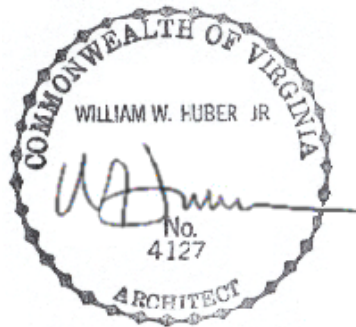


PROJECT MANUAL

Phase 1 Renovations RICHLANDS BRANCH TAZEWELL COUNTY PUBLIC LIBRARY

Project Address:
9102 Suffolk Avenue
Richlands, Virginia 24641



651 NORTH MAIN STREET, SUITE 5 MARION VIRGINIA 24354
276.783.5133 www.huberarch.com

Project No. 2216

Set No. _____

July 27, 2022

NOTICE OF INVITATION FOR BIDS

Sealed bids are invited for Phase 1 Renovations the Richlands Branch of the Tazewell County Public Library, Richlands VA. VA.

The Project is generally described as window replacement, exterior painting and gutter repairs.

Bid Deadline: 2:00 p.m., October 13, 2022, at the Richlands Branch, 102 Suffolk Avenue, Richlands VA 24641. A non-mandatory pre-bid meeting is scheduled for October 3, 2022 at 2:00 p.m.; attendance by bidders is encouraged.

Bid Bond will not be required. Successful bidder will not be required to furnish Performance and Labor and Material Payment Bonds.

Owner reserves the right to reject all bids should low bid received exceed funds available for project construction.

Invitation for Bids, including plans and specifications, are available from Trasco, Roanoke VA, Telephone (540) 345-1533. Printing and delivery costs are to be borne by entities requesting documents

Documents available for inspection at Architect's office, 651 N. Main Street, Marion VA; the Richlands Branch Library, Richlands VA; AGC, Blountville TN; McGraw-Hill Construction, Roanoke VA and Knoxville TN; Valley Construction News, Roanoke VA.

Tazewell County Public Library Board of Trustees
Regina Roberts, Chair

SECTION 00120
INSTRUCTIONS TO BIDDERS – AIA

1.1 SUMMARY

- A. Document Includes:
 - 1. Instructions to Bidders A701-2018.
- B. Related Documents:
 - 1. Document 00201 – Supplementary Instructions to Bidders.

1.2 INSTRUCTIONS TO BIDDERS

- A. AIA Document A701-2018, Instructions to Bidders shall be used in submitting bids on this project.

1.3 SUPPLEMENTARY CONDITIONS

- A. Refer to Document 00201 for Supplementary Instructions to Bidders.

END OF SECTION 00120

DOCUMENT 00201
SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1.1 SUMMARY

- A. Document Includes:
 - 1. Instructions to Bidders.
 - 2. Examination.
 - 3. Prebid conference.

- B. Related Documents:
 - 1. Document 00105 – Invitation To Bid.
 - 2. Document 00300 – Bid Form – Stipulated Price.

INSTRUCTIONS TO BIDDERS

- A. These Instructions to Bidders amend or supplement AIA Document A701-1997 - Instructions to Bidders and other provisions of Bidding Documents and Contract Documents. Where any Article of the Instructions is modified or a Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Instructions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

ARTICLE 1 – BIDDERS REPRESENTATIONS

Add Paragraph:

2.1.5 Data in the bidding documents pertaining to existing conditions is for convenience only and does not supplant obtaining first hand information at the site.

ARTICLE 3 – BIDDING DOCUMENTS

Add Paragraph:

3.1.5 Bidders shall thoroughly examine and be familiar with the Contract Documents. The failure or omission of any bidder to receive or examine any form, instrument, bulletin, addendum, or other documents, or to visit the site and acquaint himself with conditions there existing shall in no way relieve any bidder from any obligation with respect to his Bid or to the Contract. The submission of a Bid shall be taken as prima facie evidence of compliance with this section.

3.2.4 The Work of this project shall be performed in accordance with the Contract Documents; however, the plans and specifications are intended to complement and supplement each other and any work required by either and not by the other shall be performed as if denoted in both. Should a bidder find discrepancies in, or omissions from the plans or the specifications, or be in doubt as to their meaning, he shall at once notify the Architect. Failure to request such interpretations shall in no way relieve the Contractor of his responsibility for executing the project properly and completely. Unless otherwise clarified by the Architect, bidders shall base their bids on the highest quality of material or techniques required by any part of the Contract Documents.

ARTICLE 4 – BIDDING PROCEDURES

Add Paragraph:

4.1.8 Original and one copy of each Bid shall be submitted. Both copies shall have original signatures. Electronically delivered bids shall be sent twice.

Modify Paragraph:

4.3.1 Add the following text: “Sealed envelope shall also be clearly marked with date and time of bid opening so as to guard against premature opening of any bid. No responsibility shall be attached to the Architect and the Owner for premature opening of bids not properly addressed or identified.

Add Paragraphs:

4.3.5 The attention of the Bidder is directed to Title 54.1, Chapter 11, Code of Virginia, (1950), as amended, which requires evidence of a Class A certificate of registration before a Bid may be received and considered (1) on a general or subcontract of \$120,000 or more; or (2) if the total value of all contracts undertaken by the bidder during any 12-month period is \$750,000 or more.

4.3.6 It shall be the Bidder’s responsibility to check all sub-bids carefully to determine whether or not any exceptions, omissions, or alterations to the Drawings and Specifications have been noted therein; bidder is solely responsible for a complete job in strict accordance with Bidding Documents.

ARTICLE 5 – CONSIDERATION OF BIDS

5.1.2 At the opening of Bids, should questions arise regarding the validity of any Bid because of errors, omissions, waiver of informalities or other points or provisions in submitted proposals, no comment or decision will be made until a ruling has been obtained from the Owner’s legal representative.

Delete Paragraph 5.3.1 and replace with the following:

5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. In determining the lowest responsible Bidder, the Owner may consider, among other factors, the Bidder’s performance on other contracts and information provided by the Bidder on AIA Document A305, Contractor’s Qualification Statement, in the event such Statement is required. The Owner shall have the right to waive informalities in a Bid received and to accept the Bid which, in the Owner’s judgment, is in the Owner’s own best interests.

ARTICLE 6 - POST-BID INFORMATION

Modify Paragraphs:

- 6.2 Owner's Financial Capability: Delete paragraph 6.2 in its entirety.

ARTICLE 7 - PERFORMANCE BOND AND PAYMENT BOND

Delete subparagraphs 7.2.1, 7.2.2, and 7.2.3 and replace with the following:

- 7.2.1 The successful bidder shall deliver the required insurance and workers compensation certificates to the Owner with the executed Contract. Performance and Payment bonds will not be required.

END OF SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

SECTION 00300
BID FORM

Job Title:

**Phase 1 Renovations
Richlands Branch, Tazewell County Public Library**

Location:

102 Suffolk Avenue, Richlands VA

**TO: Tazewell County Public Library Board of Trustees
129 Main Street
Tazewell VA 24651**

1. BASE BID:

The undersigned, as bidder, hereby declares that the only person or persons interested in this proposal as Principal or Principals is/are named herein and that no other person than herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is, in all respects, fair and in good faith without collusion or fraud.

The bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the plans and specifications for the work and the contractual documents relative thereto; and has read all special provisions furnished prior to the opening of the bids; that he has satisfied himself relative to the work to be performed within the established time.

He proposes and agrees, if this proposal is accepted, to contract with **Tazewell County Public Library Board of Trustees, Tazewell, Virginia** in the form of contract specified to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor, and pay all State and local sales taxes necessary to complete the project listed above, in full and complete accordance with the shown, noted, described and reasonably intended requirements of the plans, specifications, and Contract Documents with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents, for the following amount:

BASE BID:

For the total sum of _____ Dollars

(\$ _____).

2. TIME OF COMPLETION:

- a. The undersigned agrees, if awarded contract, that work under this contract shall be substantially completed within _____ calendar days after Notice to Proceed.

- b. The undersigned Acknowledges that time is of the essence. The undersigned agrees to work cooperatively with all parties associated with this project to complete the Work represented by this bid within the time indicated on Bid Form.

4. CONTRACT PROVISIONS:

In submitting the Bid, the Undersigned agrees:

- a. to comply with all requirements indicated in the Invitation for Bids;
- b. to accept the provisions of the Bidding Documents;
- c. to accomplish the Work in accordance with the Bidding Documents in the time stipulated on this Bid Form.

- 5. PROPOSAL ACCEPTANCE: If undersigned is notified of proposal acceptance within thirty (30) days following opening of bids, he agrees to execute a contract for work for compensation stated in the bid form, in form of agreement attached to the specifications within ten (10) days after date of notice of acceptance.

