

SECTION 01 10 00
SUMMARY OF THE WORK

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. The title and location of the Work is printed on the cover of this Project Manual.
- B. This project is for construction of one camp latrine cabin, two bathhouse cabins and – as Additive Alternate #1 - a fabric-covered, metal-framed canopy at an existing patio, all at the Camp Junior campground on Lake Tiorati in Harriman State Park in Southfields, Orange County, New York. **All Contractors shall substantially complete the Work of each Contract (all building repairs complete and buildings useable by campground staff and campers) by Milestone Date of May 10, 2024. All Contractors shall physically complete the Work of each Contract within Two Hundred Forty (240) days after each Agreement is approved by the New York State Comptroller's Office.**
- C. A timber rattlesnake monitor will be required during periods of building demolition, as well as during all construction involving machinery for ground disturbance activities between April 1 and October 31, inclusive. The General Construction Contractor shall hire a NYS DEC licensed timber rattlesnake monitor within the timeframe specified above. See Section 01 40 90 - Environmental Requirements (Threatened/Endangered Species).
 - 1. For all other work elements, and for work being undertaken outside of the above stated timing window (April 1- October 31), workers of all prime contractors and their subcontractors shall be trained on what to do if a rattlesnake is encountered. New York State (NYS) Office of Parks, Recreation and Historic Preservation (OPRHP) agency staff are available to provide such worker training.
- D. Type of Contracts: Fixed price.

1.02 RELATED CONTRACTS

- A. The Project consists of the following separate contracts:
 - 1. General Construction Contract D006135
 - 2. Electrical Contract D006136
 - 3. Plumbing Work Contract D006137
 - 4. Mechanical Contract D006138
- B. The General Construction Contractor is responsible for coordination of their work with the work of the other Contractors and with the Owner's testing and monitoring agency. The Director's Representative shall be involved in all coordination to avoid conflicts.

1.03 MILESTONE AND COMPLETION DATES

- A. **Milestone Date: All Contractors shall substantially complete the Work of each Contract (that is, buildings complete and useable by campground staff and campers) by the Milestone Date of May 10, 2024.**
- B. **All Contractors shall physically complete the Work of each Contract within Two Hundred Forty (240) days after each Agreement is approved by the NYS Comptroller's Office.**
- C. **Liquidated damages will be assessed for failing to complete the Work on time - Refer to Section 14.10 of General Conditions.**

1.04 RESTRICTED WORK PERIOD

- A. **No work shall commence on site until on or after September 5, 2023.**
- B. Construction Work Contract: Do not perform the roofing and related Work on or after December 1st and up to, but not including April 1st unless approved otherwise, in writing, by the Director's Representative. During this period, clear the roof of materials, equipment, and debris. Maintain the roof in a watertight condition.

1.05 ITEMS NOT INCLUDED

- A. The following items shown on the Drawings are not included in the Contract:

PA-TI-2023-001 / Camp Junior
on Lake Tiorati - Phase 3
Harriman State Park

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SUMMARY OF THE WORK

1. Items indicated "NIC" (Not in Contract).
2. Existing construction, except where such construction is to be removed or repaired.

1.06 CONTRACTOR USE OF PREMISES

- A. Work hours shall be performed between the hours of 7 a.m. and 4:30 p.m. for a total of eight hours per day with the exception that these hours may be extended as necessary to achieve completion of essential work to assure that the contract work is completed by the date as noted above.
- B. No work shall be performed on Saturdays, Sundays, or Holidays with the exception that work may be performed on these days as necessary to achieve completion of essential work to assure that the contract work is completed by the date as noted above.
- C. Inform the Director's Representative of work area access requirements. The Director's Representative will coordinate and schedule the requirements with Facility staff to obtain and ensure timely availability of work areas.
- D. The following items are not allowed on the Site or on Facility premises.
 1. Firearms, ammunition, weapons, and dangerous instruments (other than tools required for the Work).
 2. Alcoholic beverages and persons under the influence of same.
 3. Cannabis and persons under the influence of same. Cannabis, as used herein shall refer to any form of cannabis that has psychoactive properties.
 4. Illegal controlled substances and persons under the influence of same.
- E. Comply with Facility policies relating to smoking at the Site.
- F. Be responsible and accountable for employees, suppliers, subcontractors and their employees, with regard to their use of the premises
- G. Furnish Facility authorities with a telephone number or method to contact the supervisor for the Work in case of an emergency after work hours, including weekends and holidays.
- H. Comply with applicable federal and State of New York Right-to-Know Law provisions and supply copies of the appropriate Material Safety Data Sheets (MSDS) to the Director's Representative.
- I. Report fire and other emergency situations to the Facility Safety/Security Department immediately.
- J. Provide access to and from site as required by law and by Owner and Owner's agents:
 1. Store materials and perform the Work so that pedestrian and vehicular traffic is not obstructed.
 2. Emergency Building Exits During the Work of this Contract: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
- K. Utility Availability:
 1. Water and sewer utilities will NOT be available at the project site.
 2. See Section 01 50 00 "Temporary Facilities and Controls" for further information as to utilities present and temporary utilities required to be provided to perform the Work.

1.07 REFERENCE SPECIFICATIONS AND STANDARDS

- A. Comply with the requirements of the various specifications and standards referred to in these Specifications, except where they conflict with the requirements of these Specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids, unless the date is given.
- B. All work shall conform to the requirements of the governing New York State Department of Labor rules and regulations.
- C. All work shall conform to the current New York State Uniform Fire Prevention and Building Code (the "Uniform Code"), including the Uniform Code's referenced 2015 editions of the

applicable International Codes as adopted by New York State. Construction shall also conform to New York State's current Uniform Code Supplement.

- D. "OSHA Safety and Health Standards, (29 CFR 1926/1910), U.S. Department of Labor, Washington, D.C.

1.08 PROJECT CONDITIONS

- A. Knowledge of Site and Project Conditions:
 - 1. The General Construction Contractor shall observe and monitor the construction site for any NY State Endangered, Threatened, or Special Concern species, particularly the NY State Threatened timber rattlesnake, and if discovered, recommend work modifications and/or initiating species relocation as necessary for the protection of the species. See Section 014090 - Environmental Requirements (Threatened/Endangered Species).
 - 2. The Project site and its structures are eligible for listing in the National Register of Historic Places.
 - 3. Before submitting bid, Bidders shall make themselves thoroughly familiar with the Drawings and Specifications, with the scope of this Project, and with all conditions at the Project site relating to requirements of this Section and limitations under which the work will be performed and shall determine or verify dimensions and quantities. Submission of a bid shall be considered conclusive evidence that Contractor is thoroughly familiar with Project requirements and site conditions and limitations.

1.09 EXAMINATION

- A. Examine the Contract Documents thoroughly and promptly report any errors or discrepancies to the Director's Representative before commencing the Work.

1.10 LAYING OUT

- A. Lay out the Work in accordance with the Contract Documents.
- B. Location of temporary facilities as well as delivery, waste container and storage areas on the Site shall be stacked out by the General Construction Contractor (GC) and approved by the Director's representative prior to beginning construction.

1.11 SPECIAL INSPECTIONS

- A. Special Inspections and tests are required by Chapter 17 of the Building Code of New York State (BCNYS). Inspections and testing services will be provided by the State unless otherwise noted.
- B. Contractors shall be responsible for notifying the Directors Representative regarding individual inspections listed in the STATEMENT OF SPECIAL INSPECTIONS. Contractors shall cooperate with the inspectors and testing agencies and sufficient notice and lead time (minimum 48 hours) must be allowed for inspection and testing to be performed.
- C. Where deficiencies are identified, the contractor must take corrective actions to comply with the contract documents or remedy the deficiencies in accordance with Article 9 of the General Conditions.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GENERAL CONSTRUCTION CONTRACT – D006135

- A. Shall include all the provisions in the General Conditions.
- B. Shall include all the provisions in Division 01 - General Requirements.
- C. Shall include all the provisions in Division 02 - Existing Conditions.
- D. Shall include all the provisions in Division 03 - Concrete.
- E. Shall include all the provisions in Division 05 - Metals.
- F. Shall include all the provisions in Division 06 - Wood, Plastics, and Composites.

1. General Construction Contractor shall provide all framed roof, wall and floor penetrations, and rough openings for same - blocked and framed as required - for all other contractors, coordinated with other contractors.
 2. General Construction Contractor shall provide wood framed supports and blocking as required by and coordinated with all other contractors.
 3. General Construction Contractor shall provide all plate protection for concealed electrical conductors and plumbing lines at all plates and studs as required.
- G. Shall include all the provisions in Division 07 - Thermal and Moisture Protection.
1. GC shall flash all plumbing and electrical roof penetrations.
 2. GC shall provide wall louvers for exhaust ductwork (by MC).
- H. Shall include all the provisions in Division 08 - Openings.
- I. Shall include all the provisions in Division 09 - Finishes.
- J. Shall include all the provisions in Division 10 - Specialties.
- K. Shall include all the provisions in Division 31 - Earthwork.
- L. **Shall include rock removal indicated in Section 31 23 16 "Rock Removal", in quantity and at unit price as follows:**
1. The bid shall include 150 cubic yards of general rock excavation and removal. Do not exceed this quantity of rock removal, except by Order on Contract. To avoid delay, notify the Director's Representative when the amount of completed Work approaches the quantity indicated.
 2. If the removed quantity of rock is greater or less than 150 cubic yards, the contract sum fee shall be adjusted by an Order on Contract at a cost of \$160.00 per cubic yard.
 - a. Added General Rock Excavation and Removal @ \$160.00 per cu yd.
 - b. Deducted General Rock Excavation and Removal @ \$160.00 per cu yd.
 3. The foregoing unit prices include test pits, overhead, profit, and all other expenses incidental to the Work. Include in the bid sum all additional costs in connection with quantity changes that are not compensated for at the given unit prices.
 4. The unit price for additional rock removal is over and above the cost of earth excavation. No deduction from the bid sum will be taken for reduced quantities of earth excavation resulting from additional rock removal.
 5. The unit price for deducted rock removal takes into account and is deemed to compensate for the cost (including overhead, profit, and all other expense items) of earth excavation in lieu of rock excavation and removal. No additional payment will be made for such additional earth excavation.
 6. If the total amount of a change exceeds 20 percent of the aforementioned quantity indicated, the adjustment of the contract sum for the quantity in excess of 20 percent will be made in accordance with the General Conditions.
- M. Shall include all the provisions in Division 32 - Exterior Improvements.
- N. Shall include all the provisions in Division 33 - Utilities.
- O. Shall include all Site Work unless otherwise noted, including site water service and sanitary sewer waste piping to five feet from buildings. Construction contractor shall provide all required trenching, bedding and backfill for all site utilities. Plumbing work contractor shall make connections at water and sanitary sewer piping connections/tie-ins to site utilities. Electrical work contractor shall provide all site electric work indicated on the Drawings at and from existing utility poles and overhead to and at the buildings.
- P. Shall include as reference the **Technical Appendix, Prior/Existing Patio Construction at Dining Hall 404**, found near the end of the Project Manual, and which drawings indicate that patio's reinforced concrete slab and foundation details. **Note: The canopy structure indicated therein was not fabricated/installed and remains unbuilt. Field-verify all conditions.**
- Q. Shall include all work shown on the following Drawings unless otherwise noted:
1. Sheets G100 and G101.

