STATE OF NEW HAMPSHIRE DEPARTMENT OF NATURAL AND CULTURAL RESOURCES

172 Pembroke Road Concord, NH 03302-1856 Tel. (603) 271-2606 Fax (603) 271-2629

PROJECT MANUAL

Project No.: ARP 2412

Wentworth-Coolidge Historic Site

Siding & Painting Renovations

Portsmouth, New Hampshire

May 1, 2024

TABLE OF CONTENTS

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

Section 00 01 10Table of ContentsSection 00 11 16Invitation to BidSection 00 21 13Instructions to BiddersSection 00 41 00Bid Proposal FormSection 00 72 00General ConditionsSection 00 73 00Supplementary Conditions for Federally Funded ProjectsSample Application and Certificate for Payment (AIA G702-1983)Sample Continuation Sheet for Application for Payment (AIA G703-1983)Sample State Building Permit Application

DIVISION 01 - GENERAL REQUIREMENTS

Section 01 10 00	Summary
Section 01 20 00	Price and Payment Procedures
Section 01 25 00	Substitution Procedures
Section 01 26 00	Contract Modification Procedures
Section 01 30 00	Administrative Requirements
Section 01 35 91	Historic Treatment Procedures
Section 01 40 00	Quality Requirements
Section 01 50 00	Temporary Facilities and Controls
Section 01 60 00	Product Requirements
Section 01 70 00	Execution and Closeout Requirements

DIVISION 02 – EXISTING CONDITIONS

Section 02 41 19 Selective Demolition

DIVISION 06 - WOOD AND PLASTIC AND COMPOSITES

Section 06 03 12 Historic Wood Repair

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

Section 07 46 23 Wood Siding

DIVISION 08 – OPENINGS

Section 08 03 14 Historic Treatment of Wood Doors

DIVISION 09 - FINISHES

Section 09 03 91 Historic Treatment of Plain Painting END OF TABLE OF CONTENTS

SECTION 00 11 16

INVITATION TO BID

SIDING & PAINTING RENOVATIONS ARP 2412 WENTWORTH-COOLIDGE HISTORIC SITE

- <u>Sealed Bids</u>: Proposals for a General Contract for the Construction of the above project will be received by the <u>Owner until 2:00 P.M.</u> prevailing time on Wednesday, May 29, 2024, at which time they will be publicly opened and read aloud. All Bids shall be made out only on the form included in the specifications package and delivered in a sealed, labeled envelope marked: <u>Bid</u> <u>Proposal for the Wentworth-Coolidge Siding & Painting Renovations</u> and deposited in the bid box located at the reception desk of the Department of Natural and Cultural Resources (DNCR) offices at 172 Pembroke Road in Concord, NH. Bidders are invited to attend the Bid opening. Bids received after the above stated time and date will not be accepted.
- <u>Technical Questions</u>: Questions regarding the Bidding Documents shall be referred to: Department of Natural and Cultural Resources, 172 Pembroke Road, Concord New Hampshire, 03301, attention Scott Coruth, Architect, Telephone (603) 271-3676, email: scott.d.coruth@dncr.nh.gov.
- 3. <u>Documents</u>: Bidding Documents may be examined at the Design, Development and Maintenance Section of DNCR, 172 Pembroke Road, Concord NH and at the following locations:

Construction Summary of New Hampshire Inc.: 734 Chestnut Street, Manchester, New Hampshire 03104, (603) 627-8856, www.constructionsummary.com

AlphaGraphics: 933 Islington Street, Portsmouth, NH 03801, (800) 581-2712 or (603) 436-3030, www.planroom.agportsmouth.com

McGraw-Hill Construction: www.construction.com

Signature Digital Imaging: 45 Londonderry Turnpike, Hooksett, NH 03106, (603) 624-4025, www.signaturenh.com

Works in Progress: 20 Farrell Street, Suite 103, South Burlington, VT 05403. (800) 286 3633 or (802) 658-3797

New Hampshire Department of Administrative Services Bureau of Purchase and Property Website: http://admin.state.nh.us/purchasing/vendorresources.asp

New Hampshire State Parks Website: www.nhstateparks.org/news-events/improving-state-parks/rfps-projects.

4. <u>Qualifications</u>: All companies, corporations, and trade names bidding must be registered and have a Certificate of Existence from the New Hampshire Secretary of State's Office, Corporate Division (telephone 603-271-3244) in order to do business with the State of New Hampshire

- 5. <u>Bid Security</u>: A Bid Bond in the amount of five (5%) percent of the total amount of the lump sum bid price shall accompany each Bid Proposal in accordance with the Instructions to Bidders.
- 6. <u>Bonds</u>: Bidders shall be required to provide the Owner with financial responsibility as security for the completion of the contract in accordance with the plans, specifications, and contract documents, in the form of a Performance and Payment Bond in the amount of One Hundred (100%) Percent of the contract award, if the contract award is seventy-five thousand dollars (\$75,000) or more, the cost of which shall be a part of the Base Bid. The form of bond and the surety shall be acceptable to the Commissioner. No contract bond shall be required on contract awards of less than seventy-five thousand dollars (\$75,000).
- 7. <u>Inspection of Site</u>: A pre-bid tour of the existing building/site will be conducted by the Owner and Architect on May 13, 2024, at 10:00 a.m. Attendance by Bidders shall be considered mandatory.
- 8. <u>Awards</u>: In most cases the proposal submitted by the qualified bidder with the lowest base bid price shall be selected. However, the Department of Natural and Cultural Resources (DNCR) reserves the right to reject any or all proposals or advertise for new proposals as it judges to be in the best interest of the state.
- 9. <u>Regulations</u>: Bidders' attention is called to the fact that this Project is required to comply with, in addition to all other requirements of the Contract Documents, Equal Employment Opportunity Regulations.

END OF INVITATION TO BID

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

DEFINITIONS

- 1. Definitions set forth in the Specification Section 00 72 00 "General Conditions" or in other Contract Documents are applicable to the Bidding Documents.
- Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements include the Invitation to Bid, Instructions to Bidders, the Proposal Form and other sample Bidding and Contract forms.
- Addenda are written or graphic instruments issued prior to the execution of the Contract. They
 modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections.
 Addenda will become part of the Contract Documents when the Construction Contract is
 executed.
- 4. A Bid is a complete and properly signed Proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- 5. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or deducted for sums stated in Alternate Bids.
- 6. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in Work, as described in the Bidding Documents, is accepted.
- 7. A Unit Price is an amount stated in the Bid as a possible price per unit of measurement for materials, equipment, services, or a portion of the Work as described in Bidding Documents. The choice of using Unit Prices, or an alternative method of payment, for additional Work shall be left solely to the Owner's discretion.
- 8. A Bidder is a person or entity who submits a Bid.
- 9. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

BIDDER'S REPRESENTATION

1. Each Bidder by making his Bid represents that he has examined and understands the Bidding Documents, that the Bidding Documents are adequate to produce the required results, and that his Bid is in accordance therewith.

- 2. Each Bidder by making his Bid represents that he has visited and thoroughly inspected the existing building and site and familiarized himself with the local conditions under which the Work will be performed. Bidders are encouraged to make any and all inspections and tests as they feel necessary to achieve such familiarization prior to submitting Bids. Such inspections and tests shall be conducted at times mutually acceptable to the Owner and Bidder. Unless waived by the Owner, Bidders shall make repairs following their testing, as necessary to restore tested areas to pre-testing condition. Should a Bidder conclude that time or other factor(s) prohibits him from performing sufficient tests, he shall so notify the Owner, in writing, prior to the receipt of Bids.
- 3. The submission of a Bid will be construed as conclusive evidence that the Bidder has made all such examinations and inspections necessary for a complete and proper assessment of the Work required, and that the Bidder has included in his Bid a sum sufficient to cover the cost of all items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to a Bidder because of lack of such examination, inspection, or knowledge.
- 4. Each Bidder by making his Bid represents that he has assessed the conditions of the current construction marketplace, and verified that an adequate, experienced workforce is available to suitably man the Work of this Project and complete it in a timely fashion.
- 5. Each Bidder is assumed to have made himself familiar with all Federal, State and Local laws, ordinances, and regulations which in any manner affect those engaged in or upon the Work, or in any way affect those engaged or employed in the Work, and no plea of misunderstanding will be considered on account of ignorance thereof. The Contractor shall comply with all taxes, fees and assessments as levied by Federal, State and Local authorities.

BIDDING PROCEDURES

- 1. All Bids must be prepared on the Bid Proposal Form provided in the Specification and submitted in duplicate copies in accordance with the Notice to Bidders and Instructions to Bidders. Any bids submitted that are not on the official bid proposal forms will not be accepted.
- 2. A Bid shall be invalid if it has not been deposited at the designated location prior to the time and date in the Invitation to Bid, or prior to any extension thereof issued to the Bidders.
- 3. Each copy of a Bid shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the state of incorporation and have a corporate seal affixed.
- 4. Unless otherwise provided in any supplement to these Instructions to Bidders, no Bidder shall modify, withdraw, or cancel his Bid or any part thereof for Ninety (90) days after the time designated for the receipt of Bids in the Notice to Bidders.
- 5. Prior to the receipt of Bids, Addenda will be e-mailed, mailed, or delivered to each person or firm recorded by the Owner as having received the Bidding Documents and will be available for inspection wherever the Bidding Documents are kept available for that purpose.

BID SECURITY

1. Bid Security shall be made payable to the Owner, in the amount of not less than five percent (5%) of the Bid Sum and shall be attached to the Bid. Security shall be either a certified check made payable to the "Treasurer, State of New Hampshire," or Bid Bond issued by surety licensed to conduct business in the State of New Hampshire. The successful Bidder's security will be retained until he has signed the Agreement or Contract and furnished the required Performance and Payment Bonds and Certificates of Insurance. The Owner reserves the right to retain the Security of the next two lowest Bidders until the low Bidder enters into a Contract, or until Sixty (60) days after Bid opening, whichever occurs first. Bid Security of all other Bidders will be returned as soon as practicable. If any Bidder refuses to enter into an Agreement or Contract, the Owner will retain his Bid Security as liquidated damages, but not as a penalty.

EXAMINATION OF BIDDING DOCUMENTS

1. Each Bidder shall examine the Bidding Documents carefully and, not later than seven (7) days prior to the date of receipt of Bids, shall make written request to the Owner for interpretation or correction of any ambiguity, inconsistency, or error therein, which he may discover. Any interpretation or correction will be issued as an Addendum by the Owner. Only a written interpretation or correction by Addendum will be binding. No Bidder shall rely upon any interpretation or correction given by any other method. <u>Bidders are encouraged to direct any questions which may arise to the Owner</u>, in order to provide necessary clarifications <u>prior</u> to the receipt of Bids. Bidders shall promptly notify the Owner of any ambiguity, inconsistency, or error which they may discover upon examination of the Bidding Documents, or the existing building, site, or local conditions. Should a Bidder fail to notify the Owner of errors, discrepancies, or contradictions, he shall be <u>assumed to have bid the more expensive alternative</u>.

SUBSTITUTIONS

- Each Bidder represents that his Bid is based upon the materials and equipment described in the Bidding Documents. Where the language "or approved equal" is used in the Bidding Documents, it is intended to require that all such materials and equipment shall be submitted as required by these Instructions to Bidders and approved by the Owner <u>prior to the receipt of Bids</u>.
- 2. <u>No substitution will be considered unless written request has been submitted to the Owner for</u> <u>approval at least seven (7) days prior to the date for receipt of Bids.</u> Each such request shall conform to the requirements of Section 01 25 00 "Substitution Procedure.".
- 3. If a Bidder proposes to use a material which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, he shall inform the Owner in writing of the nature of such deviations at the time the material is submitted for approval. <u>It shall</u> be the responsibility of the Bidder to notify the Owner, in writing, of the presence of Asbestos or any other hazardous materials in any proposed substitution. Such written notice shall be in the form of a cover letter attached to the related documents.

- 4. In requesting approval of deviations or substitutions, a Bidder shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the Owner, the evidence presented by the Bidder does not provide a sufficient basis for such reasonable certainty, the Owner may reject such substitution or deviation without further investigation.
- 5. In requesting approval of substitutions, a Bidder represents that he will provide the same warranty and/or guarantee for the substitution that he would for that specified.
- 6. The Contract Documents are intended to produce a building and site improvements of consistent character and quality of design. The Owner shall judge the design and appearance of proposed substitutes on the basis of their suitability in relationship to the overall design of the Project, as well as for their intrinsic merits. <u>The Owner will not approve proposed substitutions which, in his opinion, would be out of character, obtrusive, or otherwise inconsistent with the character or quality of design of the project.</u>
- 7. The Contractor shall be solely responsible for coordinating the installation of accepted substitutions, making such changes as may be required for the Work to be complete in all respects. Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the Contractor, notwithstanding approval or acceptance of such substitution by the Owner, unless such substitution was made at the written request or direction of the Owner.
- 8. The burden of proof of the merit of a proposed substitution is upon the proposer. Approval of a proposed substitution is valid only upon issuance by the Owner in written form, and the Owner's decision of approval or disapproval of a proposed substitution shall be considered final.

DETERMINATION OF RIGHT TO DO BUSINESS WITH STATE OF NEW HAMPSHIRE

1. If selected as the low bidder, the bidder must be registered and have a Certificate of Good Standing from the Secretary of State, Corporate Division (telephone 603-271-3244) in order to do business with the State of New Hampshire.

PROPOSAL SELECTION

1. In most cases the proposal submitted by the qualified bidder with the lowest base bid price shall be selected. However, the Department of Natural and Cultural Resources (DNCR) reserves the right to reject any or all proposals or advertise for new proposals as it judges to be in the best interest of the State of New Hampshire.

CONTRACTORS QUALIFICATIONS

 Upon the Owner's request, the successful bidder shall provide evidence that they have been successfully performing this type, scale, and quality of Work for a minimum of five (5) years. Upon request by the Owner, a comprehensive list of all similar projects worked on in the past two (2) years by the Contractor shall be submitted along with contact information for three (3) references or owners representatives involved with three (3) different projects completed by the Contractor.

EXECUTION OF AGREEMENT

- Execution and Approval of Agreement: The Agreement shall be signed by the successful Bidder and returned, together with Bonds if applicable, within fifteen (15) Days after the Agreement has been mailed or otherwise delivered to the Bidder. No Agreement shall be considered as in effect until it has been fully executed by all Parties thereto and, when the Price Limitation is more than \$10,000, the Agreement has been concurred in by Governor and Council.
- 2. Failure to Execute Agreement: Failure to execute the Agreement within fifteen (15) Days after the Agreement has been mailed or otherwise delivered to the successful Bidder shall be just cause for the cancellation of the bid and the forfeiture of the Bid Security which shall become the property of the Department, not as a penalty, but in liquidation of damages sustained. Award of the Contract may then be made to the next lowest Bidder, or the Work may be re-advertised as the Commissioner of the Department of Natural and Cultural Resources may decide.

PRECONSTRUCTION CONFERENCE

1. Either before or soon after the actual award of the Contract (but in any event prior to the start of construction), the Contractor or his representative and his principal subcontractors shall attend a preconstruction conference with representatives of the Owner. The conference will serve to acquaint the participants with the general plan of contract administration and requirements under which the construction operation is to proceed.

END OF INSTRUCTIONS TO BIDDERS

SECTION 00 41 00

BID PROPOSAL FORM

Project No. ARP 2412

PROJECT: Siding & Painting Renovations Wentworth-Coolidge Historic Site

BID OPENING DATE: May 29, 2024, at 2:00 pm at DNCR's office at 172 Pembroke Road, Concord, NH

START DATE: August 19, 2024

COMPLETION DATE: October 31, 2024

Sealed bid proposals for the above project will be accepted until the time and date indicated above. Bids may be deposited in the bid box at DNCR's offices in Concord or mailed to the attention of Scott Coruth, Architect, Department of Natural and Cultural Resources (DNCR), 172 Pembroke Road, Concord NH 03301. Please note on the outside of the sealed envelope: <u>Bid Proposal for the Wentworth-Coolidge Siding & Painting Renovations</u>.

DATE:

PROPOSAL OF:

GRAND TOTAL / LUMP SUM BASE BID (A+B):_____

PROPOSAL

Proposal of...

(name)

(address)

To furnish and deliver all materials, except as noted, and to perform all work in accordance with the Contract of the State of New Hampshire, Department of Natural and Cultural Resources for the construction of...

Project: ARP 2412 Siding & Painting Renovations

Wentworth-Coolidge Historic Site

Commissioner Department of Natural and Cultural Resources 172 Pembroke Road Concord, N.H. 03302-1856

Commissioner:

To execute the form of contract and begin work within 15 (fifteen) days after the notice to proceed has been received or otherwise delivered to the contractor and to prosecute said work until its completion.

It is further proposed:

To furnish a contract bond in the amount of one hundred percent (100%) of the contract award, if the contract award is seventy-five thousand dollars (\$75,000) or more, as security for the completion of the contract in accordance with the plans and specifications and contract documents. The form of bond and the surety shall be acceptable to the Commissioner. No contract bond shall be required on contract awards of less than seventy-five thousand dollars (\$75,000).

To guarantee all of the work performed under this contract to be done in accordance with the plans and specifications and contract documents.

Enclosed, herewith, find certified check or bid bond in the amount of 5% of the total amount of the Lump Sum Price made payable to the "Treasurer, State of New Hampshire" as a proposal guarantee which is understood, will be forfeited in the event the form of contract is not executed, if awarded to the undersigned. Note: Personal checks will not be accepted as a proposal guarantee.

The undersigned acknowledges receipt of the following addenda, issued during the bidding time, and states that these have been incorporated in the proposal:

Addendum #1 dated	
Addendum #2 dated	
Addendum #3 dated	

Dated_____

ALLOWANCE #1: Unanticipated Modification and/or Additions to Contract Items:

Include in the Contract, a stipulated sum/price of \$30,000 for use upon the Project Managers instruction. This Allowance will make money available for modifications and/or additions to contract items due to owner-initiated changes, or for unknown, latent, or differing existing conditions, or for the removal of hazardous materials that are encountered by construction.

- a. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Allowance. The cost of the bond for the amount of Allowance shall be included as part of the lump sum base bid.
- b. Funds will be drawn from an Allowance only by Change Order. Contractor can proceed with Change Order Work against Allowance with direction from the Project Manager. The Contractor shall not proceed with any work that will exceed the amount of Allowance remaining.
- c. Credits can only be added to an Allowance by Change Order. The Contractor may not use a credit until a Change Order is fully executed.
- d. Notwithstanding the Contractors objection, the Project Manager may at any time reduce the funds remaining in the Allowance by Change Order.
- e. At Final Payment of the Contract, funds remaining in the Allowance will be credited to the State.

SCHEDULE OF VALUES: Wentworth-Coolidge Siding & Painting Renovations

INDICATE DOLLAR AMOUNT OF CONTRACT SUM ALLOCATED TO EACH CATEGORY OF WORK AS DESIGNATED BELOW:

Specification Sections	Description	Amount
	General Conditions	
	Bond Cost	
	Insurance	
02 41 19	Demolition	
06 03 12	Historic Wood Repair	
07 46 23	Wood Siding	
08 03 14	Historic Treatment of Wood Doors	
09 03 91	Historic Treatment of Plain Painting	
00 00 01		

Sub Total (A):

Allowance #1 (B):

\$30,000

Grand Total: lump sum base bid (A + B)

NOTE: This Schedule of Values must be completely filled out in order for bid proposal to be considered responsive.

SIGNATURE PAGE

Company Name:
Address:
Phone:
E-mail Address:
Signature of Authorized Bidder:
Print:
Title:
Address of Bidder:
Names and Addresses of Members of the Firm/Corporation

Name	address
Name	address
Name	address

SECTION 00 72 00

GENERAL CONDITIONS

TABLE OF ARTICLES

- 1. GENERAL PROVISIONS
- 2. CONTRACTOR'S RESPONSIBILITIES
- 3. OWNER'S RESPONSIBILITIES
- 4. SUBCONTRACTS
- 5. TIME
- 6. CHANGES
- 7. PAYMENT
- 8. INDEMNITY, INSURANCE, AND BONDS
- 9. SUSPENSION, NOTICE TO CURE, AND TERMINATION
- 10. DISPUTE MITIGATION AND RESOLUTION
- 11. MISCELLANEOUS
- 12. CONTRACT DOCUMENTS

ARTICLE 1 – GENERAL PROVISIONS

1.01 Definitions

- A. Addenda: Written or graphic instruments issued prior to opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- B. Agreement: The written agreement between the Parties, executed on New Hampshire Form Number P-37, and these General Conditions, as modified, and exhibits and attachments made part of the agreement upon execution.
- C. Allowance: The sum stipulated in the Contract Documents, for use by the Owner to pay for unanticipated Modifications or Changes to the Contract Price.
- D. Architect: The term "Architect", where used throughout the Contract Documents, shall indicate the Design Professional retained or employed by the Owner and having the authority to make decisions about the design intent of the Project.
- E. Bidding Requirements: The Invitation to Bid, Instructions to Bidders, bid bond or other bid security, if any, the Bid Proposal Form, and the bid with any attachments.
- F. Business Day: All Days, except Saturdays, Sundays, and legal holidays indicated in the Contract Documents.
- G. Change Order: A written order signed by the Parties after execution of the Agreement, indicating changes in the scope of Work, the Contract Price, or Contract Time.
- H. Construction Change Directive: A change to the Work directed by the Owner pursuant to Section 6.03.