- 6. ADDENDUM/BULLETIN RECEIPT: The undersigned acknowledges receipt of addenda numbered _____, _____, _____, and/or bulletins numbered _____, _____, _____.

Title: _____

For: _____
(firm, company or corporation)

Date: _____
_____ (business address)

If a bidder is a corporation, write State of incorporation under signature, and if a partnership, give full names of all parties below.

Do not include in the envelope any bids for other work. Registered as a Class A contractor under Title 54.1, Chapter 11, Code of Virginia, as amended, Certificate No. _____, Year _____,

or

Registration not required under Chapter 11, Title 54.1, Code of Virginia.

END OF BID FORM

SECTION 00501
STANDARD FORMS

01 - AGREEMENT

a. "The Standard Form of Agreement between the Owner and Contractor, Where the Basis of Payment is a Stipulated Sum", A.I.A. Document No. A-101, edition dated 2017, will be the form used as a contract for this work.

02 - CERTIFICATE OF INSURANCE

a. ACORD Certificate of Insurance will be the form used as a part of the contract for this work.

03 - AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

a. Affidavit of Payment of Debts and Claims, A.I.A. Document G-706, latest edition, will be the form used as a part of the contract for this work.

04 - CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

a. Contractor's Affidavit of Release of Liens, A.I.A. Document G-706A, latest edition, will be the form used as a part of the contract for this work.

05 - APPLICATION AND CERTIFICATE OF PAYMENT

a. Application and Certificate for Payment, AIA Document G702, 1992 edition, and Continuation Sheet, AIA Document G703, 1992 edition, will be the forms used for this project.

06 - CHANGE ORDER

a. Change Order, AIA Document G701, 2017 Edition standard form is to be used for this work.

07 - FIELD ORDERS

a. Architect's Field Order, A.I.A. Document G-708, latest edition is to be used for this work.

08 - BID FORM

a. Bid form for lump sum contracts as contained herein will be the form used.

10 - CONSTRUCTION SKETCH

a. Construction sketch, number CSK-#, Huber Architects standard form is to be used for clarification and/or attachments to field orders or change orders on this project.

13 - COPIES

a. Sample copies of the A.I.A. forms are available at the Architect's office. Required number of copies may be obtained from the American Institute of Architects, The Octagon, 1735 New York Avenue, N.W., Washington, DC 20006.

END OF SECTION

DOCUMENT 00701
GENERAL CONDITIONS

1.1 GENERAL CONDITIONS

A. General Conditions are AIA General Conditions Document A201-2017.

1.2 SUPPLEMENTARY CONDITIONS

A. See Section 00811

END OF GENERAL CONDITIONS

DOCUMENT 00811
SUPPLEMENTARY CONDITIONS - AIA

1.1 SUMMARY

- A. Document Includes:
 - 1. Supplementary Conditions.
- B. Related Documents:
 - 1. Agreement – AIA Document A101-2017.
 - 2. General Conditions – AIA Document A201-2017.

1.2 SUPPLEMENTARY CONDITIONS

- A. These Supplementary Conditions modify the General Conditions of the Contract for Construction, AIA Document A201-2017, and other provisions of the Contract Documents as indicated below. All provisions which are not so modified remain in full force and effect.
- B. The terms used in these Supplementary Conditions which are defined in the General Conditions of the Contract for Construction, AIA Document A201-2017, have the meanings assigned to them in the General Conditions.

ARTICLE 1 - CONTRACT DOCUMENTS

1.1 BASIC DEFINITIONS

Add clause 1.1.1.1 as follows:

1.1.1.1 The term "Agreement" means the completed and signed contract form (A.I.A. Document A-102) which may not be included in this Project Manual.

Supplement subparagraph 1.1.3 - The Work as follows:

1.1.3 Related to the term "Work", where "as shown", "as indicated", "as detailed", or similar words are used, reference is made to the drawings accompanying this Project Manual. Where "as directed", "as required", "as permitted", "approved", or similar words are used, it shall be understood that the direction, permission, approval, or acceptance of the Architect-Engineer is intended unless stated otherwise.

Supplement subparagraph 1.1.5 - The Drawings as follows:

1.1.5 The term "Drawings" means the drawings enumerated in the Index to Drawings.

Add subparagraphs 1.1.9 through 1.1.17 as follows:

1.1.9 Addendum
The term "addendum" or "addenda" means any revision to the Contract which has been duly issued to prospective bidders prior to the time stipulated for the opening of Bids.

1.1.10 Clarification

The term "clarification" means answers to questions or additional comments provided to clarify the intent of the Drawings or Specifications raised during the bidding period prior to the opening of bids. This may or may not be made part of an Addendum.

1.1.11 Prime Bidders

The term "prime bidders" shall mean contractors bidding separately on the Work or on separate phases of the Work. The term prime subcontractors shall mean the Mechanical, Plumbing, and Electrical subcontractors bidding to the general contractors on their respective phases of the Work.

1.1.12 G.C.

The term "in G.C." shall mean that the portion of the Work referred to and is to be included in the General Contract and does not mean literally that the actual work is to be performed by the General Contractor. The Contract is between the General Contractor and the Owner and the General Contractor is totally responsible for the performance of all phases of the Work included in the Contract, whether it be performed by him or by his subcontractors.

1.1.13 N.I.C.

The term "N.I.C." means that the portion of the work referred to is not included in the General Contract.

1.1.14 Products

The term "Products" as used in these Contract Documents refers to new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

1.1.15 Furnish

Except as otherwise defined in greater detail, where required of the Contractor, the term "furnish" is used to mean "supplying and delivering to the project site, unloading, and inspecting for damage.

1.1.16 Install

Except as otherwise defined in greater detail, the term "install" is used to describe operations at project site including the actual "unpacking, assembly, erection, applying, placing, anchoring, working to dimension, finishing, curing, protecting, cleaning and similar operations making ready for use", as applicable in each instance.

1.1.17 Provide

The term "Provide" shall mean to furnish and install.

1.2 - CORRELATION, AND INTENT OF THE CONTRACT DOCUMENTS (Supplement as follows)

Add subparagraphs 1.2.4, 1.2.5 and 1.2.6 as follows:

Specifications and Drawings into divisions, sections, and articles, shall make the Architect an arbiter or to establish limits between Contractor and Subcontractors.

1.2.4 In the Contract Documents where detailed information is lacking or interpretation is not clear, secure required information from the Architect before proceeding with the work. Failure to request clarification prior to bid shall oblige Contractor to furnish the highest quality of material or construction method reasonably inferable by the Contract Documents. Discrepancies pertaining to the work shall be called to the attention of the Architect before proceeding with the work. For items that are detailed and/or specified but not distinctly located on the plans, the Architect shall determine the location of such items.

1.2.5 Figured dimensions are to be followed in preference to measurements by scale. Large scale or full size drawings will take precedence over smaller scale drawings.

1.2.6 In the event that a discrepancy is found between the Drawings and the Specifications, the Specifications shall supercede.

1.5 – EXECUTION OF CONTRACT DOCUMENTS

Add clause 1.5.1.1 as follows:

1.5.1.1 If required by either party to the Contract, the Contract Documents shall be signed in as many original counterparts as may be mutually agreed upon.

ARTICLE 2 – INFORMATION AND SERVICES REQUIRED OF THE OWNER

Subparagraph 2.1.1 is revised and restated as follows:

2.1.1 The contract will be with the Tazewell County Public Library Board of Trustees, which shall have exclusive authority to bind it with respect to all matters requiring approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority.

Delete subparagraph 2.2.1 in its entirety.

ARTICLE 3 - CONTRACTOR

3.3 – SUPERVISION & CONSTRUCTION PROCEDURES

Add clause 3.3.1.1 as follows:

3.3.1.1 Contractor shall be solely responsible for layout and scheduling of the Work resulting in its accurate and timely completion.

3.4 – LABOR AND MATERIALS

Add clause 3.4.1.1 as follows:

3.4.1.1 Labor shall include all fringe benefits, pension benefits and unemployment taxes provided for those performing the Work, whether or not such benefits and taxes are in effect at the time the construction contract is executed.

3.7 – PERMITS, FEES, AND NOTICES

Add clauses 3.7.1.1 thru 3.7.1.3 as follows:

3.7.1.1 Plan Review Fees

The Owner will have paid for preliminary plan review by the code official having jurisdiction prior to the project going to bid. Plan review fees should not be included in the Contractor's bid.

3.7.1.2 Contractor shall secure and pay for the Land Disturbing Permit, including bonds as required by Local Governing Authority.

3.7.1.3 Off-site Borrow or Waste Areas

The Contractor shall assume all responsibility for his use of any off-site borrow and/or waste area which shall include, but not be limited to; liability, surveying, design, permits, fees, etc. associated therewith.

