. For products specified by naming three or more products and manufacturers, select only from products and manufacturers named.
 - C. Products specified by naming one manufacturer shall establish a standard of quality and performance and shall not be construed to limit competition. Substitutions to these products may be requested in accordance with specified procedures.
- 2.02 SUBSTITUTIONS:
 - A. The Owner will consider, within ten (10) calendar days after contract execution, written requests for product substitutions.
 - 1. Substitution requests will be considered after specified time only under the following conditions:
 - a. Product is no longer manufactured.
 - b. Product is not available due to causes beyond Contractor's control.
 - 2. Substitutions will not be considered, when indicated or implied on submittals, without written request.
 - B. Substitution Request Procedures:
 - 1. Submit four (4) copies of substitution request, including the following:
 - a. Complete data substantiating that the substitution complies with the Contract Documents.
 - b. Product identification, including manufacturer's name, address, and telephone number.
 - c. Manufacturer's descriptive literature, including performance and test data, reference standards, and range of colors if color selection is required.

- d. Samples.
- e. Name, address, installation date, and Owner's Representative of two similar projects where substitution was used.
- f. Detailed description and drawings illustrating proposed construction methods.
- g. Itemized quality and performance comparison of substitution to product or method specified.
- h. Data relating to changes in progress schedule.
- i. Relation of substitution to separate contracts.
- j. Accurate costs of substitution in comparison to product or method specified.
- k. Local availability of parts and repair and maintenance facilities.
- C. By requesting a substitution, the Contractor agrees to the following:
 - 1. He has investigated the proposed substitution and determined it is equal or superior to the product or method specified.
 - 2. The substitution guarantee/warranty is the same as product or method specified.
 - 3. He will coordinate installation of the substituted product into the project, including changes, required for the work to be correct and complete.
 - 4. Claims for additional costs related to substitutions which subsequently become apparent will be waived.
 - 5. Cost data is complete and includes all related costs under this contract.
 - 6. A credit, based on manufacturer's signed quotation, will be issued if product of lesser quality or lower cost is accepted.

PRODUCT HANDLING

PART 1 - GENERAL

1.01 Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 DESCRIPTION:

A. Work Included:

Protect products scheduled for use in the work by means including, but not necessarily limited to, those described in this section.

1.03 QUALITY ASSURANCE:

Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

1.04 MANUFACTURER'S RECOMMENDATIONS:

Except as otherwise approved by the Owner, determine and comply with the manufacturer's recommendations on product handling, storage and protection.

1.05 PACKAGING:

- A. Deliver products to the job site in the manufacturer's original container, with labels intact and legible.
 - 1. Maintain packed materials with seals unbroken and labels intact until time of use.
 - 2. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The Owner may reject as non-complying such material and products that do not bear identification satisfactory to the Owner as to manufacturer, grade, quality, and other pertinent information.

1.06 PROTECTION:

Maintain finished surfaces clean, unmarred, and suitably protected until the work is accepted by the Owner.

1.07 REPAIRS AND REPLACEMENTS:

- A. In the event of damage, promptly make replacements and repairs to the approval of the Owner and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Owner to justify an extension in the contract time of completion.

1.08 DELIVERY AND STORAGE:

The Contractor shall be responsible for making all arrangements for the delivery, unloading, receiving, and storage of materials. The Owner shall not assume any responsibilities for receiving, storage or unloading of shipments. The Contractor needs to make arrangements with the Owner in regard to storing material location.

PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 DESCRIPTION:

A. Work Included:

Provide an orderly and efficient transfer of the completed work to the Owner.

1.03 QUALITY ASSURANCE:

Prior to requesting inspection by the A/E, use adequate means to assure that the work is completed in accordance with the specified requirements and is ready for the requested inspection.

1.04 PROCEDURES:

- A. Substantial Completion:
 - 1. Prepare and submit a list of any items of work not completed.
 - 2. Should the Owner determine that the work is not substantially complete, the following procedure shall apply:
 - a. The Owner shall promptly notify the Contractor, in writing, giving the reasons therefore.
 - b. The Contractor shall remedy the deficiencies and notify the Owner when ready for re-inspection.
 - 3. When the A/E concurs that the work is substantially complete:
 - a. The Owner will prepare a "Substantial Inspection Report" indicating work not completed, unacceptable, and/or work not in full compliance with the Contract Documents. Failure to identify incomplete or deficient work during the "Final Inspection Report" shall not be construed to relieve the Contractor of his obligation to fully comply with the requirements of the Contract Documents.
 - b. The Contractor shall complete work, correct deficient work, and insure all work is in full compliance with the Contract Documents.
 - c. Upon completion and/or correction of deficiencies, the Contractor shall submit the following:
 - (1) Submit final payment request with final releases and supporting documentation not previously submitted and accepted.
 - (2) Submit updated final statement (Schedule of Values), accounting for additional (final) changes, if any, to the Contract sum. Submit proof of payment of fees (if any), taxes and similar obligations.

- (3) Submit statement of completion stating each item has been completed or otherwise resolved.
- (4) Settle liens and other claims or assure Owner of subsequent settlement. Submit completed and fully executed Affidavit of Payment of Claims (including those required in the Contract Documents).
- (5) Discontinue (or change over) and remove from the project temporary facilities and services, along with construction tools, equipment, facilities, excess materials, mock-ups and similar elements not included in the work.
- (6) Submit specific warranties, workmanship/ maintenance bonds, maintenance agreements, and guarantees, and maintenance manuals as required in the Contract Documents. Provide instruction of Owner's personnel on operation, maintenance, guarantees, warranties, and other information required to properly maintain or service equipment and constructions provided in the work.
- (7) Complete final cleaning, remove all Contractor property from the Owner's site.

(8) Any grass areas needing to be restored shall be replaced with sod – seed & straw is not acceptable.

- B. Final Completion:
 - 1. Verify that the work is complete, including but not necessarily limited to the items identified in the "Substantial Inspection Report" above.
 - 2. Certify that:
 - a. The Contract Documents have been reviewed;
 - b. Work has been inspected for compliance with the Contract Documents;
 - c. Equipment and systems have been tested as required, and are fully operational, adjusted for peak performance, and their proper operation demonstrated;
 - d. The work is completed and ready for "Final Inspection".
 - 3. When the Owner determines that the work is acceptable and fully complies with the Contract Documents and any changes thereto, the Owner will request the Contractor to make closeout submittals.
- C. Closeout submittals include, but are not limited to:
 - 1. Project record documents, including as built drawings.
 - 2. Operation and maintenance data.
 - 3. Guarantees, warranties, and bonds.
- 1.05 INSTRUCTION:

Instruct the Owner's personnel in the proper operation and maintenance of systems, equipment, and similar items which were provided as part of the work.

CLEANING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and other Division 1 Specification Sections, apply to this Section

1.02 DESCRIPTION:

A. Work Included:

Maintain a standard of cleanliness for the site and buildings throughout the construction period. Interior shall be kept clean from debris resulting from work of this contract.

1.03 QUALITY ASSURANCE:

- A. Conduct daily inspection, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this section, comply with requirements of government agencies having jurisdiction.

PART 2 - PRODUCTS

2.01 CLEANING MATERIALS AND EQUIPMENT:

Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

PART 3 - EXECUTION

- 3.01 PROGRESS CLEANING:
 - A. General: Use only cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.
 - 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage and providing required protection of materials.
 - 2. Do not allow accumulation of scraps, debris, waste material, and other items not required for construction of this work.
 - 3. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection, and protection of the environment.
 - B. Site:
 - 1. Daily, and more often if necessary, inspect the site and pick up all scraps, debris, and waste material. Remove such items to the place designated for their storage.
 - 2. Maintain the site in a neat and orderly condition at all times.

- C. Structures:
 - 1. Daily, and more often if necessary, inspect the structures and pick up all scraps, debris, and waste material. Remove such items to the place designated for their storage.
 - 2. As required preparatory to installation of succeeding materials, clean the structure or portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary cleanliness.

3.02 FINAL CLEANING:

- A. "Clean", for the purpose of this article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled workers using commercial quality building maintenance equipment and materials.
- B. Site:
 - 1. Broom clean paved areas on the site and public paved areas adjacent to the building, unless otherwise specifically directed by the Owner.
 - 2. Completely remove resultant debris.
- C. Structures:
 - 1. Exterior:
 - a. Visually inspect exterior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 - b. Remove all traces of splashed materials from adjacent surfaces.
 - c. In the event of stubborn stains not removable with water, the Owner may require other cleaning at no additional cost to the Owner.
- D. Schedule of Final Cleaning:

Schedule final cleaning as approved by the Owner to enable the Owner to accept a completely clean work.

3.03 CLEANING DURING OWNER'S OCCUPANCY:

Should the Owner occupy the work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning shall remain the responsibility of the Contractor for that portion of the work not occupied by the Owner.

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and other Division 1 Specification Sections, apply to this Section

- 1.02 DESCRIPTION:
 - A. Work Included:
 - 1. Throughout progress of the work, maintain an accurate record of changes in the Contract Documents, as described in this section.
 - 2. Upon completion of the work, transfer the recorded changes to a set of Record Documents, as described in this section. Cross reference all changes to addenda, change orders, etc.

1.03 QUALITY ASSURANCE:

- A. Accuracy of Records:
 - 1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of the specifications and each sheet of drawings and other documents where such entry is required to show the change properly.

1.04 SUBMITTALS:

Prior to submitting request for final payment, submit the final Project Record Documents to the A/E and secure his approval.