- I. Construction Schedule: A schedule, prepared and maintained by the Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Time.
- J. Contract: The entire and integrated written Agreement between the Owner and Contractor concerning the Work.
- K. Contract Documents: Consist of the Agreement, Invitation to Bid, Instructions to Bidders, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract.
- L. Contract Price: The stated amount in the Contractors bid, excluding Allowances, to perform the Work under the Contract Documents, as modified by any Alternates.
- M. Contract Time: The period of time between the Date of Commencement and the total time authorized to achieve Final Completion.
- N. Contractor: The person or entity identified in the Agreement and includes the Contractor's Representative.
- O. Date of Commencement: The date of commencement of the Work as identified in the Notice to Proceed.
- P. Day: A calendar day.
- Q. Defective Work: Any portion of the Work that does not conform to the requirements of the Contract Documents.
- R. Design Professional: The licensed architect or engineer, and its consultants, retained or employed by the Owner to perform design services for the Project.
- S. Final Completion: The date when the Contractor's obligations under this Agreement are complete and accepted by the Owner and final payment becomes due and payable, as enumerated in Box 1.7 "Completion Date" of the Agreement.
- T. Hazardous Material: Any substance or material identified now or in the future as hazardous under the Law, or any other substance or material that may be considered hazardous or otherwise subject to statutory or regulatory requirement governing handling, transportation, disposal, or cleanup.
- U. Law: Federal, state, or local law, ordinance, code, rule, and regulations applicable to the Work with which the Contractor must comply that are enacted as of the Agreement date.
- V. Modification: A written amendment to the Contract signed by both Parties, a Change Order, a Construction Change Directive, or a written order for a minor change in the Work issued by the Design Professional.
- W. Notice to Proceed: A written notice by the Owner to the Contractor fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform the Work.

- X. Others: Other contractors, suppliers, and persons or entities at the Site who are not employed by the Contractor or Subcontractors.
- Y. Owner: The State Agency indicated in Box 1.1 "State Agency Name" of the Agreement and includes the Owner's Representative.
- Z. Owner's Representative: The Owners appointed representative having authority to act on the Owners behalf and shall be responsible for general supervision and administration of the Contract.
- AA. Parties: Collectively the Owner and the Contractor.
- BB. Price Limitation: The amount indicated in Box 1.8 "Price Limitation" of the Agreement. The Price Limitation is the grand total lump sum, comprised of the Contract Price and the Allowance, available to pay for the Work under the Construction Documents.
- CC. Project: The building, facility, or other improvements for which the Contractor is to perform Work under the Agreement. It may also include construction by the Owner or Others.
- DD. Site: The area of the Project location where the Work is to be performed.
- EE. Subcontractor: A person or entity retained by the Contractor as an independent contractor to provide labor, materials, equipment, or services necessary to complete a specific portion of the work.
- FF. Substantial Completion: The date when the Work (or a specified part thereof) is sufficiently complete in accordance with the Contract Documents so that the Owner may occupy or utilize the Project, or a designated portion, for the use for which it is intended, without unapproved disruption.
- GG. Sub-Subcontractor: A person or entity who has an agreement with a Subcontractor, another Subsubcontractor, or Supplier to perform a portion of the Subcontractor's Work or to supply material or equipment.
- HH. Supplier: A person or entity retained by the Contractor to provide material or equipment for the Work.
- II. Work: The construction and services necessary or incidental to fulfill the Contractor's obligations for the Project in conformance with and reasonably inferable from the Agreement and the Contract Documents. The Work may refer to the whole Project or only a part of the Project if work is also being performed by the Owner or Others.

1.02 Parties Relationship

- A. The Parties agree to proceed with the Project on the basis of mutual trust, good faith, and fair dealing. The parties shall each endeavor to promote harmony and cooperation among all Project participants.
- B. The Contractor represents that it is an independent contractor and that in its performance of the Work it shall act as an independent contractor.

C. Neither the Contractor nor any of its agents or employees shall act on behalf of or in the name of the Owner.

1.03 Ethics

- A. The Parties shall perform their obligations with integrity, ensuring at a minimum that each:
 - 1. Avoids conflicts of interest and promptly discloses any to the other Party.
 - 2. Warrants that it has not and shall not pay or receive any contingent fees or gratuities to or from the other Party, including its agents, officers, and employees, Subcontractors, or others for whom they may be liable, to secure preferential treatment.

1.04 Design Professional

- A. The Owner, through its Design Professional, shall provide all architectural and engineering design services necessary for completion of the Work, excluding however:
 - 1. Design services delegated to the Contractor in accordance with Section 2.15.
 - 2. Services within the construction means, methods, techniques, sequences, and procedures employed by the Contractor, its Subcontractors, and Sub-subcontractors in connection with their construction operations.

1.05 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

- A. The Owners design professionals, including the Architect, the Architects consultants, Engineers, and other professionals providing services shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and Suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the design professionals reserved rights.
- B. The Contractor, Subcontractors, Sub-subcontractors, and Suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and Suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of Work without the specific written consent of the Owner, and Owner's design professionals.

1.06 Digital Data Use and Transmission

A. Except as otherwise stated elsewhere in the Agreement, the Parties may transmit and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to shop drawings and other submittals, in electronic media or digital format, either directly, or though access to a secure Project website.

- B. If the Agreement does not establish protocols for electronic or digital transmittals, the Parties shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 2 – CONTRACTOR'S RESPONSIBILITIES

2.01 General Responsibilities

- A. The Contractor shall use its diligent efforts to perform the Work in an expeditious manner consistent with the Contract Documents. Such Work includes furnishing construction administration and management services.
- B. The Contractor shall provide all labor, materials, equipment, and services necessary to complete the Work, all of which shall be provided in full accord with and reasonably inferable from the Contract Documents.
- C. Unless the Contract Documents instruct otherwise, the Contractor shall solely be responsible for and have control over the construction means, methods, techniques, sequences, procedures, site security, and safety precautions, and for coordinating all portions of the Work under the Agreement.
- D. The Contractor shall perform Work only within locations allowed by the Contract Documents, Law, and applicable permits unless otherwise directed by the Owner.

2.02 <u>Construction Personnel and Supervision</u>

- A. The Contractor shall provide competent supervision for the performance of the Work. Before commencing the Work, or making a change in the supervisory personnel, the Contractor shall notify the Owner in writing of the name and qualifications of its proposed superintendent(s) and project manager so the Owner may review the individual's qualifications. If, for reasonable cause, the Owner refuses to approve the individual, or withdraws its approval after once giving it, the Contractor shall name a different superintendent or project manager for the Owner's review. Any disapproved superintendent shall not perform in that capacity thereafter at the Site. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.
- B. The Contractor shall be responsible to the Owner for acts or omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors and Suppliers.
- C. The Contractor shall permit only qualified persons to perform the Work. The Contractor shall enforce safety procedures, strict discipline, and good order among persons performing the Work. If the Owner determines that a particular person does not follow safety procedures, or is unfit or

unskilled for the assigned Work, the Contractor shall immediately reassign the person upon receipt of the Owner's written notice to do so.

- D. The Contractor's representative shall possess full authority to receive instructions from the Owner and to act on those instructions.
- E. The Contractor shall coordinate and supervise the work performed by Subcontractors to ensure that the Work is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the Work. The Contractors and all Subcontractors at all times shall afford each trade, any separate contractor, or the Owner and Others, every reasonable opportunity for the installation of their work and the storage of materials, subject to the specific limitations or restrictions of a particular site.

2.03 <u>Cooperation with Work of Owner and Others</u>

- A. The Owner may perform work at the Site directly or by Others. Any agreements with Others to perform construction or operations related to the Project shall include provisions pertaining to insurance, indemnification, waiver of subrogation, consequential damages, coordination, interference, cleanup, and safety that are substantively the same as the corresponding provisions of the Agreement.
- B. If the Owner elects to perform work at the Site directly or by Others, the Parties shall coordinate the activities of all forces at the Site and agree upon fair and reasonable schedules and operational procedures for Site activities. The Owner shall require each separate contractor to cooperate with the Contractor and assist with the coordination of activities and the review of construction schedules and operations. The Contract Price and Contract Time may be equitably adjusted for changes resulting from the coordination of construction activities, and the Construction Schedule shall be revised accordingly.
- C. With regard to work of the Owner and Others, the Contractor shall:
 - 1. Proceed with the Work in a manner that does not hinder, delay, or interfere with the work of the Owner or Others or cause the work of the Owner or Others to become defective;
 - 2. Afford the Owner or Others reasonable access for introduction and storage of their materials and equipment and performance of their activities; and
 - 3. Coordinate the Contractor's Work with theirs.
- D. Before proceeding with any portion of the Work affected by the construction or operations of the Owner or Others, the Contractor shall give the Owner prompt written notification of any defects the Contractor discovers in their work which will prevent the proper execution of the Work. The Contractor's obligations in this subsection do not create a responsibility for the work of the Owner or Others but are for the purpose of facilitating the Work. If the Contractor acknowledges that the work of the Owner or Others is not defective and is acceptable for the proper execution of the Work. Following receipt of written notice from the Contractor of defects, the Owner shall promptly inform the Contractor what action, if any, the Contractor shall take with regard to the defects.

2.04 <u>Contract Document Review</u>

- A. Prior to commencing the Work, the Contractor shall examine and compare all Contract Documents as well as information furnished by the Owner, shall take field measurements of any existing conditions related to the Work, and shall observe any conditions at the Site affecting the Work. These obligations are for the purpose of facilitating coordination and construction of the Work by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Owner and, if directed, the Design Professional in the form of a request for information (RFI) any errors, inconsistencies, or omissions discovered by or made known to the Contractor by such examination. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.
- B. The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, ordinances, codes, rules and regulations, or lawful orders of authorities having jurisdiction, but the Contractor shall promptly report to the Owner any nonconformity discovered by or made known to the Contractor as a request for information.
- C. Nothing in this section shall relieve the Contractor of responsibility for its own errors, inconsistencies, and omissions.

2.05 Workmanship

- A. The Work shall be executed in accordance with the Contract Documents in a workmanlike manner. All materials used in the Work shall be furnished in sufficient quantities to facilitate the proper and expeditious execution of the Work and shall be new except as otherwise provided in the Contract Documents.
- B. Work for which no explicit quality of standards of materials and/or workmanship is defined in the Contract Documents shall be of best quality for the intended use and consistent with the quality of surrounding work and of the construction of the Project generally.
- C. All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with manufacturer's written instructions, unless specifically indicated otherwise in the Contract Documents.
- D. Where the Work is to fit with existing conditions or work to be performed by Others, the Contractor shall join the Work fully and completely with such conditions or work, unless otherwise specified.
- E. The Contractor shall be responsible for inspection of portions of the Work already performed to determine that such portions are in proper condition to receive subsequent Work.
- F. The Contractor shall study and compare all Drawings and verify all figures shown thereon before laying out or constructing the Work. The Contractor shall be responsible for errors in its work and the work of its Subcontractors that might reasonably have been avoided thereby. The Contractor shall establish and be responsible for the accuracy of all lines, grades, measurements, levels, column lines, wall and partition lines required by the various Subcontractors in laying out their Work and shall protect and preserve all permanent bench and other markers. Checking of the figures or layout by the Design Professional shall not relieve the Contractor of these responsibilities.

2.06 Material Furnished by the Owner or Others

A. If the Work includes installation of materials or equipment furnished by the Owner or Others, it shall be the responsibility of the Contractor to examine the items so provided and thereupon handle, store, and install the items, unless otherwise provided in the Contract Documents, with such skill and care as to provide a satisfactory and proper installation. Loss or damage due to acts or omissions of the Contractor shall be the responsibility of the Contractor and may be deducted from any amounts due or to become due the Contractor. Any defects discovered in such materials or equipment shall be reported at once to the Owner. Following receipt of written notice from the Contractor of defects, the Owner shall promptly inform the Contractor what action, if any, the Contractor shall take with regard to the defects.

2.07 <u>Tests and Inspections</u>

- A. The Contractor shall schedule all tests, inspections, and approvals of the Work required by the Contract Documents, Law, or orders of authorities having jurisdiction at an appropriate time so as to not delay the progress of the Work. The Contractor shall give proper notice to all required parties of such tests, inspections, and approvals. If feasible, the Owner and Others may timely observe the tests at the normal place of testing. The Contractor shall bear all expenses associated with tests, inspections, and approvals required by the Contract Documents, which, unless otherwise agreed to, shall be conducted by an independent testing laboratory or entity retained by the Contractor, and approved by the Owner. Unless otherwise required by the Contract Documents, required certificates of testing, inspection, or approval shall be secured by the Contractor and promptly delivered to the Owner.
- B. If the Owner or appropriate authorities determine that tests, inspections, or approvals in addition to those required by the Contract Documents will be necessary, the Contractor shall arrange for the procedures and give timely notice to the Owner and others who may observe the procedures. Costs of the additional tests, inspections, or approvals are at the Owner's expense except as provided in the subsection below.
- C. If the procedures described in the two subsections immediately above indicate that portions of the Work fail to comply with the Contract Documents, the Contractor shall be responsible for costs of correction and retesting.

2.08 Warranty

A. The Contractor warrants that all materials and equipment shall be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. At the Owner's request, the Contractor shall furnish satisfactory evidence of the quality and type of materials and equipment furnished. The Contractor further warrants that the Work shall be free from material defects not intrinsic in the design or materials required in the Contract Documents. The Contractor's warranty does not include remedies for defects or damages caused by normal wear and tear during normal usage, use for a purpose for which the Project was not intended, improper or insufficient maintenance, modifications performed by the Owner or Others, or abuse. The Contractor's warranty shall commence on the Date of Substantial Completion of the Work. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective.

- B. With respect to any portion of the Work performed after Substantial Completion, the Contractor's warranty obligation shall be extended by the period of time between Substantial Completion and the actual performance of the later Work.
- C. The Contractor shall obtain from its Subcontractors and Suppliers any special or extended warranties required by the Contract Documents. The Contractor's liability for such warranties shall be limited to the one-year correction period as provided in Section 2.09. After that period, the Contractor shall provide reasonable assistance to the Owner in enforcing the obligations of Subcontractors or Suppliers for such extended warranties.

2.09 Correction of Work Within One Year

- A. If, prior to Substantial Completion and within one year after the date of Substantial Completion of the Work, any Defective Work is found, the Owner shall promptly notify the Contractor in writing. Unless the Owner provides written acceptance of the condition, the Contractor shall promptly correct the Defective Work at its own cost and time and bear the expense of additional services required for correction of any Defective Work for which it is responsible. If within the one-year correction period the Owner discovers and does not promptly notify the Contractor or give the Contractor an opportunity to test or correct Defective Work as reasonably requested by the Contractor, the Owner waives the Contractor's obligation to correct the Defective Work as well as the Owner's right to claim a breach of the warranty with respect to that Defective Work.
- B. With respect to any portion of Work performed after Substantial Completion, the one-year correction period shall be extended by the period of time between Substantial Completion and the actual performance of the later Work. Correction periods shall not be extended by corrective work performed by the Contractor.
- C. If the Contractor fails to correct Defective Work within a reasonable time after receipt of written notice from the Owner prior to final payment, the Owner may correct it in accordance with the Owners right to carry out the Work. In such case, an appropriate Change Order shall be issued deducting the cost of correcting the Defective Work from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.
- D. The Contractor's obligations and liability, if any, with respect to any Defective Work discovered after the one-year correction period shall be determined by the Law. If, after the one-year correction period but before applicable limitation period has expired, the Owner discovers any Work which the Owner considers Defective Work, the Owner shall, unless the Defective Work requires emergency correction, promptly notify the Contractor, and allow the Contractor an opportunity to correct the Work if the Contractor elects to do so. If the Contractor elects to correct the Work, it shall provide written notice of such intent within fourteen (14) Days of its receipt of notice from the Owner and shall complete the correction of Work within a mutually agreed timeframe. If the Contractor does not elect to correct the Work, the Owner may have the Work corrected by itself or Others, and, if the Owner intends to seek recovery of those costs from the Contractor, the Owner shall promptly provide the Contractor with an accounting of the correction costs it incurs.
- E. If the Contractor's correction or removal of Defective Work causes damage to or destroys other completed or partially completed Work or existing buildings, the Contractor shall be responsible for the cost of correcting the destroyed or damaged property.

- F. The one-year period for correction of Defective Work does not constitute a limitation period with respect to enforcement of the Contractor's other obligations under the Contract Documents.
- G. At the Owners option and with the Contractor's agreement, the Owner may elect to accept Defective Work rather than require its removal and correction. In such case, the Contract Price shall be equitably adjusted for any diminution in the value of the Project caused by such Defective Work. Such adjustment shall be effected whether or not final payment has been made.

2.10 Correction of Covered Work

- A. On request of the Owner, Work that has been covered without a requirement that it be inspected prior to being covered shall be uncovered for the Owner's inspection. The Owner shall pay for the costs of uncovering and replacement if the Work proves to be in conformance with the Contract Documents, or if the defective condition was caused by the Owner or Others. If the uncovered Work proves to be defective, the Contractor shall pay the costs of uncovering and replacement.
- B. If any Work is covered contrary to requirements in the Contract Documents, the Owner may issue an order to uncover the Work for the Owner's observation and re-cover the Work all at the Contractor's expense and with no adjustment to the Contract Time.

2.11 <u>Safety</u>

- A. Safety Programs: The Contractor holds overall responsibility for safety programs. However, such obligation does not relieve the Subcontractors of their safety responsibilities or requirements to comply with the Law. The Contractor shall seek to avoid injury, loss, or damage to persons or property by taking reasonable steps to protect:
 - 1. Its employees and other persons at the Site;
 - 2. Materials and equipment stored at onsite or offsite locations for use in the Work; and
 - 3. Property located at the Site and adjacent to work areas, whether or not the property is part of the Site.
- B. The Contractor shall designate an individual at the Site in its employ as its safety representative. Unless otherwise identified by the Contractor in writing to the Owner, the Contractor's superintendent shall serve as its safety representative. When the Contractor is required to file an accident report with a public authority, the Contractor shall furnish a copy of the report to the Owner.
- C. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of authorities having jurisdiction bearing on safety or persons or property or their protection from damage, injury, or loss.
- D. Damage or loss not insured under property insurance which may arise from the Work to the extent caused by negligent acts or omissions of the Contractor, or anyone for whose acts the Contractor may be liable, shall be promptly remedied by the Contractor.
- E. The Contractor shall erect and maintain, as required by existing conditions and performance of the Work, reasonable safeguards for safety and protection, including posting danger signs and other

warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

- F. When use or storage of explosives or other Hazardous Materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- G. If the Owner deems any part of the Work or Site unsafe, the Owner, without assuming responsibility for the Contractor's safety program, may require the Contractor to stop performance of the Work, take corrective measures satisfactory to the Owner, or both. If the Contractor does not adopt corrective measures, the Owner may perform them and deduct their cost from the Contract Price. The Contractor agrees to make no claim for damages, for an increase in the Contract Price or Contract Time based on the Contractor's compliance with the Owners reasonable request.

2.12 Emergencies

A. In an emergency affecting the safety of persons or property, the Contractor shall act in a reasonable manner to prevent threatened damage, injury, or loss. Any change in the Contract Price or Contract Time resulting from the actions of the Contractor in an emergency situation shall be determined as provided for in Article 6.

2.13 <u>Hazardous Materials</u>

- A. The Contractor shall not be obligated to commence or continue Work until any Hazardous Material discovered at Site has been removed, rendered, or determined to be harmless by the Owner as certified by an independent testing laboratory and approved by the appropriate governmental agency.
- B. If after commencing the Work, Hazardous Material is discovered at the Site, the Contractor shall be entitled to immediately stop Work in affected area. The Contractor shall promptly report the condition to the Owner, the Design Professional, and, if required, the authority having jurisdiction.
- C. The Contractor shall not resume nor be required to continue any Work affected by any Hazardous Material without written mutual agreement between the Parties after the Hazardous Material has been removed or rendered harmless and only after approval, if necessary, of the authorities having jurisdiction.
- D. The Owner shall be responsible for retaining an independent testing laboratory to determine the nature of the material encountered and whether the material requires corrective measures or remedial action. Such measures shall be the sole responsibility of the Owner and shall be performed in a manner minimizing any adverse effect upon the Work.
- E. If the Contractor incurs additional costs or is delayed due to the presence or remediation of Hazardous Material, the Contractor shall be entitled to an equitable adjustment in the Contract Price, the Contract Time, or both.

2.14 Submittals

- A. The Contractor shall submit to the Owner and the Design Professional all shop drawings, samples, product data, and similar submittals required by the Contract Documents for review and approval. The Contractor shall prepare and deliver its submittals in a manner consistent with the Construction Schedule and in such time and sequence so as not to delay the performance of the Work or the work of the Owner and Others. If the Contract Documents do not contain specific submittal requirements pertaining to portions of the Work, the Contractor agrees upon request to submit in a timely fashion to the Owner and Design Professional for review any shop drawings, samples, product data, or similar submittals as may reasonably be required by the Owner.
- B. The Contractor shall be responsible for the accuracy and conformity of its submittals. By submitting shop drawings, samples, product data, and similar submittals, the Contractor represents to the Owner that the Contractor has:
 - 1. Reviewed and approved them;
 - 2. Determined and verified materials, field measurements and field construction criteria related thereto, or will do so; and
 - 3. Checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- C. The Contractor shall perform all Work strictly in accordance with approved submittals. Approval of submittals is not an authorization to perform changed work, unless the procedures of Article 6 are followed. Approval does not relieve the Contractor from responsibility for Defective Work resulting from errors or omissions on the approved shop drawings.
- D. No substitutions shall be made in the Work unless permitted in the Contract Documents and then only after the Contractor obtains approvals required under the Contract Documents for substitutions. All such substitutions shall be promptly memorialized in a Change Order following approval by the Owner and, if applicable, the Design Professional to provide for an adjustment in the Contract Price or Contract Time.