Add subparagraph 3.7.6 as follows:

3.7.6 Where method of construction or installation of materials or equipment is not indicated in the Contract Documents and such construction or installation is covered by codes, ordinances, or regulations in force in the locality of the Work, the Work shall be performed in accordance therewith as part of the Contract. In the absence of applicable local codes, State Codes shall apply.

3.9 - SUPERINTENDENT

Add clause 3.9.1.1 as follows:

3.9.1.1 The Contractor's superintendent shall be experienced in the construction of projects of this type and scope. The Contractor's superintendent shall give special attention to Work nearing completion and shall remain on site and in active control until all phases of the Work have been completed, the final punch list is completed, and the project in its entirety is acceptable to the Owner.

3.11 – DOCUMENTS AND SAMPLES AT THE SITE

Add subparagraph 3.11.2 as follows:

3.11.2 The Contractor shall keep an accurate record and location of all work, both interior and exterior. On completion of the Work, one print of each of the Drawings which is applicable shall be neatly and clearly marked in color to show

all variations between the work actually provided and that indicated on the **drawings**. The representation of such variations shall conform to standard drafting practice and shall include such supplementary notes, legends, and details as may be necessary for legibility and clear portrayal of the as-built construction. Location of as-built utilities shall be accurate and located by dimensions. These drawings shall be approved by the Architect before acceptance.

3.12 – SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

Add subparagraph 3.12.11 thru 3.12.15 as follows:

3.12.11 Refer to Section 01330 – SUBMITTAL PROCEDURES for specific requirements on this subject.

3.12.12 Shop drawings shall be submitted in such number of copies that three (3) copies may be retained by the Architect. Submissions shall be accompanied by a letter of transmittal in duplicate, which shall list and properly identify the contents of such submission. Shop drawings shall be consecutively numbered and clearly labeled with name of the Project and date. Shop drawings shall be submitted in such sequence or groups that all related items may be checked together. Shop drawings not so submitted will be returned without action.

3.12.13 The Contractor shall submit to the Architect for approval a listing of all submittals required by the Contract Documents, fixing the dates for the submission of shop drawings, samples and product data.

3.12.14 In checking and approving shop drawings, the Architect will not be responsible for checking dimensions or quantities; however it shall be understood that if the Architect so chooses, this checking is done as a convenience to the Contractor and it shall not relieve the Contractor of the responsibility for furnishing any or all the items and quantities shown in the Contract Documents. The act of approving shop drawings shall not be construed as authorization for any increase in the cost of the Work.

3.12.15 Samples shall be delivered with all shipping charges prepaid. Each sample shall bear a label indicating the material represented, the name of the producer and the title of the Project. Approval of a sample shall not be construed to change or modify any Contract requirement or price. Approved samples shall be retained by the Architect until completion of the Project.

3.13 – USE OF SITE

Add subparagraph 3.13.2 and 3.13.3 as follows:

3.13.2 The Contractor shall position field offices, equipment, and supply trailers, temporary toilet facilities, and other large construction related items so as to not interfere with, hinder, or endanger the public when the Project is occupied by the Owner. Refer to Section 01500 – TEMPORARY FACILITIES AND CONTROLS for additional requirements on this subject.

3.13.3 Should the Contractor require additional land for temporary construction facilities or for storage of materials and equipment other than the areas available on the site, or as otherwise furnished by the Owner, he shall provide such other lands and access thereto entirely at his own expense and without liability to the Owner.

3.14 - CUTTING & PATCHING

Add subparagraphs 3.14.3 and 3.14.4 as follows:

3.14.3 The Contractor shall leave all such chases, holes, or openings straight, true and of the proper size in his own work, as may be necessary for the proper installation of another contractor's work, consulting with the separate contractor concerned regarding proper location and size of same. No excessive cutting will be permitted nor shall any piers or other structural members be cut without the consent of the Architect. After such work has been installed, Contractor shall carefully fit around, close up, repair, patch, and point up his material as directed, to the entire satisfaction of the Architect. All this work shall be done with proper tools and by careful workmen of the particular trade to which such work belongs. Each specification section shall include cutting and patching, plumbing, or earthwork for that trade section unless otherwise specified.

3.14.4 See Section 01045 – CUTTING AND PATCHING for further requirements.

3.15 – CLEANING UP

Add subparagraph 3.15.3 as follows:

3.15.3 The Contractor shall thoroughly clean and leave reasonably dust free, to the satisfaction of the Architect, all finished surfaces on the interior of the buildings, including the removal of all paint spatters, concrete spatters, and other defacements of the work. See Section 01700 – EXECUTION REQUIREMENTS for further requirements.

3.18 - INDEMNIFICATION

Supplement subparagraph 3.18.1 as follows:

3.18.1 This indemnification shall also include loss or damage as a result of injury, and loss or damage to adjoining or adjacent structures and their premises as a result of the performance of the work.

ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

4.1 - ARCHITECT

Add clause 4.1.1.1 as follows:

4.1.1.1 The terms "Architect" or "Engineer" means William Huber Architect. P.C., the firm engaged by the Owner for architectural and/or engineering services related to the work. These terms as used throughout the Contract Documents include authorized representatives of the firm, including consultants.

ARTICLE 5 - SUBCONTRACTORS

5.2 – AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

Add clause 5.2.1.1. as follows:

5.2.1.1. The list of subcontractors and material suppliers furnished under 5.2.1 shall be submitted within twenty-one (21) calendar days of the date of the Contract for Construction and shall contain the address, telephone number, and principal contact person for each such entity.

ARTICLE 7 - CHANGES IN THE WORK

7.2 – CHANGE ORDERS

Add subparagraph 7.2.2 thru 7.2.6 as follows:

7.2.2 Proposal Request: When a Change in the Scope of the Work is contemplated which may affect the Contract Sum or duration of the Work, the Architect will issue a "Proposal Request" detailing the Work involved in such proposed change. The "Proposal Request" will be on the AIA Document G709 and may be accompanied by drawings and other descriptive data. The issuance of a "Proposal Request" does not, in any way, authorize commencement of the Work therein described.

7.2.3 Costs Related to Changes in the Work: The costs related to changes are to include:

- .1 Labor including foreman.
- .2 Materials entering permanently in the Work.
- .3 The ownership or rental cost of construction plant and equipment during the time of use on the extra work.
- .4 Power and consumable supplies for the operation of power equipment.
- .5 Insurance and taxes.

7.2.4 Itemization of Costs: In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of all costs including labor, materials, and subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are subcontracts, they shall be itemized also. In no case will a change involving over \$100.00 be approved without such itemization.

- .1 For each material supplier, for products supplied to the project, 10 percent of the cost.

.2 For cost credits to the project neither the General Contractor nor his subcontractor, nor his sub-contractor shall receive overhead and profit.

7.2.5 Change Quotation: Upon receipt of such "Proposal Request", the Contractor shall promptly issue a "Change Quotation" stipulating the change in cost and duration of Project (if any) as a result of the proposed change. Quotation shall be complete with an itemized material and labor breakdown, indicating quantities and costs for each item of material and labor, as provided in the General Conditions. Quotations not completely itemized will be returned to the Contractor. Each "Change Quotation" shall be numbered. Revised quotations shall be resubmitted with original number with suffix "Rev" and a revised date.

7.2.6 Change Order: Should the Architect, after review and consultation with, and approval by, the Owner, find the Change Quotation to be acceptable, a Change Order will be issued in the form of AIA Document G701. Each Change Order will be prepared in triplicate, each bearing the signatures of the Owner, Architect, and the Contractor. The Change Order may be accompanied by drawings to describe the change. Such drawings will be referenced on the Change Order form; when the Change Order is signed by all parties, such drawings will become a part of the Contract Documents.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.3 – APPLICATIONS FOR PAYMENT

Add clause 9.3.1.3 as follows:

9.3.1.3 Until Substantial Completion, the Owner will pay ninety-five percent (95%) of the amount due the Contractor on account of progress payments.

9.4 – CERTIFICATES FOR PAYMENT

Add subparagraph 9.4.3 as follows:

9.4.3 The issuance of a Certificate for Payment to the Owner shall not relieve the Contractor of responsibility for faulty materials or workmanship or operate to release the Contractor or his surety from any obligations under the Contract.

Subparagraph 9.6.2 is amended and restated as follows:

9.6.2.1 Within seven (7) days after Owner pays Contractor for work performed by a subcontractor under this Contract, Contractor shall:

- A. Pay the subcontractor for the proportionate share of the total payment received from the Owner attributable to the work performed by the subcontractor; or
- B. Notify the Owner and subcontractor, in writing, of the Contractor's intention to withhold all or part of the subcontractor's payment with the reason for nonpayment.