1.05 RECORD DOCUMENTS:

Job Set: Promptly following receipt of the Owner's Notice to Proceed, secure from the Owner at no charge to the Contractor one complete set of all documents comprising the Contract.

1.06 MAINTENANCE OF JOB SET:

- A. Immediately upon receipt of the job set described in this section, identify each of the documents with the title, "RECORD DOCUMENTS JOB SET".
- B. Preservation of Documents:

Maintain the job set at the site of work as designated by the Owner.

- C. Making Entries on Drawings:
 - 1. Date all entries.
 - 2. Call attention to the entry by drawing a box or other shape in a manner that avoids confusion with the original shapes and elements on the drawing around the area or areas affected.

D. Make entries in other pertinent documents as approved by the Owner.

1.06 FINAL PROJECT RECORD DOCUMENTS:

- A. Transfer of Data to Drawings:
 - 1. Carefully transfer changed data shown on the job set of Record Drawings coordinating the changes as required.
 - 2. Clearly indicate at each affected detail and other drawings a full description of changes made during construction, and the actual location of items described in this section.
 - 3. Make changes neatly, consistently, and with proper media to assure longevity and clear reproduction.
- B. Transfer of Data to Other Documents:
 - 1. The job set of documents, other than drawings, will be accepted as Final Record Documents provided they have been kept clean during progress of the work and all entries thereon have been kept orderly and receive Owner approval.
 - 2. If any such document is not approved by the Owner, secure a new copy of that document from the Owner at the Owner's usual charge for reproduction and handling, and carefully transfer the changed data to the new copy to the approval of the owner.
- C. Review and Submittal:

Submit the completed set of Project Record Documents to the Owner for approval.

WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
 - 2. General closeout requirements are included in Section "Project Closeout."
 - 3. Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions 2 through 16.
 - 4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- C. Separate Prime Contracts: Each prime Contractor is responsible for warranties related to its own Contract.

1.03 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise

available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

- 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.04 SUBMITTALS

- A. Submit written warranties to the Owner prior to the date certified for Substantial Completion. If the Owner Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the owner within fifteen days of completion of that designated portion of the Work.
- B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Owner for approval prior to final execution.
 - 1. Refer to individual Sections of Divisions 2 through 16 for specific content requirements, and particular requirements for submittal of special warranties.
- C. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. Bind warranties and bonds in heavy-duty, commercial quality, durable three-ring, vinylcovered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 by 11-inch paper.
 - 1. Provide heavy paper dividers with celluloid-covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
 - 2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the Project title or name, and the name of the Contractor.
 - 3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 SCHEDULE OF WARRANTIES

A. Schedule: Provide warranties and bonds on products and installations as required by the individual specification sections.

TECHNICAL SPECIFICATIONS

DEMOLITION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and Division 1 - Specifications Sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

Work includes removal of all existing roof components as indicated on the plans.

- A. Full tear-off of entire roof system to the existing roof deck, including all roof layers and associated flashings.
- B. Remove shingles, gutters & wood deck covering the hidden gutter at the slate roof section.
- C. Demo existing drive thru canopy complete.
 - a) Remove (as safely store) slate to be reused for new mansard roof section (+/- 23-FT, contractor/bidder to verify).
 - b) Demo to existing building mansard roof. This area to be rebuilt with mansard roof & soffit matching existing & tying into existing.
 - c) Demo columns, concrete islands to allow for smooth transition for new concrete.
 - d) Lock out tag out all electrical. Remove electrical wiring from nearest junction box before restoring power. Coordinate outages with Owner prior.

1.03 POLLUTION CONTROLS

- A. Use water sprinkling, temporary enclosures and other suitable methods to limit dust rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.
- B. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding and pollution.
- C. Clean adjacent structures and improvements of dust, dirt and debris caused by demolition operations, as directed by architectural governing authorities. Return adjacent areas to condition existing prior to start of work.

1.04 PROTECTION OF BUILDING AND ROOF ACCESSORIES

- A. The Contractor shall be responsible for protection of the building, existing roof accessories and any metal flashing, copings, etc. all in complete accordance with Special Conditions.
- B. If the Contractor damages or fails to protect or salvage any items not noted to be renewed or replaced under this contract, then such damaged items shall be repaired or replaced by the Contractor to the complete satisfaction of the Owner and A/E at no additional cost to the Owner.
- C. Contractor shall coordinate and schedule the removal of the existing roof with the installation of the new roof, and provide temporary roof protection to the building and its contents from the elements at all times. Contractor shall submit and review his plan with the A/E before work can proceed.
- D. Ensure safe passage of persons around area of demolition. Conduct operations to prevent damage to adjacent buildings, structures, and other facilities and injury to persons.
- E. Provide safety measures at work site as per <u>OSHA Regulations</u> and any other authorities having jurisdiction.

F. Remove protections at completion of work.

1.05 DEMOLITION

- A. Demolish designated areas completely and remove from site, except for material indicated to remain or to be installed, or salvageable. Use an enclosed chute to remove material from the roof. Removed material shall go directly from roof to approved container. Material shall not be placed on ground or other areas of building.
- B. Proceed with demolition in systematic manner.
- C. Demolish designated areas in small sections.
- D. Break up and/or remove materials, unless otherwise shown to remain or to be reused.
- E. Locate demolition equipment on the structure and remove materials so as not to impose excessive loads to supporting walls, floors, framing or ceilings.
- F. For roof areas denoted on the plans as "Tear-Off", remove all existing roof assembly components down to the deck. Clean top surface of existing decking so that no protrusion or debris remains.

1.06 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from site debris, rubbish and other materials resulting from demolition operations.
- B. Transport waste materials removed during demolition and dispose of off site. Do not store waste material on site without concealing in suitable waste containers.
- C. Contractor shall apply for and receive a disposal permit. All costs for disposal shall be paid by Contractor.

1.07 EXISTING ROOF COMPOSITION

- A. It is recommended for the Contractor to inspect and verify existing roof conditions and composition prior to bidding.
- B. Owner or A/E assumes no responsibility for condition of structures to be demolished/removed.

1.08 TRAFFIC

- A. Conduct demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
- B. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction.

1.09 SCHEDULE

- A. Submit schedule indicating proposed sequence of operations for selective demolition work to Owner's Representative for review prior to start of work. Include coordination with other work to be performed, together with details for dust and noise control.
- B. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on site operations.
- 1.10 OCCUPANCY

Owner will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities that will impact Owner's normal operations.

DIVISION 3 - SECTION 03300

CONCRETE (CAST-IN-PLACE)

PART 1 - GENERAL:

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and Division 1 - Specifications sections, apply to work of this section.

1.02 DESCRIPTION OF WORK:

- A. Provide all labor, materials, equipment, and services of every nature necessary to complete all cast-in-place concrete work as herein specified, subject to the terms and conditions of the Contract.
- B. In the areas of drive-thru demo, Re-pour islands (and other excavated areas) with new concrete tying into all sides proving a smooth transition. The final elevations shall not create any trip hazards.
- 1.03 STANDARDS, RESPONSIBILITIES AND COOPERATION:
 - A. The Contractor shall be held responsible for all material meeting all requirements as herein specified, for the adequacy of all formwork and for all workmanship.
 - B. The Contractor shall cooperate with all other trades, whether or not in his control, in permitting the forming and setting of recesses, chases, sleeves, inserts, bolts, hangers, openings, trench drains, or any other items that may be necessary.
 - C. The Contractor shall cooperate fully with the A/E or his duly appointed representative. The A/E shall be notified sufficiently in advance of all pours in order that he, or his representative, may inspect and approve the placement of all reinforcing steel, formwork, and the concreting operation.
 - D. Comply with provisions of the latest edition of the following codes, specifications and standards, except where more stringent requirements are shown or specified:
 - 1. ACI 301 "Specifications for Structural Concrete for Buildings."
 - 2. ACI 302 "Recommended Practice for Concrete Floor and Slab Construction."
 - 3. ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete."
 - 4. ACI 308 "Standard Practice for Curing Concrete."
 - 5. ACI 309 "Recommended Practice for Consolidation of Concrete."
 - 6. ACI 311 "Recommended Practice for Concrete Inspection."
 - 7. ACI 318 "Building Code Requirements for Reinforcing Concrete."
 - 8. ACE 347 "Recommended Practice for Concrete Formwork."
 - 9. Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice."
 - 10. ASTM C-1116, Type III Section 4.1.3 and 4.2 and Performance Level I Toughness Index I-5 outlined in Section 21 Note 17, "Standard Specification for Fiber-Reinforced Concrete and Shotcrete"
 - 11. ACI 544, State of the Art Report of Reinforced Concrete
 - 12. ACI 544.2R Measurement of Properties of Fiber Reinforced Concrete
 - 13. ASTM C-1018, "Standard Test Method for Flexural Toughness and First-Crack-Strength of Fiber-Reinforced Concrete" (Using Beam with Third-Point Loading)
 - E. Materials and installed work may require testing and retesting, as directed by A/E, at any time during progress of work. Allow free access to material stockpiles and facilities. Tests,

not specifically indicated to be done at Owner's expense, including retesting of rejected materials and installed work, shall be done at Contractor's expense.

1.04 SUBMITTALS:

A. Mix Design: Submit concrete mix designs including product information sheets on any admixtures used in mix. For fly ash mixes, a quality history to demonstrate that the fly ash consistently conforms to ASTM 618 certification, specifications herein, and uniformity requirements. The quality history must include test results for loss on ignition, No. 325 sieve residue, specific gravity, moisture content, and the complete chemical composition. Only mix designs that have been stamped "Approved by the General Contractor" will be accepted for review.

