

**SECTION 01 10 00
SUMMARY****PART 1 - GENERAL****1.1 SUMMARY****A. This Section addresses:**

1. Type of Contract
2. Physical Completion Date
3. Work covered by Contract Documents.
4. Contractor's use of premises.
5. Compliance
6. Laying out.
7. Related Documents
8. Related Contracts
9. Incidental Cleaning
10. Work by NYS OPRHP
11. Special Events
12. Additional Insurance
13. Physical Damage
14. Historic Preservation Statement

1.2 TYPE OF CONTRACT

- A. Lump Sum Best Value contract consisting of lump sum work items.**

1.3 PHYSICAL COMPLETION DATE

Physically complete all work within the number of days listed in the Agreement as approved by the State Comptroller. All milestone dates must be met. If this schedule is not met, liquidated damages may apply. Use of overtime and premium time, if required to meet the schedule, should be included in your bid.

For the purposes of this bid, anticipate Contract Award date of August 18, 2021, contractor mobilization on site as of August 19th, 2021, and contract Physical Completion Date of May 15, 2022 (calculated 270 days after agreement has been approved by the NYSComptroller's Office.)

The final completion date and all final milestone dates will be determined by the dates indicated in the awarded Contractor's proposal and will be incorporated into the Agreement, and adjusted based on the actual Contract Award date.

PROJECT SCHEDULE/MILESTONE DATES

1. **December 3, 2021** All exterior Cottage and Manor Hall historic rehabilitation work complete (Structural work, masonry, wood, stucco, window, and door repairs, surface prep and painting)
2. **December 15, 2021** – Weathertight service addition. (Watertight roofing and building envelope)
3. **December 30, 2021** Sub surface work including utilities and hard surface pavements including pathways. (parking lot/pathway base course only)
4. **April 15, 2022** Physical Completion of Interior of Manor Hall – Exhibit installer occupies Manor Hall.

- A. The time allowed includes 10 days for notifying the Contractor of the Comptroller's approval of the Agreement.
- B. The approval of the Agreement by the Comptroller constitutes the filing of the Contract Documents as a public record and notice to the Contractor that a fully executed contract exists between the Contractor and the State.
- C. **NYS OPRHP does not set the date for the approval of the Agreement by the Office of the State Comptroller. However in order to expedite approval, it is critical that Contractors all submit required paperwork in required timeframe after bid. Refer to Contract Submittals Checklist included in this project manual for more information.**

1.4 WORK COVERED BY CONTRACT DOCUMENTS

The description of the Work in this section does not, and is not, intended to list every element of work but to provide guidance highlighting key elements of work that are included in scope of work. Read all Contract Documents thoroughly.

A. The Work consists of:

1. Construct a two-story addition (plus basement) for elevator (1) and restrooms (4).
2. Interior restoration of historic building fabric including:
 - a. plaster restoration
 - b. wood trim & wood floor restoration
 - c. painting
3. Exterior restoration of historic building fabric including:
 - a. wood repair and replacement,
 - b. masonry repointing
 - c. stucco restoration,
 - d. painting
4. Custom pressure-fit, interior, wood storm windows with ultraviolet protection film on all windows.
5. Electrical upgrade & ethernet install.
6. New lighting (interior & exterior).
7. Brownston steps -resetting & restoration.
8. HVAC repairs.
9. Porch roof replacement (wood shingle) & gutter install.
10. Structural improvements.
11. Install commercial kitchen in Cottage.
12. Transport (1) cannon to location TBD in Yonkers, NY.
13. Site & drainage improvements
14. Walkway alterations/ addition and re-setting
15. Driveway - Precast permeable concrete paver install.

A. GENERAL CONSTRUCTION CONTRACTOR (GCC)

General Construction Contractor is responsible for all items indicated in the Contract Documents,. The General Construction Work involves multiple areas of construction. The General Construction Contractor will coordinate their work.

1.5 CONTRACTOR'S USE OF PREMISES

- A. Contractors use of premises shall be solely for the performance of the Work of this Contract. Contractor's operations at the work site shall be limited to the existing property boundaries or the Limits of Work, whichever is more restrictive.
- B. Routes of ingress and egress, parking and storage areas shall be as established by the Director's Representative. Store materials and perform the Work without obstructing vehicular or pedestrian access to the buildings, site and roadways
- C. The NYS OPRHP reserves the right to restrict access by oversized or overweight vehicles or equipment, if in the opinion of the Director or Director's Representative they pose a safety risk.
- D. Comply with the NYS Park's Rules and Regulations and Facilities Regulation and Use Policies.
- E. Comply with applicable federal and State of New York Right-to-Know Law provisions and maintain appropriate Safety Data Sheets (SDS) as required by law. Provide copies of SDS sheets if requested by the Code Enforcement Official or the Director's Representative.
- F. Comply with Facility Policies relating to smoking at the Site.

1.6 COMPLIANCE

- A. Comply with applicable Federal, State and local regulations including but not limited to: NYS Building Code, NYS Department of Labor, OSHA, NYS DEC, NYS OPRHP, NYS DOT, etc.

1.7 LAYING OUT

- A. Examine the Contract Documents thoroughly and promptly. Report any errors or discrepancies to the Director's Representative before commencing the Work **Report any unknown or latent field conditions to the Director's Representative.**
- B. Lay out the Work in accordance with the Contract Documents.

1.8 RELATED DOCUMENTS

- A. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

1.9 RELATED CONTRACTS

- A. Coordinate scheduling and staging to avoid conflicts with other current contracts.
- B. Adjustments in the sequence of work under this contract may be required to avoid conflicts.

1.10 INCIDENTAL CLEANING By Contractor

- A. Each Contractor is responsible for keeping their work areas clean from debris and for protection of surrounding construction from damage such as breakage, marking, denting, staining, soiling, etc. Each

contractor shall promptly clean materials soiled during or by construction progress caused by their work or items of their work to prevent permanent damage from occurring.

1.11 **WORK BY NYS OPRHP**

- A. Parks will demolish the existing service wing prior to construction to allow for archaeology. Any footings or foundation that remain to be removed by Contractor.
- B. Parks will remove the existing American Holly Tree on the east elevation of the building prior to construction.
- C. Parks will remove all historic collections from the building prior to construction.

1.12 **SPECIAL EVENTS**

- A. NA

1.13 **ADDITIONAL INSURANCE**

- A. List any entities that should be listed as additional insureds.
 - 1. City of Yonkers

1.14 **PHYSICAL DAMAGE**

- A. The Contractor is responsible for damage to existing construction, including materials and equipment furnished but not yet installed, resulting from the operations of the Contractor's employees, and those of its subcontractors and suppliers.
 - 1. New materials and equipment shall be repaired or replaced with items that duplicate the approved items in every respect. The decision to repair or replace shall be at the sole discretion of NYS OPRHP.
 - 2. Historic elements and features shall be conserved, repaired, or restored at the sole discretion of NYS OPRHP. If the nature of the work requires special skills or expertise, the NYS OPRHP reserves the right to have the work performed by a firm or individual of their choosing at the Contractor's own expense. NYS OPRHP reserves sole judgment in determining whether or not repairs require special skill or expertise.

1.15 **HISTORIC PRESERVATION STATEMENT**

- A. This project involves work on a National Historic Landmark structure.
 - 1. Historic elements and features shall be conserved, repaired, or restored at the sole discretion of NYS OPRHP. If the nature of the work requires special skills or expertise, the NYS OPRHP reserves the right to have the work performed by a firm or individual of their choosing at the Contractor's own expense. NYS OPRHP reserves sole judgment in determining whether or not repairs require special skill or expertise.
 - 2. Refer to specification section 01 35 00.

NYSOPRHP – TACONIC REGION

Contract D005805: Philipse Manor Hall State Historic Site
Construction of Elevator/Restroom Addition, Interior and
Exterior Rehabilitation and Site Enhancements

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 14 00 WORK RESTRICTIONS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Owner's occupancy and use of the premises.
- B. Contractor's use of the premises.
- C. Restricted work period.
- D. Work methods.

1.2 OWNER'S OCCUPANCY AND USE

- A. Building use to be carefully controlled during construction to preserve and protect historic features of the building from overuse and heavy loads.
 - 1. One (1) building ground floor exit/entrance on the Manor Hall shall be designated for routine access by the Contractors. Other exterior doors must be kept locked, except when required for delivery or removal of materials and equipment, when work is being performed on the door or opening, and for emergencies. Opening of additional doors must be coordinated with the Director's Representative or Site Staff. ALL openings shall be secured by the end of each work shift.
 - a. **The Contractor shall use the South Stairs (Rooms 102-202) and the Room 205 fire escape stairs for routine travel between floors**
 - b. The Contractor shall not use the North (East, Rooms 104-204) staircase unless permission is given by the Director's Representative or Facility Staff management.
 - c. Foot traffic and material movement to be restricted through **Room 203**. No storage of materials in **Rooms 201 and 203**.
 - 2. Furnishings, equipment, and supplies will remain in the building during construction. Take all necessary measures to protect the Owner's property from damage, theft or vandalism.
- B. The Site will be CLOSED to the public, but open to NYSOPRHP personnel only with prior approval of Director's Representative and their Consultants. OPRHP Director's representative will coordinate all site visits.
 - 1. Direct employees to be watchful of people in or near the work area where safety hazards may be present. Notify the Site Manager or Director's Representative, if necessary, to remove unauthorized persons from the work area.
 - 2. Refer to Section 01 50 00 Temporary Facilities and Controls regarding temporary construction fencing and signage.

1.3 CONTRACTOR'S USE OF PREMISES

- A. Use of Site: Limit use of the premises to areas indicated. Keep driveways and entrances to buildings clear and accessible to the Owner and public. Do not obstruct access to fire hydrants or fire lanes.
 - 1. Do not diminish existing level(s) of life safety during performance of the Work.
 - 2. Maintain work areas clean and free of debris.
 - 3. Locate and post required notices where directed.
- B. Storage: Provide secure facilities for on-site storage of materials and locate as directed. Materials and equipment may not be stored in Owner's facilities.
 - 1. Schedule deliveries to minimize use of driveways and entrances.
 - 2. Coordinate deliveries to conform to the progress schedule and to minimize the time required for storage on the premises.
- C. Parking: Refer to Section 01 50 00 Temporary Facilities for parking for the Contractor's and their subcontractor's employees. A chain link fence entrance gate shall be secured with a combination lock, with the combination given to the Director's Representative, and the Contractor's key personnel.
 - 1. Parking extremely limited on site.
 - 2. Do not block City sidewalk with parked or idling vehicles.
- D. Access to Interior Spaces: The Contractor will be permitted use interior spaces as needed to perform the Work of this Contract.
 - 1. Refer to Section 01 35 00 for additional requirements pertaining to security and personal identification.
- E. Smoking, vaping, and electronic smoking is not permitted anywhere within the project.
- F. Prohibited items: The following items are not permitted to be brought onto the premises:
 - 1. Firearms, ammunition, explosives, weapons, or dangerous instruments (other than tools required for the Work).
 - 2. Alcoholic beverages or persons under the influence of same.
 - 3. Illegal controlled substances or persons under the influence of same.

1.4 UTILITY OUTAGES AND SHUTDOWN

- A. General: Do not interrupt utility services or branch services within the building except as needed to perform the Work.
 - 1. Except as needed to replace or modify the system, maintain the existing fire detection and alarm system during the Work of this Contract. Limit scheduled interruptions to no more than a single workday. Do not leave the fire alarm system disabled during non-working hours. Where work may possibly produce dust, install temporary dust covers over detectors.
 - 2. Maintain the existing security system during the Work of this Contract except where such system is to be modified or replaced. Where the work requires disengagement of security systems, schedule temporary shutdowns with the Director's Representative or historic site staff. All security systems must be fully operational at the end of each work shift.

1.5 RESTRICTED WORK PERIOD

- A. On-Site Work Hours: Perform work at the premises except on official State holidays
 - 1. Monday through Friday, between the hours of 7:00 A.M. and 5:00 P.M.
 - 2. Saturday, between the hours of 7:00 A.M. and 5:00 P.M.
 - 3. Sunday, between the hours of 8:00 A.M. and 4:00 P.M.
- B. The performance of Work on-site during other times requires prior approval of the Director's Representative.
- C. No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency.
 - 1. The contractor and OPRHP may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project. There are very few exceptions to this rule.

1.6 WORK METHODS

- A. The Director's Representative reserves the right to disapprove the Contractor's method(s) of operation, size or quantity of equipment used if, in his opinion, improper materials or workmanship are being used or unsatisfactory work or damage to existing construction might result. Upon notification of such disapproval, the Contractor shall modify his or her methods, materials, or equipment used to perform the Work to comply with the terms of this Contract.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 21 00 ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
- B. Include in the **Total Bid Amount** the Allowances stated on the Bid Form. Refer to Bid Form.
- C. No work in excess of the specified allowance will be permitted unless approved by the Directors Representative.
- D. The actual requested allowance amount will be reviewed and approved or rejected by Directors Representative, on the accuracy and completeness of the cost of pricing and data submitted

1.2 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Field/ Change Orders.
- B. Submit invoices or delivery slips to show actual cost and quantities of materials delivered to the site for use in fulfillment of each allowance.

1.3 FIELD ORDER ALLOWANCE

- A. Used for miscellaneous field change orders during construction subject to Office's Approval. **See Bid Form for details.**

1.4 UNIT PRICE ALLOWANCE

- A. A given quantity of Work to be included in the Base Bid Amount. **See Bid Form for details.**

1.5 UNUSED MATERIALS

- A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to NYS OPRHP, after installation has been completed and accepted.
 - 1. If requested, prepare unused material for storage by NYS OPRHP when it is not economically practical to return the material for credit. If directed by NYS OPRHP, deliver unused material to designated storage space. Otherwise, disposal of unused material is Contractor's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. FIELD ORDER ALLOWANCE
 - 1. Total Field Order Allowances: **See Bid Form**

END OF SECTION

SECTION 01 23 00 ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Alternates not indicated on this Contract**

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for designated work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Office decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Base Bid Amount to incorporate alternate into the Work.
 - 2. See Instructions to Bidders for Award of Contract with respect to Alternates.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Following the award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section.

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PART 2 - PRODUCTS (Not Used)

PART 3 - (Not Used)

END OF SECTION

SECTION 01 26 00 CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section contains procedures that clarify and supplement those prescribed by Article 11 of the General Conditions (Change Orders) and Specification Section 01 21 00 (Allowances).