2. Sheets C101, C102, C103, C130, C131, C132, C530 and C531 (8 drawings).
 3. Sheets L-200, L-201, L-202, L-300, L-301, L-302, L-400, L-401, L-402 and L-500 (10 drawings).
 4. Sheets A001, A100, A101, A102, A110, A111, A200, A201, A210, A220, A300, A301, A310, A311, A320, A500, A600, A601, A602, A700, A701, A702 and A800 (23 drawings).
 5. Sheets S001, S101, S102, S103, S104, S105, S106, S107, S301, S302 and S303 (11 drawings).
- R. Shall include as reference the work of other contractors indicated on following Drawings:
1. Sheet M101.
 2. Sheets P101 and P102.
 3. Sheets E001, E101, E102, E103, E104, E600 and E700 (7 drawings).

3.02 ELECTRICAL WORK CONTRACT – D006136

- A. Shall include all the provisions in the General Conditions.
- B. Shall include all the provisions in Division 01 - General Requirements.
- C. Shall include all the provisions in Division 26 - Electrical.
- D. Shall include providing any temporary light fixtures, wiring and equipment required for construction purposes.
- E. Shall include all site electric work indicated on the Drawings at and from existing utility poles and overhead to and at the buildings in Scope.
- F. Shall include providing all electrical work on and within the buildings and on the site to provide electric service to the three buildings in Scope. Electrical Contractor shall make electric service connections to on-site electric utility. Electrical Contractor shall make AC voltage connections at equipment installed by other Contractors.
- G. Shall include as reference **Technical Appendix, Prior/Existing Patio Construction at Dining Hall 404**, found near the end of the Project Manual, and which drawings indicate that patio's reinforced concrete slab and foundation details. **Note: The canopy structure indicated therein was not fabricated/installed and remains unbuilt. Field-verify all conditions.**
- H. Shall include all work shown on the following Drawings:
 1. Sheets G100 and G101.
 2. Sheets E001, E101, E102, E103, E104, E600 and E700 (7 drawings).
- I. Shall include the site electric work associated with electric service connections at and electrical overhead connection from existing utility poles to and at the buildings in Scope, indicated in part on the following Drawings:
 1. Sheets C101, C102, C103, C130, C131, C132 (6 drawings).
- J. Shall include as reference the work of other contractors indicated on following Drawings:
 1. Sheets C101, C102, C103, C130, C131, C132, C530 and C531 (8 drawings).
 2. Sheets L-200, L-201, L-202, L-300, L-301, L-302, L-400, L-401, L-402 and L-500 (10 drawings).
 3. Sheets A001, A100, A101, A102, A110, A111, A200, A201, A210, A220, A300, A301, A310, A311, A320, A500, A600, A601, A602, A700, A701, A702 and A800 (23 drawings).
 4. Sheets S001, S101, S102, S103, S104, S105, S106, S107, S301, S302 and S303 (11 drawings).
 5. Sheet M101.
 6. Sheets P101 and P102.

3.03 PLUMBING WORK CONTRACT – D006137

- A. Shall include all the provisions in the General Conditions.
- B. Shall include all the provisions in Division 01 - General Requirements.
- C. Shall include all the provisions in Division 22 - Plumbing.

- D. Shall include providing water service entrance and piping, and sanitary sewer waste piping within the building and to five feet distance from building. Plumbing Contractor shall make connections at water and sanitary sewer piping connections/tie-ins to site utilities.
- E. Shall include all work shown on the following Drawings:
 - 1. Sheets G100 and G101.
 - 2. Sheets P101 and P102.
- F. Shall include as reference the work of other contractors indicated on following Drawings:
 - 1. Sheets C101, C102, C103, C130, C131, C132, C530 and C531 (8 drawings).
 - 2. Sheets L-200, L-201, L-202, L-300, L-301, L-302, L-400, L-401, L-402 and L-500 (10 drawings).
 - 3. Sheets A001, A100, A101, A102, A110, A111, A200, A201, A210, A220, A300, A301, A310, A311, A320, A500, A600, A601, A602, A700, A701, A702 and A800 (23 drawings).
 - 4. Sheets S001, S101, S102, S103, S104, S105, S106, S107, S301, S302 and S303 (11 drawings).
 - 5. Sheet M101.
 - 6. Sheets E001, E101, E102, E103, E104, E600 and E700 (7 drawings).

3.04 MECHANICAL WORK CONTRACT – D006138

- A. Shall include all the provisions in the General Conditions.
- B. Shall include all the provisions in Division 01 - General Requirements.
- C. Shall include all the provisions in Division 23 – Heating, Ventilation, and Air-Conditioning (HVAC).
 - 1. Mechanical work contractor shall connect ductwork to exterior wall louver (by GC).
- D. Shall include all work shown on the following Drawings:
 - 1. Sheets G100 and G101.
 - 2. Sheet M101.
- E. Shall include as reference the work of other contractors indicated on following Drawings:
 - 1. Sheets C101, C102, C103, C130, C131, C132, C530 and C531 (8 drawings).
 - 2. Sheets L-200, L-201, L-202, L-300, L-301, L-302, L-400, L-401, L-402 and L-500 (10 drawings).
 - 3. Sheets A001, A100, A101, A102, A110, A111, A200, A201, A210, A220, A300, A301, A310, A311, A320, A500, A600, A601, A602, A700, A701, A702 and A800 (23 drawings).
 - 4. Sheets S001, S101, S102, S103, S104, S105, S106, S107, S301, S302 and S303 (11 drawings).
 - 5. Sheets P101 and P102.
 - 6. Sheets E001, E101, E102, E103, E104, E600 and E700 (7 drawings).

END OF SECTION

**SECTION 01 21 00
ALLOWANCES**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Include in the contract sum the allowances stated in this Section.
- B. Should the cost be more than the specified amount of the allowance, the contract sum will be adjusted by Order on Contract in accordance with Article 11 of the General Conditions. No Work in excess of the Allowance will be permitted except by Order on Contract. Should the net cost be less than the specified amount of the allowance, the balance will be deducted from the final payment.

1.02 ALLOWANCES FOR CONTINGENCIES

- A. Include in the contract sum the amount indicated below to cover the cost of contingent activities within the scope of the Contract as directed in writing by Field Order. The Field Order will include a description of the Work and a method for determining the cost of such Work.

<u>Allowance Items</u>	<u>Amount</u>
General Construction Contract D006135 Allowance	\$65,400.00
Electrical Work Contract D006136 Allowance	\$7,700.00
Plumbing Work Contract D006137 Allowance	\$9,600.00
Mechanical Work Contract D006138 Allowance	\$1,500.00

- 1. (Allowance to address unforeseen field conditions and/or other changes as directed by the Director's Representative.)
- B. The value of the directed Work under this allowance will be determined by one of the methods indicated in Article 11 of the General Conditions and will be specified in the Field Order.

1.03 SUBMITTALS

- A. Submit all materials required by the written Field Order.
- B. Submit a cost breakdown or proposal for additional work when the Director's Representative determines that a field order is necessary.
- C. Submit an executed Field Order prior to commencement of work covered under that Field Order.
- D. Commence with Field Order Work only after the Field Order has been approved by the Director's Representative

PART 2 - PRODUCTS

2.01 FIELD ORDERS

- A. Where Field Order work is covered under an existing specification, products are to conform to that specification.
- B. Where Field Order work is not covered by an existing specification, products will be specified in the Field Order.

PART 3 - EXECUTION

3.01 FIELD ORDERS

- A. Field Order work is to be executed in accordance with existing specifications or specifications stated in the Field Order.

END OF SECTION

**SECTION 01 23 00
ALTERNATES**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for alternate.
- B. Coordinate pertinent related Work and modify surrounding Work as required to complete the project under each alternate selected by the Director's Representative.
- C. Include in the Base Bid the cost of all Work required by the Contract Documents except the additional cost of the alternates described below.
- D. Refer to Contract Drawings for the locations and scope of alternates.

1.03 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to the base bid amount if NYS Parks 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 for each alternate is the net addition to the Base Bid Amount to add the alternate to the base scope of Work.
 - 2. See Instructions to Bidders for Award of Contract with respect to Alternates.

1.04 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
- 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.

1.05 SCHEDULE OF ADDITIVE ALTERNATES

- A. The following Alternate description is intended to be general in nature and is not intended to list all specific aspects and elements involved. See Contract Drawings for more information.
 - 1. **Add Alternate #1 (Construction Contract D006135 only):** Add all associated delegated design services, materials, labor, equipment, shipping and supplies necessary to furnish, deliver and install the complete patio fabric canopy, its supporting frame, required connections and fasteners at Dining Hall 404, as identified on the Drawings, as specified herein, and as required by job conditions. See **Technical Appendix** found near the end of the Project Manual for reference regarding the existing patio at Dining Hall 404.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
 - 1. Related Requirements:
 - a. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - b. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

1.03 DEFINITIONS

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

1.04 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A or similar or as provided by Director's Representative.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, as necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided

within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.