1.05 HANDLING AND STORAGE:

Handle and store aggregate separately, preventing intrusion of foreign material or segmentation. Protect reinforcement until used. Materials containing ice or hardened cement shall not be used.

1.06 QUALITY ASSURANCE:

- A. Materials and installed work may require testing and retesting, as directed by the Owner, at any time during progress of work. Allow free access to material stockpiles, and facilities. Tests, not specifically indicated to be done at Owner's expense, including retesting of rejected materials and installed work, shall be done at Contractor's expense.
- B. The Contractor is responsible for corrections of deficient concrete work that does not conform to the specified requirements, including strength, tolerances and finishes.
- C. Allowable tolerances for all work shall be such that depressions do not exceed 1/8" under a 10' straight edge; form work 1/8" in 4'.
- D. All exposed work shall be of uniform color and free of voids.

PART 2 - PRODUCTS

- 2.01 MATERIALS:
 - A. Form Materials:

Forms for Unexposed Finish Concrete: Form concrete surfaces that will be unexposed in finished structure with plywood, lumber, metal or other acceptable material. Provide lumber dressed on at least two edges and one side for tight fit. Forms for exposed finish concrete to be HDF or MDF boards.

- B. Concrete Materials:
 - 1. Portland Cement of American Manufacturer: ASTM C 150, Type I or II.
 - 2. Fine Aggregates: ASTM C33, except as specified herein; washed natural silica sand or manufactured sand or combination thereof; 100% of fine aggregate must pass a #4 sieve.
 - 3. Coarse Aggregates: ASTM C33, except as specified herein; crushed stone or gravel, free from thin elongated or laminated pieces, soluble salts, organic and other deleterious matter, maximum size not to exceed 1/5 of the narrowest dimension between forms or larger than 3/4 of the minimum clear spacing between reinforcing

bars; maximum size not to exceed 1" in any dimension without special permission of the A/E.

- 4. Water: Clean, free from injurious amounts of oil, acid, alkali, salt, organic or other deleterious matter.
- C. Admixtures:
 - 1. Air-Entraining Admixture: ASTM C 260. "Micro-Air" by Master Builders. "Daravair" by W.R. Grace. "Sika AER" by Sika or approved equal.
 - Water-Reducing Admixture: ASTM C 494, Type A (for normal set at temperatures 50 degrees F to 80 degrees F). "Eucon WR-75" Euclid Chemical Co.; "Pozzolith 133N" Master Builders; "Plastocrete 161" SIKA Chemical Corp.; "WRDA with hycol" W.R. Grace.
 - 3. Water-Reducing, Retarding Admixture: ASTM C 494, Type D (for use at temperatures above 80 degrees F). "Pozzolith 122-R"; Master Builders. "Eucon Retarder 75"; Euclid Chemical Co. "Daratard"; W. R. Grace.
 - 4. Water-Reducing, Accelerating Admixture: ASTM C 494, Type C or E (for use at temperatures below 50 degrees F). "Accelguard 80" by Euclid Chemical Co.; "Pozzutec 20" by Master Builders, "Daraset" by W. R. Grace or approved equal.
 - 5. High range water reducing admixtures (superplasticizer) may be used and must be used in all pump mixes. High Range Water Reducing admixtures shall conform to ASTM C-494 as a Type F High Range Water Reducing admixture or as a Type G Set Retarding High Range Water Reducing Admixture. The admixture shall be a second or third generation type without intentionally added chlorides and alkalies. The treated concrete must be capable of maintaining its Rheoplastic state in excess of two hours, if so desired. Acceptable products include: "WRDA-19" by W.R. Grace, "Pozzolith 440-N" or Reobuild 716" by Master Builders or approved equal.
 - 6. Fly Ash: Materials must exceed the requirements of ASTM C618, "Specifications for Fly Ash and Raw or Calcined Natural Pozzolans for use in Portland Cement Concrete" except that the maximum loss on ignition (LOI) shall be 3%.
- D. Reinforcing Materials:
 - 1. Welded Wire Fabric to be 6x6-W1.4xW1.4.
- E. Related Materials:
 - 1. Expansion joint filler shall be premolded material composed of fiberboard impregnated with not less than 35 percent nor more than 50 percent of asphalt by weight, 1/2 inch thick, with removable joint cap (for sealant).
 - 2. Curing Membranes & Compounds:
 - a. Polyethylene membrane shall be 6-mil polyethylene film complying with ASTM C171. Membrane is to meet or exceed test for water retention, ASTM C156.
 - b. Burlap shall be free of sizing of any substances that are injure to cement or can cause discoloration. Burlap shall be rinsed in water prior to use. Burlap shall be of sufficient thickness to retain water without frequent wetting.

- c. Curing compound per ASTM C309, Type 1: "Sure-Cure" floor treatment made by Kaufman Products, Inc., Baltimore, Maryland; "Kure-N-Seal" by Sonneborn Chemical Products, or "Eucocure" by Euclid.
- 2.02 Proportioning and Mixing:
 - A. Proportion concrete mix in accordance with the American Concrete Institute (ACI) for strength indicated and shall be the responsibility of the General Contractor. Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method is used, use an independent testing facility, at Contractor's expense, acceptable to Owner for preparing and reporting proposed mix designs. The testing facility shall not be the same as used for field quality control testing unless otherwise acceptable to Owner.
 - B. Submit written reports to A/E of each proposed mix for each class of concrete at least 15 days prior to start of work. Do not begin concrete production until mixes have been reviewed by A/E.
 - C. All concrete shall be Ready-Mix Concrete in accordance with ASTM C 94.
 - 1. Concrete shall be mixed only in quantities for immediate use. Concrete that has set shall be discarded and shall not be retempered.
 - 2. When a truck mixer is used, no water from the truck water system or elsewhere shall be added to the concrete after the initial introduction of the mixing water at the batch plant except when on arrival at the job site if the slump is less that specified by the approved mix design. Such addition of water to bring the slump within specified limits shall be done so in accordance with ASTM C94 and only after first being approved by the concrete technician representing the authorized testing agency for the project. The water added shall be incorporated by additional mixing equal to at least half of the total mixing required.
 - 3. Trucks delivering concrete to the site with too high a slump or excessively dry mixes are not acceptable and are to be sent back to the batch plant.
 - 4. All concrete, unless otherwise noted otherwise, shall have a minimum 28-day compressive strength of 4000 psi and a slump of 4" (<u>+</u>1"). If a superplasticizer is used, concrete shall have a slump of 4" (<u>+</u>1") before the addition of superplasticizer and a minimum slump of 7" and maximum slump of 10" after the addition of superplasticizer.
 - 5. The maximum water-soluble chloride ion present at age 28 days in the concrete, by weight of cement, shall not exceed 0.30%.
 - 6. Concrete shall have a total air content of $6\% (\pm 1\%)$

PART 3 - EXECUTION

- 3.01 FORMWORK AND SURFACE PREPARATION:
 - A. Design and construction of formwork shall be in accordance with ACI 347. Forms shall be sufficiently strong to carry the dead weight of the concrete as liquid without deflection and tight enough to prevent leakage of mortar. Wood forms shall be thoroughly cleated together with corrosion-resistant devices. Bevel strips shall be provided in form angles and in corners of boxes for chamfering of corners, where shown or as directed. If any forms show bulge or deflection that in the opinion of the A/E is excessive, the concrete shall be removed and the

work shall be rebuilt.

- B. Before reinforcing is placed, the inside of wood forms for concrete that will not be exposed shall be coated with form oil or plastic coating, or shall be thoroughly wetted.
- C. Forms shall not be removed until members have acquired sufficient strength to safely support their own weight, or any weight that will be applied.

3.02 REINFORCEMENT:

- A. Placing:
 - 1. Welded Wire Fabric to be 6x6-W1.4xW1.4, placed in center of the concrete.
 - 2. Concrete shall be 6 inches thick minimum.

3.03 PLACING MISCELLANEOUS MATERIALS:

- A. Expansion joint filler shall be continuous and full thickness of slab. Expansion joint to be added on one end of each pour. Joint to be sealed watertight with one part urethane caulking after concrete has cured.
- B. Construction Joints: trowel all concrete edges with edge trowel.
- C. Fibrous Reinforcement:
 - 1. Add fibrous concrete reinforcement to concrete materials at the time concrete is batched in amounts in accordance with approved submittals for each type of concrete required.
 - 2. Mix concrete in strict accordance with fiber reinforcement manufacturer's instructions and recommendations for uniform and complete distribution.

3.04 PLACING CONCRETE:

- A. Concrete shall be conveyed to the place of final deposit by methods that will prevent separation or loss of the materials. Equipment for shutting concrete shall be of such size and design as to ensure a practically continuous flow of concrete at the delivery end.
- B. Concrete shall be deposited as near as possible in its final position to avoid segregation due to handling or flowing. No concrete that has partially hardened or has been contaminated by foreign materials shall be deposited in the work, not shall retempered concrete be used, unless approved by the A/E.
- C. When concreting is once started, it shall be carried on as a continuous operation until the placement of the section has been completed. The top surface shall be generally level. When construction joints are necessary, they shall be made as shown or as approved by the A/E.
- D. Where conditions made consolidating difficult or where reinforcement is congested, the specified high range water-reducing admixture (superplasticizer) must be used. The concrete shall be plastic at all times and flow readily into the space between the bars.
- E. Concrete shall be placed with the aid of mechanical vibrating equipment, placing in the concrete at the point of deposit, and in strict accordance with ACI 309, "Recommended Practice for Consolidation of Concrete". Lower frequency vibrators may be used with "flowing" concrete.
- F. Where not practical, in the opinion of the A/E, to use a mechanical vibrator, concrete shall be

thoroughly compacted by puddling with suitable tools during the placing.