1.2 SECTION INCLUDES

- A. Field Directive
- B. Request for Information
- C. Request for Proposal
- D. Field Order

1.3 FIELD DIRECTIVE

- A. The Director's Representative may issue a Field Directive authorizing minor changes in the Work that, in the opinion of the Director's Representative, do not require an adjustment in the Contract Sum or in the Time of Completion.
 - 1. **Field Directives that impact any historic building elements at Philipse Manor Hall must be approved by OPRHP Historic Preservation Representative.**
- B. If a Contractor believes that a Field Directive merits an increase in either the Contract Sum or the Time of Completion, he shall immediately notify the Director's Representative and submit a written explanation to substantiate the claim(s). In such an event, the Contractor shall NOT proceed further with the Field Directive except where directed otherwise in writing.
 - 1. The Director's Representative shall promptly review the Contractor's claim of additional compensation or time for completion and provide a written response. The Director's Representative may rescind or modify the directive.
 - 2. Any Field Directive subsequently determined to warrant a change in the Contract Sum or Time of Completion will be re-issued as a Field Order or a Change Order.

1.4 Request for Information

- A. The Contractor shall prepare a written Request for Information (RFI) when needed to clarify the intended function, performance, or installation of any component or procedure required by the Contract. RFIs shall be delivered to the Director's Representative for a response.

1. The Contractor shall make every reasonable effort to identify and prepare RFIs as soon as practical so as to avoid any unnecessary delay in the progress of the Work or need for changes to items already approved, purchased or to work already completed.
- B. The Director's Representative will promptly respond to all RFIs and, when needed, coordinate a response from the Consulting Engineer or Architect. The Contractor shall re-direct his workforce until the RFI is resolved. The Contractor shall immediately notify the Director's Representative when a delay in the response to an RFI might result in a change to the Time of Completion.

1.5 REQUEST FOR PROPOSALS

- A. A Request for Proposal (RFP) does not constitute instructions to modify the scope of work. Acceptance of any RFP will be established by an approved Field Order or Change Order.
- B. An RFP may be initiated by either the Contractor or the Director's Representative.
- C. NYS OPRHP Initiated Proposal Requests
 1. The Director's Representative will issue an RFP for changes that may require an adjustment in the Contract Sum or the Time of Completion. Do not stop work in progress or execute the proposed change unless specifically directed to do so by the Director's Representative.
 2. Within the time specified in the RFP, or as soon as practical if no time is specified, the effected Contractor(s) shall submit a detailed estimate of cost adjustments to the Contract Sum and/or increase in the Time of Completion. The estimate shall include a breakdown of labor, materials and equipment. Include all associated costs relating to delivery charges, equipment rental, project record documents, and overhead and profit in the estimate. Overhead and profit shall be determined by one of the methods described in Article 11 of the General Conditions.
 3. The Director's Representative will review the RFP and may request changes to the proposal that best serve the interests of the State.
- D. Contractor-Initiated Proposal Requests
 1. If latent or unforeseen conditions require changes in the Work of the Contract, a Contractor may propose changes by submitting a RFP to the Director's Representative. Do not stop work in progress or execute the proposed change unless specifically directed to do so by the Director's Representative.
 2. The Contractor shall include a written explanation of the reasons for the change and describe the effect of the proposed change upon the work of other contractors, the Contract Sum, or the Time of Completion. Include a detailed estimate of the cost of labor, materials and equipment to substantiate any change in the Contract Sum.
 3. If a RFP is accepted, the Director's Representative will issue a Field Order or a Change Order.

1.6 FIELD ORDER

- A. The Director's Representative may issue a Field Order that instructs a Contractor to proceed with certain items of Work. A Field Order does not adjust the Contract Sum but rather is funded by the Field Order Allowance which is included in the original Contract Sum.

- B. The Field Order shall contain a complete description of the proposed change in the Work and a fixed dollar amount or other basis for determining the final cost of the change. The Contractor shall maintain accurate records for Work performed on a time and material or unit price basis.
- C. Total Field Order Allowance shall be listed on the FIN112 Payment Application continuation page "Schedule of Values" as a line item, adjusted downward by the approved field order line items when applicable.
- D. Contractor shall use NYS OPRHP provided documentation forms for the Field Order. The Field Order cover sheet shall be prepared by the Director's Representative for attachment and approval by the Contractor.

1.7 CHANGEORDER

- A. Any change in the Time of Completion or Contract Sum shall be made in the form of a Change Order. A Change Order shall not be binding until approved by the Comptroller.
- B. Change Orders shall be listed on a separate continuation sheet attached to the FIN112 Application for Payment.
- C. Change Orders shall comply with Article 11 of the General Conditions.
- D. Contractor shall use NYS OPRHP provided documentation forms for the Change Order. The Change Order cover sheet shall be prepared by the Director's Representative for attachment and approval by the Contractor.

PART 2 - PRODUCTS: NOT USED

PART 3 - EXECUTION: NOT USED

END OF SECTION

SECTION 01 29 00 PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. DETAILED ESTIMATE
- B. Application and Certifications for Payment.

1.2 DETAILED ESTIMATE

- A. Prepare and submit a detailed breakdown (Schedule of Values) of the Contractor's lump sum bid within 10 days after pre-construction meeting. List all major work items individually, including separate prices for labor and materials.
 - 1. Correlate work items with Specification Sections. Provide at least one line item for each Specification Section.
 - 2. Provide a line item for each allowance identified in Section 01 21 00.
- B. The Contractor shall use the Detailed Estimate FIN 112 form.
- C. The Detailed Estimate shall be supported by such evidence, including certified copies of subcontracts and supplier quotations, as the Director's Representative may require.
- D. The Detailed Estimate shall be approved by the Director's Representative, who may revise it as necessary to make the various items conform to their true values. The purpose for the Detailed Estimate is to assist in determining and approving application payment amounts based on estimated percentage of completion.
- E. Application for payments will be made based upon the percentage of work completed and the approved Detailed Estimate.
- F. Contractor shall make sure that values indicated on the detailed estimate are accurate and true and reflect values entered on the MWBE Monthly Payment Statement.

1.3 APPLICATIONS FOR PAYMENT

- A. Prepare and submit payment applications in draft form as a "pencil copy" using forms as directed by NYS OPRHP. When approved by the Director's Representative, submit three original signed copies.
- B. Payment application periods: Prepare and submit applications on a monthly basis. Applications shall accurately reflect the percentage of work completed as of the date indicated.
 - 1. The period ending date for any given payment application shall never be beyond the current contract completion date.

2. The contractor shall not sign or submit the payment application before the work period ending date.

C. Transmit payment applications to the Director's Representative.

D. Certified payrolls must be submitted with all applications for payment. Certified payroll shall be submitted through the period ending date entered on the Application for Payment. Payments will not be processed without full certified payroll through the period ending date.

E. As required by Department of Labor, OSHA 10 cards shall be submitted for any employees listed on the Certified Payroll.

F. Retainage will be held for the duration of this project in the amount of 5%. It may be reduced at the discretion of the Director's Representative once the project has reached substantial completion. The amount reduced will be determined by the Director's Representative.

1.4 FINAL APPLICATION FOR PAYMENT

A. Final payment application with all supporting documents shall be submitted within 20 days after the "Joint Inspection for Physical Completion".

B. See specification section 01 77 00 for documents and other requirements prior to final payment.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 30 00 ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 PERMITS AND COMPLIANCE

- A. The Contractor shall obtain, maintain and pay for all permits, licenses, third party inspections legally required and shall give all notices, pay all fees and comply with all laws, rules and regulations applicable to the Work at no additional cost. Building Permit will be issued by Parks.

1.2 JOB MEETINGS/ SITE VISITS

- A. PRE-BID SITE VISIT. A pre-bid site visit is recommended. Observe actual conditions and verify dimensions, elevations, etc. Any discrepancies shall be reported to the Director's Representative immediately. Formal/ technical questions may be asked using the RFI form provided. The Contractor shall verify his/her understanding of the scope and extent of the Work to be performed as part of the Contract Documents.

- B. PRE-CONSTRUCTION MEETING. Before starting the Work, arrange a Pre-construction Meeting with Director's Representative to review existing conditions, and the proper installation of materials. Attendees shall include all parties directly affecting the Work of this Section.

- 1. MASTER SCHEDULE MEETING. All Contractors shall meet with the Director's Representative to develop the baseline Master Progress Schedule. The date of the initial meeting will take place as agreed to at the pre-construction meeting.

- 2. PRE-TESTING & INSPECTION. A meeting with staff from NYS OPRHP, the Contractors, the Consultants and the testing companies may be requested to plan for tests and inspections required for this project. Please refer to section 01 43 00 for required tests. The date of this meeting will take place as agreed to at the pre-construction meeting.

- C. PROJECT MEETINGS. Subsequent or regular Project Meetings will be held to review progress and quality of the Work, resolve discrepancies, discuss unforeseen conditions and expedite the Work. The frequency of these meetings will be established prior to beginning work at the pre-construction meeting. All contractors must attend each meeting.

- D. PRE-INSTALLATION MEETINGS. The NYS OPRHP reserves the right to request special meetings prior to installation of critical or unique construction items. Attendance by manufacturer representatives, sub-contractors, etc. may be required.

1.3 CONTRACTOR'S MASTER PROGRESS SCHEDULE

- A. Master Schedule shall be submitted to the NYS OPRHP no later than 10 days after the date of the Master Schedule Meeting. Progress payments will not be processed until the Master Progress Schedule is adopted by the NYS OPRHP. The schedule, when approved by the NYS

OPRHP, shall become the baseline schedule and establish the dates for starting and completing work for the various portions of the Contract. It shall be the duty of all Contractors to conform to the approved schedule and to perform its work within the time limits indicated.

- B. The Master Progress Schedule shall be a Critical Path Method (CPM) type construction schedule showing, in detail, the proposed sequence of the work and the estimated date of starting and completing each stage of the work in order to complete the project within the contract time. Prepare the schedule in a manner so that the actual progress of the work can be recorded and compared with the expected progress. Coordinate the schedule with the proposed schedules of equipment suppliers and subcontractors. Identify the “critical path” of the project including all major milestones. An updated schedule (in legible format) shall be brought to each project meeting.
- C. The Contractor’s Progress Schedule shall also show the following:
 - 1. Equipment reservation and delivery dates for major equipment that require special arrangements and that are on the critical path.
- D. Coordinate the work and make every effort to maintain the construction schedule. In the event actual progress begins to lag the schedule, promptly employ additional means and methods of construction to make up the lost time at no additional cost to the NYS OPRHP.
- E. Notify NYS OPRHP, in writing:
 - 1. 72 hours before commencing any work at the site
 - 2. At least 48 hours before resuming work in the case of a temporary suspension of work.
- F. Keep the Master Progress Schedule current and revise and resubmit as often as necessary to accurately reflect the conditions of the work, past progress and anticipated future progress.
- G. Coordinate letting of subcontracts, material purchases, shop drawing submissions, delivery of materials, and sequence of operations, to conform to the schedule.

1.4 SUBMITTALS

- A. Related Requirements Specified Elsewhere:
 - 1. Other submittal requirements may also be included in other Specification sections. Read other sections carefully.
- B. Initial Contract Submittals shall be made within 10 days of the Pre-construction Meeting (unless otherwise noted). Progress payments will not be processed until the Schedule of Submittals is received by the NYS OPRHP. These include:
 - 1. Detailed Estimate – Refer to PAYMENT PROCEDURES 01 29 00.
 - 2. Schedule of Submittals (OPR107): Submit to the NYS OPRHP a complete list of all submittals for the Project on the OPR 107 Form. Anticipated dates of each submittal should be indicated. Consider lead time of approvals and material ordering. Refer to “Timing of Submittals” below.
 - 3. Contractor’s List of Sub-contractors and Suppliers (TAC103 form).
 - 4. Project Schedule – Refer to section 1.3A above.

- C. Some submittals may be reviewed by the NYS OPRHP Consultants and other parties. Exact routing of methodology of submittals will be established with input from all parties prior to construction.
- D. All submittals shall be quality prints or electronic images. They must be legible. Font size shall be 10 point minimum.
- E. TIMING OF SUBMITTALS
 - 1. Make submittals promptly in accordance with approved schedule (OPR107), and in such sequence as to cause no delay in the work or in the work of any other Contractor.
 - 2. Make submission for approval prior to delivery of materials to job site. If material or equipment is installed before it is approved, the Contractor shall be liable for its removal and replacement at no charge if, in opinion of the NYS OPRHP, material or equipment does not meet intent of Plans and Specifications.
 - 3. Make submissions well in advance as the returning, rejecting, disapproval of submissions, or other similar circumstances are possible, and are deemed “avoidable delays”. Costs for these delays or those attributed to Contractor’s tardiness in making submittals shall be borne by the Contractor. To avoid delays, begin submittal process immediately after pre-construction meeting.
- F. Electronic Format - Submittals and Shop Drawings
 - 1. Submit single electronic submissions means to reduce costs, time, and environmental impacts. Submittal or construction management software or web-based tools are encouraged and may be used if approved NYSOPRHP.
 - 2. Format: Submittals shall be made in Adobe PDF (Portable Document Format) or as a TIFF format image.
 - 3. Contact the Director’s Representative if you have any questions regarding electronic submittals.
- G. Samples
 - 1. Submit **two (2)** (unless otherwise specified herein) of each sample required by the specifications. Samples shall show the quality, type, range of color, finish and texture of the material intended to be furnished for the Work.
 - 2. Samples shall become the property of the NYSOPRHP when submitted unless specifically stated otherwise, and will not be incorporated into the Work [unless specifically stated otherwise in the respective specification section].
 - 3. Samples of colors shall be actual paint samples not reproduced color swatches or printed material.
- H. Qualification Data
 - 1. Submit qualification data for the personnel specified in “Quality Assurance” Articles of applicable specification sections that demonstrate that the personnel have capabilities and experience complying with the specified requirements.
 - 2. Qualification data must be submitted to the Director’s Representative at least thirty (30) days prior to execution of any work under the applicable section.

I. Safety Data Sheets (SDS)

1. Comply with “Right to Know” requirements of Chapter 551 of Laws of New York, 1980, concerning notification of the use of toxic substances.
2. Any product or substance used by the Contractor or its subcontractors which is listed in Subpart Z of OSHA Part 1910 Title 29 of the Code of Federal Regulations entitled “Toxic and Hazardous Substances” shall be identified to the Owner by the Contractor’s submission of a standard Safety Data Sheet.

J. Additional Submittal Requirements

1. Identify all submittals by project title and number. Include Contractor’s name, date and revision dates. On shop drawings, product data and samples also include name of subcontractor and supplier, applicable specification section number and Contractor’s stamp, initialed or signed, certifying to review and approval of submittal, verification of field measurements and compliance with contract documents.