- j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Action by Director's Representative: If necessary, Director's Representative will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Director's Representative will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Field Order or Change Order, Construction Change Directive, or Director's Representative's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Director's Representative does not issue a decision on use of a proposed substitution within time allocated.

1.05 QUALITY ASSURANCE

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

1.06 PROCEDURES

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

PART 2 - PRODUCTS

2.01 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Director's Representative will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Director's Representative will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Requested substitution provides sustainable design characteristics that specified product provided.
 - c. Substitution request is fully documented and properly submitted.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - f. Requested substitution is compatible with other portions of the Work.
 - g. Requested substitution has been coordinated with other portions of the Work.
 - h. Requested substitution provides specified warranty.
 - i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
 - j. Requested substitution meets the requirements of Article 5 of the General Conditions.
- B. Substitutions for Convenience: Not allowed.

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 26 00
CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

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

1.03 MINOR CHANGES IN THE WORK

- A. Director's Representative will issue a field order authorizing minor changes in the Work, that may or may not involve adjusting the Contract Sum or the Contract Time, on OPRHP Field Order Form as provided by the Director's Representative.

1.04 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Director's Representative will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Director's Representative are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request or 20 days, when not otherwise specified, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: As provided by Director's Representative.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Director's Representative.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times,

and activity relationship. Use available total float before requesting an extension of the Contract Time.

6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: As provided by Director's Representative.

1.05 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Changes Proposal Request, Director's Representative will issue a Change Order for signatures of Owner and Contractor on form to be provided.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 29 00
PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment. Refer to additional information related to payments as per the Contract Submittals Checklist included within the "Other OPRHP Forms" Section of the Project Manual.
- B. Related Requirements:
 - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.03 DEFINITIONS

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

1.04 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Director's Representative at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of NYS Agency.
 - c. NYS Agency's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Provide and arrange schedule of values on form as provided by the Director's Representative.
 - 3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.

- g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
7. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
8. Allowances: Provide a separate line item in the schedule of values for each allowance.
9. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
10. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
11. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.05 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Director's Representative and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Submit Application for Payment to Director's Representative by the twenty-fifth of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 1. Submit draft copy of Application for Payment seven days prior to due date for review by Director's Representative.
- C. Application for Payment Forms: Use NYS OPRHP "Contractor's Monthly Activity Report and Application for Payment" as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form and execute by a person authorized to sign legal documents on behalf of Contractor. Director's Representative will return incomplete applications without action.
 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 3. Include amounts of Field Orders and Change Orders issued before last day of construction period covered by application.
 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.

- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three signed original copies of each Application for Payment to Director's Representative by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 - 5. Products list (preliminary if not final).
 - 6. Submittal schedule (preliminary if not final).
 - 7. List of Contractor's staff assignments.
 - 8. List of Contractor's principal consultants.
 - 9. Initial progress report.
 - 10. Report of preconstruction conference.
- H. Application for Payment at Substantial Completion: After Director's Representative issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements (as provided by the Director's Representative).
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. Evidence that claims have been settled.
 - 5. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 - 6. Final liquidated damages settlement statement (if required).

7. Acceptance has been acknowledged by the Director's Representative.
- J. Payment by Contractor to Subcontractors and Suppliers
 1. All provisions of Section 139 f of the State Finance Law, Payment on Public Works Projects, paragraph 2, apply. Specific requirements include the following:
 - a. All subcontractors and suppliers are to be paid for material supplied or work performed within 15 days after the Contractor has been paid for this work.
 - b. The Contractor may withhold five percent as a retainage until the work is substantially complete.
 - c. If the subcontractor or supplier is not paid within 15 days, the Contractor is obligated to pay the subcontractor or supplier interest as provided for by State Finance Law.
 - d. Should the contractor not submit a request for payment within 90 days after the contract work is substantially complete, all payments to subcontractors and/ or suppliers must be made by the Contractor.
 - e. Parks is not obligated to pay any subcontractor or supplier or to ensure that payment of money due to a subcontractor or supplier, from the Contractor for work performed on this project, is made.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 00
PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Information (RFIs).
 - 4. Project meetings.
 - 5. Related Requirements:
- B. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
- C. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
- D. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.03 DEFINITIONS

- A. RFI: Request from Owner (or Director's Representative) or Contractor seeking information required by or clarifications of the Contract Documents.

1.04 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Use form as provided by Director's Representative.
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. 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, and by each temporary telephone. Keep list current at all times.

1.05 GENERAL COORDINATION PROCEDURES

- A. Coordination: Contractor shall coordinate its construction operations with those of subcontractors and OPRHP to ensure efficient and orderly installation of each part of the Work. Contractor shall coordinate its operations with operations, included in different Sections, 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.

1.06 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.
- B. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
 - 1. File Preparation Format: Same digital data software program, version, and operating system as original Drawings.
 - 2. File Submittal Format: Submit or post coordination drawing files using format same as file preparation format.
 - 3. Director's Representative will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Director's Representative makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.

1.07 REQUESTS FOR INFORMATION (RFI'S)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI using form provided by the Director's Representative.
 - 1. Director's Representative will return RFIs submitted to Director's Representative by other entities controlled by Contractor with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Director's Representative.
 - 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.
- C. RFI Forms: NYSOPRHP OPR-103.
 - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Action by Director's Representative: Director's Representative will review each RFI, determine action required, and respond. Allow seven working days for response from Director's Representative for each RFI. RFIs received by Director's Representative 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 coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Director's Representative's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
- 2. Director's Representative's action may include a request for additional information, in which case Director's Representative's time for response will date from time of receipt of additional information.
- 3. Director's Representative'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 Division 01 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Director's Representative 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. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Agency and Director's Representative.
 - 4. RFI number including RFIs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Director's Representative's response was received.
- F. On receipt of Director's Representative's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Director's Representative within seven days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.08 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences 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 of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Director's Representative, within three days of the meeting.
- B. Preconstruction Conference: Director's Representative will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Director's Representative.
 - 1. Conduct the conference to review responsibilities and personnel assignments.
 - 2. Attendees: Authorized representatives of Owner and Director's Representative, 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. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.

- f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - l. Preparation of record documents.
 - m. Use of the premises and existing building.
 - n. Work restrictions.
 - o. Working hours.
 - p. Owner's occupancy requirements.
 - q. Responsibility for temporary facilities and controls.
 - r. Procedures for moisture and mold control.
 - s. Procedures for disruptions and shutdowns.
 - 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.
4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at biweekly intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner and Director's Representative, 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.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Resolution of component conflicts.
 - 4) Status of submittals.
 - 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: Entity responsible for conducting the meeting 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. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 32 00
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Startup construction schedule.
 - 2. Contractor's construction schedule.
 - 3. Construction schedule updating reports.
 - 4. Daily construction reports.
 - 5. Material location reports.
 - 6. Site condition reports.
 - 7. Special reports.
- B. Related Requirements:
 - 1. Section 01 33 01 "Submittal Procedures" for submitting schedules and reports.
 - 2. Section 01 40 00 "Quality Requirements" for submitting a schedule of tests and inspections.

1.03 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 Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- 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 connected chain of interdependent 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 successor activity.
 - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.04 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file, where indicated.
 - 2. PDF electronic file.
- B. Startup construction schedule.

- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- D. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 - 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 the Notice to Proceed until most recent Application for Payment.
- E. Construction Schedule Updating Reports: Submit with Applications for Payment.
- F. Daily Construction Reports: Submit at weekly intervals.
- G. Material Location Reports: Submit at weekly intervals.
- H. Site Condition Reports: Submit at time of discovery of differing conditions.
- I. Special Reports: Submit at time of unusual event.
- J. Qualification Data: For scheduling consultant.

1.05 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Director's Representative's request.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section 01 31 00 "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 submittal requirements and procedures.
 - 7. Review time required for review of submittals and resubmittals.
 - 8. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 9. Review time required for Project closeout and Owner startup procedures, including commissioning activities.
 - 10. Review and finalize list of construction activities to be included in schedule.
 - 11. Review procedures for updating schedule.

1.06 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.

2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.01 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. 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.
 - a. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1) Activity Duration: Define activities so no activity is longer than 20days, unless specifically allowed by Director's Representative.
 - 2) Procurement Activities: Include procurement process activities for the following 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) Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 - 4) Startup and Testing Time: Include no fewer than 15 days for startup and testing.
 - 5) Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Director's Representative's and Construction Manager's administrative procedures necessary for certification of Substantial Completion.
 - 6) Punch List and Final Completion: Include not more than 30days for completion of punch list items and final completion.
 - b. 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.
 - 2) Work under More Than One Contract: Include a separate activity for each contract.
 - 3) Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 - 4) Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 5) Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 6) Work Restrictions: Show the effect of the following items on the schedule:
 - (a) Coordination with existing construction.
 - (b) Limitations of continued occupancies.
 - (c) Uninterruptible services.
 - (d) Partial occupancy before Substantial Completion.
 - (e) Use of premises restrictions.
 - (f) Provisions for future construction.
 - (g) Seasonal variations.
 - (h) Environmental control.
 - 7) Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - (a) Subcontract awards.
 - (b) Submittals.
 - (c) Purchases.

- (d) Mockups.
 - (e) Fabrication.
 - (f) Sample testing.
 - (g) Deliveries.
 - (h) Installation.
 - (i) Tests and inspections.
 - (j) Adjusting.
 - (k) Curing.
 - (l) Building flush-out.
 - (m) Startup and placement into final use and operation.
- 8) Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
 - (a) Structural completion.
 - (b) Temporary enclosure and space conditioning.
 - (c) Permanent space enclosure.
 - (d) Completion of mechanical installation.
 - (e) Completion of electrical installation.
 - (f) Substantial Completion.
- 9) Other Constraints.
- c. 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) Temporary enclosure and space conditioning.
- d. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
 - 1) Unresolved issues.
 - 2) Unanswered Requests for Information.
 - 3) Rejected or unreturned submittals.
 - 4) Notations on returned submittals.
 - 5) Pending modifications affecting the Work and Contract Time.
- e. Recovery Schedule: When periodic update indicates that the Work is 10 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
- f. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
 - 1) Use Oracle P6 operating system.

2.02 STARTUP CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit startup, horizontal, bar-chart-type construction schedule within seven 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.