9.6.2.2 Contractor shall pay interest to a subcontractor on all amounts the Contractor owes such subcontractor that remain unpaid after seven (7) days following the Contractor's receipt of payment from the Owner, except for amounts withheld as allowed in Section 9.6.2.1(A). Unless otherwise provided under the terms of this Contract, interest shall accrue at the rate of one percent per month.

9.6.2.3 Contractor shall include in each of its subcontracts with subcontractors a provision requiring each such subcontractor to include or otherwise be subject to the same payment and interest requirements in Sections 9.6.2.1 and 9.6.2.2 with respect to each lower-tier subcontractor.

9.6.2.4 Contractor shall provide Owner with its federal employer identification number, and if an individual, his or her social security number.

Delete subparagraph 9.6.7 in its entirety.

9.10 - FINAL COMPLETION & FINAL PAYMENT

Add subparagraphs 9.10.1.1 and 9.10.1.2 as follows:

9.10.1

.1 Written notice shall include certification that:

- .1 Contract Documents have been reviewed.
- .2 Work has been inspected for compliance with Contract Documents.
- .3 Work has been completed in accordance with Contract Documents and is ready for final inspection.
- .4 Equipment and systems have been tested in the presence of the Owner's representative and are operational.
- .5 All items on the "Substantial Completion Inspection List," as verified and amended by the Architect, have been corrected.
- .6 All specified close-out submittals have been made.

.2 Should Architect consider that Work is incomplete or defective:

- .1 Architect will make a complete inspection creating a punch list of incomplete or defective work and promptly notify the Contractor in writing of findings.
- .2 Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Architect that the Work is complete.
- .3 Architect will then re-inspect the Work. See Paragraph 3.2.4 of this document for related fees.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY (Supplement as follows)

10.2 – SAFETY OF PERSONS AND PROPERTY

Add subparagraph 10.2.8 as follows:

10.2.8 The Contractor shall brace, shore up, underpin, secure and protect as may be necessary, all parts of existing structures adjoining and in the vicinity of the site that may be affected in any way by excavating or other operations in connection with the execution of the Work in this Contract.

ARTICLE 11 - INSURANCE AND BONDS

11.1 – CONTRACTOR’S LIABILITY INSURANCE

Add subclause 11.1.1.4.1 as follows:

11.1.1.4.1 Certificate of Insurance must therefore evidence the elimination of "employee exclusion" clauses normally included.

Add clause 11.1.2.1 as follows:

11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be written for not less than the following limits:

- .1 Worker's Compensation:
 - .1 State: Statutory
 - .2 Applicable Federal (e.g., Longshoremen): Statutory
 - .3 Employer's Liability:
 - \$1,000,000 per Accident
 - \$1,000,000 Disease, Policy Limit
 - \$1,000,000 Disease, Each Employee
 - .2 Comprehensive or General Liability (including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):
 - .1 Bodily Injury:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
 - .2 Property Damage:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
 - .3 Products and Completed Operations to be maintained for two (2) years after final payment.
 - .4 Property Damage Liability Insurance shall provide for X, C, and U Coverage.
 - .5 Broad Form Property Damage Coverage shall include Completed Operations.

- .3 Contractual Liability:
 - .1 Bodily Injury:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
 - .2 Property Damage:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
- .4 Personal Injury, with Employee Exclusion deleted:
 - \$1,000,000 Aggregate
- .5 Business Auto Liability (including owned, non-owned and hired vehicles):
 - .1 Bodily Injury:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
 - .2 Property Damage:
 - \$1,000,000 Each Occurrence
 - \$1,000,000 Aggregate
- .6 If the General Liability coverage are provided by a Commercial Liability policy, the:
 - .1 General Aggregate shall not be less than \$1,000,000 and it shall apply, in total, to this project only.
 - .2 Fire Damage Limit shall not be less than \$1,000,000 on any one Fire.
 - .3 Medical Expense Limit shall not be less than \$1,000,000 on any one person.
- .7 Umbrella Excess Liability
 - \$1,000,000 over primary insurance
 - \$1,000,000 retention for self-insured hazards each occurrence
- .8 Aircraft Liability (owned and non-owned) when Aircraft are used in the performance of the Contract:
 - .1 Limits are proposed by the Contractor for Owner's approval.

Supplement subparagraph 11.1.3 as follows:

11.1.3 ...Certificates shall be ACORD form 25S.

11.3 – PROPERTY INSURANCE

Supplement clause 11.3.1.1 as follows:

11.3.1.1

1. The Owner will not be responsible for fire, vandalism, or theft of Contractor's or Subcontractor's equipment or materials used in the development of the project.
2. All materials and supplies to be incorporated in the construction of proposed buildings shall become the property of the Owner as soon as they are delivered to the site and the value of all labor shall likewise become part of the property of the insured as soon as it is performed.
3. The Owner may purchase and maintain fire and extended coverage insurance on the buildings including all materials and supplies to be used in construction therewith. This insurance may be of the form which provides automatic protection for the Owner's interest in any addition, new buildings, or structures. This insurance shall be for the full insurable value of the buildings and contain a loss payable clause in favor of the Contractor and Owner jointly as their interest may appear.
4. The Contractor may, at his cost, maintain vandalism, malicious mischief and theft insurance coverage to protect his interest in the performance of his work during the course of construction should the Owner's policy not provide for this coverage.
5. Property Damage Insurance shall include protection for the "XCU" hazard which includes property damage due to collapse, explosion or undermining.

Add subclause 11.3.1.4.1 as follows:

11.3.1.4.1 The Contractor shall provide, or assure that subcontractors and suppliers provide, insurance coverage for portions of the Work stored off the site. If the Contractor requests payment for portions of the Work stored off-site, then an insurance certificate indicating the materials insured, insured value, storage location, and identifying the owner as the beneficiary (or insured) must accompany the payment request.

ARTICLE 14 – TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 – TERMINATION BY THE CONTRACTOR

The first line of subparagraph 14.1.1 is amended as follows:

14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of sixty (60) consecutive days ...

Subparagraph 14.1.2 is amended and restated as follows:

14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven (7) days written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed and costs incurred by reason of such termination.

14.4 – TERMINATION BY THE OWNER FOR CONVENIENCE

Subparagraph 14.4.3 is amended and restated as follows:

14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination.

ARTICLE 15 – CLAIMS AND DISPUTES

15.1 - CLAIMS

Subparagraphs 15.1.2, 15.1.3 and 15.1.4 are amended and restated as follows:

15.1.2 All claims, disputes, and other matters in question arising out of or relating to the Contract, including but not limited to, determinations for actual quantities and classifications of Unit Price Work, interpretations of the Contract, claims, disputes, and other matters relating to the acceptability of the Work and claims concerning changes in the Contract Price or Contract Times, shall be decided by the Circuit Court of the City of Bristol, Virginia. The Contractor first shall submit any claim it has to the Owner pursuant to Section 15.1.4 and fully exhaust the procedure thereunder before it can proceed with the procedures agreed to by the Contractor and the Owner, or if no agreement, then before it can proceed in the Circuit Court.

15.1.3 The Contractor shall carry on the work and maintain the progress schedule during any proceeding instituted to resolve a claim or dispute unless otherwise mutually agreed to in writing.

15.1.4 Contractor shall adhere to the following first step procedure for resolving disputes arising under the Contract:

- A. Should the Contractor have a contractual claim of any kind, whether for money or other relief, it shall submit to the Owner, in writing, a notice of claim at the time of the occurrence or at the beginning of the work on which the claim is based or within a reasonable time thereafter. The notice shall be delivered or mailed to the Architect and the Owner.
- B. The Contractor, after having given written notice of its claim, must submit the claim in writing no later than sixty (60) days after final payment by delivering or mailing the same to the Architect and to the Owner. For claims that are mailed, the postmarked date will be deemed to be the date of submission.
- C. The claim shall briefly state the relevant facts, including the date the claim arose, the nature of the claim, and the relief sought.
- D. Within seven (7) days of the Contractor's submission of the claim, the Owner will schedule a hearing that it would hold within sixty (60) days of the date of the submission of the claim.

- E. At the hearing, the Contractor will be entitled to put on evidence in support of its claim. The members of the Owner's members, the Owner's attorney, and the Architect will be entitled to question any witnesses. Should the Owner, its agents, representatives, or attorney call any witnesses, the Contractor will have the opportunity to cross-examine any witnesses.
- F. The Owner will render a final decision within fourteen (14) days after the hearing, a copy of which will be mailed to the Contractor. In reaching its decision the Owner may request the assistance of the Architect.
- G. The decision of the Owner shall be final and conclusive unless the Contractor appeals the decision of the Owner within six (6) months of the date of the decision to the Circuit Court. Upon request, the Architect may assist Owner in making a final decision.