- G. Drop concrete vertically through suitable hopper, chutes, or elephant trucks, in uniform horizontal layers not deeper than 24 inches. Avoid building up large piles and consequent segregation by spreading.
- H. Vibrate concrete, mechanically, using type and number as approved by Owner. Supplement mechanical vibration with hand tamping as required around pipes, inserts, and other obstructions. Proper vibration of concrete and adequate hand spading at face of forms is required. Do not use vibrators to transport concrete within forms. Vibration of forms prohibited.
- I. Coordinate the installation of joint materials and moisture barriers with placement of forms and reinforcing steel.
- J. Partially hardened concrete, concrete contaminated by foreign material, or retempered concrete is not permitted.
- K. Temperature of concrete as placed and maintained during the protection and curing period shall be between 55 degrees F and 90 degrees F. Cooling of the concrete not to be faster than one degree each hour for the first 24-hour period after placement.

3.05 CONCRETE FINISHING:

- A. Very Light Broom Finish: Apply a very light broom finish to surfaces that are to be exposed to view. After floating, begin trowel finish when surface produces a ringing sound as trowel is moved over surfaces. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance. A very light broom finish shall then be applied as directed by the Owner.
- B. Check and level surface plans to a tolerance not exceeding 1/8 inch in 10 feet when tested with a 10-foot straightedge. Out of tolerance concrete to be removed and re-poured.
- C. Concrete to be edge troweled on sides.

3.06 CURING AND PROTECTION:

- A. Beginning immediately after placement, concrete shall be protected from premature drying, excessively hot and cold temperatures and mechanical injury, and shall be maintained with minimal moisture loss at a relatively constant temperature for the period necessary for hydration of the cement and hardening of the concrete.
- B. Curing of concrete surfaces not in contact with forms shall be accomplished by one or a combination of the following methods:
 - 1. Wet-cure by fully covering the surface with wet burlap as soon as it can be placed without marking the surface. Keep the burlap continuously wet and in place for as long as possible (minimum 7 days).
 - 2. Wet-cure by fully covering the previously wetted surface with polyethylene film as soon as it can be placed without marking the surface. Keep in place as long as possible (minimum 7 days).
 - 3. Seal the slab surface and edges with curing compound as specified. Quantities and application shall be in strict accordance with manufacturer's recommendations and instructions. Curing compounds shall not be used where not recommended by floor covering manufacturer.

C. Curing of formed surfaces shall be done by keeping forms wet while in place. After form removal, the concrete shall be cured with wet burlap or polyethylene film as described above.

3.07 QUALITY CONTROL TESTING DURING CONSTRUCTION:

- A. The Owner **may** employ a testing laboratory to perform the following tests and to submit test reports. All testing agencies shall meet the requirements of ASTM E-329. All technicians used in sampling concrete at the project site shall have an ACI Certification for Concrete Field-Testing Technician Grade 1 or equivalent certifications as stipulated in ACI publication CP1.
 - 1. Sampling Fresh Concrete: Secure samples in accordance with ASTM C 172.
 - Compression Test Specimens: ASTM C 31. Mold and cure one set of three standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens, except when fieldcured.
 - 3. Compressive Strength Tests: ASTM C 39 One set for each 100 cubic yards or fraction thereof, of each concrete class placed in any one day, or for each 5000 square feet of surface area placed; one specimens tested at 7 days, one specimens tested at 28 days, and one specimens retained in reserve for later testing @ 56 days, if required.
 - 4. Slump: Determine for each sample in accordance with ASTM C 143.
 - 5. Air content: Determine for each sample in accordance with ASTM C 231.
 - 6. Concrete Temperature: Determine for each sample.
 - 7. Unit Weight: Determine for each sample in accordance with ASTM C138.
- B. The concrete technician **may** monitor all concrete delivered to the site to ensure that the specified slump is maintained. If the slump of the delivered concrete appears to be below the specified design slump, the addition of water to the concrete mix in order to obtain the specified slump is allowed only after first being approved by the concrete technician. Trucks coming to the site with concrete of too high a slump, or extremely dry concrete, are to be rejected by the technician and set back to the batch plant.
- C. Test results will be reported in writing to the Owner, A/E and Contractor on the same day that tests are made. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials, and compressive breaking strength and type of break for both 7-day tests and 28-day tests.
 - D. Additional Tests: The testing service will make additional tests of in-place concrete when test results indicate specified concrete strength and other characteristics have not been attained in the structure. Testing service may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed. Contractor shall pay for such tests conducted, and any other additional testing as may be required, when acceptable concrete is verified.

3.09 APPEARANCE TOLERANCES

A. Appearance: Minor variations in appearance of integrally colored concrete that are similar to natural variations in color and appearance of uncolored concrete are acceptable.

3.10 CLEANING

A. Efflorescence: Remove efflorescence as soon as practical after it appears and as part of final cleaning.

B. Use least aggressive cleaning techniques possible

C. If proprietary cleaning agents are used, pre-wet surface, test cleaning agent on small, inconspicuous area, and check effects prior to proceeding. Thoroughly rinse surface afterwards with clean water. Follow cleaner manufacturer's instructions.

D. Do not use muriatic or hydrochloric acid on integrally colored concrete.

DIVISION 6 - SECTION 06100

ROUGH CARPENTRY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Documents affecting the work of this section includes, but not necessarily limited to, the Drawings and general provisions of the Contract, including the General Conditions, Supplemental General Conditions, Special Conditions, and Division 1 of the specifications.

1.02 DESCRIPTION OF WORK

Work includes rough carpentry as indicated, including but not limited to:

- A. Miscellaneous blocking and structural members.
- B. Rough hardware.
- C. Any rotten lumber found in the edge blocking is to be replaced with matching wood, non-treated.
- D. New blocking as required by roofing manufacturer
- E. 640 SF of wood deck replacement, as included on the bid form as unit procing.

1.03 QUALITY ASSURANCE

- A. Source of quality control:
 - 1. Lumber and wood used in the work shall be Grade Stamped by the appropriate regulating agency.
 - a. Identify all framing lumber by the grade stamp of the Southern Pine Inspection Bureau.
 - b. Identify all other materials of the Section by the appropriate stamp of the agency listed in the reference standards, or by such other means as are approved in advance by the A/E.
- B. Reference Standards:
 - Product Standards (PS): PS 20-70, American Softwood Lumber Standard, latest edition.
 - 2. Southern Pine Inspection Bureau (SPIB): Standard Grading Rules for Southern Pine Lumber.
 - Western Wood Products Association (WWPA): Standard Grading Rules for Western Lumber, 1977.
 - 4. American Wood Preservers Association (AWPA).

1.04 PRODUCT DELIVERY, HANDLING AND STORAGE

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

- B. Store materials a minimum of six inches (6") above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation or ventilation.
- C. Do not store seasoned materials in wet or damp portions of building.
- D. Protect sheet materials from corners breaking or damaging surfaces while unloading.
- E. Keep all materials clearly identified with all grade marks legible; keep all damaged material clearly identified as damaged, and separately stored to prevent its inadvertent use.
- F. Do not allow installation of damaged or otherwise non-complying material.

PART 2 - PRODUCTS

- 2.01 MATERIALS
 - A. Lumber:
 - 1. Dimensions:
 - a. Specified lumber dimensions are nominal.
 - b. Actual dimensions to conform to PS 20.
 - 2. Surfacing: Surface four (4) sides, unless specified otherwise.
 - 3. Lumber: No. 2 Southern Yellow Pine, non-treated and non-fireproof.
 - B. Rough Hardware:
 - 1. Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable ASTM specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices.
 - 2. Provide framing anchors of the size and type recommended by the manufacturer for each use including recommending nails.
 - C. Fasteners:
 - 1. Any fasteners penetrating into and/or through new treated lumber is to be stainless steel.
 - 2. .045 min FSM separator sheet required between all metal (including deck and sheet metal flashing and new treated blocking/lumber.

PART 3 - EXECUTION

3.01 INSTALLATION

General:

- A. All rough carpentry shall produce joints true, tight, and well connected with all members assembled in accordance with the Contract Documents and with all pertinent codes, regulations, and standards.
- B. Install all wood framing, making proper provisions for work of other trades. Do all cutting of

wood required. Fit neatly around all exposed items such as outlet boxes, conduit, pipes and supports.

- C. Carefully select all members; select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing or making proper connections.
- D. Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of curbs, nailers, blocking, grounds, and similar supports to allow proper attachment of other work. Fasteners to be spaced in accordance with Section 07720 "Fasteners", allowing 1/4" to 1/2" space between butting ends of nailers/blocking as recommended by manufacturer of membrane and/or materials/system being attached. Provide new wood nailers/blocking and other necessary incidentals as required for proper anchorage and so as to comply with recommendations of manufacturer of materials/system being attached.
- E. Existing wood nailer may be reused if in good condition. If not, replace to the extent necessary to comply with design criteria. All new nailers/blocking shall be No. 2 Southern Yellow Pine.
- F. Fasteners for wood nailers/blocking shall be doubled (10 feet in each direction) at all outside corners. (See Section 07720 Fasteners)

3.02 CLEANING

Keep premises in a neat, safe and orderly condition at all times during execution of this contract, free from accumulation of sawdust, cut-ends, and debris.

DIVISION 7 - SECTION 07200

ROOFING INSULATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

Documents affecting the work of this section includes, but not necessarily limited to, the Drawings and general provisions of the Contract, including the General Conditions, Supplemental General Conditions, Special Conditions, and Division 1 of the specifications.