2.03 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 14 days of date established for the Notice to Proceed.

Base schedule on the startup construction schedule and additional information received since the start of Project. Identify critical activities and the critical path.

- 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 three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.
- C. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.
- D. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:
 - 1. Contractor or subcontractor and the Work or activity.
 - 2. Description of activity.
 - 3. Main 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).
- E. 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.
- F. 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 the 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 day before each regularly scheduled progress meeting.

2.04 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.

6. High and low temperatures and general weather conditions, including presence of rain or snow.
 7. Accidents.
 8. Meetings and significant decisions.
 9. Unusual events (see special reports).
 10. Stoppages, delays, shortages, and losses.
 11. Meter readings and similar recordings.
 12. Emergency procedures.
 13. Orders and requests of authorities having jurisdiction.
 14. Change Orders received and implemented.
 15. Field Orders received and implemented.
 16. Services connected and disconnected.
 17. Equipment or system tests and startups.
 18. Partial completions and occupancies.
 19. Substantial Completions authorized.
- B. Material Location Reports: At weekly intervals, prepare and submit 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 list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
1. Material stored prior to previous report and remaining in storage.
 2. Material stored prior to previous report and since removed from storage and installed.
 3. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit 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.

2.05 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

3.01 CONSTRUCTION SCHEDULING

- A. Each Contract shall provide Startup Construction Schedule, Contractor Construction Schedule, Reports and Special Reports.
- B. The General Construction Contractor shall coordinate, compile, and establish the Overall Construction Schedule which incorporates the construction schedules of all contracts, complying with phasing and completion requirements. The General Construction Contractor shall provide initial overall project schedule within fourteen (14) days after preconstruction meeting.
- C. The General Construction Contractor shall monitor the progress of the work, coordinate the updated schedule information of all Contracts and provide an updated Overall Construction Schedule that identifies progress to date, delayed activities, and critical activities, at each progress meeting.
- D. Contractor's Construction Schedule Updating: At bi-weekly intervals, update schedule to reflect actual construction progress and activities. Issue schedule three days 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 final completion percentage for each activity.
- E. Distribution: Distribute copies of approved schedule to Construction Manager, 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.

END OF SECTION 01 3200

**SECTION 01 3300
SUBMITTALS**

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Other requirements pertaining to submittals are included in the General Conditions and in the various sections of the Specifications.
- B. Contract Closeout: Section 01 77 00.
- C. Submittal Procedures: Section 01 33 01.

1.02 DEVIATIONS FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS

- A. Deviations from the requirements of the Contract Documents will not be allowed unless a request for deviation is made in writing at the time of submission and the specific deviation is approved by the Director's Representative. The request for deviation shall include the reason for the requested deviation.

1.03 SUBSTITUTIONS FOR BRAND NAMED PRODUCTS

- A. Whenever a product is specified by brand name, a substitute brand, equal to that named, may be submitted for approval subject to the requirements of Article 5 of the General Conditions.
- B. Whenever a color or pattern is indicated by a specific manufacturer's name or number, the intent is to communicate the required color or pattern of the material. Other manufacturers' comparable colors or patterns may be submitted for approval as equal.

1.04 WAIVER OF CERTAIN SUBMITTAL REQUIREMENTS

- A. Unless otherwise specified, the requirement to submit product data and samples for approval will be waived for products specified by brand name if the specifically named products are furnished for the Work. In such cases, furnish two copies of required Product Data to the Director's Representative for information only.

1.05 HAZARD COMMUNICATIONS STANDARD

- A. Submit, to facility personnel, material safety data sheets for all hazardous material that will be used, as required by OSHA standards.

1.06 MINORITY AND WOMEN-OWNED BUSINESS UTILIZATION PROGRAM & EQUAL EMPLOYMENT OPPORTUNITY

- A. Each Contractor is required to make "good faith" effort to solicit active participation by enterprises identified in the directory of certified businesses" provided by the Office of Economic Development.
- B. Submit contractor's list of MWBE subcontractors and suppliers (Utilization Program) on forms provided after the bid is accepted and prior to award showing MWBE participation.
- C. If, after good faith efforts are made and MWBE participation goals are not achieved, submit an application for a partial or total waiver of the MWBE participation requirements.
- D. The bid may be disqualified, after a hearing on the record, if the Contractor does not remedy notified deficiencies contained in the MWBE Utilization Plan. Procedures included in Section 313 of Article 15A of the Executive Law will be followed.
- E. Submit contractor's list of MWBE subcontractors and suppliers on forms provided with final payment if no MWBE goals are stated.
- F. Submit cumulative monthly payment statement, Certification of Inactivity on Contract (if appropriate) and Contractor's Monthly Subcontracting/Suppliers Activity Report with each application for payment.
- G. If the amount of the contract will exceed \$25,000, the Contractor is required to submit an EEO Policy Statement and monthly work force utilization reports.

- H. The Contractor agrees to be bound by Section 316 of Article 15A of the Executive Law relating to disputes concerning MWBE utilization and Equal Employment Opportunity.

1.07 CONTRACTOR'S SUBMITTAL FORMS

- A. Submit Detailed Estimate or Schedule of Values, Summary of Subcontractors, Contractor's Submission Schedule, Contractor's Progress Schedule using forms provided with your award letter. Similar forms providing necessary information may be substituted.
- B. Submit a "Request for Information", form OPR 103, whenever a written clarification of an issue is required. This form is to be used on all contracts.

1.08 CONTRACTOR'S APPLICATION FOR PAYMENT

- A. Submit application for payment at the end of each month for all work performed during that month, unless the contract has been certified as inactive. Submit application for final payment only after acceptance has been acknowledged by the Director's Representative.

1.09 CERTIFICATE OF INSURANCE

- A. A certificate of insurance showing conformance with the requirements of Article 19 of the General Contract Conditions shall be submitted using the ACCORD form and naming NYS Office of Parks, Recreation and Historic Preservation as also insured.
- B. Definitions -
 - 1. **Builders Risk** - provides coverage for the insured's interest as well as the interests of others in specified structures while under construction.
 - 2. **Installation Floater** - covers materials and supplies during transit to or installation at a covered job site. Coverage generally ends when the contractor's or purchaser's interest ceases, whichever occurs first.
- C. The Contractor is to furnish builders risk insurance for the value of the contract amount on all contracts involving construction of new buildings or additions to existing buildings. The contractor is to furnish an installation floater policy for the value of the contract on all other contracts including rehabilitation of buildings, site work, utility work and any contract involving the installation of materials or equipment. The insurance certificate must name New York State as also insured.

1.10 CERTIFIED PAYROLLS

- A. Every contractor and subcontractor is to submit copies of certified payrolls to the Director's Representative within thirty days of issuance of its first payroll and every thirty days thereafter as required by Article 8, Section 220 of the NYS Labor Law.

1.11 ADMINISTRATIVE REQUIREMENTS

- A. Identify all submittals by project title and number. Include Contractor's name, date, and revision date. On shop drawings, product data, and samples, also include name of supplier and subcontractor (if any), and applicable specification section number. Stamp each submittal and initial or sign the stamp to certify review and approval of submittal.
- B. If a submittal is based on, or the result of, a change order or field order to the Contract documents include two (2) copies of applicable change order or field order with the submittal.

1.12 SHOP DRAWINGS

- A. Submit six (6) copies of each shop drawing required by the Specifications. Show the information, dimensions, connections and other details necessary to insure that the shop drawings accurately interpret the Contract Documents. Show adjoining construction in such detail as required indicating proper connections. Where adjoining connected construction requires shop drawings or product data, submit such information for approval at the same time so that connections can be accurately checked.
- B. Have shop drawings prepared by a qualified detailer. Shop drawings shall be neatly drawn and clearly legible. Machine-duplicated copies of Contract Drawings will not be accepted as shop drawings.

- C. The Director's Representative will review shop drawings and will return 2 stamped copies. If returned copies are stamped "DISAPPROVED" or "RETURNED FOR CORRECTION", promptly resubmit 6 copies of shop drawings meeting Contract requirements.

1.13 PRODUCT DATA

- A. Submit 6 copies of each item of product data required by the Specifications. Modify product data by deleting information that is not applicable to the project or by marking each copy to identify pertinent products. Supplement standard information, if necessary, to provide additional information applicable to project.
- B. The Director's Representative will review product data and will return 2 stamped copies. If returned copies are stamped "DISAPPROVED" or "RETURNED FOR CORRECTION", promptly resubmit 6 copies of product data meeting Contract requirements.

1.14 SAMPLES

- A. Submit 2 (unless a different number is specified) of each sample required by the Specifications.
- B. Samples will become the property of the State when submitted unless specifically stated otherwise and will not be incorporated in the Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 01
SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
 - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the schedule of values.
 - 2. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
 - 3. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
 - 4. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
 - 5. Division 01 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.03 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Director's Representative'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 Director's Representative'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."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.04 ACTION SUBMITTALS

- A. Submittal Schedule: 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 Director's Representative 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. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final 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.

4. 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 Director's Representative's final release or approval.
 - g. Scheduled date of fabrication.
 - h. Scheduled dates for purchasing.
 - i. Scheduled dates for installation.
 - j. Activity or event number.

1.05 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Transmittal Form: Include with each electronic, paper and physical sample Submittal item or grouping of related items, a completed and signed Submittal Cover Sheet – Form OPR 107A (form provided by the Director's Representative).
- 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. Director's Representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Director's Representative'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 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Director's Representative 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 15 days for review of each resubmittal.
 4. Sequential Review: Where sequential review of submittals by Director's Representative, Owner's consultants, or other parties is indicated, allow 21 days for initial review of each submittal.
 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Director's Representative and to Owner's consultants, allow 15 days for review of each submittal. Submittal will be returned to Director's Representative before being returned to Contractor.
- D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Director's Representative.
 3. Include the following information for processing and recording action taken:
 - a. Project name.