15.2 – INITIAL DECISION (Paragraph Deleted)

Paragraph 15.2 and subparagraphs 15.2.1 through 15.2.8 thereunder are deleted.

15.4.4 – CONSOLIDATION OR JOINDER (Paragraph Deleted)

Subparagraph 15.4.4 and subparagraphs 15.4.4.1 through 15.4.4.3 thereunder are deleted.

Add ARTICLE 16 as follows:

ARTICLE 16 - ENGINEERING AND LAYOUT

16.1 - VERIFICATION:

16.1.1: Except as otherwise provided, the Contractor shall furnish competent engineering services to execute the work in accordance with the Contract requirements. He shall verify the figures or existing improvements shown on the drawings before undertaking any construction work and shall be responsible for the accuracy of the finished work.

16.1.2: The Owner has established, or will establish, such general reference points as will, in his judgment, enable the Contractor to proceed with the work. If the Contractor finds that any previously established reference points have been inaccurately indicated, he shall promptly notify the Architect.

16.1.3: The Contractor shall protect and preserve the established bench marks and monuments and shall make no changes in locations without the written approval of the Architect. Any such bench marks and documents that may be lost or destroyed or which require shifting because of necessary changes in grades or locations shall be replaced and accurately located by the Contractor subject to prior approval by the Architect.

Add ARTICLE 17 as follows:

ARTICLE 17 - DOCUMENT EXPLANATION AND INSTRUCTIONS

17.1 - DETAIL DRAWINGS AND INSTRUCTIONS:

17.1.1: The drawings are intended to give the general character and scope of the work.

17.1.2: In case of conflict between small and large scale drawings, the large scale drawings shall govern. Where a portion of the work is detailed or drawn out and the remainder is indicated in outline, the parts detailed or drawn out shall apply also to all other like portions of the work. Unless noted otherwise where the word "similar" occurs on the drawings, 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 connection with other parts of the work.

17.2 - MEASUREMENTS AND DIMENSIONS

17.2.1: Before ordering any materials or doing any Work, each subcontractor shall verify all measurements at the building and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements indicated on the drawings. Where figures are given on the drawings, said figures shall be followed in preference to measurements obtained by scale.

17.3 - SPECIFICATIONS EXPLANATION

17.3.1: The Specifications have been partially "stream-lined" and some words and phrases have been intentionally omitted. Missing portions shall be supplied by inference as with notes on drawings.

17.3.2: The words "approved", "inspected", "directed", "selected", and similar words and phrases shall be presumed to be followed by "by the Architect". The words "satisfactory", "submitted", "reported", and similar words or phrases shall be presumed to be followed by "to Architect". Words like "install", "provide", "furnish", and "supply" shall be construed to include complete furnishing and installing or constructing unless modified by additional information. Instructions, directions, and requirements as specified shall be considered to be followed by the phrase "unless otherwise specified or indicated".

17.3.3: The following shall apply to and be made a part of each division of the Specifications:

- .1 General - Separation of the specifications into Division and Sections is for convenience only and is not intended to establish limits of work. Consult Index to be certain that set of Documents is complete.

17.4 - STANDARDS

17.4.1: Reference to standards, codes, specifications, recommendations and regulations refer to the latest edition or printing prior to the date and issuance of the Specifications.

17.4.2: Applicable portions of standards listed that are not in conflict with Contract Documents are hereby made a part of the Specifications. Modifications or exceptions to standards shall be considered as amendments, and unmodified portions shall remain in full effect. In cases of discrepancies between the specifications and standards listed, the requirements of the specifications shall govern. In cases of discrepancies between standards, the most stringent requirements will govern.

17.5 - OR EQUAL PROVISIONS, SUBSTITUTIONS

17.5.1: Manufacturer's names and brands are mentioned in the sections of the Specifications which follow in order to establish the type, quality, dimensions, and function of the items specified and are not intended to limit the Specifications to any one product.

17.5.2: Request for substitutions:

- .1 Within 30 days after execution of the Contract or ten days prior to bid date, Architect will consider formal requests from Contractor for substitution of products in place of those specified. Requests received after that time will not be considered.
- .2 Submit four (4) copies of request for substitution. Include in request:
 - .1 Complete data substantiating compliance of proposed substitution with Contract Documents
 - .2 For products:
 - .1 Product identification, including manufacturer's name and address.
 - .2 Manufacturer's literature setting forth product description performance and test data, reference standards and range of manufacturer's colors if item requires color selection.
 - .3 Samples.
 - .4 Name and address of similar projects on which product was used, and date of installation.
 - .3 Detailed description of proposed construction methods and drawings illustrating methods.
 - .4 Itemized comparison of proposed substitution with product or method specified.
 - .5 Data relating to changes in construction schedule.
 - .6 Relation to separate contracts.
 - .7 Accurate cost data on proposed substitution in comparison with product or method specified.
- .3 In making request for substitution, bidder/contractor represents:
 - .1 He has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
 - .2 He will provide the same guarantee for substitutions as for product or method specified.

.3 He will coordinate installation of accepted substitution into work, making such changes as may be required for work to complete.

.4 He waives all claims for additional cost related to substitution which consequently become apparent.

.5 Cost data is complete and includes all related costs under his contract, but excludes:

.1 Costs under separate contracts.

.2 Architect's redesign.

.4 Substitutions will not be considered if:

.1 They are indicated or implied on shop drawings or project data submittals without formal request submitted or specified.

.2 Acceptance will require substantial revision of Contract Documents.

.5 Substitutions will be considered after deadline only under the following conditions:

.1 The specified product is no longer manufactured.

.2 The specified product is not available due to a strike.

.3 If a product of lesser quality or lower cost is proposed for use, a credit based on manufacturer's signed quotations will be required.

17.5.3: If any proposed substitution involves changes or modifications to related or adjacent work, then approval of such changes or modifications shall be a condition to approval of the substitution. Detailed drawings and other necessary information to show the proposed modifications shall be submitted to the Architect. All work in this connection shall be done without additional cost to the Owner.

17.6 - MANUFACTURER'S DIRECTIONS

17.6.1: Apply, install, connect, erect, clean, and condition manufactured items or materials according to the recommendations of the manufacturer when such recommendations are not in conflict with the Contract Documents. Furnish copies of manufacturer's recommendations to Architect, on request, before proceeding with the work.

17.7 - MATERIALS AND EQUIPMENT LIST

17.7.1: Within thirty (30) days after date of award of the Contract, the Contractor shall submit for approval two (2) copies of a complete list of materials and equipment proposed for use in connection with the project. Partial lists from time to time will not be considered. In the event these requirements are not complied with, the Architect reserves the right to assume that there will be no change in materials and equipment from those specified.

17.7.2: After any material or piece of equipment has been approved, no change in brand or make will be considered unless satisfactory evidence is presented by the manufacturer stating that the material or equipment no longer is available or delivered material has been rejected, and the substitution of a suitable material is urgent or that other conditions have become apparent which indicate that approval of such other materials is in the best interest of the Owner.

17.8.- GENERAL SCOPE OF THE WORK

17.8.1: See A.I.A. General Conditions Article 1.2.

17.8.2: See A.I.A. General Conditions Article 3.4.

18.8.3: Scope: The work of each division includes the work required by each Specification division and Section heading unless specifically noted otherwise under "Related Work Specified Elsewhere".

17.8.4: Related Work Specified Elsewhere: General Conditions, Supplements to General Conditions, Special Conditions, and Temporary Work are specified elsewhere; however, these provisions of the Contract Documents are a part of and applicable to each Division and Section of the Specifications.

17.9 - DELIVERY AND STORAGE

17.9.1: Deliveries and unloading shall be timed to prevent traffic congestion and blocking of access and scheduled to avoid interferences and delays in work. Provide for continuity of supply to avoid change of supplier of materials during any phase of the work. Sufficient quantities for completion of a phase shall be on site before that phase is started.

17.9.2: Materials shall be packaged and handled to prevent damage during delivery, and stored at designated locations to avoid interference with work. Arrange materials in order of intended use. Prevent damage to stored materials with suitable sheds or coverings.

17.9.3: Storage of equipment and materials shall be limited to those exterior spaces indicated as being within the construction limits.

Add ARTICLE 18 as follows:

ARTICLE 18 - COORDINATION AND COOPERATION

18.1.1: The Contractor shall see that all subcontractors coordinate their work with adjacent work and cooperate with other trades so as to facilitate general progress of the Work in accordance with the intent of the Contract Documents. Each trade shall afford other trades every reasonable opportunity for installation for their work and for storage of their materials. The Contractor shall be responsible for methods and systems and for the work and for coordination of the work of his subcontractors. However, in the performance of the work, the location and placement of mechanical and electrical work shall be generally as follows.