K. CONTRACTOR’S RESPONSIBILITIES

1. Consultant review of submittals shall not relieve contractor of responsibility for any deviation from the requirements of the contract documents unless contractor has informed the Consultant, in writing, of such deviation at the time of submission, including reasons for and technical significance of the deviation and Consultant has given written approval to the specific deviation, nor shall Consultant’s approval relieve contractor from responsibility for errors or omissions in the submittals.
2. No portion of the work requiring a submission shall be commenced until the submission has been found in general compliance with the Contract Documents by Consultant or Licensed Design Professional.
3. For quality control purposes, Contractor shall provide complete submittals for systems or elements of the same component of construction.

PART 2 - PRODUCT

- A. Not used.

PART 3 - EXECUTION

- A. Not Used

END OF SECTION

SECTION 013100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Interpretation (RFIs).
 - 4. Project meetings.

1.2 INFORMATIONAL SUBMITTALS

- A. Submittals: Make initial submittals within 15 days of Notification of Award and before first Application for Payment. Update list and resubmit when information changes and when new information becomes available.
 - 1. Submit PDF electronic files of each list.
- B. Subcontract List: Submit list of individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design
 - 1. Subcontract List Form: Use CSI Form 1.5A or other Architect accepted form.
 - 2. Include the following information in tabular form:
 - a. Name, address, and telephone number of entity performing subcontract or supplying products.
 - b. Number and title of related Specification Section(s) covered by subcontract.
 - c. Drawing number and detail references, as appropriate, covered by subcontract.
 - d. Insurance certificates.
- C. Key Personnel Names: Submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
 - 1. Post copies of list in project meeting room, in temporary field office, on Project Web site, and by each temporary telephone. Keep list current at all times.

1.3 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work.
 - 1. Administrative activities include, but are not limited to, the following:
 - a. Preparation of Contractor's construction schedule.
 - b. Preparation of the schedule of values.
 - c. Installation and removal of temporary facilities and controls.
 - d. Delivery and processing of submittals.
 - e. Progress meetings.
 - f. Preinstallation conferences.
 - g. Project closeout activities.
 - h. Startup and adjustment of systems.
 - i. Commissioning activities.

1.4 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 - 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.

- c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - d. Indicate space requirements for normal operations, routine maintenance, and for anticipated replacement of components during the life of the installation.
 - e. Show location and size of access doors and clearances required for access to concealed dampers, valves, and other controls.
 - f. Indicate required installation sequences.
 - g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
- 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 - 2. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
 - 3. Structural Penetrations: Indicate penetrations and openings required for other Work.
 - 4. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
 - 5. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
 - 6. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inches in diameter and larger and cable trays.
 - b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire-alarm device locations.
 - c. Motion detector, occupancy sensor, daylight sensor, and other electrical system control device locations.
 - d. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - e. Location of pull boxes and junction boxes, dimensioned from column center lines.
 - 7. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are

not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make changes as directed and resubmit.

- C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
1. File Submittal Format: Submit or post coordination drawing files using Portable Data File (PDF) format.
 2. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
 - b. Digital Data Software Program: Drawings are available in Revit and/or AutoCAD 2018.
 - c. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Director's Representative and Architect.

1.5 REQUESTS FOR INTERPRETATION (RFIs)

- A. General: Immediately on discovery of the need for interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: CSI Form 13.2 A or other Architect accepted form.

1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.
 1. Log Form: Use CSI Log Form 13.2B or other Architect accepted form including the following:
 - a. Project name.
 - b. Name and address of Contractor.
 - c. Name and address of Architect.
 - d. RFI number including RFIs that were returned without action or withdrawn.
 - e. RFI description.
 - f. Date the RFI was submitted.
 - g. Date Architect's response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
 1. Indicate resulting Minor Change in the Work, Construction Change Directive, and Proposal Request in RFI log.

1.6 PROJECT MEETINGS

- A. General: Schedule and conduct bi-weekly meetings and/or weekly meetings, if directed at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Director's Representative and Architect of scheduled meeting dates and times.
 2. Coordinate meeting times with Architect's regularly scheduled site visits.
 3. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 4. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Director's Representative and Architect, within three days of the meeting.
- B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Director's Representative and Architect, but no later than 15 days after execution of the Agreement.
1. Conduct the conference to review responsibilities and personnel assignments.
 2. Attendees: Director's Representative, Owner's Commissioning Authority, and Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Critical work sequencing and long-lead items.
 - c. Designation of key personnel and their duties.
 - d. Lines of communications.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of record documents.
 - l. Use of the premises and existing building.
 - m. Work restrictions.
 - n. Working hours.
 - o. Owner's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Procedures for moisture and mold control.
 - r. Procedures for disruptions and shutdowns.
 - s. Owner's work restrictions.
 - t. Construction waste management and recycling.
 - u. Parking availability.
 - v. Office, work, and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.
 - y. Security.
 - z. Progress cleaning.
 - aa. Commissioning Activities.

4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect, and Owner's Commissioning Authority of scheduled meeting dates.
 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility requirements.
 - k. Time schedules.
 - l. Weather limitations.
 - m. Manufacturer's written instructions.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
 - z. Startup and adjusting procedures.
 - aa. Commissioning procedures
 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

- D. **Project Closeout Conference:** Schedule and conduct a project closeout conference, at a time convenient to Director's Representative and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.
1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 2. Attendees: Authorized representatives of Director's Representative and Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Owner's partial occupancy requirements.
 - k. Responsibility for removing temporary facilities and controls.
 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- E. **Progress Meetings:** Conduct progress meetings at every two weeks intervals, or more frequently if necessary.
1. Coordinate dates of meetings with preparation of payment requests.
 2. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time. Include the following schedule milestone dates:
 - i. August 18 2021 Anticipated contract award date

- ii. December 3, 2021 All exterior Cottage and Manor Hall historic rehabilitation work (Structural work, masonry, wood, stucco, window, and door repairs, surface prep and painting)
- iii. December 15 2021 Weathertight Service Addition (Water tight roofing and building envelope)
- iv. December 30 2021 Sub surface work including utilities and hard surface pavements including pathways. (Parking lot pathway base course only)
- v. April 15 2021 Physical Completion of Interior of Manor Hall. Exhibit Installer occupies Manor Hall.

*The contractor will be permitted to mobilize to the site upon approval by Parks of a site logistics plan. Contractor will be permitted to begin installation of fencing, trailers, and demolition of select items at that time. Concurrently, Park's staff will be working to discharge the water from the pool and filter room immediately after closing to the public. Parks will be winterizing the filter room and performing other cleanup work within and adjacent to the Limit of Work. It is anticipated that the water will be removed from the pool and all other Park activities completed on or about August 31 to allow contractor construction activities to commence.

b. Review present and future needs of each entity present, including the following:

- 1) Interface requirements.
- 2) Sequence of operations.
- 3) Status of submittals.
- 4) Deliveries.
- 5) Off-site fabrication.
- 6) Access.
- 7) Site utilization.
- 8) Temporary facilities and controls.
- 9) Progress cleaning.
- 10) Quality and work standards.
- 11) Status of correction of deficient items.
- 12) Field observations.
- 13) Status of RFIs.
- 14) Status of proposal requests.
- 15) Pending changes.
- 16) Status of Change Orders.
- 17) Pending claims and disputes.
- 18) Documentation of information for payment requests.

- 4. Minutes: Construction Manager will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized as requested by the Director's Representative. Issue revised schedule concurrently with the report of each meeting.

NYSOPRHP – TACONIC REGION

Contract D005805: Philipse Manor Hall State Historic Site
Construction of Elevator/Restroom Addition, Interior and
Exterior Rehabilitation and Site Enhancements

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 013200

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A.** This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Preliminary Construction Schedule.
 2. Contractor's Construction Schedule.
 3. Submittals Schedule.
 4. Daily construction reports.
 5. Material location reports.
 6. Field condition reports.
 7. Special reports.
 8. Construction photographs.
 9. All items listed in Section 4 – Reporting of the Remedial Action Work Plan included in Appendix A.

1.2 DEFINITIONS

- A.** Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 2. Predecessor activity is an activity that must be completed before a given activity can be started.
- B.** CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C.** Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D.** Event: The starting or ending point of an activity.
- E.** Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.
 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F.** Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- G.** Major Area: A story of construction, a separate building, or a similar significant construction element.
- H.** Milestone: A key or critical point in time for reference or measurement.
- I.** Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.

1.3 SUBMITTALS

- A.** Qualification Data: For firms and persons specified in "Quality Assurance" Article and in-house scheduling personnel to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B.** Submittals Schedule: Submit 3 copies of schedule. Arrange the following information in a tabular format:
1. Scheduled date for first submittal.
 2. Specification Section number and title.
 3. Submittal category (action or informational).
 4. Name of subcontractor.
 5. Description of the Work covered.
 6. Scheduled date for Director's Representative final release or approval.
- C.** Preliminary Construction Schedule: Submit 2 printed copies; one a single sheet of reproducible media, and one a print.
- D.** Preliminary Network Diagram: Submit 2 printed copies; one a single sheet of reproducible media, and one a print; large enough to show entire network for entire construction period.

- E.** Contractor's Construction Schedule: Submit 2 printed copies of initial schedule, one a reproducible print and one a blue- or black-line print, large enough to show entire schedule for entire construction period.
1. Submit an electronic copy of schedule on CD or DVD. Include type of schedule (Initial or Updated) and date on label.
 2. Use Primavera (P6) or Primavera (P6) compatible or approved equal.
- F.** CPM Reports: Concurrent with CPM schedule, submit 3 printed copies of each of the following computer-generated reports. Format for each activity in reports shall contain activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float.
1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
 3. Total Float Report: List of all activities sorted in ascending order of total float.
 4. Earnings Report: Compilation of Contractor's total earnings from commencement of the Work until most recent Application for Payment.
- G.** Construction Photographs: Submit a digital photo of each view within 7 days of taking photographs.
1. Format: Digital JPG image with minimum resolution of 2584x1936 and image quality set to fine/high or better.
 2. Identification: A photo-log shall be provided containing a record for each submitted photo with the following information:
 - a. File Name of Photo.
 - b. Name of Project.
 - c. Name and address of photographer.
 - d. Name of Director's Representative.
 - e. Name of Contractor.
 - f. Date photograph was taken.

- g. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.

Photo-logs may be scanned hard-copy forms, though digital formats such as MS Word, MS Excel or MS Access are preferred. If the delivery method for the photos is via an online file management system, photo-log records should be entered into that system provided it supports entering the above information.

- 3. Delivery: If an online document management system or project collaboration website is used on the project, all photos and accompanying identification will be uploaded to it. Otherwise, digital photos will be delivered via traditional media such as CD, DVD, or uploaded to an FTP site.

- H. Daily Construction Reports: will be completed by the construction manager (Arcadis)
- I. Material Location Reports: Submit 2 copies at bi-weekly intervals (every other week).
- J. Field Condition Reports: Submit 2 copies at time of discovery of differing conditions.
- K. Special Reports: Submit 2 copies at time of unusual event.

1.4 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting.
- B. Photographer Qualifications: An individual of established reputation who has been regularly engaged as a professional photographer for not less than three years.
- C. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.
 - 3. Discuss constraints, including phasing, work, stages, area separations, interim milestones, and partial Owner occupancy.
 - 4. Review delivery dates for Owner-furnished products.

5. Review schedule for work of Owner's separate contracts.
6. Review time required for review of submittals and resubmittals.
7. Review requirements for tests and inspections by independent testing and inspecting agencies.
8. Review time required for completion and startup procedures.
9. Review and finalize list of construction activities to be included in schedule.
10. Review submittal requirements and procedures.
11. Review procedures for updating schedule.

1.5 COORDINATION

- A.** Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B.** Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.
- C.** Auxiliary Services: Cooperate with photographer and provide auxiliary services requested, including access to Project site and use of temporary facilities including temporary lighting.

1.6 PROJECT SOFTWARE

- A.** General Contractor's project software will be used for the purposes of managing communication and documents during construction.
 1. Procore or Equal shall be used.

Part 2 - Products

2.1 SUBMITTALS SCHEDULE

- A.** Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - a. At Contractor's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTORS' CONSTRUCTION SCHEDULES

- A.** Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B.** Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion.
 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C.** Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Director's Representative.
 2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for the Director's Representative's administrative procedures necessary for certification of Substantial Completion.
- D.** Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
 1. Phasing: Arrange list of activities on schedule by phase.

- E.** Contractors' Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to the Notice to Proceed, Substantial Completion, and Final Completion.
 - 1. Completion of all mobilization, staging and site preparation.
- F.** Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
 - 1. Refer to Section "Payment Procedures" for cost reporting and payment procedures.
- G.** Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.
- H.** Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules.
 - 1. Use Primavera (P6) or Primavera (P6) compatible.

2.3 PRELIMINARY CONSTRUCTION SCHEDULE

- A.** Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within 7 days of date established for the Notice of Award.
- B.** Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A.** Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B.** Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.5 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE) TO BE PRIMAVERA P(P6) OR PRIMAVERA (P6) COMPATIBLE

- A.** General: Prepare network diagrams using AON (activity-on-node) format.
- B.** Preliminary Network Diagram: Submit diagram within 14 days of date established for the Notice of Award. Outline significant construction activities for the first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.
- C.** CPM Schedule: Prepare Contractor's Construction Schedule using a CPM network analysis diagram.
 1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 30 days after date established for the Notice of Award.
 2. Conduct educational workshops to train and inform key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
 3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
 4. Use "one workday" as the unit of time.
- D.** CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the preliminary network diagram, prepare a skeleton network to identify probable critical paths.
 1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
 - a. Preparation and processing of submittals.
 - b. Purchase of materials.
 - c. Delivery.
 - d. Fabrication.
 - e. Installation.
 2. Processing: Process data to produce output data or a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.

3. Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
 - a. Sub-networks on separate sheets are permissible for activities clearly off the critical path.
- E.** Initial Issue of Schedule: Prepare initial network diagram from a list of straight "early start-total float" sort. Identify critical activities. Prepare tabulated reports showing the following:
 1. Contractor or subcontractor and the Work or activity.
 2. Description of activity.
 3. Principal events of activity.
 4. Immediate preceding and succeeding activities.
 5. Early and late start dates.
 6. Early and late finish dates.
 7. Activity duration in workdays.
 8. Total float or slack time.
 9. Average size of workforce.
 10. Dollar value of activity (coordinated with the Schedule of Values).
- F.** Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
 1. Identification of activities that have changed.
 2. Changes in early and late start dates.
 3. Changes in early and late finish dates.
 4. Changes in activity durations in workdays.
 5. Changes in the critical path.
 6. Changes in total float or slack time.
 7. Changes in the Contract Time.
- G.** Value Summaries: Prepare two cumulative value lists, sorted by finish dates.
 1. In first list, tabulate activity number, early finish date, dollar value, and cumulative dollar value.
 2. In second list, tabulate activity number, late finish date, dollar value, and cumulative dollar value.
 3. In subsequent issues of both lists, substitute actual finish dates for activities completed as of list date.
 4. Prepare list for ease of comparison with payment requests; coordinate timing with progress meetings.
 - a. In both value summary lists, tabulate "actual percent complete" and "cumulative value completed" with total at bottom.