- b. Date.
 - c. Name of Director's Representative.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of subcontractor.
 - g. Name of supplier.
 - h. Name of manufacturer.
 - i. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
 - j. Number and title of appropriate Specification Section.
 - k. Drawing number and detail references, as appropriate.
 - l. Location(s) where product is to be installed, as appropriate.
 - m. Other necessary identification.
4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Director's Representative observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
- a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Director's Representative.
5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Director's Representative will return without review submittals received from sources other than Contractor.
- a. Transmittal Form for Paper Submittals: Use AIA Document G810.
 - b. Transmittal Form for Paper Submittals: Provide locations on form for the following information:
 - 1) Project name.
 - 2) Date.
 - 3) Destination (To:).
 - 4) Source (From:).
 - 5) Name and address of Agency and Director's Representative.
 - 6) Name of Contractor.
 - 7) Name of firm or entity that prepared submittal.
 - 8) Names of subcontractor, manufacturer, and supplier.
 - 9) Category and type of submittal.
 - 10) Submittal purpose and description.
 - 11) Specification Section number and title.
 - 12) Specification paragraph number or drawing designation and generic name for each of multiple items.
 - 13) Drawing number and detail references, as appropriate.
 - 14) Indication of full or partial submittal.
 - 15) Transmittal number.
 - 16) Submittal and transmittal distribution record.
 - 17) Remarks.
 - 18) Signature of transmitter.
- E. 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.

3. 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).
 4. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Director's Representative.
 5. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Director's Representative, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Agency and Director's Representative.
 - d. Name of Contractor.
 - e. Name of firm or entity that prepared submittal.
 - f. Names of subcontractor, manufacturer, and supplier.
 - g. Category and type of submittal.
 - h. Submittal purpose and description.
 - i. Specification Section number and title.
 - j. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - k. Drawing number and detail references, as appropriate.
 - l. Location(s) where product is to be installed, as appropriate.
 - m. Related physical samples submitted directly.
 - n. Indication of full or partial submittal.
 - o. Transmittal number, numbered consecutively.
 - p. Submittal and transmittal distribution record.
 - q. Other necessary identification.
 - r. Remarks.
 6. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- F. Options: Identify options requiring selection by Director's Representative.
- G. 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 Director's Representative on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- H. 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 Director's Representative's action stamp.
- I. 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.
- J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Director's Representative's action stamp.

PART 2 - PRODUCTS

2.01 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. Director's Representative will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Submit electronic submittals via email as PDF electronic files.
 - a. Director's Representative will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 3. Action Submittals: Submit five paper copies of each submittal unless otherwise indicated. Director's Representative will return three copies.
 - 4. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Director's Representative will not return copies.
 - 5. 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 where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- 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.
 - 6. Submit Product Data in the following format:
 - a. Five paper copies of Product Data unless otherwise indicated. Director's Representative will return three copies.
- 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 (215 by 280 mm).
- 3. Submit Shop Drawings in the following format:
 - a. Five opaque copies of each submittal. Director's Representative will retain two copies; remainder will be returned.
- 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. For projects where electronic submittals are required, 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(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Director's Representative 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 two sets of Samples. Director's Representative will retain one 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.
 5. Submit product schedule in the following format:
 - a. Three paper copies of product schedule or list unless otherwise indicated. Director's Representative will return two copies.
- F. Coordination Drawing Submittals: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- H. Application for Payment and Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- K. Maintenance Data: Comply with requirements specified in Division 01 Section "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.

2.02 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 Director's Representative.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, 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.
 2. Prepare delegated-design drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.

PART 3 - EXECUTION

3.01 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 Director's Representative.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Division 01 Section "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.

3.02 ACTION BY DIRECTOR'S REPRESENTATIVE

- A. Action Submittals: Director's Representative will review each submittal, make marks to indicate corrections or revisions required, and return it. Director's Representative will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

- B. Informational Submittals: Director's Representative will review each submittal and will not return it, or will return it if it does not comply with requirements. Director's Representative 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 Director's Representative.
- 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 Director's Representative without action.

END OF SECTION

**SECTION 01 35 00
SPECIAL REQUIREMENTS**

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 31 00 – Project Management and Coordination.
- B. Section 01 40 00 – Quality Requirements.
- C. Section 01 40 90 – Environmental Requirements.
- D. Section 01 50 00 – Temporary Construction Facilities.

1.3 PROTECTION OF HISTORIC AND CULTURAL RESOURCES

- A. Camp Junior (and its existing campground buildings) at Lake Tiorati are contributing resources to Harriman State Park that was previously determined to be eligible for inclusion in the New York State and National Registers of Historic Places.
- B. The design of the construction work of this project has been subject to limited New York's State Historic Preservation Office (SHPO) review because of the significance of the historic architecture at this campground.
- C. 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 historic buildings and site.

1.4 SECURITY REQUIREMENTS

- A. Prevent unauthorized access to the building and work areas by securing openings during non-working hours. Erect temporary construction fences, barriers and appropriate signage to prevent unauthorized access.
- B. During the Work of this Contract, the site will remain open to the public, though the campground will not be occupied by campers. The Contractor shall take every reasonable precaution to protect facility staff and the public from the Work of this Contract, including preventing unauthorized access to ladders, scaffolding and equipment.
- C. Do not diminish the level of life safety during the performance of the Work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. 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.
- C. Related Requirements:
 - 1. Refer to Specifications for specific test and inspection requirements.

1.03 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that the actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Director's Representative.
- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project;

being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.04 CONFLICTING REQUIREMENTS

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

1.05 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Testing Agency Qualifications: 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.
- D. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.06 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed], and not less than five days prior to preconstruction conference. Submit in format acceptable to Director's Representative. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- C. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Director's Representative has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.07 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. 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. Record of temperature and weather 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-inspection.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of technical representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.

1.08 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- 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 installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

1.09 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 2. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.

- B. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- C. Testing Agency 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. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- D. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
- E. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Director's Representative.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
 - a. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Director's Representative's reference during normal working hours.

3.02 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 01 40 90
ENVIRONMENTAL REQUIREMENTS
(THREATENED/ENDANGERED SPECIES)

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This work shall consist of observing and monitoring the construction site for any NY State Endangered, Threatened, or Special Concern species, particularly the NY State Threatened timber rattlesnake, and if discovered, recommending work modifications and/or initiating species relocation as necessary for the protection of the species.
- B. A timber rattlesnake monitor will be required during periods of construction involving building demolition and machinery for ground disturbance activities between April 1 and October 31, inclusive. The General Construction Contractor shall hire a NYS DEC licensed timber rattlesnake monitor (hereinafter referred to as the "Monitor") within the timeframe specified above. The role of the Monitor will be to provide oversight during the disturbance phase of the project to ensure that any timber rattlesnakes encountered in the work area are not harmed by construction activities and are promptly relocated to a safe location in the immediate vicinity of the project. Acceptable release locations will be specified by the NYS OPRHP Regional Biologist and/or Director of Science.
- C. For all other work elements, and for work being undertaken outside of the above stated timing window (April 1- October 31), workers shall be trained on what to do if a rattlesnake is encountered. NYS OPRHP agency staff are available to provide such worker training.
- D. All Contractors shall attend a pre-construction meeting to review the timber rattlesnake encounter plan and reporting guidelines, which will be distributed to all parties during the pre-construction meeting by the NYS OPRHP Regional Biologist (see subsection 3.01 – B).

PART 2 – PRODUCTS

2.01 TOOLS, EQUIPMENT, AND MATERIALS

- A. The General Construction Contractor shall provide all necessary equipment and logistical support to have safe access to all required locations and to enable the Monitor to perform the required work.
- B. Qualifications: The Monitor must have knowledge of timber rattlesnake ecology and safe relocation procedures and be licensed by NYS DEC to handle and move timber rattlesnakes. Proof of qualifications and NYS DEC license is required to be submitted to NYS OPRHP.

PART 3 – EXECUTION

3.01 PREPARATION

- A. The licensed Monitor will review and become familiar with the project manual provided by the NYS OPRHP official representative, including a copy of any NYS DEC conditions, maps of the area, construction plans, and other relevant background information. Once familiar with this information the licensed Monitor will meet in the park with the Director's Representative and NYS OPRHP Regional Biologist and/or Director of Science to become familiar with the park, project areas, and any important habitats.
- B. An approximately 30-minute to one-hour training session will be required for all personnel working on the project. The session will be provided by NYS OPRHP and will introduce construction personnel to timber rattlesnakes and steps to follow if a rattlesnake is encountered during periods of work when machinery is not involved. The Monitor will be required to attend this training as well. This will be an opportunity to be introduced to all personnel involved.

3.02 IMPLEMENTATION

- A. Once construction activities begin, the Monitor shall conduct reconnaissance surveys for timber rattlesnakes within the work area prior to the initiation of any work activities and throughout the workday, including inspecting the areas around all vehicles or construction equipment for the

presence of timber rattlesnakes. If a rattlesnake is found within the work area, the Monitor shall be required to relocate the animal to a previously specified release area/distance as identified by the NYS OPRHP Regional Biologist and/or Director of Science.

- B. Other wildlife found in the work area (e.g., eastern box turtle, northern copperhead), should also be moved to a safe location by the Monitor, as specified by the NYS OPRHP Regional Biologist and/or Director of Science.
- C. All excavated areas will be examined by the Monitor before they are backfilled to ensure that these areas are free of any species of wildlife that may be present.
- D. For timber rattlesnake found on site, basic biological information should be recorded by the Monitor on data sheets supplied by NYS OPRHP (sex, approximate length, color, rattle count) and any photographs, if taken, should be submitted to NYS OPRHP. Other species of interest that are encountered (e.g., eastern box turtle, northern copperhead) should also be noted on the data sheets. When a Monitor is not on site, Incidental rattlesnake encounters and outcomes, will also be reported to OPRHP.

END OF SECTION

SECTION 01 41 00
REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 COMPLIANCE

- A. Comply with applicable regulatory requirements and various codes referenced in this and other sections of these specifications. Where conflicts exist between local, State, and/or Federal regulatory requirements, codes, or these specifications advise the Director's Representative. The Director's Representative will assist in resolving the conflicts to the satisfaction of the regulatory agencies prior to commencing the Work.

1.02 CODES

- A. The referenced codes shall be the date of latest revision in effect at the time of receiving bids, unless the date is given.
- B. Electrical Work: Conform to the requirements of the National Fire Prevention Association (NFPA) standard reference number 70 - the 2017 National Electrical Code (NEC) unless otherwise shown or specified. The Director will be the sole judge of the interpretation of these rules and requirements.