18.1.2: Plumbing, Heating, Ventilating and Air conditioning work requiring the sloping or grading of piping or duct work shall take precedence over other work which does not require definite grades or slopes.

18.1.3: The location of electrical conduit is to be determined after the location of mechanical utilities and shall be concealed within the structural space. Ungraded piping or conduit shall be run in proper direction and offset as required to clear other work. Horizontal conduit lines, generally, shall not extend below the bottom of structural elements without written consent of the Architect and then only by definite location.

18.1.4: The Architect may require the General Contractor to remove and rework, or relocate, uncoordinated work to facilitate the proper function, installation and location of the work.

18.2 - CONTRACTS AND WORK LET SEPARATELY

18.2.1: Equipment contractors shall furnish to the Contractor all parts, supports, assemblies, etc., that are to be built into the structure as the Work progresses for installation by the Contractor and the Contractor shall include the installation of these built-in items as part of his work. Equipment contractors shall also furnish complete rough-in drawings.

18.2.2: The Contractor in conjunction with the equipment contractors shall set up a delivery schedule of all items of equipment, allowing ample time to properly coordinate and expedite the delivery of all equipment items so as not to delay any portion of the work.

Add ARTICLE 19 as follows:

ARTICLE 19 - MAINTENANCE

19.1: The Contractor shall maintain the Work from beginning of construction operations until final acceptance of the project. Maintenance shall constitute continuous and effective work prosecuted day by day with adequate equipment and forces to the end that the work is kept in satisfactory conditions at all times.

ARTICLE 20 – REPRODUCTION OF PLANS AND SPECIFICATIONS

20.1: The Contractor shall bear cost of reproduction of plans and specifications needed for construction.

END OF SECTION 00811

SECTION 01100
SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:

- 1. Project information.
- 2. Work covered by Contract Documents.
- 3. Work under separate contracts.
- 4. Owner-furnished products.
- 5. Specification and drawing conventions.

- B. Related Section:

- 1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: Phase 1 Renovations, Richlands Branch Library

- 1. Project Location: 102 Suffolk Avenue, Richlands VA

- B. Client: Tazewell County Public Library Board of Trustees

- 1. Owner's Representative: Regina Roberts

- C. Architect: Huber Architects, P.C..

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and consists of the following:

Exterior renovations including painting of all wood, replacement of windows as shown on drawings, and repairs to concealed guttering.

- B. Type of Contract

1. Project will be constructed under a single prime contract.

1.5 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01100

SECTION 01250
SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - 2. Divisions 02 through 16 Sections for specific requirements and limitations for substitutions.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within ten calendar days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or ten calendar days of receipt of additional information or documentation, whichever is later.

- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
- b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

- 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- b. Requested substitution will not adversely affect Contractor's construction schedule.
- c. Requested substitution has received necessary approvals of authorities having jurisdiction.
- d. Requested substitution is compatible with other portions of the Work.
- e. Requested substitution has been coordinated with other portions of the Work.
- f. Requested substitution provides specified warranty.

- B. Substitutions for Convenience: Architect will consider requests for substitution if received within 30 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.

- 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation

services, increased cost of other construction by Owner, and similar considerations.

- b. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- c. Requested substitution will not adversely affect Contractor's construction schedule.
- d. Requested substitution has received necessary approvals of authorities having jurisdiction.
- e. Requested substitution is compatible with other portions of the Work.
- f. Requested substitution has been coordinated with other portions of the Work.
- g. Requested substitution provides specified warranty.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01250

SECTION 01260
CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

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

1.4 CHANGE ORDER PROCEDURES

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

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01260

SECTION 01290
PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections:
 - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.
 - 3. Division 01 Section "Submittal Procedures" for administrative requirements governing the preparation and submittal of the submittal schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule. Cost-loaded Critical Path Method Schedule may serve to satisfy requirements for the schedule of values.
 - 1. Correlate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Architect at earliest possible date but no later than ten days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Contractor's name and address.
 - d. Date of submittal.
 2. Arrange schedule of values consistent with format of AIA Document G703 .
 3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of Contract Sum.
 - a. Include separate line items under Contractor and principal subcontracts for project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
 5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
 7. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
 8. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.

9. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
10. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement. **Expectation is that there will be three approximately equal progress payment requests, with a 10% retainage subtracted from each pay requested. Retainage will be paid at completion of work.**
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.

1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 3. Provide summary documentation for stored materials indicating the following:
 - a. Materials previously stored and included in previous Applications for Payment.
 - b. Work completed for this Application utilizing previously stored materials.
 - c. Additional materials stored with this Application.
 - d. Total materials remaining stored, including materials with this Application.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Copies of building permits.
 5. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 6. Certificates of insurance and insurance policies.
 7. Performance and payment bonds.
 8. Data needed to acquire Owner's insurance.
- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01290

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Sections:
 - 1. Division 01 Section "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service: Library shall provide and pay for water used by all entities for construction operations; washing of vehicles on site is not permitted.
- C. Electric Power Service: Contractor may use power already available at site; contractor to furnish extension cords as needed.

1.4 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion and Sediment Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
 - 1. Waste management plan.

1.5 QUALITY ASSURANCE

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

1.6 PROJECT CONDITIONS

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

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Not required..
- B. Common-Use Field Office: Not required.
- C. Toilet facilities: Provide temporary toilet facilities for use of construction workers.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

END OF SECTION 01500

SECTION 01600
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Sections:
 - 1. Division 01 Section "Substitution Procedures" for requests for substitutions.
- C. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- D. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Refer to Divisions 02 through 16. Sections for specific content requirements and particular requirements for submitting special warranties.

- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 - 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
 - 1. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as

performance, weight, size, durability, visual effect, and specific features and requirements indicated.

3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01600

SECTION 01770
CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
- B. Related Sections:
 - 1. Division 01 Section "Execution" for progress cleaning of Project site.
 - 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 3. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 4. Divisions 02 through 16 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 4. Complete startup testing of systems.
 - 5. Submit test/adjust/balance records.
 - 6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 1. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 2. Submit pest-control final inspection report and warranty.
 3. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 1. Organize list of spaces in sequential order, starting with exterior areas first.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Contractor.
 - d. Page number.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark 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 Installer.

3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

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

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.

- f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- g. Sweep concrete floors broom clean in unoccupied spaces.
- h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
- i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- j. Remove labels that are not permanent.
- k. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates.
- l. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- m. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
- n. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- o. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- p. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter upon inspection.
 - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report upon completion of cleaning.
- q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- r. Leave Project clean and ready for occupancy.

- C. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls."

END OF SECTION 01770

SECTION 07620
GUTTER FLASHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 PERFORMANCE REQUIREMENTS

- A. General: Flashing as indicated shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed flashing shall not rattle, leak, or loosen, and shall remain watertight.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
- B. Samples for Initial Selection: For each type of flashing, trim, and accessory indicated with factory-applied color finishes involving color selection.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not store flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage.
- B. Protect strippable protective covering on adhesive surface

PART 2 - PRODUCTS

2.1 ELASTOMERIC METAL-FACED FLASHING

- A. Self-stick roll flashing equal to MFM Peel & Seal
 1. Thickness: 45 mils
 2. Composition: Laminate of aluminum foil (gray), cross-linked polymer films and rubberized asphalt with self-adhesive back. 100 SF cartons; secure width to avoid linear seams in gutters.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
 - 3. Remove any dirt, rust, or other unstable surface conditions prior to installing self-adhesive elastomeric flashing.
- B. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. General: Adhere flashing securely in place. Use rubber roller to firmly adhere new flashing to existing metal gutter liner. Cover entire surface of existing concealed gutter.
 - 1. Install flashing true to line and levels of existing gutter. Provide uniform, neat seams with minimum 6" lap. Flashing to be entire width of existing gutter material; minimize end laps.
 - 2. Install flashing to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before cutting.
 - 3. Apply when ambient temperature exceeds 55 degrees and gutter is dry without expectation of precipitation during application.
 - 4. Prime existing metal with manufacturer-recommended primer.

END OF SECTION 07620

SECTION 07920
JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Silicone joint sealants.
 - 2. Latex joint sealants.

1.3 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.
- C. Warranties: Sample of special warranties.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.

1.5 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.6 WARRANTY

- A. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
 - 1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. **Compatibility:** Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. **Liquid-Applied Joint Sealants:** Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
 - 1. **Suitability for Immersion in Liquids.** Where sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- C. **Stain-Test-Response Characteristics:** Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- D. **Suitability for Contact with Food:** Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- E. **Colors of Exposed Joint Sealants:** As selected by Owner from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

- A. **Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant:** ASTM C 920, Type S, Grade NS, Class 50, for Use NT.