2.15 Design Delegation

- A. If the Contract Documents specify that the Contractor is responsible for the design of a particular system or component to be incorporated into the Project, the Owner shall provide all required performance and design criteria. The Contractor shall not be responsible for the adequacy of such performance and design criteria.
- B. As required by Law, the Contractor shall procure design services and certifications necessary to satisfactorily complete the Work from a licensed design professional. The signature and seal of the Contractor's design professional shall appear on all drawings, calculations, specifications, certifications, shop drawings, and other submittals related to the Work designed or certified by the Contractor's design professional.

2.16 <u>Site Conditions</u>

A. Site Visit: The Contractor acknowledges that it has visited, or has had the opportunity to visit, the Site to visually inspect the general and local conditions which could affect the Work.

- B. Concealed or Unknown Site Conditions: If the conditions encountered at the Site are (a) subsurface or other physical conditions materially different from those indicated in the Contract Documents, or (b) unusual and unknown physical conditions materially different from conditions ordinarily encountered and generally recognized as inherent in Work provided for in the Contract Documents, the Contractor shall stop affected Work after the condition is first observed and give prompt written notice of the condition to the Owner and the Design Professional. The Contractor shall not be required to perform any Work relating to the unknown condition without the written mutual agreement of the parties. Any change in the Contract Price or the Contract Time as a result of the unknown condition shall be determined as provided in Article 6.
- C. The Owner maintains possession of the premises and any improvements made by the Contractor. Under the Contract Documents, the Owner grants the Contractor the right to enter and use the premises. The Contractor shall confine its apparatus, the storage of materials, and the operations of the Contractor's workers to limits indicated by Law, ordinance, the Contract Documents, permits, and/or directions of the Owner and shall not unreasonably encumber the premises with the Contractor's materials or equipment.
- D. The Contractor shall remove snow or ice within the limits of the Site indicated in the Contract Documents that might result in damage or delay.

2.17 Permits, Fees, Notices and Compliance with Laws

- A. Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by authorities having jurisdiction necessary for proper execution and completion of the Work that are customarily secured after execution of the Agreement and legally required at the time bids are received or negotiations concluded.
- B. The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of authorities having jurisdiction applicable to performance of the Work.
- C. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules, and regulations, or lawful orders of authorities having jurisdiction, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

2.18 Cutting, Fitting, and Patching

- A. The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.
- B. The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Others by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or Others except with written consent of the Owner and Others. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or Others, its consent to cutting or otherwise altering the Work.

2.19 Cleaning Up

- A. The Contractor shall regularly remove debris and waste materials at the Site resulting from the Work. Prior to discontinuing Work in an area, the Contractor shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste, and surplus material. The Contractor shall minimize and confine dust and debris resulting from construction activities. At the completion of the Work, the Contractor shall remove from the Site all construction equipment, tools, surplus materials, waste materials, and debris. All debris from the Project shall be cleaned up daily and removed from the Site at least on a weekly basis.
- B. If the Contractor fails to commence compliance with cleanup duties within two (2) Business Days after written notification from the Owner of non-compliance, the Owner may implement appropriate cleanup measures without further notice and shall deduct the reasonable costs from any amounts due or to become due the Contractor in the next payment period.

2.20 Access to Work

A. The Contractor shall facilitate the access of the Owner, Design Professional, and Others to Work in progress.

2.21 Compliance with Laws

- A. The Contractor shall comply with the Law at its own costs. The Contractor shall be liable to the Owner for all loss, cost, or expense attributable to any acts or omissions by the Contractor, its employees, subcontractors, and agents for failure to comply with the Law, including fines, penalties, or corrective measures. However, liability under this subsection shall not apply if prior approval by appropriate authorities and the Owner is received.
- B. The Contract Price or Contract Time shall be equitably adjusted by Change Order for additional costs or time needed resulting from any changes in Law, including increased taxes, enacted after the date of the Agreement.

2.22 Royalties, Patents, and Copyrights

A. The Contractor shall pay all royalties and license fees which may be due on the inclusion of any patented or copyrighted materials, methods, or systems selected by the Contractor and incorporated in the Work. The Contractor shall defend, indemnify, and hold the Owner harmless from all suits or claims for infringement of any patent rights or copyrights arising out of such selection.

ARTICLE 3 – OWNER'S RESPONSIBILITIES

3.01 Information and Services

A. The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

3.02 Site Information

- A. To the extent the Owner has obtained or is required elsewhere in the Contract Documents to obtain, Site information, the Owner shall furnish surveys describing physical characteristics, legal limitations, and utility locations for the Site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information provided by the Owner but shall exercise proper precautions relating to the safe performance of the Work.
- B. The Owner shall provide tests, inspections, and other reports dealing with environmental matters, Hazardous Material, and other existing conditions, including structural, mechanical, and chemical tests, required by the Contract Documents or by Law.

3.03 Permits, Fees, and Approvals

A. Except for those permits and fees related to the Work which are the responsibility of the Contractor, the Owner shall secure and pay for necessary approvals, easements, assessments, and fees required for the development, construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

3.04 Mechanics and Construction Lien Information

A. The Owner shall furnish to the Contractor within fifteen (15) Days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

3.05 Owner's Representative

A. The Owner's Representative shall be fully acquainted with the Project and shall have authority to bind the Owner in all matters requiring the Owner's approval, authorization, or written notice. If the Owner changes its Representative or its Representative's authority, the Owner shall immediately notify the Contractor in writing.

3.06 Owner's Right to Stop the Work

A. If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents or repeatedly fails to carry out the Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

3.07 Owner's Right to Carry Out the Work

A. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. The Owner may, pursuant to Section 7.3, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Design Professional's additional services made necessary by such default, neglect, or failure. If current or future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

3.08 Submittals

A. The Owner or its Design Professional will review and approve, or take other appropriate action upon, the Contractor's submittals such as shop drawings, product data, and samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner's action will be taken with reasonable promptness while allowing sufficient time in the Owner's judgement to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Owner's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Owner's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

ARTICLE 4 – SUBCONTRACTS

4.01 Award of Subcontracts and Other Contracts for Portions of the Work

- Promptly after the award of the Agreement, the Contractor shall provide the Owner and, if directed, the Design Professional with a written list of the proposed Subcontractors and significant Suppliers. If the Owner has a reasonable objection to any proposed Subcontractor or Supplier, the Owner shall notify the Contractor in writing. Failure to promptly object shall constitute acceptance.
- B. If the Owner has reasonably and promptly objected, the Contractor shall not contract with the proposed Subcontractor or Supplier, and the Contractor shall propose another acceptable Subcontractor or Supplier to the Owner. No adjustment in the Contract Price or Contract Time shall be made because of such substitution.
- C. The Contractor shall not change a Subcontractor or Supplier previously selected without the prior written approval of the Owner.

4.02 Binding of Subcontractors and Suppliers

A. The Contractor agrees to bind every Subcontractor and Supplier (and require every Subcontractor to so bind its subcontractors and suppliers) to the Contract Document's applicable provisions to that portion of the Work. Each subcontract agreement shall preserve and protect the rights of the Owner and its Design Professional under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the

Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors.

4.03 <u>Contingent Assignment of Subcontracts</u>

- A. If the Agreement is terminated, each subcontract and supply agreement shall be assigned by the Contractor to the Owner, subject to the prior rights of any surety, provided that:
 - 1. The Agreement is terminated by the Owner pursuant to Sections 9.03 or 9.04; and
 - 2. The Owner accepts such assignment after termination by notifying the Contractor and Subcontractor or Contractor and Supplier in writing and assumes all rights and obligations of the Contractor pursuant to each subcontract or supply agreement.
- B. If the Owner accepts such an assignment, and the Work has been suspended for more than thirty (30) consecutive Days, following termination, if appropriate, the Subcontractor's or Supplier's compensation shall be equitably adjusted as a result of the suspension.

ARTICLE 5 – TIME

5.01 <u>General</u>

- A. Time is of the essence with regard to the obligations of the Contract Documents. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- B. Unless instructed by the Owner in writing, the Contractor shall not knowingly commence the Work before the effective date of insurance and Bonds to be provided by the Contractor as required by the Contract Documents.
- C. Date of Commencement: The Contractor shall commence the Work after the Notice to Proceed has been received by the Contractor. The Notice to Proceed shall be issued immediately after the Agreement has been approved by the Governor and Council and shall establish the actual construction start date. Failure to commence the Work within fifteen (15) Calendar Days after the Date of Commencement shall be considered a Default of the Agreement. If the Date of Commencement is later than the advertised start date, the date of Final Completion shall be extended by an equivalent number of Days.

5.02 <u>Construction Schedule</u>

A. Before submitting the first application for payment, the Contractor shall submit to the Owner, and if directed, the Design Professional, a Construction Schedule showing the dates on which the Contractor plans to commence and complete various parts of the Work, including dates on which information and approvals are required from the Owner. Except as directed by the Owner, the Contractor shall comply with the approved Construction Schedule. Unless otherwise agreed, the Construction Schedule shall be formatted in a detailed precedence-style critical path method that (a) provides a graphic representation of all activities and events, including float values that will affect the critical path of the Work, and (b) identifies dates that are critical to ensure timely and orderly completion of the Work.

B. The Contractor shall revise the Construction Schedule at appropriate intervals as required by the conditions of the Work and Project. At a minimum, an updated schedule shall be submitted with each application for payment, and within seven (7) Days following receipt of information by the Contractor, which the Contractor believes may result in a change of completion date.

5.03 Delays and Extensions of Time

- A. If the Contractor is delayed at any time in the commencement or progress of the Work by any cause beyond the control of the Contractor, the Contractor shall be entitled to an equitable extension of the Contract Time. Examples of causes beyond the control of the Contractor include, but are not limited to, the following:
 - 1. Acts or omissions of the Owner, Design Professional, or Others.
 - 2. Changes in the Work or the sequencing of the Work ordered by the Owner or arising from decisions of the Owner that impact the time of performance of the Work.
 - 3. Encountering Hazardous Materials or concealed or unknown conditions.
 - 4. Delay authorized by the Owner pending dispute resolution or suspension by the Owner under Section 9.01.
 - 5. Transportation delays not reasonably foreseeable.
 - 6. Labor disputes not involving the Contractor.
 - 7. General labor disputes impacting the Project but not specifically related to the Site.
 - 8. Fire.
 - 9. Terrorism.
 - 10. Epidemics.
 - 11. Adverse governmental actions.
 - 12. Unavoidable accidents or circumstances.
 - 13. Adverse weather conditions not reasonably anticipated. Such conditions do not include typical weather conditions of remote mountain top sites.
- B. The Contractor shall submit any requests for equitable extensions of the Contract Time in accordance with Article 6. The Contractor shall have the burden of demonstrating such impact and shall furnish to the Owner such documentation relating thereto as the Owner may reasonably require.
- C. If the Contractor incurs additional costs as a result of a delay that is caused by items 1 through 13 above, the Contractor shall be entitled to an equitable adjustment in the Contract Price.
- D. If delays to the Work are encountered for any reason, the Contractor shall provide prompt written notice to the Owner within five (5) Days of the cause of such delays after the Contractor first recognized the delay. The Parties agree to take reasonable steps to mitigate the effect of such delays.
- E. Any changes in time that extend past Completion Date of the Contract, shall be formalized in a Change Order in accordance with Article 6, and subsequent Contract Amendment for approval by Governor and Council.

5.04 Liquidated Damages

- A. The Contractor understands that if the date of Final Completion established in the Agreement, as may be amended by subsequent Change Order and approval by Governor and Council, is not attained, the Owner will suffer damages which are difficult to determine and accurately specify. The Contractor agrees that if the date of Final Completion is not attained, the Contractor shall pay the Owner the amount specified in the below Section as liquidated damages, and not as a penalty, for each Day that completion extends beyond the date of Final Completion. Should the amount of money otherwise due the Contractor be less than the amount of such liquidated damages, the Contractor and its Surety shall be liable to the Owner for such deficiency. When final acceptance of the Work has been duly made by the Owner, any liquidated damage charges shall end.
- B. Allowing the Contractor to continue executing the Work after the date of Final Completion, shall in no way obligate the Owner to waive any of its rights under the Agreement.
- C. Schedule of Liquidated Damages: The fixed, agreed, liquidated damages shall be assessed in accordance with the following:

Price Limitation		Amount of Liquidated
		Damages per Day
From more than:	To and Including:	
\$0.00	\$25,000.00	\$300.00
\$25,000.00	\$50,000.00	\$400.00
\$50,000.00	\$100,000.00	\$500.00
\$100,000.00	\$500,000.00	\$600.00

ARTICLE 6 – CHANGES

6.01 <u>General</u>

A. Changes in the Work that are within the general scope of the Agreement shall be accomplished, without invalidating the Agreement, by Change Order, and Construction Change Directive.

6.02 Change Orders

- A. The Contractor may request, or the Owner may order, changes in the Work or the timing or sequencing of the Work that impacts the Contract Price or the Contract Time. All such changes in the Work that affect Contract Price or Contract Time shall be formalized in a Change Order and processed in accordance with this Article.
- B. For changes in the Work, the Parties shall negotiate an appropriate adjustment to the Contract Price or the Contract Time, in good faith and conclude negotiations as expeditiously as possible. Acceptance of the Change Order and any adjustment in the Contract Price or Contract Time shall not be unreasonably withheld.
- C. The Contractor shall not be obligated to perform changes in the Work that impact Contract Price or Contract Time until a Change Order has been executed or a written Construction Change Directive has been issued.

6.03 <u>Construction Change Directives</u>

- A. The Owner may issue a written Construction Change Directive directing a change in the Work before agreeing on an adjustment to Contract Price or Contract Time or directing the Contractor to perform Work that the Owner believes is not a change. If the Parties disagree that the Construction Change Directive work is within the scope of the Work, the Contractor shall perform the disputed Work and furnish the Owner with an estimate of the costs to perform the disputed work in accordance with Owner's interpretations.
- B. The Parties shall negotiate expeditiously and in good faith for appropriate adjustments, as applicable, to the Contract Price or the Contract Time arising out of a Construction Change Directive. As the directed Work is performed, the Contractor shall submit its costs for such Work with its application for payment beginning with the next application for payment within thirty (30) Days of the issuance of the Construction Change Directive. If there is a dispute as to the cost to the Owner, the Parties shall resolve the disputed amount, subject to the requirements of Article 10. Undisputed amounts may be included in applications for payment and shall be paid by the Owner in accordance with the Agreement.
- C. When the Parties agree upon the adjustment in the Contract Price or the Contract Time, for a change in the Work directed by a Construction Change Directive, such agreement shall be the subject of a Change Order. The Change Order shall include all outstanding Construction Change Directives on which the Parties have reached agreement on Contract Price or Contract Time issued since the last Change Order.

6.04 Determination of Cost

- A. An increase or decrease in the Contract Price or the Contract Time resulting from a change in the Work shall be determined as follows:
 - 1. A mutually accepted lump sum properly itemized and supported by sufficient substantiating data, as determined by the Owner, to permit evaluation.
 - 2. If the price change is an increase in the Contract Price, and the Work is performed by the Contractor and not a Subcontractor, it shall include the following indirect costs for Work performed by the Contractor: Workmen's Compensation and Employee Liability, and Unemployment and Social Security Taxes.
 - a. In addition to the above indirect costs, the Contractor shall be allowed a markup not to exceed ten percent (10%). This markup shall be all inclusive for overhead, supervision, and profit.
 - 3. If the price change is an increase in the Contract Price, and the Work is performed by both the Contractor and a Subcontractor, the Contractor shall be allowed a markup of ten percent (10%) on that portion of the Work performed by the Contractor, and a markup of five percent (5%) on the portion of the Work performed by the Subcontractor. The same percentages shall apply to Sub-subcontractors.
 - 4. On any change that involves a decrease in the Contract Price, no overhead and profit shall be figured.

6.05 Changes Notice

A. Except as provided in Subsection 5.03 C for any claim for an increase in the Contract Price or Contract Time, the Contractor shall give the Owner written notice of the claim within fourteen (14)

Days after the occurrence giving rise to the claim or within fourteen (14) Days after the Contractor first recognizes the condition giving rise to the claim, whichever is later. Except in an emergency, notice shall be given before proceeding with the Work. Thereafter, the Contractor shall submit written documentation of its claim, including appropriate supporting documentation, within twenty-one (21) Days after giving notice, unless the Parties mutually agree upon a longer period of time. The Owner shall respond in writing denying or approving the Contractor's claim no later than fourteen (14) Days after receipt of the Contractors claim. Owner's failure to so respond shall be deemed a denial of the claim. Any change in the Contract Price or the Contract Time resulting from such claim shall be authorized by Change Order.

6.06 Incidental Changes

A. The Owner may direct the Contractor to perform incidental changes in the Work, upon concurrence with the Contractor that such changes do not involve adjustments in the Contract Price or Contract Time. Incidental changes shall be consistent with the scope and intent of the Contract Documents. The Owner shall initiate an incidental change in the Work by issuing a written order to the Contractor. Such written notice shall be carried out promptly and is binding on the Parties.

ARTICLE 7 – PAYMENT

7.01 <u>Schedule of Values</u>

A. Within fifteen (15) Days of receiving the Notice to Proceed and before the first application for payment, the Contractor shall submit to the Owner, for approval, a schedule of values allocating the Contract Price to various portions of the Work. This schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. Upon approval by the Owner, this schedule shall be used as the basis for reviewing the Contractor's applications for payment and shall be revised if later found by the Owner to be inaccurate.

7.02 Progress Payments

- A. Applications for Payment: The Contractor shall submit to the Owner and, if directed, the Design Professional a monthly application for payment no later than the first Day of the calendar month for the preceding calendar month. Contractor's applications for payment shall be itemized and supported by the Contractor's schedule of values based on a percentage of completion and shall include any other substantiating data as required by the Agreement. Applications for payment shall be notarized and include payment requests on account of properly authorized Change Orders or Construction Change Directives. The Owner shall pay the amount otherwise due on any payment application no later than thirty (30) Days after the Contractor has submitted a complete and accurate payment application, or such shorter time period as required by applicable state statute. The Owner may deduct from any progress payment amounts that may be retained pursuant to Subsection 7.02 D.
- B. Stored Materials and Equipment: Unless otherwise provided in the Contract Documents, applications for payment may include materials and equipment not yet incorporated into the Work but delivered to and suitably stored onsite including applicable insurance, storage, and costs incurred transporting the materials to an offsite storage facility. Approval of payment applications for stored materials and equipment stored offsite shall be conditioned on a submission by the Contractor of bills of sale and proof of required insurance, or such other documentation satisfactory

to the Owner to establish proper valuation of the stored materials and equipment, the Owner's title to such materials and equipment, and to otherwise protect the Owner's interest therein, including transportation to the Site.

- C. Lien Waivers and Liens
 - 1. Partial Lien Waivers and Affidavits: If required by the Owner, as a prerequisite for payment, the Contractor shall provide partial lien and claim waivers in the amount of the application for payment and affidavits from is Subcontractors and Suppliers for the completed Work. Such waivers shall be conditional upon payment. In no event shall the Contractor be required to sign an unconditional waiver of lien or claim, either partial or final, prior to receiving payment or in an amount in excess of what it has been paid.
 - 2. Removing Liens: If the Owner has made payments in the time required by this article, the Contractor shall, within thirty (30) Days after filing, cause the removal of any liens filed against the premises or public improvement fund by any party or parties performing labor or services or supplying materials in connection with the Work. If the Contractor fails to take such action on a lien, the Owner may cause the lien to be removed at the Contractor's expense, including bond costs and reasonable attorney's fees. This subsection shall not apply if there is a dispute pursuant to Article 10 relating to the subject matter of the lien.
- D. Retainage: From each progress payment made prior to Substantial Completion, the Owner shall retain ten percent (10%) of the amount otherwise due after deduction of any amounts as provided in Section 7.02, and in no event shall such percentage exceed any applicable statutory requirements.

7.03 Adjustment of Contractor's Payment Application

- A. The Owner may adjust or reject a payment application or nullify a previously approved payment application, in whole or in part, as may reasonably be necessary to protect the Owner from loss or damage based upon the following, to the extent that the Contractor is responsible under the Agreement:
 - 1. The Contractor's repeated failure to perform the Work as required by the Contract Documents;
 - 2. Except as accepted by the insurer providing builders risk or other property insurance covering the project, loss or damage arising out of or relating to the Agreement and caused by the Contractor to the Owner or to Others to whom the Owner may be liable;
 - 3. The Contractor's failure to properly pay Subcontractors and Suppliers following receipt of such payment from the Owner;
 - 4. Rejected, nonconforming or Defective Work not corrected in a timely fashion;
 - 5. Reasonable evidence of delay in performance of the Work such that the Work will not be completed within the Contract Time;
 - 6. Reasonable evidence demonstrating that the unpaid balance of the Contract Price is insufficient to fund the cost to complete the Work; and
 - 7. Uninsured third-party claims involving the Contractor, or reasonable evidence demonstrating that third-party claims are likely to be filed unless and until the Contractor furnishes the Owner with adequate security in the form of a surety bond, letter of credit, or other collateral or commitment sufficient to discharge such claims if established.