1.02 DESCRIPTION OF WORK:

The extent of thermal insulation work is shown on the plans, by the generic name or by its abbreviation.

1.03 APPLICATION:

The applications of thermal insulation specified in this section include roof insulation.

1.04 THERMAL CONDUCTIVITY:

The R-values shown are for the thermal resistance specified for each material.

1.05 FIRE AND INSURANCE RATINGS:

The insulation system shall be ASCE 7 accepted for the particular application.

1.06 SUBMITTALS:

Manufacturer's Data Thermal Insulation:

- A. Submit manufacturer's specifications and installation instructions for each type of insulation required. Include data substantiating that materials comply with specified requirements.
- B. Shop drawings to be submitted by Contractor shall accommodate positive drainage. Contractor to field verify existing conditions before submittal of shop drawings to A/E.

PART 2 - PRODUCTS

- 2.01 MATERIALS INSULATION BOARDS:
 - A. Polyisocyanurate (Iso board) -
 - 1. 1/4-inch per foot tapered glass faced Iso insulation board
 - 3. Flat ¹/₂-inch high density glass faced Iso cover board
 - B. Polyisocyanurate foam board with coated glass facer (Class 2, Grade 3). Insulation shall be compatible with the type of roofing system used.
 - 1. Polyisocyanurate insulation boards shall have the following properties:

PROPERTY	TEST METHOD	SPECIFICATION
K-factor at 75F (BTU/in/ft5/hr./F)	ASTM C518	0.13, min.
R-value at 75F	ASTM C518	5.5/inch, min.
Compressive Strength Tapered Cover Board	ASTM D1621 ASTM D1621	25 psi., NOMINAL 100psi., NOMINAL
Dimensional stability (with facer)	ASTM D2126	2% linear change (max.)
Water absorption	ASTM C209	1% by volume (max.)
Water vapor transmission	ASTM C355	1.0 perm-inch, min.
Density	ASTM D1622	2.1 pcf, min.
Flame Spread (Core Foam)	ASTM E84	25 (full 10 min. test)

Board Size = 4'x4', 4'x8'; 1-inch min thickness

- 2. Manufacturers offering products which comply with the above requirements include the following:
 - a. Carlisle Syn Tec Incorporated
 - b. Versico
 - c. Elevate, roofing, wall & lining systems (<u>www.holcimevate.com</u>).

PART 3 - EXECUTION

3.01 PRODUCT HANDLING:

Protection from Deterioration: Do not allow insulation materials to become wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage and protection during installation. Insulation material will be checked immediately prior to application for moisture content and insulation exhibiting moisture above recommended limits shall not be used.

3.02 INSTALLATION:

- A. The contractor shall verify with the roofing materials manufacturer(s) that the roofing insulation is compatible with the proposed roofing material and roofing system.
- B. Extend insulation as shown on the contract drawings over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Remove projections which interfere with placement.
- C. Insulation shall be spaced a minimum of 1/8" apart to allow for expansion. Joints of parallel courses should be staggered. Gaps greater than 1/4" should be filled with appropriate insulation.

- D. Roof system shall have the insulation board surface completely adhered to substrate with cold-applied low-rise urethane foam adhesive approved by the insulation and membrane manufacturer so as to achieve a UL Class 90 wind uplift rating. Foam adhesive to cover at minimum of 95% of insulation surface area; ribbon adhesive installation shall be acceptable at a 4-inch maximum spacing. Other cold-applied adhesives, hot asphalt, or hot applications shall also not be acceptable. Sufficiently clean deck substrate (and prime as necessary) in accordance with the insulation, flexible sheet membrane, and cold-applied adhesive manufacturer's recommendations prior to installation of the intended roofing system.
- E. Provide pull test by the manufacturer to ensure attachment of the roofing system to the metal roof deck meets the roofing manufacturer's FM 1-90 up-lift.

DIVISION 7 - SECTION 07315 SLATE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General Conditions, Supplemental General Conditions, Special Conditions and Division 1 - Specifications Section, apply to work of this Section.

1.02 DESCRIPTION

- A. Work of this project includes the removal and re-installation of slate shingles as needed for hidden gutter tie-in and chimney re-flashing to install new ice & water shield and re-install slate as shown on the drawings
- B. The slate work of this project includes the removal as needed for the installation of the above listed items. Slate is expected to be removed (as needed) stored, protected and re-used.
- C. **Base Bid B (Unit Price 1)** Included is 50 slate shingles to be used as repair of existing broken slate as directed by the Owner. Any remaining slate is to be turned over to the Owner at the end of the project. Slate with cracks, broken corners (3" x 3" or greater) or broken to be replaced.
- D. Contractor to re-use existing slate salvaged while removal of drive-thru.
- E. Contractor responsible for damages they caused.
- F. Contractor to return all unbroken, unused slate to Owner's storage at the end of the project

1.03 QUALITY ASSURANCE

- A. Slate to be salvaged from demo of drive-thru
- B. Install slate shingles to meet requirements of published manufacturer's instructions.

1.04 SUBMITTALS

- A. Submit copper data from the manufacturer/supplier
- B. Submit actual details to be used on this project
 - a. Chimney flashing detail
 - b. Replacement detail for replacement of broken/missing slate
- C. Submit underlayment data from manufacturer

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials with manufacturer's labels intact and legible.
- B. Store materials on raised platforms and protect with coverings at outdoor locations.
- C. Do not stack bundles of slate shingles, they should be transported on end and boxed to protect.
- D. Store all rolled goods on end.

1.06 ENVIRONMENTAL CONDITIONS

A. Do not install underlayment or slate shingles on wet surfaces.

1.07 WARRANTY

A. Workmanship Applicator warranty against defects for two (2) years.

1.08 JOB CONDITIONS

Examine substrate and the conditions under which the slate will be installed and notify the A/E of any unsatisfactory conditions. Do not proceed with installation until unsatisfactory conditions have been corrected in an acceptable manner.

PART 2 - PRODUCTS

2.01 MISCELLANEOUS MATERIALS

- A. Roofing underlayment shall be self-adhering rubberized asphalt membrane.
- B. Nails shall be large head diamond point, smooth shaft 3d hard copper slating nails 1-1/2 inches long or sufficient length to adequately penetrate the roof sheathing.
- C. Rubberized asphalt membrane self-adhering sheet waterproofing underlayment.a. Membrane Flashing at chimney flashing & hidden gutter tie-in:

PART 3 - EXECUTION

3.01 INSPECTION

- A. Assure that surfaces to which slate shingles are to be applied are uniform, smooth, clean, dry and free of irregularities.
- B. Verify that installation of flashings has been completed.
- C. Verify that work of other trades that penetrates roof deck has been completed.
- D. Do not start work until unsatisfactory conditions are corrected.

3.02 SLATE INSTALLATION

- A. All broken, slopped or missing slate shall be replaced. Assume 150 slate to be replaced.
- B. All areas shall be covered with slate as herein specified, in a proper and watertight manner.
- C. Slates overlapping metal work shall have the nails so placed as to avoid puncturing the copper metal where possible.
- D. Neatly fit slate around all pipes, ventilators and other vertical surfaces.
- E. In nailing the slate shingles, the heads of the slating nails should just touch the slate and should not be driven "home" or draw the slate, but left with the heads just clearing the slate so that the slate hangs on the nail.
- F. All slating nails should penetrate the sheathing and not the joints between boards.

G. Upon completion, all slate must be sound, whole, clean and the roof shall be left watertight and neat in every respect and subject to the A/E's approval.

3.04 ADJUST AND CLEAN

- A. Replace any slate shingles that are damaged during the project.
- B. Remove any debris from project area.
- C. All unused slate to be returned to the Owner in the storage area where they were supplied.

DIVISION 7 - SECTION 07531

FLEXIBLE SHEET MEMBRANE (FULLY ADHERED)

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Documents affecting the work of this section includes, but not necessarily limited to, the Drawings and general provisions of the Contract, including the General Conditions, Supplemental General Conditions, Special Conditions, and Division 1 of the specifications.

1.02 DESCRIPTION OF WORK

- A. Work includes complete removal of existing roof system and the installation of a new flexible sheet membrane (fully adhered) roof system complete with new insulation, flashing, and other accessories as indicated and required for a complete, watertight roof system.
- B. New 20-year roof system.
- C. First layer of permanent flashing is to be installed by end of each day's work. Tearoff no more than can be installed Watertight each day.

1.03 QUALITY ASSURANCE

- A. Qualifications of Installer: The membrane roofing installer shall be currently approved and authorized to install single-ply roofing by the manufacturer of the selected membrane roofing (as listed in paragraph 2.2).
- B. Provide start-up, interim and final inspection by the roofing manufacturer, and these site visits by manufacturer shall be coordinated with Owner & A/E.

1.04 SUBMITTALS

- A. Product Data: If materials from manufacturers other than the ones specified in this section are used, submit descriptive literature and recommended installation instructions for the specific roof system used.
- B. Submit copies of contractor's evidence of manufacturer's approval status.
- C. Submit certification from manufacturer that roofing materials furnished comply with the specified ASTM Standards.
- D. Contractor shall submit to the A/E the methodology for daily seals.

1.05 DELIVERY AND STORAGE

- A. Materials shall be delivered in their original, unopened containers, clearly labeled with manufacturer's name, brand name and such identifying numbers as are appropriate.
- B. All materials other than membrane shall be stored between 60°F. and 80°F. Should they be exposed to lower temperatures, restore to room temperature prior to use. Do not use materials damaged in handling or storage. All cardboard containers should be stored in a dry area.