2.3 LATEX JOINT SEALANTS

- A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

2.4 JOINT SEALANT BACKING

- A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), Type O (open-cell material) or either of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

2.5 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.
 - b. Masonry.
 - c. Unglazed surfaces of ceramic tile.
 - d. Exterior insulation and finish systems.
 3. Remove laitance and form-release agents from concrete.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 1. Do not leave gaps between ends of sealant backings.
 2. Do not stretch, twist, puncture, or tear sealant backings.
 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 1. Place sealants so they directly contact and fully wet joint substrates.
 2. Completely fill recesses in each joint configuration.
 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs

below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.

3.4 FIELD QUALITY CONTROL

- A. Evaluation of Field-Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.7 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces
 1. Joint Locations:
 - a. Perimeter joints between materials listed above and frames of windows
 2. Silicone Joint Sealant: Single component, nonsag, neutral curing, Class 50
 3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors

- B. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal nontraffic surfaces
1. Joint Locations:
 - a. Perimeter joints between new window inserts and adjacent original window frames and trim.
 2. Joint Sealant: Latex.
 3. Joint-Sealant Color: As selected by Owner from manufacturer's full range of colors

END OF SECTION

SECTION 08520
WOOD WINDOWS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes replacement of existing windows with operable and fixed wood-framed windows of the following type:
 - 1. Aluminum clad wood replacement windows, double-hung and fixed.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Provide wood windows capable of complying with performance requirements indicated, based on testing manufacturer's windows that are representative of those specified, and that are of test size indicated below:
 - 1. Size required by AAMA/WDMA 101/I.S.2/NAFS for gateway performance.
 - 2. Size indicated on Drawings.

- B. Structural Performance: Provide wood windows capable of withstanding the effects of the following loads based on testing units representative of those indicated for Project that pass AAMA/WDMA 101/I.S.2/NAFS, Uniform Load Structural Test:
 - 1. Design Wind Loads: Determine design wind loads applicable to Project from basic wind speed indicated in miles per hour at 33 feet above grade, according to ASCE 7, Section 6.5, "Method 2-Analytical Procedure," based on mean roof heights above grade indicated on Drawings.
 - a. Basic Wind Speed: 85 mph.
 - 2. Deflection: Design glass framing system to limit lateral deflections of glass edges to less than 1/175 of glass-edge length or 3/4 inch, whichever is less, at design pressure based on testing performed according to AAMA/WDMA 101/I.S.2/NAFS, Uniform Load Deflection Test or structural computations.

- C. Windborne-Debris Resistance: Provide glazed windows capable of resisting impact from windborne debris, based on the pass/fail criteria as determined from testing

glazed windows identical to those specified, according to ASTM E 1886 and testing information in ASTM E 1996 and requirements of authorities having jurisdiction.

1.4 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, fabrication methods, dimensions of individual components and profiles, hardware, finishes, and operating instructions for each type of wood window indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, attachments to other work, operational clearances, installation details, and the following:
 - 1. Joinery details.
 - 2. Expansion provisions.
 - 3. Flashing and drainage details.
 - 4. Weather-stripping details.
 - 5. Thermal-break details.
 - 6. Glazing details.
 - 7. Window cleaning provisions.
 - 8. For installed products indicated to comply with design loads, include structural analysis data prepared by or under the supervision of a qualified professional engineer detailing fabrication and assembly of wood windows and used to determine the following:
 - a. Structural test pressures and design pressures from basic wind speeds indicated.
 - b. Deflection limitations of glass framing systems.
- C. Warranty: Special warranty specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An installer acceptable to wood window manufacturer for installation of units required for this Project.
 - 1. Installer's responsibilities include providing professional engineering services needed to assume engineering responsibility.
 - 2. Engineering Responsibility: Preparation of data for wood windows, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- B. Manufacturer Qualifications: A manufacturer capable of fabricating wood windows that meet or exceed performance requirements indicated and of documenting this performance by inclusion in lists and by labels, test reports, and calculations.
- C. Source Limitations: Obtain wood windows through one source from a single manufacturer.

- D. Product Options: Information on Drawings and in Specifications establishes requirements for wood windows' aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including preconstruction testing, field testing, and in-service performance.
- E. Product Options: Drawings indicate size, profiles, and dimensional requirements of wood windows and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements." Do not modify size and dimensional requirements.
 - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- F. Fenestration Standard: Comply with AAMA/WDMA 101/I.S.2/NAFS, "North American Fenestration Standard Voluntary Performance Specification for Windows, Skylights and Glass Doors," for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
 - 1. Provide WDMA-certified wood windows with an attached label.
- G. Glazing Publications: Comply with published recommendations of glass manufacturers and with GANA's "Glazing Manual" unless more stringent requirements are indicated.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify wood window openings by field measurements before fabrication and indicate measurements on Shop Drawings. Window dimensions to match existing masonry openings with ¼ " shim space entire perimeter.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace wood windows that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.
 - b. Structural failures including excessive deflection, water leakage, air infiltration, or condensation.
 - c. Faulty operation of movable sash and hardware.
 - d. Deterioration of wood, metals, vinyl, other materials, and finishes beyond normal weathering.
 - e. Failure of insulating glass.

2. Warranty Period:

- a. Window: Ten years from date of Substantial Completion.
- b. Glazing: 10 years from date of Substantial Completion.
- c. Metal Finish: Ten years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:

1. Aluminum-Clad Wood Windows:

- a. EAGLE Window & Door, Inc.; an American Architectural Products Corporation Company.
- b. Kolbe & Kolbe Millwork Co., Inc.
- c. Marvin Windows and Doors (Ultimate Double-Hung Insert G2 basis of design)
- d. Pella Corporation.

3. MATERIALS

- B. Wood: Clear ponderosa pine or another suitable fine-grained lumber; kiln dried to a moisture content of 6 to 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/32 inch deep by 2 inches wide; water-repellent preservative treated.

- C. Aluminum Extrusions and Rolled Aluminum for Cladding: Manufacturer's standard formed sheet or extruded-aluminum cladding, mechanically bonded to exterior exposed wood members. Provide aluminum alloy and temper recommended by wood window manufacturer for strength, corrosion resistance, and application of required finish, but not less than 22,000-psi ultimate tensile strength, and not less than 16,000-psi minimum yield strength.

1. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
2. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
3. Baked-Enamel Finish for Extrusions and Sheet: Manufacturer's standard baked enamel complying with AAMA 2603 and paint manufacturer's written specifications for cleaning, conversion coating, and painting.
 - a. Color: White.
4. Baked-Enamel Finish for Coil: Manufacturer's standard baked enamel complying with AAMA 620 and paint manufacturer's written specifications for cleaning, conversion coating, and painting.

a. Color: White.

- D. Wood Trim and Glazing Stops: Material and finish to match frame members.
- E. Sill covers: Where new window insert does not cover existing sill, install .050 break metal with finish to match window.
- F. Fasteners: Aluminum, nonmagnetic stainless steel, epoxy adhesive, or other materials warranted by manufacturer to be noncorrosive and compatible with wood window members, cladding, trim, hardware, anchors, and other components.
 - 1. Exposed Fasteners: Unless unavoidable for applying hardware, do not use exposed fasteners. For application of hardware, use fasteners that match finish of member or hardware being fastened, as appropriate.
- G. Anchors, Clips, and Accessories: Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions; provide sufficient strength to withstand design pressure indicated.
- H. Reinforcing Members: Aluminum, or nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions; provide sufficient strength to withstand design pressure indicated.
- I. Compression-Type Weather Stripping: Provide compressible weather stripping designed for permanently resilient sealing under bumper or wiper action and for complete concealment when wood window is closed.
 - 1. Weather-Stripping Material: Elastomeric cellular preformed gaskets complying with ASTM C 509.
 - 2. Weather-Stripping Material: Dense elastomeric gaskets complying with ASTM C 864.
 - 3. Weather-Stripping Material: Manufacturer's standard system and materials complying with AAMA/WDMA 101/I.S.2/NAFS.
- J. Replaceable Weather Seals: Comply with AAMA 701/702.

2.2 WINDOW

- A. Window Type: Double-hung and fixed
- B. AAMA/WDMA Performance Requirements: Provide wood windows of performance indicated that comply with AAMA/WDMA 101/I.S.2/NAFS.
 - 1. Performance Class and Grade: LC 30.
- C. Condensation-Resistance Factor (CRF): Provide wood windows tested for thermal performance according to AAMA 1503, showing a CRF of 52.