B. No later than seven (7) Days after receipt of an application for payment, the Owner shall give written notice to the Contractor, at the time of disapproving or nullifying all or part of an application for payment, stating its specific reasons for such disapproval or nullification, and the remedial actions to be taken by the Contractor in order to receive payment. When the above reasons for disapproving or nullifying an application for payment are removed, payment will be promptly made for the amount previously withheld.

7.04 Acceptance of Work

A. Neither the Owner's payment of progress payments nor its partial or full use or occupancy of the Project constitutes acceptance of Work not complying with the Contract Documents.

7.05 Payment Delay

A. If for any reason not the fault of the Contractor, the Contractor does not receive a progress payment from the Owner within seven (7) Days after the time such payment is due, then the Contractor, upon giving seven (7) Days written notice to the Owner, and without prejudice to and in addition to any other legal remedies, may stop Work until payment of the full amount owing to the Contractor has been received.

7.06 <u>Substantial Completion</u>

- A. The Contractor shall notify the Owner and, if directed, the Design Professional, when it considers Substantial Completion of the Work or a designated portion to have been achieved. The Owner, with the assistance of its Design Professional, shall promptly conduct an inspection to determine whether the Work or its designated portion can be occupied or used for its intended use by the Owner without excessive interference in completing any remaining unfinished Work. If the Owner determines that the Work or designated portion has not reach Substantial Completion, the Owner shall promptly compile a list of items to be completed or corrected so the Owner may occupy or use the Work or designated portion for its intended use. The Contractor shall promptly complete all items on the list.
 - 1. The Contractor's notification of Substantial Completion shall include (a) a list of items to be completed or corrected, and (b) all permits, certificates, and special warranties required by the Contract Documents, endorsed by the Contractor and in a form reasonably acceptable to the Owner.
- B. When Substantial Completion of the Work or a designated portion is achieved, the Owner or Design Professional shall prepare a Certificate of Substantial Completion establishing the date of Substantial Completion and the respective responsibilities of each Party for interim items such as security, maintenance, utilities, insurance, and damage to the Work and fixing the time for completion of all items on the list accompanying the Certificate of Substantial Completion. In the absence of a clear delineation of responsibilities, the Owner shall assume all responsibilities for items such as security, maintenance, utilities, insurance, and damage to the Work. The Certificate of Substantial Completion shall also list any items to be completed or corrected and establish the time for their completion or correction.

- C. Unless otherwise provided in the Certificate for Substantial Completion, warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or a designated portion.
- D. Upon the Owner's acceptance of Substantial Completion, the Owner shall pay to the Contractor the remaining retainage held by the Owner for the Work described in the Certificate of Substantial Completion, less a sum equal to two hundred percent (200%) of the estimated cost of completing or correcting remaining items on that part of the Work, as agreed to by the Parties as necessary to achieve Final Completion. The Owner shall pay the Contractor monthly the amount retained for unfinished items as each item is completed.

7.07 Partial Occupancy or Use

- A. The Owner may occupy, or use completed or partially completed portions of the Work when:
 - 1. The portion of the Work is designated in a Certificate of Substantial Completion;
 - 2. Appropriate insurer(s) consent to the occupancy or use, and
 - 3. Appropriate authorities having jurisdiction authorize the occupancy or use.

7.08 Final Completion and Final Payment

- A. Upon notification from the Contractor that the Work is complete and ready for final inspection and acceptance, the Owner with the assistance of its Design Professional shall promptly conduct an inspection to determine if the Work has been completed and is acceptable under the Contract Documents.
- B. When Final Completion has been achieved, the Contractor shall prepare for the Owner's written acceptance a final application for payment stating that to the best of the Contractor's knowledge, and based on the Owner's inspections, the Work has reached Final Completion in accordance with the Contract Documents.
- C. Final payment of the balance of the Contract Price shall be made to the Contractor within thirty (30) Days after the Contractor has submitted a complete and accurate application for final payment, including submissions required under the subsection below.
- D. Final payment shall be due on the Contractor's submission of the following to the Owner:
 - 1. An affidavit declaring any indebtedness connected with the Work to have been paid, satisfied, or to be paid with the proceeds of final payment, so as not to encumber the Owner's property;
 - 2. As-built record drawings, manuals, copies of warranties, and all other close-out documents required by the Contract Documents;
 - 3. Release of any liens, conditioned on final payment being received;
 - 4. Consent of any surety; and
 - 5. Any outstanding known and unreported accidents or injuries experienced by the Contractor or its Subcontractors at the Site.
- E. If, after Substantial Completion of the Work, the Final Completion of a portion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the balance due for

portions of the Work fully completed and accepted. If the remaining contract balance for Work not fully completed and accepted is less than the retained amount prior to payment, the Contractor shall submit to the Owner and, if directed, the Design Professional, the written consent of any surety to payment of the balance due for portions of the Work that are fully completed and accepted. Such payment shall not constitute a waiver of claims, but otherwise shall be governed by these final payment provisions.

F. Contractor Acceptance of Final Payment: Unless the Contractor provides written identification of unsettled claims with an application for final payment, its acceptance of final payment constitutes a waiver of all claims by the Contractor arising out of or related to the Agreement or the Work.

ARTICLE 8 – INDEMNITY, INSURANCE, AND BONDS

8.01 Indemnity

- A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, the Owner's officers, directors, members, consultants, agents, and employees, the Design Professional, and Others (the Indemnitees) from all claims for bodily injury and property damage, other than to the Work itself and other property insured, including reasonable attorney's fees, costs, and expenses, that may arise from the performance of the Work, but only to the extent caused by the negligent acts or omissions of the Contractor, Subcontractors, or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.
- B. No Limitation on Liability: The limits and types of insurance set forth in this Article are the minimum required amounts and in no way limit the liability of the Contractor or Subcontractors. In any and all claims against the Indemnitees by any employee of the Contractor, anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under workers' compensation acts, disability benefit acts, or other employment benefit acts.

8.02 Insurance

- A. The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement and Section 8.03 "Insurance Requirements."
- B. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where Project is located.
- C. The Owner, its trustees, their officers, employees, representatives, and agents including the Design Professional, shall be included as additional insureds (except under worker's compensation and employer's liability insurance) for and relating to the Work to be performed by the Contractor.
- D. Proof of Coverage: Certificates of Insurance, as evidence of the insurance required by these Contract Documents, shall be submitted by the Contractor to the Owner prior to the date of the Agreement and in all cases prior to the commencement of Work.

- E. Subcontractor Insurance: The Contractor shall either require subcontractors to carry the insurance or the Contractor shall insure the activities of the Subcontractors in the types and form of insurance required under the Contract Documents, and in such amounts as the Contractor shall deem appropriate.
- F. Notice of Cancelation or Expiration: Within ten (10) Days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide required coverage.
- G. Workers Compensation Insurance: Workers compensation insurance is required for all workers on the Site of this Project. Per RSA 21-I:80-VI, at the outset of Work on any State construction project, the Contractor shall provide to the Owner a current list of all Subcontractors and Subsubcontractors the Contractor has agreed to use on the Project, with a record of the entity to whom such Subcontractor is insured for workers compensation purposes. This list shall be posted on the Project Site and updated as needed to reflect any new Subcontractors or Sub-subcontractors.
 - 1. If it is determined that a Subcontractor or Sub-subcontractor is present on the Site without their name and direct contracting relationship being posted in a visible location at the Site, the Contractor shall require the Subcontractor or Sub-subcontractor to provide the information within thirty-six (36) hours and to post the information in a visible location at the Site. If the information is not provided within thirty-six (36) hours of its request, the Contractor shall suspend the Subcontractor or Sub-subcontractor until the information is provided and posted.

8.03 Insurance Requirements

- A. <u>Workers Compensation Insurance:</u> In accordance with RSA 281-A.
 - 1. Employers' Liability:
 - a. \$100,000 Each accident
 - b. \$500,000 Disease-policy limit
 - c. \$100,000 Disease-each employee
- B. <u>Commercial General Liability Insurance:</u> Occurrence Form Policy; Include full Contractual Liability, Broad Form Property Damage, Explosion, Collapse, and Underground Hazard coverage
 1. Limits of Liability:
 - a. \$1,000,000 Each Occurrence; Bodily Injury & Property Damage
 - b. \$2,000,000 General Aggregate; Include Per Project Aggregate Endorsement
 - c. \$2,000,000 Products/Completed Operations Aggregate
- C. <u>Commercial Automobile Liability:</u> Covering all motor vehicles including owned, hired, borrowed, and non-owned vehicles
 - 1. Limits of Liability:
 - a. \$1,000,000 Combined Single Limit for Bodily Injury & Property Damage

- D. <u>Commercial Umbrella Liability:</u>
 - 1. Limits of Liability:
 - a. \$1,000,000 Each Occurrence
 - b. \$1,000,000 Aggregate
- E. <u>Other Insurance:</u> If blasting and/or demolition are required by the Contract Documents, the Contractor or Subcontractor shall obtain the respective coverage for those activities and shall furnish to the Owner a Certificate of Insurance evidencing the required coverage's prior to commencement of any operations involving blasting and/or demolition.

8.04 <u>Owner's Insurance</u>

A. Owner Liability Insurance: The Owner shall either self-insure or obtain and maintain its own liability insurance for protection against claims arising out of the performance of the Agreement, including, without limitation, loss of use and claims, losses, and expenses arising out of the Owner's acts or omissions.

8.05 <u>Bonds</u>

- A. Performance and Payment Bond: In the event a bid is \$75,000 or more, the Contractor shall furnish security by bond or otherwise in an amount equal to 100% of the Contract Price guaranteeing performance and payment. The payment security shall meet the requirements of New Hampshire RSA 447:16.
- B. The fully executed performance and payment bond must be returned to the Owner a minimum of fifteen (15) Days prior to the Date of Commencement for the Work.

ARTICLE 9 – SUSPENSION, NOTICE TO CURE, AND TERMINATION

9.01 Suspension by Owner for Convenience

- A. The Owner may, without cause, order the Contractor in writing to suspend, delay, or interrupt the performance of the Work, for the convenience of the Owner and not due to any act or omission of the Contractor or any person or entity for whose acts or omissions the Contractor may be liable, then the Contractor shall immediately suspend, delay, or interrupt that portion of the Work for the time period ordered by the Owner. The Contract Price and the Contract Time shall be equitably adjusted by Change Order for the cost and delay resulting from any such suspension.
- B. Any action taken by the Owner that is permitted by any other provision of the Contract Documents and that result in a suspension of part of the Work does not constitute a suspension of Work under this section.

9.02 <u>Termination by Owner for Convenience</u>

- A. The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.
- B. Upon receipt of Notice from the Owner of such termination for the Owner's convenience, the Contractor shall:

- 1. Cease operations as directed by the Owner in the notice;
- 2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- 3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
- C. In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

9.03 <u>Default</u>

- A. The Owner may terminate this Contract for default if the Contractor materially breaches this Contract by:
 - 1. Refusing, failing, or being unable to commence the Work within the time specified in the Contract Documents
 - 2. Refusing, failing, or being unable to properly manage the Work;
 - 3. Refusing, failing, or being unable to supply the Work with sufficient numbers of properly skilled workers, proper materials, or construction equipment, or to maintain the Construction Schedule;
 - 4. Refusing, failing, or being unable to make prompt payment to Subcontractors or Suppliers;
 - 5. Disregarding Laws, ordinances, rules, regulations, or orders of any authority having jurisdiction or quasi-public authority having jurisdiction over the Project; or,
 - 6. Refusing, failing, or being unable to substantially perform in accordance with the terms of the Agreement and Contract Documents, as determined by the Owner, or as otherwise defined elsewhere herein.
- B. Upon the occurrence of any of the events described in Section 9.03 A, the Owner shall give written Notice to the Contractor setting forth the nature of the default and requesting cure within seven (7) Days from the date of notice. Within seven (7) Days of receipt of the Owner's notice of default, the Contractor shall furnish the Owner with either:
 - 1. Written evidence that the default has been cured; or,
 - 2. A written plan demonstrating steps to be taken by the Contractor to cure the default and accomplish completion of the Work in accordance with the requirements of the Contract Documents and within established cost and schedule requirements.

9.04 <u>Owner's Remedies</u>

- A. If the Contractor fails to cure the default or provide a written plan to cure the default satisfactory to the Owner, or if the Contractor fails to expeditiously continue such cure until complete, the Owner may give written Notice to the Contractor of immediate termination, and the Owner, without prejudice to any other rights or remedies, may take any or all of the following actions:
 - 1. Exclude the Contractor from the Site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

- 2. Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.
- 3. Require the Contractor to assign the Contractor's right, title, and interest in any or all of the Contractor's subcontracts or orders to the Owner.
- B. When the Owner terminates the Agreement for default, the Owner shall be entitled to collect from the Contractor all direct, indirect, and consequential damages suffered by the Owner on account of the Contractor's default, including without limitation additional services and expenses of the Design Professional and attorney's fees and expenses made necessary thereby. The Owner shall be entitled to hold all amounts due the Contractor at the date of termination until all of the Owner's damages have been established, and to apply such amounts to such damages. In no case shall the Contractor be entitled to receive further payment until the Work is finished.

9.05 <u>Contractor's Right to Terminate</u>

- A. Upon seven (7) Days written notice to the Owner, the Contractor may terminate the Agreement if the Work has been stopped for a thirty (30) Day period through no fault of the Contractor for any of the following reasons:
 - 1. Under court order or order of other governmental authorities having jurisdiction;
 - 2. As a result of the declaration of a national emergency or other governmental act during which, through no act or fault of the Contractor, materials are not available; or
 - 3. Suspension by the Owner for convenience pursuant to Section 9.01
- B. In addition, if the Work is stopped for a period of 60 consecutive Days through no act or fault of the Contractor, and upon seven (7) Days written notice to the Owner, the Contractor may terminate the Agreement if the Owner:
 - 1. Has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work;
 - 2. Fails to pay the Contractor in accordance with the Agreement; or
 - 3. Otherwise materially breaches the Agreement
- C. Upon termination by the Contractor in accordance with this Section, the Contractor is entitled to recover from the Owner payment for all Work executed and for any proven loss, cost, or expense in connection with the Work, including all demobilization.

9.06 Obligations Arising Before Termination

A. Even after termination, the provisions of this Agreement still apply to any Work performed, payments made, events occurring, costs charged or incurred, or obligations arising before the termination date.

ARTICLE 10 – DISPUTE MITIGATION AND RESOLUTION

10.01 Work Continuance and Payment

A. Unless otherwise agreed in writing, the Contractor shall continue the Work and maintain the Construction Schedule during any dispute mitigation or resolution proceedings. If the Contractor continues to perform, the Owner shall continue to make payments in accordance with the Agreement.

10.02 Direct Discussions

A. If the Parties cannot reach resolution on a matter relating to or arising out of the Agreement, the Parties shall endeavor to reach resolution through good faith direct discussions between the Parties' representatives, who shall possess the necessary authority to resolve such matters and who shall record the date of first discussions. If the Parties' representatives are not able to resolve such matter within five (5) Business Days from the date of first discussion, the Parties' representatives shall immediately inform senior executives of each of the parties in writing that a resolution could not be reached. Upon receipt of such notice, the senior executives of the Parties shall meet within five (5) Business Days to endeavor to reach resolution. If the dispute remains unresolved after fifteen (15) Days from the date of first discussion, the Parties shall submit such matter to the dispute mitigation and dispute resolution procedures selected below.

10.03 Mediation

A. If direct discussions pursuant to Section 10.02 do not result in resolution of the matter, the Parties shall endeavor to resolve the matter by mediation through the current Construction Industry Mediation Rules of the American Arbitration Association, or the Parties may mutually agree to select another set of mediation rules. The parties shall mutually agree upon the mediator and the mediation process. The mediation shall be convened within thirty (30) Business Days of the matter first being discussed and shall conclude within forty-five (45) Business Days of the matter first being discussed. Either party may terminate the mediator. The costs of the mediation shall be shared equally by the Parties.

10.04 Binding Dispute Resolution

A. If the matter is unresolved after submission of the matter to mediation, the Parties shall submit the matter to litigation in either the state or federal court having jurisdiction of the matter in the location of the Project.

10.05 <u>Costs</u>

A. The Parties shall pay their own costs and attorneys' fees of any binding dispute resolution procedures unless otherwise determined by the adjudicator.

10.06 <u>Multiparty Proceeding</u>

A. All parties necessary to resolve a matter agree to be parties to the same dispute resolution proceeding, if possible. Appropriate provisions shall be included in all other contracts relating to the Work to provide for the joinder or consolidation of such dispute resolution procedures.

10.07 Lien Rights

A. Nothing in this article shall limit any rights or remedies not expressly waived by the Contractor that Contractor may have under lien laws.

ARTICLE 11 – MISCELLANEOUS

11.01 Conflicting Terms

A. These General Conditions are supplementary to the General Provisions of the New Hampshire Form P-37 Agreement, and in no case shall be construed or interpreted to reduce or supersede the requirements thereof. In all cases these General Conditions shall be considered as additions to those described in the Agreement.

ARTICLE 12 – CONTRACT DOCUMENTS

12.01 Interpretation of Contract Documents

- A. The Contract Documents are complimentary. If Work is shown only on one of the Contract Documents but not on the other, the Contractor shall perform the Work as though fully described on both.
- B. In case of conflict between the drawings and specifications, the specifications shall govern. In any case of omissions or errors in figures, drawings, or specifications, the Contractor shall submit the matter to the Owner for clarification. The Owners clarifications are final and binding.
- C. The Drawings are generally made to scale, but all working dimensions shall be taken from the figured dimensions, or by actual measurements taken at the Site, and in no case by scaling. Whether or not an error is believed to exist, deviation from the drawings and dimensions given thereon shall be made only after approval in writing from the Owner and its Design Professional.
- D. Unless otherwise specifically defined in the Agreement, any terms that have well-known technical or trade meanings shall be interpreted in accordance with their well-known meanings.

12.02 Order of Precedence

- A. In case of any inconsistency, conflict, or ambiguity among the Contract Documents, the documents shall govern in the following order:
 - 1. Change Orders and written amendments to the Agreement;
 - 2. The Agreement;
 - 3. The drawings (large scale governing over small scale), specifications, and addenda issued and acknowledged before the execution of the Agreement;
 - 4. Approved submittals;
 - 5. Information furnished by the Owner;
 - 6. Other Contract Documents listed in the Agreement.
- B. Among categories of documents having the same order of precedence, the term or provision that is strictest shall control.

END OF GENERAL CONDITIONS

SECTION 00 73 00

SUPPLEMENTARY CONDITIONS FOR FEDERALLY FUNDED PROJECTS

PART 1 - GENERAL

1.01 NOTICE OF FEDERAL FUNDING

A. This Project is being performed in whole or in part using federal funds. Therefore, all work or services performed by the Contractor and its subcontractors shall be subject to the terms and conditions set forth in this Section in addition to all terms and conditions in the Agreement, General Conditions, and other contract documents. The concepts, rules and guidelines set forth in 2 CFR 200 describing allowable costs and administrative requirements apply.

1.02 **DEFINITIONS**

A. As used herein, "Federal Government" means the government of the United States of America. "Federal Agency" means an agency, entity, department, or division of the Federal Government that is providing funding for this Project. All other terms shall have the meanings established in the Agreement, General Conditions, and Project Manual, unless such definitions conflict with a definition provided in an applicable statute or regulation.

1.03 CONFLICTING TERMS OR CONDITIONS

A. To the extent that any terms or conditions set forth herein conflict with the Agreement or its General Conditions, the more stringent of the two terms shall govern.

1.04 NO OBLIGATION BY FEDERAL GOVERNMENT

A. The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, Contractor, or any other party pertaining to any matter resulting from the contract.

1.05 COMPLIANCE WITH FEDERAL LAWS, REGULATIONS AND EXECUTIVE ORDERS

A. The Contractor and its subcontractors and suppliers shall comply with all applicable Federal laws, regulations, and executive orders, regardless of whether set forth herein. The Contractor shall assist and enable the State in complying with any requirements imposed by the Federal Agency as a condition of funding.

1.06 NONDISCRIMINATION

- A. Per Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.), Contractors are prohibited from discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.
- B. Contractors shall not discriminate against individual with disabilities and shall provide goods and services in a manner that is accessible to and usable by individuals with disabilities, in compliance with Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), and its

implementing regulations, and Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.)

1.07 EQUAL EMPLOYMENT OPPORTUNITY

- A. Equal Opportunity in Construction Projects: Pursuant to 41 CFR Part 60, during the performance of this contract, the Contractor agrees as follows:
 - The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
 - a. Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 - 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
 - 3. The Contractor will not discharge or in any other manner discriminate against an employee or applicant for employment because such employee or applicant has inquired about, or discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.
 - 4. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - 5. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
 - 6. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
 - 7. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible

for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- 8. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:
 - a. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

1.08 MINORITY BUSINESSES

- A. The Contractor must take all necessary affirmative steps to ensure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- B. Affirmative steps must include:
 - 1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - 2. Ensuring that small and minority businesses and women's business enterprises are solicited whenever there are potential sources;
 - 3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
 - 4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business and women's business enterprises;
 - 5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - 6. Requiring subcontractors to take the affirmative steps listed above.