1.06 JOB CONDITIONS

A. Pre-Roofing Conference:

Representatives of the Owner (including the Roofing Inspector), A/E, and Roofing Contractor shall attend a pre-roofing conference to: review plans, specifications, flashing details, work scheduling, workmanship standards required, and resolve problems and discrepancies prior to ordering of any roofing materials. The A/E shall prepare a written record of proceedings and make it a part of the job record.

- B. Environmental Conditions:
 - 1. When extreme hot or cold weather conditions occur, or are expected to occur, which might detrimentally affect the work of this Section, employ techniques to guard against such effects.
 - 2. Unless adequate protection is provided, do not perform the work of this Section during rain, sleet or snow.

1.07 GUARANTEE

- A. The Contractor shall guarantee the materials and workmanship associated with the roofing, flashings, and sheet metal work incidental to the reroofing project against defects due to faulty materials or workmanship for a period of two (2) years from the date of completion.
- B. The Contractor shall furnish a manufacturer's total system 20-year warranty (i.e. including membrane, accessories, insulation, fasteners, high density ISO cover board, attachment methodology, etc. Warranty shall include a maximum peak gust wind speed of 72 mph.
- C. Manufacturer must submit approval of all component parts and state that the warranty will not be jeopardized or altered by the performance of any system parts.

PART 2 - PRODUCTS

201 PRODUCT OPTIONS

Details indicated on the drawings are based on an E.P.D.M. roof system. Contractor shall use this roof system exclusively.

- 2.02 MATERIALS E.P.D.M. ROOFING SYSTEM
 - A. The following specification is written to establish a level of quality. Roof systems, materials and approved applicators meeting this specification and level of quality only (as follows) shall be used:

Elevate, roofing, wall & lining systems (<u>www.holcimevate.com</u>). Carlisle SynTec Incorporated Versico

If the specifications conflict with the recommendations of the manufacturer, the more stringent requirements shall prevail.

B. Membrane Material: Membrane shall be a minimum of .060 inch thick E.P.D.M. (Ethylene Propylene Dione Monomer) compounded elastomeric membrane conforming to the following minimum properties:

PROPERTY	TEST METHOD	SPECIFICATIONS
Thickness	N/A	.060 in.
Specific Gravity	ASTM D297	1.18
Tensile Strength	ASTM D412	1400 p.s.i.,min.
Elongation	ASTM D412	300%, min.
Tear Resistance, Die C	ASTM D624	125 lb/in.,min.
Shore A Hardness <u>PROPERTY</u>	ASTM D2240 TEST METHOD	60 <u>SPECIFICATIONS</u>
Puncture Resistance	ASTM D120	90/19.2lb./Force
Ozone Resistance	ASTM D1149	No Cracks
Heat Aging: 116C/7 days Tensile Strength Elongation	ASTM D573	1200 p.s.i.,min. 210%, min.
Brittleness Temp.	N/A	-59°C(-75°F)
Water Vapor Transmission	ASTM E96	2.0 perm.mil.
Color	N/A	Black
Fire Classification	ASTM E108	Class A

- C. Sheet Size: Membrane sheet size shall be 10' x 100' or the largest sheet possible as determined by job condition.
- D. Membrane Flashing: Flashing material shall be of .060 inch thickness.
- E. Material Compatibility: All materials with which membrane is to be bonded must be compatible with bonding adhesive. Test or field verify compatibility of materials.
- F. Sheet Seaming System: All materials shall be by membrane manufacturer. 6-inch seam tape to be used with 5-inch nominal semi-cured flashing over the completed seam. All seams including any curb base tie-in and seams running vertical up parapet walls.
- G. Lap Sealant: Lap sealant shall be trowel or gun consistency as furnished by membrane manufacturer.
- H. Other roofing manufacturer's products: Water cut-off mastic, pourable sealer, prefabricated pipe seals, and all adhesives shall be by membrane manufacturer.
- I. Expiration Dating: All adhesives shall have labels showing expiration dates. Furthermore, adhesives shall be power mixed to achieve complete mixing.
- K. Rough Carpentry: Refer to Section 06100 for a description of wood.

PART 3 - EXECUTION

3.01 CAUTIONS

The following cautions and warnings, unless manufacturer advises otherwise, shall be considered applicable:

- A. Do not use oil base or plastic roof cement.
- B. Do not allow waste products (petroleum, grease, oil and solvents; vegetable or mineral oil and animal fat) or direct steam venting to come in contact with the roofing system.
- C. Do not expose membrane and accessories to a constant temperature in excess of 180°F.
- D. Cements and bonding adhesives contain petroleum distillates and are extremely flammable. Do not breathe vapors or use near fire.
- E. Splicing and bonding surface must be dry.
- F. Cold temperatures will restrict installation of roofing system. Follow specified precautions for storage of materials and expose only enough cement and adhesive to be used within a four (4) hour period.
- G. Roof surface shall be free of ponded water, frost, ice or snow so as to eliminate future condensation problems.

3.02 PREPARATION OF ROOF

- A. Existing roof materials shall be removed as per Section 02220 (Demolition) as applicable and as indicated on drawings.
- B. Any existing loose ballast, gravel, or debris shall be carefully and completely removed by power brooming/clean to provide a smooth surface for application as indicated on drawings.
- D. Perimeter (base) nailers shall be installed where required. Nailers shall be firmly anchored to resist a force of 200 pounds per lineal foot in any direction. Refer to Section 07720 for a description of roofing fasteners. Refer to Section 06100 for a description of wood nailers.
 Roof perimeter to be constant height. Adjust height to match existing roof system.
- E. The thickness of the nailers shall be such that the top of the nailer is flush with the adjoining horizontal surface (i.e. new roof insulation).

3.03 INSTALLATION - E.P.D.M. ROOFING SYSTEM

- A. Types of E.P.D.M. roofing specified in this project are the following and will be installed as specified by the manufacturer:
 - 1. Elastomeric sheet fully adhered to substrate.
- B. Substrate: Refer to Section 07220 for details of insulation installation procedures. Insulation shall be mechanically attached using approved fasteners on areas indicated as "Fully Adhered". Refer to Section 07720 for a description of approved insulation fasteners.
- C. Base Nailers: Nailers shall be installed at locations as denoted on plans and/or locations per manufacturer's recommendations. Base nailer is to be of proper thickness to be flush with top surface of adjoining roof substrate. Nailers shall be anchored to resist a force of 200 pounds per lineal foot in any direction. Refer to Section 06100 for a description of wood base nailers. Refer to Section 07720 for a description of roofing fasteners and anchor systems.

- D. Membrane Installation: E.P.D.M. system (.090 inch membrane thickness).
 - 1. General: Do not attempt to install overly large areas of roof membrane in any single work session. Follow manufacturer's recommendations to achieve most efficient and best quality installation of roof membrane.
 - 2. Placement: Position roof membrane over approved substrate without stretching.
 - 3. Relaxation: Allow membrane to relax approximately 1/2 hour prior to any adhesion or attachment, including splicing and flashing.
 - 4. Attachment: On all roof areas indicated as "Fully Adhered", apply bonding adhesive and adhere membrane to substrate as per manufacturer's instructions and achieve a minimum of 98% adhesion over the entire roof area.
 - 5. Laps: Position adjoining sheets, lapping edges a minimum of six (6) inches. Seams to be cleaned, primed and 6-inch seal tape rolled, with additional 5-inch nominal cover strip over the finished seam.
 - 6. Reinforced Perimeter Strips: Reinforced perimeter strips shall be provided as detailed or as required by the membrane manufacturer (more stringent shall prevail) using fasteners approved for the purpose.
 - 7. Flashing: Perimeter flashing and flashing around vents, etc., shall be done with E.P.D.M. flashing using the longest pieces practicable. All flashing and terminations shall be done as detailed on the drawings and in accordance with manufacturer's recommendations (more stringent shall prevail).
 - a. Complete splice between flashing and main roof sheet before bonding flashing to vertical surface. Splice shall extend at least six inches onto the roof membrane.
 - b. Apply bonding adhesive to both flashing and surface to which it is being bonded. After bonding adhesive has dried to the point where it does not string or stick to a dry finger, roll the flashing into the adhesive. Care must be taken to assure that the flashing does not bridge where there is a change of direction (i.e., where the vertical surface meets the roof deck).
 - c. Flash all penetrants (pipes, conduits, etc.) passing through the membrane.
 - d. Flash pipe with molded pipe flashings where installation is possible.
 - e. Where molded pipe flashing cannot be installed, use field fabricated pipe seals.
 - 8. Daily Seal: Care should be exercised to ensure that the water does not flow beneath any completed sections of roof. Temporarily seal loose edge of membrane with manufacturer approved materials when weather is threatening.
 - a. Mix the two components thoroughly according to the instructions on the label.
 - b. On roof substrate, remove gravel or debris. Surface shall be clean and dry.
 - c. Apply the seal at a rate of 100 lineal feet per gallon (on smooth surface), 12 inches back from edge sheet onto exposed substrate surface. If necessary, use a trowel to spread material in order to achieve complete seal. Onto

existing built-up roof surface, this coverage will be reduced according to surface preparation.