- b. Submit value summary printouts one week before each regularly scheduled progress meeting.

2.6 REPORTS

- A.** Daily Construction Reports: To be completed by construction manager (Arcadis)
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. High and low temperatures and general weather conditions.
 - 5. Accidents.
 - 6. Meetings and significant decisions.
 - 7. Unusual events (refer to special reports).
 - 8. Stoppages, delays, shortages, and losses.
 - 9. Meter readings and similar recording.
 - 10. Emergency procedures.
 - 11. Orders and requests of authorities having jurisdiction.
 - 12. Change Orders received and implemented.
 - 13. Work Change Directives received.
 - 14. Service connected and disconnected.
 - 15. Equipment or system tests and startups.
 - 16. Partial Completions and occupancies.
 - 17. Substantial Completions authorized.
- B.** Material Location Reports: At bi-weekly intervals (every other week), prepare a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with it a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- C.** Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.7 SPECIAL REPORTS

- A.** General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B.** Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTORS' CONSTRUCTION SCHEDULE

- A.** Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting using CPM scheduling.
1. In-House Option: Owner may waive the requirement to retain a consultant if Contractor employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.
 2. Meetings: Scheduling consultant shall attend all meetings related to Project progress, alleged delays, and time impact.
- B.** Contractor's Construction Schedule Updating: At bi-weekly intervals (every other week), update schedule to reflect actual construction progress and activities and direction from Director's Representative. Issue schedule 1 week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate Actual Completion percentage for each activity.
 4. Contractor shall provide a written 2 week and a 4 week look ahead at all project meetings.
- C.** Distribution: Distribute copies of approved schedule to Director's Representative, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

3.2 CONSTRUCTION PHOTOGRAPHS

- A.** Date Stamp: Unless otherwise indicated, date and time stamp each photograph as it is being taken so stamp is integral to photograph.

- B.** Preconstruction Photographs: Before starting construction, take a minimum of 24 photographs of Project site and surrounding properties from different vantage points, as directed by Director's Representative. Show existing conditions adjacent to property.
- C.** Periodic Construction Photographs: Take a minimum of 24 color photographs weekly. Photographer shall select vantage points to best show status of construction and progress since last photographs were taken.

 - 1. Field Office Prints: Retain an electronic set of photographs in field office at Project site, available at all times for reference. Identify photographs the same as for those submitted to the Director's Representative.
- D.** Final Completion Construction Photographs: Take a minimum of 8 photographs after date of Substantial Completion for submission as Project Record Documents. Director's Representative will direct photographer for desired vantage points.

END OF SECTION

SECTION 013300 SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Shop Drawings.
 - 2. Product Data.
 - 3. Samples.
 - 4. Other submittals.
 - 5. Delegated-design services.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 ACTION SUBMITTALS

- A. Submittal Schedule: Contractor shall use a Construction Management Information System (CMI) as approved by the Director's Representative. Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - 2. Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 3. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.

- f. Scheduled date for Architect's final release or approval.
- g. Scheduled date of fabrication.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project record drawings.
 - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
 - b. Digital Drawing Software Program: The Contract Drawings are available in Autodesk AutoCAD 2013.
 - c. Contractor shall execute a data licensing agreement in the form provided by Architect.
 - d. The following digital data files will be furnished for each appropriate discipline:
 - 1) Floor plans.
 - 2) Reflected ceiling plans.
 - 3) Exterior elevations.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received
- A. Processing Time: Allow time for submittal review, including time for resubmittals. Time for review shall commence on Architect's receipt of submittal. 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.
 - 1. Initial Review: Allow 15 working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 10 working days for review of each resubmittal.

4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 working days for initial review of each submittal.
 - a. Submittal items requiring sequential review will be identified by Architect when submittal schedule is submitted for review.
 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 working days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
 - a. Submittal items permitted to be reviewed concurrently will be identified by Architect when submittal schedule is submitted for review.
- 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 submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Architect, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Contractor
- C. Options: Identify options requiring selection by Architect.
- D. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- E. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

- F. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms. Copy director's representative on all approved submittals or proposed substitutions.
- G. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.
- H.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Post electronic submittals as PDF electronic files directly to Contractor's Project software site specifically established for Project.
 - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications.
 - b. Provide a notarized statement on original paper copy certificates and certifications.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.

- b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before or concurrent with Samples.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - e. Specification paragraph number and generic name of each item.
 - 3. Provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 - 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 - 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from

manufacturer's product line. Architect will return submittal with options selected.

6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample set; remainder will be returned.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
- F. Coordination Drawing Submittals: Comply with requirements specified in Section 013100 "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation."
- H. Application for Payment and Schedule of Values: Comply with requirements specified in Section 012900 "Payment Procedures."
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."
- K. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."
- L. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

- M. **Welding Certificates:** Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- N. **Installer Certificates:** Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- O. **Manufacturer Certificates:** Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- P. **Product Certificates:** Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- Q. **Material Certificates:** Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- R. **Material Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- S. **Product Test Reports:** Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- T. **Research Reports:** Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- U. **Preconstruction Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- V. **Compatibility Test Reports:** Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

- W. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- X. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: Submit Shop Drawings, Product Data, performance and design criteria, design calculations, and other required submittals acceptable to authority having jurisdiction, in form of digitally signed PDF electronic file, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: 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. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION

**SECTION 01 35 00
SPECIAL PROCEDURES
HISTORIC PRESERVATION**

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Protection of historic and cultural resources.
- B. Security requirements at the job site.

1.2 RELATED SECTIONS

- A. Section 01 30 00 – Administrative Requirements.
- B. Section 01 43 00 - Quality Assurance.
- C. Section 01 50 00 - Temporary Construction Facilities.

1.3 PROTECTION OF HISTORIC AND CULTURAL RESOURCES

- A. Philipse Manor Hall State Historic Site is a National Historic Landmark and is listed on the National Register of Historic Places. The Contractor shall communicate the historic significance of this property to its employees and the employees of its subcontractors and suppliers, and direct each to take precautions to protect and preserve the building.
 - 1. Assume that all existing construction to remain, items noted for removal and salvage, and items noted for removal and reinstallation are original historic materials.
- B. Work of this Contract includes the repair and replacement of historic and archaic materials. Where specified, the replacement of historic building materials must replicate the historic material in all visual and physical qualities, including dimension, profile, color, surface texture, tooling or manufacturing marks, and strength. No allowance in the lump sum price will be considered for the cost of accurately replicating historic and archaic building materials.
- C. Archaeological Resources: Contractor shall promptly advise the Director's Representative of the need to perform any trenching or excavation, drive any anchors or posts into the ground, or otherwise disturb soils before commencing Work of this Contract. Do not proceed with any such work without prior approval from the Director's Representative. Director's Representative will schedule Owner's archaeologists to monitor all excavations in which the depth exceeds six (6)-inches. Excavations of less than six (6) inches do not require archaeological monitoring.
 - 1. Contractor may be required to adjust the sequence of the Work to allow for any necessary archeological testing and salvage.
 - 2. Excavation within 24-inches of the structure will be performed by hand tools only. No excavating machines are permitted within 24-inches of the structure without written authorization from the Director's Representative

- D. For more information visit: <http://www.nps.gov/hps/tps/standguide/>

1.4 SECURITY REQUIREMENTS

- A. Prevent unauthorized access to the buildings and work area by securing openings during non-working hours. Refer to Section 01 50 00 Temporary Facilities... for site enclosure fencing. Erect temporary barriers and appropriate signage to prevent unauthorized access.
1. One (1) building ground floor exit/entrance on the Manor Hall shall be designated for routine access by the Contractors. Other exterior doors must be kept locked, except when required for delivery or removal of materials and equipment, when work is being performed on the door or opening, and for emergencies. Opening of additional doors must be coordinated with Site Staff. ALL openings shall be secured by the end of each work shift.
 2. Where doors or windows are opened or removed for the performance of work, or where new openings are created or altered, temporary enclosures shall be installed to secure the openings by the end of a work shift.
- B. Employee Identification and Sign-in:
1. All Contractors' employees are required to sign in at the beginning of a work shift and sign out at the completion of the work shift. Records shall be maintained by Construction Manager.
- C. The site will be CLOSED to the public during the Work of this Contract. The Contractor shall take every reasonable precaution to protect the public from the Work of this Contract, including preventing unauthorized access to the site, ladders, scaffolding, open trenches, equipment and from exposure to other construction hazards.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 43 00

QUALITY ASSURANCE

PART 1 - GENERAL

1.1 SUMMARY

- 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. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Specified quality-control requirements for individual construction activities are specified in the Sections that specify those activities.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited to this section.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by Director's Representative.
- C. Mockups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Mockups establish the standard by which the Work will be judged.
- D. Inspection and Testing Agency (ITA): An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- E. Historic Building: A building or structure that is listed on or eligible for the National Register of Historic Places.

1.3 CONTRACTOR'S REQUIREMENTS

- A. It is the intent of this project to preserve **Philipse Manor Hall** building and its historic materials to the greatest extent possible. The gentlest means possible shall be used to perform the work

and the greatest care shall be taken to ensure that the brick, stone, woodwork, plaster, papier mache, and other historic materials are not damaged in the process of the work.

- B. The Contractor shall establish and maintain a Quality Assurance program to insure adherence to the minimum standards of workmanship required by these Specifications.
- C. The Contractor shall insure that all laborers and mechanics, including those of any Subcontractor, performing the Work of this Contract possess the necessary skills and experience to accomplish the Work in accordance with the specified minimum performance standards.
- D. No adjustment in the Contractor's bid price will be allowed due the rejection of any Subcontractor or personnel that fail to demonstrate the minimum qualifications specified in the Specifications.
- E. Project Manager and Site Superintendent
 - 1. The Contractor shall engage and retain a Project Manager and Site Superintendent who shall be responsible for insuring compliance with all quality assurance requirements of the Work of this Contract.
 - 2. The Project Manager shall have satisfactory experience in similar projects and must be fluent in English.
 - a. Project Manager shall have a minimum of eight (8) years' experience and shall have worked on a minimum of (3) projects of similar size and scope involving historic buildings.
 - b. Submit list of historic properties supervised by this Project Manager including name, location, cost, Owner/Architect/Engineer's name and phone number.
 - c. Contractor may not change Manager without written approval of Owner.
 - 3. The Site Superintendent shall have satisfactory experience in similar projects and must be fluent in English. Project Superintendent shall have a minimum of eight (8) years' experience and shall have worked on a minimum of (3) projects of similar size and scope involving historic buildings.
 - a. Submit list of historic properties supervised by this Superintendent including name, location, cost, Owner/Architect/Engineer's name and phone number.
 - b. Contractor may not change Superintendent without written approval of Owner.
 - 4. Substitution of the approved Project Manager or the Site Superintendent requires prior written approval from the Director's Representative upon submission of satisfactory evidence of qualifications and experience.
 - 5. The Project Manager or the Site Superintendent shall regularly inspect the Work of this Contract to insure continued compliance with quality assurance requirements.
 - 6. The Site Superintendent shall be present when work is in progress.
- F. Personnel:
 - 1. All work shall be performed by skilled workers.
 - 2. Journeyman: Only skilled journeyman who are familiar and experienced with the methods specified shall be used for the Work. One skilled journeyman, trained in historic restoration, shall be present at all times during restoration and shall personally direct the work.

- a. Journeyman shall have a minimum of three (3) years experience and have worked on a minimum of three (3) historic buildings.
 - b. Submit a list of historic projects performed by Journeyman to participate in this project including, name, location, cost, Owner/Architect/Engineer's name and phone number.
3. Workman Qualifications: Due to the historic significance of this building, work must be performed by persons familiar with the Historic Standards. The contractor workman must have the following qualifications:
 - a. Successfully completed not less than three (3) projects of similar size and scope involving historic projects within the last ten (10) years.
 - b. Submit a list of historic properties including name, location, cost, Owner/Architect/Engineer's name and phone number.
 4. At least one (1) skilled foreman shall always be present.
 5. The job foreman must be fluent in English.
- G. In the acceptance or rejection of the Work of this Contract, no allowance will be made for lack of skill on the part of any worker.

1.4 QUALITY ASSURANCE SUBMITTALS

- A. Quality Assurance Program: In addition to requirements highlighted elsewhere, Contractor shall submit a program description describing how they will assure quality workmanship throughout the duration of the project.
1. Provide the following:
 - a. A narrative describing the program strategy.
 - b. Any testing agencies to be employed shall be identified including a general description of anticipated inspections.
 - c. Fabricator Qualifications: A firm experienced in producing products 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. Installer Qualifications: A firm or individual experienced in stalling, 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.
 - 2) Installers whose personnel are required in other Sections to be qualified as part of the project shall provide experienced and skilled personnel sufficient to the processes and operations indicated.
 - 3) Installers shall be qualified as described in **Division 1 Section "Special Procedures Historic Preservation" and shall utilize Historic Tolerances unless otherwise directed**
 - e. Manufacturer Qualifications: A firm experienced in manufacturing products or systems like those indicated for this Project and with a record of successful in-service performance.
 - f. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing Engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or products that are similar to those indicated for this Project in material, design, and extent.

- g. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services
- h. Specialists: Certain sections of the Specifications 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) Refer to Division 1 Section **“Special Procedures for Historic Preservation”**
- i. Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, and that specializes in types of tests and inspections to be performed. Each testing agency shall be authorized by the authorities having jurisdiction in the state in which the project is located.
 - 1) Preconstruction Testing: Testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
 - 2) Contractor responsibilities include the following:
 - a) Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of product to comply with performance requirements.
 - b) Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c) Fabricate and install test assemblies using installers who will perform the same tasks for Project.
 - d) When testing is complete, remove assemblies; do not reuse materials on Project.
- j. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- k. Reports: Prepare and submit certified written reports, that include the following:
 - 1) Date of issue.
 - 2) Project title and number.
 - 3) Name, address, and telephone number of testing agency.
 - 4) Dates and locations of samples and tests or inspections.
 - 5) Names of individuals making tests and inspections.
 - 6) Description of the Work and test and inspection method.
 - 7) Identification of product and Specification Section.
 - 8) Complete test or inspection data.
 - 9) Test and inspection results and an interpretation of test results.
 - 10) Ambient conditions at time of sample taking and testing and inspecting.
 - 11) Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12) Name and signature of laboratory inspector.
 - 13) Recommendations on re-testing and re-inspecting.
- l. Permits, Licenses, and Certificates: For NYS OPRHP's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional

settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY CONTROL

- A. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services as required by applicable codes, specifications, regulations, and the NYS OPRHP Code Enforcement Official.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by NYS OPRHP, unless agreed to in writing by NYS OPRHP.
 - 2. Notify testing agencies at least **24** hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to the NYS OPRHP Code Enforcement Official, when they so direct.
- B. Re-testing/Re-inspection: Contractor shall be responsible for re-testing and re-inspection of revised or replaced work due to failure to comply with requirements of the Contract Documents.
- C. ITA Responsibilities: Cooperate with Director's Representative and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Director's Representative and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 3. Submit a certified written report of each test, inspection, and similar quality-control service through Contractor.
 - 4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 - 5. Do not perform any duties of Contractor.
- D. Other Testing and Inspection Providers: Contractor shall cooperate with other testing agencies performing required tests, inspections, and similar quality-control services, and provide reasonable assistance as requested. Notify NYS OPRHP sufficiently in advance, to permit scheduling of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field-curing of test samples.
 - 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 6. Security and protection for samples and for testing and inspecting equipment at Project site.