1.09 PROHIBITION ON SEGREGATED FACILITIES

- A. By submission of this Bid, the Contractor certifies that it does not and will not maintain or provide for its employees and segregated facilities at any of its establishments, and it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agree that a breach of this certification is a violation of the Equal Employment opportunity clause of this Agreement. The Contractor further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- B. "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage

or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

1.10 COPELAND ANTI-KICKBACK ACT

A. The Contractor shall comply with all applicable provisions of the Copeland Anti-Kickback Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"), which are incorporated into this Agreement by reference. This act provides that each contractor or subcontractor is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The Contractor shall report all suspected or reported violations to the State and the U.S. Department of Treasury.

1.11 CONTRACT WORK HOURS AND SAFETY STANDARD ACT

A. The Contractor shall comply with all applicable provisions of 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, the Contractor is required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

1.12 SUSPENSION AND DEBARMENT

- A. Universal Identifier and System for Award Management (SAM): The Contractor shall maintain active registration in the System for Award Management (SAM) throughout the term of this contract and provide evidence of active registration and assignment of a Universal Entity Identified (UEI) to the State as requested.
- B. By signing the Agreement the Contractor attests that in accordance with 2 CFR 180.220, to the best of the Contractors knowledge, the Contractor is not debarred, suspended, excluded, disqualified, or otherwise ineligible from participation in covered transactions as defined in 2 CFR 180. Should the Contractor become debarred, suspended, excluded, disqualified, or otherwise ineligible at any point during the contract term, the Contractor shall immediately notify the State.

1.13 LOBBYING RESTRICTIONS

A. The Contractor certifies by signing the Agreement, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 USC 1253.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," OMB Number 4040-0013, in accordance with its instructions.
- 3. The Contractor shall require that the language of this certification is included in all subcontracts, sub-subcontracts, and material supply agreements, at all tiers, and that all such sub agreements shall certify and disclose accordingly.

1.14 PROCUREMENT OF RECOVERED MATERIALS

A. The Contractor shall comply with the requirements of Section 6002 of the Solid Waste Disposal Act, as prescribed in 2 CFR 200.323, including procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeds \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

1.15 ACCESS TO RECORDS AND REPORTS

A. The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the State, the Federal Agency, and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts, and transcriptions. The Contractor shall maintain all books, records, and reports required under this contract for a period of not less than five years after final payment is made and all pending matters are closed.

1.16 SAFETY AND ACCIDENT PREVENTION

A. All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

- B. Seat Belt Use: The Contractor is encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.
- C. Text Messaging: The Contractor is encouraged to adopt and enforce policies that ban text messaging while driving and to establish workplace policies to decrease accidents caused by distracted drivers.

1.17 RIGHTS TO INVENTIONS

A. Contracts or Agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the State in any resulting inventions as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This Agreement incorporates by reference the patent and inventions rights as specified within 37 CFR 401.14, Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

1.18 ENERGY CONSERVATION

A. The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.).

1.19 CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

- A. If the amount of the Contract exceeds \$100,000, the Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387), and to take any necessary actions to ensure compliance. The Contractor shall promptly notify the State and Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA) of any violations of these standards, orders, or regulations.
- B. Environmental Laws and Regulations: The Contractor must comply with all generally applicable environmental laws and regulations unless explicitly exempted under the U.S. Department of Treasury's SLFRF Final Rule, supplemental guidance, or the terms and conditions of the Agreement or the prime agreement between Treasury and the State.
 - 1. The Contractor will include this clause in all subcontracts and will ensure subcontractor compliance with these terms.

1.20 PROTECTIONS FOR WHISTLEBLOWERS

A. In accordance with 41 USC 4712, an employee of a contractor, subcontractor, grantee, or subgrantee, or personal services contractor may not be discharged, demoted, or otherwise discriminated against as reprisal for disclosing to a person or entity listed below information that the employee reasonably believes is evidence of gross mismanagement of a federal contract or grant, a gross waste of federal funds, an abuse of authority relating to a federal contract or grant, a substantial or specific danger to public health or safety, or a violation of law, rule, or other

regulation related to a federal contract (including the competition or negotiation of a contract) or grant.

- B. The list of persons and entities referenced in the paragraph above includes the following:
 - 1. A member of Congress or a representative of a committee of Congress;
 - 2. An Inspector General;
 - 3. The Government Accountability Office;
 - 4. A Treasury employee responsible for contract or grant oversight or management;
 - 5. An authorized official of the US Department of Justice or other law enforcement agency;
 - 6. A court or grand jury; or
 - 7. A management official or employee of the State, subrecipient, contractor, or subcontractor, who has the responsibility to investigate, discover, or address misconduct.
- C. The Contractor and all subcontractors shall inform their employees in writing of the rights and remedies provided in 41 USC 4712 in the predominant language of the workforce.

1.21 DRUG FREE WORKPLACE ACT

A. The Contractors shall provide a drug free workplace in accordance with the Drug Free Workplace Act of 1988, 41 U.S.C. Chapter 81, and all applicable regulations. The Contractor shall report any conviction of the Contractor's personnel under a criminal drug statute for violations occurring on the Contractor's premises or off the Contractor's premises while conducting official business. A report of a conviction shall be made to the State within five (5) business days after the conviction.

1.22 ACCESS REQUIREMENTS FOR PERSONS WITH DISABILITIES

A. The Contractor shall comply with 49 U.S.C. 5301 (d), stating Federal policy that the elderly and persons with disabilities have the same rights as other persons to use mass transportation services and facilities and that special efforts shall be made in planning and designing those services and facilities to implement that policy. The Contractor shall also comply with all applicable requirements of Sec. 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, which prohibits discrimination on the basis of handicaps, and the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. et seq., which requires that accessible facilities and services be made available to persons with disabilities, including and subsequent amendments thereto.

1.23 DOMESTIC PREFERENCES FOR PROCUREMENT

- A. The Contractor shall, to the greatest extent practicable and as applicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products) as prescribed by 2 CFR 200.322. For the purposes of this requirement, "produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States, and "manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.
 - 1. For the purposes of this Project, the requirements of 2 CFR 200.322 (c) Buy America preferences for infrastructure projects, set forth in 2 CFR 184, do not apply.

1.24 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT

A. The Contractor shall adhere to the requirements of 2 CFR 200.216 regarding certain telecommunications and video surveillance equipment. The Contractor is prohibited from procuring, obtaining, or extending, renewing, or entering into a contract that involves equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

END OF SUPPLEMENTARY CONDITIONS FOR FEDERALLY FUNDED PROJECTS

APPLICATION AND	CERTIFICAT		AIA DOCUMENT G70	2 PAGE 1 OF 2 PAGES
TO (OWNER):		PROJECT:	APPLICATION NO:	Distribution to: OWNER
			Period to:	ARCHITECT CONTRACTOR
FROM:		VIA (ARCHITECT):	ARCHITECT'S PROJECT NO: CONTRACT DATE:	CONTRACTOR
CONTRACT FOR:				
CONTRACTOR'S A	PPLICATION	FOR PAYMENT	Application is made for Payment, as shown below, in conn Continuation Sheet, AIA Document G703, is attached.	ection with the Contract.
CHANGE ORDER SUMMAF	Υ Υ		1. ORIGINAL CONTRACT SUM	
Change Orders approved ir	ADDITIONS	DEDUCTIONS	2. Net change by Change Orders	
previous months by Owner			3. CONTRACT SUM TO DATE	
TOTAL	-		4. TOTAL COMPLETED & STORED TO DATE	
Approved this Month Number Date Approved			5. RETAINAGE:	
Number Date Approved			a. 10% of Completed Work b. 10% of Stored Material	
			Total Retainage	
			6. TOTAL EARNED LESS RETAINAGE	
			7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	
TOTALS	-	-	8. CURRENT PAYMENT DUE	
Net change by Change Orde	ers	\$0.00	9. BALANCE TO FINISH, PLUS RETAINAGE	
The undersigned Contractor certifies that to the	ne best of the Contractor's kno	wledge, information and belief the		
Work covered by this Application for Payment			State of: County of:	00
that all amounts have been paid by the Contra	·		Subscribed and sworn to before me this day of Notary Public:	, 20
issued and payments received from the Owne CONTRACTOR:	er, and that current payment sr	nown herein is now due.	My Commission expires:	
By:	Date:			
			AMOUNT CERTIFIED\$	
ARCHITECT'S CER	TIFICATE FOI	R PAYMENT	(Attach explanation if amount certified differs from the amo	ount applied for.)
In accordance with the Contract Do	ocuments, based on on	-site observations and the	ARCHITECT:	
data comprising the above application			By: Date	
best of the Architect's knowledge, indicated, the quality of the Work is the contractor is entitled to paymer	s in accordance with the	e Contract Documents, and	This Certificate is not negotiable. The AMOUNT CERTIFIC Contractor named herein. Issuance, payment and accepta prejudice to any rights of the Owner or Contractor under the	nce of payment are without
AIA DOCUMENT G702 • APPLICATIO THE AMERICAN INSTITUTE OF ARCI	N AND CERTIFICATE FC	R PAYMENT • MAY 1983 EDITI	ON • AIA • 1983	G702-1983

CONTINUATION SHEET

AIA DOCUMENT G703

PAGE 2 OF 2 PAGES

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing

Contractor's signed Certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

PERIOD TO: ARCHITECTS PROJECT NO:

APPLICATION NUMBER: APPLICATION DATE:

Α	В	С	D	E	F	G		Н	I
ITEM	DESCRIPTION OF WORK	SCHEDULED	WORK CO	MPLETED	MATERIALS	TOTAL	%	BALANCE	RETAINAGE
NO.		VALUE	FROM PREVIOUS	THIS PERIOD	PRESENTLY	COMPLETED AND	(G÷C)	TO FINISH	
			APPLICATION		STORED (NOT	STORED TO		(C - G)	
			(D+E)		IN D OR E)	DATE (D+E+F)			
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

AIA DOCUMENT G703 • APPLICATION AND CERTIFICATE FOR PAYMENT • MAY 1983 EDITION • AIA • 1983 THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006

fice Use Only DSFM 106 rev 6/2019) te Rcv: v By: nount: X #: vv: rmit #:	Offic Paul Mailing Addres 603 TDD Access: Relay NH	AMPSHIRE DEPAR Robert L. Quinn Division of Fire Safet ce of the State Fire Ma J. Parisi, State Fire Ma ss: 33 Hazen Drive Co 223-4289, Fax 603-223 1-800-735-2964 Arson DING PERMIT APPL	y arshal arshal ncord NH 03305 3-4294 1 Hotline 1-800-400-35	
		a separate application per pe		
Applicant Informati	on (Property Owner)	APPLICATION Property I	nformation	
			ame:	
Title:		Map/Lot#:_		
Address:		Address:		
City:	State :Zip:	City:	State:	Zip:
Email:				
Telephone #				
Permit Type (Check	APPL	ICATION INFORMATIO	ON Construction Type	
□Building Construct □Fire Protection □Electrical IBC Use Group:	ion Dechanical (Fuel Gas/Equ Dechanical (Non-Fuel gas Plumbing	s portion of work) Building A TRACTOR INFORMATIO		SF
Company Name:		Telephone	#·	
Address:				
City:	State:	Zip: ENSING INFORMATION	J	
	ease provide a copy of applicable	license for electrical, plum	bing or mechanical applice	ations*
	□ Fire Protection □		-	
	Exp. Date:			
Name:		Telephone	#:	
Company:				
Address:				
	State:			
5		IGN PROFESSIONAL (I		
Name:	RESPONSIBLE DES			
			-	
Address:				
City:	S	tate:Zip:		

Brief Description:		

Owner's Signature____

Date:

I hereby certify, subject to the penalties of unsworn falsification pursuant to RSA 641:3, that all statements made on this application are true to the best of my knowledge and that I am responsible to ensure that all construction work will be completed in accordance with all Federal, State and local laws and ordinances, including local Zoning Ordinances as applicable and the State of NH Building Code, and that I further authorize employees and or agents of the NH Fire Marshal's Office to enter this property for purposes of inspections.

PERMIT FEES PURSUANT TO NH CODE OF ADMINISTRATIVE RULES Saf-C 8105 *Please make checks payable to "Treasurer, State of New Hampshire"

Calculations: (Electrical/Mechanical/Plumbing)

Total cost of construction for permit calculation :\$_____(electrical/mechanical/plumbing only)

JOB COST	AMOUNT	MULTIPLY	INSP. FEE (MIN \$75.00)
1st 100,000 0.01-100,000		1.2%	
Cost 100,000.01-300,000	+	0.5%	+
Costs 300,000.01 +	+	0.3%	+
Total:	=	Total Fee:	=

<u>Re-Inspection Fee (Electrical/Mechanical /Plumbing)</u>

10% Re-inspection Fee: 10% of the fee calculated, provided that the fee shall not be less than \$100.00 nor more than \$500.00.

New Commercial Permit Fee (Building)

FEE TYPE	SQUARE FOOTAGE	FEE AMOUNT	TOTAL INSP. FEE
BUILDING PERMIT		0.30	
OTHER STRUCTURES min. \$35.00		1.00	

New Commercial Renovation Permit Fee (Building)

FEE TYPE	SQUARE FOOTAGE	FEE AMOUNT	TOTAL INSP. FEE
BUILDING PERMIT		0.15	
OTHER STRUCTURES min. \$35.00		\$1.00	

New Commercial Permit & Renovation Permit Fee (Fire Protection)

FEE TYPE # OF DEVICES		FEE AMOUNT EACH	TOTAL INSP. FEE MIN \$35.00
FIRE PROTECTION		1.00	

Re-Inspection fee for Building, Fire Protection and Other; Permit fee is \$100.00 per inspection

SECTION 01 10 00

SUMMARY

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Work sequence.
 - 4. Access to site.
 - 5. Coordination with occupants.
 - 6. Work restrictions.
 - 7. Specification and drawing conventions.
 - 8. Miscellaneous provisions.
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 50 00: Temporary Facilities and Controls

1.02 PROJECT INFORMATION

- A. Project Identification: Siding & Painting Renovations, ARP 2412
 - 1. Project Location: Wentworth-Coolidge Historic Site, 375 Little Harbor Road, Portsmouth, NH 03801
- B. Owner: State of New Hampshire, Department of Natural and Cultural Resources
 - 1. Owner's Representative: Scott Coruth, Architect. Phone: 603-271-3676, Email: scott.d.coruth@dncr.nh.gov

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. Visitors Center: Removal and replacement of cedar shingle siding, on three faces of the existing building, and localized removal and replacement of damaged cedar shingle siding in locations indicated on the Drawings.
 - 2. Mansion: Replacement of damaged and missing siding and trim components. Scraping and surface preparation of existing siding, trim, and other exterior components. Painting of the exterior of the building, including all: siding, trim, windows, doors, and other exterior painted components.

- B. Type of Contract: Project will be constructed under a stipulated lump sum grand total contract with the State of New Hampshire in accordance with the General Conditions of the Contract for Construction.
- C. The Contractor shall, except as otherwise specifically stated in Contract Documents, provide and pay for all materials, labor, tools, equipment, water, heat, fuel, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities or every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

1.04 WORK SEQUENCE

A. Work shall commence within 15 days after issuance of Notice to Proceed. Failure to comply shall constitute a Default of Contract.

1.05 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Limit site disturbance, including earthwork and clearing of vegetation to 40-feet beyond building perimeter; 10-feet beyond surface walkways, patios, surface parking, and utilities less than 12-inches in diameter; 15-feet beyond primary roadway curbs and main utility branch trenches; and 25-feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that require additional staging areas in order to limit compaction in the constructed area.
 - 2. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.06 COORDINATION WITH OCCUPANTS

A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

- 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without permission from Owner and approval of authorities having jurisdiction.
- 2. Notify Owner not less than 72-hours in advance of activities that will affect Owner's operations.

1.07 WORK RESTRICTIONS

- A. Work restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 4:30 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Access for work outside of normal working hours shall be requested in writing to the Contract Administrator, at least one week in advance. The Contract Administrator may accept or reject the request.
 - 2. No access during the following observed holidays:
 - a. New Years' Day.
 - b. Martin Luther King Jr. Civil Rights Day.
 - c. Washington's Birthday.
 - d. Memorial Day.
 - e. Independence Day.
 - f. Labor Day.
 - g. Veterans' Day.
 - h. Thanksgiving Day.
 - i. Day after Thanksgiving.
 - j. Christmas Day.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owners written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruptions to owner occupancy with owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.08 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 Drawings are described in detail in the Specifications. One or more of the following are used on 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 published as part of the U.S. National CAD Standard and scheduled on Drawings.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SUMMARY

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section Includes:
 - 1. Schedule of Values
 - 2. Applications for Payment
 - 3. Allowances

1.02 SCHEDULE OF VALUES

- A. Submit printed schedule on AIA Form G703 Continuation Sheet for G702. Contractor's standard for or electronic media printout will be considered.
- B. Submit Schedule of Values in duplicate within 15 days after the date of issuance of Notice to Proceed. Failure to submit within specified time period will constitute Default of Contract.
- A. Utilize the Schedule of Values provided with the bid and any addenda. The Contractor may add line items to the Schedule of Values with approval from the contract administrator. No line items may be deleted. Identify each line item with number and title of specification Section. Identify General Conditions, bonds, and insurance.
- C. Include separate line item for the amount of each Allowance and Alternates Specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by unit cost to achieve total for each item.
- D. Revise schedule to list approved Change Orders, with each Application for Payment.

1.03 APPLICATION FOR PAYMENT

- A. Submit three copies of each application or electronic transmittal along with any supporting materials.
- B. Execute on AIA Form G702 Application and Certificate for Payment.
- C. Items on the Application for payment shall be consistent with the items listed on the Proposal Form. Utilize Schedule of Values for listing items in Application for Payment.
- D. Submit updated construction schedule with each Application for Payment.
- E. Payment Period: Submit monthly, or as otherwise allowed by the Owner.

1.04 ALLOWANCES

- A. Contingency Allowances: Use the allowance only as directed by Section 00 41 00 "Bid Proposal Form".
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF PRICE AND PAYMENT PROCEDURES

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 20 00: Price and Payment Procedures
 - 2. SECTION 01 60 00: Product Requirements

1.02 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitution 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. Substitution for Convenience: Changes proposed by Contractor that are not required in order to meet other Project requirements but may offer advantage to Contractor.

1.03 ACTION 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. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or installation cannot be provided.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparisons of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.

- g. List of similar installation for completed projects with project names and addresses and names and addresses of architects and owners.
- h. Material test reports from qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
- j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- k. Cost information, including a proposal of change, if any, in the Contract Sum.
- I. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure or proposed substitution to produce indicated results.
- Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven 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.

1.04 QUALITY ASSURANCE

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

1.05 PROCEDURES

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

PART 2 – PRODUCTS

2.01 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately on 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 provides sustainable design characteristics that specified product provided.
 - c. Substitution request is fully documented and properly submitted.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - f. Requested substitution is compatible with other portions of the Work.
 - g. Requested substitution has been coordinated with other portions of the Work.
 - h. Requested substitution provides specified warranty.
 - i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: <u>Not allowed.</u>

PART 3 – EXECUTION (Not Used)

END OF SUBSTITUTION PROCEDURES

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 20 00: Price and Payment Procedures
 - 2. SECTION 01 25 00: Substitution Procedures
 - 3. SECTION 01 30 00: Administrative Requirements

1.02 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in Work, not involving adjustment to the Contract Sum or the Contract Time.

1.03 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specification.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified by Proposal Request or 14 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include and updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for change to Architect.

- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
- 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 3. Indicate applicable delivery charges, equipment rental, and amounts of trade discounts.
- 4. Include costs of labor and supervision directly attributable to the change.
- 5. Include an updated Contractor's construction schedule that indicated effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available float before requesting an extension of the Contract Time.
- 6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

1.04 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Contract Change Order for signatures of Owner and Contractor on Owner's standard form.

1.05 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on Architects standard form. Construction Change Directive instructs Contractor to proceed with a change in 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 Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and materials 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 CONTRACT MODIFICATION PROCEDURES

SECTION 01 30 00

ADMINISTRATIVE REQUIRMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes administrative provisions for coordinating construction operations, submittal procedures, delegated design, and Contractor's construction schedule including, but not limited to, the following:
 - 1. Project management and coordination
 - 2. Submittal procedures
 - 3. Construction schedule
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 70 00: Execution and Closeout Requirements

1.02 PROJECT MANAGEMENT AND COORDINATION

- A. Subcontract List: Submit a written summary identifying individuals or firms proposed for each portion of the Work.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance AT Project site. List e-mail addresses and telephone numbers.
- C. Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work.
- D. Requests for Information (RFIs): On discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI. Use forms acceptable to Architect.
- E. Schedule and conduct progress meetings at Project site at biweekly intervals. Notify Owner of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved in planning, coordination, or performance of future activities.
 - 1. Contractor will record minutes and distribute to all attendees, including Owner/Architect.