1.03 CODE-REQUIRED SPECIAL INSPECTIONS AND TESTS

- A. As indicated in individual specification sections, Owner shall employ and pay for services of an independent inspection/testing agency to perform specified Special Inspections and/or Testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

1.04 ELECTRICAL INSPECTIONS

- A. General: During and upon completion of the Work, Electrical Work Contractor shall arrange and pay all associated costs for inspections of all electrical work installed under the Electrical Work Contract, in accordance with the Conditions of the Contract.
- B. Inspections Required: As per the codes, laws and regulations of the local and/or state agencies having jurisdiction at the project site.
- C. Inspection Agency: Approved by the local and/or state agencies having jurisdiction at the project site.
- D. Certificates: Submit to Director's Representative all required inspection certificates.
- E. Coordination: Coordinate inspections with the local electric utility.

1.05 LISTINGS

- A. Equipment and materials for which Underwriters' Laboratories, Inc. (UL) provides product listing service, shall be listed and bear the listing mark.
- B. Alternately, ETL Testing Laboratories, Inc. Product Safety Testing Listing is acceptable if the listed product has been tested to the applicable UL Standard.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 42 00
REFERENCES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Director's Representative's action on Contractor's submittals, applications, and requests, "approved" is limited to Director's Representative's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Director's Representative. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.03 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.04 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. [Abbreviations and acronyms not included in this list shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."] The information in this list is subject to change and is believed to be accurate as of the date of the Contract Documents.
 - 1. AAMA - American Architectural Manufacturers Association; www.aamanet.org.

2. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
3. ACI - American Concrete Institute; (Formerly: ACI International); www.concrete.org.
4. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
5. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
6. AF&PA - American Forest & Paper Association; www.afandpa.org.
7. AI - Asphalt Institute; www.asphaltinstitute.org.
8. AIA - American Institute of Architects (The); www.aia.org.
9. AISC - American Institute of Steel Construction; www.aisc.org.
10. AISI - American Iron and Steel Institute; www.steel.org.
11. AITC - American Institute of Timber Construction; www.aitc-glulam.org.
12. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
13. ANSI - American National Standards Institute; www.ansi.org.
14. AOSA - Association of Official Seed Analysts, Inc.; www.aosaseed.com.
15. APA - APA - The Engineered Wood Association; www.apawood.org.
16. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
17. ASCE - American Society of Civil Engineers; www.asce.org.
18. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
19. ASSE - American Society of Safety Engineers (The); www.asse.org.
20. ASTM - ASTM International; www.astm.org.
21. AWI - Architectural Woodwork Institute; www.awinet.org.
22. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
23. AWPA - American Wood Protection Association; www.awpa.com.
24. AWS - American Welding Society; www.aws.org.
25. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
26. CLFMI - Chain Link Fence Manufacturers Institute; www.chainlinkinfo.org.
27. CPA - Composite Panel Association; www.pbmdf.com.
28. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
29. CSA - CSA Group; www.csagroup.com.
30. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
31. CSI - Construction Specifications Institute (The); www.csinet.org.
32. DASMA - Door and Access Systems Manufacturers Association; www.dasma.com.
33. DHI - Door and Hardware Institute; www.dhi.org.
34. FIBA - Federation Internationale de Basketball; (The International Basketball Federation); www.fiba.com.
35. FIVB - Federation Internationale de Volleyball; (The International Volleyball Federation); www.fivb.org.
36. FM Approvals - FM Approvals LLC; www.fmglobal.com.
37. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
38. FSA - Fluid Sealing Association; www.fluidsealing.com.
39. FSC - Forest Stewardship Council U.S.; www.fscus.org.
40. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
41. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
42. ICBO - International Conference of Building Officials; (See ICC).
43. ICC - International Code Council; www.iccsafe.org.
44. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
45. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
46. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
47. IEC - International Electrotechnical Commission; www.iec.ch.
48. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.

49. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
 50. IESNA - Illuminating Engineering Society of North America; (See IES).
 51. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
 52. ISO - International Organization for Standardization; www.iso.org.
 53. LMA - Laminating Materials Association; (See CPA).
 54. LPI - Lightning Protection Institute; www.lightning.org.
 55. MHIA - Material Handling Industry of America; www.mhia.org.
 56. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
 57. MPI - Master Painters Institute; www.paintinfo.com.
 58. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
 59. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
 60. NECA - National Electrical Contractors Association; www.necanet.org.
 61. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
 62. NEMA - National Electrical Manufacturers Association; www.nema.org.
 63. NETA - InterNational Electrical Testing Association; www.netaworld.org.
 64. NFHS - National Federation of State High School Associations; www.nfhs.org.
 65. NFPA - National Fire Protection Association; www.nfpa.org.
 66. NFPA - NFPA International; (See NFPA).
 67. NHLA - National Hardwood Lumber Association; www.nhla.com.
 68. NLGA - National Lumber Grades Authority; www.nlga.org.
 69. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
 70. NSPE - National Society of Professional Engineers; www.nspe.org.
 71. NWFA - National Wood Flooring Association; www.nwfa.org.
 72. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
 73. PIPC - Palisades Interstate Park Commission.
 74. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
 75. RIS - Redwood Inspection Service; www.redwoodinspection.com.
 76. SAE - SAE International; www.sae.org.
 77. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
 78. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
 79. SPIB - Southern Pine Inspection Bureau; www.spib.org.
 80. SSINA - Specialty Steel Industry of North America; www.ssina.com.
 81. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
 82. TPI - Turfgrass Producers International; www.turfgrasssod.org.
 83. UL - Underwriters Laboratories Inc.; www.ul.com.
 84. USAV - USA Volleyball; www.usavolleyball.org.
 85. WASTEC - Waste Equipment Technology Association; www.wastec.org.
 86. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
 87. WDMA - Window & Door Manufacturers Association; www.wdma.com.
 88. WI - Woodwork Institute; www.wicnet.org.
 89. WWPA - Western Wood Products Association; www.wwpa.org.
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
1. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
 2. ICC - International Code Council; www.iccsafe.org.
 3. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the

following list. Information is subject to change and is up to date as of the date of the Contract Documents.

1. EPA - Environmental Protection Agency; www.epa.gov.
 2. OSHA - Occupational Safety & Health Administration; www.osha.gov.
 3. TRB - Transportation Research Board; National Cooperative Highway Research Program; The National Academies; www.trb.org.
- D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. ADA - Americans with Disabilities Act (ADA)/Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities, Available from U.S. Access Board; www.access-board.gov
 2. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
 3. USAB - United States Access Board; www.access-board.gov.
 4. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.
1. DEC - New York State Department of Environmental Conservation; <https://www.dec.ny.gov>.
 2. DOL - New York State Department of Labor; <https://www.labor.ny.gov>.
 3. DOT - New York State Department of Transportation; <https://www.dot.ny.gov>.
 4. OPRHP - New York State Department Office of Parks, Recreation and Historic Preservation; <https://parks.ny.gov>.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 45 00
SPECIAL INSPECTIONS AND STRUCTURAL TESTING

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS:

- A. Special Inspections and Structural Testing shall be in accordance with Chapter 17 of the 2015 International Building Code as amended by New York State (BCNYS).
- B. The program of Special Inspection and Structural Testing 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 of the Owner's quality assurance program and the extent of the Contractor's 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. Reference to standard specifications for the following organizations is intended to specify minimum standards for quality of materials, products, performance of workmanship, and test methods for material and product compliance verification. The latest edition of referenced standard specification(s) shall be used unless the applicable Building Code provides a different referenced edition in which case the Building Code controls.
 - 1. American Society for Testing and Material (ASTM).

1.02 SCHEDULE OF INSPECTIONS AND TESTS:

- A. Required inspections and tests are described in the Statement of Special Inspections provided at the end of this Section, and in the individual specification sections for the items to be inspected or tested.

1.03 QUALIFICATIONS:

- A. The Special Inspector shall be a licensed Professional Engineer, Structural Engineer or as specified in the Statement of Special Inspections and Chapter 17 of the BCNYS, and who is approved by the Code Enforcement Official (CEO).
- B. The Testing Laboratory and individual technicians shall be approved by the CEO.
- C. The Testing Laboratory shall maintain a full time licensed Professional Engineer or Structural 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.
- D. The minimum qualifications for testing agency laboratory personnel, and the minimum technical requirements for equipment and procedures utilized in the testing and inspection of construction and materials used in construction shall comply with ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection, Testing, of Special Inspection, and ASTM E543, "Standard Practices for Agencies Performing Non-Destructive Testing".

1.04 SUBMITTALS:

- A. The Special Inspector and Testing Laboratory shall submit to the CEO 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. The Testing Laboratory shall also submit to the CEO for review, in accordance with ASTM E329, a certificate of accreditation, including the scope of accreditation.
- B. Approved Fabricators: Special Inspections are not required for work done on the premises of a fabricator registered and approved to perform such work without special inspection. See Section 1704.2.5 of the IBCNYS for conditions of approval.
- C. Certificate of Compliance upon completion of fabrication. The "Fabricator's Certificate of Compliance" form is provided with the Statement of Special Inspections.

1.05 CONTRACTOR RESPONSIBILITIES:

- A. The Contractor shall cooperate with the Special Inspector and his agents so that the Special Inspections and testing may be performed without hindrance.
- B. The Contractor shall review the Statement of Special Inspections and shall be responsible for coordinating and scheduling inspections and tests. The Contractor shall notify the Special Inspector or Testing Laboratory at least 5 days 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.
- G. When required by the Statement of Special Inspection's "Quality Assurance Plan" each Contractor responsible for the construction or fabrication of main seismic or wind force resisting systems, designated seismic systems, or seismic or wind resisting components shall submit to the CEO and the Owner a "Statement of Responsibility". If required the Contractor's "Statement of Responsibility" form is provided with the Statement of Special Inspections.

1.06 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.

1.07 STATEMENT OF SPECIAL INSPECTIONS:

- A. The Statement of Special Inspections has been prepared by and will be maintained by the Registered Design Professional in Responsible Charge (RDP).
- B. The Statement of Special Inspections shall be submitted with the application for Building Permit.
- C. The Statement of Special Inspections is included on the Drawings. See Drawing Sheet S001.