- d. After embedding membrane in seal, check for continuous contact. Then weight the edge, providing continuous pressure over the length of the cutoff. The recommended weight for the continuous pressure is a ten foot length of 2-1/2 inch Lay Flat Tubing filled with dry sand.
- e. When work is resumed, pull sheet free before continuing installation.
- f. Other methods of daily seals shall be approved by the manufacturer and submitted to the A/E.
- E. Metal Work: All metal work shall be sealed and watertight to prevent leakage into the building. Roofing or flashing shall not extend above thru-wall flashing unless otherwise noted on the plans.
- F. Fasteners: Where applicable, coated mechanical fasteners (i.e, metal screws, nails, battens, stress plates, accessory compounds, etc.) appropriate to substrate and as recommended by manufacturer of membrane shall be used.
- G. At 6-foot from the leading edge of the roof (fall zone) install 6-inch yellow pressuresensitive warning strip, a nominal 30-mil-thick non-reinforced TPO flashing laminated to a nominal 30-mil-thick, fully cured synthetic rubber PS adhesive. Stop and re-start warning strip on each side of roof seams.
- H. Provide 8 walk pads at end of gutters (Roof Section A)

3.04 FINAL INSPECTION

- A. The following items must be given to the Owner's representative at the final Inspection:
 - 1. A copy of the roofing contractors two-year guarantee.
 - 2. A copy of the roofing manufacturer's 30-yr warranty.

DIVISION 7 - SECTION 07600

FLASHING AND SHEET METAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Documents affecting the work of this section includes, but not necessarily limited to, the Drawings and general provisions of the Contract, including the General Conditions, Supplemental General Conditions, Special Conditions, and Division 1 of the specifications.

1.02 DESCRIPTION OF WORK

- A. The extent of each type of flashing and sheet metal work is indicated on the drawings and by provisions of this section.
- B. The types of work specified in this section include the following:
 - 1) New aluminum roof edge, surface applied counterflashing & flashing.
 - i) Roof edge
 - (a) EPDM to top of mansard Slate
 - (b) EPDM drip edge into new gutters
 - ii) Surface applied counterflashing
 - iii) Flashing under slate
 - iv) Step flashing, counter flashing & cricket at chimney

1.03 QUALITY ASSURANCE

- A. SMACNA: Architectural Sheet Metal Manual, current edition.
- B. ANSI /SPRI ES-1
- 1.04 SUBMITTALS
 - A. Product Data: Submit Manufacturer's product specifications, installation instructions, and general recommendations for each specified sheet material and fabricated product.
 - B. Samples: Submit two (2) eight inch (8") square samples of specified sheet materials to be exposed as finished surfaces.
 - C. Shop Drawings: Submit shop drawings showing layout, joining, profiles, and anchorages of fabricated work; layouts at 1/4" scale, details at 3" scale.

1.05 JOB CONDITIONS

Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of the work and protection of materials and finishes.

PART 2 - PRODUCTS

- 2.01 FLASHING AND SHEET METAL MATERIALS
 - A. Materials:

- 1) Roof edge and surface applied counterflashing: .040 aluminum with Kynar finish. Color shall be selected from manufacturer's standard colors.
- 2) Owner to select from colors from manufacturer's standard colors.
- 3) Roof edges are required to meet ES-1 requirements.
- B. Miscellaneous Materials and Accessories:
 - 1. Fasteners: Same metal as flashing/sheet metal or other noncorrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
 - 2. Mastic Sealant: One-part Polyurethane (see Division 7 Section 07920 Sealants).
 - 3. Metal Accessories: Cleats shall be the same material and thickness as sheet being anchored, 2 inches wide.
 - 4. Wall caps and roof edges are to have continuous metal cleats.
 - 5. Wood Blocking: Provide new wood blocking as required in accordance with Section 06100 "Rough Carpentry".
 - 6. Bituminous Coating: Solvent type bituminous material nominally free of sulphur, compounded for 15-mil dry film thickness per coat.

2.02 FABRICATED UNITS

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details indicated, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates, comply with material manufacturer instructions and recommendations. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line levels as indicated, and with exposed edges folded back to form hems.
- B. Seams: Fabricate non-moving seams in sheet metal with flat-lock seams.
- C. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

PART 3 - EXECUTION

3.01 INSTALLATION REQUIREMENTS

A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.

- B. Exposed Edges: Except where shown otherwise on the plans, or where it may be necessary to form a drip, the exposed edges of all flashings shall be doubled 1/2" in such manner as to conceal the folds from view.
- C. Separate dissimilar metals from each other by painting each metal surface in the area of contact with a heavy application of bituminous coating, or by other permanent separation as recommended by the manufacturer of the dissimilar metals.
- D. Fabricate and install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves, and avoidable tool marks, considering the temper and reflectivity of the metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Fold back the sheet metal to form a hem on the concealed side of exposed edges.
- E. Drip edge shall be used where appropriate, i.e. at perimeter to divert drainage from vertical surfaces.
- F. No face nailing will be allowed without approval of the A/E.

3.02 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces, including new and existing to remain, removing substances which might cause corrosion of metal, deterioration of finishes, or visual irregularities. Solder new metal to existing as prescribed by the manufacturer.
- B. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion (Owner's Acceptance).

DIVISION 7 - SECTION 07920

SEALANTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DESCRIPTION OF WORK

- A. Sealant is to provide a positive barrier against penetration of air and moisture at joints between items where sealant is essential to continue integrity of the barrier.
- B. Sealant installation shall be performed in strict accordance with the provisions of this Section.

1.03 SUBMITTALS

- A. Product Data: Submit descriptive literature and recommended instructions for each type sealant specified.
- B. Samples: Submit samples of the following:
 - 1. Color chart/samples.

1.04 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Delivery: Deliver caulking, sealants and related accessories to the job site in factory sealed, unopened containers bearing manufacturer's name and product designation.
- B. Storage:
 - 1. Store all caulking materials and equipment under conditions recommended by its manufacturer.
 - 2. Do not use materials stored for a period of time exceeding the maximum recommended shelf-life of the material.
- C. Product Handling: Follow manufacturer's recommendations for handling products containing toxic materials. Keep flammable material away from heat, sparks and open flame. Use recommended solvents and cleaning agents for cleaning tools, equipment and skin.

1.05 JOB CONDITIONS

- A. Existing Conditions:
 - 1. When extreme hot or cold weather conditions occur, or are expected to occur, which might detrimentally affect the work of this Section, employ techniques to guard against such affects.
 - 2. Unless adequate protection is provided, do not perform the work of this Section during rain, sleet or snow.

B. Schedule caulking and sealing operations so that working joints are most likely to be normal size. Apply materials within manufacturer's recommended surface and ambient temperature ranges.

PART 2 - PRODUCTS

- 2.01 MATERIALS
 - A. Exterior Sealants: Sealants for all joints, unless otherwise indicated, shall be non-sagging, one-part polyurethane sealer.
 - B. Back-up Materials: Manufacturer's standards, in general, use closed cell, bead or rope shaped, expanded polyethylene or polyurethane foam. Do not use any uncompressible materials. In general, width or diameter of preformed back-up material shall be 1-1/3 to 1-1/2 times the width of the joint to be sealed.
 - C. Manufacturers meeting this specification:
 - 1. Mameco Vulkem
 - 2. Sonneborn Sonolastic NP 1
 - 3. Pecora Corporation Dynatrol 1

PART 3 - EXECUTION

- 3.01 INSPECTION
 - A. Prior to the work of this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
 - B. Verify that all sealant may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.
 - C. In the event of discrepancy, immediately notify the A/E.
 - D. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.02 PREPARATION

- A. Clean joint surfaces, using joint cleaner as necessary to be free of dust, dirt, oil, grease, rust, lacquers, release agents, moisture or other matter which might adversely affect adhesion of sealant.
- B. Mask areas adjacent to joints.
- C. Apply primer (when required), following manufacturer's instructions.

3.03 APPLICATION

- A. General:
 - 1. Install sealants in strict accordance with the manufacturer's instructions taking care to produce beads of proper width and depth, to tool as recommended by the

manufacturer, and to immediately remove all surplus sealant.

- 2. Employ only proven installation techniques, which will ensure that sealants will be deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of the adjoining bond surfaces equally on opposite sides. Fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form a slight curve, so that joint will not trap moisture and dirt.
- B. Backer Rods: Install sealant backer rod to depth recommended by sealant manufacturer for the application shown.
- C. Bond Breaker Tape: Install bond breaker tape wherever required by manufacturer's recommendations to ensure that sealants will perform properly.

3.04 CURE AND PROTECTION

- A. Curing: Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.
- B. Protection: Protect sealants and caulking compounds during construction so that they will be without deterioration or damage at the time of final acceptance.

3.05 CLEANING

- A. Spillage:
 - 1. Do not allow sealants or compound to overflow or spill onto adjoining surfaces or to migrate into the voids of adjoining surfaces. Use masking tape or other precautionary devices to prevent staining of adjoining surfaces.
 - 2. Remove excess and spillage of compounds properly as the work progresses. Clean the adjoining surfaces and remove masking tape immediately after caulking and sealing.
- B. Cleaning: Clean adjacent surfaces soiled by sealant operation. Remove wet material before it "sets". Follow manufacturer's recommendations for cleaning procedures. Cleaning agents shall not stain or be injurious to exposed surfaces nor shall they be potentially dangerous to metal surfaces due to washoff by rain.

DIVISION 16 - SECTION 16010

GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY:

This section specifies the basic requirements of electrical installations and includes requirements common to all sections of Division 16. It expands and supplements the requirements specified in sections of Division 1.

1.02 SCOPE OF WORK:

Electrical work shall include associated electrical required for the demo of the drive thru. Work to include lockout/tagout of associated circuits. All demo circuits to be disconnected/removed from closest junction box (inside the building) and removed conduit & wire. All power outages to be coordinated with the Owner in advance.