1.03 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

- 2. Architect will discard submittals received from sources other than Contractor.
- B. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with unique identifier, including project identifier, Specification Section number, and revision identifier.
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
- C. Identify options requiring selection by Architect.
- D. Identify deviations from the Contract Documents on submittals.
- E. Contractor's Construction Schedule Submittal Procedure:
 - 1. Submit required submittals in the following format:
 - a. Working electronic copy of schedule file, where indicated.
 - b. PDF electronic file
 - 2. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 3. Coordinate Contractor's construction schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.

PART 2 – PRODUCTS

2.01 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections.
 - 1. Submit electronic submittals vie email as PDF electronic files.
- B. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.

2.02 ACTION SUBMITTALS

- A. Submit electronic copies of each submittal unless otherwise indicated. Architect will return one copy.
- B. Product Data: Mark each copy to show applicable products and options. Include the following:

- 1. Manufacturer's written recommendations, product specifications, and installation instructions.
- 2. Wiring diagrams showing factory-installed wiring.
- 3. Printed performance curves and operational diagrams.
- 4. Testing by recognized testing agency.
- 5. Compliance with specified standards and requirements.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture and for comparison of these characteristics between submittal and actual component as delivered and installed. Include name of manufacturer and product name on label.
 - 1. If variation is inherent in material or product, submit at least three sets of paired units that show variations.

2.03 INFORMATIONAL SUBMITTALS

- A. Informational Submittals: Submit electronic copies of each submittal unless otherwise indicated. Architect will return one copy.
- B. Qualification Data: Include lists of completed projects with project names and addresses, names, and addresses of architects and owners, and other information specified.
- C. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

2.04 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, schedule in the format outlined in the General Conditions.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
- C. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.
- D. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by with Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew size, and equipment required to achieve compliance, and indicate date by which recovery will be accomplished.

PART 3 – EXECUTION

3.01 SUBMITTAL REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Architect will review each action submittal, make marks to indicate corrections or modification required, will signify each submittal with an action stamp, and will signify appropriately to indicate action.
- C. Informational Submittals: Architect will review each submittal and will return a copy. Architect will forward each submittal to appropriate party.
- D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

3.02 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule a minimum of one day before each regularly scheduled progress meeting.
 - 1. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribute copies of approved schedule to Owner/Architect, subcontractors, testing and inspecting agencies, and parties identified by Contractor with a need-to-know schedule responsibility. When revisions are made, distribute updated schedules to the same parties.

END OF ADMINISTRATIVE REQUIREMENTS

SECTION 01 35 91

HISTORIC TREATMENT PROCEDURES

PART 1 – GENERAL

1.01 DESCRIPTION

A. Section includes general protection and treatment procedures for designated historic spaces, areas, rooms, and surfaces in Project.

1.02 DEFINITIONS

- A. Consolidate: To strengthen loose or deteriorated materials in place.
- B. Design Reference Sample: A sample that represents Architects prebid selection of work to be matched; it may be existing work or work specially produced for Project.
- C. Dismantle: To disassemble or detach a historic item from a surface, or a nonhistoric item from a historic surface, using gentle methods and equipment to prevent damage to historic items and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- D. Historic: Spaces, areas, rooms, surfaces, materials, finishes, and overall appearance that are important to the successful preservation, rehabilitation, restoration, and reconstruction as determined by Architect.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- G. Reinstall: To protect removed or dismantled item, repair and clean it as indicated for reuse, and reinstall it in original position, or where indicated.
- H. Remove: To take down or detach a nonhistoric item located within a historic space, area, or room, using methods and equipment to prevent damage to historic items and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- I. Repair: To correct damage and defects, retaining existing materials, features, and finishes while employing as little new material as possible. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- J. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- K. Replicate: To reproduce in exact detail, materials, and finishes unless otherwise indicated.

- L. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- M. Restore: To consolidate, replicate, reproduce, repair, and refinish as required to achieve the indicated results.
- N. Retain: To keep existing items that are not to be removed or dismantled.
- O. Reversible: New construction work, treatments, or processes that can be removed or undone in the future without damaging historic materials unless otherwise indicated.
- P. Salvage: To protect removed or dismantled items and deliver them to Owner ready for reuse.
- Q. Stabilize: To provide structural reinforcement of unsafe or deteriorated items while maintaining the essential form as it exists at present; also, to reestablish a weather-resistant enclosure.
- R. Strip: To remove existing finish down to base material unless otherwise indicated.

1.03 COORDINATION

- A. Historic Treatment Subschedule: A construction schedule coordinating the sequencing and scheduling of historic treatment work for the entire Project, including each activity to be performed in historic spaces, areas, rooms, and on historic surfaces; and based on Contractor's Construction Schedule. Secure time commitments for performing critical construction activities from separate entities responsible for historic treatment work.
 - 1. Schedule construction operations in sequence required to obtain best historic treatment results.
 - 2. Coordinate sequence of historic treatment work activities to accommodate the following:
 - a. Owner's continuing occupancy of portions of existing building.
 - b. Owner's partial occupancy of completed Work.
 - c. Other known work in progress.
 - d. Tests and inspections.
 - 3. Detail sequence of historic treatment work, with start and end dates.
 - 4. Utility Services: Indicate how long utility services will be interrupted. Coordinate shutoff, capping, and continuation of utility services.
 - 5. Use of elevator and stairs.
- B. Pedestrian and Vehicular Circulation: Coordinate historic treatment work with circulation patterns within Project building(s) and site. Some work is near circulation patterns. Circulation patterns cannot be closed off entirely, and in places can be only temporarily redirected around small areas of work. Plan and execute the Work accordingly.

1.04 PROJECT MEETINGS FOR HISTORIC TREATMENT

A. Preliminary Historic Treatment Conference: Before starting historic treatment work, conduct conference at Project site.

- 1. Attendees: In addition to representatives of Owner and Contractor, testing service representative, historic treatment specialists, chemical-cleaner manufacturer(s), and installers whose work interfaces with or affects historic treatment shall be represented at the meeting.
- 2. Agenda: Discuss items of significance that could affect progress of historic treatment work, including review of the following:
 - a. Historic treatment Subschedule: Discuss and finalize; verify availability of materials, historic treatment specialists' personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Fire-prevention plan.
 - c. Areas where existing construction is to remain and the required protection.
 - d. Sequence of historic treatment work operations.
 - e. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
 - f. Qualifications of personnel assigned to historic treatment work and assigned duties.
 - g. Requirements for extent and quality of work, tolerances, and required clearances.
 - h. Methods and procedures related to historic treatments, including product manufacturers' written instructions and precautions regarding historic treatment procedures and their effects on materials, components, and vegetation.
 - i. Embedded work such as flashings and lintels, special details, collection of wastes, protection of occupants and the public, and condition of other construction that affect the Work or will affect the work.
- 3. Reporting: Contractor will record conference results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.

1.05 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.
 - 1. Dismantle and salvage each item or object and protect it from damage, then promptly deliver it to Owner where directed at Project site.
 - 2. Coordinate with owner's historical advisor who will establish special procedures for dismantling and salvaging.

1.06 INFORMATIONAL SUBMITTALS

- A. Historic Treatment Subschedule: Submit historic treatment subschedule within seven days of date established for commencement of historic treatment work.
- B. Historic Treatment Program: Submit 30 days before work begins.

1.07 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: An experienced firm regularly engaged in historic treatments similar in nature, materials, design, and extent to the work specified in each Section and that has completed a minimum of five recent projects with a record of successful in-service performance that demonstrates the firms qualifications to perform this work.
 - Field Supervisor Qualifications: Full-time supervisors experienced in historic treatment work similar in nature, material, design, and extent to that indicated for this Project. Supervisor shall be on site when historic treatment work begins and during its progress. Supervisors shall not be changed during project except for causes beyond control of specialist firm.
- B. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- C. Historic Treatment Program: Prepare a written plan for historic treatment for whole Project, including each phase or process and protection of surrounding materials during operations. Describe in detail the materials, methods, and equipment to be used for each phase of work. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project historic treatment program with specific requirements required in other historic treatment Sections.
 - 1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
- D. Safety and Health Standard: ANSI/ASSE A10.6.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Salvaged Historic Materials:
 - 1. Clean loose dirt and debris from salvaged historic items unless more extensive cleaning is indicated.
 - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
 - 3. Store items in a secure area until delivered to Owner.
 - 4. Transport items to Owner's storage area on-site.
 - 5. Protect items from damage during transport and storage.
- B. Historic Materials for Reinstallation:
 - 1. Repair and clean historic items for reuse as indicated.
 - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
 - 3. Protect items from damage during transport and storage.

- 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.
- C. Existing Historic Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after historic treatment and construction work in the vicinity is complete.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from historic treatment procedures.
 - 1. Use only proven protection methods, appropriate to each area and surface being protected.
 - 2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where historic treatment work is being performed.
 - 3. Erect temporary barriers to form and maintain fire-egress routes.
 - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during historic treatment work.
 - 5. Contain dust and debris generated by historic treatment work and prevent it from reaching the public or adjacent surfaces.
 - 6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
 - 7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
 - 8. Provide supplemental sound-control treatment to isolate removal and dismantling work from other areas of the building.
- B. Temporary Protection of Historic Materials:
 - 1. Protect existing historic materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
 - 2. Do not attach temporary protection to historic surfaces except as indicated as part of the historic treatment program and approved by Architect.
- C. Comply with each product manufacturers written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
- D. Utility and Communications Services:
 - 1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by historic treatment work before commencing operations.
 - 2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for historic treatment work.

 Maintain existing services unless otherwise indicated; keep in service and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

3.02 PROTECTION FROM FIRE

- A. Follow fire-prevention plan and the following:
 - 1. Comply with NFPA 241 requirements unless otherwise indicated.
 - 2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
 - a. If combustible material cannot be removed, provide fire blankets to cover such material.
 - 3. Prohibit smoking by all persons within Project work and staging areas.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:
 - 1. Use of open-flame equipment is not permitted.
 - 2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
 - 3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that area is safe.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for type of fire risk in each work area. Ensure that nearby personnel and fire-watch personnel are trained in fire-extinguisher and blanket use.

3.03 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Protect motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm or spillage resulting from applications of chemicals and adhesives.
- B. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for project unless chemicals being used will not affect adjacent surfaces as indicated in historic treatment program. Use covering materials and masking agents that are waterproof and UV resistant and that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.
- C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
- D. Neutralize alkaline and acid wastes and legally dispose of off Owner's property.

E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

3.04 GENERAL HISTORIC TREATMENT

- A. Have historic treatment work performed by qualified historic treatment specialists.
- B. Ensure that supervisory personnel are present when historic treatment work begins and during its progress.
- C. Perform regular inspections of Project site as the Work progresses to detect hazards resulting from historic treatment procedures.
- D. Follow the procedures in subparagraphs below and procedures approved in historic treatment program unless otherwise indicated:
 - 1. Retain as much existing material as possible; repair and consolidate rather than replace.
 - 2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
 - 3. Use reversible processes wherever possible.
 - 4. Use historically accurate repair and replacement materials and techniques unless otherwise indicated.
- E. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
 - 1. Do not proceed with the work in question until directed by Architect.
- F. Where missing features are indicated to be repaired or replaced, provide work with appearance based on accurate duplications rather than on conjecture, subject to approval of Architect.
- G. Where work requires existing features to be removed or dismantled and reinstalled, perform these operations without damage to the material itself, to adjacent materials, or to the substrate.
- H. Identify new and replacement materials and features with permanent marks hidden in the completed Work to distinguish them from original materials. Record a legend of identification marks and the locations of the items on record Drawings.

END OF HISTORIC TREATMENT PROCEDURES

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and –control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related activities do not limit Contractor's other qualityassurance and –control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and –control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.02 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Level: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.03 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Specialists: Certain sections of the Specification require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- E. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.04 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
- B. Manufacturer's Field Services: Where indicated, engage a manufacturer's representative to observe and inspect the Work. Manufacturer's representative's services include examination of substrates and conditions, verification of materials, inspection of completed portions of the Work, and submittal of written reports.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspection.
 - 3. Adequate quantities of representative sample of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and of test samples.
 - 5. Delivery of samples to testing agencies.
- E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with Contract Document requirements for cutting and patching in Section 01 70 00 "Execution and Closeout Requirements."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF QUALITY REQUIREMENTS

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Temporary utilities
 - b. Construction facilities
 - c. Temporary controls
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 26 00: Contract Modification Procedures
 - 2. SECTION 01 70 00: Execution and Closeout Requirements

1.02 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.03 PROJECT CONDITIONS

A. The Contractor shall be permitted to utilize the existing Owner utilities at the site. These utilities include electric power and water. The Contractor shall provide temporary sanitary facilities for the workmen, temporary cell phones and temporary fire safety devices such as fire extinguishers.

PART 2 – PRODUCTS

2.01 TEMPORARY FACILITIES

- A. Field Offices: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

2.02 EQUIPMENT

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

PART 3 – EXECUTION

3.01 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.
- 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.

3.02 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities. Permanent sanitary facilities installed under this Contract shall not be used during construction.
- D. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
 - 1. Prior to commencing work, isolate HVAC system in area where work is to be performed according to coordination drawings.
 - 2. Maintain dust partitions during Work. Use vacuum collection attachments on dustproducing equipment. Isolate limited work within occupied areas using portable dustcontainment devices.
 - 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filterequipped vacuum equipment.
- E. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- F. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.03 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

- 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30-feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
- 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel.

3.04 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Barricades, Warning Signs, and Lights: Comply with authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

3.05 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability or temporary facilities to essential and intended uses.
- **B.** Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot by satisfactorily repaired.

END OF TEMPORARY FACILITIES AND CONTROLS

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes administrative and procedural requirements for selection of products for use in Project.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Product delivery, storage, and handling
 - b. Manufacturers' standard warranties
 - c. Special warranties
 - d. Comparable products
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 20 00: Price and Payment Procedures
 - 2. SECTION 01 25 00: Substitution Procedures

1.02 DEFINITIONS

- A. 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.
 - 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 Products: 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.
- B. 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.

1.03 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. <u>Note that no substitutions for convenience are</u> <u>allowed per Section 01 25 00.</u>
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of 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 Section 01 30 00 "Administrative Requirements."
 - 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 Section 01 30 00 "Administrative Requirements."

1.04 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.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.

- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 6. Protect stored products from damage and liquids from freezing.
- 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by owner's construction forces. Coordinate location with owner.

1.06 **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 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. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 01 70 00 "Execution and Closeout Requirements."

PART 2 – PRODUCTS

2.01 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.
- B. Product Selection Procedures:
 - 1. Product: Where Specifications name a single manufacturer and product, provide the named product complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements.
 - 4. Manufacturers:
 - a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - 5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers and/or products, 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 names. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.02 <u>COMPARABLE PRODUCTS</u>

A. Conditions for Consideration: Architect will consider Contractor's request for comparable products when the following conditions are satisfied. <u>Note that substitutions for convenience are not allowed per Section 01 25 00.</u> 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 or architects and owners, if requested.
- 5. Samples, if requested.

PART 3 – EXECUTION (Not Used)

END OF PRODUCT REQUIREMENTS

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes general administrative and procedural requirements governing execution and closeout of the Work including, but not limited to, the following:
 - 1. Execution
 - 2. Cutting and patching
 - 3. Closeout procedures
 - 4. Project record documents
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 10 00: Summary
 - 2. SECTION 01 30 00: Administrative Requirements

1.02 INFORMATIONAL SUBMITTALS

A. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.

1.03 CLOSEOUT SUBMITTALS

- A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- B. Project Record Documents:
 - 1. Record Drawings: Submit one paper-copy set of marked-up record prints and an annotated PDF electronic file of marked-up record prints.

1.04 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
 - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 3. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architects opinion, reduce the buildings aesthetic qualities.

Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

1.05 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractors List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - a. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - b. Submit closeout submittals specified in other Division 1 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 - c. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - a. Advise Owner of pending insurance changeover requirements.
 - b. Make final changeover of permanent locks and deliver keys to Owner. Advise Owners personnel of changeover in security provisions.
 - c. Terminate and remove temporary facilities from project site, along with mockups, construction tools, and similar elements.
 - d. Complete final cleaning requirements, including touchup painting.
 - e. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificates will be issued.

1.06 FINAL COMPLETION PROCEDURES

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

- 1. Submit a final Application for Payment according to Section 01 20 00 "Price and Payment procedures."
- 2. Certified List of Incomplete Items: Submit certified copy of Architects Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy shall state that each item has been completed or otherwise resolved for acceptance.
- 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

PART 2 – PRODUCTS

2.01 <u>MATERIALS</u>

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

2.02 RECORD DRAWINGS

- A. Record Prints: Maintain a set of prints of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued. Mark to show actual installation where installation varies from that shown originally. Accurately record information in an acceptable drawing technique.
 - 1. Record drawings are to be updated at a minimum weekly.
 - 2. Review markings with Architect and Owner at Project Meetings.
 - 3. Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
- B. Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect.

PART 3 – EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

3.02 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturers written instructions and recommendations for installing products in applications indicated.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- D. Joints: Make joints uniform in width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- E. Use products, cleaners, and installation materials that are not considered hazardous.

3.03 CUTTING AND PATCHING

- A. Temporary Support: Provide temporary support of work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation using methods least likely to damage elements retained or

adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installers written recommendations.

- 1. In general, use hand or small power tools designed for sawing and grinding, not hammering, and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
- D. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible.
 Provide materials and comply with installation requirements specified in other Sections.
 - 1. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - 2. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance.

3.04 <u>CLEANING</u>

- A. General: Clean Project site and work areas daily, including common areas. Dispose of materials lawfully.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
 - 3. Remove debris from concealed spaces before enclosing space.
- B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:
 - 1. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - 2. Remove labels that are not permanent.

END OF EXECUTION AND CLOSEOUT REQUIREMENTS

SECTION 02 41 19

SELECTIVE DEMOLITION

PART 1 – GENERAL

1.01 DESCRIPTION

A. Provide all labor, materials, equipment, services, etc. required to provide all Selective Demolition as indicated on the Drawings, Specified herein, or otherwise required for a complete and proper job.

The Work of this Section is not necessarily fully represented on the Drawings or specifically identified herein. The Contractor, either himself or through his various subcontractors, shall thoroughly review all documents and shall visit the site and existing building prior to bidding, as required to fully satisfy himself as to the types, locations and quantities of demolition work required for the complete and proper execution of the Work. No pleas of misunderstanding resulting from failure to adequately inspect existing conditions will be entertained and no additional expenses related thereto will be granted.

- 1. The Work shall include, but shall not necessarily be limited to:
 - a. Protection of site work and adjacent items
 - b. Pollution control during building and selective demolition, including noise control
 - c. Selective demolition of exterior façade, structures, and components designated to be removed.
 - d. Protection of portions of building adjacent to or affected by selective demolition
 - e. Removal and legal disposal of materials

1.02 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of the Owner.
 - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.03 QUALITY ASSURANCE

A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers.

1.04 PROJECT CONDITIONS

A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1.05 COORDINATION

A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 – PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulation before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Review Project Record Documents of existing construction or other existing conditions and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- B. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

3.02 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.

- 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
- 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
- 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
- 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 01 50 00 "Temporary Facilities and Controls."
- B. Remove temporary barricades and protections where hazards no longer exist.

3.03 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as required by other sections of the Specifications.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse.
 - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.04 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and recycle or dispose of them.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

3.05 <u>CLEANING</u>

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SELECTIVE DEMOLITION

SECTION 06 03 12

HISTORIC WOOD REPAIR

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, equipment, services, etc. required to furnish and install all Historic Wood Repair as indicated on the Drawings, Specified herein, or otherwise required for a complete and proper job.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Repairing lap siding and shingle siding
 - b. Replacing lap siding and shingle siding
 - c. Repairing and replacing trim boards
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 35 91: Historic Treatment Procedures
 - 2. SECTION 09 03 91: Historic Treatment of Plain Painting

1.02 DEFINITIONS

- A. Very Low-Pressure Spray: Less than 100 psi standard water pressure without augmentation.
- B. Low-Pressure Spray: 100 to 300 psi; 4 to 6 gpm.

1.03 **PREINSTALLATION MEETING**

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review minutes of Preliminary Historic Treatment Conference that pertain to historic wood repair.
 - 2. Review methods and procedures related to historic wood repair, including, but not limited to, the following:
 - a. Historic treatment specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Material, material application, sequencing, tolerances, and required clearances.
 - c. Fire-protection plan.
 - d. Wood historic treatment program.
 - e. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

1.04 SEQUENCING AND SCHEDULING

A. Perform historic wood repair in the following sequence, which includes work specified in this and other Sections:

- 1. Before removing wood components for on-site or off-site repair, tag each component with location-identification numbers. Indicate on tags and building plans the locations of each component.
- 2. Dismantle hardware and tag with location-identification numbers.
- In the shop, label each repaired component and whole or partial replacement with permanent location-identification number in inconspicuous location and remove siteapplied tags.
- 4. Sort units by condition, separating those that need extensive repair.
- 5. Clean surfaces.
- 6. General Wood-Repair Sequence:
 - a. Remove paint to bare wood.
 - b. Repair wood by consolidation, replacement, partial replacement, and patching.
 - c. Sand, prime, fill, sand again, and prime surfaces again for refinishing.
- 7. Repair, refinish, and replace hardware if required. Reinstall operating hardware.
- 8. Reinstall components.
- 9. Apply finish coats.
- 10. Install remaining hardware.

1.05 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include recommendations for product application and use. Include test data substantiating that products comply with requirements.

1.06 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For historic treatment specialist, including workers, and wood-repair-material manufacturer.
- B. Wood Historic Treatment Program: Submit before work begins.

1.07 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic wood-repair specialist, experienced in repairing, refinishing, and replacing wood in whole and in part. Experience only in fabricating and installing new woodwork is insufficient experience for wood historic treatment work.
- B. Wood-Repair-Material Manufacturer Qualifications: A firm regularly engaged in producing wood consolidant and wood-patching compound that have been used for similar historic wood-treatment applications with successful results, and with factory-authorized service representatives who are available for consultation, project-site inspection, and on-site assistance.
- C. Wood Historic Treatment Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for historic treatment work, including protection of surrounding materials and Project site.
 - 1. If materials and methods other than those indicated are proposed for any phase of historic treatment work, add a written description of such materials and methods, including

evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project.

1.08 DELIVERY, STORAGE AND HANDLING

- A. All materials and related accessories shall be delivered and stored in strict compliance with the manufacturer's instructions.
- B. Until installed, store products inside a well-ventilated area and protect from weather, moisture, soiling, abrasion, extreme temperatures, and humidity, and where environmental conditions comply with manufacturer's requirements.

1.09 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within the limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Weather Limitations: Proceed with historic wood repair only when existing and forecasted weather conditions are within the environmental limits set by each manufacturer's written instructions and specified requirements.

PART 2 – PRODUCTS

2.01 HISTORIC WOOD REPAIR, GENERAL

A. Quality Standard: Comply with applicable requirements in Section 12 "Historic Restoration Work," and related requirements in AWI/AWMAC/WI's "Architectural Woodwork Standards" for construction, finishes, grade rules, and other requirements unless otherwise indicated.

2.02 WOOD-REPLACEMENT MATERIALS

- A. Wood, General: Clear 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.
- B. Exterior Siding: Match species of original wood, as determined by wood species analysis.
- C. Exterior Trim: Match species of original wood, as determined by wood species analysis.

2.03 WOOD-REPAIR MATERIALS

- A. Source Limitations: Obtain wood consolidant and wood-patching compound from single source from single manufacturer.
- B. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated due to weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.

- 1. Basis-of-Design Product: LiquidWood as manufactured by Abatron Corp.
- C. Wood-Patching Compound: Two-part, epoxy-resin, wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated due to weathering and decay. Compound shall be capable of filling deep holes and spreading to featheredge.
 - 1. Basis-of-Design Product: LiquidWood with WoodEpox as manufactured by Abatron Corp.

2.04 MISCELLANEOUS MATERIALS

- A. Borate Preservative Treatment: Inorganic, borate-based solution, with disodium octaborate tetrahydrate as the primary ingredient; manufactured for preserving weathered and decayed wood from further damage caused by fungi and wood-boring insects; complying with AWPA P5; containing no boric acid.
- B. Cleaning Materials:
 - 1. Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), ½ cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hypochlorite bleach, and 15 quarts of warm water for each 5 gallons of solution required.
 - 2. Mildewcide: Commercial, proprietary mildewcide or a solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent sodium hypochlorite bleach, and 3 quarts of warm water.
- C. Adhesives: Wood adhesives with minimum 15- to 45-minute cure at 70 deg F, in gunnable and liquid formulations as recommended in writing by adhesive manufacturer for each type of repair and exposure condition.
- D. Fasteners: Use fastener metals that are noncorrosive and compatible with each material joined.
 - 1. Match existing fasteners in material and type of fastener unless otherwise indicated.
 - 2. For fastening metals, use fasteners of same basic metal as fastened metal unless otherwise indicated.
 - 3. For exposed fasteners, use Phillips-type machine screws of head profile flush with metal surface unless otherwise indicated.
 - 4. Finish exposed fasteners to match finish of metal fastened unless otherwise indicated.

2.05 WOOD FINISHES

- A. Unfinished Replacement Units: Provide exposed exterior and interior wood surfaces of replacement units unfinished; smooth, filled, and suitably prepared for on-site priming and finishing.
 - 1. Field finish priming and painting of historic wood is specified in Section 09 03 91 "Historic Treatment of Plain Painting."

PART 3 – EXECUTION

3.01 PREPARATION

- A. Protect adjacent materials from damage by historic wood repair.
- B. Clean wood of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildeweide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
- C. Condition replacement wood members and replacement units to prevailing conditions at installation areas before installing.

3.02 HISTORIC WOOD REPAIR, GENERAL

- A. Historic Treatment Appearance Standard: Completed work is to have a uniform appearance as viewed by Architect from 20 feet away for exterior work.
- B. General: In treating historic items, disturb them as minimally as possible and as follows:
 - 1. Stabilize and repair wood to reestablish structural integrity and weather resistance while maintaining the existing form of each item.
 - 2. Repair items in place where possible.
 - 3. Install temporary protective measures to protect wood-treatment work that is indicated to be completed later.
- C. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use only the gentlest mechanical methods, such as scraping and natural-fiber bristle brushing, that will not abrade wood substrate, reducing clarity of detail. Do not use abrasive methods, such as sanding, wire brushing, or power tools, except as indicated as part of the historic treatment program and as approved by Architect.
- D. Repair Wood: Match existing materials and features, retaining as much original material as possible to perform repairs.
 - 1. Unless otherwise indicated, repair wood by consolidating, patching, splicing, or otherwise reinforcing wood with new wood matching existing wood or with salvaged, sound, original wood.
 - 2. Where indicated, repair wood by limited replacement matching existing material.
- E. Replace Wood: Where indicated, duplicate and replace units with units made from salvaged, sound, original wood or with new wood matching existing wood. Use surviving prototypes to create patterns for duplicate replacements.
 - 1. Do not use substitute materials unless otherwise indicated.
- F. Identify removed items with numbering system corresponding to item locations, to ensure reinstallation in same location. Key items to Drawings showing location of each removed unit. Permanently label units in a location that will be concealed after reinstallation.

3.03 WOOD PATCH-TYPE REPAIR

- A. General: Patch wood that exhibits depressions, holes, or similar voids, and that has limited amounts of rotted or decayed wood.
 - 1. Verify that surfaces are sufficiently clean and free of paint residue prior to patching.
 - 2. Treat wood with wood consolidant prior to application of patching compound. Coat wood surfaces by brushing, applying multiple coats until wood is saturated and refuses to absorb more. Allow treatment to harden before filling void with patching compound.
- B. Apply borate preservative treatment to accessible surfaces either before applying wood consolidant or after removing rotted or decayed wood. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom. Allow treatment to dry.
- C. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.
 - 1. Prime patch area with application of wood consolidant or manufacturer's recommended primer.
 - 2. Mix only as much patching compound as can be applied according to manufacturer's written instructions.
 - 3. Apply patching compound in layers as recommended in writing by manufacturer until the void is completely filled.
 - 4. Sand patch surface smooth and flush with adjacent wood, without voids in patch material, and matching contour of wood member.
 - 5. Clean spilled compound from adjacent materials immediately.

3.04 WOOD-REPLACEMENT REPAIR

- A. General: Replace parts of or entire wood items at locations where damage is too extensive to patch.
 - 1. Remove surface-attached items from wood surfaces before performing wood-replacement repairs unless otherwise indicated.
 - 2. Verify that surfaces are sufficiently clean and free of paint residue prior to repair.
 - 3. Remove broken, rotted, and decayed wood down to sound wood.
 - 4. Custom fabricate new wood to replace missing wood; either replace entire wood member or splice new wood part into existing member.
 - 5. Secure new wood using finger joints, multiple dowels, or splines with adhesive and nailing to ensure maximum structural integrity at each splice. Use only concealed fasteners. Fill nail holes and patch surface to match surrounding wood.
- B. Apply borate preservative treatment to accessible surfaces after replacements are made. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
- C. Repair remaining depressions, holes, or similar voids with patch-type repairs.
- D. Clean spilled materials from adjacent surfaces immediately.

E. Reinstall items removed for repair into original locations.

3.05 FIELD QUALITY CONTROL

A. Manufacturers Field Service: Engage wood-repair-material manufacturers' factory-authorized service representatives for consultation and Project-site inspection and provide on-site assistance when requested by Architect.

3.06 ADJUSTMENT

A. Adjust existing and replacement operating items, hardware, and accessories for a tight fit at contact points and for smooth operation and tight closure. Lubricate hardware and moving parts.

3.07 CLEANING AND PROTECTION

- A. Protect wood surfaces from contact with contaminating substances resulting from construction operations. Monitor wood surfaces adjacent to and below exterior concrete and masonry during construction for presence of dirt, scum, alkaline deposits, stains, and other contaminants. If contaminating substances contact wood surfaces, remove contaminants immediately.
- B. Clean exposed surfaces immediately after historic wood repair. Avoid damage to coatings and finishes. Remove excess sealants, patching materials, dirt, and other substances.

END OF HISTORIC WOOD REPAIR

SECTION 07 46 23

WOOD SIDING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, equipment, services, etc. required to furnish and install all Wood Siding as indicated on the Drawings, Specified herein, or otherwise required for a complete and proper job.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Shingle siding
 - b. Clapboard siding
- B. Related Work Specified Elsewhere:
 - 1. SECTION 09 03 91: Historic Treatment of Plain Painting

1.02 ACTION SUBMITTALS

A. Product Data: For each type of product specified.

1.03 MAINTENANCE MATERIALS SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Wood Siding: 100 sq. ft. of each type, color, and finish, in unbroken bundles.

1.04 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Minimum 5 years' experience harvesting and milling forest products.
- B. Installer Qualifications: Minimum 2 years' experience installing similar products.
- C. Grading Agency Qualifications: An independent testing and inspecting agency recognized by authorities having jurisdiction as qualified to label siding for compliance with referenced grading rules.

1.05 DELIVERY, STORAGE AND HANDLING

- A. All materials and related accessories shall be delivered and stored in strict compliance with the manufacturer's instructions.
- B. Store siding in a dry, well-ventilated, weathertight location according to manufacturer's written instructions.

1.06 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit siding installation and related work to be performed according to manufacturer's written instructions.
 - 1. Field-Finished Siding: Proceed with installation of siding only when existing and forecast weather conditions permit installation and the immediate application of at least one coat of specified finish on siding before it is exposed to rain, snow, or dampness.
 - a. Proceed with installation only after base or primer coat has been applied to every surface of siding units and has dried.

PART 2 – PRODUCTS

2.01 SHINGLE SIDING

- A. General: Cedar shingle siding
 - 1. Species: White cedar.
 - 2. Grade: Clear "B" or better.
 - 3. Exposure: Match existing.
 - 4. Butt thickness: Match existing.
 - 5. Moisture: Kiln-dried to approximately 12%.
 - 6. Edge: Square butt.
 - 7. Width: Random.
- B. Source Limitation: Obtain products from a single source from a single manufacturer.

2.02 CLAPBOARD SIDING

- A. General: Beveled wood clapboard siding
 - 1. Species and Grade: As required by Section 07 46 23 "Historic Wood Repair."
- B. Source Limitation: Obtain products from a single source from a single manufacturer.

2.03 ACCESSORIES

- A. Flashing: Provide factory painted aluminum flashing at window and door heads and where indicated.
 - 1. Finish for Aluminum Flashing: High-performance organic finish (Kynar pvf paint system). Color as selected by Architect from manufacturers full range.
- B. Fasteners:
 - 1. For fastening wood, use stainless steel siding nails of sufficient length to penetrate a minimum of 1-inch into substrate.

- 2. For fastening aluminum flashings, use stainless steel or aluminum fasteners.
- 3. For fastening to cedar shingles use rust-resistant aluminum or stainless steel nails or hotdip galvanized box nails.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION, GENERAL

- A. Comply with siding manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.
- B. Do not install damaged components.

3.03 SHINGLE SIDING INSTALLATION

- A. Install products according to manufacturer's written instructions and recommendations in CSSB's "Exterior and Interior Wall Manual."
- B. Install products, beginning at base of wall.
- C. Starter Undercourse: Install a single course of undercoursing at the base of the wall in a continuous straight line.
 - 1. Extend 1 inch below top of foundation wall.
 - 2. Match fastening and corner treatment of siding.
- D. Exposed Siding:
 - 1. Install starter (first) course of exposed siding over starter undercourse with butts 1/2-inch lower than undercourse butts.
 - 2. Offset joints in first course of exposed siding a minimum of 1-1/2 inches from joints in starter undercourse.
 - 3. Install succeeding exposed siding courses with joints offset a minimum of 1-1/2 inches from joints in the two courses below.
 - 4. Install exposed siding courses with butt lines to match into existing.
 - 5. Fasten each unit with two concealed nails spaced 3/4 to 1-inch from edges and 1-inch above butt line of succeeding course. For units wider than 10-inches, add two concealed fasteners, spaced 1-inch apart, to the center of the unit. Drive fasteners flush with top surface of units without crushing wood.
 - 6. Interior Corner Treatment: Butt to interior corner trim.
 - 7. Exterior Corner Treatment: Butt to corner boards with flashing behind.

3.04 CLAPBOARD

- A. Install in accordance with manufacturer's instructions.
- B. Products shall have all butt and scarf joints sealed with a quality, exterior rated, flexible sealant prior to paint application. All non-trim/fascia abutments shall be sealed with the same exterior grade sealant.
- C. Ends exposed due to post-manufacturing field cuts shall be sealed with a premium, 100% acrylic primer, to ensure that no fiber is left to the elements.
- D. Use only corrosion resistant fasteners. Acceptable are stainless steel or hot-dipped galvanized nails; minimum size 7 penny.
- E. Joints shall fall over framing lumber and shall be double nailed. Siding boards of 10 inches or greater in width require 3 nails evenly spaced across the face of the board. Do not nail any less than 1/2-inch from any edge and fasten a minimum of 24-inches on center.
- F. Drive nails perpendicular to the framing lumber and the wood trim product; drive nails flush with the products surface. Nails shall penetrate at least 1-1/4 inches into the structural framing.

3.05 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF WOOD SIDING

SECTION 08 03 14

HISTORIC TREATMENT OF WOOD DOORS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, equipment, services, etc. required to furnish and install all Historic Treatment of Wood Doors as indicated on the Drawings, Specified herein, or otherwise required for a complete and proper job.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Repairing wood doors and trim.
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 35 91: Historic Treatment Procedures

1.02 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include recommendations for product application and use. Include test data substantiating that products comply with requirements.
- B. Shop Drawings: For locations and extent of wood-door repair and replacement work.
 - 1. Include plans, elevations, sections, and details of replacement parts indicating materials, profiles, joinery, reinforcing, method of splicing into or attaching to existing wood door, accessory items, and finishes.

1.03 INFORMATIONAL SUBMITTALS

A. Qualification Data: For historic treatment specialist.

1.04 QUALITY ASSURANCE

A. Wood-Repair-Material Manufacturer Qualifications: A firm regularly engaged in producing wood consolidant and wood-patching compound that have been used for similar historic wood treatment applications with successful result, and with factory-authorized service representatives who are available for consultation and Project-site inspection and on-site assistance.

1.05 PROJECT CONDITIONS

A. Weather Limitations: Proceed with historic treatment of wood doors only when existing and forecasted weather conditions are within the environmental limits set by each manufacturers written instructions and specified requirements.

PART 2 – PRODUCTS

2.01 HISTORIC TREATMENT OF WOOD DOORS, GENERAL

- A. Quality Standard: Comply with applicable requirements in Section 12, "Historic Restoration Work," and related requirements in AWI/AWMAC/WI's "Architectural Woodworking Standards" for construction, finishes, grades of wood doors, and other requirements unless otherwise indicated.
 - 1. Exception: Industry practices cited in the "Architectural Woodwork Standards," Section 12, Article 1.5, "Industry Practices," do not apply to the work of this Section.

2.02 WOOD-REPLACEMENT MATERIALS

- A. Wood, General: Clear 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.
 - 1. Species: Match species of each existing type of wood component or assembly unless otherwise indicated.

2.03 WOOD-REPAIR MATERIALS

- A. Source Limitations: Obtain wood consolidant and wood-patching compound from single source from single manufacturer.
- B. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated because of weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.
 - 1. Basis-of-Design Product: LiquidWood as manufactured by Abatron Corp.
- C. Wood-Patching Compound: Two-part epoxy-resin wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated because of weathering and decay. Compound shall be capable of filling deep holes and spreading to feather edge.
 - 1. Basis-of-Design Product: WoodEpox as manufactured by Abatron Corp.

2.04 MISCELLANEOUS MATERIALS

- A. Borate Preservative Treatment: Inorganic, borate-based solution, with disodium octaborate tetrahydrate as the primary ingredient; manufactured for preserving weathered and decayed wood from further damage by decay fungi and wood-boring insects; complying with AWPA P5; containing no boric acid.
- B. Cleaning Materials:

- 1. Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), 1/2 cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hypochlorite bleach, and 15 quarts of warm water for each 5 gal. of solution required.
- 2. Mildewcide: Commercial, proprietary mildewcide or a solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent hypochlorite bleach, and 3 quarts of warm water.
- C. Adhesives: Wood adhesives with minimum 15- to 45-minute cure at 70 deg F, in gunnable and liquid formulations as recommended in writing by adhesive manufacturer for each type of repair and exposure conditions.
- D. Fasteners: Use fastener metals that are noncorrosive and compatible with each material joined.
 - 1. Match existing fasteners in material and type of fastener unless otherwise indicated.
 - 2. Use concealed fasteners for interconnecting wood components.
 - 3. Use concealed fasteners for attaching items to other work unless exposed fasteners are unavoidable or the existing fastening method.
 - 4. For fastening metals, use fasteners of same basic metal as fastened metal unless otherwise indicated.
 - 5. For exposed fasteners, use Phillips-type machine screws of head profile flush with metal surface unless otherwise indicated.
 - 6. Finish exposed fasteners to match finish of metal fastened unless otherwise indicated.
- E. Anchors, Clips, and Accessories: Fabricate anchors, clips, and door accessories of aluminum, nonmagnetic stainless-steel, or hot-dip zinc-coated steel complying with requirements in ASTM B633 for SC3 (Severe) service condition.

2.05 WOOD DOOR FINISHES

A. Factory-Primed Replacement Units: Manufacturers standard factory-prime coat on exposed exterior and interior wood surfaces; compatible with indicated finish coating.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Protect adjacent materials from damage by historic treatment of wood doors.
- B. Clean wood doors of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildew areas with mildewcide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
- C. Condition replacement wood members and replacement units to prevailing conditions at installation areas before installing.

3.02 HISTORIC TREATMENT OF WOOD DOORS, GENERAL

- A. Historic Treatment Appearance Standard: Completed work is to have a uniform appearance as viewed by Architect from the door exterior at 20 feet away.
- B. General: In treating historic items, disturb them as minimally as possible and as follows:
 - 1. Stabilize and repair wood doors to reestablish structural integrity and weather resistance while maintaining the existing form of each item.
 - 2. Remove coatings and apply borate preservative treatment before repair. Remove coatings according to Section 09 03 91 "Historic Treatment of Plain Painting" unless otherwise indicated.
 - 3. Repair items in place where possible.
 - 4. Install temporary protective measures to protect wood door work that is indicated to be completed later.
- C. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use only the gentlest mechanical methods, such as scraping and natural-fiber bristle brushing, that will not abrade wood substrate, reducing clarity of detail. Do not use abrasive methods such as sanding, wire brushing, or power tools except as indicated as part of the historic treatment program and as approved by Architect.
- D. Repair and Refinish Existing Hardware: Dismantle door hardware; strip paint, repair, and refinish it to match finish Samples; and lubricate moving parts just enough to function smoothly.
- E. Repair Wood Doors: Match existing materials and features, retaining as much original material as possible to perform repairs.
 - 1. Unless otherwise indicated, repair wood doors by consolidating, patching, splicing, or otherwise reinforcing wood with new wood matching existing wood or salvaged, sound, original wood.
 - 2. Where indicated, repair wood doors by limited replacement matching existing material.

3.03 WOOD DOOR PATCH-TYPE REPAIR

- A. General: Patch wood members that exhibit depressions, holes, or similar voids and that have limited amounts of rotted or decayed wood.
 - 1. Remove leaves, storm doors and screen doors from door frames before performing patchtype repairs at meeting or sliding surfaces unless otherwise indicated. Reglaze units prior to reinstallation.
 - 2. Verify that surfaces are sufficiently clean and free of paint residue before patching.
 - 3. Treat wood members with wood consolidant before applying patching compound. Coat wood surfaces by brushing, applying multiple coats until wood is saturated and unable to absorb more. Allow treatment to harden before filling void with patching compound.
 - 4. Remove rotted or decayed wood down to sound wood.
- B. Apply borate preservative treatment to accessible surfaces either before applying wood consolidant or after removing rotted or decayed wood. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom. Allow treatment to dry.

- C. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.
 - 1. Prime patch area with application of wood consolidant or manufacturers recommended primer.
 - 2. Mix only as much patching compound as can be applied according to manufacturer's written instructions.
 - 3. Apply patching compound in layers as recommended in writing by manufacturer until void is completely filled.
 - 4. Sand patch surfaces smooth and flush with adjacent wood, without voids in patch material, and matching contour of wood member.
 - 5. Clean spilled compound from adjacent materials immediately.