- E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.6 MOCKUPS

- A. Mockups: before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. This project involves “matching” of historic materials/ systems utilizing Historic Tolerances. Therefore, each contractor should assume the construction of multiple separate mockups, of each material requiring mockups, in order to obtain acceptance.
- B. Build mockups in location and of size indicated or, if not indicated, as directed by Director’s Representative.
- C. Notify Director’s Representative **two** (2) business days in advance of dates and times when mockups will be constructed.
- D. Demonstrate the proposed range of aesthetic effects, workmanship, and historic tolerances to match existing or to achieve the design intent.
- E. Obtain Director’s Representative’s approval of mockups before starting work, fabrication, or construction.
 - 1. Approval of mockups are also contingent upon acceptance by the following:
 - a. NYS Historic Preservation Office, Division for Historic Preservation.
 - b. NYS Parks, Taconic Region, Historic Site Restoration Coordination.
- F. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.

1.7 INSPECTIONS AND TESTS

- A. Contractor shall coordinate and schedule inspections and tests with the Inspection and Testing Agency (ITA) at various stages and at completion of the Contract as required by all applicable codes, specifications, regulations, and the NYS OPRHP Code Enforcement Official.
- B. Contractor shall schedule inspections and tests by contacting the ITA at appropriate time in advance of needed inspection.
- C. In the event the inspection must be cancelled, the GCC shall contact both the ITA and the Director’s Representative.
 - 1. Cancellation must be made according to the ITA requirements.
 - 2. If cancellation is not provided as required above, any fees or charges assessed to NYS OPRHP may be back-charged to the responsible Contractor.
- D. NYS OPRHP shall have direct communication with the ITA in the event questions arise about required tests.

- E. Schedule of Tests and Inspections
 - 1. Refer to the schedule below.
 - 2. The schedule indicates who shall provide and pay for each inspection and test.
- F. Building inspections and tests related to plumbing, mechanical and HVAC systems shall be witnessed by the NYS OPRHP Code Enforcement Official or their appointed designee. Contractors are required to coordinate and schedule these inspections and tests with the NYS OPRHP Code Enforcement Official.
- G. Approved Third Party Electrical Inspection(s) shall be provided and paid for by the Electrical Contractor. Important: Electrical Contractor shall provide copy of all electrical inspection reports to the NYS OPRHP Code Enforcement Official or their appointed designee.
- H. All Contractors shall coordinate utility connection inspections with appropriate authorities. Contractor shall bear the costs (if any) for such inspections.
 - 1) Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - (a) Specification Section number and title.
 - (b) Description of test and inspection.
 - (c) Identification of applicable standards.
 - (d) Identification of test and inspection methods.
 - (e) Number of tests and inspections required.
 - (f) Time schedule or time span for tests and inspections.
 - (g) Entity responsible for performing tests and inspections.
 - (h) Requirements for obtaining samples.
 - (i) Unique characteristics of each quality-control service.
 - (j) Distribute schedule to Director's Representative, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS – Not Used

PART 3 - EXECUTION – Not Used

END OF SECTION

SECTION 01 45 34 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

SECTION 014534 – STRUCTURAL TESTS AND SPECIAL INSPECTIONS

PART 1 – GENERAL

1.1 GENERAL REQUIREMENTS

- A. Structural Tests and Special Inspections shall be in accordance with Chapter 17 of the New York State Uniform Fire Prevention and Building Code with 2017 Supplement.
- B. The program of Structural Tests and Special Inspections is a Quality Assurance program intended to ensure that the work is performed in accordance with the Contract Documents.
- C. This specification section is intended to inform the Contractor their responsibilities. This specification section is also intended to notify the Special Inspector, Testing Laboratory, and other Agents of the Special Inspector of their requirements and responsibilities.
- D. Where application is made to the building official for construction specified in Section 105 of the Building Code of NYS the Contractor shall employ one or more approved agencies to provide special inspections and tests during construction and identify the approved agencies to the building official. These special inspections and tests are in addition to the inspections by the Building Official on their behalf.

1.2 SCHEDULE OF INSPECTIONS AND TESTS

- A. Required inspections and tests are described in the attached Schedule of Special Inspection and in the individual specification Sections for the items to be inspected or tested.

1.3 QUALIFICATIONS

- A. A Special Inspector shall be a qualified individual who is approved by the Code Enforcement Official.
- B. The registered design professional (RDP) in responsible charge acting as the Director's Representative and the Code Enforcement Official shall approve the Testing Laboratory and individual inspectors/technicians.
- C. The testing laboratory shall maintain a full time licensed Professional Engineer on staff who shall certify all test reports. The Engineer shall be responsible for the training of the testing technicians and shall be in responsible charge of the field and laboratory testing operations.

1.4 SUBMITTALS

- A. The Special Inspector and Testing Laboratory shall submit to the RDP and Code Enforcement Official for review a copy of their qualifications, which shall include the names and qualifications of each of the individual inspectors and technicians who will be performing inspections or tests.

- B. The Special Inspector and Testing Laboratory shall disclose any past or present business relationship or potential conflict of interest with the Contractor or any of the Subcontractors whose work will be inspected or tested.

1.5 PAYMENT

- A. The Contractor shall engage and pay for the services of the RDP, Special Inspector, Agents of the Special Inspector, and Testing Laboratory.
- B. If any materials which require Special Inspections are fabricated in a plant which is not located within 100 miles of the project, the Contractor shall be responsible for the travel expenses of the Special Inspector or Testing Laboratory.
- C. The Contractor shall be responsible for the cost of any re-testing or re-inspection of work, which fails to comply with the requirements of the Contract Documents.

1.6 CONTRACTOR RESPONSIBILITIES

- A. The Contractor shall cooperate with the Special Inspector and his agents so that the Special Inspections and testing may be performed at appropriate times and without hindrance.
- B. The Contractor shall review the Schedule of Inspections and shall be responsible for coordinating and scheduling inspections and tests. The Contractor shall notify the Special Inspector or Testing Laboratory at least 24 hours in advance of a required inspection or test. Uninspected work that required inspection may be rejected solely on that basis.
- C. The Contractor shall provide incidental labor and facilities to provide access to the work to be inspected or tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.
- D. The Contractor shall keep at the project site the latest set of construction drawings, field sketches, approved shop drawings, and specifications for use by the inspectors and testing technicians.
- E. The Special Inspection program shall in no way relieve the Contractor of his obligation to perform work in accordance with the requirements of the Contract Documents or from implementing an effective Quality Control program. The Contractor's quality control personnel shall first review all work that is to be subjected to Special Inspections.
- F. The Contractor shall be solely responsible for construction site safety.

1.7 LIMITS ON AUTHORITY

- A. The Special Inspector or Testing Laboratory may not release, revoke, alter, or enlarge on the requirements of the Contract Documents.
- B. The Special Inspector or Testing Laboratory will not have control over the Contractor's means and methods of construction.
- C. The Special Inspector or Testing Laboratory shall not be responsible for construction site safety.
- D. The Special Inspector or Testing Laboratory has no authority to stop the work.

1.8 STATEMENT OF SPECIAL INSPECTIONS

- A. The registered design professional (RDP) will prepare the Schedule of inspections
- B. The Schedule of Inspections and any required Quality Assurance Plans shall be submitted to the Code Enforcement Official with the application for Building Permit.

1.9 RECORDS AND REPORTS

- A. Detailed daily reports shall be prepared of each inspection or test and submitted to the RDP and Director's Representative. Reports shall include:
 - 1. Date of test or inspection.
 - 2. Name of inspector or technician.
 - 3. Location of specific areas tested or inspected.
 - 4. Description of test or inspection and results.
 - 5. Applicable ASTM standard or other code.
 - 6. Weather conditions.
- B. The Special Inspector shall submit interim reports to the Code Enforcement Official at the end of each week which include all inspections and test reports received that week. Copies shall be sent to the RDP, Architect, and Contractor.
- C. Any discrepancies from the Contract Documents found during a Special Inspection shall be immediately reported to the Contractor. The Special Inspector shall notify the RDP and Code Enforcement Official. Reports shall document all discrepancies identified and the corrective action taken.
- D. The Testing Laboratory shall immediately notify the Special Inspector and the RDP by telephone or fax of any test results, which fail to comply with the requirements of the Contract Documents.
- E. Reports shall be submitted to the RDP within 7 days of the inspection or test. Hand written reports may be submitted if final typed copies are not available.
- F. At the completion of the work requiring Special Inspections, each inspection agency and testing laboratory shall provide a statement to the RDP that all work was completed in substantial conformance with the Contract Documents and that all appropriate inspections and tests were performed.

1.10 FINAL REPORT OF SPECIAL INSPECTIONS

- A. The Final Report of Special Inspections shall be completed by the RDP and submitted to the Code Enforcement Official as a condition for issuance of a Certificate of Use and Occupancy.
- B. The Final Report of Special Inspections will certify that all required inspections have been performed and will itemize any discrepancies that were not corrected or resolved.

PART 2 – PRODUCTS (not applicable)

PART 3 – EXECUTION

3.1 SPECIAL INSPECTIONS

- A. The following tables comprise the required schedule of Special Inspections for this project. The construction divisions which require Special Inspections for this project are as follows:

1. Soils and Foundations.
2. Cast-In-Place Concrete.
3. Masonry.
4. Structural Steel.

INSPECTION AGENTS	FIRM	ADDRESS
1. Registered Design Professional (RDP)		
2. Special Inspector		
3. Inspector		
4. Testing Laboratory		
5. Testing Laboratory		
6. Testing Laboratory		
7. Other		
Note: The inspection & testing agent shall be engaged by the Director's Representative and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Code Enforcement Official prior to the commencement of work		
Seismic Performance Category:	Quality Assurance Plan Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Basic Wind Speed:	Quality Assurance Plan Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Wind Exposure Category:		

- B. Qualifications of Inspectors and Testing Technicians

1. The qualifications of all personnel performing Special Inspection activities are subject to the approval of the Code Enforcement Official. The credentials of all Inspectors and testing technicians shall be provided if requested.
2. The person administering the Special Inspections program shall be a Professional Engineer experienced in the design of buildings.

- C. Minimum Qualifications of Inspection Agents: When the RDP deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear as the Inspection Agent in table above.

1. SE Structural Engineer – a licensed PE specializing in the design of building structures. This may be required for the inspection of critical structural elements.
2. GE Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations. This may be required for the inspection of difficult soil conditions or deep foundations.
3. EIT Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination. This may be required for the inspection of elements that require some engineering training to properly evaluate.
4. ACI American Concrete Institute - Level I Certified Concrete Field Testing Technician. This certification is appropriate for individuals performing concrete sampling, slump tests, air content tests, temperature tests, unit weight tests, and casting compression test cylinders.
5. AWS American Welding Society - Certified Welding Inspector (CWI). This certification is appropriate for individuals performing visual inspection of welds.
6. ASNT American Society of Non-Destructive Testing – Level II or III. This certification is appropriate for individuals performing ultra-sonic testing of welds.

7. SMSI Structural Masonry Special Inspector – certification by ICBO. SWSI Structural Steel and Welding Special Inspector – certification by ICBO.
8. RCSI Reinforced Concrete Special Inspector – certification jointly sponsored by ACI, ICBO, BOCA and SBCCI.

3.2 SCHEDULES

A. Schedule of Special Inspections – Soils and Foundations:

SCHEDULE OF SPECIAL INSPECTION - SOILS AND FOUNDATIONS					
Verification/Inspection	Agent No.	Cont.	Periodic	Referenced Standard	BC-NYS Reference
1. Soils:					
a. Verify site preparation. Review proof-rolling.		X	--		1704.7.1
b. Review submittals for fill materials.		--	X		1704.7.2
c. Verify use of fill material and lift thickness in field.		--	X		1704.7.2
d. Review footing bearing strata		--	X		
e. Review slab subgrade and subbase preparation.		--	X		
2. Compaction Testing:					
a. One test for each spread footing, for each 20-foot length of strip footing, and for each 2,000 sf of building area.		--	X		1704.3
3. Moisture Content Testing of slab subbase.					
a. One test for each 2,000 sf of building area. Minimum of Four tests per area.		--	X		ASTM F1869

B. Schedule of Special Inspection – Cast-in-Place Concrete

SCHEDULE OF SPECIAL INSPECTION - CAST-IN-PLACE CONCRETE					
Verification/Inspection	Agent No.	Cont.	Periodic	Referenced Standard	BC-NYS Reference
1. Inspection of reinforcing steel, including pre-stressing tendons and placement		--	X	ACI 318: 3.5, 7.1-7.7	1903.5 1907.1 1907.7
a. Footings and frost walls. b. Slabs on grade.		--	X		
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B				AWS D1.4 ACI 318:3.5.2	1903.5.2
3. Inspect anchor rods to be installed in concrete prior to and during placement of concrete:					
a. At columns in braced frames, and elsewhere where rods are subject to shear or tension.		X	--		1912.5
4. Verifying use of required design mix.		X	--	ACI 318: Ch.4, 5.2-5.4	1904, 1905.2, 1905.4, 1914.2, 1914.3
5. Sampling fresh concrete and performing slump, air content, unit weight and determining the temperature of fresh concrete at the time of making specimens for strength tests.		X	--	ASTM C172 ASTM C31 ACI 318: 5.6, 5.8	1905.6, 1914.10