- D. Thermal Transmittance: Provide wood windows with a whole-window, U-factor maximum indicated at 15-mph exterior wind velocity and winter condition temperatures when tested according to AAMA 1503.

- 1. U-Factor: 0.35 Btu/sq. ft. x h x deg F or less.

2.3 GLAZING

- A. Glass: Clear, insulating-glass units, with low-E coating pyrolytic on second surface or sputtered on second or third surface, complying with Division 08 Section "Glazing."
- B. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal .

2.4 HARDWARE

- A. General: Provide manufacturer's standard hardware fabricated from aluminum, stainless steel, carbon steel complying with AAMA 907, or other corrosion-resistant material compatible with wood and aluminum cladding; designed to smoothly operate, tightly close, and securely lock wood windows, and sized to accommodate sash or ventilator weight and dimensions. Do not use aluminum in frictional contact with other metals. Where exposed, provide extruded, cast, or wrought aluminum.

2.5 FABRICATION

- A. Fabricate wood windows in sizes indicated. Include a complete system for assembling components and anchoring windows.
- B. Fabricate wood windows that are reglazable without dismantling sash or ventilator framing.
- C. Weather Stripping: Provide full-perimeter weather stripping for each operable sash and ventilator, unless otherwise indicated.
- D. Factory machine windows for openings and for hardware that is not surface applied.
- E. Factory-Glazed Fabrication: Except for light sizes in excess of 100 united inches, glaze wood windows in the factory where practical and possible for applications indicated. Comply with requirements in Division 08 Section "Glazing" and with AAMA/WDMA 101/I.S.2/NAFS.
- F. Glazing Stops: Provide nailed or snap-on glazing stops coordinated with Division 08 Section "Glazing" and glazing system indicated. Provide glazing stops to match sash and ventilator frames.
 - 1. Clear pine head and seat boards.
 - 2. Top and bottom plywood platforms.
 - 3. Exterior head and sill casings and trim.

- 4. Support brackets.
- G. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation. Allow for scribing, trimming, and fitting at Project site.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work. Verify rough opening dimensions, levelness of sill plate, and operational clearances. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure a coordinated, weathertight window installation.
 - 1. Wood Frame Walls: Dry, clean, sound, well nailed, free of voids, and without offsets at joints. Ensure that nail heads are driven flush with surfaces in opening and within 3 inches of opening.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 REMOVAL OF EXISTING WINDOWS

- A. Remove existing windows, including stops and trim as needed to install new windows. Remove only as many windows as can be replaced in same day.
- B. Dispose of existing windows as directed by Library.

3.2 INSTALLATION

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing windows, hardware, accessories, and other components.
- B. Install windows level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- C. Set sill members in bed of sealant or with gaskets, as indicated, for weathertight construction.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

3.3 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust operating sashes and ventilators, screens, hardware, and accessories for a tight fit at contact points and weather stripping for smooth operation and weathertight closure. Lubricate hardware and moving parts.
- B. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- C. Clean factory-glazed glass immediately after installing windows. Comply with manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- D. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.
- E. Protect window surfaces from contact with contaminating substances resulting from construction operations. In addition, monitor window surfaces adjacent to and below exterior concrete and masonry surfaces during construction for presence of dirt, scum, alkaline deposits, stains, or other contaminants. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written recommendations.

END OF SECTION 08520

SECTION 09900

PAINTING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and field application of paints and primers.

- C. Work includes, but is not limited to:
 - 1. Painting and finishing of exterior exposed items and surfaces including surface preparation and priming. .
 - 2. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.
 - 3. Where items or surfaces are not specifically mentioned, paint the same as similar adjacent materials or areas. If color or finish is not designated, Architect will select these from standard colors or finishes available.
 - 4. Paint exposed surfaces whether or not colors are designated in schedules, except where a surface or material is specifically indicated not to be painted or to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
 - 5. Painting includes field painting exposed-to-view bare and covered pipes including sprinkler lines, and ducts (including color coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment except as specified in Division 16. Painting is not required in unassigned areas.

1.2 REFERENCES

- A. ASTM D16 - Terminology Relating to Paint, Varnish, Lacquer, and Related Products.

- B. ASTM D823-95 Standard Practices for Producing Films of Uniform Thickness of Paint, Varnish, and Related Products.
- C. ASTM D5150-92 (1997)e1 Standard Test Method for Hiding Power of Architectural Paints Applied by Roller.
- D. ASTM D3276-96 Standard Guide for Painting Inspectors- (metal substrates).

1.3 DEFINITIONS

- A. Conform to ASTM D16 for interpretation of terms used in this section.

1.4 SUBMITTALS

- A. Product Data: Submit data on all finishing products. Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use.
- B. Samples: Provide a listing of material and application for each coat of each finish sample. Submit samples for Architect's review of finish color and texture. Submit two paper chip samples, illustrating range of colors and textures available for each surface finishing product scheduled.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

1.6 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this section with minimum five years documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Do not apply exterior coatings during rain or snow when relative humidity is outside the humidity ranges, or moisture content of surfaces exceed those required by the paint product manufacturer.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.

1.9 EXTRA MATERIALS

- A. Furnish extra materials described below that are from same production run (batch mix) as materials applied and that are packaged for storage and identified with labels describing contents.

1. Quantity: Furnish an additional 5 percent, but not less than 1 gallon of each material and color applied.

PART 2 PRODUCTS

2.1 PAINTS AND COATINGS

- A. Provide materials as manufactured by Benjamin Moore, Sherwin-Williams, or PPG as specified in the schedule below.

2.2 SCHEDULE

- A. Exterior Ferrous Metal: Provide the following finish systems over exterior ferrous metal. Primer is not required on shop-primed items.
 1. Semi-gloss Alkyd-Enamel Finish: 2 finish coats over a rust-inhibitive primer.
 - a. Primer: Rust-inhibitive metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils (0.038 mm).
 - b. First and Second Coats: semi-gloss, exterior, alkyd enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 3.4 mils (0.086 mm).
- B. Exterior millwork and siding: Provide the following finish system over millwork and siding.

1. Semigloss, Exterior Latex Finish: Two finish coats over an exterior latex primer.
 - a. Primer: Exterior latex matching topcoat applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils (0.038 mm)
 - b. Semigloss, Exterior Latex (gloss Level 5)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Applicator must examine areas and conditions under which painting work is to be applied and notify Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Applicator. Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within any particular area.
- B. Test shop applied primer for compatibility with subsequent cover materials.
- C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below 8%.

3.2 PREPARATION

- A. Surface Appurtenances: Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.

- B. Surfaces: Correct defects and clean surfaces that affect work of this section. Remove or repair existing coatings that exhibit surface defects. Seal knots, fill countersunk bolts and sand smooth. Thoroughly clean all existing painted wood surfaces, scrape any loose paint. Sand to remove any dirt or mildew from bare wood, and prime.
- C. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- E. Uncoated Steel and Iron Surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by wire brushing or blasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.

3.3 APPLICATION

- A. Spray painting will be permitted wherever practical; however, excess thinning will not be permitted and complete surface coverage shall be equal to that of first class brush work. Do not spray paint concrete block unless it is immediately back-rolled.
- B. Do all touch-up and clean-up at the completion of this work to leave all surfaces in a finished condition.
- C. Where exposed, painting contractor shall paint all ducts, piping, conduit and mechanical and electrical equipment without factory finish, including those in mechanical and electrical rooms.
- D. Visible surfaces on interior of ducts behind louvers, diffusers, registers and grilles shall be primed and then painted with one coat of flat black metal enamel.
- E. Belt guards and other protective guards on equipment shall be painted with two coats of safety yellow metal enamel.

- F. Insulated pipes and ducts with paper or canvas jacket shall be painted with one coat of paint, and insulated surfaces with aluminum foil jacket shall be painted with one coat of Zinc Chromate Primer prior to two coats of finish paint. Armaflex type insulation on exposed pipes shall be painted with two coats of latex base paint tinted to match background color.
- G. Mechanical equipment surfaces with asphalt or bitumen coating shall be sealed with an approved asphalt sealer and painted with two coats of metal primer.
- H. The Architect shall have the right to select in addition to scheduled colors, deep, accent colors for one or more walls, bulkheads, columns, or other features in any of the spaces on the project, up to 500 sq ft of area.
- I. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- J. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.
- K. Sand wood and metal surfaces lightly between coats to achieve required finish.
- L. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior applying next coat.
- M. Paint front and back sides of access panels, and removable or hinged covers.
- N. Protect work of other trades, whether being coated or not, against damage from coating

3.4 CLEANING

- A. Collect waste material that may constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.5 SCHEDULE - COLORS

A.

1. Exterior colors to match existing.

END OF SECTION 09900