1.08 RECORDS AND REPORTS:

- A. Detailed daily reports shall be prepared of each inspection or test and submitted to the Special Inspector. Reports shall be submitted to the Special Inspector within 5 days of the inspection or test. The "Special Inspection Daily Report" form is provided with the Statement of Special Inspections. Daily reports shall include:
 - 1. Project Name and Location,
 - 2. Date of test or inspection,
 - 3. Time of inspection start and end,
 - 4. Type of inspection "Continuous" or "Periodic",
 - 5. Name of inspector or technician,
 - 6. Location of specific areas tested or inspected,
 - 7. Description of test or inspection and results,

8. Applicable ASTM standard(s),
 9. Weather conditions,
 10. Current item(s) of construction needing corrective action,
 11. Previously reported items of construction requiring corrective action that have been corrected,
 12. Previously reported items of construction requiring corrective action that have not been corrected,
 13. Changes to Contract Documents authorized by the RDP,
 14. Engineer's seal and signature.
- B. The Special Inspector shall submit interim reports to the CEO, the Special Inspection Coordinator, the RDP, and the Contractor at the end of each week. The interim report(s) shall include all inspections and test reports received that week along with a completed "Special Inspection Weekly (Interim) Report" form provided with the Statement of Special Inspections.
 - C. Any discrepancies from the Contract Documents found during a Special Inspection shall be immediately reported to the Contractor for correction. If the discrepancies are not corrected, the Special Inspector shall notify the CEO, Special Inspection Coordinator, and the RDP by telephone, email, or fax. Reports shall document all discrepancies identified, exact location, reference to applicable plan sheets, details and specifications and the resolution or corrective action taken.
 - D. The Testing Laboratory shall immediately notify the Special Inspector, Special Inspection Coordinator, the RDP and the Contractor by telephone, email, or fax of any test results that fail to comply with the requirements of the Contract Documents.
 - E. Upon completion of the work requiring Special Inspections, each inspection agency and testing laboratory shall provide a statement to the Special Inspector that all work was completed in conformance with the Contract Documents and that all appropriate inspections and tests were performed.

1.09 FINAL REPORT OF SPECIAL INSPECTIONS:

- A. The "Final Report of Special Inspections" shall be completed by the Special Inspector and submitted to the CEO prior to the issuance of a Certificate of Use and Occupancy. Concurrent with submission of the "Final Report of Special Inspections" to the CEO, the "Final Report of Special Inspections" shall be submitted to the Special Inspection Coordinator, and the RDP. The "Final Report of Special Inspections" form is provided with the Statement of Special Inspections.
- B. The "Final Report of Special Inspections" will certify that all required inspections have been performed and the report will itemize any discrepancies that were not corrected or resolved.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

PART 4 – MEASUREMENT AND PAYMENT

4.01 MEASUREMENT – SPECIAL INSPECTIONS AND STRUCTURAL TESTING:

- A. Measurement for Special Inspections and Structural Testing shall include the cost of all materials, equipment, labor, submittals, and testing as indicated in this Section.

4.02 PAYMENT - SPECIAL INSPECTIONS AND STRUCTURAL TESTING:

- A. The Owner, or the RDP acting as the Owner's Agent, shall employ one, or more Special Inspectors to provide inspections during construction on the types of work listed in the Statement of Special Inspections. The Owner shall be responsible for the cost of all Special Inspections and Structural Testing indicated in the Statement of Special Inspections.
- 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 and/or Testing Laboratory.

- C. The Contractor shall be responsible for the cost of any retesting or reinspection of work that fails to comply with the requirements of the Contract Documents, or as the result of the Contractor scheduling inspection of work not ready for inspection.

END OF SECTION

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide temporary facilities and controls necessary for the Work, unless otherwise indicated.
 - 1. The construction facilities and temporary controls specified to be provided by a particular Contract shall be kept operational by that Contractor for the Work of all related Contracts at all times that Work is being performed by a Contractor.
 - 2. The construction facilities and temporary controls specified to be provided by a particular Contractor shall be installed as soon after award of the Contract as necessary to enable the Work of each Contract to proceed on schedule and shall be maintained until completion of the Work of all related Contracts unless otherwise directed in writing.
 - 3. Any Contractor who requires additions to the construction facilities and temporary controls specified to be provided by another Contractor, shall provide and maintain them.

1.02 TEMPORARY LIGHT AND POWER

- A. Electrical energy for temporary light and power will be available at the Project site only in presently electrified buildings at the site within the limits of existing circuitry.
- B. Temporary lighting as required to perform the work of all contracts shall be provided by the Electrical Work Contractor.
- C. Cabins 202, 209, 224, 225, 226, 227 and 229 are not electrified. Near these cabins and at areas of the site without available electrical power:
 - 1. Electrical energy for temporary lighting and power required for the work of all contracts shall be provided by the Electrical Work Contractor.
- D. At locations where electricity is available nearby, any temporary lighting, wiring and electrical equipment and conductor tie-in connections required for construction purposes shall be provided by the Electrical Work Contractor.
- E. Electrical Work Contractor (EC) shall connect to existing electric utility and tie-in temporary electric service to up to two site office trailers (by GC). EC shall disconnect such temporary electric service connections upon GC de-mobilization from the Site.
- F. All temporary wiring, lighting and equipment must be in conformance with NFPA 70, the 2014 National Electrical Code.

1.03 TEMPORARY WATER

- A. Water for selective demolition and asbestos abatement purposes will NOT be available at the Project site and in the buildings within the limits of work.
- B. General Construction Contractor shall provide and pay for all water required to perform the work of this contract.

1.04 TEMPORARY SANITARY FACILITIES

- A. Sanitary sewer utilities will NOT be available at the project site.
- B. General Construction Contractor: Provide toilet and hand wash/sanitize facilities for Contractors' and subcontractors' employees engaged on the Project, including for employees of other contractors, as well as for Owner's agents. Locate toilet and hand wash/sanitize facilities in coordination with Director's Representative and maintain them in a sanitary condition. Provide the following toilet facilities:

NUMBER OF EMPLOYEES	MINIMUM NUMBER OF FACILITIES*
20 or less	1 toilet
21 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.

1. Provide hand wash/sanitize facilities in same number as toilets and urinals.
2. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
3. Locate sanitary facilities no more than 1000 feet from any work location.
 - a. Exception: Mobile crews with readily available transportation to nearby toilet facilities.
4. Maintain sanitary facilities daily in clean and sanitary condition.
5. At end of construction, return facilities to same or better condition as originally found.

1.05 TEMPORARY HEAT

- A. Temporary heat, if needed/as required for construction purposes, shall be provided by the General Construction Contractor.

1.06 TEMPORARY FIELD OFFICES

- A. General Construction Contractor:
 1. Provide Field Offices: Weathertight, with screened windows, lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack and drawing display table.
 2. Provide separate private office similarly equipped and furnished, for sole use of Owner's Construction Manager, with separate entrance door(s) with new lock(s) and two keys.
 - a. Provide space for Project meetings, with table and chairs to accommodate six (6) persons.
 3. Provide field offices ready for occupancy at time of project mobilization.
 4. Locate offices a minimum distance of 30 feet from existing structures.
 5. Maintain approach walks free of mud, water, and snow.

1.07 PROTECTION OF WORK AND EXISTING PROPERTY

- A. Protect completed Work and existing property during performance of the Work.
- B. Maintain buildings in a watertight condition during performance of the Work.
- C. Provide temporary and removable protection for completed work. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at wall projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces to remain from traffic, dirt, wear, damage, and movement of heavy objects by covering them with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed and roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Protect existing trees and plants during performance of the Work. Do not deposit or store materials around trees or plants. Do not attach guy wires to trees.
- H. Prohibit traffic from landscaped areas.

1.08 WATER CONTROLS

- A. Construction Contractor shall provide and maintain pumping equipment necessary to keep the work areas free from water. Discharge water as directed.

1.09 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.
- C. Furnish and maintain currently-inspected 20-pound capacity multi-class ABC fire extinguisher(s) as required in the immediate vicinities where welding tools or torches are in use.
- D. Do not use flammable liquids, other than those specified, within a building without the written approval from the Commissioner's Representative.

- E. Tarpaulins shall be flameproof and shall be securely anchored when attached to scaffolding or when used to enclose any portion of a building.

1.10 VEHICAL ACCESS AND PARKING

- A. All Contracts:
 - 1. Coordinate access and haul routes with governing authorities and Owner.
 - 2. Park vehicles in areas where directed.
 - 3. Keep designated parking areas and campground roads clear of dirt and debris resulting from the Work.

1.11 SNOW REMOVAL

- A. NYS OPRHP/PIPC will be responsible for snow removal from Tiorati Brook Road (which is normally closed in winter) to the Camp Junior (T-6, T-8 and T-10) campground entrance gate on Tiorati Brook Road.
- B. General Construction Contractor shall be responsible for snow removal from the Tiorati Brook Road entrance gate into and within the site at each work area as required to perform the work of all contracts.

1.12 RUBBISH REMOVAL

- A. All Contracts: Clean up and containerize the rubbish (refuse, debris, waste materials, and removed materials and equipment) resulting from the Work at least once a day and more often if the rubbish interferes with the work of others or presents a hazard. Leave work areas broom clean, except where more stringent cleaning is specified, at the end of each day.
 - 1. Burning of rubbish will not be permitted.
- B. General Construction Contract:
 - 1. Provide common container(s) on site for separated rubbish and recyclable materials generated by all Contracts and locate container(s) where directed.
 - 2. Comply with waste disposal and recycling requirements in Section 01 74 19 "Construction Waste Management and Disposal".

1.13 RELOCATIONS AND REMOVALS

- A. Should a change in location of any facilities and temporary controls be necessary to progress the Work properly, remove and relocate such items as directed.
- B. Remove the temporary facilities and controls when they are no longer required. Restore permanent facilities used for or connected to temporary facilities to their original condition or better.
- C. Clean and repair damage caused by installation or use of temporary work.