SCHEDULE OF SPECIAL INSPECTION - CAST-IN-PLACE CONCRETE					
Verification/Inspection	Agent No.	Cont.	Periodic	Referenced Standard	BC-NYS Reference
6. Inspection of concrete for proper application techniques.		X	--	ACI 318: 5.9, 5.10	1905.9, 1905.10, 1914.6, 1914.7, 1914.8
7. Inspection for maintenance of specified curing temperature and techniques.		X	-	ACI 318: 5.11-5.13	1905.11, 1905.13, 1914.9
8. Inspection of prestressed concrete:					
a. Application of prestressing forces.		X		ACI 318:18.18	
b. Grouting of bonded prestressing tendons in the seismic-force-resisting system.		X		ACI 318:18.16.4	
9. Erection of precast concrete members			X	ACI 318: Ch.16	
10. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete & prior to removal of shores & forms from beams & structural slabs.			X	ACI 318:6.2	1906.2
11. Slab testing:					
a. Floor Flatness and Levelness.		--	X	ASTM E1155	
b. Moisture Vapor Emission and Alkalinity		--	X	ASTM F1869	

C. Schedule of Special Inspection - Masonry (Level 1):

SCHEDULE OF SPECIAL INSPECTION – MASONRY (LEVEL 1)						
Verification/Inspection	Agent No.	Frequency		Reference for Criteria		
		Cont.	Periodic	BC-NYS Reference	ACI 530/ASCE 5/TMS 402	ACI 530.1/ASCE 6/TMS 602
1. As masonry construction begins, the following shall be verified to ensure compliance:		-	X			
a. Proportions of site prepared mortar. b. Construction of mortar joints. c. Location of reinforcement and connectors and prestressing tendons and anchorages d. Prestressing technique e. Grade and size of prestressing tendons and anchorages.						Art. 2.6A Art. 3.38 Art. 3.4 and 3.6A Art 3.6B Art 2.4B and 2.4H
2. The inspection program shall verify:		-	X			
a. Size and location of structural elements.			X			3.3F
b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.			(Except Item 2e)		Sec.1.2.1e., 6.1.4.3, 6.2.1	
c. Specified size, grade, and type of reinforcement.			X		Sec. 6.1	Art. 2.4, 3.4
d. Welding of reinforcing bars		X		Sec. 2108.9.2.11 Item 2	Sec 8.1.6.7.2, 9.3.3.4(c), 11.3.3.4(b)	

SCHEDULE OF SPECIAL INSPECTION – MASONRY (LEVEL 1)						
Verification/Inspection	Agent No.	Frequency		Reference for Criteria		
		Cont.	Periodic	BC-NYS Reference	ACI 530/ASCE 5/TMS 402	ACI 530.1/ASCE 6/TMS 602
e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F)			X	2104.3, 2104.4		Art. 1.8C, 1.8D
f. Application & measurement of prestressing force			X			Art. 3.6B
3. Prior to grouting, the following shall be verified to ensure compliance:		-	X			
a. Grout space is clean.			X			Art. 3.2D, 3.2F
b. Placement of reinforcement and connectors.			X	Sec 6.1, 6.2.1, 6.2.6, 6.2.7		Art. 3.2E, 3.4, 3.6A
c. Proportions of site-prepared grout.			X			Art. 2.6B, 2.4G.1.b
d. Construction of mortar joints.			X			Art. 3.3B
4. a. Grout placement shall be verified to ensure compliance with Code and Construction Document provisions		X	--			Art. 3.5
b. Grouting of prestressed bonded tendons		X	--			Art. 3.6C
5. Preparation. any required grout specimens, mortar specimens and/or prisms shall be observed.		-	X	2105.3, 2105.4, 2105.5		Art. 3.5
6. Compliance with required inspection provisions of the Construction Documents & the approved submittals shall be verified.		--	X	--	--	Art. 1.5
For SI: °C = (°F-32)/1.8 The specific standards referenced are those listed in Chapter 35						

D. Schedule of Special Inspection - Structural Steel:

SCHEDULE OF SPECIAL INSPECTION – STRUCTURAL STEEL					
Verification/Inspection	Agent No.	Cont.	Periodic	Referenced Standard	BC-NYS Reference
1. Verify that Fabricator(s) maintains detailed fabrication and quality control procedures. Review procedures for completeness and adequacy relative to the Code requirements for the Fabricator's scope of work.		--	X		1704.2
2. Material verification of high-strength bolts, nuts, and washers:					
a. Identification markings to conform to ASTM standards specified in the approved Construction Documents.		--	X	Applicable ASTM material specifications; AISC ASD, A3.4; AISC LRFD, A3.3	
b. Manufacturer's certificate of compliance required.					
3. Inspection of high-strength bolting:					

SCHEDULE OF SPECIAL INSPECTION – STRUCTURAL STEEL					
Verification/Inspection	Agent No.	Cont.	Periodic	Referenced Standard	BC-NYS Reference
a. Bearing type connections.		-	X	AISC LRFD; M2.5	1704.3.3
b. Slip critical connections.		X	X		
4. Material verification of structural steel:					
a. Identification marking to conform to ASTM standards specified in the approved Construction Documents.		--	X	ASTM A6 or ASTM A568	1708.4
b. Manufacturer's certified mill test reports required.				ASTM A6 or ASTM A568	
5. Material verification of weld filler materials:					
a. Identification markings to conform to AWS specification in the approved Construction Documents.		--	X	AISC, ASD, A3.6; AISC, LRFD, A3.5	
b. Manufacturer's certificate of compliance required.					
6. Inspection of welding:				AWS D1.1	
a. Structural steel:					
1. Complete & partial penetration groove welds.		X			
2. Multi-pass fillet welds		X			
3. Single-pass deck welds >5/16" (7.9mm)		X			
4. Single-pass deck welds <5/16" (7.9mm)		-	X	AWS D1.3	1903.5.2
5. Floor & roof deck welds		-	X	Hammer test	
b. Reinforcing steel:					
1. Verification of weldability of reinforcing steel other than ASTM A706		X			
2. Reinforcing steel-resisting flexural and axial forces in intermediate & special moment frames, and boundary elements of special reinforcing concrete shear wall & shear reinforcement.		X			
3. Shear reinforcement.		X	-	AWS D1.4	1903.5.2
4. Other reinforcing steel.		-	X	ACI 318:3.5.2	
7. Inspection of steel frame joint details for compliance with approved Construction Documents.		-	X		1704.3.2
a. Details such as bracing and stiffening.					
b. Member locations.					
c. Application of joint details at each connection.					
8. Inspect condition of erected materials.		-	X		1704.2
9. Verify column plumbness and splices.		-	X		
For SI: 1 inch = 25.4MM.					

END OF SECTION

SECTION 01 50 00 TEMPORARY CONSTRUCTION, FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 TEMPORARY UTILITIES/ SERVICES AND PROTECTION

A. TEMPORARY LIGHT AND POWER

1. Electrical energy will be provided by the NYS OPRHP at existing location(s) at no charge to the Contractor to the extent that the existing system can safely supply. Electrical energy distribution within the construction site will be provided by the Electrical Contractor, including any temporary panels or switchgear.
2. Provide wiring and other equipment within the building for temporary light and power.
3. Install materials for temporary light and power in conformance with the National Electrical Code.
4. Provide lamps and fuses including replacements required.
5. Temporary light shall be provided through energy efficient means including, LED and compact fluorescent bulb technology.
6. Any Contractor requiring additional lighting shall provide additional fixtures, but in no case shall the load on any branch circuit or feeder exceed its rated capacity.
7. Provide ground-fault protection for personnel (such as portable plug-in type ground-fault circuit-interrupters) on single phase 15 and 20 ampere receptacle outlets which are in use.
8. Receptacle outlets, portable cord connectors and attachment plugs shall have standard NEMA configurations.
9. As the progress of the Work allows, and as approved, completed portions of the permanent wiring and electrical service may be utilized for temporary light and power.
10. Temporary shut down or interruption of branch circuits and electrical switchgear for execution of the work shall be coordinated with the Site Manager.
11. Each Contractor shall provide their own work lights or task lights where required for intermittent lighting.

B. TEMPORARY SPACE HEAT

1. Maintain an interior air temperature of at least 50° F throughout the project. The permanent building HVAC system shall be used to maintain interior environmental conditions to the degree practical throughout the Work. Temporary interruption of the system by a contractor, when required to perform the Work, shall be scheduled with the Site Manager. If interrupted, system operation must be restored before the end of a work shift, or temporary heat must be provided by the Contractor.
2. The use of space heaters within any historic structure is **strictly prohibited**. Any salamanders or open-flame heating devices shall not be operated within 20-feet of any historic building or covered porch.

C. TEMPORARY TOILETS

1. The General Contractor shall provide toilet facilities for Contractor's and subcontractors' employees engaged on the Project, including employees of other contractors. Locate toilets where directed and maintain them in a sanitary condition.
2. Locate toilet facilities no more than 500 feet from any work location.

NUMBER OF EMPLOYEES	MINIMUM NUMBER OF FACILITIES*
20 or less	1 toilet
20 or more	1 toilet and 1 urinal per 40 employees
200 or more	1 toilet and 1 urinal per 50 employees

*Toilet/Urinal Combinations shall count as only one facility.

D. TEMPORARY WATER

1. Water will be made available for the Work without charge "as is" at source or sources directed within the limits of the existing supply and usage.
 - a. Provide and maintain a temporary water system, of such size and capacity as to adequately supply the needs of all contractors during performance of their Work.
2. Maintain temporary water lines during construction in proper working order. Repair damages caused by installation of leaky, defective or broken piping, connections or other fittings.

E. SNOW AND ICE REMOVAL AND CONTROLS

1. The Contractor shall keep the site clear of snow and ice to provide safe working conditions during construction. This applies to areas required for walking, working, staging, storage, parking, exit routes, etc.
2. Do not use excessive salts on bluestone and brownstone sidewalks which may result in permanent damage and delamination of stone.

1.2 MISUSE OF UTILITIES

- A. Contractors will make reasonable efforts not to waste utilities provided. E.g., water must be turned off when not in use. Should the Contractor repeatedly misuse utilities provided, the Office may prohibit such use and the Contractor must provide utilities at their own expense and at no charge to the State.

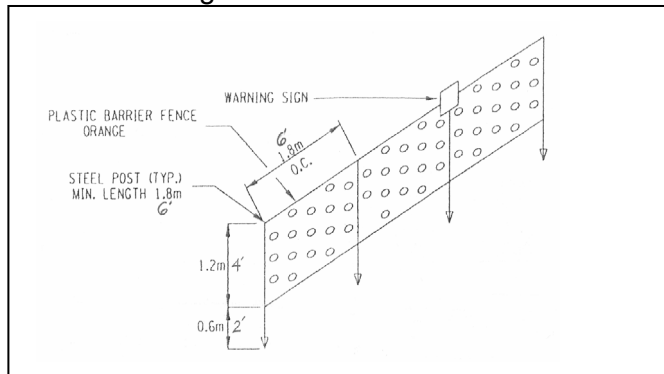
1.3 TEMPORARY FENCE – SECURITY & CONSTRUCTION/ TREE BARRIERS

- A. This work shall consist of furnishing, installing, and maintaining:
 1. A construction security or site enclosure fence, and
 2. Construction and tree/vegetation protection barrier fences of the type and at the locations shown in the plans or where directed by the Director's Representative.

- B. The Construction Security (Site Enclosure) Fence shall be erected prior to any construction activity.
- C. The tree/vegetation protection barrier fence(s) shall be erected prior to moving construction equipment onto any site where the trees or vegetation designated for protection are located, as shown on plans or where directed by the Director's Representative.
- D. Tree/vegetation barrier fences and tree guards shall be used.
 - 1. Barrier Fence shall be not less than 4 feet in height. For protection of individual trees, lay out a square around the drip line of the tree canopy if practical with the trunk centered in the square and at least 5 feet away from any side, or as shown on drawings. Drive a post normal to the ground at each corner, and at the midpoint of each side or at 6 foot intervals, whichever is less to a depth 1/3 of the total post length.
 - 2. Tree Guards shall be not less than 4 feet in height. For protection of individual trees, outside the Barrier Fence with trunk centered in the square and at least 5 feet away from any side, or as shown on drawings. Drive a post normal to the ground at each corner, and at the midpoint of each side or at 6 foot intervals, whichever is less to a depth 18". Install 2' x 4" railing with diagonal cross bracing.
- E. Maintain the temporary Construction Security (Site Enclosure) fence and tree/vegetation barrier fences throughout the life of the Contract, or until directed to be removed. Maintenance shall commence immediately after erection of the tree/vegetation protection barrier and continue until one week prior to acceptance of the contract. The barriers shall not be temporarily removed to allow equipment access over a protected area, except as required for items of work specifically shown on the plans and approved by the Director's Representative in writing. Maintenance shall consist of replacing damaged or destroyed post(s) and fencing, and tightening fencing.
- F. Maintain adequate access for vehicle and worker access.
- G. Construction Security or Site Enclosure Fence (not required where retaining walls are 5-feet tall or higher and surmounted by an iron picket fence)
 - 1. Type: Galvanized Chain-link Fence
 - 2. Top Rail: Yes
 - 3. Mid-Rail: Optional
 - 4. Height: 8'-0" Min.
 - 5. Mounting: Self Standing Ground Bracket/ Stabilizer
 - 6. Gates: Provide chain link fence double gate as shown on drawings. Place a combination lock on the gate, providing Director's Representative and the Contractor's key personnel with the combination.
- H. Tree/Vegetation Protection Fence :
 - 1. Brand: Tenax Guardian Warning Barrier/ Safety Fence
 - 2. Manufacturer: Tenax Corporation
 - 3. Color: Orange
 - 4. Material: Plastic
 - 5. Height: 48"
 - 6. Post Material: Oak or Steel
 - 7. Size: 2"x2" (if Oak)
 - 8. Length: 6'-0"
 - 9. Spacing: 6'-0" O.C.
 - 10. Depth Embedment: 24"

11. Or approved equal.

I. Installation Diagram:



1.4 BARRIERS

- A. Erect and maintain temporary barriers, fences or guardrails as necessary to maintain a safe work site in compliance with OSHA, and the local Code Enforcement Official.

1.5 PROJECT IDENTIFICATION SIGN

- A. Provide signs as indicated below. Unauthorized signs are not permitted.
 1. Project signage: Provide (2) Project identification signs. OPRHP will provide text and graphics in a compatible digital file as directed by the Contractor's sign fabricator. Sign size will be 4'-0" x 8'-0". Signs shall be printed on vinyl with weather resistant ink. Vinyl sign shall be mounted on 3/4" x 4'-0" x 8'-0" sign board or printed corrugated plastic and affixed to the construction fencing at a location determined by the Director's Representative.

1.6 SAFETY SIGNS

- A. Provide site safety signs as required by OSHA or other codes and regulations.
- B. Properly spaced signs shall be posted on construction fence indicating the area is "**Restricted - Authorized Personnel Only**" as required by the Director's Representative, but at no more than 100 feet. Signs shall be 16" by 24" with 4" black letters on a white background.
- C. Additional Signs shall be provided as deemed necessary by the Director's Representative.