3.04 WOOD DOOR MEMBER-REPLACEMENT REPAIR

- A. General: Replace parts of, or entire wood door members at locations where damage is too extensive to patch.
 - 1. Remove leaves, storm doors and screen doors from door frames before performing member-replacement repairs unless otherwise indicated.
 - 2. Verify that surfaces are sufficiently clean and free of paint residue before repair.
 - 3. Remove broken, rotted and decayed wood down to sound wood.
 - 4. Custom fabricate new wood to replace missing wood; either replace entire wood member or splice new wood part into existing member.
 - 5. Secure new wood using finger joints, multiple dowels, or splines with adhesives and nailing to ensure maximum structural integrity at each splice. Use only concealed fasteners. Fill nail holes and patch surface to match surrounding wood.
- B. Apply borate preservative treatment to accessible surfaces after replacements are made. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom.
- C. Repair remaining depressions, holes, or similar voids with patch-type repairs.
- D. Clean spilled materials from adjacent surfaces immediately.
- E. Reinstall units removed for repair into original openings.

3.05 ADJUSTING

A. Adjust existing and replacement operating leaves, 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.

3.06 CLEANING AND PROTECTION

A. Protect door surfaces from contact with contaminating substances resulting from construction operations. Monitor door surfaces adjacent to and below exterior concrete and masonry during construction for presence of dirt, scum, alkaline deposits, stains, and other contaminants. If contaminating substances contact door surfaces, remove contaminants immediately.

- B. Clean exposed surfaces immediately after historic treatment of wood doors. Avoid damage to coatings and finishes. Remove excess sealants, glazing and patching materials, dirt, and other substances.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF HISTORIC TREATMENT OF WOOD DOORS

SECTION 09 03 91

HISTORIC TREATMENT OF PLAIN PAINTING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, equipment, services, etc. required to furnish and install all Historic Treatment of Plain Painting as indicated on the Drawings, Specified herein, or otherwise required for a complete and proper job.
 - 1. The Work shall include, but shall not necessarily be limited to:
 - a. Removing existing paint
 - b. Repairing substrates
 - c. Plain painting of historic surfaces
- B. Related Work Specified Elsewhere:
 - 1. SECTION 01 35 91: Historic Treatment Procedures

1.02 DEFINITIONS

- A. Paints are available in a wide range of sheens or glosses, as measured by a gloss meter from a 60 and/or 85 degree angle from vertical, as a percentage of the amount of light that is reflected. The following terms are used to describe the gloss of the products specified. The list below is provided for general guidance; refer to the technical data sheet for the actual gloss/sheen level for each product.
 - 1. Flat: Less than 5 Percent.
 - 2. Eggshell: 5 20 Percent.
 - 3. Satin: 20 35 Percent.
 - 4. Semi-Gloss: 30 65 Percent.
 - 5. Gloss: Over 65 Percent.
- B. Modern Paint Materials: Paint materials not designed to match historic paint formulations but that may be required to match historic paint colors.
- C. Plain Painting: For historic treatment, this means painting that requires attention to historic treatment requirements, but no special, decorative, or artistic painting skill.
- D. Low-Pressure Spray: 100 to 400 psi; 4 to 6 gpm.
- E. Medium-Pressure Spray: 400 to 800 psi; 4 to 6 gpm.

1.03 **PREINSTALLATION MEETINGS**

A. Preinstallation Conference: Conduct conference at Project site.

- 1. Review minutes of Preliminary Historic Treatment Conference that pertain to historic treatment of painting.
- 2. Review methods and procedures related to historic treatment of painting including, but not limited to, the following:
 - a. Verify historic treatment specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Materials, material application, colors, patterns, and sequencing.
 - c. Fire-protection plan.
 - d. Plain painting historic treatment program.
 - e. Coordination with building occupants.
 - f. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

1.04 SEQUENCING AND SCHEDULING

- A. Perform historic treatment of painting in the following sequence, which includes work specified in this and other Sections:
 - 1. Dismantle existing surface-mounted objects and hardware except items indicated to remain in place. Tag items with location identification and protect.
 - 2. Verify that temporary protections have been installed.
 - 3. Examine conditions of surfaces to be painted.
 - 4. Remove existing paint to the degree required for each substrate and surface condition of existing paint.
 - 5. Apply paint system.
 - 6. Reinstall dismantled surface-mounted objects and hardware unless otherwise indicated.

1.05 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include recommendations for product application and use. Include test data substantiating that products comply with requirements.
- B. Samples: For each type of paint system and each pattern, color, and gloss.
 - 1. For each painted color being matched to a standardized color-coding system, include the color chips from the color-coding-system company with samples.

1.06 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For historic treatment specialist and paint-remover manufacturer.
- B. Plan Painting Historic Treatment Program: Submit before work begins.
- C. Preconstruction Test Reports: For cleaning materials, paint removers and paint coatings and systems.

1.07 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra paint materials, from the same production run, that match products applied and that are packaged with protective covering for storage and identified with labels describing contents, including material, finish, source, and location on building.
 - 1. Quantity: Furnish Owner with an additional 5 percent, but not less than 1 gal. or one case, as appropriate, of each material and color applied.

1.08 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: A qualified historic painting specialist with expertise in matching and touching up existing painting. Experience only in new painting work is insufficient experience for historic treatment work.
- B. Paint-Remover Manufacturer Qualifications: A firm regularly engaged in producing paint removers that have been used for similar historic painting applications with successful results, and with factory-authorized service representatives who are available for consultation and Project-site inspection and on-site assistance.
- C. Color Matching: Custom computer-match paint colors to colors indicated on Drawings. For colors indicated by a standardized coding system, obtain a color chip for each color indicated from the color-coding-system company; computer match paint colors to the color chips.
- D. Plain Painting Historic Treatment Program: Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for historic treatment work, including protection of surrounding materials and project site, and control of runoff during cleaning, paint removal, repainting, and other processes.
 - 1. If materials and methods other than those indicated are proposed for any phase of historic treatment work, add a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show effectiveness for this Project.

1.09 DELIVERY, STORAGE AND HANDLING

- A. All materials and related accessories shall be delivered and stored in strict compliance with the manufacturer's instructions.
- B. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg. F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste daily.

1.10 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within the limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Weather Limitations: Proceed with historic treatment of painting only when existing and forecasted weather conditions are within the environmental limits set by each manufacturer's written instructions and specified requirements.
- C. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg. F.
- D. Do not apply paint in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer for surface preparation and during paint application and drying periods.

PART 2 – PRODUCTS

2.01 PREPARATORY CLEANING MATERIALS

- A. Water: Potable.
- B. Hot Water: Water heated to a temperature of 140 to 160 deg. F.
- C. Detergent Solution: Solution prepared by mixing 2 cups tetrasodium pyrophosphate (TSPP), 1/2 cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hyochlorite bleach, and 15 quarts of warm water for every 5 gal. of solution required.
- D. Mildewcide: Commercial proprietary mildewcide or a job-mixed solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent sodium hypochlorite bleach, and 3 quarts of warm water.

2.02 PAINT REMOVERS

- A. Alkaline Paste Paint Remover: Manufacturer's standard alkaline paste or gel formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methylene chloride.
- B. Covered or Skin-Forming Alkaline Paint Remover: Manufacturer's standard covered or skinforming alkaline paste or gel formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methylene chloride.
- C. Solvent-Type Paste Paint Remover: Manufacturer's standard water-rinseable, solvent-type paste or gel formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project.

- D. Low-Odor, Solvent-Type Paste Paint Remover: Manufacturer's standard low-odor, water-rinseable, solvent-type paste, gel, or foamed emulsion formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methanol or methylene chloride.
- E. Covered, Solvent-Type Paste Paint Remover: Manufacturer's standard, low-odor, covered, waterrinseable, solvent-type paste or gel formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methanol or methylene chloride.

2.03 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another, and substrates indicated, under conditions or service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

2.04 MODERN PAINT MATERIALS, GENERAL

- A. Basis of Design: Subject to compliance with requirements, provide products indicated or comparable product from one of the following:
 - 1. Duron, Inc.
 - 2. Benjamin Moore & Company
 - 3. Pratt & Lambert
 - 4. PPG Pittsburg Paints
 - 5. Sherwin-Williams Company
- B. Source Limitation: Obtain products from a single source from a single manufacturer.
- C. Paints and Coatings:
 - 1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturers product instructions.
 - 2. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color. Or follow manufacturers product instructions for optimal color conformance.
- D. Transition Coat: Paint manufacturer's recommended coating for use where a residual existing coating is incompatible with the paint system.
- E. Colors: Color scheme and colors shall match existing building. Existing paint colors are as follows:
 - 1. Siding and Downspouts: Benjamin Moore "Bryant Gold HC-7."
 - 2. Doors: Benjamin Moore "Tarrytown Green HC-134."

3. Trim Boards, Eaves, Rakes, Gutters, and Windows: Benjamin Moore "Cloud White OC-130."

2.05 PATCHING MATERIALS

- A. Wood-Patching Compound: Two-part, epoxy-resin, wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated due to weathering and decay. Compound shall be capable of filling deep holes and spreading to feather edge.
- B. Metal Patching Compound: Two-part, polyester-resin, metal patching compound; knife-grade formulation as recommended in writing by manufacturer for type of metal repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be produced for filling metal that has deteriorated due to corrosion. Filler shall be capable of filling deep holes and spreading to feather edge.

PART 3 – EXECUTION

3.01 PROTECTION

- A. Comply with each manufacturers written instructions for protecting building and other surfaces against damage from exposure to its products. Prevent chemical solutions from coming into contact with people, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
 - Cover adjacent surfaces with materials that are proven to resist chemical solutions being used unless the solutions will not damage adjacent surfaces. Use protective materials that are UV resistant and waterproof. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive staining.
 - 2. Do not apply chemical solutions during winds of sufficient force to spread them to unprotected surfaces.
 - 3. Neutralize and collect alkaline and acid wastes before disposal.
 - 4. Dispose of runoff from operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundation, damage to landscaping, and water penetration into building interiors.

3.02 HISTORIC TREATMENT OF PAINTING, GENERAL

- A. Historic Treatment Appearance Standard: Completed work is to have a uniform appearance as viewed by Architect from building exterior at 20 feet away from painted surface.
- B. Execution of the Work: In treating historic items, disturb them as minimally as possible and as follows:
 - 1. Remove failed coatings and corrosion and repaint.
 - 2. Verify that substrate surface conditions are suitable for painting.

- 3. Allow other trades to repair items in place and retain as much original material as possible before repainting.
- 4. Reproduce original, historic paint systems where indicated or scheduled.
- 5. Install temporary protective measures to protect historic painted surfaces that shall be treated later.
- C. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use only the gentlest mechanical methods, such as scraping and lightly hand sanding, that will not abrade softer substrates, reducing clarity of detail. Do not use abrasive methods such as rotary sanding, rotary wire brushing, or power tools except as indicated as part of the historic treatment program and as approved by Architect.
- D. Heat Processes: Do not use torches, heat guns, or heat plates.

3.03 EXAMINATION

- A. Examine substrates and conditions, with historic treatment specialist present, for compliance with requirements for maximum moisture content and other conditions affecting performance of painting work. Comply with paint manufacturer's written instructions for inspection.
- B. Maximum Moisture Content of Substrates: Do not begin application of coatings unless moisture content of exposed surface is below the maximum value recommended in writing by paint manufacturer and not greater than the following maximum values when measured with an electronic moisture meter appropriate to the substrate materials:
 - 1. Wood: 15 percent.
- C. Alkalinity: Do not begin application of coatings unless surface alkalinity is within range recommended in writing by paint manufacturer. Conduct alkali testing with litmus paper on exposed plaster, cementitious, and masonry surfaces.
- D. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
 - 1. If existing surfaces cannot be prepared to an acceptable condition for proper finishing by using specified surface-preparation methods, notify Architect in writing.
- E. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.04 PREPARATORY CLEANING

A. General: Use only the gentlest, appropriate method necessary to clean surfaces in preparation for painting. Clean all surfaces, corners, contours, and interstices.

- B. Detergent Cleaning: Wash surfaces by hand using clean rags, sponges, and bristle brushes. Scrub surface with detergent solution and bristle brush until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used, and that surface remains wet. Rinse with water applied by clean rags or sponges.
- C. Solvent Cleaning: Use solvent cleaning to remove oil, grease, smoke, tar, and asphalt from painted or unpainted surfaces before other preparation work. Wipe surfaces with solvent using clean rags and sponges. If necessary, spot-solvent cleaning may be employed just prior to recommencement of paint application, provided enough time is allowed for complete evaporation. Use clean solvent and clean rags for the final wash to ensure that all foreign materials have been removed. Do not use solvents, including primer thinner and turpentine, that leave residue.
- D. Mildew: Clean off existing mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. Rinse with water applied by clean rags or sponges.

3.05 PAINT REMOVAL

- A. General: Remove paint where indicated. Where cleaning methods have been attempted and further removal of paint is required because of incompatible or unsatisfactory surfaces for repainting, remove paint to extent required by conditions.
 - 1. Application: Apply paint removers according to paint-remover manufacturer's written instructions. Do not allow paint removers to remain on surface for periods longer than those indicated or recommended in writing by manufacturer.
 - a. Apply materials to all surfaces, corners, contours, and interstices, to provide a uniform final appearance without streaks.
 - b. After work is complete, remove protection no longer required. Remove tape and adhesive marks.
 - 2. Brushes: Use brushes that are resistant to chemicals being used.
 - a. Metal Substrates: If using wire brushes on metal, use brushes of same metal composition as metal being treated.
 - b. Wood Substrates: Do not use wire brushes.
 - 3. Spray Equipment: Use spray equipment that provides controlled application at volume and pressure indicated, measured at nozzle. Adjust pressure and volume to ensure that spray methods do not damage surfaces.
 - a. Equip units with pressure gages.
 - b. Unless otherwise indicated, hold spray nozzle at least 6 inches from surface and apply material in horizontal, back-and-forth sweeping motion, overlapping previous strokes to produce uniform coverage.
 - c. For chemical spray application, use low-pressure tank or chemical pump suitable for chemical indicated, equipped with nozzle having a cone-shaped spray.
 - d. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
 - e. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F at flow rates indicated.

- B. Paint Removal with Hand Tools: Remove paint manually using hand-held scrapers, wire brushes, sandpaper, and metallic wool as appropriate for the substrate material. Do not use other methods except as indicated as part of the historic treatment program and as approved by Architect.
- C. Paint Removal with Alkaline Paste Paint Remover:
 - 1. Remove loose and peeling paint using water, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
 - 2. Apply paint remover to dry, painted surface with brushes.
 - 3. Allow paint remover to remain on surface for a period recommended in writing by manufacturer or as determined by preconstruction testing.
 - 4. Rinse with cold water applied by medium-pressure spray to remove chemicals and paint residue.
 - 5. Use mechanical methods recommended in writing by manufacturer to remove chemicals and paint residue.
 - 6. Repeat process if necessary to remove all paint.
- D. Paint Removal with Covered or Skin-Forming Alkaline Paint Remover:
 - 1. Remove loose and peeling paint using water, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
 - 2. Apply paint remover to dry, painted surface with brushes or as recommended in writing by manufacturer.
 - 3. Apply cover according to manufacturer's written instructions.
 - 4. Allow paint remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing.
 - 5. Scrape off paint and remover.
 - 6. Rinse with cold water applied by medium-pressure spray to remove chemicals and paint residue.
 - 7. Use mechanical methods recommended in writing by manufacturer to remove chemicals and paint residue.
 - 8. For spots of remaining paint, apply alkaline paste paint remover according to "Paint Removal with Alkaline Paste Paint Remover" paragraph.
- E. Paint Removal with Solvent-Type Paste Paint Remover:
 - 1. Remove loose and peeling paint using water, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
 - 2. Apply thick coating of paint remover to dry, painted surface with natural-fiber cleaning brush, deep-nap roller, or large paintbrush. Apply in one or two coats according to manufacturer's written instructions.
 - 3. Allow paint remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing.
 - 4. Rinse with cold water applied by medium-pressure spray to remove chemicals and paint residue.
 - 5. Use mechanical methods recommended in writing by manufacturer to remove chemicals and paint residue.
 - 6. Repeat process if necessary to remove all paint.

- F. Paint Removal with Covered, Solvent-Type Paste Paint Remover:
 - 1. Remove loose and peeling paint using water, scrapers, stiff brushes, or a combination of these. Let surface dry thoroughly.
 - 2. Apply paint remover to dry, painted surface with natural-fiber cleaning brush, deep-nap roller, or large paint brush or as recommended in writing by manufacturer.
 - 3. Apply cover according to manufacturer's written instructions.
 - 4. Allow paint remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing.
 - 5. Scrape off paint and remover.
 - 6. Rinse with cold water applied by a medium-pressure spray to remove chemical and paint residue.
 - 7. Use mechanical methods recommended in writing by manufacturer to remove remaining chemicals and paint residue.

3.06 SUBSTRATE REPAIR

- A. General: Repair substrate surface defects that are inconsistent with the surface appearance of adjacent materials and finishes.
- B. Wood Substrate:
 - 1. Repair wood defects including dents and gouges more than 1/4 inch in size and all holes and cracks by filling with wood-patching compound and sanding smooth. Reset or remove protruding fasteners.
 - 2. Where existing paint is allowed to remain, sand irregular buildup of paint, runs, and sags to achieve uniformly smooth surface.

3.07 PAINT APPLICATION, GENERAL

- A. Comply with manufacturer's written instructions for application methods unless otherwise indicated in this Section.
- B. Prepare surfaces to be painted according to the Surface-Preparation Schedule and with manufacturer's written instructions for each substrate condition.
- C. Apply a transition coat over incompatible existing coatings.
- Blending Plain Painted Surfaces: When painting new substrates patched into existing surfaces or touching up missing or damaged finishes, apply coating system specified for the specific substrate. Apply final finish coat over entire surface from edge to edge and corner to corner.

3.08 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.09 SURFACE-PREPARATION SCHEDULE

- A. General: Before painting, prepare surfaces where indicated on Drawings for painting according to applicable requirements specified in this schedule.
 - 1. Examine surfaces to evaluate each surface condition according to paragraphs below.
 - 2. Where existing degree of soiling prevents examination, preclean surface and allow it to dry before making an evaluation.
 - 3. Repair substrate defects according to "Substrate Repair" Article.
- B. Surface Preparation for Degree of Surface Degradation **DSD #0**:
 - 1. Surface Condition: Existing paint film in good condition and tightly adhered.
 - 2. Paint Removal: Not required.
 - 3. Preparation for Painting: Wash surface by detergent cleaning; use solvent cleaning where needed. Roughen or degloss cleaned surfaces to ensure paint adhesion according to paint manufacturer's written instructions.
- C. Surface Preparation for Degree of Surface Degradation **DSD #1:**
 - 1. Surface Condition: Paint film loose, flaking, or peeling.
 - 2. Paint Removal: Remove loose, flaking, or peeling paint film by hand-tool or chemical paintremoval methods.
 - 3. Preparation for Painting: Wash surface by detergent cleaning; use solvent cleaning where needed. Use other cleaning methods for small areas of bare substrate if required. Sand surfaces to smooth remaining paint film edges. Prepare bare cleaned surface to be painted according to paint manufacturer's written instructions for substrate construction materials.
- D. Surface Preparation for Degree of Surface Degradation **DSD #2:**
 - 1. Surface Condition: Paint film severely deteriorated.
 - 2. Paint Removal: Completely remove paint film by hand-tool or chemical paint-removal methods. Remove rust.
 - 3. Preparation for Painting: Prepare bare cleaned surface according to paint manufacturer's written instructions for substrate construction materials.
- E. Surface Preparation for Degree of Surface Degradation **DSD #3**:
 - 1. Surface Condition: Missing material, small holes, and openings, and deteriorated or corroded substrate.

- 2. Substrate Preparation: Repair, replace, and treat substrate according to "Substrate Repair" Article.
- 3. Preparation for Painting: Sand substrate surfaces to smooth remaining paint film edges and prepare according to paint manufacturer's written instructions for substrate construction materials. Remove rust.

3.10 PAINTING AND COATING SCHEDULE

A. <u>Exterior Painting:</u>

- 1. <u>Non-Ferrous Metal:</u>
 - Prime Coat: Acrylic, anti-corrosive for metal: Benjamin Moore Ultra Spec HP, D.T.M. Acrylic Semi-Gloss HP29, 4.0 to 5.4 mils wet, 1.8 to 2.5 mils dry.
 - Intermediate Coat: Exterior, acrylic, matching topcoat.
 - Topcoat: Acrylic, anti-corrosive for metal: Benjamin Moore Ultra Spec HP, D.T.M. Acrylic Semi-Gloss HP29, 4.0 to 5.4 mils wet, 1.8 to 2.5 mils dry.

2. <u>Wood:</u>

- Prime Coat (Previously Painted): Primer, interior/exterior acrylic: Benjamin Moore Fresh Start, High-Hiding All Purpose Primer 046, 3.8 mils wet, 1.4 mils dry.
- Prime Coat (Bare Wood): Primer, exterior alkyd: Benjamin Moore Fresh Start, Deck & Siding Primer 094, 3.0 to 3.6 mils wet, 1.7 to 2.0 mils dry.
- Intermediate Coat: Acrylic, exterior, matching topcoat.
- Topcoat: Acrylic, exterior soft gloss: Benjamin Moore Aura, Waterborne Exterior Soft Gloss N632, 3.5 to 4.5 mils wet, 1.4 to 1.8 mils dry.

END OF HISTORIC TREATMENT OF PLAIN PAINTING