- 1.03 ELECTRICAL INSTALLATIONS:
 - A. In addition to the requirements of General Conditions, examine areas and conditions for compliance with installation tolerances and other conditions affecting performance of electrical work. Do not proceed with installation until unsatisfactory conditions have been corrected.
 - B. Install material and equipment in accordance with applicable requirements of the National Electrical Contractor's Association (NECA) "Standard of Installation" and applicable requirements of National Electrical Code (NEC), NFPA-72, Virginia Uniform Statewide Building Code, 2018.
 - C. Arrange for chases, slots, and openings in other building components to allow for electrical installations.
 - D. Install electrical equipment with National Electrical Code (NEC) minimum clearances to facilitate maintenance and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations.

1.04 QUALITY ASSURANCE:

- A. Codes and Standards: Comply with applicable requirements of the following codes and standards.
 - 1. National Electrical Code (NEC).
 - 2. Virginia Uniform Statewide Building Code, 2018.
- B. Provide material and equipment which is listed by Underwriters Laboratories, Inc. (UL) and which bears the UL label. This applies to materials and equipment for which UL standards have been established and for which label service is regularly furnished. Assemble materials and equipment for which no UL Product Category exists with UL-listed components.

ASBESTOS & LEAD PAINT REPORT Northumberland County Public Schools' School Board Office Building 6958 Northumberland Highway Heathsville VA 22473 Partial Roof Replacement

TABLE OF CONTENTS

SCOPE OF WORK

ASBESTOS INSPECTION

LEAD INSPECTION

LAB RESULTS

SCOPE OF WORK

HDH Technical, Inc. was contracted to provide an asbestos inspection of the existing roof system 6958 Northumberland Highway. The inspection was conducted by personnel trained and licensed in accordance with the regulations of the Environmental Protection Agency (EPA) and the Commonwealth of Virginia. This inspection was performed using current EPA AHERA standards. This protocol was used for the determination, sampling and analysis of suspected Asbestos Containing Materials (ACM).

ASBESTOS INSPECTION

An inspection of the roof at Northumberland County Public Schools' School Board Office Building, 6958 Northumberland Highway, Heathsville VA 22473 was performed 10-18-2022, by representatives of HDHT. The objective of this inspection was to determine the location of any suspect asbestos-containing roofing materials (ACRM) currently located on the exterior of this structure that may be disturbed by upcoming roof replacement projects.

The existing roof assembly consists of EPDM and polyisocyanurate insulation over BUR roof system mopped to the wood deck. Neither of EPDM nor the Polyisocyanurate insulation are considered suspect asbestos materials so were therefore not sampled. The BUR was sampled and tested negative.

This information will be provided to the contractors as a note on the drawing cover and included in the specification. If any additional suspect materials are identified during the course of the project, the contractor is to immediately stop work and contact the Owner for further direction.

LEAD INSPECTION

On 10-18-2022 a Lead-Based Paint inspection was also conducted on the roof at this location. The inspection was conducted to identify potential lead-based paint concerns with metal roofing.

The inspection determined that none of the surfaces intended to be disturbed on the roof are suspect for lead-based paint.

This inspection was in compliance with the Virginia Lead-based Paint Activities Regulations, October 1, 1995 and EPA HUD Chapter 5 standards. The Inspector/Risk Assessor is properly trained, licensed, and met the competency requirements spelled out in those regulations.



The Identification Specialists

Analysis Report prepared for HDH Technical, Inc.

Report Date: 10/25/2022 Project Name: 6958 Northumberland Hwy Heathsvil Project #: Northumberland SanAir ID#: 22053720



NVLAP LAB CODE 200870-0

10501 Trade Court | North Chesterfield, Virginia 23236 888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



Name: HDH Technical, Inc. Address: P.O. Box 6158 Christiansburg, VA 24073 Phone: 540-381-7999 SanAir ID Number 22053720 FINAL REPORT 10/25/2022 10:57:52 AM

Project Number: Northumberland P.O. Number: Project Name: 6958 Northumberland Hwy Heathsvil Collected Date: 10/18/2022 Received Date: 10/24/2022 10:15:00 AM

Dear Crowder,

We at SanAir would like to thank you for the work you recently submitted. The 6 sample(s) were received on Monday, October 24, 2022 via UPS. The final report(s) is enclosed for the following sample(s): C 1.01, C 1.02, F 2.01, F 2.02, RM 3.01, RM 3.02.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

andra Sobiint

Sandra Sobrino Asbestos & Materials Laboratory Manager SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 6 samples in Good condition.



Name: HDH Technical, Inc. Address: P.O. Box 6158 Christiansburg, VA 24073 Phone: 540-381-7999 SanAir ID Number 22053720 FINAL REPORT 10/25/2022 10:57:52 AM

Project Number: Northumberland P.O. Number: Project Name: 6958 Northumberland Hwy Heathsvil Collected Date: 10/18/2022 Received Date: 10/24/2022 10:15:00 AM

Analyst: Hogrefe, Sarah

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
C 1.01 / 22053720-001 Caulk - Repairs	Black Non-Fibrous Homogeneous	15% Cellulose	85% Other	None Detected
C 1.02 / 22053720-002 Caulk - Repairs	Black Non-Fibrous Homogeneous	15% Cellulose	85% Other	None Detected
F 2.01 / 22053720-003 Flashing - Roof Edge - Under LRF	Black Non-Fibrous Homogeneous	30% Glass	70% Other	None Detected
F 2.02 / 22053720-004 Flashing - Roof Edge - Under LRF	Black Non-Fibrous Homogeneous	30% Glass	70% Other	None Detected
RM 3.01 / 22053720-005 Roof Membrane - BUR - Under LRF	Black Non-Fibrous Heterogeneous	10% Cellulose 5% Glass	85% Other	None Detected
RM 3.02 / 22053720-006 Roof Membrane - BUR - Under LRF	Black Non-Fibrous Heterogeneous	10% Cellulose 5% Glass	85% Other	None Detected

Analyst:

Analysis Date:

Stage

Approved Signatory:

Johnston Whan

10/25/2022

Date: 10/25/2022

Disclaimer

This report is the sole property of the client named on the SanAir Technologies Laboratory chainof-custody (COC). Results in the report are confidential information intended only for the use by the customer listed on the COC. Neither results nor reports will be discussed with or released to any third party without our client's written permission. The final report shall not be reproduced except in full without written approval of the laboratory to assure that parts of the report are not taken out of context. The information provided in this report applies only to the samples submitted and is relevant only for the date, time, and location of sampling. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample(s) in the condition in which they arrived at the laboratory and information provided by the client on the COC, such as: project number, project name, collection dates, po number, special instructions, samples collected by, sample numbers, sample identifications, sample type, selected analysis type, flow rate, total volume or area, and start stop times that may affect the validity of the results in this report. Samples were received in good condition unless otherwise noted on the report. SanAir assumes no responsibility or liability for the manner in which the results are used or interpreted. This report does not constitute and shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any other U.S. governmental agencies and may not be certified by every local, state, and federal regulatory agencies.

Samples are held for a period of 60 days. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations.

For NY state samples, method EPA 600/M4-82-020 is performed.

NYELAP Disclaimer:

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Certifications

NVLAP lab code 200870-0 City of Philadelphia: ALL-460 PA Department of Environmental Protection Number: 68-05397 California License Number: 2915 Colorado License Number: AL-23143 Connecticut License Number: PH-0105 Massachusetts License Number: AA000222 Maine License Number: LB-0075, LA-0084 New York ELAP lab ID: 11983 Rhode Island License Number: PCM00126, PLM00126, TEM00126 Texas Department of State Health Services License Number: 300440 Commonwealth of Virginia 3333000323 Washington State License Number: C989 West Virginia License Number: LT000616 Vermont License: AL166318 Louisiana Department of Environmental Quality: 212253, Cert 05088

Revision Date: 8/14/2020

Sa	anAll ogies Laboratory	10501 Trade Ct N. Chesterfield 804-897-1177 / Fax 804-897-00 www.sanair.co	, VA 23139 888-895-1 70		Asbestos Chain of Custo	ody		22	SanAir ID Number 053720
Company:	HDH Techni	cal, Inc		(9-1) 	Project #: Northu	mberland	County (collected by	Crowder
Address:	1305 Radfor	d Street		Pro	oject Name: 6958 Northumbe	rland Hw	y Heathsvil	Phone #:	540-381-7999
City, St, Zip: (Christiansbu	rg, VA 24073	÷. 9.	Date	Collected: 10/18/2022	5		Email:	rliebal@hdhassociates.com
State of Collect	ion: VA	Account #:	1769	P.O.	Number:		a 12	Email:	jcrowder@hdhassociates.com
-	Bulk				Air	a sha			I/Vermiculite
ABB	PLM EPA 600	/R-93/116	Λ	BA	PCM NIOSH 7400	- C	ABSE	NET HING	PA 600/R-93/116 (Qual.)
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ABBEN	PLM EPA NO	and the second		3T2	TEM Level II				Dust
ABBCH	TEM Chatfield				New York ELAP		ABWA	TEMAN	ipe ASTM D-6480
ABBTM	TEMEPANO	P		MNY	PLM EPA 600/M4-82-02		ABDMV		crovac ASTM D-5755
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		Flashing - Roof Edge - Under LRF							
RM 3.01		Roof Membrane - BUR - Under LRF Roof Membrane - BUR - Under LRF							
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Unless scheduled, the turn around time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time. Work with standard turn around time sent Priority Overnight and Billed to Recipient will be charged a \$10 shipping fee.

EDR