1.7 RUBBISH REMOVAL

- A. **The General Contractor** is responsible for all waste removal and disposal from the Site.
- B. Clean up the debris resulting from the work at the end of each day.

- C. Remove debris from State property as the refuse container(s) becomes full or if the debris presents a hazard. Burning of waste material is prohibited.
- D. Properly and legally dispose of all waste materials.
- E. Recycle materials whenever possible.
- F. Maintain drop cloths to catch and collect debris from removal of existing materials and application of new materials (paint, caulk, mortar, plaster, etc.).

1.8 REMOVAL OF TEMPORARY WORK/ EQUIPMENT

- A. Temporary work such as electric power and light system, water piping, hoses, guards, shoring, fences, etc., provided or erected by each Contractor, shall be removed and shall become property of the Contractor, except where otherwise noted, when such temporary work is no longer required, or when directed, or at completion of Contract.

1.9 FIRE PREVENTION

- A. Take precautions necessary to prevent fires.
- B. Fuel for cutting and heating torches shall be acetylene or LP-gas only and shall be contained in Underwriters Laboratory or Federal Department of Transportation approved containers.
 - 1. All soldering work shall require a "Hot Work" Permit issued by the Director's Representative prior to commencement of soldering work, on a form provided by Parks. Permit shall indicate area of work and day for which it is valid.
 - 2. All soldering and cutting using heating torches must cease at least one (1) hour prior to the end of a work shift to perform a "fire watch".
 - 3. Welding inside the existing facilities is *strictly prohibited*. All steel components must be welded and pre-assembled outside the structure.
- C. Furnish and maintain a currently inspected 20 pound capacity multi-class ABC fire extinguisher in the immediate vicinity where welding tools or torches are in use. Provide additional fire extinguishers as required by the Director's Representative, Code Enforcement Official, and the NYS Building Code.
- D. Provide qualified Fire Watch as required by NYS Building Code.
- E. Keep flammable materials enclosed in safe containers, provide fire extinguishers of proper size, capacity and type in quickly accessible locations at all times.

1.10 TEMPORARY SCAFFOLDS, STAGINGS, AND SAFETY DEVICES:

- A. Each Contractor shall erect, provide, maintain, and remove when directed, all scaffolding, staging, platforms, temporary runways, guards, railings, etc., as required by state codes, or laws for the protection of workmen and public. Construction, inspection, and maintenance of above items shall comply with OSHA requirements, safety codes and regulations as applicable to work.

- B. Trench boxes, temporary shoring, sheet piling or other methods should be employed during excavation procedures where required by OSHA.

1.11 CUTTING AND PATCHING

- A. Refer to **Section 02 10 00 Selective Demolition, Removals and Salvage** for additional information. The General Contractor shall do all cutting, drilling, and patching of finishes and structural elements as required for the Work as defined in the contract. Exceptions are noted below. Cutting, drilling, and patching shall be done in a manner which will not weaken the structure and which will retain the integrity of any existing protection. All cutting of concrete shall be accomplished by saw-cutting or core-drilling in such a manner to permit neat and proper patching to adjacent areas.
 - 1. Each contractor shall be responsible for Installation of pipe hangers and supports, equipment supports, supports for electrical wiring and devices for work under their contract. Holes for fasteners and anchors shall be pre-drilled to avoid damage and splitting of wood.
- B. Areas of cutting and patching may be required to be larger sections of walls, ceilings, etc. In these cases, the General Contractor shall do all cutting, drilling, and patching as required for the Work as defined in the contract. Workmanship of patched construction shall match the existing adjacent construction remaining, or shall patch as indicated in the plans, or as directed by the Architect or Director's Representative.
- C. Chases: It shall be the **General Contractor's** responsibility to coordinate their work with subcontractors in order to insure provision of chases, recesses, and openings in building walls and ceilings; and to insure that reasonable clearances between the work of various trades be maintained while proper structural stability is maintained throughout. Should any chases or similar provisions be omitted, the General Contractor shall, do all the work necessary to provide same despite interference with finished work in place. Original architectural lines and planes shall be maintained. There shall be no projections into spaces unless shown on drawings.
 - 1. **The Contractor and all subcontractors** shall make every reasonable effort to use existing chases, cavities and penetrations in such a manner that minimizes damage to historic building finishes and structural fabric.
 - 2. Drawings provide general layouts for removal of existing finishes. It is the intent of these documents to place multiple systems in the same openings and chases to minimize damage to historic building fabric. Some minor adjustments in location and routing may be required.
- D. The **General Contractor** shall confirm that all work of all trades which will be buried or made otherwise inaccessible by his work, is approved by the Code Enforcement Officials or Inspectors before proceeding with that part of his work which renders the other work inaccessible.

1.12 STORAGE AND SHOP FACILITIES

- A. The Contractor shall make provisions necessary for safe and secure equipment and material storage and enclosed workspaces. The Office assumes no liability for loss or damage to materials or equipment.
- B. Owner's/Construction Manager's Office Trailer: Refer to Section 01 52 10

1.13 PROTECTION OF EXISTING CONSTRUCTION

- A. Protect existing construction during the work. Erect temporary protection to keep water out of the structure where walls, roofs, etc. have been opened up or removed.
- B. **General Contractor** shall be responsible for adequately bracing and protecting all work during construction against damage, leakage, collapse, distortions, misalignments, etc., in accordance with codes and standards of good practice. Contractor is responsible for the structural stability, shoring, underpinning of structures as per codes and standards of good practice.
- C. The **General Contractor** shall provide and install temporary protection of existing construction, including the covering of all wood floors where construction occurs.
 - 1. Floors: Over exposed wood floors, steps and landings, install 1 layer of 6-mil polyethylene, taped to seal from liquid penetration, covered with wood or paper fiber protection material such as Homasote or Ram Board, to protect against impact damage.
- D. Protection of Collections, including furnishings, built-in cabinets, etc. shall be the responsibility of Parks. The Contractors shall not handle collections. All items that are too large to move or relocate shall be protected in place.

1.14 DUST CONTROL

- A. All Contractors shall execute work by methods that minimize raising dust from construction operations.
- B. Where selective demolition, removals and other construction activities produce dust and air-borne particles, the **General Contractor** shall install and maintain temporary dust controls to prevent the migration of dust and other fine particles outside of spaces undergoing work, including selective removal & demolition.
 - 1. Provide, install and maintain temporary dust partitions, “zip” doors, plastic sheeting, etc. to compartmentalize or isolate demolition areas. Tape used to install dust controls shall not leave an adhesive residue on existing finishes (i.e., duct tape shall not be used).
 - 2. Provide and install “sticky mats” at entrance/exits to demolition areas to reduce the spread of fine particles throughout the building.
 - 3. Regularly vacuum demolition areas to prevent spread of fine particles and debris. Vacuums shall be equipped with HEPA filters.
 - 4. And/or employ ventilation to create “negative pressure” within demolition areas to prevent the migration of dust and fine particles.

1.15 SITE ACCESS

- A. Parking for all Contractors, employees, or sub-contractors shall be in the staff parking lot or public street parking areas as available. The cost of off-site parking is the responsibility of the Contractor, subcontractors and/or their employees.
 - 1. At least two (2) parking spaces shall be reserved on site for Directors Representative, and Construction Managers and inspectors, except when the parking lot is being re-surfaced, marked or striped, or prepared for such.

- B. Store materials and perform work so that pedestrian and vehicular traffic is not obstructed.
- C. The Historic Site will be CLOSED to the public, but open to OPRHP staff, construction management and construction inspectors with prior approval and coordination by Directors Representative.

PART 2 - PRODUCTS

- 2.1 Not used.

PART 3 - EXECUTION

- 3.1 Not used.

END OF SECTION

SECTION 01 52 10

OWNER'S/CONSTRUCTION MANAGER'S FIELD OFFICE

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. This Section includes requirements for CONTRACTOR-provided field office, with furnishings, equipment, and consumables, for use by ARCADIS.
2. CONTRACTOR shall provide and maintain field office for ARCADIS's sole use. Provide field office at location shown on the Drawings and as approved by ARCADIS, in reasonable proximity to CONTRACTOR's field office.
3. Field office shall be complete and fully functional within 30 days after date on which the Contract Times commence running.
4. Obtain required permits for field offices.

1.2 SUBMITTALS

A. Action Submittals: Obtain approval of the following prior to staging field office to the Site:

1. Field Office Submittal: Submit all of the following as one submittal which shall include:
 - a. Site plan indicating proposed location of field office, parking for field office, facilities related to the field office, and material of both field office parking and sidewalk or walkway to field office.
 - b. Information on proposed field office size, construction, exterior appearance, interior finishes, and field office security measures.
 - c. Proposed layout of field office interior, showing location of offices, common areas, restroom, closet, other areas specified (if any), with dimensions indicated for each.
 - d. Proposed layout of field office exterior identifying sign, showing all text, font, colors, and graphics (if any).
 - e. Proposed type of Internet service; name of proposed Internet service provider; and product data and technical information on equipment (if any) required for Internet service.
 - f. Office Equipment: Product data and technical information for copier, telephones, and other office equipment.

PART 2 – PRODUCTS

2.1 FIELD OFFICE CONSTRUCTION AND SITE REQUIREMENTS

- A. Site at Field Office:
 - 1. Allocate total of 5 reserved parking spaces for use by ARCADIS and NYS Parks in close proximity to the field office.
 - 2. Provide sidewalk or walkway, not less than four feet wide, of bituminous pavement, concrete, crushed stone, or other material approved for the full distance between parking area and field office.
- B. Field Office, Minimum Construction: Field office shall comply with the following:
 - 1. Structurally sound foundation and superstructure.
 - 2. Size: Floor area of not less than 672 square feet. Provide "single-wide" trailer approximately 12 feet wide by 60 feet in length or equal adjacent office.
 - 3. Completely weather-tight and insulated, with insulation.
 - 4. Exterior finish to be submitted and approved in advance of mobilization.
 - 5. New interior finishes approved, including resilient floor covering in first-class condition.
 - 6. Field Office Ingress and Egress:
 - a. Two doors for ingress and egress for each field office unit, each with landing, stairs, and railing conforming to building codes in effect at the Site. A handicap accessible ramp shall be provided for access at one of the doors as approved.
 - b. Landing and stairs shall have slip-resistant walking surfaces, and be metal, fiberglass, or concrete.
 - c. Railing shall be metal or fiberglass.
 - d. Door Security:
 - 1) Doors shall be secure and lockable.
 - 2) Furnish each door with suitable, lockable security bar. Security bar shall be Master Lock 265DCCSEN Dual-Function Security Bar, or equal.
 - 7. Windows:
 - a. Window area equal to not less than ten percent of floor area.
 - b. Windows shall each have insect screen and operable sash.
 - c. Provide each window with lock and exterior security bars approved by ARCADIS.
 - 8. One lockable closet for storage.
 - 9. Keys:
 - a. Furnish four identical sets of keys suitable for operating all keyed locks, including ingress/egress door locks, security bars for doors, window locks, closets, and office furnishings.
 - b. Permanently label each key to indicate its associated lock.
 - 10. Restroom:
 - a. **Provide in field office one private restroom** that is ADA-compliant including one lavatory, one toilet, and medicine cabinet with mirror, soap dispenser, and paper towel holder.

- b. Provide each restroom with appropriate electric ventilation fan.
- 11. Exterior Sign:
 - a. Field office identifying exterior sign, approved by ARCADIS. Sign shall be durable, weatherproof, suitable for long-term exposure to sunlight.
 - b. Exterior sign shall be not less than two feet high by three feet wide, installed at location determined in field and acceptable to ARCADIS.
 - c. Sign shall be in color, as presented in the layout below.
 - d. Sign layout and general proportions shall be as presented below. Sign shall be 2' x 3'. Text of first line and last line shall be Arial. Text size and size of graphic shall be proportionate to the graphic below. ARCADIS will furnish graphic as JPG file for use by CONTRACTOR in preparing the sign.



- C. Field Office Optional Construction:
 - 1. Provide mobile office trailer in first-class condition approved by ARCADIS, specifically designed for use as construction field office and complying with requirements of this Section.
 - 2. Provide skirting around perimeter of each mobile field office trailer.
 - 3. Supplier: Provide field office by one of the following:
 - a. Pac-Van, Inc.
 - b. Modular Space Corporation (ModSpace).
 - c. Williams Scotsman, Inc.
 - d. Or equal.

2.2 FIELD OFFICE UTILITIES

- A. Comply with Section 01 50 00, Temporary Construction Facilities and Controls.
- B. Provide the following for the field office:
 - 1. Electrical System and Lighting:
 - a. Electric service as required, including paying all costs.
 - b. Interior lighting of not less than 50 foot-candles at desktop height.

- c. Minimum of eight 120-volt, wall-mounted, duplex convenience electrical receptacles.
 - d. Exterior, wall-mounted lighting at each entrance to field office, not less than 250 watts each.
- 2. Heating, Ventilating, and Air Conditioning System:
 - a. Provide automatic heating to maintain indoor temperature in field office of not less than 65 degrees F in cold weather. Furnish all fuel and pay all utility costs.
 - b. Automatic cooling to maintain indoor temperature in field office of not warmer than 75 degrees F in warm weather.
- 3. Water and Sewerage:
 - a. Provide potable water service for each plumbing fixture associated with field office. Potable water service is not available on-site from the OWNER's supply. CONTRACTOR shall provide potable water tanks, or other means of water supply, for use.
 - b. Provide sanitary sewerage for each lavatory/sink and toilet.
 - c. Utility Connections – General:
 - 1) Comply with Laws and Regulations, including plumbing and sewer codes, and requirements of authorities having jurisdiction.
 - 2) Protect plumbing from freezing.
 - d. Potable Water Service: Provide the following:
 - 1) Type K copper waterline from potable water main to each plumbing fixture.
 - 2) Reduced pressure zone (RPZ)-type backflow preventer in accordance with Laws and Regulations and requirements of authorities having jurisdiction.
 - 3) Provide 15-gallon electric hot water tank or tankless hot water heater, and hot water piping to serve each lavatory/sink in field office.
 - 4) Not less than one exterior hose bib, with not less than 50 feet of hose, located adjacent to field office sidewalk or walkway, near field office ingress/egress doors. Provide wall-mounted hose reel or hose caddy.
 - 5) Before placing potable water system into service, disinfect piping and appurtenances in accordance with Laws and Regulations.
 - e. Sanitary Sewerage:
 - 1) Provide PVC or other appropriate piping, arranged in accordance with Laws and Regulations, to convey wastewater from field office to holding tank provided by CONTRACTOR. Discharge and connection to the facility sanitary sewer is not permitted.
 - 2) Provide pumping and disposal of holding tank contents at appropriate, regular intervals.
- 4. Internet Access:

- a. Obtain and pay for Internet service until removal of the field office, with unlimited (untimed) Internet access, for ARCADIS' sole use.
 - b. Set up system and appurtenances required and verify functionality in the field office.
 - c. Internet service shall be one of the following, listed in order of preference; provide a lower type of access only when the next-higher level is unavailable:
 - 1) Fiber-optic or Cable Provider Service:
 - a) Provide service via communication service provider via either cable or fiber-optic service at download speed of not less than 15 megabytes per second (Mbps) and upload speed of not less than 1 Mbps.
 - b) Provide appropriate modem, cabling, and appurtenances.
 - 2) DSL:
 - a) Provide service via symmetrical digital subscriber line with download speed of not less than 1.5 Mbps and upload speed of not less than 384 kilobits per second (Kbps).
 - b) Provide dedicated telephone line for Internet access.
 - c) Provide DSL filters on each non-DSL outlet in the field office telephone system.
 - 3) Mobile Broadband Wireless:
 - a) Provide mobile broadband wireless 4G network by AT&T, Verizon, Sprint, T-Mobile, or equal, with download speed of not less than 37 Mbps and upload speed of not less than 17 Mbps.
 - a) Provide mobile broadband wireless router. Product and Manufacturer: Linksys Wireless-G Router for Mobile Broadband, or equal.
 - b) Mobile broadband air-card for field office. Product and Manufacturer: Sierra Wireless 597E, Novatel Merlin EX720, or equal.
 - c) Router and air-card will remain CONTRACTOR's property upon removal of field office from the Site.
 - 4) Satellite:
 - a) Provide 4G network service with download speed of not less than 12 Mbps.
 - b) Provide required equipment, including outdoor unit (dish) and indoor satellite modem equipment, together with required cabling provided.
 - c) Provide telephone modem in computer, together with telephone line and service, for file uploading.
- C. Should actions of utility companies delay the complete set up of field office, CONTRACTOR shall provide temporary electricity, heat, water supply, sanitary facilities, and telephone service as required at no additional cost to ARCADIS.

2.3 FURNISHINGS AND EQUIPMENT

- A. Provide the following furnishings and equipment:
1. Desks: minimum of four - 3-drawer desks for the trailer interior. Each desk shall be five feet long by 2.5 feet wide with not less than one file drawer per desk, suitable for storing 8.5-inch by 11-inch documents.
 2. Desk Chairs: One new or used (in good condition) five-point, high backed, cushioned swivel chair with seat-height adjustment, for each office area/work space indicated on the field office layout plan.
 3. Other Chairs: Four side chairs with arm rests and padded seats and backs, and eight metal folding chairs without arm rests.
 - 3A. Provide adequate shelving in each office and in the common area.
 4. Four new or used (in good condition) folding tables each eight feet long by 2.5 feet wide.
 5. Two new or used (in good condition) folding tables each four feet long by 2.5 feet wide.
 6. Conference Table: One conference table equipped with 6 chairs and suitable to accommodate 6 people.
 7. Plan rack(s) and plan sticks to hold not less than eight sets of the Drawings.
 8. Two 4-drawer file cabinets.
 9. Two 2-door storage cabinet.
 10. (Not used).
 11. Polyethylene waste baskets, each with capacity of not less than seven gallons. Furnish one in each office/work space indicated on the field office layout plan; one for the common area; and one for the restroom.
 12. Suitable doormat at each exterior ingress/egress door.
 13. Cork tack-board, 2.5 feet by three feet, with thumbtacks. Provide one for each office/work space shown on the field office layout plan and one in the common area.
 14. One white board for use with dry markers, approximately six feet by four feet, with marker holding tray, installed by CONTRACTOR at location directed by ARCADIS in the field. Furnish supply of colored markers and eraser for the white board.
 15. Safety Equipment: Provide the following:
 - a. Fire extinguishers with associated signage.
 - b. Smoke detectors with supply of batteries.
 - c. Carbon monoxide detector with power supply.
 - d. Provide in accordance with Laws and Regulations. For each field office structure, provide not less than two wall-mounted fire extinguishers, three battery operated ceiling-mounted smoke detector, and one carbon monoxide detector, each suitably located and installed in accordance with manufacturer's instructions.
 16. First-Aid Kit:

- a. In addition to first-aid stations otherwise required by the Contract Documents, provide for ARCADIS's sole use a first-aid kit in ARCADIS's field office.
 - b. Product and Manufacturer: Zee Medical Service Co., Item 0152, "Medium Four-Shelf Plastic Cabinet", www.zeemedical.com; or equal.
17. Temperature and Humidity Monitor:
- a. Sensor installed outdoors in shade, display installed inside field office. Unit shall display daily minimum and maximum temperature and current temperature, and be capable of displaying daily minimum and maximum relative humidity and current relative humidity, and have audible alarm and adjustable alarm setpoints.
 - b. Manufacturer and Product: Provide Fisher Scientific "Traceable Remote Alarm RH/Temperature Monitor" Catalog No. 14-649-84; or equal.
 - c. Provide batteries for unit as required.
18. Personal Protective Equipment for Visitors: Furnish the following:
- a. Hardhats: Eight, each with full brim, of fiberglass or thermoplastic; each with ratchet suspension; white in color.
 - b. Safety Glasses: Eight, each with clear lenses, polycarbonate, anti-fog and anti-scratch coating, Two pair suitable to fit over personal eyewear.
 - c. Reflective Safety Vest: Eight, each of polyester mesh or other material acceptable to ARCADIS, color to be high-visibility orange, with one-inch-wide reflective tape, one-size-fits-all design.
 - d. Earplugs: Supply of foam, disposable earplugs. Promptly resupply when stock is depleted.
19. Two electric clocks.
20. One electric coffee maker, Keurig (single pod) with water reservoir.
21. Bottled water with electric cooler dispenser for five-gallon bottles, with cup dispenser.
22. Printer/Copier/Scanner:
- 1) System Description: Provide one laser printer/copier/scanner with color printing capability.
 - 2) Manufacturer and Model: Provide one of the following:
 - a) HP LaserJet Pro M476dw Color Multifunction Printer with sorter.
 - b) Or equal.
 - 3) Sheet Size: Capable of printing 8.5-inch by 11-inch, 8.5-inch by 14-inch, and 11-inch by 17-inch sheets.
 - 4) Printing Speed: 20 pages per minute (black and white), 18 pages per minute (color).
 - 5) Scanning: Capable of scanning to PDF and JPG files, selectable by the user.

- 6) Toner Cartridges: Provide all cartridges required for full-color printing, and promptly replace cartridges as needed throughout the Project.
 - e. Wireless Router:
 - 1) Provide two wireless routers (one active and one spare) to be configured by ARCADIS.
 - 2) Router capacity shall be not less than 54 Bbps.
 - 3) Manufacturer: Router shall be Linksys, or equal.
24. Multi-function Color Copier:
- a. One new machine with the following functions: photocopying, network printing, scanning to produce PDF and JPG files, and e-mail.
 - b. Products and Manufacturers: Provide one of the following:
 - 1) Xerox WorkCentre 7220.
 - 2) Konica Minolta Bizhub C224e
 - 3) Or equal.
 - c. Minimum Memory: 2 GB.
 - d. Ten-bin sort capacity, 8.5-inch by 11-inch, 8.5-inch by 14-inch, and 11-inch by 17-inch paper capacity, enlarging and reducing capabilities, stream-feed capability, bypass feeder, stapling capability, and double-sided copying capability. Copier shall produce not less than 20 copies per minute.
 - e. Provide necessary cables and appurtenances to enable all functions specified in this Section, including scan-and-email and printing from field office computers. Furnish services of manufacturer's representative to set up and service copier.
25. Dormitory Style Refrigerator
- a. Provide one Dormitory Style Refrigerator 4.0 Cu.Ft.
 - b. Products and Manufacturer: Provide one of the following:
 - 1) Haier
 - 2) Or equal
26. Microwave Oven model OGZ.1104.1100 WATT
27. Toaster Oven. Black & Decker
28. Plan Table. Construct one 3' x 8' Plan table out of plywood, 2" x 4"s & Masonite. Locate in Common Area of Trailer.
- Ownership:
- a. All furnishings and equipment purchased to accommodate this trailer shall be the property of NYSOPRHP. It shall be cataloged and inventoried upon mobilization to the site and turned over to NYSOPRHP at the completion of the project.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install field office and related facilities in accordance with Laws and Regulations.
- B. Install materials and equipment, including prefabricated structures, in accordance with manufacturer's instructions.

3.2 CLEANING, MAINTENANCE, AND SUPPLIES

- A. Furnish the following maintenance services:
 - 1. Immediately repair malfunctioning, damaged, leaking, or defective field office structure, site improvements, systems, and equipment.
 - 2. Provide computer supplies and pay for maintenance on CONTRATCOR-furnished computer system and copier.
 - 3. Promptly provide snow and ice removal for ARCADIS' field office, including parking area, walkways, and stairs and landings.
 - 4. Provide daily maintenance and janitorial service of field office and sanitary facilities. Clean field office not less than once per week Sweep or vacuum field office not less than every other day when site conditions are such that dirt or mud are frequently tracked into field office.
 - 5. Waste Disposal:
 - a. Properly dispose of trash and waste as needed, not less than twice per week.
 - b. Properly handle and dispose of recyclables. Do not dispose of recyclables as trash. Provide Containers strictly for Recyclables.
 - c. Dispose of other waste, if any, as required, to avoid creation of nuisances and adverse environmental effects. Properly dispose of electronic waste, when necessary, at proper waste receiving facility.
 - 6. Strip and wax all floor surfaces in the field office not less than once per year.
- B. Consumables: Provide the following consumables as needed:
 - 1. Toner and ink cartridges for printers and copier, as required.
 - 2. Paper supplies for printer and copier. Always maintain in field office not less than one ream of each size of paper for which printer and copier are capable.
 - 3. Dry markers in six colors and white board eraser set. Replace markers when exhausted or lost.
 - 4. Bottled water suitable for water dispenser and disposable cups.
 - 5. Coffee supplies, including coffee, filters, cups, sugar, creamer, and stir-sticks.
 - 6. Hand-soap, paper towels, toilet paper, cleansers, and janitorial implements, including broom.
 - 7. Batteries for smoke detector and other battery-powered items furnished by CONTRACTOR.
 - 8. Replace fire extinguishers upon expiration.

9. Not less-often than monthly, inspect first-aid kit and inventory items consumed or used and remove items that are at or near their expiration date. Promptly replace and restock consumed and expired items.

3.3 REMOVAL

- A. Remove field office when directed by ARCADIS, prior to inspection for final completion. Upon removal of the field office structure, the field office will be Contractor's responsibility for disposition.

+ + END OF SECTION + +

SECTION 01 77 00 CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Other provisions pertaining to this Section are included in Article 9 of the General Conditions.

1.2 PERMITS AND COMPLIANCE

- A. Building Permit will be issued by Parks.

1.3 CONTRACT CLOSEOUT INSPECTIONS

- A. The following 3 inspections will be made in addition to the normal inspections to ensure that all Contract requirements are met and that the Work is complete and acceptable. The purpose of each of these inspections is to furnish the Contractor a written list of Contract exceptions, omissions, and errors so that the Work can be progressed to timely completion in accordance with the Contract Documents.
 - 1. Detailed Inspection: The “Detailed Inspection” will be made when the Work is substantially complete. A copy of the detailed inspection list (detailed punch list) will be furnished to the Contractor. When this inspection progresses over any length of time, copies of the list will be furnished as the inspection progresses so that the Contractor may proceed with the required Work without delay.
 - 2. Final Inspection: The Contractor will be advised of the date and time of final inspection. A copy of the final inspection list (final punch list) containing all incomplete or unsatisfactory items and the time allowed to complete the Work will be furnished to the Contractor.
 - 3. Joint Inspection for Physical Completion (JIPC): The joint inspection for physical completion will be made to verify completion of all punch list items listed on the final inspection list so that the physical completion date (defined in the General Conditions) may be established. All incomplete or unsatisfactory items must be complete prior to this final inspection. No work on site may take place after the physical completion date.
 - 4. Final payment application with all supporting documents shall be submitted within 20 days after the “Joint Inspection for Physical Completion”.

1.4 FINAL CLEANING

- A. Perform final cleaning prior to joint inspection for physical completion. Leave the premises in a neat, unobstructed condition, the work areas broom clean (except where more thorough cleaning is specified), and everything in perfect repair and adjustment.
- B. Clean site; sweep paved areas, rake clean landscaped surfaces.

- C. Remove tools, equipment, waste and surplus materials, rubbish, and construction facilities from the premises as soon as possible upon completion of the Work.

1.5 PROJECT RED-LINE/AS-BUILT DOCUMENTS

- A. Maintain on site, a set of the following contract documents; record actual revisions to the Contract Documents concurrent with construction progress. Upon completion of the work, contractor shall provide accurate and legible red-line documents to OPRHP in Adobe™ PDF format:
 - 1. Contract Drawings.
 - 2. Project Manual.
 - 3. Addenda.
 - 4. Change Orders, Sketches, Requests for Information, and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Applications for Final payment will not be approved until the Red-Line/As-Built documents are received and approved.

1.6 INSTALLATION, OPERATION AND MAINTENANCE (IO&M) MANUALS:

- A. Provide in PDF format IO&M manual including cut sheets, instructions, and reports.

1.7 WARRANTIES

- A. Furnish warranty certification and copies of warranties that extend beyond the one year period required by the General Conditions. Warranties submitted without warranty certification will not be accepted.
 - 1. Warranty Certification: Written certification from the warrantor that invoices for installation, service, supplies, and warranty fees have been paid in full to persons or firms due payment, and that the warranty is in effect and non-retractable due to any of the specified conditions.
 - 2. Applications for final payment will not be approved until the warranty certification and warranty documents are delivered to the Director's Representative.

1.8 FINAL PAYMENT

- 1. Application for final payment will not be approved until the following documents are received and approved by the Director's Representative. They are required within twenty (20) days of the date of JIPC:
 - a. Red-Line/As-Built, and other submittals required above and elsewhere in the specifications. Electronic format required.
 - b. IO&M Manuals
 - c. Warranties required in specifications.
 - d. Two (2) original Fin112 Applications for Payment
 - e. One copy of the following:
 - 1) Certified Payroll – any not previously submitted

- 2) AC2948 "Sub-contractors Certification" for all sub-contractors
- 3) PW51 "Prime Contractor's Prevailing Rate Certification"

PART 2 - PRODUCTS

2.1 Not used.

PART 3 - EXECUTION

3.1 Not used.

END OF SECTION