1.14 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Final Application for Payment inspection.
- B. Clean and repair damage caused by installation or use of temporary work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Division 01 Section "Substitution Procedures" for requests for substitutions.
 - 2. Division 01 Section "References" for applicable industry standards for products specified.

1.03 DEFINITIONS

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

1.04 ACTION SUBMITTALS

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

1.05 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.
- B. Product Labels: When materials or equipment are specified to conform to ASTM, Federal or other reference specifications, the materials delivered to the site shall bear the manufacturer's printed labels stating that the materials meet the requirements of such referenced specifications.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 6. Protect stored products from damage and liquids from freezing.
 - 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.07 PRODUCT WARRANTIES

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

2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
3. See Divisions 02 through 32 Sections for specific content requirements and particular requirements for submitting special warranties.

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

PART 2 - PRODUCTS

2.01 PRODUCT SELECTION PROCEDURES

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

- a. that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample", provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 - 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Division 01 Section "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.02 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 73 00
EXECUTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Coordination of Owner-installed products.
 - 6. Progress cleaning.
 - 7. Starting and adjusting.
 - 8. Protection of installed construction.
 - 9. Correction of the Work.
- B. Related Requirements:
 - 1. Division 01 Section "Summary of the Work" for limits on use of Project site.

1.03 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.04 INFORMATIONAL SUBMITTALS

- A. Cutting and Patching Plan: Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:
 - 1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
 - 3. Products: List products to be used for patching and firms or entities that will perform patching work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.
 - a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.
- B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal (If/as required).

1.05 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: When cutting and patching structural elements, notify Director's Representative of locations and details of cutting and await directions from Director's Representative before proceeding. Shore, brace, and support structural elements during

- cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - a. Primary operational systems and equipment.
 - b. Fire-suppression systems.
 - c. Mechanical systems piping and ducts.
 - d. Control systems.
 - e. Communication systems.
 - f. Fire-detection and -alarm systems.
 - g. Electrical wiring systems.
 - h. Operating systems of special construction.
 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety.
 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Director's Representative's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Director's Representative for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
 - a. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1) Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - b. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

- 1) Description of the Work.
 - 2) List of detrimental conditions, including substrates.
 - 3) List of unacceptable installation tolerances.
 - 4) Recommended corrections.
- c. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.
3. Prior to cutting, drilling or removal, investigate both sides of the surface involved. Determine the exact location of structural members.
 4. If unforeseen obstructions are encountered, take precautions necessary to prevent damage and obtain instructions from the Director's Representative before proceeding with the Work.

3.02 PREPARATION

- A. Existing Utility Information: Furnish information to Director's Representative that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Division 01 Section "Project Management and Coordination."

3.03 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Director's Representative promptly.
- B. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- C. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Director's Representative.

3.04 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 1. Do not change or relocate existing benchmarks or control points without prior written approval of Director's Representative. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Director's Representative before proceeding.
 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

3.05 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
 - C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
 - D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
 - E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
 - F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
 - G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
 - H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Director's Representative.
 2. Allow for thermal expansion and contraction.
 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
 - I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
 - J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.06 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary shoring and other supports necessary to prevent settlement or other damage to existing construction which is to remain.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Division 01 Section "Summary."

- F. Existing Utility Services: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. Perform removal of items to remain the property of the State with such care as necessary to prevent damage to these items.
 - 2. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 3. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 4. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 5. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
 - 6. Mechanical and Electrical Services: Cut off pipe or conduit to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - 7. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as
 - 1. practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 2. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 3. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
- I. Reinstallation: Where reinstallation of removed items is necessitated, reinstall them to a condition equal to or better than their condition before removal
- J. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.07 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
 - 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.

2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls."
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- I. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.08 STARTING AND ADJUSTING

- A. Coordinate startup and adjusting of equipment and operating components with requirements in Division 01 Section "General Commissioning Requirements."
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- E. Manufacturer's Field Service: Comply with qualification requirements in Division 01 Section "Quality Requirements."

3.09 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION

SECTION 01 74 19
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Disposing of nonhazardous demolition and construction waste.
- B. Related Requirements:
 - 1. Division 01 Section "Temporary Facilities and Controls" for containerization of rubbish.

1.2 DEFINITIONS

- A. Construction Waste: Building and site improvement materials, rubbish and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials and rubbish resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of recyclable demolition or construction waste and transport of same off site for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction removal items to be turned over to Owner for storage and Owner's subsequent reuse on site or at another facility.
- F. Salvage and Reuse: Recovery of indicated demolition or construction waste/items and subsequent incorporation into the Work, for example, vertical wood board siding.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site / State Property and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste and materials that are to be disposed of or recycled to accumulate on-site.
 - 2. Remove and transport debris and recycling materials in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.
- D. Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION

SECTION 01 77 00
CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Division 01 Section "Execution" for progress cleaning of Project site.
 - 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 3. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.03 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.04 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.05 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.06 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, and similar final record information.
 - 3. Submit closeout submittals specified in individual Divisions 02 through 33 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Divisions 02 through 33 Sections, including tools, spare parts, extra materials, and similar items, and deliver to

location designated by Director's Representative. Label with manufacturer's name and model number where applicable.

- a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Director's Representative's signature for receipt of submittals.
 5. Submit test/adjust/balance records.
 6. Submit sustainable design submittals required in Division 01 sustainable design requirements Section and in individual Division 02 through 32 Sections.
 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Advise Owner of pending insurance changeover requirements.
 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 3. Complete startup and testing of systems and equipment.
 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Division 01 Section "Demonstration and Training."
 6. Advise Owner of changeover in utilities.
 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 9. Complete final cleaning requirements, including touchup painting.
 10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Director's Representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Director's Representative will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Director's Representative, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for final completion.

1.07 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment after the Certificate of Acceptance has been prepared. The application for final payment is to include (or other forms as required and provided by the Director's Representative): The Prime Contractor's Prevailing Rate Certification, Subcontractor's Prevailing Rate certificate, MWBE-3 form and Certified Payrolls.
 2. Certified List of Incomplete Items: Submit certified copy of Director's Representative's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Director's Representative. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.

- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Director's Representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Director's Representative will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.08 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use Form as provided by Director's Representative.
 - 1. Organize list of spaces in sequential order.
 - 2. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Director's Representative.
 - d. Name of Contractor.
 - e. Page number.
 - 3. Submit list of incomplete items in the following format:
 - a. PDF electronic file. Director's Representative will return annotated file.

1.09 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Director's Representative for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.01 MATERIALS

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

1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. General Construction Contract: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove labels that are not permanent.
 - g. Leave Project clean and ready for occupancy.
- C. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls."

3.02 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to the specified condition.
 1. Any apparent defects which appear within one year after the date of physical completion shall be investigated by the Director's Representative. If it is determined that the defect was caused by defective products or improper execution of the specification, the contractor will be directed to correct the defect.

END OF SECTION

SECTION 01 78 23
OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
1. Operation and maintenance documentation directory.
 2. Emergency manuals.
 3. Operation manuals for systems, subsystems, and equipment.
 4. Product maintenance manuals.
 5. Systems and equipment maintenance manuals.
- B. Related Requirements:
1. Division 01 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 2. Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
1. Director's Representative will comment on whether content of operations and maintenance submittals are acceptable.
 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Director's Representative.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.
 2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Director's Representative will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Director's Representative will return copy with comments.
1. Correct or revise each manual to comply with Director's Representative's comments. Submit copies of each corrected manual within 15 days of receipt of Director's

Representative's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to applicable standards.

2.2 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 - 2. Performance and design criteria if Contractor has delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Operating logs.
 - 6. Wiring diagrams.
 - 7. Control diagrams.
 - 8. Piped system diagrams.
 - 9. Precautions against improper use.
 - 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number. Use designations for products indicated on Contract Documents.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
 - 1. Startup procedures.
 - 2. Equipment or system break-in procedures.
 - 3. Routine and normal operating instructions.

4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

2.3 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
 1. Product name and model number.
 2. Manufacturer's name.
 3. Color, pattern, and texture.
 4. Material and chemical composition.
 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 1. Inspection procedures.
 2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Schedule for routine cleaning and maintenance.
 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 1. Include procedures to follow and required notifications for warranty claims.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 1. Standard maintenance instructions and bulletins.
 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 3. Identification and nomenclature of parts and components.
 4. List of items recommended to be stocked as spare parts.

- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original project record documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared record Drawings in Division 01 Section

"Project Record Documents."

- F. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION

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PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
1. Record Drawings.
 2. Record Specifications.
 3. Record Product Data.
 4. Miscellaneous record submittals.
- B. Related Requirements:
1. Division 01 Section "Execution" for final property survey.
 2. Division 01 Section "Closeout Procedures" for general closeout procedures.
 3. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 4. Divisions 02 through 33 Sections for specific requirements for project record documents of the Work in those Sections.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
1. Number of Copies: Submit one set(s) of marked-up record prints.
 2. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit PDF electronic file of scanned marked-up record prints and one of file prints.
 - 2) Director's Representative will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit PDF electronic file of marked-up record prints.
 - 2) Submit record digital data files and three set(s) of record digital data file plots.
 - 3) Plot each drawing file, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one PDF copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy of each submittal.
1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Reports: Submit written report biweekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

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

1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Locations and depths of underground utilities.
 - d. Revisions to routing of piping and conduits.
 - e. Revisions to electrical circuitry.
 - f. Actual equipment locations.
 - g. Duct size and routing.
 - h. Locations of concealed internal utilities.
 - i. Changes made by Change Order or Construction Change Directive.
 - j. Changes made following Architect's written orders.
 - k. Details not on the original Contract Drawings.
 - l. Field records for variable and concealed conditions.
 - m. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
 2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
 3. Refer instances of uncertainty to Architect for resolution.
 4. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
 - a. See Division 01 Section "Submittal Procedures" for requirements related to use of Architect's digital data files.
 - b. Architect will provide data file layer information. Record markups in separate layers.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
 2. Consult Architect for proper scale and scope of detailing and notations required to record

the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.

- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Format: Annotated PDF electronic file with comment function enabled.
 - 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 - 4. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 - 5. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 3. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file.
 - 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as PDF electronic file.
 - 1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION