
RFB-OC177-22

Volume 1 of 2

ORANGE COUNTY DEPARTMENT OF HEALTH

ORANGE COUNTY MEDICAL EXAMINER'S OFFICE

WELLS FARM ROAD
GOSHEN, NEW YORK 10924

ISSUED: November 30, 2022

OWNER

County of Orange
2455-2459 Route 17M
Goshen, NY 10924
Phone: (845) 291-2750

CONSTRUCTION MANAGER

The Palombo Group
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Poughkeepsie, NY 12601
Phone: (845) 868-1239

ARCHITECT/ENGINEER

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Suite 103, 800 Troy Schenectady Road
Latham, NY 12210
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SECTION 00 200**NOTICE TO BIDDERS**

ORANGE COUNTY MEDICAL EXAMINER'S OFFICE
WELLS FARM ROAD
GOSHEN, NY 10924

RFB-OC177-22

Sealed bids for RFB-OC177-22 Orange County Medical Examiner's Office will be received by James P. Burpoe, Commissioner of General Services of the County of Orange, at the office of the Department of General Services, Government Center, 255-275 Main Street, Goshen, New York 10924, up to and including January 06, 2023 at 2:00 P.M. prevailing time. No bids will be received after 2:00 PM. The bids shall be publicly opened and read aloud on January 6, 2023 at 2:15 P.M. in the Community Room of the Government Center, 255-275 Main Street, Goshen, New York 10924. Bids will not be accepted in the Community Room; bids must be delivered to the office of the Department of General Services by the 2:00 P.M. deadline or they will not be considered responsive.

Copies of the Request for Bids may be obtained beginning Wednesday, November 30, 2022 at that office between the hours of 9:00 A.M. and 4:45 P.M., Monday through Friday or through <https://www.orangecountygov.com/577/General-Services.com> under "Current Bids and Proposals". Alternatively, a hard copy of the Request for Bids may be obtained beginning November 30, 2022 at the Office of General Services at the above address between the hours of 8:00 A.M. and 4:00 P.M., Monday through Friday. A deposit of One Hundred Dollars (\$100.00) for each set of plans and specifications will be required from prospective bidders. Checks shall be made payable to the COUNTY OF ORANGE, COMMISSIONER OF FINANCE. Bidders are limited to a maximum purchase of THREE (3) full sets and they will be available on a first-come-first-serve basis.

For mailing of plans and specifications to prospective bidders, a non-refundable mailing fee of \$100 will be required by the County. The mailing fee shall be a separate check from the deposit for plans and specifications and shall be made payable to the County of Orange, Commissioner of Finance. Prospective bidders wishing to obtain documents through other delivery methods (i.e.: UPS, FedEx) shall provide their account number.

A Pre-Bid Conference and site walk will be held at 22 Wells Farm Road, Goshen, NY 10924 at 1:00PM on December 6, 2022. Attendance by prospective Bidders is **strongly recommended**. The conference will begin at the far end of the parking lot near the water tower. All visiting personnel will be responsible for their own personal protective equipment.

Bidders are advised that a Project Labor Agreement (PLA) is made part of the Contract Documents. Bidders are to follow the PLA for wage rate requirements.

This project is funded in whole or in part with American Recovery Plan Act (APRA) State and Local Fiscal Recovery Funds (SLFRF) and compliance with various federal requirements noted throughout the Contract Documents is required.

Awarded Contractors shall be required to provide Performance and Payment Bonds, each equal to 100% of the Contract amount and insurance coverages as specified in the Contract Documents, with the County, Architect and Construction Manager named as additional insureds, and prior to Final Payment, a one-year Maintenance Bond against any defects in workmanship or materials in an amount equal to 10% of the Contract Price at Substantial Completion.

ADDITIONAL BIDDING REQUIREMENTS ARE INCLUDED IN THE INSTRUCTIONS TO BIDDERS.

DATED: November 30, 2022

BY: James P. Burpoe
Commissioner of General Services

SECTION 00 1000**INSTRUCTIONS TO BIDDERS****1.0 PRE-BID CONFERENCE**

- 1.1 A pre-bid conference and site walk will be held at 22 **Wells Farm Road, Goshen, New York, on December 6, 2022 at 1:00 P.M.** Attendance by prospective Bidders is **strongly recommended**. Meetings will begin at the far end of the Emergency Services Center parking lot near the water tower. All visiting personnel will be responsible for their own personal protective equipment.

2.0 RESTRICTED COMMUNICATIONS; PROCUREMENT LOBBYING; ETHICS AND CONFLICTS OF INTEREST

- 2.1 Pursuant to State Finance Law §139-j and §139-k, this solicitation includes and imposes certain restrictions on communications between the Owner and a bidder during the procurement process. A bidder is restricted from contacting other than designated staff from the earliest notice of intent to solicit offers through final award and approval of the Procurement Contract by the County Executive ("restricted period") unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Owner employees are required to obtain certain information when contacted during the restricted period. The designated staff contact is the Commissioner of General Services or his representative, telephone (845) 291-2792, fax (845) 378-2378. Bidders responding to this Advertisement must familiarize themselves with these State Finance Law requirements and will be expected to affirm that they understand and agree to comply on the Bid Form.
- 2.2 **Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)** - Contractors that apply or bid for an award exceeding \$100,000 must file the required certification (see §14.1, item 9 of this Section 00 1000 Instructions to Bidders). Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- 2.3 Both the Local Ethics Law and General Municipal Law Article 18 [Conflicts of Interest of Municipal Officers and Employees are applicable to this Contract and the procurement under which it was awarded. In addition, pursuant to 2 CFR §200.318, no employee, officer, or agent of Owner may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the Owner entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, the Owner may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity (refer to the Local Ethics Law).

3.0 COPIES OF BID DOCUMENTS

- 3.1 Complete sets of Bid Documents shall be used in preparing Bids. Neither Owner, Construction Manager,

nor Architect assumes any responsibilities for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents. Only the documents obtained from the official source should be relied upon.

The only "official source" is through <https://www.orangecountygov.com/577/General-Services.com> under "Current Bids and Proposals". This will lead you to the BidNet website which requires a free registration. You may not receive addenda or important information regarding this RFB if you are not registered as having obtained a copy of this RFB through BidNet. Alternatively, a hard copy of the Request for Bids may be obtained beginning November 30, 2022 at the Office of General Services at the above address between the hours of 8:00 A.M. and 4:00 P.M., Monday through Friday. A deposit of One Hundred Dollars (\$100.00) for each set of plans and specifications will be required from prospective bidders. Checks shall be made payable to the COUNTY OF ORANGE, COMMISSIONER OF FINANCE. Bidders are limited to a maximum purchase of THREE (3) full sets and they will be available on a first-come-first-serve basis. It is strongly recommended that anyone obtaining hard copies through the Office of General Services also register through BidNet, if possible, to ensure receipt of all addenda.

- 3.2 There shall be a \$100 refund for each full set of Bid Documents returned in good condition within 30 days after the date of the Notice of Award.
- 3.3 In making copies of Bid Documents available, Owner, Construction Manager and Architect does so only for the purpose of obtaining Bids on the Work and do not confer permission or a license or grant for any other use.

4.0 EXAMINATION OF BID DOCUMENTS AND SITE

- 4.1 Before submitting a Bid, each Bidder must (a) examine the Bid Documents thoroughly, (b) visit the Site to familiarize itself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize itself with Federal, State and local laws, ordinances, rules and regulations that may, in any manner, affect cost, progress or performance of the Work, and (d) study and carefully correlate Bidder's observations with the requirements of the Bid Documents.
- 4.2 The lands upon which the Work is to be performed and the rights-of-way for access thereto and other lands designated for use by Contractor in performing the Work are identified on the Drawings.
- 4.3 Surveys, investigative and clearance reports (such as investigative reports of subsurface or latent physical conditions, hazardous materials, etc) obtained by Owner or Architect shall be enclosed in the Project Manual and/or provided as completed during the term of the Agreement. These reports are for informational purposes only and are not guaranteed or warranted as to accuracy, completeness or quantities.
- 4.4 The submission of a Bid will constitute an incontrovertible representation by the Bidder that it has complied with every requirement of the Instructions to Bidders and that the Bid Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

5.0 QUESTIONS; INTERPRETATIONS; NON-SPECIFIED PRODUCTS; ADDENDA

- 5.1 All questions about the meaning or intent of the Bid Documents may be submitted until **5:00 P.M.** prevailing time on **December 13, 2022**. Questions submitted prior to this deadline shall be responded to through the Addendum process. Questions submitted after the deadline shall receive no response. Submit questions

in writing on company letterhead with date of question and contact information (name, fax, email, and phone number of person asking question) to: **Generalservices@orangecountygov.com**

5.2 Written clarifications or interpretations will be issued by Addenda before the bid opening date. Only questions answered by written Addenda will be binding. Oral and other clarifications or interpretations will be without legal effect. Addenda will be sent by overnight service and/or e-mail, to all parties recorded as having received the Bid Documents from the official source.

5.3 Each Bidder must be responsible for determining that it has received all Addenda issued and shall acknowledge receipt of all Addenda on the Bid Form.

6.0 BID SECURITY

6.1 Each Bid must be accompanied by Bid Bond or a Cashier's Check issued by a responsible surety, bank or trust company acceptable to the Owner (collectively, "Bid Security"), payable to County of Orange, Commissioner of Finance. The Bid Security shall be in the amount of FIVE PERCENT (5%) of the Bid Price.

6.2 In case a party to whom a Contract is awarded fails to execute a Contract in the form enclosed in the Bid Documents, and/or furnish the required Bonds, and/or Certificate(s) of Insurance within ten (10) days of the Notice of Award, Owner may determine that the Bidder has abandoned the Bid and Contract, and the Bid Security accompanying the Bid Form shall be forfeited to Owner as liquidated damages for such failure and to indemnify said Owner for any loss sustained by Bidders failure to act. After execution by Owner of a Contract and acceptance of the Bonds by Owner, the Bid Security accompanying the Bid Form of the successful Bidder will be returned in accordance with the terms and conditions of the Contract Documents.

7.0 PERFORMANCE, PAYMENT, MAINTENANCE, AND OTHER BONDS

7.1 Performance and Payment Bonds: The Contractor shall furnish Performance and Payment Bonds in an amount equal to ONE HUNDRED PERCENT (100%) of the total Contract Price as security for the faithful performance of this Contract, and for the payment of all persons performing labor or furnishing materials in connection with this Contract.

7.2 Maintenance Bond: Upon application for Final Payment, the Contractor shall provide the Owner with a Maintenance Bond in the amount of TEN PERCENT (10%) of the total Contract Price at Substantial Completion which shall remain in effect for one year from the date of issue of Final Payment check to Contractor, as a guarantee that the Contractor shall make good any faults or defects in the Work arising from improper or defective workmanship or materials which may appear during that period. The Maintenance Bonds shall be in addition to any other warranties, guarantees or similar obligations called for in the Contract Documents.

7.3 Acceptable Types of Security: Acceptable types of security shall be limited to a Bond in a form satisfactory to the Owner or a Cashier's Check. The surety company for all Bonds must be licensed in the State of New York, has an A.M. Best Rating of A- or better, and appear on the most recent published Department of the Treasury's Listing of Approved Sureties (Department Circular 570) at the time of filing the Bonds.

7.4 Power of Attorney: Attorneys-in-fact who sign Performance or Payment Bonds must file with each bond a certified copy of their Power of Attorney to sign said Bonds.

7.5 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment

of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the Bonds or shall permit a copy to be made.

8.0 CONTRACT TIME

- 8.1 The Contractor agrees and covenants that TIME IS OF THE ESSENCE and the Contract Time shall commence on the date specified in the Contract. The Contractor further agrees that Substantial Completion and Final Completion shall be achieved in the timeframes specified in Section 00 7000A Table 1-1. Liquidated damages as specified in Table 1-1 shall apply for failure to meet Substantial or Final Completion deadlines. If a change order extending the Contract Time is issued, unless otherwise provided in that change order, liquidated damages will apply as in Table 1-1 but to the new dates of Substantial and Final Completion.

9.0 PROJECT LABOR AGREEMENT; PREVAILING WAGE; APPRENTICE TRAINING REQUIREMENTS

- 9.1 This project is subject to a Project Labor Agreement (PLA) that is included in the Contract Documents.
- 9.2 Prevailing Wage Rates, as determined by the New York State Department of Labor and the United States Department of Labor (i.e. Davis Bacon rates), are applicable to this Project. Davis Bacon requirements are not applicable to ARPA-SLFRF funded projects, however, the Act may be applicable if other federal funding sources require it. It is the responsibility of the Contractor, before Bid publication and Bid opening, to request, if necessary, any additional information on Prevailing Wage Rates for those who may be employed for the work under this Bid Document. The Contractor is also responsible for complying with all reporting requirements of the State of New York including, but not limited to, providing a certified payroll with each application of payment.
- 9.3 Pursuant to Labor Law Section 222(2)(e), this Project requires participation in Apprentice Training Programs for any Contract in excess of \$500,000.
- 9.4 Unless otherwise excepted under Orange County Local Law No. 3 of 2019, for any contracts over \$350,000, Bidders are required to have apprenticeship agreements appropriate for the type and scope of work to be performed which are registered with the New York State Commissioner of Labor in accordance with Article 23 of New York State Labor Law. Each apprenticeship programs must have a graduation rate of at least 30% as determined by the New York State Department of Labor.

10.0 SAFETY AND HEALTH REGULATIONS

- 10.1 This Project is subject to, and the Contractor shall apply with, all applicable Federal, State and Local Laws, regulations, ordinances, codes, rules and requirements.
- 10.2 The Contractor shall have a competent person or persons, as may be required under the Federal Occupational Safety and Health Act, on the Site to inspect the Work and to supervise the conformance of the Work with OSHA regulations and any other necessary or applicable health and safety standards and practices.

11.0 NONDISCRIMINATION IN EMPLOYMENT; EEO; MWBE

- 11.1 Contracts for work under this Project will obligate the Contractor and Subcontractors not to discriminate in employment practices.

- 11.2 Compliance with 41 CFR §60-1.4 regarding Equal Employment Opportunity is required see Section 00 5000 Public Improvement Contract §31.3.
- 11.3 Per 2 CFR 200.321, the Owner has, and Contractor and Subcontractors shall, take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Current labor surplus areas include City of Middletown, Town of Monroe and City of Newburgh (see <https://dol.ny.gov/labor-surplus-areas> for more information). Affirmative steps must include:
- a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
 - d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
 - e. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - f. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed above.

12.0 OTHER BID PRICING ISSUES

- 12.1 The prices submitted shall be exclusive of New York state sales and use taxes (or other taxes inapplicable to government entities) and must not include any tax for which the Bidder may claim exemption because of doing business with the County. Unless otherwise indicated in this RFB, prices shall be net, including any applicable transportation and delivery charges fully prepaid by the successful Contractor to the destination indicated in the Bid. No additional (post-bid) freight and/or handling and/or fuel surcharges will be accepted, unless otherwise agreed to in the Contract.
- 12.2 Contractor acknowledges that the Contract Price and detailed schedule for completion of the Work are based on its own knowledge and judgment of the conditions and hazards involved, and not upon any representation of the Owner, Construction Manager or Architect. The Owner, Construction Manager and Architect assume no responsibility for any understanding or representation made by any of their representatives during or prior to execution of this Contract unless such understanding or representations are expressly stated in the Contract and the Contract expressly provides that the responsibility is assumed by Owner, Construction Manager, or Architect. The cost of all of the following will be included in the Contract Price and Contractor shall have full responsibility for:
- .1 Review and checking all such information and data;
 - .2 Locating all Underground Facilities shown or indicated in the Contract Documents;

- .3 Coordination of the Work with the owners of such Underground Facilities during construction; and
 - .4 The safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.
- 12.3 Allowances shall cover the cost to the Contractor of materials and equipment delivered at the Site and required taxes, if any, less applicable trade discounts; Contractor's costs for unloading and handling at the Site, labor, installation costs, overhead, profit and other expenses contemplated for stated Allowance amounts shall be included in the Contract Sum and not in the Allowances.
- 12.4 Compliance with 2 CFR §200.323 and Section 6002 of the federal Solid Waste Disposal Act requiring Procurement of Recovered Materials is required. (See Section 01 6000 Product Requirements §2.1.B.4.a)
- 12.5 Compliance with 2 CFR §200.216 Prohibiting Certain Telecommunications and Video Surveillance Services or Equipment is required. (See Section 01 6000 Product Requirements §2.1.B.4.b)
- 12.6 Compliance with 2 CFR §200.322 regarding Domestic Product Preferences is required. (See Section 01 6000 Product Requirements §2.1.B.4.c)
- 12.7 The previously listed items in Section 12 are examples of provisions that may impact bid pricing. Contractor is responsible for reading the Bid Documents in full to ascertain that it understands and accounts for all cost impacts. The Owner shall assume no liability for and has no obligation to compensate Contractor for failure to consider such impacts in the calculation of bid prices. By submitting a Bid, Contractor certifies that it has read and understood this provision and the rest of the Bid Documents and has submitted pricing in accordance with its own observations, correlations, and investigations of and among the Bid Documents, the Site, the labor market, materials and equipment costs, legal and regulatory requirements, and other pertinent factors.
- 13.0 **BID FORM**
- 13.1 Each Bid shall be submitted on the applicable Bid Forms for the trade(s) bid upon which are included in the Bid Documents. The forms shall be removed and submitted separately.
- 13.2 Bid Forms shall be completed in ink or by typewriter.
- 13.3 Bids by corporations or limited liability company shall be executed in the corporate name by a person duly authorized to sign the bid. Any corporation or limited liability corporation should be properly registered under applicable New York law and show proof that they are authorized to do business in New York State.
- 13.4 Bids by all types of partnerships shall be executed in the partnership name by a person duly authorized to sign the bid. All types of partnerships should be properly registered under applicable New York law and show proof that they are authorized to do business in New York State.
- 13.5 All names shall be typed or printed below the signature.
- 13.6 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

- 13.7 The name, address, fax, email and telephone number to which communications regarding the Bid are to be directed shall be provided on the Bid Form.

14.0 SUBMISSION OF BIDS

- 14.1 Sealed bids for RFB-OC177-22 Orange County Medical Examiner's Office will be received by James P. Burpoe, Commissioner of General Services of the County of Orange, at the office of the Department of General Services, Government Center, 255-275 Main Street, Goshen, New York 10924, up to and including January 6, 2023 at 2:00 P.M. prevailing time. No bids will be received after 2:00 PM. The bids shall be publicly opened and read aloud on January 6, 2023 at 2:15 P.M. in the Community Room of the Government Center, 255-275 Main Street, Goshen, New York 10924. Bids will not be accepted in the Community Room; bids must be delivered to the office of the Department of General Services by the 2:00 P.M. deadline or they will not be considered responsive.
- 14.2 One (1) original (marked as "Original") and five (5) copies of each bid must be submitted on the forms furnished in this Request for Bids and/or addenda address to County of Orange, James P. Burpoe, Commissioner, Department of General Services, PO Box 218, 255-275 Main Street, Goshen, New York 10924. Bids must be enclosed in a sealed opaque envelope and plainly marked with the name and address of the Bidder, the Prime Contract being bid (unless the Project is single-prime) and the RFB number and title. If submitted by mail, the sealed envelope marked as described above and containing the bid shall be enclosed in another envelope with the notation "BID ENCLOSED" on the face and addressed as indicated in the Invitation to Bid. The following documents must also be enclosed with the Bid:
1. Bid Bond – as per §6.0 of the Instructions to Bidders
 2. Bid Form – as per applicable contract(s), SEPARATE bids must be submitted for each contract if bidding on more than one – 1 original and 5 copies of each Bid Form
 3. Subcontractor Approval Form – Section 003500 for any potential subcontractors (make additional copies, if necessary)
 4. Stockholder & Partnership Affidavit – Section 004300
 5. Non-Collusive Affidavit – Section 004800
 6. Contractor's Qualifications Statement – Section 004900
 7. Disclosure of Prior Non-Responsibility Determinations – Section 004950
 8. Iran Divestment Act- Section 00 4951
 9. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
 10. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
 11. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
 12. A minimum of five (5) references for satisfactory completion of work at least equal in size and complexity to the Work proposed.

15.0 RECEIPT OF BIDS; WITHDRAWAL

- 15.1 Sealed Bids will be received at the time and place indicated in the Notice to Bidders as may be modified by Addenda.
- 15.2 Owner, in its sole discretion, may refuse to consider as non-responsive any Bid not prepared or not submitted in accordance with the Bid Documents.

- 15.3 Bidders are cautioned that it is the responsibility of each individual Bidder to assure that its Bid is in the possession of the responsible official or his or her designated alternate prior to the stated time and at the place of opening of the Bid. Owner is not responsible for Bids delayed by mail and/or delivery services of any nature.
- 15.4 Bids may be withdrawn prior to the scheduled time (or authorized postponement thereof) for Bid Opening.
- 15.5 Any Bid received after the specified time for Bid Opening shall not be considered. No Bidder may withdraw its Bid for a period of forty-five (45) calendar days, after the actual date of the Bid Opening, without the consent of the Commissioner of Public Works, solely at the Commissioner's discretion.
- 16.0 LOWEST RESPONSIVE AND RESPONSIBLE BIDDER**
- 16.1 A contract may be awarded to the Lowest Responsive and Responsible Bidder. The term "Lowest Responsive and Responsible Bidder" as used herein shall mean the Bidder whose Total Bid Price is determined by the Owner to be the lowest of those Bidders determined to possess the skill, ability, expertise, experience, qualifications, integrity, and other qualities necessary for the faithful performance of the Work. The Owner may consider Alternate pricing, if any, solely at its discretion, in determining the Low Bidder.
- 16.2 Geothermal Wells Contract & Geothermal Wells Alternate Under GC Contract** – In addition to bids under the Geothermal Wells Contract, the County is seeking ALTERNATE pricing from potential General Construction Contractors for performance of the work under Contract 2 Geothermal Wells Work, to ensure we receive bids for that work. **All General Construction bids must include the ALTERNATE pricing for the Geothermal Work.** If the lowest responsible and responsive bidder for Contract 1 General Construction Work has a TOTAL ALTERNATE PRICE lower than the TOTAL BID PRICE of lowest responsive and responsible bid for Contract 2 Geothermal Wells Work, the Alternate for the Geothermal Wells Work may be awarded to that General Construction bidder ONLY IF that bidder or its proposed subcontractor(s) meet(s) all necessary qualifications and requirements for performance of the Geothermal Wells Work. If that bidder or its proposed subcontractor(s) do(es) not meet all necessary qualifications and requirements, then Geothermal Wells Work will then be awarded to the lowest responsive and responsible bidder for Contract 2 Geothermal Wells Work, even if that low bid is higher than the General Construction bidder's alternate pricing.
- 16.3 Owner reserves the right to reject any and all Bids, to decline to make an award, to waive any and all informalities, to disregard any nonconforming, nonresponsive or conditional Bids, and to act in Owner's best interest.
- 16.4 All Bidders shall complete and submit as part of their Bids the Contractor's Qualifications Statement, and be prepared to submit within five (5) days of Owner's request, written evidence of any additional information and data requested by the Owner to make the determination that the Contractor has the requisite qualifications, in the opinion of the Owner, to perform Work set forth in the Contract Documents.
- 16.5 Bidders may be further investigated by Owner, Construction Manager and Architect to determine if they are responsible, qualified and eligible to perform the Work. The investigation of a Bidder may include, among other factors, whether the organization is adequate in size, is authorized to do business in the jurisdiction where the Project is located, has had sufficient and successful previous experience, and whether available equipment, financial resources, expertise, and other factors are adequate to assure Owner that

the Work will be completed in accordance with the terms of a contract. The amount of other work to which the Bidder is committed may also be considered.

- 16.6 In evaluating Bids, Owner reserves the right to consider the qualifications of only those Bidders whose Bids are in compliance with the prescribed requirements and therefore are considered responsive.
- 16.7 Pursuant to State Finance Law §139-j and §139-k, the Owner is required to make a determination of the responsibility of any Bidder. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a 4-year period the Bidder is debarred from obtaining governmental Procurement Contracts. Bidders must familiarize themselves with these State Finance Law requirements and will be expected to affirm that they understand and agree to comply on the bid form.
- 16.8 Pursuant to 2 CFR §200.180.22 and federal Executive Orders 12549 and 12689, a contract cannot be awarded to a party listed on the federal System for Award Management ("SAM").
- 16.9 Owner reserves the right to reject the Bid of any Bidder that is non-responsive or that the Owner considers non-responsible if they do not possess the qualities set forth herein as evaluated through the Qualifications Statement, Bidder Disclosure of Prior Non-Responsibility Determinations, and any additional information requested, or investigation done by the Owner.

17.0 AWARD AND EXECUTION OF CONTRACT

- 17.1 No Bid shall be withdrawn for a period of forty-five (45) days after Bid Opening without the consent of the Commissioner of General Services, at the Commissioner's sole discretion.
- 17.2 If a contract is to be awarded, Owner If a contract is to be awarded, Owner's Department of General Services will give the Lowest Responsive and Responsible Bidder a Notice of Intent to Award after bid opening and due diligence is performed. This Notice will be followed by a letter from the procuring department transmitting contract documents for signature.
- 17.4 Contractor agrees to execute a contract in the form provided in this RFB or as may be modified in an addendum during the Questions period. Contractor's unwillingness to execute a contract containing the terms and provisions set forth in the contract provided in this RFB, as may be modified by addenda, may result in the Contractor's bid being declared non-responsive by the County.
- 17.5 If this Bid is accepted, Bidder agrees to return an executed Contract in the form noted above, and all applicable insurance certificates, bonds and any other required forms within ten (10) business days of the date of the letter of transmitting contract documents from the procuring department, failure to return all documentation in a timely manner may result in rescission of the intent to award and the County moving to the next lowest responsive and responsible bidder. Bidder may be required to forfeit its Bid Security to Owner as liquidated damages.
- 17.6 Thereafter, upon all required reviews and approvals, the Owner will deliver one fully signed copy to Contractor. The Owner shall incur no obligations, contractual or otherwise, unless and until the Owner both executes the Contract and delivers to the Contractor a written Notice to Proceed.
- 17.7 Unsuccessful bidders shall have their Bid Security checks returned to them within forty-five (45) days of the Bid Opening.

18.0 COMPLIANCE WITH COVID-19 REQUIREMENTS

- 18.1 Contractor shall fully comply, and shall ensure that each individual performing contract services on its behalf fully complies, with all applicable Federal, New York State, County, and Local laws, rules, regulations, directives, orders, guidance, and requirements pertaining to the prevention and control of COVID-19 including, but not limited to, those requiring testing, vaccination, and masking as may be in effect, issued, and/or amended during the contract term.

19.0 SPECIAL NOTICE

- 18.1 Bidders are responsible for reading and seeking clarification of all Bid Documents prior to submitting a bid.

END OF SECTION

SECTION 00 3000**BID FORM FOR
CONTRACT NO. 1 – GENERAL CONSTRUCTION WORK**NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES FOR GENERAL CONSTRUCTION CONTRACT ONLY

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

A. **UNIT PRICE #1 – EXCAVATION AND LEGAL OFF-SITE DISPOSAL OF UNSUITABLE SOILS.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

NOTE: UNIT PRICE IS TO INCLUDE ALL COSTS ASSOCIATED WITH THE EXCAVATION, HAULING AND PROPER LEGAL OFF –SITE DISPOSAL OF THE EXCAVATED UNSUITABLE SOILS.

B. **UNIT PRICE #2 – FURNISH, INSTALL AND COMPACT SUITABLE FILL.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

C. **UNIT PRICE #3 – FURNISH, INSTALL AND COMPACT PROCESSED STONE.**

\$ _____/CY MEASURED AS IN-PLACE YARDAGE.

PART 4 – ALTERNATE FOR GEOTHERMAL WELLS WORK

The County is seeking ALTERNATE pricing from potential General Construction Contractors for performance of the work under Contract 2 Geothermal Wells Work. If the lowest responsible and responsive bidder for Contract 1 General Construction Work has a TOTAL ALTERNATE PRICE lower than the TOTAL BID PRICE of lowest responsive and responsible bid for Contract 2 Geothermal Wells Work, the Alternate for the Geothermal Wells Work may be awarded to that General Construction bidder ONLY IF that bidder or its proposed subcontractor(s) meet(s) all necessary qualifications and requirements for performance of the Geothermal Wells Work. If that bidder or its proposed subcontractor(s) do(es) not meet all necessary qualifications and requirements, then Geothermal Wells Work will then be awarded to the lowest responsive and responsible bidder for Contract 2 Geothermal Wells Work, even if that low bid is higher than the General Construction bidder's alternate pricing.

A. In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

UNIT PRICE #1 – FURNISH AND INSTALL GEOTHERMAL WELL CASING

\$ _____/LF.

B. TOTAL ALTERNATE PRICE

- Base Alternate Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 31 through Division 33, inclusive of any related work in Division 21 through Division 27, plans, and/or specifications that require General Construction Work and Section 010100 – "Summary of Work"

(Amount) \$ _____

- Unit price #1** to furnish and install geothermal well casing 1,000 lineal feet x Unit Price #1
\$ _____/lf =

(Amount) \$ _____

3. SUBTOTAL = SUMS OF ITEMS 1 + 2

(Amount) \$ _____

- 10% of Base Alternate Price (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

5. **TOTAL ALTERNATE PRICE = SUM OF ITEMS 3 AND 4** (Amount) \$ _____

TOTAL ALTERNATE PRICE IN WORDS _____

PART 5 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. **BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT**, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 31 through Division 33, inclusive of any related work in Division 21 through Division 27, plans, and/or specifications that require General Construction Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. **Unit price #1** for the removal and legal off-site disposal of unsuitable soils, measured as in-place yardage 1,000 cubic yards x Unit Price #1 \$ _____ /cy =

(Amount) \$ _____

3. **Unit price #2** to furnish, install, and compact suitable fill measured as in-place yardage 1,000 cubic yards x Unit Price #2 \$ _____ /cy =

(Amount) \$ _____

4. **Unit price #3** to furnish, install and compact processed stone measured as in-place yardage 1,000 cubic yards x Unit Price #3 \$ _____ /cy =

(Amount) \$ _____

6. **SUBTOTAL = SUMS OF ITEMS 1 + 2 + 3 + 4**

(Amount) \$ _____

7. 10% of Base Bid Price (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

8. TOTAL BID PRICE = SUM OF ITEMS 6 AND 7 (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #8, TOTAL BID PRICE.

PART 6 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 7 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3100**BID FORM FOR
CONTRACT NO. 2 – GEOTHERMAL WELLS WORK**NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials, and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents and for the UNIT PRICES listed as follows:

UNIT PRICES shall be add or deduct from listed quantities.

A. **UNIT PRICE #1 – FURNISH AND INSTALL GEOTHERMAL WELL CASING**

\$ _____/LF.

PART 4 – TOTAL BID PRICE

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 31 through Division 33, inclusive of any related work in Division 21 through Division 27, plans, and/or specifications that require General Construction Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. **Unit price #1** to furnish and install geothermal well casing 1,000 lineal feet x Unit Price #1
\$ _____ /lf =

(Amount) \$ _____

3. **SUBTOTAL = SUMS OF ITEMS 1 + 2**

(Amount) \$ _____

4. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

5. **TOTAL BID PRICE = SUM OF ITEMS 3 AND 4** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #5, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3200**BID FORM FOR
CONTRACT NO. 3 – PLUMBING WORK**NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES – Not Used**PART 4 – TOTAL BID PRICE**

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 31 through Division 33, inclusive of any related work in Division 21 through Division 27, plans, and/or specifications that require General Construction Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3300**BID FORM FOR
CONTRACT NO. 4 – HVAC WORK**

NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES – Not Used.**PART 4 – TOTAL BID PRICE**

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 23, inclusive of any related work in other Divisions, plans, and/or specifications that require HVAC Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SECTION 00 3400**BID FORM FOR
CONTRACT NO. 5 – ELECTRICAL WORK**NAME OF CONTRACTOR SUBMITTING BID:

(PLEASE PRINT)

PART 1 – GENERAL

The undersigned declares that the Bid is made without any collusion with any other persons, firms, or corporations; that the Bidder has carefully examined all Bid Documents as prepared by Hyman Hayes Associates, August 24, 2022; that the Bidder has informed itself fully regarding all conditions pertaining to the Work and the place where it is to be performed; that the undersigned has full authority to submit this Bid from the entity on behalf of which he or she is signing; and that with these representations, the undersigned makes this Bid. These prices shall cover all expenses incurred in performing the Work set forth in the Bid Documents and Contract. If a contract is awarded and fully executed, the Bid Documents and Bid Form shall become a part of the Contract.

All Bids shall remain open for forty-five (45) calendar days, after the actual date of the opening of the Bids.

The premiums for all Bonds and/or insurance required shall be paid by Contractor.

The undersigned further agrees that the Bid Security accompanying this Bid shall be forfeited to Owner if the Bidder fails to execute the contract and deliver proof of insurance and bonds in the manner and timeframe stated in the Bid Documents. **Award is conditional upon receipt of such documents in the stated timeframe and Owner reserves the right, but not the obligation, to declare a Bidder who does not comply with the timeframe nonresponsive, rescind the conditional award and proceed to the next Lowest Responsive and Responsible Bidder.**

The undersigned hereby agrees to all obligations and terms contained in the Bid Documents, shall commence on the date specified in the Contract and agrees that the **Substantial and Final Completion Dates shall be as specified in Section 00 7000A Table 1-1** and in accordance with the terms as stated in such Contract. The undersigned agrees to pay Owner liquidated damages in accordance with the provisions for such stated in the Contract Documents, for each day beyond Substantial Completion and/or Final Completion.

PART 2 – ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

The undersigned acknowledges the receipt of addenda:

Addendum #1: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #2: _____
(date received) (Signature of Individual or Officer Signing this Bid)

Addendum #3: _____
(date received) (Signature of Individual or Officer Signing this Bid)

PART 3 – UNIT PRICES – Not Used.**PART 4 – TOTAL BID PRICE**

In accordance with the above understanding, the undersigned proposes to perform the Work, furnish all materials and complete the Work in its entirety in the manner and under the conditions required in the Bid Documents at the prices listed as below. BY SUBMITTING THIS BID THE UNDERSIGNED ACKNOWLEDGES AND AGREES ON BEHALF OF THE BIDDER THAT, as per **Section 01 2000 Sec. 2.1(B)** for Contingency based Work, costs of overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.

1. **Base Bid Price** Lump Sum price for all of the work shown and specified in the Contract Documents and described in Division 00 through Division 13, Division 26 through Division 27, inclusive of any related work in Division 21 through Division 27, plans, and/or specifications that require General Construction Work and Section 010100 – “Summary of Work”

(Amount) \$ _____

2. 10% of Base Bid (Item 1) Contingency: For required changes in the Work to be used at the discretion of the Owner

(Amount) \$ _____

3. **TOTAL BID PRICE = SUM OF ITEMS 1 AND 2** (Amount) \$ _____

TOTAL BID PRICE IN WORDS _____

Amount shall be shown in both words and figures where indicated. In case of discrepancy, the amount shown in words shall govern.

The Award will be made to the Lowest Responsive and Responsible Bidder based upon Item #3, TOTAL BID PRICE.

PART 5 – CERTIFICATION

The complete Bid shall include the following completed documents:

- a. Bid Form – Section 00 3000
- b. Bid Bond – Section 00 4100
- c. Stockholder & Partnership Affidavit – Section 00 4300
- d. Non-Collusion Affidavit – Section 00 4800
- e. Qualifications Statement – Section 00 4900
- f. Disclosure of Prior Non-Responsibility Determinations – Section 00 4950
- g. Iran Divestment Act Certification – Section 00 4951
- h. Disclosure of Contractor-Subcontractor and Substantially Owned-Affiliated Entity Relationships – Section 004952
- i. Section 004955 Byrd Anti-Lobbying Certification (required) and Section 004956 Disclosure (if applicable)
- j. Proof of authorization to do business in New York State (this may be a certificate filed with the Department of State or County Clerk, as applicable to the business entity type)
- k. Corporate Resolution and Seal, as applicable to the business entity type

The undersigned agrees that extra work or omitted work, if any, shall be performed as directed and will be paid for, in accordance with the Contract Documents.

The individual submitting this Bid on behalf of the business entity noted above, certifies under the penalties of perjury by his or her signature below that:

- that this Bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this section, the work “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity;
- he or she is able to furnish labor that can work in harmony with all elements of labor employed or to be employed on the work;
- he or she has read and understood the full Request for Bid;
- he or she is duly authorized to submit the Bid on behalf of the business entity;
- he or she understands and has complied with the requirements of State Finance Law Sections 139-j and 139-k and will continue to do so throughout the Restricted Period; and
- that the business entity submitting this bid, and in the case of a joint bid each party as to its own organization, has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

(Signature of Individual or Corporate Name)

(Date)

(Signature of Corporate Officer – if applicable)

PART 6 – NOTICE

Notices regarding this Bid should be mailed or delivered to:

(Name)

(Title)

(Business Name)

(Business Address)

(City and State)

END OF SECTION

SUBCONTRACTOR APPROVAL FORM

Please indicate the type of trade and business name for all subcontractors anticipated to perform Work under the Contractor for review and approval by the County. Updates may be made during the term of the Contract, at the County's discretion, in accordance with the terms of the Contract. Please attach additional sheets if necessary.

Item	Description & Subcontractor Name	County Approval/ Rejection (initialed by Department administering Contract)
A.	Type of Trade for Subcontractor: _____ Business Name of Subcontractor: _____ _____	Approved ____ Rejected ____
B.	Type of Trade for Subcontractor: _____ Business Name of Subcontractor: _____ _____	Approved ____ Rejected ____
C.	Type of Trade for Subcontractor: _____ Business Name of Subcontractor: _____ _____	Approved ____ Rejected ____
D.	Type of Trade for Subcontractor: _____ Business Name of Subcontractor: _____ _____	Approved ____ Rejected ____
E.	Type of Trade for Subcontractor: _____ Business Name of Subcontractor: _____ _____	Approved ____ Rejected ____

SECTION 00 4100**BID BOND SAMPLE**

KNOW ALL MEN BY THESE PRESENTS, that we,

hereinafter referred to as the "Principal", and

hereinafter referred to as the "Surety" are held and firmly bound to THE COUNTY OF ORANGE, NEW YORK, hereinafter referred to as the "COUNTY", or to its successors and assigns in the penal sum of

Dollars (\$ _____), lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to submit (or has submitted) to the COUNTY the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for:

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said Proposal without the consent of the COUNTY for a period of forty-five (45) days after the opening of bids and in the event of acceptance of the Principal's Proposal by the COUNTY, if the Principal shall:

- (a) Within ten (10) days after notification by the COUNTY, execute the number of multiples provided by the COUNTY and deliver to the COUNTY all the executed counterparts of the Contract in the form set forth in the Contract Documents, in accordance with the proposal as accepted, and
- (b) Furnish a performance bond and separate payment bond, as may be required by the COUNTY, for the faithful performance and proper fulfillment of such Contract, which bonds shall be satisfactory in all respects to the COUNTY and shall be executed by good and sufficient sureties, and
- (c) In all respects perform the agreement created by the acceptance of said Proposal as provided in the Instructions to Bidders, bound herewith and made a part hereof, or if the COUNTY shall reject the aforesaid Proposal, then this obligation shall be null and void; otherwise to remain in full force and effect.

In the event that the Proposal of the Principal shall be accepted and the Contract be awarded to Principal the Surety hereunder agrees subject only to the payment by the Principal of the premium therefore, if requested by the COUNTY, to write the aforementioned performance and payment bonds in the form set forth in the Contract Documents.

It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

There shall be no liability under this bond if, in the event of the acceptance of the Principal's Proposal by the COUNTY, either a performance bond or payment bond, or both, shall not be required by the COUNTY on or before the 30th day after the date on which the COUNTY signs the Contract.

The surety, for the value received, hereby stipulates and agrees that the obligations of the Surety and its bond shall in no way be impaired or affected by any postponements of the date upon which the COUNTY will receive or open bids, or by an extensions of time within which the COUNTY may accept the Principal's Proposal, or by any waiver by the COUNTY of any of the requirements of the Instructions to Bidders, and the Surety hereby waives notice of any such postponements, extensions, or waivers.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this _____ day of _____, _____.

(Seal)

_____(L.S.)
Principal

By: _____

(Seal)

_____(L.S.)
Surety

By: _____

If the Principal is a partnership, the bond should be signed by each of the individuals who are partners.

If the Principal is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES.

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of _____

County of _____ ss:

On this ____ day of _____, _____, before me personally came to me known,
_____ who, being by me duly sworn, did depose and say that
he/she is the _____ of

_____ of
the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said
corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the
directors of said corporation, and that he/she signed his/her name thereto by like order.

Notary Public**ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP**

State of _____

County of _____ ss:

On this ____ day of _____, _____, before me personally appeared
_____ to me known and known to me to be one of the
members of the firm of _____ described in and who executed the
foregoing instrument, and he/she acknowledged to me that he/she executed the same as and for the act and deed
of said firm.

Notary Public**ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL**

State of _____

County of _____ ss:

On this ____ day of _____, _____, before me personally appeared
_____ to me known and known to me to be the person
described in and who executed the foregoing instrument and acknowledged that he/she executed the same.

Notary Public**END OF SECTION**

SECTION 004300**STOCKHOLDER AND PARTNERSHIP INTEREST AFFIDAVIT**

STATE OF _____

COUNTY OF _____

(Name)

(Title)

of the firm of _____

(Firm Name)

being sworn according to law on his or her oath deposes and says that:

I am duly authorized to make this affidavit on behalf of the firm named herein.

The following are the names and addresses of all stockholders or partners in the corporation or partnership who own ten percent (10%) or more of its stock of any class, or of all individual partners in the partnership who own a ten percent (10%) or greater interest therein. If one or more such stockholders or partners is itself a corporation or partnership, the stockholders holding ten percent (10%) or greater interest in the corporation's stock, or the individual partners owning ten percent (10%) or greater interest in the partnership that shall also be listed accordingly. This disclosure shall include names and addresses of every non-corporate stockholder, and individual partner, exceeding the ten percent (10%) ownership criteria.

I hereby certify that the following is the complete list (attach additional sheets as necessary) of all stockholders and/or partners in the corporation(s)/partnership(s) with ten percent (10%) or greater interest herein as set forth above.

By: _____

Title: _____

Notary Public

Subscribed and sworn to before me

This ____ day of _____, 20__

END OF SECTION

SECTION 00 4800**NON-COLLUSIVE AFFIDAVIT**

(a) By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto, certifies as to its own organization under penalty of perjury that to the best of knowledge and belief:

- (1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any bidder, with any competitor;
- (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder, and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;
- (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition;

(b) A bid shall not be considered for award nor shall any award be made where (a)(1)(2) and (3) above have not been complied with; provided however, that, if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where (a)(1)(2) and (3) above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of subparagraph one (a).

Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

COMPANY NAME

SIGNATURE

DATE

PRINT NAME

PRINT TITLE**END OF SECTION**

SECTION 00 4900**CONTRACTOR'S QUALIFICATION STATEMENT**

Please complete in full, typed or in ink. Attach additional pages or supporting documentation as necessary for all questions. Both this questionnaire and the Disclosure of Prior Non-Responsibility Determinations MUST be completed.

1. Company Name: _____

Address of Principal Place of Business:

Street: _____

City, State, Zip: _____

Telephone: _____ Fax: _____

Name of Authorized Contact for this questionnaire: _____

Title: _____ Phone: _____

Email: _____ Fax: _____

2. Former or Other DBA or Trade Name(s), Other Identities, or EIN(s) used in the Past Five (5) Years (Include Business Entity Type, Name, EIN, State or County where filed and indicate active or inactive status. Attach additional pages as necessary):

3. Business Entity Type: _____

Date of Incorporation / Registration / Establishment: _____

If sole proprietorship, years in Business: _____

If general partnership, County formed in (if formed in NY): _____

State Business Entity was formed in, if other than NY: _____

If your business entity is other than a sole proprietorship or general partnership, is it registered to do business in NY? Yes No

Is your business entity a joint venture? Yes No

(If yes, separate Qualifications Statements must be submitted for each entity in the joint venture).

4. Company Resources

4.1 What services does your company provide?

4.2 How many full-time, permanent staff does your firm employ? _____

4.3 What is the average number of employees for the past five (5) years?

2018____ 2019____ 2020____ 2021____ 2022____

4.4 What services does the Company intend to self-perform on this Project?

4.5 What services does the Company intend to subcontract on this Project?

5. Identify each person who is, or has been within the past five (5) years, a Business Entity Official or Principal Owner of 5.0% or more of the entity's shares or one of the five largest shareholders or an officer, a director, partner or proprietor. Joint Ventures provide information for all firms involved.

Name: _____

Title: _____

Percentage Ownership: _____

Employment Status: Current Former

License(s) or Professional Registration(s) at time employed: _____

Name: _____

Title: _____

Percentage Ownership: _____

Employment Status: Current Former

License(s) or Professional Registration(s) at time employed: _____

Name: _____

Title: _____

Percentage Ownership: _____

Employment Status: Current Former

License(s) or Professional Registration(s) at time employed: _____

Name: _____

Title: _____

Percentage Ownership: _____

Employment Status: Current Former

License(s) or Professional Registration(s) at time employed: _____

Name: _____

Title: _____

Percentage Ownership: _____

Employment Status: Current Former

License(s) or Professional Registration(s) at time employed: _____

6. Name(s) and Relationships of Parent Company, Affiliates, Subsidiaries, Partners, include any other entities in which now, or in the past five years, the responding entity or any of the individuals listed in Question 5 either owned 5.0% or more of the shares of or was or is one of the five largest shareholders or an officer or a director, partner or proprietor.

Company _____

Address _____

City, State, Zip _____

Relationship _____

Company _____

Address _____

City, State, Zip _____

Relationship _____

Company _____

Address _____

City, State, Zip _____

Relationship _____

6.1 If a parent company or limited partnership exists, are there any guarantees? Please describe:

7. Financial Status

7.1 Provide a summary of your firm's annual revenues for the past five (5) years and a copy of the annual financial statement for the last year.

7.2 D-U-N-S number, or similar identifier, if available, to reference business credit reporting:

7.3 Banking References

Name of Bank _____
Address: _____
City, State, Zip: _____
Bank Officer: _____

Name of Bank: _____
Address: _____
City, State, Zip: _____
Bank Officer: _____

Name of Bank: _____
Address: _____
City, State, Zip: _____
Bank Officer: _____

7.3 Bonding Information:

Bonding Company: _____
Address: _____
City, State, Zip: _____
Agent Name and Phone Number: _____
Number of years with bonding company: _____
What is the Business Entity's bonding capacity?
Single Project: _____ Aggregate (all projects): _____

7.4 Federal Tax ID Number: _____

7.5 Has there been a change of ownership in the Company within the last three (3) years?

Yes _____ No _____

7.6 During the past seven (7) years, has the Company had any final judgments issued against it with respect to any claim? If yes, provide details:

7.7 During the past seven (7) years, has the Company ever filed for protection under the Federal bankruptcy laws? If yes, provide details.

7.8 Is the Business Entity a certified Minority Owned Business Enterprise, Women Owned Business Enterprise or Disadvantaged Business Enterprise (indicate certifying agency or entity):

8. Extent of Insurance Coverage

8.1 Describe the ability of the Company to comply with 29 CFR 1910 120 and OSHA.

8.2 List the Company's Experience Modification Rate (EMR) for the three (3) most recent years:

Year	Intrastate - NY	Interstate
2020	<hr/>	<hr/>
2021	<hr/>	<hr/>
2022	<hr/>	<hr/>

8.3 List the names, address and telephone numbers for verification of EMR's.

8.4 If the Company does not have an EMR, please explain.

8.5 How long has the Company been covered by its current provider of Worker Compensation Insurance?

8.6 Provide the following information from the Company's OSHA 200 logs. Attach the OSHA 200 logs for the company for the past five (5) years.

	2018	2019	2020	2021	2022
(a) Number of Lost Workday Cases	_____	_____	_____	_____	_____
(b) Number of Restricted Workday Cases	_____	_____	_____	_____	_____
(c) Number of Medical Treatment Cases (not first aid)	_____	_____	_____	_____	_____
(d) Employee Hours Worked Each Year	_____	_____	_____	_____	_____
(e) Total Recordable Frequency Rate	_____	_____	_____	_____	_____

8.7 List any fatalities your Company has had in the last three (3) years. Include location, cause and corrective action.

9. Geographic Operating Areas

10. Experience/Work History

10.1 List the ten most recent construction contracts the Business Entity has COMPLETED. If less than ten, include most recent completed subcontracts on projects up to that number. Include the following information on this list:

- Name of Client
- Client Contact Name and Phone Number
- Name of Project
- Award Date
- Completion Date
- Contract Amount
- Architect or Design Engineer
- Joint Venture name, if applicable
- Indicate if Prime or Subcontractor
- Description of Project – (Include specific details describing the scope and complexity for each project and how that experience is relevant to this project.)

10.2 List ALL current INCOMPLETE construction contracts held by the Business Entity. Include the following information on this list:

- Name of Client
- Client Contact Name and Phone Number
- Name of Project
- Award Date
- Scheduled Completion Date
- Architect or Design Engineer
- Joint Venture name, if applicable
- Indicate if Prime or Subcontractor
- Total Contract Amount
- Amount Subcontracted to Others
- Incomplete Amount
- Description of Project – (Describe the scope and complexity for each project and how that may impact your resources or ability to meet the proposed schedule on this Project.)

10.3 Within the past five (5) years, has the Business Entity, predecessor or affiliate:

a) ever had a contract terminated, suspended, cancelled or been declared in default or breach within the past five (5) years? Yes No If yes, provide details.

b) been a party in a lawsuit or other dispute resolution proceeding, including, without limitation, administrative proceedings or arbitration, within the past five (5) years?
Yes No If yes, provide details.

c) had any judgment or awards against it in the past five (5) years, including specific performance, restitution, or formal monitoring agreements?
Yes No If yes, provide details.

d) been suspended or debarred from any government contract process, been disqualified on any government procurement, or agreed to any voluntary exclusion from bidding or contracting with a government entity? Yes No If yes, provide details.

e) initiated a request to withdraw a bid submitted to a government entity or made any claim of error on a bid submitted to a government entity? Yes No If yes, provide details.

f) ever has a surety called upon to complete any contract whether government or private sector?
Yes No If yes, provide details.

g) had a revocation or suspension of any business or professional permit and/or license?
Yes No If yes, provide details.

h) had a denial, decertification, revocation or forfeiture of a Minority Owned Business Enterprise, Women Owned Business Enterprise or Disadvantaged Business Enterprise certification for other than a change of ownership?
Yes No If yes, provide details.

i) been the subject of a criminal investigation, whether open or closed, or an indictment for any business related conduct constituting a crime under federal, state or local law?

Yes No If yes, provide details.

j) been the subject of an indictment, grant of immunity, judgment or conviction (including entering into a plea bargain) for conduct constituting a crime?

Yes No If yes, provide details.

k) been the subject of any criminal investigation, felony indictment or conviction concerning the formation of, or any business association with, an allegedly false or fraudulent Minority Owned Business Enterprise, Women Owned Business Enterprise or Disadvantaged Business Enterprise?

Yes No If yes, provide details.

l) had a government entity find a willful prevailing wage or supplemental payment violation?

Yes No If yes, provide details.

m) entered into a consent order with the New York State Department of Environmental Conservation, or a federal, state or local government enforcement determination involving violation of federal, state or local environmental laws?

Yes No If yes, provide details.

n) other than disclosed elsewhere in this Qualifications Statement, been the subject of any citations, notices of violations, pending administrative hearings or proceedings or determinations of a violation of:

i) federal, state or local health laws, rules or regulations? Yes No

ii) federal, state or local environmental laws, rules or regulations? Yes No

iii) federal, state or local human rights laws? Yes No

iv) federal, state or local security laws? Yes No

v) unemployment insurance or workers compensation coverage or claim requirements?

Yes No

vi) Employee Retirement Income Security Act (ERISA)? Yes No

If yes to any of the above, provide details.

o) had any liquidated damages assessed over \$25,000? Yes No

If yes, provide details.

n) had any liens, claims or judgments (not including UCC filings, over \$25,000 which remain undischarged or were unsatisfied for more than 90 days?

Yes No If yes, provide details.

10.4 Within the past five (5) years, has any individual previously identified above or any Individual having the authority to sign, execute or approve bids, proposals, contracts or supporting documentation with governmental entities been subject to:

a) a sanction imposed relative to any business or professional license?

Yes No If yes, provide details.

b) a criminal investigation, whether open or closed, or an indictment for any business-related conduct constituting a crime under federal, state or local law?

Yes No If yes, provide details.

c) any misdemeanor or felony charge, indictment or conviction for:

i) any business-related activity including but not limited to fraud, coercion, extortion, bribe or bribe-receiving, giving or accepting unlawful gratuities, immigration or tax fraud, racketeering, mail fraud, wire fraud, price fixing or collusive bidding?; or

ii) any crime, whether or not business-related, the underlying conduct of which related to truthfulness, including but not limited to the filing of false documents or false sworn statements, perjury or larceny?

Yes No If yes, provide details.

d) a debarment from any government contracting process? Yes No

If yes, provide details.

11. Health and Safety Program

11.1 Does the Company have an official Health and Safety Department? Yes No

11.2 Provide a copy of the organization chart for the Company's health and safety department and resumes of key individuals.

11.3 Attach list of any State or Federal Health and Safety citation received in the past three (3) years.

11.4 Would you provide us with a copy of your Corporate Health and Safety Plan/Program if asked?
Yes No

11.5 Are accident reports (OSHA 200) circulated to:

		Monthly	Qtrly	Annually
Employees?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supervisors and/or foreman?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vice President/General Manager?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
President Owner of the Firm?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11.6 Indicate the number of employees by labor category who have undergone OSHA 1910.20 health and safety measures and provide the types of programs and procedures the Company adheres to:

	Labor Category	Number of Employees
Health & Safety Training	_____	_____
Medical Monitoring	_____	_____

11.7 Does the Company conduct field safety inspections? Yes No

If yes, who conducts the inspection (include title) _____

If so, how often? ☐ Weekly ☐ Bi-Weekly ☐ Monthly ☐ As Needed

- 11.8 During foreman performance reviews, does the Company use safety as a criterion for rating purposes? Yes No
- 11.9 Does the Company hold tailgate or tool box safety meetings? Yes No
If so, how often? ☐ Weekly ☐ Bi-Weekly ☐ Monthly ☐ As Needed
- 11.10 Does the Company have a pre-job employee and new hire safety orientation program? Yes No

If yes, does it include instructions on the following:

	Yes	Hrs*	No
Company Safety Policy	_____	_____	_____
Company safety rules, procedures incorporating clients safety rules and regulations	_____	_____	_____
Safety meeting attendance	_____	_____	_____
Work hazard reporting	_____	_____	_____
Injury reporting	_____	_____	_____
Personal protective equipment	_____	_____	_____
1. Head protection	_____	_____	_____
2. Eye protection	_____	_____	_____
3. Hearing protection	_____	_____	_____
4. Respiratory protection	_____	_____	_____
Housekeeping	_____	_____	_____
Fire protection	_____	_____	_____
Driving safety	_____	_____	_____
Toxic substances	_____	_____	_____
First aid	_____	_____	_____
Electrical safety	_____	_____	_____
Rigging safety	_____	_____	_____
Safety belts and lifeline	_____	_____	_____
Scaffolding	_____	_____	_____
Perimeter guarding	_____	_____	_____
Trenching and excavation	_____	_____	_____
Signs, barricades, flagging	_____	_____	_____
Other (specify)	_____	_____	_____

*If yes is marked, provide hours to each employee at each job site.

- 11.11 Does the Company hold specialized safety/training meetings for

New Hires?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Supervisors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Foreman?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Subcontractors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If yes to any of the above, do the meetings include the following instructions:

	Yes	Hrs*	No
Safe work practices	_____	_____	_____
Safety supervisors and enforcement	_____	_____	_____
Tailgate safety meetings	_____	_____	_____
Emergency procedures	_____	_____	_____
Incident reporting	_____	_____	_____
First aid procedures	_____	_____	_____
Accident investigation	_____	_____	_____
New employee orientation	_____	_____	_____
Fire protection and prevention	_____	_____	_____

*If marked yes, provide hours of instructions provided to each new foreman.

11.12 How are accident records and accident summaries kept? How often are they reported?

	Yes	No	Monthly	Annually
Accidents totaled for the entire company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accidents related to the Project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accidents totaled by Project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11.13 How are the costs of individual accidents kept? How often are they reported?

	Yes	No	Monthly	Annually
Costs totaled for entire company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Costs totaled for projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11.14 List any OSHA citations and resolutions during the past three (3) years.

11.15 List any OSHA citations and resolutions during the past three (3) years for any of the Company's proposed major subcontractors.

11.16 Does the Company have a drug/alcohol program? Yes No

11.17 Does the Company have a safety recognition program? Yes No

12. Quality Assurance/Quality Control Program

12.1 Does the Company have an official Quality Assurance/Quality Control (QA/QC) Department?

12.2 Who is the Department Head and to whom does this person report?

12.3 Does the Company have a formal Quality Assurance/Quality Control (QA/QC) Manual or Procedure?
Yes No

12.4 Would the Company provide us with a copy of its Corporate Quality Assurance/Quality Control Manual if asked? Yes No

12.5 What type of QA/QC training does your Company provide for its employees?

12.6 Indicate how your firm ensures project compliance with regulatory and industry codes and standards

13. Additional Information

Attach any additional information which would assist the Owner and its agents to evaluate the Company's qualifications, history, financial standing, safety record, and insurability as it relates to a project of similar scope, complexity, and size to this Project.

14. Indicate whether any information provided herein is believed to be exempt from disclosure under the Freedom of Information Law (FOIL). Note: A determination of whether such information is exempt from FOIL will be made at the time of any request for disclosure under FOIL.

Yes No Indicate question number(s) and basis for FOIL exemption, attaching additional pages as necessary.

15. Certification and Signature of Authorized Representative:

The undersigned: (1) recognizes that this questionnaire is submitted for the express purpose of assisting the County of Orange in making responsibility determinations regarding an award of a contract or approval of a subcontract; (2) recognizes that the County of Orange will rely on information disclosed herein in making responsibility determinations in approving a contract or subcontract; (3) acknowledges that the County of Orange may, in its discretion, by means which it may choose, verify the truth and accuracy of all statements made herein; and (4) acknowledges that intentional submission of false or misleading information may constitute a misdemeanor or felony under New York State Penal Law, may be punishable by a fine and/or imprisonment under Federal Law, and may result in a finding of non-responsibility, contract suspension or contract termination.

The undersigned certifies that he or she:

- is knowledgeable about the submitting Business Entity's business and operations;
- has read and understands all of the questions contained herein;
- has not altered the content of this questionnaire in any manner;
- has reviewed and/or supplied full and complete responses to each question;
- to the best of his or her knowledge, information and belief, confirms that the Business Entity's responses are true accurate and complete, including all attachments, if applicable;
- understands that the County of Orange will rely on the information disclosed herein when entering into a contract with the Business Entity; and
- is under obligation to update the information provided herein to include any material changes to the responses at the time of the bid submission through the contract award notification, and may be required to update the information at the request of the County prior to the award and/or approval of a contract, or during the term of the contract.

Name of Business Entity: _____

Signature: _____

Name: _____

Title: _____

Notary Public

Sworn to before me this ____ day of _____, 20__

END OF SECTION

SECTION 00 4950**DISCLOSURE OF PRIOR NON-RESPONSIBILITY DETERMINATIONS**

See instructions on next page before completing this form.

Name of Individual or Entity Seeking to Enter into the Procurement Contract: _____

Address: _____

Name and Title of Person Submitting this Form: _____

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? No Yes

If Yes, please answer the next questions:

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j?
No Yes

3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? No Yes

4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below and attach additional pages as necessary.

Governmental Entity: _____

Date of Finding of Non-responsibility: _____

Basis of Finding of Non-responsibility: _____

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above names individual or entity due to the intentional provision of false or incomplete information?
No Yes

6. If yes, please provide details below and attach additional pages as necessary.

Governmental Entity: _____

Date of Termination or Withholding of Contract: _____

Basis of Termination or Withholding: _____

Offeror certifies that all information provided to the Governmental Entity with respect to State Finance Law §139-k is complete, true and accurate.

By: _____ Date: _____

Signature

Instructions for Completing the Bidder Disclosure of Prior Non-Responsibility Determinations**Background:**

New York State Finance Law §139-k(2) obligates a Governmental Entity to obtain specific information regarding prior non-responsibility determinations with respect to State Finance Law §139-j. This information must be collected in addition to the information that is separately obtained pursuant to State Finance Law §163(9). In accordance with State Finance Law §139-k, an Offeror must be asked to disclose whether there has been a finding of non-responsibility made within the previous four (4) years by any Governmental Entity due to: (a) a violation of State Finance Law §139-j or (b) the intentional provisions of false or incomplete information to a Governmental Entity. The terms "Offeror" and "Governmental Entity" are defined in State Finance Law §139-k(1). State Finance Law §139-j sets forth detailed requirements about the restrictions on Contacts during the procurement process. A violation of State Finance Law §139-j includes, but is not limited to, an impermissible Contact during the restricted period (for example, contacting a person or entity other than the designated contact person, when such contact does not fall within one of the exemptions).

As part of its responsibility determination, State Finance Law §139-k(3) mandates consideration of whether an Offeror fails to timely disclose accurate or complete information regarding the above non-responsibility determination. In accordance with law, no Procurement Contract shall be awarded to any Offeror that fails to timely disclose accurate or complete information under this section, unless a finding is made that the award of the Procurement Contract to the Offeror is necessary to protect public property or public health safety, and that the Offeror is the only source capable of supplying the required Article of Procurement within the necessary timeframe. See State Finance Law §§139-j(10)(b) and 139-k(3).

Instructions:

The County of Orange includes this disclosure request regarding prior non-responsibility determinations in accordance with State Finance Law §139-k in its solicitation of proposals or bid documents or specifications or contract documents, as applicable, for procurement contracts. The attached form is to be completed and submitted by the individual or entity seeking to enter into a Procurement Contract, Supplemental or Change Order. It shall be submitted with your Bid to the County agency conducting the Governmental Procurement.

This document must accompany each Bid Form, Letter of Interest, or Proposal submitted by all Offerors.

END OF SECTION

SECTION 00 4951**IRAN DIVESTMENT ACT CERTIFICATION**

The Iran Divestment Act of 2012 ("Act"), Chapter 1 of the 2012 Laws of New York, added State Finance Law (SFL), §165-a and General Municipal Law §103-g, effective April 12, 2012. Under the Act, the Commissioner of the New York State Office of General Services ("OGS") developed a list ("Prohibited Entities List") of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). In accordance with SFL § 165-a(3), the Prohibited Entities List may be found on the OGS website at: <http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf>.

Pursuant to General Municipal Law §103-g, by signing below, Bidder certifies as true under the penalties of perjury that:

By submission of this Bid each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each Bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the State Finance Law.

A Bid shall not be considered for award nor shall any award be made where the certification has not been made, provided, however, that if in any case the Bidder cannot make the certification, the Bidder shall so state and shall furnish with the Bid a signed statement which sets forth in detail the reasons therefor. The County may award a contract to a Bidder who cannot make the required certification on a case-by-case basis if:

- (1) The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the person has adopted, publicized, and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
- (2) The County makes a determination that the goods and services are necessary for the County to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

During the term of the Contract, should the County receive information that a person is in violation of the above-referenced certifications, the County will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the County shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the contractor in default.

The County reserves the right to reject any bid, proposal, contract or request for assignment for an entity that appears on the Prohibited Entities List prior to the award or execution of a contract or any renewal thereof, as applicable, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities List after contract award.

BUSINESS NAME

NAME

TITLE

SIGNATURE

DATE

END OF SECTION

SECTION 00 4952**DISCLOSURE OF CONTRACTOR-SUBCONTRACTOR AND
SUBSTANTIALLY OWNED-AFFILIATED ENTITY RELATIONSHIPS**

Effective March 18, 2018, New York State General Municipal Law §103(1-c) and New York State Labor Law §220-b declares contractors, subcontractors and any "substantially owned-affiliated entities" who have been debarred for violations under the federal Davis Bacon Act, pursuant to 40 U.S.C. 3144; the Copeland Act, pursuant to 18 U.S.C. 874 and 40 U.S.C. 3145; or the Contract Work Hours and Safety Standards Act, pursuant to 40 U.S.C. 332; ineligible to bid on or be awarded low bid contracts.

New York State Labor Law §220(5)(g) defines a Substantially Owned-Affiliated Entities to mean:

"...the parent company of the contractor or subcontractor, any subsidiary of the contractor or subcontractor, or any entity in which the parent of the contractor or subcontractor owns more than fifty percent of the voting stock, or an entity in which one or more of the top five shareholders of the contractor or subcontractor individually or collectively also owns a controlling share of the voting stock, or an entity which exhibits any other indicia of control over the contractor or subcontractor or over which the contractor or subcontractor exhibits control, regardless of whether or not the controlling party or parties have any identifiable or documented ownership interest. Such indicia shall include, power or responsibility over employment decisions, access to and/or use of the relevant entity's assets or equipment, power or responsibility over contracts of the entity, responsibility for maintenance or submission of certified payroll records, and influence over the business decisions of the relevant entity."

For a bid to be considered, and to enable the County to perform the required due diligence on potential bidders to determine if they are eligible and therefore responsive, all bidders must disclose all Contractor-Subcontractor relationships that would be involved in the performance of any contract awarded under this RFB, as well as any Substantially Owned-Affiliated Entities of the bidder (i.e. Contractor) and all subcontractor(s), if any.

Please list the legal name of the Bidder/Contractor, any Subcontractor(s), and any Substantially Owned-Affiliated Entities, in addition, please also include any "doing business as" name for each of the foregoing and describe the nature of the relationship (e.g. bidder/contractor, subcontractor, owns 60% of voting stock of contractor, shareholder of subcontractor, partner of contractor, etc.). Attach additional sheets, if necessary.

Entity Name: _____

Nature of Relationship: _____

Entity Name: _____

Nature of Relationship: _____

Entity Name: _____

Nature of Relationship: _____

SECTION 00 4953**SUBCONTRACTOR'S VERIFIED STATEMENT
(SECTION 220-a OF NEW YORK LABOR LAW)**

STATE OF NEW YORK)
COUNTY OF _____)ss.:

_____, being duly sworn, deposes and states:

1. That I am an officer of _____ (hereinafter referred to as "the Subcontractor"), a subcontractor on public contract number _____ (hereinafter "the Contract") and I am duly authorized to make this Verified Statement on behalf of the firm.
2. That I make this Verified Statement in order to comply with the provisions of Section 220-a of New York Labor Law.
3. That on _____, the Subcontractor received from _____, the public improvement contractor/subcontractor that engaged this firm as a subcontractor on the Contract, a copy of the initial/revised schedule of wages and supplements Prevailing Rate Case Number _____ (PRC) specified in the Contract.
4. That the Subcontractor has reviewed such schedule(s) of wages and supplements and agrees to pay the applicable prevailing wages and to pay or provide the supplements specified therein.
5. I have read this Subcontractor's Verified Statement and know the contents thereof; and the same is true to my own knowledge. This Verified Statement is made by me, a person acquainted with the facts of this matter, and is made under penalty of perjury.

SIGNATURE

PRINT NAME

NAME OF SUBCONTRACTOR

TITLE WITH SUBCONTRACTOR

On this ___ day of ___, 20___, before me personally appeared _____, to me known, and known to me to be one of the firm of _____ described in and who executed the foregoing Verified Statement, and he/she thereupon acknowledged to me that he/she executed the same as and for the act and deed of said firm.

Notary Public

If this verified statement is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See New York CPLR Section 2309(c); New York Real Property Law Sections 311 and 312).

END OF SECTION

**CONTRACTOR'S VERIFIED STATEMENT
(SECTION 220-a OF NEW YORK LABOR LAW)**

STATE OF NEW YORK)
COUNTY OF _____)ss.:

_____, being duly sworn, deposes and states:

1. That I am an officer of _____ (hereinafter referred to as "the Contractor") and am duly authorized to make this Verified Statement on behalf of the Contractor on public contract number _____ (hereinafter "the Contract").
2. That the Contractor fully comprehends the terms and provisions of Section 220-a of the Labor Law.
3. That the Contractor hereby files every verified statement required to be obtained by the Contractor from the subcontractors.
4. That, except as herein stated, there are no amounts due and owing from the Contractor to or on behalf of any and all laborers for daily or weekly wages or supplements on account of labor performed upon the work under the Contract. (Set forth below the names of the persons whose wages or supplements are unpaid and the amount due to each or on behalf of each, respectively. If there are none, please write "N/A".)

NAME

AMOUNT

5. That, upon information and belief, except as stated herein, there are no amounts due and owing from the Contractor's subcontractors or the subcontractors of the Contractor's subcontractors to or on behalf of any and all laborers for daily or weekly wages or supplements on account of labor performed upon the work under the Contract. (Set forth below the known names of the persons whose wages or supplements are unpaid and the known amount due to each or on behalf of each, respectively. If there are none known to the Contractor, please write "N/A" and utilize clause 5A below.)

NAME

AMOUNT

- 5A. That the Contractor has no knowledge of amounts due and owing from the Contractor's subcontractors or the subcontractors of the Contractor's subcontractors to or on behalf of any and all laborers for daily or weekly wages or supplements on account of labor performed upon the work under the Contract.

6. In the event it is determined by the Commissioner of Labor that the wages or supplements or both of any employees of the Contractor's subcontractors and subcontractors of the Contractor's subcontractors have not been paid or provided pursuant to the appropriate schedule of wages and supplements, the Contractor shall be responsible for payment of such wages or supplements pursuant to the provisions of Section 223 of New York Labor Law.
7. I have read this Contractor's Verified Statement and know the contents thereof; and the same is true to my own knowledge, except with respect to wages and supplements owing by subcontractors, which is stated upon information and belief, and, with respect to wages and supplements owing by subcontractors, I believe it to be true. This Verified Statement is made by me, a person acquainted with the facts of this matter, and is made under penalty of perjury.

SIGNATURE

PRINT NAME

NAME OF CONTRACTOR

TITLE WITH CONTRACTOR

On this ____ day of ____, 20____, before me personally appeared _____, to me known, and known to me to be one of the firm of _____ described in and who executed the Verified Statement, and he/she thereupon acknowledged to me that he/she executed the same as and for the act and deed of said firm.

Notary Public

If this affidavit is verified by an oath administered by a notary public in a foreign country other than Canada, it must be accompanied by a certificate authenticating the authority of the notary who administers the oath. (See New York CPLR Section 2309(c); New York Real Property Law Sections 311 and 312).

END OF SECTION

SECTION 00 4955**BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION**

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned, _____ certifies, to the best of his or her
[Company]
knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____, certifies or affirms the truthfulness
[Company]

and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

Please check the appropriate box:

_____ No federal or other than federal funds have been used or are planned to be used for lobbying in connection with this application/award/contract.

or

_____ Attached is Standard Form LLL, "Disclosure of Lobbying Activities," which describes the use (past or planned) of other than federal funds for lobbying in connection with this application/award/contract.

[Signature appears on following page.]

Executed this ____ day of _____, 20____

By: _____

(Signature of Executing Official)

(Title of Executing Official)

(Type or Print Name)

END OF SECTION

SECTION 00 5000**AGREEMENT BETWEEN OWNER AND CONTRACTOR**

THIS AGREEMENT, effective on the date signed by the Orange County Executive, is by and between the County of Orange, a New York state municipal corporation, with a principal place of business at 2455-2459 Route 17M, Goshen, New York 10924 ("Owner") and _____, a _____ state duly registered and authorized _____ with a principal place of business at _____ ("Contractor").

Owner and Contractor in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 DEFINITIONS

1.1 Unless otherwise specified in the Contract Documents, definitions are as set forth in §1.1 of Section 00 7000 General Conditions.

1.2 The Request for Bid for this Project is Orange County, New York RFB-OC177-22 Orange County Medical Examiner's Office, including all attachments and addenda.

ARTICLE 2 SCOPE AND CHARACTER OF THE WORK

2.1 This Scope of Work ("Work") shall be as outlined in the Contract Documents which are intended to define, but not limit the Work to be performed. The Work shall include all necessary labor, material, accessories, equipment, hardware, fasteners, tools, layout, engineering, supervision, hoisting, rigging, scaffolding, shop drawings, detailing, packaging, trucking, freight, delivery, permits, insurance, bonding, applicable taxes, temporary and permanent utilities, safety, and Site logistics materials. The Work shall also include staging and all other services required for the complete performance of each Contractor for this Project and in accordance with Contract Documents.

2.2 Contractor shall complete all Work as specified or indicated in the Contract Documents, however, the Work may constitute the whole or a part of the Project and completed or incomplete portions of the Work.

2.3 Unless otherwise expressly provided in the Contract Documents, the Work shall be performed in accordance with the best modern practice utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship and design of the highest quality, to the satisfaction of the Owner.

2.4 Each Contractor acknowledges that the Work includes all items that may be inferred as being required by the Drawings and Specifications and is customarily required and supplied in order to furnish a complete product for its intended use.

2.5 The Contractor shall perform all demolition and selective demolition complete and in accordance with the Contract Documents including, but not limited to, disposal of all furnishings, debris and/or equipment that is not identified otherwise within the Contract Documents if demolition and removal of such items are necessary for the performance of new Work or as directed by the Construction Manager.

2.6 All items identified or implied in the Drawings, Specifications and Addenda shall be performed timely, diligently, and orderly in accordance with the Contract Documents, the overall Project and/or submitted Schedules, and using practices deemed "standard for the industry" for this geographic region and type of construction.

2.7 Each Contractor understands that the Contract Documents depict design intent and that field conditions may vary. Each Contractor is responsible to apply the design intent per the field conditions with any adjustments to the design being brought to the Architect's attention prior to final installation.

2.8 Where materials or equipment are required by the Specifications or the Contract Drawings to conform to standards, specifications, or requirements of organizations, associations, or societies, the current edition or most recent revision of such standards, specifications, or requirements shall be used. Upon request by the Owner, the Contractor shall furnish the manufacturer's written certification that the materials or equipment conform to such standards, specifications, or requirements. Such certifications are not binding or conclusive on the Owner and may be rejected at any time if incorrect, improper, or otherwise unsatisfactory. The Owner's failure to request or reject any certification does not release the Contractor from its full responsibility for the accurate and complete performance of the Work in accordance with the Contract.

2.9 Any approval given by the Owner shall not release the Contractor from its full responsibility for the accurate and complete performance of the Work in accordance with the Contract or from any duty, obligation, or liability imposed upon it by the Contract or from responsibility for injuries to persons or damage to property.

2.10 Any approval given by the Owner pursuant to any provision of the Contract shall be construed merely to mean that at the time the approval is given, the Owner had no reason for objecting. Such approval does not release the Contractor from its full responsibility for the accurate and complete performance of the Work in accordance with the Contract or any duty, obligation, or liability imposed upon it by the Contract or from responsibility for injuries to persons or damage to property.

2.11 Contractor shall render all Work and Extra Work, if any, under this Contract in accordance with applicable provisions of all federal, state, and local laws, rules, and regulations as are in effect at the time such Work and Extra Work, if any, are rendered.

ARTICLE 3 MEANS AND METHOD OF CONSTRUCTION

3.1 Unless otherwise expressly provided in the Contract Drawings, Specifications and Addenda, the Means and Methods of Construction shall be such as the Contractor may choose; subject, however, to the Construction Manager's right to reject the Means and Methods of Construction proposed by the Contractor which, in the opinion of the Construction Manager:

3.1.1 will constitute or create a hazard to the Work, or to persons or property;

3.1.2 will not produce finished Work in accordance with the terms of the Contract; or

3.1.3 will be detrimental to the overall progress of the Project.

3.2 The Construction Manager's approval of the Contractor's Means and Methods of Construction, or the Construction Manager's failure to exercise its right to reject such Means or Methods, shall not relieve the Contractor of its obligation to complete the Work as provided in this Contract; nor shall the exercise of such right to reject create a cause of action for damages.

ARTICLE 4 CONTRACT TIME; LIQUIDATED DAMAGES FOR DELAY

4.1. CONTRACT TIME AND TIME OF COMPLETION. Contractor shall begin the Work in accordance with Section 00 7000A Table 1-1, unless the written consent of the Owner is given to begin at a later date. TIME IS OF THE ESSENCE and Contractor will prosecute the Work without interruption, so that it will be entirely completed and

performed by in accordance with Table 1-1, unless the time is extended by written change order at the sole discretion of the Owner.

4.2 Contractor agrees that the Work shall be performed regularly, diligently and uninterruptedly and at such rate of progress as will insure full completion thereof within the Contract Time and the times stated above. It is expressly understood and agreed, by and between Contractor and Owner that the Contract Time is reasonable for the completion of the Work, and that time is of the essence for all provisions set forth in the Contract Documents.

4.3 LIQUIDATED DAMAGES FOR DELAY. The parties recognize and agree that time is of the essence and the Work shall be accomplished within the time stated in §4.1 and Section 00 7000A Table 1-1 of this Contract. Since actual damages are speculative in nature and not readily ascertainable, liquidated damages shall apply if Contractor is unable to achieve substantial completion by the date agreed upon and through no fault of the Owner, its officers, employees and/or other contractors. Should the Work, including any previously approved change orders, not be substantially completed within the time specified and, unless an extension of time has been granted by the Owner, the Contractor shall forfeit the Liquidated Damages sum indicated in Section 00 7000A Table 1-1, for each and every Day from and after the time during which the Work, including any approved change orders, shall remain unfinished and incomplete. The forfeited sum(s) shall be deemed Liquidated Damages and shall be deducted from the sum agreed to be paid to the Contractor by the Owner under the terms of this Contract or any binding addendum and/or change order. This provision shall not be construed as a penalty. If Completion dates are revised by Change Order, this shall not be construed as a waiver of liquidated damages and liquidated damages shall apply to the revised Completion dates in the Change Order.

ARTICLE 5 CONTRACT SUM & PAYMENT

5.1 Owner will pay Contractor for performance of the Work in accordance with the Contract Documents, in current funds at the Contract Sum agreed upon in the Contractor's Bid Form as may be modified by Change Order. Progress and Final Payments shall be made in accordance with the approved Schedule of Values and terms, conditions, and procedures set forth in the General Conditions as may be modified by the Supplemental Conditions.

5.2 The Owner shall pay, and the Contractor agrees to accept, in full consideration for the Contractor's performance of the Work subject to the terms and conditions of the Contract Documents, the lump sum price or unit prices for which this Contract was awarded, plus the amount required to be paid for any Extra Work ordered by the Owner, less credit for any Omitted Work pursuant to procedures set forth in Article 7 of the General Conditions as may be modified by the Supplemental Conditions.

5.3 A not-to-exceed cost of **\$ 000000** has been established for the performance of the Work. Costs in excess of such not-to-exceed cost, if any, may not be incurred without prior written authorization of the County Executive of the Owner, evidenced only by a written Change Order to this Contract. The Contractor specifically agrees that the Owner will not be responsible for any additional cost or costs in excess of the not-to-exceed cost if the Owner's authorization by the County Executive is not given in writing prior to the performance of any Work or Extra Work giving rise to such excess or additional cost.

5.4 Prompt Payment. Contractor shall pay all subcontractors and suppliers within Seven (7) Days of receipt of payment from Owner (or such other time period as may be provided by General Municipal Law §106-b as may be amended), representing the value of the Work performed and/or materials furnished by the subcontractor and/or supplier and reflecting the percentage of the subcontractor's work completed or the materials provided by supplier in the requisition approved by the Architect and accepted by the Construction Manager and Owner and based upon the actual value of the subcontract or purchase order less an amount necessary to satisfy any claims, liens or judgments against the subcontractor or supplier which have not been suitably discharged and less any retained amount not in excess of the percentage requirements specified in Article 6 of this Agreement.

ARTICLE 6 RETAINED PERCENTAGE

6.1 If this Contract requires 100% performance and payment security then, as further security for the faithful performance of this Contract, the Owner shall deduct, and retain until the Final Completion of the Work, five (5%) percent of the value of Work certified for payment in each partial payment voucher. Final Completion shall include but not be limited to Punch List, warranties and all closeout documentation.

6.2 If this Contract does not require 100% performance and payment security then, as further security for the faithful performance of this Contract, the Owner shall deduct and retain until the Final Completion of the Work, up to ten (10%) percent of the value of Work certified for payment in each partial payment voucher. Final completion shall include but not be limited to Punch List, warranties and all closeout documentation.

6.3 Notwithstanding the foregoing, and in compliance with applicable New York State laws and regulations, the Owner may withhold from any money due under this Contract, a) the amount of any claims made by any person or entity (including but not limited to other contractors or subcontractors), against the Owner or against the Contractor and the Owner as security against the claims or b) other amounts as permitted under New York State law or regulation. Withholding amounts subject to this Article include, but are not limited to:

6.3.1 claims involving an alleged loss, damage, injury, theft, or vandalism which, in the opinion of the Owner, may not be covered by insurance policies, or which, together with previously filed claims, is in excess of the amount payable under such policies;

6.3.2 claims involving an infringement of copyrights, patents or use of patented articles, tools, etc.; or

6.3.3 damages claimed to have been caused directly or indirectly by the failure of the Contractor to perform the Work in strict accordance with this Contract.

6.3.4 any other amounts permissible under New York State law or regulation.

6.4 The Owner, in its discretion, may permit the Contractor to substitute other satisfactory security in lieu of the monies so withheld.

6.5 If an action on such claim is timely commenced and the liability of the Owner, the Contractor, or both, is established by a final judgment of a Court of competent jurisdiction, or if such claim shall have been admitted by the Contractor to be valid, the Owner shall pay such judgment or admitted claim out of the monies retained by the Owner under the provisions of this Article and return the balance, if any, without interest, to the Contractor.

6.6 If at any time before or within Thirty (30) Days after the Work is completed and accepted by the Owner, notice as is described in the New York State Lien Law pertaining to public improvements, is filed by any person claiming to have performed any labor or furnished any material toward the performance or completion of this Contract, the Owner shall retain, from the monies due or to become due under this Contract, the greater of the amount claimed in the notice or any greater percentage permitted under New York State Lien Law, together with the reasonable costs of any action or actions brought or that may be brought to enforce such lien. The Owner shall hold the monies retained until the lien is discharged pursuant to applicable law and regulation.

ARTICLE 7 CHANGES IN THE WORK

7.1 Changes in the Work, including Extra Work and Omitted Work shall be governed by the terms and conditions of Article 7 of the General Conditions as may be modified by the Supplemental Conditions.

ARTICLE 8 ETHICS AND CONFLICTS OF INTEREST.

8.1 Both the Local Ethics Law and General Municipal Law Article 18 [Conflicts of Interest of Municipal Officers and Employees] are applicable to this Contract and the procurement under which it was awarded. In addition, pursuant to 2 CFR §200.318, no employee, officer, or agent of Owner may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the Owner entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, the Owner may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity (refer to the Local Ethics Law).

ARTICLE 9 NEW YORK STATE LABOR LAW REQUIREMENTS; FEDERAL REQUIREMENTS.**9.1 Project Labor Agreement**

Each Contractor is governed by and will adhere to the Project Labor Agreement (PLA) included in the Appendix to the Project Documents.

9.2 Anti-Discrimination Requirements

9.2.1 For all Public Work subject to Article 8 the New York State Labor Law AND all contracts involving manufacturing, sale or distribution of equipment, materials or supplies by Contractor, pursuant to Labor Law §220-e, the Contractor, on behalf of itself and its Subcontractors, hereby agrees:

- .1 that in the hiring of employees for the performance of Work under the contract or any subcontract hereunder, no Contractor, Subcontractor, nor any person acting on behalf of such Contractor or subcontractor, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the Work to which the employment relates;
- .2 that no Contractor, Subcontractor, nor any person on their behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of Work under the contract on account of race, creed, color, disability, sex or national origin;
- .3 that there may be deducted from the amount payable to the Contractor by the [County], a penalty of fifty dollars (\$50) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of the contract;
- .4 that the contract may be cancelled or terminated by the County, and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this subsection; and
- .5 the provisions of this [sub]section covering every contract for or on behalf of the County for the manufacture, sale or distribution of materials, equipment or supplies shall be

limited to operations performed within the territorial limits of the State of New York.

9.2.2 For all Building Service work subject to Article 9 of the New York State Labor Law, pursuant to Labor Law §239, the Vendor, on behalf of itself and its subcontractors, agrees:

- .1 that in the hiring of employees for the performance of Work under the contract or any subcontract thereunder within the territorial limits of the State of New York, no Contractor, subcontractor, nor any person acting on behalf of such Contractor or subcontractor, shall by reason of race, creed, color, national origin, age, sex or disability, discriminate against any citizen of the State of New York who is qualified and available to perform the Work to which the employment relates;
- .2 that no Contractor, subcontractor, nor any person on behalf of Contractor or its subcontractors shall, in any manner, discriminate against or intimidate any employee hired for the performance of Work under the contract on account of race, creed, color, national origin, age, sex or disability;
- .3 that there may be deducted from the amount payable to Contractor by the County under the contract a penalty of fifty dollars (\$50.00) for each person for each day during which such person was discriminated against or intimidated in violation of the provisions of the contract;
- .4 that the contract may be cancelled or terminated by the County, and all moneys due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of this subsection of the contract.

9.3 Provisions Applicable to Article 8 Work, if Any

To the extent the Work is subject to Article 8 of the New York State Labor Law, the Contractor, on behalf of itself and its Subcontractors, agrees as follows:

- 9.3.1** Pursuant to Labor Law §220(3)(a) and (b), each laborer, workman or mechanic, employed by the Contractor, its Subcontractors or other persons to perform Work shall be paid be not less than the prevailing rate of wages and supplements set by the New York State Department of Labor.
- 9.3.2** Pursuant to Labor Law §220(3)(d)(iv), the filing of payrolls in a manner consistent with Labor Law §220(3-a) is a condition precedent to payment of any sums due and owing for Work done under the contract.
- 9.3.3** Pursuant to Labor Law §220-a(2), before final payment, Contractor must provide a verified statement from each subcontractor of each tier, with the subcontractor's attestation that it has received and reviewed the schedule of wages and supplements, or subsequently issued schedule, and agrees that it will pay the applicable prevailing wages and will pay or provide the supplements specified therein.
- 9.3.4** Pursuant to Labor Law §220-a(2), before final payment, Contractor must also provide a statement, satisfactory to the County, certifying the amount then due and owing from Contractor to or on behalf of any and all laborers for daily or weekly wages or supplements on account of labor

performed upon the Work under the contract, setting forth the names of the persons whose wages or supplements are unpaid and the amount due to each or on behalf of each respectively. Such statement shall also set forth the amounts known by the Contractor to be then due and owing from each subcontractor, of all tiers, for wages and supplements, or shall certify that the contractor has no knowledge of such amounts owing to or on behalf of any laborers of its subcontractors, and that in the event it is determined by the New York State Commissioner of Labor that the wages or supplements or both of any employees of such subcontractors have not been paid or provided pursuant to the appropriate schedule of wages and supplements, the Contractor shall be responsible for payment of such wages or supplement pursuant to the provisions of §223 of the Labor Law. This statement shall be verified by the oath of the Contractor that he or she has read such statement subscribed by him or her and knows the contents thereof, and that the same is true of his or her knowledge except with respect to wages and supplements owing by subcontractors which may be certified upon information and belief.

- 9.3.5** Pursuant to Labor Law §220-b(2), Bidders who are persons or corporations or with an officer or shareholder who owns or controls at least ten percent (10%) of the outstanding stock of such corporation that have been convicted of a felony offense for conduct relating to obtaining or attempting to obtain or performing or attempting to perform a Public Work contract with New York State, any municipal corporation, public benefit corporation, or public body, and such felon offense is a violation of provisions listed in subdivisions of Labor Law §220-b(3)(b)(2) are ineligible to submit a bid or be awarded a contract for a period of five (5) years from the date of conviction.
- 9.3.6** Pursuant to Labor Law §220-b(3), when any Contractor, subcontractor, or person is listed by the federal government as excluded from receiving federal contracts and certain subcontracts, assistance or benefits, pursuant to 48 C.F.R. Subpart 9-4, such contractor, subcontractor, or person shall be ineligible to submit a bid on or be awarded any public work contract with the County during such period of exclusion, unless the County determines, after public notice and comment, that there is a compelling reason, consistent with 48 C.F.R. §9.405, to allow such contractor, subcontractor or person to submit a bid or to be awarded a particular public work contract. Public notice shall include notice to the New York State Department of Labor, which shall post such notice on its website.
- 9.3.7** Pursuant to Labor Law §220-d, the minimum prevailing wage rates and supplements have been included as an attachment to the contract or incorporated by reference via a URL to pull the applicable wage schedule. The Contractor shall pay laborers, workingmen and mechanics performing Work not less than such prevailing wage rates and supplements.
- 9.3.8** Pursuant to Labor Law §220-h, if the not-to-exceed cost of the contract is at least two hundred fifty thousand dollars (\$250,000) all laborers, workers, and mechanics employed in the performance of the contract on the Work Site, either by the Contractor, Subcontractors or other persons doing or contracting to do the whole or a part of the Work contemplated by the contract, shall be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.
- 9.3.9** Pursuant to Labor Law §222(d), a) the design and design and construction standards of the Work shall be subject to the review and approval of the County, if applicable, and b) the Contractor shall furnish performance and payment bonds as specified in the contract, which must conform to provisions of New York State and local law, and copies shall be kept by the County and be open to

public inspection.

9.3.10 Pursuant to Labor Law §222(e), the County shall consider the financial and organizational capacity of the Contractor and its Subcontractors in relation to the magnitude of Work they may perform, the record of performance of the Contractor and its Subcontractors on previous work, the record of the Contractor and its Subcontractors in complying with existing labor standards and maintaining harmonious labor relations, and the commitment of the Contractor to work with minority and women-owned business enterprises pursuant to Article 15-A of the New York State Executive Law through joint ventures of Subcontractor relationships. If the not-to-exceed cost of the contract is in excess of five hundred thousand dollars (\$500,000), the Contractor and each Subcontractor shall participate in apprentice training programs for the trades of work it employs that have been approved by the New York State Department of Labor for not less than three (3) years and shall have graduated at least one (1) apprentice in the last three (3) years and shall have at least one (1) apprentice currently enrolled in such apprenticeship training program. In addition, it must be demonstrated that the program has made significant efforts to attract and retain minority apprentices, as determined by affirmative action goals established for such program by the New York State Department of Labor.

9.3.11 Pursuant to Labor Law §222-a, in the construction of public works wherein a harmful dust hazard is created for which appliances or methods for the elimination of harmful dust have been approved by the Industrial Board of Appeals, the installation, maintenance and effective operation of such appliances and methods is required. Failure to comply with this provision shall void the contract.

9.4 Provisions Applicable to Article 9 Work, if Any

To the extent the Work is subject to Article 9 of the New York State Labor Law, the Contractor, on behalf of itself and its subcontractors, agrees as follows:

9.4.1 Pursuant to Labor Law §231(3), a schedule of wages required to be paid to the various classes of service employees for the performance of Work has been as an attachment to the contract or incorporated by reference via a URL to pull the applicable wage schedule. Contractor shall pay each employee for the performance of Work not less than the wage specified for his or her craft, trade or occupation in such schedule.

9.4.2 Pursuant to Labor Law §237(2), before any payment of any sums due under the contract, the Contractor must file a statement in writing, satisfactory to the County, certifying to the amounts then due and owing from the Contractor to or on behalf of any and all service employees (as defined in Labor Law §230(1)) for daily or weekly wages on account of labor performed upon the Work under the contract, setting forth the names of the persons whose wages are unpaid and the amount due to or on behalf of each respectively. This statement will be verified by the oath of the Contractor that he or she has read the statement subscribed by him or her and knows the contents thereof, and that the same is true of his or her own knowledge.

9.4.3 Pursuant to Labor Law §237(3), before payment of any sums due under the contract representing the final twenty percent (20%) of the total contract sum, the Contractor must file a statement in writing, satisfactory to the County, setting forth the amounts known by Contractor to then be due and owing from a subcontractor, of any tier, for wages and supplements, or certifying that the Contractor has no knowledge of the amounts owing to or on behalf of any service employees (as defined in Labor Law §230(1)) of its subcontractors, and that in the event it is determined by the

New York State Commissioner of Labor, that the wages or supplements or both of any employee of such subcontractors have not been paid or provided pursuant to the appropriate schedule of wages and supplements, the Contractor shall be responsible for payment of such wages or supplements, pursuant to Labor Law §239-a.

- 9.4.4** Pursuant to Labor Law §237(3), before final payment of any sums due under the contract, the Contractor must file a supplemental statement setting forth any additional amounts known by the Contractor to be then due and owing by each subcontractor for such wages and supplements, or that the Contractor has no knowledge of such amount owing to or on behalf of any employee of its subcontractors. This statement will be verified by the oath of the Contractor that he or she has read the statement subscribed by him or her and knows the contents thereof, and that the same is true of his or her own knowledge, except with respect to wages and supplements owing by subcontractors which may be certified upon information and belief.

9.5 Davis Bacon Wage Requirements. Davis Bacon requirements are not applicable to ARPA-SLFRF funded projects, however, the Davis Bacon wages may be applicable if other federal funding sources require it.

9.6 Federal Contract Work Hours and Safety Standards Act. For contracts in excess of \$100,000 involving employment of mechanics or laborers. Contractor must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor is required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

ARTICLE 10 INSURANCE, BONDING & INDEMNIFICATION

10.1 INSURANCE

10.1.1 Prior to commencing the Work through the term of the Contract, or for such other period as may be required by the Contract Documents, Contractor and Subcontractors shall purchase from and maintain in a company or companies lawfully authorized to do business in the state of New York, with an A.M. Best Rating of A- or better, insurance specified in this §10.1, and as will protect the Contractor, Subcontractor, Owner, Construction Manager and Architect-Engineer from any and all claims which may arise out of or result from the Contractor's or Subcontractor's performance under the Contract and for which the Contractor or Subcontractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

10.1.2 The insurance required hereunder shall be written for not less than the following amounts, or greater, if required by law:

- .1 Workers Compensation & Disability: State Statutory Amounts
- .2 Employer's Liability: \$1,000,000 aggregate and each occurrence
- .3 Commercial General Liability (including Premises; Independent Contractor's Protective;

- Bodily Injury; Property Damage; Contractual Liability; and Products and Completed Operations to be maintained for two years after Final Payment): \$3,000,000 aggregate and each occurrence
- .4 Business Automobile Liability with: \$3,000,000 aggregate and each occurrence
 - .5 Contractors Pollution Liability: \$1,000,000 aggregate and each occurrence
 - .6 Umbrella Excess Liability: \$5,000,000, aggregate and each occurrence which may be used to fund any portion of the insurances required above.
 - .7 Construction Project Management Protective Liability: \$2,000,000 aggregate and each occurrence
 - .8 Insurance for Project Office: Each Contractor shall provide fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage for their Project office spaces and contents in the amount of no less than \$100,000.
 - .9 If the Work involves disposal of hazardous materials, the Contractor shall dispose of such materials only at sites where the disposal site is properly permitted, and the disposal site operator maintains Pollution Legal Liability Insurance in the amount of at least \$2,000,000 for losses arising from such disposal site.
- 10.1.3** Coverage listed in this §10.1, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of Final Payment and termination of any coverage required to be maintained after Final Payment. Claims-made policies shall be maintained for Three (3) Years from the date of Final Payment.
- 10.1.4** Contractors and Subcontractors, within Ten (10) Days of the date of Notice of Award, shall supply the Owner with a Certificate(s) of Insurance, evidencing compliance with the minimum requirements listed above and shall within Thirty (30) Days thereafter furnish Owner with certified copies of the policies. The certificates and the insurance policies required by this §10.1.4 shall contain a provision that coverage will not be canceled or allowed to expire until at least Thirty (30) Days prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after Final Payment, an additional certificate evidencing continuation of such coverage shall be submitted with the Final Application for Payment as required by the Contract Documents. Information concerning reduction of coverage on account of revised limits or claims paid under occurrence, aggregate, or both, shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.
- 10.1.5** With the exception of Workers Compensation, Disability and Professional Liability, Contractors and Subcontractors shall have the Owner, Construction Manager and Architect-Engineer each added as an additional insured to all policies. The insurance policies shall be endorsed to indicate that they are primary with respect to the Owner, Construction Manager and Architect-Engineer and not contributory with any other insurance available to either of those parties. Each policy shall contain the following cross liability provision.

"In the event of a claim being made hereunder by one insured for which another insured is or may be liable, then this policy shall cover such insured against whom a claim is or may be made in the same manner as if separate policies had been

issued to each insured hereunder."

In addition, the Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Construction Manager, the Construction Manager's consultants, the Owner, the Architect, and the Architect's consultant's as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

- 10.1.6** Waivers of Subrogation: Contractors and Subcontractors waive all claims, losses, damages, or expenses against the Owner, Construction Manager, Architect-Engineer, their agents, employees, consultants and separate Contractors, if any, from risks actually insured. The policies shall provide such waivers of subrogation by endorsement or otherwise.
- 10.1.7** In accordance with New York State General Municipal Law §108, this Contract shall be void and of no effect unless the person or corporation making or performing such Contract shall secure compensation for the benefit of, and keep insured during the life of such Contract, such employees, in compliance with the provisions of the New York State Workers' Compensation Law.
- 10.1.8** The Contractor shall not commence Work unless and until all required certificates have been submitted to and accepted by the Owner. Acceptance by the Owner of a certificate hereunder does not excuse the Contractor from securing a policy consistent with all provisions of this Article or of any liability arising from its failure to do so.
- 10.1.9** The Contractor shall be responsible for providing continuous insurance coverage in the manner, form and limits required by this Contract and shall be authorized to perform Work only during the effective period of all required coverage.
- 10.1.10** In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the Contractor shall immediately stop all Work, and shall not recommence Work until authorized in writing to do so by the Owner. Upon quitting the Site, except as otherwise directed by the Owner, the Contractor shall leave all plant, materials, equipment, tools and supplies on the Site. Contract Time shall continue to run during such periods, no extensions of time shall be granted, and Contractor shall be liable for any delays to the Project incurred by Owner or by other Contractors to their Work. The Owner may also declare the Contractor in default for failure to maintain required insurance.
- 10.1.11. Worker's Compensation and Disability Insurance.** Pursuant to General Municipal Law §108, this Contract shall be void and of no effect unless Contractor and each Subcontractor, if any, shall secure compensation for the benefit of, and keep insured during the life of this Contract, such employees, in compliance with the provisions of the Worker's Compensation Law, unless Contractor is exempt and provides the applicable New York State Workers Compensation Board certificate of exemption.
- 10.1.12. Unemployment Benefits.** Contractor shall take out and maintain during the life of this Contract adequate unemployment benefits insurance, in compliance with New York Labor Law Article 18, for all employees and will also require all Subcontractors, if any, to maintain such insurance.

10.2 Bonding

- 10.2.1** Bid Bond: Contractor shall furnish a Bid Bond, in the amount of ten percent (10%) of the Contract Sum, as security for the Contractor's adherence to its proposal, the execution and faithful performance of the Contract, and the furnishing of Performance and Payment Bonds by the Contractor.
- 10.2.2** Bid Security shall be returned to unsuccessful Bidders after a Contract is awarded. If an award is not made within Forty-five (45) Days, pursuant to General Municipal Law §105, bidders may withdraw their Bid Security.
- 10.2.3** Performance and Payment Bonds: The Contractor shall furnish Performance and Payment Bonds in an amount equal to one hundred percent (100%) of the total Contract Sum as security for the faithful performance of this Contract, and for the payment of all persons performing labor or furnishing materials in connection with this Contract. The Performance and Payment Bonds shall be delivered to the Owner by the Contractor prior to or at the time of execution of the Contract. If a Contractor fails to deliver the required Performance and Payment security, its Bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive Bidder, or the Contract may be rebid.
- 10.2.4** Maintenance Bond: Upon application for Final Payment, the Contractor shall provide the Owner with a Maintenance Bond in the amount of ten percent (10%) of the total Contract Sum at Substantial Completion which shall remain in effect for one year from Final Completion to replace any and all defects arising in said Work whether resulting from defective materials or defective workmanship, after which period then the above obligation shall be void. Otherwise, it shall remain in full force and effect.
- 10.2.5** Acceptable Types of Security: Acceptable types of security for Bid, Performance and Payment Bonds shall be limited to a bond in a form satisfactory to the Owner or a bank certified check or money order.
- 10.2.6** All bonds are to be executed on the forms substantially similar to those provided in the Contract Documents and the surety company must be licensed in the State of New York, have a A.M. Best Rating of A- or better and appear on the most recent published Department of the Treasury's Listing of Approved Sureties (Department Circular 570) at the time of filing the bonds.
- 10.2.7** Power of Attorney: Attorneys-in-fact who sign Bid, Performance, or Payment Bonds must file with each bond a certified copy of their power of attorney to sign said bonds.
- 10.2.8** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

10.3 INDEMNIFICATION

- 10.3.1** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner, the Construction Manager, the Architect-Engineer and any of their respective officers, directors, agents, employees, stockholders and affiliated companies (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses, demands and actions of any nature whatsoever (including damage done to the environment and damage to persons and/or property occasioned by any such damage

to the environment) which arise out of, result from or are related to, (a) any accident or occurrence which happens or is alleged to have happened in or about the Project Site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects, and (b) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable.

10.3.2 The foregoing indemnification includes, but is not limited to, all costs and expenses, including reasonable attorneys' fees, court costs, and expenses, liabilities, damages, losses, claims, demands and actions on account of personal injury, death or property loss to any Indemnitee, whether based upon or claimed to be based upon, statutory (including workmen's compensation), contractual, tort or other liability or any Indemnitee, and including any claims, damages, losses, expenses, demands, liabilities or actions to the extent caused by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except to the extent it is caused in part by a party indemnified hereunder.

10.3.3 The foregoing indemnification shall also include all costs and expenses, including attorneys' fees and expenses, liabilities, expenses, damages, losses, claims, demands and actions for trademark, copyright or patent infringement under §3.17 of Section 00 7000 General Conditions, or unfair competition or infringement of any so-called "intangible" property right, for defamation, false arrest, malicious prosecution, or any other infringement of personal or property rights, of any kind whatever. The provisions of this indemnification shall not be construed to eliminate, negate, abridge, or otherwise reduce any other indemnification or right which an Indemnitee has by law.

10.3.4 Without limiting the generality of §10.3.1 the Contractor further agrees to indemnify and hold the Indemnitees harmless from any and all losses or damages arising out of jurisdictional labor disputes or other labor troubles of any kind that may occur during performance of the Work except to the extent the same arises in connection with persons (other than Contractor) hired or employed directly by the Owner.

10.3.5 Without limiting the generality of §10.3.1 the Contractor and all Subcontractors shall indemnify and save harmless the Indemnitees from any and all claims, demands, causes of actions or suits of whatever nature arising out of services, labor, equipment or materials furnished by the Contractor in the performance of the Work, and from all laborers', mechanics' and material men's liens upon the property upon which the Work is to be performed, and arising out of the services, labor, equipment or materials furnished by the Contractor, and the Contractor shall keep all materials, tools, equipment and machinery used in connection with any of the Work free and clear of all liens, claims and encumbrances of any nature whatsoever arising from the performance of the Work by the Contractor or any Subcontractors.

10.3.6 In claims against any person or entity indemnified under this §10.3 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under laws or regulations regarding Workers' Compensation, Disability Benefits or other Employee Benefits.

10.3.7 The obligations of the Contractor under this §10.3 shall not extend to the liability of the Construction Manager, Architect-Engineer, their consultants, and agents and employees of any of them arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the

Construction Manager, Architect-Engineer, their consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage.

ARTICLE 11 ASSURANCES, REPRESENTATIONS & WARRANTIES

11.1 In consideration of and to induce the award of this Contract to the Contractor, the Contractor represents and warrants that:

- 11.1.1** it has familiarized itself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and all Federal, State and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work;
- 11.1.2** the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work and to determine the cost of the Work;
- 11.1.3** it has had sufficient opportunity to visit the Site and examine all conditions, including subsurface and physical conditions affecting the Work and has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the Site or otherwise affecting cost, progress or performance of the Work which were obtained by Architect in the preparation of the Drawings and Specifications and, without limitation, include the Geotechnical Reports included in the Project Manual.
- 11.1.4** it has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in the above paragraph as it deems necessary for the performance of the Work at the Contract Sum within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by Contractor for such purposes.
- 11.1.5** it has had a sufficient opportunity to examine the Contract Documents for errors, inconsistencies and omissions;
- 11.1.6** it has correlated the results of all such observations, examinations, investigations, tests, reports and data in paragraphs .3 and .4 above with the terms and conditions of the Contract Documents, has given Architect written notice of any conflict, error or discrepancy that it has discovered in the Contract Documents through a Request for Information submitted to the Construction Manager and the written resolution thereof by Architect is acceptable to Contractor.
- 11.1.7** the Contract Documents are complete and unambiguous.
- 11.1.8** it is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to perform the Work and its obligations under the Contract Documents;
- 11.1.9** it is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform its obligations under the Contract Documents and has sufficient experience and competence to do so;
- 11.1.10** it is authorized to do business in the State where the Project is located and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over it and over the Work and the Project Site;

- 11.1.11** the facts stated in its bid and the information given by it pursuant to the Request for Bid is true and correct in all respects;
- 11.1.12** it has read and complied with all requirements set forth in the Contract Documents in respect to its submission of a Bid and shall comply with those and all other Contract Document requirements throughout performance of the Contract, and after for warranties or other surviving terms and conditions;
- 11.1.13** it is familiar with all applicable federal, state and local laws, regulations and guidance that may in any way affect the Work;
- 11.1.14** it has carefully examined the Site of the Work and is satisfied as to the nature and location of the Work; the character, quality, and quantity of surface and subsurface materials likely to be encountered; the character or type of equipment and other facilities needed for the performance of the Work; the general and local conditions; and all other materials or items that may affect the Work;
- 11.1.15** it is an independent Contractor and not an employee of the Owner. Unless the Contract specifically provides otherwise, the conduct and control of the Work shall be entirely the Contractor's responsibility at all times;
- 11.1.16** fair and ethical business practices will be strictly adhered to during the life of this Contract. During the term of this Contract, neither the Contractor nor any director, partner, principal, officer, or employee shall:
- .1** file with a government office or employee, a written instrument that intentionally contains a false statement or false information;
 - .2** intentionally falsify business records;
 - .3** give, or offer to give, money or any other benefit to a labor official with intent to influence that labor official with respect to any of his acts, duties, or decisions as a labor official;
 - .4** give, or offer to give, money or any other benefit to a public servant with intent to influence that public servant with respect to any of his acts, duties, or decisions as a public servant; or
 - .5** knowingly participate in the criminal activities of any organized crime group, syndicate, or "family," nor shall any person employed by or associated with any such organized crime group, syndicate, or "family" participate through criminal means in any of the business affairs of the Contractor.
- 11.1.17** no person or selling agency has been employed or retained by it to solicit or secure this Contract upon an agreement or upon an understanding for a commission, percentage, a brokerage fee, contingent fee, or any other compensation;
- 11.1.18** no payment, gift, or thing of value has been made, given, or promised to obtain this or any other agreement between the parties;
- 11.1.19** it has thoroughly reviewed the terms of this Contract and that the terms of the Contract are not to

be construed against the drafter of the Contract.

11.1.20 it shall not retain the services of any current or former Owner employee in connection with this Contract or any other contract that the Contractor has or may have with the Owner without the express written permission of the Owner. This employment restriction period covers the preceding three (3) years or longer if the current or former Owner employee has or may have an actual or perceived conflict of interest due to his or her position with the Owner.

11.1.21 neither it, nor any of its officers, directors, partners, members, employees, contractors, agents, assignees or other representatives, have any interest nor shall they acquire any interest, directly or indirectly, which would or may conflict in any manner or degree with the performance of this Contract. Contractor further represents and warrants that no person having such conflict of interest or possible conflict of interest shall be employed or contracted by it unless such person:

- .1** if required by the County's "Local Ethics Law" (Local Law No. 2 of 1994, as amended) to submit a Disclosure Form to the Orange County Board of Ethics, amends such Disclosure Form to include their interest in this Contract; or
- .2** if not required to complete and submit such a Disclosure Form, must either voluntarily complete and submit a Disclosure Form disclosing their interest in this Contract or seek a formal opinion from the Orange County Ethics Board as to whether or not a conflict of interest exists.

11.1.22 its execution of this Contract and its performance thereof is within its duly authorized powers.

11.2 To the extent that it may be appropriate for the proper execution of its subcontract, Contractor shall cause each Subcontractor to do the evaluation described in §11.1. Owner shall not be required to make any adjustment in either the Contract Sum or Contract Time in connection with any failure by Contractor or Subcontractor to comply with this Article 11.

11.3 If Contractor breaches or violates any of these representations or warranties, the Owner has the right to annul this Contract without liability, entitling the Owner to recover all monies paid hereunder and Contractor shall not make any claim or be entitled to recover, any sum or sums otherwise due under this Contract. This remedy, if effected, shall not constitute the sole remedy afforded the Owner for such falsity or breach, nor shall it constitute a waiver of the Owner's right to claim damages, refuse payment, or to take any other action provided for by law, in equity, or pursuant to this Contract.

ARTICLE 12 PROCUREMENT OF AGREEMENT

12.1 Contractor represents and warrants that no person or selling agency has been employed or retained by Contractor to solicit or secure this Contract upon an agreement or upon an understanding for a commission, percentage, a brokerage fee, contingent fee or any other compensation. Contractor further represents and warrants that no payment, gift or thing of value has been made, given or promised to obtain this or any other agreement between the parties. Contractor makes such representations and warranties to induce the Owner to enter into this Contract and the Owner relies upon such representations and warranties in the execution hereof.

12.2 For a breach or violation of such representations or warranties, the Owner shall have the right to annul this Contract without liability, entitling the Owner to recover all monies paid hereunder and Contractor shall not make claim or be entitled to recover, any sum or sums otherwise due under this Contract. This remedy, if effected, shall not constitute the sole remedy afforded the Owner for such falsity or breach, nor shall it constitute a waiver of the

Owner's right to claim damages or otherwise refuse payment or to take any other action provided for by law, in equity or pursuant to this Contract.

ARTICLE 13 CURRENT OR FORMER OWNER EMPLOYEES

13.1 Contractor represents and warrants that it shall not retain the services of any Owner employee or former Owner employee in connection with this Contract or any other Contract that Contractor has or may have with the Owner, without the express written permission of the Owner. This limitation period covers the preceding three (3) years or longer if the Owner employee or former Owner employee has or may have an actual or perceived conflict of interest(s) due to their position with Owner.

13.2 For a breach or violation of such representations or warranties, Owner shall have the right to annul this Contract without liability, entitling Owner to recover all monies paid hereunder and Contractor shall not make claim for or be entitled to recover, any sum or sums otherwise due under this Contract. This remedy, if affected, shall not constitute the sole remedy afforded Owner for such falsity or breach, nor shall it constitute a waiver of Owner's right to claim damages or otherwise refuse payment or to take any other action provided for by law or pursuant to this Contract.

ARTICLE 14 INDEPENDENT CONTRACTOR

14.1 In performing the Work and incurring expenses under this Contract, Contractor shall operate as, and have the status of, an independent contractor and shall not act as agent, or be an agent, of Owner. As an independent contractor, Contractor shall be solely responsible for determining the means and methods of performing the Work and shall have complete charge and responsibility for Contractor's personnel and subcontractors engaged in the performance of the same.

14.2 In accordance with such status as independent contractor, Contractor covenants and agrees that neither it nor its employees or agents will hold themselves out as, nor claim to be officers or employees of Owner, or of any department, agency or unit thereof, and that they will not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of Owner including, but not limited to, Worker's Compensation and Disability, health insurance, Unemployment Insurance Benefits, Social Security coverage or employee retirement membership or credit.

ARTICLE 15 IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION

15.1 Identification Number(s). For granting, renewing, amending, supplementing or restating the license of any person, and for every invoice or other claim for payment submitted to Owner by Contractor under this Contract, the application, invoice or claim must include Contractor's payee identification number. This number is any or all of the following:

15.1.1 the payee's federal employer identification number;

15.1.2 the payee's federal social security number, and/or

15.1.3 the payee's Contractor Identification Number assigned by Owner, if any.

15.2 Failure to include applicable payee identification number(s), as required by Owner, may delay payment. Where Contractor does not have such number(s), on its application, invoice or other claim for payment, Contractor

must give the reason or reasons why it does not have a payee identification number(s).

15.3 Privacy Notification.

15.3.1 The Owner's authority to request the above personal information from Contractor, and its authority to maintain such information, is found in New York State Tax Law §5. Disclosure of this information by Contractor to Owner is mandatory. The principal purpose for collection of the information is for New York State to identify individuals, businesses and others who have been delinquent in filing tax returns, or may have understated their tax liabilities, and to generally identify persons affected by the taxes administered by the New York State Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

15.3.2 The Owner may forward the personal information to the New York State Commissioner of Taxation and Finance upon that Commissioner's request pursuant to New York State Tax Law §5(3).

ARTICLE 16 RECORDKEEPING

16.1 Contractor agrees to maintain separate and accurate books, records, documents and other evidence and accounting procedures and practices which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Contract.

ARTICLE 17 RETENTION OF RECORDS

17.1 Contractor agrees to retain all paper and electronic invoices, payment receipts, books, records and other data and documents relevant to this Contract ("Records") for six (6) years after the final payment or termination of this Contract or such longer period as may be required the Contract Documents or by law or regulation, whichever later occurs. Owner, or any state and/or federal auditors, and any other persons duly authorized by Owner, shall have full access and the right to examine any Records during the term of this Contract and the retention period, unless otherwise specified in schedule a or required by law or regulation.

ARTICLE 18. AUDIT BY THE OWNER AND OTHERS

18.1 All records and accounts upon which the records are based are subject to inspection, review and audit by the Owner, New York State, United States, and/or other persons or entities duly authorized by Owner. Contractor, upon request, shall submit any and all documentation and justification in support of expenditures or fees under this Contract as may be required for evaluation of the reasonableness of the charges. Such audits may include examination and review of the source and application of all funds relevant to the performance of the Work, whether from the Owner, New York State, the federal government, private sources or otherwise. Contractor shall not be entitled to any interim or final payment under this Contract if any audit requirements and/or requests have not been satisfactorily met.

ARTICLE 19 NONDISCRIMINATION; EQUAL EMPLOYMENT OPPORTUNITIES

19.1 To the extent required by Article 15 of the New York State Executive Law (also known as the Human Rights Law) and all other New York State and federal statutory and constitutional non-discrimination provisions, Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex (including gender identity or expression), national origin, sexual orientation, military status, age, disability, predisposing genetic characteristics, marital status or domestic violence victim status.

19.2 If this Contract involves the sale or rental of property, Contractor specifically agrees to abide by all applicable provisions of federal and state laws and regulations, as applicable to sale or rental of the property. With respect to any sale of the property and selection and treatment of tenants, Contractor shall not in any manner discriminate on the basis of race, color, religion, sex (including gender identity or expression), familial status, national origin, disability, age, sexual orientation, military status or marital status.

ARTICLE 20 SECULAR PURPOSE

20.1 Contractor agrees that no funds received pursuant to this Contract will be used for sectarian purposes or to further the advancement of any religion.

20.2 Additionally, Contractor agrees that if it is, or is deemed to be, a religious or denominational institution or organization, or an organization operated for religious purposes which is supervised or controlled by, or in connection with, a religious or denominational institution or organization, in performing this Contract Contractor will:

- 20.2.1** not discriminate against any employee or applicant for employment on the basis of religion, and will not limit or give preference in employment to persons on the basis of religion;
- 20.2.2** not discriminate against any individual or entity, seeking to participate or participating in any program or activity funded under this Contract and will not limit the programs and activities or give preference to persons, on the basis of religion; and
- 20.2.3** provide no religious instruction or counseling, conduct no religious worship or services, engage in no religious proselytizing and exert no other religious influence in the provision of services or the use of facilities or furnishings funded in whole or in part under this Contract or any other agreement with Owner.

ARTICLE 21 PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS

21.1 Contractor certifies and warrants that all wood products to be used in performing the Work under this Contract, if any, will be in accordance with, but not limited to, the specifications and provisions of New York State State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by New York State or any governmental agency or political subdivision or public benefit corporation.

21.2 In addition, when any portion of this Contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the Contractor will indicate and certify in the submitted bid or proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in New York State State Finance Law §165.

21.3 Contractor certifies that any use of tropical hardwood in the Work meets with the exception requirements of New York State State Finance Law §165(2)(d)(iii), as established by the Contractor and was approved by Owner during the quote, bid or proposal process.

ARTICLE 22 COMPLIANCE WITH NEW YORK STATE INFORMATION SECURITY BREACH NOTIFICATION ACT

22.1 Both during and after the performance of the Work under this Contract, with respect to all data involved in the performance of this Contract, Contractor shall comply with the New York State Information Security Breach and Notification Act (General Business Law §899-aa; State Technology Law §208, both as may be amended).

ARTICLE 23 COMPLIANCE WITH EXECUTIVE ORDER 38

23.1 Contractor is and shall remain in compliance with New York State Executive Order 38 of 2013, as may be amended. More information may be found at: <http://www.executiveorder38.ny.gov/>.

ARTICLE 24 COMPLIANCE WITH PROCUREMENT LOBBYING LAWS.

24.1 To the extent this Contract is a "procurement contract" as defined by New York State State Finance Law §139-j and §139-k, Contractor certifies and affirms that all disclosures made in accordance with New York State State Finance Law §139-j and §139-k are complete, true and accurate. In the event such certification is found to be intentionally false or incomplete, Owner may terminate this Contract in accordance with §29.2 of this Contract.

24.2 Notwithstanding any other provision of this Contract, Contractor shall not be relieved of liability to Owner for damages sustained by Owner by virtue of Contractor's breach of this subsection. Owner may withhold payments to Contractor for the purposes of set-off until such time as the exact amount of damages due to Owner from Contractor is determined.

24.3 These remedies, if effected, shall not constitute the sole or exclusive remedies afforded the Owner, nor shall it constitute a waiver of that the Owner's right to claim damages or otherwise refuse payment or to take any other action provided for by law, in equity, or pursuant to this Contract.

ARTICLE 25 COMPLIANCE WITH IRAN DIVESTMENT ACT

25.1 Contractor certifies in accordance with New York State State Finance Law §165-a that it is not on the "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("**Prohibited Entities List**") posted at:
<http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf>

25.2 Contractor agrees that should it seek to renew or extend this Contract, it must provide the same certification at the time this Contract is renewed or extended. Contractor also agrees that any proposed assignee of this Contract will be required to certify that it is not on the Prohibited Entities List before the assignment will be approved by Owner.

25.3 During the term of this Contract, should Owner receive information that Contractor is in violation of the above-referenced certifications, Owner will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Iran Divestment Act (New York State State Finance Law §165-a) within Ninety (90) Days after the determination of such violation, then Owner shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring Contractor in default and terminating the Contract in accordance with §29.2 of this Contract. These remedies, if effected, shall not constitute the sole or exclusive remedies afforded the Owner, nor shall it constitute a waiver of that the Owner's right to claim damages or otherwise refuse payment or to take any other action provided for by law, in equity, or pursuant to this Contract.

25.4 Owner reserves the right to reject any request for assignment, renewal or extension for an entity that

appears on the Prohibited Entities List prior to the assignment, renewal or extension of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities list after contract award.

ARTICLE 26. SEXUAL HARASSMENT PREVENTION CERTIFICATION

26.1 Pursuant to State of New York State Finance Law §139-l, by execution of this Contract, the Contractor and the individual signing this Contract on behalf of the Contractor certifies, under penalty of perjury, that the Contractor has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the State of New York Labor Law. A model policy and training has been created by the New York State Department of Labor and can be found on its website at:

<https://www.ny.gov/programs/combating-sexual-harassment-workplace>.

26.2 The County's policy against sexual harassment and other unlawful discrimination and harassment in the workplace can be found on the County's website at:

<https://www.orangecountygov.com/1137/Human-Resources>.

ARTICLE 27 EMERGENCIES AND FORCE MAJEURE

27.1 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

27.2 A Force Majeure occurrence is an event or effect that cannot be reasonably anticipated or controlled and is not due to the negligence or willful misconduct of the affected party. Force Majeure includes, but is not limited to, acts of God, acts of war, acts of public enemies, terrorism, strikes, fires, explosions, actions of the elements, floods, or other similar causes beyond the control of the Contractor or the Owner in the performance of this Contract where non-performance, by exercise of reasonable diligence, cannot be prevented.

27.3 The affected party shall provide the other party with written notice of any Force Majeure occurrence as soon as the delay is known and provide the other party with a written contingency plan to address the Force Majeure occurrence, including, but not limited to, specificity on quantities of materials, tooling, people, and other resources that will need to be redirected to another facility and the process of redirecting them. Furthermore, the affected party shall use its commercially reasonable efforts to resume proper performance within an appropriate period of time. Notwithstanding the foregoing, if the Force Majeure condition continues beyond Thirty (30) Days, the parties shall jointly decide on an appropriate course of action that will permit fulfillment of the parties' objectives hereunder.

27.4 The Contractor agrees that in the event of a delay or failure in the performance of the Work by Contractor, due to a Force Majeure occurrence, the Owner may purchase from other sources (without recourse to and by the Contractor for the costs and expenses thereof) to replace all or part of the goods and/or services which are the subject of the delay, which purchases may be deducted from the quantities of this Contract, if any, without penalty or liability to the Owner.

27.5 Neither the Contractor nor the Owner shall be liable to the other for any delay in or failure of performance under this Contract due to a Force Majeure occurrence. Any such delay in or failure of performance shall not constitute default or give rise to any liability for damages. The existence of such causes of such delay or failure shall extend the period for performance to such extent as determined by the Contractor and the Owner to be necessary

to enable complete performance by the Contractor and Owner if reasonable diligence is exercised after the cause of delay or failure has been removed.

27.6 Notwithstanding the above, at the discretion of the Owner where the delay or failure will significantly impair the value of this Contract to the Owner, the Owner may terminate this Contract or the portion thereof which is subject to delays, and thereby discharge any unexecuted portion of this Contract or the relative part thereof.

ARTICLE 28 GENERAL RELEASE

28.1 The acceptance by Contractor or its assignees of the final payment under this Contract (whether based on invoice, judgment of any court of competent jurisdiction, administrative or any other means) shall constitute and operate as a general release to owner from any and all claims of Contractor arising out of the performance of this Contract.

ARTICLE 29 SET-OFF RIGHTS

29.1 Owner shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but are not limited to, Owner's right to withhold for the purposes of set-off any monies otherwise due to Contractor:

29.1.1 under this Contract;

29.1.2 under any other agreement or contract with Owner, including any agreement or contract for a term commencing prior to or after the term of this Contract; or

29.1.3 from Owner by operation of law.

29.2 Owner also has the right to withhold any monies otherwise due under this Contract for the purposes of set-off as to any amounts due and owing to Owner for any reason whatsoever including, without limitation, tax delinquencies, fee delinquencies or monetary penalties or interest relative thereto.

29.3 Owner also reserves the right to back charge Contractor, through a Deductive Change Order, for the cost of the total and complete remedy due to the failure of Contractor to comply with any portion(s) of the Contract Documents.

ARTICLE 30 COMPLIANCE

30.1 Contractor and its officers, directors, partners, members, employees, Subcontractors, agents, assignees, Suppliers or other representatives shall at all times comply with all applicable state and federal laws and regulations in the performance of the Work.

30.2 Contractor understands that it may be necessary for Owner to submit to governmental agencies or to a court of law part of or all of the data, analyses and/or conclusions developed in the performance of the Work as well as certification, payment applications or other documentation certified and/or signed by Contractor or its officers, directors, partners, members, employees, Subcontractors, agents, assignees, Suppliers, or other representatives. Contractor is aware that there are significant state and/or federal civil and criminal penalties for submitting false information, including the possibility of fines and imprisonment. Contractor is responsible for such penalties resulting from false information submitted by Contractor or its officers, directors, partners, members, employees, Subcontractors, agents, assignees, Suppliers or other representatives and shall, to the fullest extent permitted by law, defend, indemnify and hold harmless Owner and its officers, employees, contractors, agents,

assignees and other representatives, from and against any and all claims, liabilities, expenses, costs, losses, damages and causes of action (including without limitation, reasonable attorneys' fees and costs of litigation and/or settlement) arising out of, directly or indirectly, any such submission of false information.

ARTICLE 31 BUSINESS AUTHORIZATION AND REGISTRATION; SERVICE OF PROCESS

31.1 Contractor shall be properly authorized and registered to do business as required by the laws of the state of New York applicable to Contractor's business entity type.

31.2 Regardless of the propriety or legality of Contractor's business authorization and registration status, as a condition of contract, Contractor shall agree to service of process as follows: In addition to the methods of service allowed by New York's Civil Practice Law and Rules, Contractor consents to service of process upon it by registered or certified mail, return receipt requested, to the address indicated in this Contract. Service shall be complete upon Contractor's actual receipt of process, or upon Owner's receipt of the return by the United States Postal Service as refused or undeliverable. Contractor shall immediately notify Owner, in writing, via registered or certified mail, return receipt requested, of each change or address to which service of process can be made. Service by Owner to the last known address shall be sufficient.

31.3 Pursuant to 41 CFR §60-1.4, during the performance of this Contract, the Contractor agrees as follows:

31.3.1 The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

31.3.2 The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

31.3.3 The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

31.3.4 The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and

applicants for employment.

- 31.3.5** The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 31.3.6** The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 31.3.7** In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 31.3.8** The Contractor will include the portion of the sentence immediately preceding paragraph 31.3.1 and the provisions of paragraphs 31.3.1 through 31.3.8 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant (Owner) further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant (Owner) so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the Contract.

The applicant (Owner) agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of Contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant (Owner) further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and

subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

ARTICLE 32 GOVERNING LAW

32.1 The Contract shall be governed by the laws of the State of New York, without regard to its choice of law rules. Contractor shall render all Work under the Contract in accordance with applicable provisions of all federal, state and local laws, rules and regulations as are in effect at the time such Work is rendered. Any disputes shall be submitted to the Supreme Court of the State of New York with venue in Orange County or, in the event the dispute concerns a federal matter, in the United States District Court for the Southern District of New York, White Plains Division.

ARTICLE 33 TERMINATION OR SUSPENSION OF AGREEMENT

33.1 TERMINATION BY THE CONTRACTOR

33.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of Ninety (90) Days through no act or fault of the Contractor, a Subcontractor, or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 issuance of an order of a court or other public authority having jurisdiction over the Work or parties hereto which requires all Work to be stopped; or
- .2 an act of government, such as a declaration of national emergency which requires all Work to be stopped;

33.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in §13.3 constitute in the aggregate more than one hundred (100) percent of the total number of Days scheduled for completion, or One Hundred Twenty (120) Days in any successive Three Hundred Sixty-five- (365-) Day period commencing from the start date in the Notice to Proceed, whichever is less.

33.1.3 In case of such termination, the Contractor shall be entitled to receive payment for Work executed.

33.2 DEFAULT AND TERMINATION BY THE OWNER FOR CAUSE

33.2.1 Contractor shall be deemed in default and the Owner may terminate this Contract if the Contractor or any of its Subcontractors shall:

- .1 fail to begin Work within the time specified;

- .2 persistently or repeatedly refuse or fail to supply sufficient properly skilled workers or sufficient proper equipment or materials to insure the completion of the Work within the specified time as reasonably determined by Owner, which failure shall continue for Ten (10) Days after notice thereof from the Owner;
- .3 perform the Work in a manner reasonably deemed by Owner to be unsatisfactory, which failure shall continue for Ten (10) Days after notice thereof from the Owner;
- .4 fail or refuse to remove materials reasonably determined by Construction Manager, Architect-Engineer or Owner to be unsuitable, which failure shall continue for Ten (10) Days after notice thereof from the Owner;
- .5 fail or refuse to perform anew any Work reasonably determined by Construction Manager, Architect-Engineer or Owner to be defective or unacceptable, which failure shall continue for Ten (10) Days after notice thereof from the Owner;
- .6 fail to diligently proceed with the prosecution of the Work according to the agreed Master Schedule for completion, which failure shall continue for Ten (10) Days after notice thereof from the Owner;
- .7 fail to make prompt payment to Subcontractors or suppliers for labor or material furnished to or for the Project, which failure shall continue for Ten (10) Days after notice thereof from the Owner or otherwise become insolvent or be declared bankrupt, commit any act of bankruptcy or insolvency, or make an assignment for the benefit of creditors;
- .8 violate any laws, ordinances, rules, regulations or orders of any public authority having jurisdiction over the Project, which violation shall continue for Ten (10) Days after notice thereof from the Owner; or
- .9 otherwise fail to perform its obligations hereunder, which failure shall continue for Thirty (30) Days after notice thereof from the Owner.
- .10 pursuant to New York State Finance Law §139-k(5) upon finding by Owner that information and the certification provided by Contractor in the Bidder Disclosure of Prior Non-Responsibility Determinations is intentionally false or intentionally incomplete.

33.2.2 When the Owner determines that any of the above reasons exist, the Owner may, without prejudice to any other rights or remedies the Owner may have, and after giving the Contractor and the Contractor's surety, if any, Seven (7) Days written notice:

- .1 terminate the Contract;
- .2 take possession of the Site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor;
- .3 finish the Work by whatever method the Owner, in its sole discretion may deem expedient;
- .4 provide the Contractor with instructions as described in subparagraph 13.2.3.

33.2.3 Upon receipt of notice of termination, the Contractor shall immediately, in accordance with written instructions from the Owner, through the Construction Manager, proceed with performance of the

following duties regardless of delay in determining or adjusting amounts due under this §13.2:

- .1 cease operations as specified in the notice;
- .2 place no further orders and enter into no further subcontracts for materials, equipment, labor, services or facilities, except as necessary to complete continued portions of the Contract;
- .3 promptly make every reasonable effort to procure cancellation upon terms satisfactory to the Owner of all orders and subcontracts;
- .4 take actions that may be necessary, or that the Owner may direct, for the protection and preservation of the terminated Work and to protect materials, plant and equipment on the Site or in transit thereto;
- .5 execute and deliver such papers and documents and take such steps, including legal assignment of its contractual rights, as the Owner may require in order to vest in the Owner the rights and benefits the Contractor may have under any obligations or commitments incurred or undertaken by the Contractor in connection with the Work.

33.2.4 In the event that the Owner terminates the Contract under §13.2, the Contractor shall not be entitled to receive further payment until the Work is finished. If the sum of the costs of finishing the Work, including compensation for the services of the Construction Manager, Architect-Engineer, their respective consultants and other Contractors and their Subcontractors made necessary thereby, plus the amounts previously paid to the Contractor prior to termination, exceed the Contract Sum, the Contractor shall pay the difference to the Owner upon demand. If the foregoing costs together with all other costs incurred by the Owner as a consequence of having to terminate the Contract are less than the Contract Sum, then upon completion of the Work the Contractor shall be paid the portion of such difference, if any, properly allocable to the portion of the Work completed by the Contractor prior to termination by the Owner and for which the Contractor has not theretofore been paid. In no event, however, shall the Contractor be entitled to receive more than the difference between the Contract Sum, minus all costs associated with completing the Work and terminating the employment of the Contractor. In determining the amount owing to the Contractor, allowances shall be made for claims which the Owner has against the Contractor under the Contract, and for the value of materials, supplies, equipment and other items that are part of the Cost of the Work to be disposed of by the Contractor.

33.2.5 By terminating the employment of the Contractor, the Owner does not forfeit the right to recover damages from the Contractor.

33.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

33.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such time period as the Owner may determine.

33.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in §13.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by

another cause for which the Contractor is responsible; or

.2 that an equitable adjustment is made or denied under another provision of the Contract.

33.4 TERMINATION BY THE OWNER FOR CONVENIENCE

33.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

33.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

33.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 34 SUCCESSORS AND ASSIGNS

34.1 In accordance with New York State General Municipal Law §109, Contractor is prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Contract, or of its right, title, or interest therein, or its power to execute such Contract, to any other person or corporation without the previous written consent of the County Executive. If such consent is not obtained, the County shall revoke and annul this Contract and the County shall be relieved and discharged from any and all liability and obligations arising out of the Contract to the Contractor, and to any party to which the Contract was assigned, transferred, conveyed, sublet or otherwise disposed of, and the Contractor, its assignees, transferees or sublessees shall forfeit and lose all moneys, earned under this Contract, except so much as may be required to pay Contractor's employees. The provisions of General Municipal Law §109 shall not hinder, prevent, or affect an assignment by any Contractor for the benefit of its creditors made pursuant to the laws of New York.

34.2 Contractor shall not, without the prior written consent of the Owner, assign any monies due or to become due without the prior written consent of Owner. In the event that Contractor assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the Work called for in the Contract Documents. Any assignment, transfer, conveyance, or other disposition without prior consent shall be void and any Work provided thereunder will not be compensated.

34.3 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents. Any subcontracts under this Project will provide that any subcontractors are subject to all applicable provisions of the Contract Documents.

34.4 The Owner may, without consent of the Contractor, assign the Contract to any successor in interest. In such event, said assignment shall act as a complete assignment of all rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

34.5 Any assignment properly consented to by the Owner shall be subject to all of the terms and conditions of this Contract.

ARTICLE 35 WRITTEN NOTICE

35.1 Unless otherwise specifically required in the Contract Documents, all notices shall be in writing to the entities and individuals listed below. Except as otherwise provided herein, all notices may be given by certified mail, by personal delivery, by nationally recognized overnight courier service or by facsimile. Notice by certified mail will be effective upon sending provided such notice is simultaneously transmitted by facsimile, subject to the confirmation requirements contained herein. Notice by personal delivery will be effective upon delivery to the other party. Notice by nationally recognized overnight courier service shall be effective One (1) Day after delivery of notice to such overnight courier service. If notice is given by facsimile, immediately after sending such notice, the sender thereof shall confirm by telephone addressee's receipt of such notice. Facsimile notice is acceptable provided a hard copy is delivered to the party within Three (3) Business Days of delivery of the facsimile but shall not be effective until delivery of the hard copy. Notices must be addressed to the address or addresses of the respective party as set forth below.

If to the Owner:

Erik Denega, P.E., Commissioner
Department of Public Works
2455-2459 Route 17M,
P.O. Box 509
Goshen, NY 10924
Phone: (845) 291-2750
Fax: (845) 291-2778

If to the Architect:

Hyman Hayes Associates, LLC
Suite 103, Troy Schenectady Road
Latham, NY 12110

Phone: (518) 452-3470
Fax: (518) 452-3783

If to the Contractor:

Name
Address

Phone:
Fax:

If to the Construction Manager:

The Palombo Group
22 Noxon Street
Poughkeepsie, NY 12601

Phone: (845) 868-1239
Fax: (845) 485-1220

or to such other address(es) or addressee(s) as any party entitled to receive notice hereunder shall designate to all other parties in the manner provided herein for the service of notice.

ARTICLE 36 RIGHTS AND REMEDIES

36.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law or in equity.

36.2 No action or failure to act by the Owner, Architect, Construction Manager or Contractor shall constitute a

waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed to in writing.

ARTICLE 37 NO ESTOPPEL AND NO WAIVER

37.1 Neither the Owner nor any department, officer, agent, or employee thereof, shall be bound, precluded, or estopped by any determination, decision, approval, order, letter, payment, or certificate made, given under, or in connection with this Contract by the Owner, or any other officer, agent, or employee of the Owner, either before or after the Final Completion and acceptance of the Work and payment therefore:

- .1** from showing the true and correct classification, amount, quality, or character of the Work actually done; or that any such determination, decision, order, letter, payment, or certificate was untrue, incorrect, or improperly made in any particular way, or that the Work, or any part thereof, does not in fact conform to the requirements of this Contract; and
- .2** from demanding and recovering from the Contractor any overpayment made to it, or such damages as the Owner may sustain by reason of the Contractor's failure to perform each and every part of its Contract.

37.2 Neither the acceptance by the Owner or any of its officers, agents, or employees of any certificate issued by the Owner, any payment voucher issued by the Owner, acceptance of the whole or part of the Work, nor any extension of time granted by the Owner shall operate as a waiver of any portion of this Contract, any power reserved to the Owner, or of any right to damages herein provided. Further, a waiver of any breach of this Contract does not operate as a waiver of any other or subsequent breach.

ARTICLE 38 NO CLAIM AGAINST OFFICERS, AGENTS, OR EMPLOYEES

38.1 No claim whatsoever shall be made by the Contractor against any officer, agent, or employee of the Owner for, or on account of, anything done or omitted to be done in connection with this Contract.

ARTICLE 39. MODIFICATION.

39.1 Changes in the Work will be made in accordance with Article 7 of this Contract and Article 7 of Section 00 7000 General Conditions. No modification of the terms and conditions of this Agreement Between Owner and Contractor shall be valid unless reduced to writing and signed by both parties.

39.2 Unless otherwise specifically provided for in the modification(s), the provisions of this Contract shall remain in full force and effect and applicable to the modified scope of Work.

ARTICLE 40 BINDING EFFECT

40.1 The rights and obligations of the parties and their respective agents, successors, and assignees shall be subject to this Contract, including any Change Orders, Addenda, or Specifications thereto, which supersede any other understandings or writings between or among the parties.

40.2 Contractor binds itself, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents. Any subcontracts under this Project will provide that any Subcontractors are subject to all applicable provisions of the Contract Documents.

ARTICLE 41 EXECUTORY CONTRACT

41.1 Owner shall have no liability under this Contract to Contractor or to anyone else beyond the extent of funds appropriated and made available to fund this Contract by the Owner.

ARTICLE 42 SURVIVAL

42.1 The rights and obligations under §§ 4, 5, 6, 7, 10, 11, 13, 16, 17, 18, 22, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42 and 43 shall survive the expiration or termination of this Contract.

ARTICLE 43 ENTIRE AGREEMENT

43.1 The Contract Documents constitute the entire agreement between Owner and Contractor and may only be altered, amended or repealed solely by a written modification.

IN WITNESS WHEREOF, the parties executed multiple sets of this Contract on the date signed below.

CONTRACTOR

By: _____
(Sign Name)

(Print Name)

Notary Public

Subscribed and sworn to before me
This ____ day of _____, 20__

COUNTY OF ORANGE

By: _____
Steven M. Neuhaus, County Executive

Notary Public

Subscribed and sworn to before me
This ____ day of _____, 20__.

END OF SECTION

SECTION 00 6100A**PERFORMANCE BOND SAMPLE**

KNOW ALL MEN BY THESE PRESENTS, that we, _____

hereinafter referred to as the "Principal", and _____

hereinafter referred to as the "Surety" are held and firmly bound to THE COUNTY OF ORANGE, NEW YORK, hereinafter referred to as the "COUNTY", or to its successors and assigns in the penal sum of _____

Dollars (\$ _____), lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to submit (or has submitted) to the COUNTY the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for _____

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his, her or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and/or replacement of defective work and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the COUNTY from all cost and damage which it may suffer by reason of failure so to do, and shall fully reimburse and repay the COUNTY for all outlay and expense which the COUNTY may incur in making good any such default, and shall protect the said COUNTY against, and pay any and all amounts, damages, costs and judgments which may or shall be recovered against said COUNTY or its officers or agents of which the said COUNTY may be called upon to pay any person or corporation by reason of any damages arising or growing out of the doing of said work, or the repair or maintenance thereof, or the manner of doing the same, or the neglect of the said PRINCIPAL, or his, her their, or its agents or servants, or the improper performance of the said work by the said PRINCIPAL, or his, her, their, or its agents or servants, or the infringement of any patent or patent rights by reason of the use of any materials furnished or work done as aforesaid or otherwise, then this obligation shall be null and void, otherwise to remain in full force and effect.

The Surety (Sureties), for value received, hereby stipulates and agrees, if requested to do so by the COUNTY, to fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof, if the COUNTY determines that the Principal, for any cause, has failed or neglected to fully perform and complete such Work. The Surety (Sureties) further agrees to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the COUNTY and to complete all Work within such time as the COUNTY may fix. The Surety and the COUNTY reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or Work to be performed thereunder, or by any payment thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this ____ day of _____, ____.

(Seal) _____ (L.S.)
Principal

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

Bond Premium Rate _____

Bond Premium Cost _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

An appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract should be executed.

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES.

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of _____
County of _____ ss:

On this ____ day of _____, 20____, before me personally came to me known, _____ who, being by me duly sworn, did depose and say that he/she is the _____ of _____ the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____
County of _____ ss:

On this ____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same as and for the act and deed of said firm.

Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____

County of _____ ss:

On this _____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same.

Notary Public**END OF SECTION**

SECTION 00 6100B**PAYMENT BOND SAMPLE**

KNOW ALL MEN BY THESE PRESENTS, that we, _____

hereinafter referred to as the "Principal", and _____

hereinafter referred to as the "Surety" are held and firmly bound to THE COUNTY OF ORANGE, NEW YORK, hereinafter referred to as the "COUNTY", or to its successors and assigns in the penal sum of _____

Dollars (\$_____), lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to submit (or has submitted) to the COUNTY the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for _____

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for:

- (a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his, her or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and
- (b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

- (a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the COUNTY itself.
- (b) All persons who have performed labor, rendered services or furnished materials and supplies, as

aforesaid, shall have a direct right of action against the Principal and his, her, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the COUNTY liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

The Principal, for himself / herself / itself and successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the right of the COUNTY to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including subcontractors, material men and third persons, for work, labor, services, supplies or material performed rendered, or furnished as aforesaid upon the ground that there is no law authorizing the COUNTY to require the foregoing provisions to be placed in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

IN WITNESS HEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this _____ day of _____, _____.

(Seal)

_____(L.S.)
Principal

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

(Seal) _____ (L.S.)
Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract.

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES.

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of _____
County of _____ ss:

On this ____ day of _____, 20____, before me personally came to me known, _____ who, being by me duly sworn, did depose and say that he/she is the _____ of _____ the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____
County of _____ ss:

On this ____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same as and for the act and deed of said firm.

Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____
County of _____ ss:

On this ____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same.

Notary Public

END OF SECTION

SECTION 00 6100C**MAINTENANCE BOND SAMPLE**

KNOW ALL MEN BY THESE PRESENTS, that we, _____
hereinafter referred to as the "Principal", and _____

hereinafter referred to as the "Surety" are held and firmly bound to THE COUNTY OF ORANGE, NEW YORK,
hereinafter referred to as the "County", or to its successors and assigns in the penal sum of _____

(\$ _____), Dollars lawful money of the United States, for the payment of which said sum of money well
and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and
assigns, jointly and severally, firmly by these presents.

WHEREAS, on the ____ day of _____, 20__ the said Principal, as Contractor, entered into a
contract for _____

for the sum of _____
Dollars (\$ _____); and

WHEREAS, under the terms and conditions for such work, the Principal as Contractor is required to give a bond for
Dollars (\$ _____), to protect the County as Owner against the result of faulty materials or workmanship
for a period of one year from and after the date of the final completion and acceptance of same, namely for a period
from _____ through _____.

NOW, THEREFORE, if the Principal shall for a period of one year from and after the date of issue on final payment
check to contractor for completion and acceptance of same by County as Owner replace any and all defects arising
in said Work whether resulting from defective materials or defective workmanship, after which period then the
above obligation shall be void. Otherwise, it shall remain in full force and effect.

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of
them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed
by their proper officers, this ____ day of _____, 20__.

(Seal)

_____(L.S.)
Principal

By: _____

(Seal)

_____(L.S.)
Surety

By: _____

(Seal)

_____(L.S.)
Surety

By: _____

(Seal)

_____(L.S.)
Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

An appropriate number of counterparts of the bond corresponding to the number of counterparts of the Contract should be executed.

Each executed bond should be accompanied by: (a) appropriate acknowledgments of the respective parties; (b) appropriate duly certified copy of Power of Attorney or other certificate of authority where bond is executed by agent, officer or other representative of Principal or Surety; (c) a duly certified extract from By-Laws or resolutions of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued, and (d) certified copy of latest published financial statement of assets and liabilities of Surety.

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES.

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of _____

County of _____ ss:

On this ____ day of _____, 20____, before me personally came to me known, _____ who, being by me duly sworn, did depose and say that he/she is the _____ of _____ the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

Notary Public**ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP**

State of _____

County of _____ ss:

On this ____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be one of the members of the firm of _____ described in and who executed the foregoing instrument, and he/she acknowledged to me that he/she executed the same as and for the act and deed of said firm.

Notary Public**ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL**

State of _____

County of _____ ss:

On this ____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same.

Notary Public**END OF SECTION**

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ARTICLE 1 GENERAL PROVISIONS**§1.1 DEFINITIONS**

§1.1.1 The definitions set forth below are applicable throughout the Contract Documents unless otherwise specifically defined.

§1.1.2 Words not otherwise defined that have a well-known technical or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

§1.1.3 Whenever the context of any Contract provision so requires, any noun including the terms defined in §2.1 of this Agreement shall include its plural and singular form. Any pronoun shall include the corresponding masculine, feminine, and neuter forms, both singular and plural.

§1.1.4 "Addendum" or "Addenda" shall mean the additional Contract provisions issued in writing by the Owner.

§1.1.5 "Agreement" is the Agreement between Owner and Contractor for each Contractor.

§1.1.6 "Architect-Engineer" is Hyman Hayes Associates, Suite 103, Troy Schenectady Road, Latham, NY 12110.

§1.1.7 "Business Day" means a Calendar Day excluding weekends and holidays (as defined for each trade in the Prevailing Wage Schedule).

§1.1.8 "Calendar Day" or "Day" means all days including weekends and holidays.

§1.1.9 "Construction Manager" is The Palombo Group, 22 Noxon Street, Poughkeepsie, NY 12601.

§1.1.10 The "Contract" consists of the Contract Documents. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect-Engineer and a Contractor, (2) between the Construction Manager and a Contractor, (3) between the Architect-Engineer and the Construction Manager, (4) between the Owner and a Subcontractor, (5) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect-Engineer shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Construction Manager's and Architect-Engineer's duties.

§1.1.11 The "Contract Documents" consist of the executed Agreement, Drawings, Specifications, and all other materials in the Request for Bid for this Project, including addenda issued prior to execution of the Contract, the Contractor's Bid, other materials referenced in the previously listed documents (unless otherwise specifically excluded) and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect-Engineer. Shop Drawings and Submittals are not Contract Documents. Nothing contained in the Contractor's Bid shall constitute a waiver to any other requirement of the Contract Documents, unless expressly noted in the Agreement.

§1.1.12 "Contractor" shall mean the entity which executed this Agreement whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his or her successors, personal

representatives, executors, administrators and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Agreement.

§1.1.13 The "County" is also the Owner and the terms "Owner" and "County" are interchangeable.

§1.1.14 "Day" means Calendar Day unless otherwise specifically defined.

§1.1.15 The "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

§1.1.16 "Extra Work" shall mean Work authorized by the Owner other than that required by the Contract at the time of award.

§1.1.17 "Means and methods of construction" or "Construction means, methods, techniques, sequences and/or procedures" shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

§1.1.18 "Other Contractor(s)" shall mean any Contractor (other than the entity that executed this Contract or its Subcontractors) who has a contract with the Owner for Work on or adjacent to the Site of the Work.

§1.1.19 "Owner" is the County of Orange, Orange County Government Center, 255-275 Main Street, Goshen, NY 10924. The term "Owner" means the Owner or the Owner's authorized representative. The terms Owner and County are interchangeable. Wherever the term Owner or County is used, it shall mean the County of Orange.

§1.1.20 The "Project" is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

§1.1.21 The "Project Manual" is the volume usually assembled for the Work which may include, but not be limited to, the Notice/Invitation to Bidders, Instructions to Bidders, unexecuted Agreement, blank sample forms, General and Supplemental Conditions and Specifications.

§1.1.22 "Punch List" shall mean a list, issued pursuant to §9.8.2 of these General Conditions.

§1.1.23 "Site" shall mean the Project Site or the area upon or in which the Contractor's operations are to be carried on, and such other adjacent areas as may be designated by the Owner.

§1.1.24 The "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§1.1.25 The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor and includes all Subcontractors of any tier unless otherwise specified.

§1.1.26 "Substantial Completion" shall be the stage defined in §9.8.1 of the General Conditions and the date defined in §8.1.3 of the General Conditions.

§1.1.27 "Supplier" shall mean material and equipment suppliers of any tier.

§1.1.28 The "Work" is as defined in Article 2 of the Agreement.

§1.1.29 "Working Day" means a day the Contractor's crew is typically performing Work for this Project which may include some non-Business Days (e.g. if the Project work schedule is Monday-Saturday).

§1.2 EXECUTION, CORRELATION AND INTENT

§1.2.1 The Contract Documents shall be signed by the Owner and Contractor as provided in the Agreement. If either the Owner or Contractor or both do not sign all the Contract Documents, the Construction Manager shall identify such unsigned Documents upon request.

§1.2.2 Execution of the Contract by the Contractor is a representation that the Contractor has visited the Site, become familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, if Work is shown only on one but not on the other, the Contractor shall perform the Work as though fully described on both, consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.

§1.2.4 Organization of the Specifications into Divisions, Sections and Articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§1.2.5 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§1.3 RULES OF INTERPRETATION AND ORDER OF PRECEDENCE

§1.3.1 In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§1.3.2 The following rules of interpretation apply to this Contract and shall take priority over the Order of Precedence rule set forth in §1.3.2.5 below. If application of any of these rules of interpretation resolves the inconsistency, ambiguity, or discrepancy, it shall not be necessary to apply the Order of Precedence rule:

.1 When one portion of the Contract Documents places upon the Contractor more detailed or more stringent requirements than another portion of the Contract Documents, the more detailed and more stringent requirement applies. If there is any disagreement as to which requirement is more detailed or more stringent, the requirement that is costs more to perform shall be required unless agreed otherwise between the parties.

.2 In instances where materials and installation techniques or requirements are introduced by a Contractor's Submittal that is accepted by the Owner, if there are differences between or among the Contract, the manufacturer's written requirements, the Submittals, and relevant code and standards, the most stringent requirements shall apply. The Contractor shall perform the Work in accordance with the most stringent requirements at no increase to the Contract Sum or change to Contract Time.

.3 In the event of a discrepancy between a Drawing and figures written thereon, the figures govern

over the scaled dimensions unless they are obviously incorrect.

.4 Anything mentioned in the Specifications and not shown in the Drawings or shown in the Drawings and not mentioned in the Specifications, shall be of like effect as if shown in or mentioned in both. Anything addressed in a Drawing or Drawings of one trade discipline and not addressed in a Drawing or Drawings of another trade discipline shall be of like effect as if shown or mentioned in both.

.5 All Contract Documents and subsequently issued Modifications are essential parts of this Contract. A requirement included in one is binding as if included in all. Except as stated below, the following Order of Precedence shall be used to resolve any inconsistencies, conflicts, discrepancies, error, or omissions between or among the documents comprising the Contract, first taking precedence:

- .1** Most recent Modifications, Addenda, or Change Orders to the Agreement
- .2** Agreement
- .3** Federal, State and Local laws, regulations, codes or ordinances, as may be applicable
- .4** Supplemental Conditions
- .5** General Conditions
- .6** Specifications
- .7** Drawings
- .8** Referenced Standards
- .9** Project Labor Agreement
- .10** Instructions to Bidders
- .11** Notice to Bidders
- .12** Signed and Completed Bid Proposal

.6 Reports and documents listed in Contract Documents as "Reference Documents" are not part of the Contract. The Contractor acknowledges that it has read and has knowledge of the Reference Documents' content and the Contractor is deemed to have knowledge of such content. If a document that is not otherwise identified as a "Reference Document" is expressly identified in the Contract as "incorporated by reference" or "attached and incorporated" it is a Contract document rather than a "Reference Document." Documents and standards identified in this Contract as a Contract Document, whether included in the Contract or expressly incorporated by reference, are Contract Documents whether or not a full copy of the document is included as part of the Contract. Such incorporated Contract Documents shall have the priority of the documents they are identified to be.

.7 In the event of any other discrepancy or ambiguity or if design or material requirements are not clearly defined, the Contractor shall promptly submit the issue to the Owner for a written determination. Any action taken by the Contractor before the Owner issues its determination shall be at the Contractor's own risk and expense.

.8 The Contractor shall not take advantage of any patent or apparent error, omissions, or ambiguity in the Contract Documents. With respect to any patent or apparent error, omission, or ambiguity, the Contractor has a duty to inquire prior to submitting its Bid. If the Contractor fails to do so, the Owner's interpretation shall prevail.

.9 If the Contractor discovers an error, omission, or that additional information is needed to execute the Work, the Contractor shall immediately notify the Owner. The Owner will then make the corrections or interpretations it deems necessary to fulfill the intent of the Contract and shall provide those corrections or interpretations to the Contractor. The Contractor shall provide all labor, materials, tools, and equipment needed to complete the specified Work. Where additional details, clarifications, or both are needed to complete the specified Work, the Contractor shall comply with the details and clarifications provided by the Owner and the cost of compliance shall be deemed included in the Contract Sum.

§1.3.7 Organization of the Specifications into Divisions, Sections and Articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§1.3.8 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§1.4 CAPITALIZATION

§1.4.1 Terms capitalized in these General Conditions include those which are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other Contract Documents.

§1.5 INSTRUMENTS OF SERVICE

§1.5.1 The Drawings, Specifications and other documents, including those in electronic form, prepared by the Architect-Engineer and the Architect-Engineer's consultants are Instruments of Service and the property of the Owner and through which the Work to be executed by the Contractor is described. The Contractor may retain one record set. Neither the Contractor nor any Subcontractor or Supplier shall own or claim a copyright in the Instruments of Service and, unless otherwise indicated, the Owner will retain all common law, statutory and other reserved rights, in addition to the copyrights. All copies of Instruments of Service, except the Contractor's record set, shall be returned or suitably accounted for by the Architect-Engineer, on request, upon completion of the Work.

§1.5.2 The Instruments of Service are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor or Supplier on other projects or for additions to this Project outside the scope of the Contractor's Work without the specific written consent of the Owner.

§1.5.3 The Contractor, Subcontractors, or Suppliers are authorized to use and reproduce applicable portions of the Instruments of Service appropriate to and for use in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of copyrights or other reserved rights.

§1.5.4 All Drawings and Specifications, Shop Drawings, Product Data and Samples, computations, sketches, test data, survey results, photographs, renderings, models and other materials prepared by Contractor or any of its Subcontractors or their consultants shall be the property of the Owner and available to the Owner for its exclusive use and reuse at any time without further compensation to Contractor or Subcontractor and without any restrictions on such use and reuse.

ARTICLE 2 OWNER**§2.1 GENERAL**

§2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. The term "Owner" means the Owner or the Owner's authorized representative. The terms Owner and County are interchangeable. Wherever the term Owner or County is used, it shall mean the County of Orange.

§2.1.2 The Owner shall furnish to the Contractor within Fifteen (15) Days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the Site, and the Owner's interest therein at the time of execution of the Agreement and, within Five (5) Days after any change, information of such change in title, recorded or unrecorded.

§2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§2.2.1 The Owner shall furnish available surveys describing physical characteristics, legal limitations and utility locations for the Site of the Project, and a legal description of the Site. The Contractor shall be responsible to verify the accuracy of information furnished by the Owner and shall exercise proper precautions relating to the safe performance of the Work.

§2.2.2 Except for permits and fees which are the responsibility of the Contractor under the Contract Documents, the Owner shall pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit and any other federal, state or local government approvals not the responsibility of the Contractor.

§2.2.3 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness.

§2.2.4 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, one (1) printed copy of the Project Manual and Drawings as are reasonably necessary for execution of the Work.

§2.2.5 The Owner shall forward all communications to the Contractor through the Construction Manager and shall contemporaneously provide the same communications to the Architect-Engineer.

§2.2.6 The provisions of this §2.2 are in addition to other duties and responsibilities of the Owner listed these General Conditions including, but not limited to, those in Article 6 (Construction by Owner or by Other Contractors), Article 9 (Payments and Completion) and Article 11 (Insurance and Bonds).

§2.3 OWNER'S RIGHT TO STOP THE WORK

§2.3.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by §12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise

to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by §6.1. Contractor shall be responsible to the Owner, Architect-Engineer, Construction Manager and any other Contractors, Subcontractors or Suppliers for any delays or damages suffered by such failure or failures to correct any such deficiencies.

§2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

§2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a Seven- (7-) Day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, after such Seven- (7-) Day period, give the Contractor a second written notice to correct such deficiencies within a Three- (3-) Day period. If the Contractor, within the Three- (3-) Day period after receipt of such second notice, fails to commence and continue with due diligence to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued, deducting from payments then or thereafter due the Contractor, the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect-Engineer's, Construction Manager's, other Contractors and their respective consultant's additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3 CONTRACTOR

§3.1 GENERAL

§3.1.1 The term "Contractor" means each Contractor or each Contractor's authorized representative. When a certain Contractor is responsible for certain acts, that Contractor shall be specifically indicated. The plural term "Contractors" refers to persons or entities who also perform construction or similar services for the Project under separate Contracts with the Owner (e.g. other Contractors or installation contractors for Owner-purchased equipment) which may include or exclude a Contractor(s), depending upon the context.

§3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents and Submittals approved pursuant to §3.12.

§3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect-Engineer or the Construction Manager in the administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

§3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

§3.2.1 Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the Contract Documents with each other and with the information furnished by the Owner pursuant to § 2.2, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the Site affecting it. Any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Construction Manager and the Architect-Engineer as a Request for Information in such form as the Architect-Engineer may require.

§3.2.2 Any design errors or omissions noted by the Contractor during this review shall be reported promptly to the Construction Manager and the Architect-Engineer, but it is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise

specifically provided in the Contract Documents. The Contractor is required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations and any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Construction Manager and the Architect-Engineer.

§3.2.2 Contractor shall examine all the available records, including information referenced in Geotechnical Data, pertaining to the Work; make a field examination of the Site and rights-of-way; and inform itself about the character, quality and quantity of surface and subsurface materials and water conditions to be encountered, the quantities in the various Sections of the Work, any aspect of the means, methods, techniques, sequences and procedures needed for the prosecution of the Work, the location and suitability of all construction materials, the local labor conditions, safety precautions and programs incident, and all other matters in connection with the Work under this Contract. There is no expressed or implied guarantee as to the accuracy of the data or any interpretation, opinion, method, sequence, or procedure. Contractor states that it recognizes this, and that it has formed its own opinion of all these conditions from an inspection of the Site and has made its own interpretation of the data.

§3.2.3 Contractor shall have full responsibility for locating all Underground Facilities, for coordination of underground Work with existing Underground Facilities, and to provide safety and protection thereof. The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Architect-Engineer by the owners of such Underground Facilities or by others. Owner and Architect-Engineer shall not be responsible for the accuracy or completeness of any such information or data.

§3.2.4 Contractor acknowledges that the Contract Sum and detailed Draft Construction Schedule for completion of the Work are based on its own knowledge and judgment of the conditions and hazards involved, and not upon any representation of Owner, Construction Manager or Architect-Engineer. The Owner, Construction Manager and Architect-Engineer assume no responsibility for any understanding or representation made by any of their representatives during or prior to execution of this Contract unless such understanding or representations are expressly stated in the Contract and the Contract expressly provides that the responsibility is assumed by Owner, Construction Manager or Architect-Engineer. The cost of all of the following will be included in the Contract Sum and Contractor shall have full responsibility for:

- .1 Review and checking all such information and data;
- .2 Locating all Underground Facilities shown or indicated in the Contract Documents;
- .3 Coordination of the Work with the owners of such Underground Facilities during construction; and
- .4 The safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

§3.2.5 If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Architect-Engineer in response to the Contractor's notices or Requests for Information pursuant to §3.2.1 and §3.2.2, the Contractor shall make Claims as provided in § 4.4. If the Contractor fails to perform the obligations of §3.2.1 and §3.2.2, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. The Contractor shall not be liable to the Owner, Construction Manager or Architect-Engineer for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Contract Documents unless the Contractor reasonably recognized such error, inconsistency, omission or difference and failed to report it to the Construction Manager and the Architect-Engineer or, unless such damages are attributable to the Contractor's errors, inconsistencies or omissions.

§3.3 CONTRACTOR'S SUPERVISION AND CONSTRUCTION PROCEDURES

§3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, subject to overall coordination of the Construction Manager as provided in §4.2.2 and §4.2.3. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Construction Manager and the Architect-Engineer and shall not proceed with that portion of the Work without further written instructions from the Construction Manager and the Architect-Engineer.

§3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.

§3.3.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect-Engineer in their administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

§3.3.4 The Contractor shall inspect portions of the Project related to the Contractor's Work in order to determine that such portions are in proper condition to receive subsequent Work.

§3.3.5 Obtain all permits, licenses and certificates, including certificates of occupancy, required by all governmental authorities, having jurisdiction over the Work, except as otherwise provided in the Contract Documents or directed by the Owner in writing, and assist in the preparation and giving of such notices and arrange for all inspections as are legally required in connection with same. The cost of such permits, licenses and certificates shall be paid directly by the Contractor.

§3.3.6 In consultation with the Construction Manager, make arrangements for temporary construction facilities on the Site to be used by the Contractor and Subcontractors and assign to each Subcontractor the area and provide general service and facilities in the support of all Subcontractors, including, but not limited to, trash removal, toilets and washrooms, water for construction use and fire protection, construction service roads and their maintenance, power, general purpose hoists and security guards.

§3.3.7 Coordinate the Work by Contractor's Subcontractors on the Project until Final Completion satisfactory to the Construction Manager and Architect-Engineer and acceptance of the Project by the Owner.

§3.3.8 Establish and maintain quality control procedures for all parts of the Work. Take measures to prevent the installation of any Work not in conformity with the Contract Documents, including, but not by way of limitation, prevent use of material or equipment not properly approved, suspend operations upon the installation thereof, and report promptly to the Construction Manager and Architect-Engineer that particular Work or materials fail to conform to the Contract Documents.

§3.3.9 Ascertain that all inspection and testing of material or equipment required to be tested under the terms of the Contract Documents are performed by qualified consultants. Any inspection and testing that should be performed by an independent third-party to prevent conflict of interest shall be arranged and paid for by the Construction Manager in accordance with §3.23.

§3.3.10 Maintain equipment and material delivery records and inventory records for tools, equipment, machinery and office furniture acquired and employed in managing the Work.

§3.3.11 Maintain cost accounting records with respect to the Work in accordance with generally accepted accounting procedures. Provide, at the request of the Owner through the Construction Manager, a separate breakdown of the portion of the Cost of the Work allocable to building and equipment items for purposes of determining depreciation and for other federal income tax purposes. The Contractor shall Work with the Construction Manager to establish a satisfactory cost accounting system that will provide the Owner with the breakdown of costs which the Owner needs. Such accounting procedure shall be consistently applied throughout the completion of the Work, in addition to any other accounting required by the Contract Documents.

§3.3.12 Collect and deliver to the Construction Manager, in an orderly fashion, all guarantees, warranties, maintenance and operations manuals, part lists, keying schedules and other such data, documents, and any other items set forth in the Close-Out Requirements listed in Division 01 of the Specifications.

§3.3.13 Prepare for the Owner's use, operating manuals for the various building systems.

§3.3.14 Maintain orderly files for correspondence, reports of job conferences, Shop Drawings and other submissions, reproductions or original Contract Documents, including all Change Orders, supplemental Drawings, Modifications, and all other Project-related documents.

§3.3.15 Maintain a daily field report describing Work and activities accomplished on each Working Day, the number of each Subcontractor's employees at the Site, material deliveries, labor difficulties, observations in general and specific observations as required.

§3.3.16 Promptly advise the Construction Manager and Architect-Engineer as to the feasibility, costs, delay or accelerations, or other adverse or beneficial effects on schedule or costs anticipated with respect to proposed or ordered changes or Extra Work and promptly advise the Construction Manager and Architect-Engineer with respect to any and all matters affecting either Project costs or progress.

§3.4 LABOR AND MATERIALS

§3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§3.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees, Subcontractors and any other persons carrying out the Contract on behalf of Contractor. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§3.4.3 The Contractor may make materials substitutions only with the consent of the Owner, after evaluation by the Construction Manager and Architect-Engineer and in accordance with a Change Order or Construction Change Directive. All costs and time for making substitutions shall be borne by the Contractor.

By making requests for substitutions the contractor:

1. represents that it has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
2. represents that it will provide the same warranty for the substitution as it would have provided for the

product specified;

3. certifies that the cost data presented is complete and includes all related costs for the substituted product and for Work that must be changed as a result of the substitution, except for the Architect's redesign costs, and waives all claims for additional costs related to the substitution that subsequently become apparent; and
4. shall coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.

§3.4.4 Notwithstanding the delivery to and storage on the Site of materials, equipment and facilities to be incorporated into the Work by the Contractor, and the partial or total payment therefore by the Owner, the Contractor shall be responsible for, and shall bear all losses with respect to, the care and maintenance of such materials, equipment and facilities until they have been incorporated into the Work and such portion of the Work has been accepted in writing by the Owner. The Contractor shall store all materials delivered to the Project Site in the area designated by the Construction Manager so as to facilitate the orderly progress of the Work. If the Contractor does not store such materials in accordance with such directives, the Contractor shall bear the cost, if any and when incurred, of moving such materials, as well as the cost of any damage attributable to the unauthorized storage of such materials. The Contractor shall not be responsible for the storage of materials by the Owner on the Site not related to Contractor's Work, and the Owner shall not store any such materials so as to interfere with Contractor's execution of its Work. Acceptance of materials by or on behalf of the Owner (other than materials, fixtures or equipment provided directly by the Owner) shall not bar future rejection if subsequently found to be defective or inferior in quality or uniformity to materials specified in the Contract Documents, or if such materials are found not to be as represented. The Contractor's responsibility set forth in this §3.4 shall be subject to or reduced by amounts received or recoverable under applicable insurance required to be maintained by the Contract Documents.

§3.5 WARRANTY

§3.5.1 The Contractor warrants to the Owner, Construction Manager and Architect-Engineer that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's Warranty excludes remedy for damage or defect caused by abuse, Modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect-Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§3.5.2 The Contractor shall Warrant all their Work for one (1) year including all labor and materials. Each Contractor is responsible for Warranties related to its own Contract. If the products installed provide a longer period of warranty, the longer period shall prevail. The starting date for Warranty periods for all material, workmanship or equipment provided by the Contractor shall be the date of Final Completion for the Project. No Warranty period shall start before the date of Final Completion. Any Contractor that plans to use permanent building equipment and/or systems and/or utilities prior to Substantial Completion shall include in their Lump Sum Bid all costs for utility charges and any extended Warranties required to ensure that the base term for the Contractor's Warranty commences at the date of Final Completion.

§3.5.3 Rejection of Warranties: The Owner reserves the right to reject product warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

§3.5.4 Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do

not relieve the Contractor of its Warranty on the Work that incorporates the products, nor does it relieve Suppliers, manufacturers and subcontractors of any requirement to countersign special warranties with the Contractor.

§3.5.5 Replacement Cost: Upon determination that Work covered by the Warranty has failed, Contractor shall replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life. Replacement costs shall include removal and replacement of other Work by Contractor or others that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of Warranted Work.

§3.5.6 Reinstatement of Warranty: When Work covered by the Warranty has failed and been corrected by replacement or rebuilding, Contractor shall reinstate the Warranty by written endorsement. The reinstated Warranty shall be equal to the original Warranty with an equitable adjustment for depreciation.

§3.5.7 Owner's Recourse: Written Warranties made to the Owner are in addition to implied warranties and shall not limit the rights and remedies otherwise available at law or in equity, nor shall Warranty periods be interpreted as limitations on time in which the Owner can enforce such other rights or remedies.

§3.6 TAXES

§ 3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when Bids are received or negotiations are concluded, whether effective or merely scheduled to go into effect by the time of purchase. However, the materials to be incorporated into the Project or Work as set forth in the Contract Documents are exempt from New York State sales tax.

§3.7 PERMITS, FEES AND NOTICES

§3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all applicable permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when Bids are due or negotiations concluded.

§3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to performance of the Work.

§3.7.3 It is the Contractor's responsibility to ascertain that the Contract Documents are in accordance with all applicable laws, statutes, ordinances, building codes, rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Construction Manager, Architect-Engineer and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

§3.7.4 If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, rules and regulations without such notice to the Construction Manager, Architect-Engineer and Owner; the Contractor shall be responsible for correcting all such Work and shall be responsible for all resulting costs, losses or damages.

§3.7.5 Contractor shall supply the Construction Manager, within Two (2) Days of issuance, One (1) copy of all permits, licenses, inspection reports, releases, jurisdictional settlements, notices and similar documents pertaining to this §3.7.

§3.8 CONTINGENCIES

§3.8.1 The Contractor shall include in the Contract Sum all Contingencies and Allowances stated in the Contract Documents. Items covered by Contingencies shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§3.8.2 The Work and associated costs for items charged to Contingencies must be reviewed and approved in writing by the Architect-Engineer, Construction Manager and the Owner as per the Change Order process described in Article 7 of these General Conditions.

§3.8.3 Unless otherwise provided in the Contract Documents:

- .1** authorization to proceed on Contingency based Work shall be provided by the Owner in sufficient time to avoid delay in the Work;
- .2** Contingencies shall cover the cost to the Contractor, less applicable trade discounts, as approved by the Owner;
- .3** Contractor's costs for unloading and handling at the Site, labor, installation costs, overhead, profit and other expenses contemplated for stated Contingency amounts shall be included in the Contract Sum and not in the Contingencies;
- .4** the amount of each Contingency shall be listed as a separate line item(s) on the Contractor's Schedule of Values;
- .5** whenever costs are more than or less than the balance of remaining Contingency funds, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the Contingencies listed pursuant to §3.8.3.4.
- .6** at closeout of Contract, funds remaining in the Contingencies will be credited to the Owner by deductive Change Order.

§3.9 SUPERVISION

§3.9.1 The Contractor shall employ a competent Superintendent, Assistant Superintendent, General Foreman, Foreman, Project Manager, Assistant Project Manager and necessary assistants who shall be on Site during performance of the Work. The Superintendent, Assistant Superintendent, General Foreman, Foreman and Project Manager, Assistant Project Manager shall represent the Contractor, and communications given to the Superintendent, Assistant Superintendent, General Foreman, Foreman or Project Manager, Assistant Project Manager shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case. It shall be the Contractor's responsibility to manage and coordinate the Work of their Subcontractors and Suppliers. The Superintendent, Assistant Superintendent, General Foreman, Foreman, and Project Manager, Assistant Project Manager shall be subject to approval by the Owner and, if Owner deems supervision inadequate at any time, any objectionable Supervision shall be removed and replaced, at Owner's request, at no additional cost to Owner.

§3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

§3.10.1 Contractors shall submit required scheduling information in accordance with Specification provisions

pertaining to Scheduling.

3.10.2 The Contractor, within (10) days of being awarded the Contract, shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project schedule to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors or the construction or operations of the Owner's own forces.

3.10.3 In the event the Contractor is not performing in accordance with approved Construction Schedule the Contractor will increase its workforce to perform the Work on an overtime basis including without limitation a second shift and performing work on holidays and weekends to comply with the approved schedule when directed by the Construction Manager. All costs including those incurred by the Owner, Architect, and Construction Manager resulting from such overtime shall be borne by the Contractor.

§3.11 DOCUMENTS AND SAMPLES AT THE SITE

§3.11.1 The Contractor shall maintain at the Site for the Owner one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record changes and selections made during construction, in addition approved Shop Drawings, Product Data, Samples and similar required Submittals. These documents shall be available to the Construction Manager and Architect-Engineer and shall be delivered to the Construction Manager for Submittal to the Owner upon completion of the Work.

§3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

§3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, manufacturer, Supplier or distributor to illustrate some portion of the Work.

§3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§3.12.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

§3.12.4 Shop Drawings, Product Data, Samples and similar Submittals are not Contract Documents. The purpose of their Submittal is to demonstrate for those portions of the Work for which Submittals are required by the Contract Documents the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Architect-Engineer is subject to the limitations of §3.12.7.

§3.12.5 The Contractor shall review, approve and submit to the Architect-Engineer with a copy to the Construction Manager, in accordance with the schedule and sequence approved by the Construction Manager, Shop Drawings, Product Data, Samples and similar Submittals required by the Contract Documents. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples and similar Submittals with related documents submitted by other Contractors. Informational Submittals upon which the Construction Manager and Architect-Engineer are not expected to take responsive action may be so identified in the Contract Documents. The Contractor shall direct specific attention, in writing on

resubmitted Shop Drawings, Product Data, Samples or similar Submittals, to revisions other than those requested by the Construction Manager and Architect-Engineer on previous Submittals. Submittals made by the Contractor which are not required by the Contract Documents may be returned without action. By approving and submitting Shop Drawings, Product Data, Samples and similar Submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents. The Contractor may only have two (2) rejections for a submitted or equal specified item. After that the Contractor will have to pay for all expenses for any additional review time.

§3.12.7 The Architect-Engineer shall review and approve or take other appropriate action upon the Contractor's Submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect-Engineer's action will be taken with such reasonable promptness as to cause no delay in the Work of the Contractor or in the activities of the other Contractors, the Owner, or the Construction Manager, while allowing sufficient time in the Architect-Engineer's professional judgment to permit adequate review. Review of such Submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect-Engineer's review of the Contractor's Submittals shall not relieve the Contractor of the obligations under §3.3, §3.5 and §3.12. The Architect-Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect-Engineer, of any construction means, methods, techniques, sequences or procedures. The Architect-Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§3.12.8 The Contractor shall not be required to provide professional services in violation of applicable law or which constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect-Engineer will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other Submittals prepared by such professional. Shop Drawings and other Submittals related to the Work designed or certified by such professional, shall bear such professional's written approval when submitted to the Architect-Engineer. The Owner, Construction Manager and Architect-Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided the Owner, Construction Manager and Architect-Engineer have specified to the Contractor all performance and design criteria that such services must satisfy. The Construction Manager and Architect-Engineer will review, approve or take other appropriate action on such Submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall only be responsible for the adequacy of the performance or design criteria required by the Contract Documents, if any.

§3.12.9 The Contractor shall perform no portion of the Work requiring Submittal and review of Shop Drawings, Product Data, Samples or similar Submittals until the respective Submittal has been approved by the Construction Manager and Architect-Engineer. The Work shall be in accordance with approved Submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect-Engineer's approval of Shop Drawings, Product Data, Samples or similar Submittals unless the Contractor has specifically informed the Construction Manager and the Architect-Engineer in writing of

such deviation at the time of Submittal and (1) the Architect-Engineer has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar Submittals by the Architect-Engineer's approval thereof.

§3.12.10 The Construction Manager, Architect-Engineer and/or the Contractor will be responsible for all costs related to any loss of time with respect to the Master Construction due to delays created by those parties, as applicable.

§3.12.10 The Architect-Engineer's review of Contractor's submittals will be limited to examination of an initial submittal and (1) resubmittals. The Owner is entitled to obtain reimbursement from the Contractor for amounts paid to the Architect-Engineer for evaluation of additional resubmittals.

§3.13 USE OF SITE

§3.13.1 The Contractor shall confine operations at the Site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the Site with materials or equipment.

§3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the Site. Each Contractor shall confine its operations to the limits of the rights-of-way indicated on the Drawings and shall not trespass on private property. Where the Owner has procured easements and rights-of-way from individuals, extreme care must be exercised while working on these areas. Prior to use of heavy equipment on or over developed surfaces (lawns; gardens; driveways; courtyards; brick, stone or paved paths, etc.), the surface of the area shall be planked, or otherwise adequately protected to prevent harm by tractors, heavy wheels, etc. Bulldozers and other heavy equipment shall not be used for backfilling near developed surfaces (lawns; gardens; driveways; courtyards; brick, stone or paved paths, etc.). Contractor is always responsible at Contractor's cost for restoring all affected areas back to original condition, unless such area is subject to a Contract Modification.

§3.13.3 The Contractor shall be responsible for enforcing the following rules of conduct for its personnel and those of its Subcontractors and Suppliers at the Project site, and the Owner's Project Representative shall provide interpretations should a question arise if the rules of conduct are being adequately enforced by the Contractor:

1. No smoking or use of tobacco products.
2. No drinking of alcoholic beverages or use of controlled substances.
3. No working, or presence on site, under the influence of alcoholic beverages or controlled substances.
4. No use of indecent language or display of indecent images, publications or terms.
5. No use of radios or other entertainment devices.
6. No horseplay or dangerous behavior.
7. No firearms or other weapons.
8. No communication with staff.

§3.13.4 The Contractor shall require its personnel and those of its Subcontractors and Suppliers to wear visible photo-identification badges acceptable to the Owner, at all times for identification and security purposes. All personnel must wear a yellow safety vest with the Prime or Subcontractor company name at all times when on project site.

§3.14 CUTTING AND PATCHING

§3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

§3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or other Contractors by cutting, patching, excavating or otherwise altering such construction. Contractor shall be responsible for the repair, replacement or other costs related to any such damages.

§3.14.3 The Contractor shall not cut or otherwise alter construction by the other Contractors or the Owner's own forces except with written consent of the Construction Manager, Owner, and such other Contractors; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the other Contractors or the Owner, the Contractor's consent to cutting or otherwise altering the Work.

§3.15 CLEANING UP

§ 3.15.1 The Contractor shall:

- .1** provide labor and equipment necessary to remove debris and scrap materials from Work areas inside the building, on a daily basis.
- .2** maintain areas in a well-groomed, clean condition acceptable to the Owner.
- .3** eliminate fire hazards by removing combustible materials from the building immediately upon being classed as scrap, to the designated location of the Site.
- .4** clean Owner-occupied areas at the end of each Work period and restored such areas to the condition existing at the beginning of the period, unless otherwise acceptable to the Owner.
- .5** take measures during construction to enforce protection of adjacent surfaces during application of finishes, etc., and protection of finished resilient flooring and similar finished surfaces.
- .6** provide equipment and labor to keep storage areas and Work areas clear to maintain continuous operations.
- .7** remove snow whenever the fall totals one inch (1") or more, provide sand and/or salt in icy areas, and remove, by pumping or other acceptable means, any areas of standing water which interfere with operations or access to Work locations.
- .8** store materials only in those areas designated by the Construction Manager. All materials stored at the Site shall be in a neat and orderly manner.

§3.15.2 On completion of the Work, any areas of Owner's property which have been disturbed due to these operations, and the alteration or restoration of which is not specifically included in any Section of the Specifications, shall be restored by Contractor to the original condition. This shall include removal and replacement of damaged paving, sidewalks, curbs, and any other incidental items. Restoration Work shall be in accordance with the requirements of these specifications for similar or adjacent Work where such exist; otherwise all Work shall be as directed by the Owner.

§3.15.3 On completion of the Work, any areas of adjacent municipal or private property which are damaged

or disturbed as a result of the operations under this Contract, shall be corrected or replaced by Contractor. Corrective Work on municipal property shall be in accordance with requirements of the municipal authority having jurisdiction, and to the satisfaction of such authority and the Owner. Corrective Work on private property generally shall be in accordance with requirements for Work of a similar nature under this Contract, shall be at least equal to the adjacent undamaged surfaces, and shall be carried out to the satisfaction of the Owner, the owner of the property and any municipal authority having jurisdiction.

§3.15.4 On completion of the Work, items of building construction which have been damaged or disturbed during operations under this Contract, and the reconditioning, repair or replacement of which does not specifically form part of this Contract, shall be corrected by the Contractor to the reasonable satisfaction of the Owner.

§3.15.5 In addition to the above requirements, upon completion of the Work or of an individual portion thereof, the Contractor, immediately prior to turning over the Work of the completed portion thereof to the Owner, shall arrange for the proper and complete performance of the following:

- .1 cleaning and polishing of glass and replacement of any broken items;
- .2 cleaning and polishing of finish hardware and adjustment of closers, holders, locksets, etc., as required for proper operation;
- .3 removal of fingerprints, soot smudges and similar deposits from finished surfaces;
- .4 removal of paint spillage or overspray, smeared caulking or sealing compounds and similar defects, from finish surfaces including mechanical and electrical devices and equipment;
- .5 removal and replacement of caulking or sealant beads not properly adhering to substrate;
- .6 removal of temporary coverings in applied floor finish areas and final, thorough broom cleaning of finished floors. If final broom cleaning does not, in the opinion of Owner, provide a floor surface which is suitable for moving in of the Owner's equipment, scrub and polish or otherwise refinish areas as directed until acceptable to the Owner;
- .7 soiled carpeting shall be shampooed by a professional carpet cleaning company. If carpet is not cleaned to the reasonable satisfaction of the Owner, the carpet shall be replaced by Contractor at its sole expense;
- .8 reconditioning of permanent heating equipment used by Contractor for provision of temporary heat during construction, including replacement of filter elements;
- .9 restoration of previously finished surfaces damaged due to failure or removal of protective measures;
- .10 cleaning by washing of solid concrete walls, where exposed;
- .11 replacement of burned out light bulbs, tubes, etc.

§3.15.6 If the Contractor fails to clean up as provided in the Contract Documents, the Construction Manager may do so with the Owner's approval and the cost thereof shall be charged to the Contractor.

§3.16 ACCESS TO WORK

§3.16.1 The Contractor shall provide the Owner, Construction Manager and Architect-Engineer access to the Work in preparation and progress wherever located.

§3.17 ROYALTIES, PATENTS AND COPYRIGHTS

§3.17.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager and Architect-Engineer and their respective consultants harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Architect-Engineer. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect-Engineer.

§3.18 RESERVED

§3.19 AS-BUILT DRAWINGS

§3.19.1 As the Work progresses, the Contractor shall maintain a current and accurate record of all deviations from the Drawings and Specifications which occur in the Work as actually constructed and installed. Upon completion of the Work, and prior to Final Payment, the Contractor shall furnish to the Owner two complete record sets, one of which shall be a set of Mylar reproducible documents and in electronic (AutoCAD) format, of "As Built Drawings" for HVAC, plumbing, fire protection, electrical, security, technology cabling, Integrated drawings, glass and glazing, and such other descriptions, drawings, sketches, marked prints and similar data, depicting the Project as modified during construction, with the exception of architectural and structural "as built" drawings which shall be prepared by the Architect-Engineer, per the terms of the Owner-Architect-Engineer Agreement, based on information provided by the Contractor as described in the Contract Documents.

§3.20 PROTECTION OF SURFACES, UTILITIES AND STRUCTURES

§3.20.1 Each Contractor shall be responsible for the protection of all existing surfaces, utilities and new surfaces intended to remain, including adjacent structures and spaces that are affected by the Work. Any damages or disturbances to such surfaces, utilities or structures during the execution of the Work under this Contract shall be repaired and/or replaced by the Contractor at no cost to the Owner or Architect-Engineer.

§3.21 ENVIRONMENTAL REQUIREMENTS

§3.21.1 Throughout performance of the Work, the Contractor shall conduct all operations in such a way as to minimize impact on the natural environment and prevent any spread or release of contaminated or hazardous substances.

§3.21.2 The Contractor shall:

- .1** Comply with all New York State and federal laws, regulations and guidance governing environmental requirements and conduct the Work in accordance with the requirements of this Contract, including complying with permit requirements and Project plans and approvals.
- .2** Provide all documentation required by all levels of governing authority and the Owner concerning environmental requirements.

.3 Provide and maintain effective planning and field control measures (including, but not limited to: obtaining certifications; conducting analyses and monitoring of activities as required by the Contract, permit conditions, or other applicable laws, regulations and guidance; using appropriate equipment; and proceeding in accordance with permit requirements) for the following activities:

- .1** wastewater discharges to land, surface water, or groundwater;
- .2** extraction and supply of water;
- .3** storm water management;
- .4** spill prevention and response;
- .5** erosion and sedimentation control;
- .6** minimization of dust and air emissions, containment of chemical vapors, control of engine exhaust gases, and control of smoke from temporary heaters;
- .7** noise and vibration control;
- .8** waste and hazardous waste management;
- .9** Work area restoration, including revegetation;
- .10** maintenance of traffic and pedestrians;
- .11** control of sanitary facilities;
- .12** proper storage of fuels and other potential contaminants; and
- .13** proper and legal disposal, off-Site unless otherwise provided, of waste and spoil resulting from construction activities.

.4 Develop and maintain a written environmental compliance plan ("Environmental Compliance Plan") that provides the Contractor's plan for compliance and that compiles all acts, procedures, and other requirements the Contractor must follow to comply with all laws, regulations, guidance, permits, and the Contract Documents. Contractor shall submit its written Environmental Compliance Plan to the Owner for review Thirty (30) Days after Notice of Award and in any event prior to commencing Work at the Site. The Owner's review of the Environmental Compliance Plan shall not relieve the Contractor of its obligations under this Contract or as imposed by applicable laws, regulations and guidance. The Contractor is solely responsible for the adequacy and effectiveness of its Environmental Compliance Plan and has the sole responsibility for implementing and enforcing it.

.5 Comply with all access restrictions, including prohibitions on access to certain areas on or adjacent to the Site and require its employees and those of its Subcontractors and Material men to comply with all signage and flagging related to restricted areas. Restricted areas include, but are not limited to, environmental mitigation study areas and cultural, historical, and archaeological sites.

.6 Not proceed with any renovation or demolition Work until:

- .1** asbestos surveys have been completed and notifications have been delivered to the

appropriate regulatory agencies in accordance with applicable laws, regulations and guidance; and

- .2 the Owner specifically authorizes such Work to proceed.

If asbestos-containing materials in addition to those identified in completed surveys be uncovered during performance of the Work, the provisions of §3.21.2.7 will apply.

- .7 Immediately stop Work in any area (Stop Work Area) where any of the following are uncovered:

- .1 contaminated soil indicators, such as odor or appearance;
- .2 unknown containers, piping, underground storage tanks, or similar structures; or
- .3 any other materials that are reasonably suspected to be toxic or hazardous.

The Contractor shall immediately notify the Owner, who will determine the Stop Work Area and confirm it in writing. Activity in the Stop Work Area can only resume upon the Owner's written approval.

- .8 Immediately stop Work in any area where cultural resources or artifacts, or materials with archaeological or historical value are discovered and notify the Owner. The Contractor shall ensure that no artifacts or materials shall be disturbed or taken from the location of discovery. Neither the Contractor nor any of its Subcontractors or Suppliers shall have property rights to such artifacts or materials. Activity in the Stop Work Area can only resume upon the Owner's written approval.

- .9 Manage, handle, store, transport, and dispose of all hazardous waste generated by the Contractor during its Work in accordance with all applicable laws, regulations and guidance. The managing, storing, and disposing includes, but is not limited to, waste minimization, hazardous waste generator registration, hazardous materials inventory, employee training, hazardous waste spill management and reporting, proper storage of hazardous waste, equipment decontamination, preparation of manifests, on-Site and off-Site transport of hazardous waste, and selection and use of off-Site final disposal facilities.

§3.22 REQUESTS FOR INFORMATION

§3.22.1 In the event that the Contractor determines that some portion of the Contract Documents for the Project requires clarification or interpretation by the Architect-Engineer, the Contractor shall submit a Request for Information (RFI) in writing to the Construction Manager. RFI shall be submitted in writing to the Construction Manager on a form provided by the Construction Manager.

- .1 Construction Manager shall provide RFI numbers and RFI forms.
- .2 If submitted via email subject line of the email shall clearly read "RFI" with a summary title and shall be on RFI forms.

§3.22.2 The Contractor shall define the issue that requires clarification or interpretation in clear and concise language as follows:

- .1 Indicate location of the issue within the building, by room number, name and nearest columns.
- .2 Confirm that reasonable locations for the information required have been reviewed and document those locations by specific references to the Drawings and Project Manual.

.3 Include a review for systemic or global implications, including review of other pending RFI's and Work of other phases, so that the final RFI submitted represents a reasonable consolidation of similar requests.

.4 Description of what the Contractor believes to be the intent of the design documents, with due regard to §3.2 of the Agreement, along with reasons why the RFI is required.

.5 Indicate any schedule and/or cost impact.

§3.22.3 The Contractor shall coordinate and review the RFI's originating from its trades, Subcontractors, Suppliers, manufacturers, etc. for compliance with this process, including polling them and meeting with them on-Site to review the issue prior to its submission as an RFI.

§3.22.4 RFI's that do not comply with the requirements of this §3.22 will be returned to the Contractor for revision and resubmission.

§3.22.5 The Architect-Engineer and/or Construction Manager will review all RFI's to determine whether they are RFI's within the meaning of this term as defined above. If the Architect-Engineer and/or Construction Manager determines that the document submitted is not an RFI, it will be returned to the Contractor un-reviewed as to content, for resubmission in the proper manner and it will be removed from the RFI log.

§3.22.6 The Architect-Engineer and Construction Manager shall endeavor to reply to all RFIs within Ten (10) Business Days. If additional time is required for review, the Contractor shall be informed within said Ten (10) Business Days. However, in no case shall the Architect-Engineer and/or Construction Manager be required to respond to an RFI in less than Five (5) Business Days.

§3.22.7 Responses to RFI's shall not change any requirements of the Contract Documents.

§3.23 TESTS AND INSPECTIONS

§3.23.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. The Contractor shall cooperate with the Construction Manager who shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority. All related costs of such tests, inspections and approvals shall be billed to Owner as Reimbursable Expenses of the Construction Manager or Owner shall contract directly for costs of test, inspections, and approvals. The Construction Manager shall give the Contractor and Owner written and timely notice of when and where tests and inspections are to be made so that their representatives may be present for such procedures. The Construction Manager shall be required to have all the required insurances for itself and the testing or inspection consultants, as may be required by the Owner's Risk Manager, before conducting any such tests, inspections or approvals and the Construction Manager and/or testing or inspection consultants shall bear the full cost of obtaining same. Notwithstanding the Construction Manager's duties under this §3.23.1 to arrange for tests, inspections and approvals; the Owner reserves the right to contract directly with any entity for testing, inspection or approvals. The Architect/Engineer shall inspect all piles.

§3.23.2 In the event that the Construction Manager, Architect-Engineer, Owner or other public or independent authorities having jurisdiction over the Work determine that portions of the Work require additional testing, inspection or approval not included under §3.23.1, upon written authorization from the Owner, the Construction Manager, with the cooperation of the Contractor, shall make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Construction Manager shall give timely notice

to the Contractor and Owner of when and where tests and inspections are to be made so that their representatives may be present for such procedures. Such costs, except as provided in §3.23.3, shall be billed to Owner as Reimbursable Expenses of the Construction Manager. Notwithstanding the Construction Manager's duties under this §3.23.1 to arrange for tests, inspections and approvals; the Owner reserves the right to contract directly with any entity for testing, inspection or approvals.

§3.23.3 If such procedures for testing, inspection or approval under §3.23.1 and §3.23.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated testing or inspection procedures and compensation for the Construction Manager's, Owner's or other Contractors' services and expenses shall be at the Contractor's expense and not billed to Construction Manager or Owner.

§3.23.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Construction Manager.

§3.23.5 If the Contractor, Construction Manager, Architect-Engineer or Owner will observe tests, inspections or approvals required by the Contract Documents, each will do so promptly and, where practicable, at the normal place of testing.

§3.23.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§3.24 POSTING.

§3.24.1 Contractor and all Subcontractors, if any, engaged in the Work described in this Contract shall post and maintain at each of their establishments and at the Work Site(s), any and all notices required of employers by federal and New York State laws and regulations, as may be amended.

ARTICLE 4 ADMINISTRATION OF THE CONTRACT

§4.1 ARCHITECT & CONSTRUCTION MANAGER

§4.1.1 The Architect-Engineer is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect-Engineer" means the Architect-Engineer or the Architect-Engineer's authorized representative.

§4.1.2 The Construction Manager is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Construction Manager" means the Construction Manager or the Construction Manager's authorized representative.

§4.1.3 Duties, responsibilities and limitations of authority of the Construction Manager and Architect-Engineer as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner and, in the case of an Agreement with the Owner, the other party to the Agreement.

§4.1.4 In case of termination of employment of the Construction Manager or Architect-Engineer, the Owner shall appoint a construction manager or architect against whom the Contractor makes no reasonable objection and whose status under the Contract Documents shall be that of the former construction manager or architect, respectively.

§4.2 ADMINISTRATION OF THE CONTRACT

§4.2.1 The Construction Manager and Architect-Engineer will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives (1) during construction, (2) until Final Payment is made and (3) with the Owner's concurrence, from time to time during the correction period described in §12.2. The Construction Manager and Architect-Engineer will advise and consult with the Owner and will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

§4.2.2 The Construction Manager will determine in general that the Work is being performed in accordance with the requirements of the Contract Documents, will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work.

§4.2.3 The Construction Manager will schedule and coordinate the activities of the Contractors and the Owner's own forces in accordance with the latest approved Master Schedule. The Contractor shall participate and cooperate with other Contractors, the Construction Manager and Owner in reviewing their Draft Construction Schedules when directed to do so. The Contractor shall make any revisions to its Draft Construction Schedule deemed necessary after a joint review and mutual agreement. The Master Schedule shall constitute the schedule to be used by the Contractor, other Contractors, the Construction Manager and the Owner until subsequently revised.

§4.2.4 The Architect-Engineer will visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the Architect-Engineer will not be required to make exhaustive or continuous on-Site inspections to check quality or quantity of the Work. On the basis of on-Site observations as an architect, the Architect-Engineer will keep the Owner informed of progress of the Work and will endeavor to guard the Owner against defects and deficiencies in the Work.

§4.2.5 The Construction Manager, except to the extent required by §4.2.3, and Architect-Engineer will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with each Contractor's Work, since these are solely the Contractor's responsibility as provided in §3.3.1, and neither will be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents, excepting the Construction Manager's or Architect-Engineer's negligence in failing to stop Work that appears grossly not in accordance with the Contract Documents. Neither the Construction Manager nor the Architect-Engineer will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

§4.2.6 Communications Facilitating Contract Administration.

- .1** Except as otherwise provided in the Contract Documents, or when direct communications have been specially authorized, the Owner and Contractor shall communicate through the Construction Manager and shall contemporaneously provide the same communications to the Architect-Engineer.
- .2** Communications by and with the Architect-Engineer's consultants shall be through the Architect-Engineer.
- .3** Communications by and with Subcontractors and Suppliers shall be through the Contractor.

.4 Communications by and with other Contractors shall be through the Construction Manager and shall be contemporaneously provided to the Architect-Engineer.

.5 Communication from the Construction Manager shall not be construed as releasing any Contractor or Subcontractor from performing all Work in accordance with the Contract Documents.

.6 The Contractor or Subcontractors, their officers, employees, agents, subcontractors, or consultants should not speak directly with the general public or SUNY officers, personnel, or students without the Construction Manager present for the discussion.

§4.2.7 The Construction Manager will maintain at the Site for the Owner one record copy of all Contracts, Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes and selections made during construction, and in addition approved Shop Drawings, Product Data, Samples and similar required Submittals. These will also be available to the Architect-Engineer and the Contractor and will be delivered to the Owner upon completion of the Project.

§4.2.8 The Architect-Engineer shall receive, review and approve all Shop Drawings, Product Data and Samples in accordance with §3.12.

§4.2.9 The Architect-Engineer shall prepare Change Orders and the Construction Manager shall prepare Construction Change Directives and the Architect-Engineer shall take appropriate action thereon in accordance with Article 7.

§4.2.10 The Architect-Engineer shall have authority to order Minor Changes in the Work as provided in §7.4.

§4.2.11 The Construction Manager and the Architect-Engineer shall review applications and prepare certificates for payments in accordance with Article 9.

§4.2.12 The Construction Manager and the Architect-Engineer shall conduct inspections and prepare certificates for Substantial Completion and Final Completion pursuant to §9.8 and §9.10.

§4.2.13 If the Owner and Architect-Engineer agree, the Architect-Engineer will provide one or more Project representatives to assist in carrying out the Architect-Engineer's responsibilities at the Site. The duties, responsibilities and limitations of authority of such Project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§4.2.14 The Architect-Engineer will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of the Construction Manager, Owner or Contractor. The Architect-Engineer's response to such requests will be made with reasonable promptness and within any time limits agreed upon. If no agreement is made concerning the time within which interpretations required of the Architect-Engineer shall be furnished in compliance with this §4.2.14, then delay shall not be recognized on account of failure by the Architect-Engineer to furnish such interpretations until Ten (10) Days after written request is made for them.

§4.2.15 Interpretations and decisions of the Architect-Engineer will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of Drawings. When making such interpretations and decisions, the Architect-Engineer will endeavor to secure faithful performance by both Owner and Contractor.

§4.2.16 The Architect-Engineer's decisions on matters relating to aesthetic effect will be final if consistent

with the intent expressed in the Contract Documents.

§4.2.17 Rejection of Work; Additional Inspection or Testing.

.1 The Architect-Engineer will have authority to reject Work which does not conform to the Contract Documents, and to require additional inspection or testing, in accordance with §3.23, whether such Work is fabricated, installed or completed, but will take such action only after notifying the Construction Manager. Subject to review by the Architect-Engineer, the Construction Manager will have the authority to reject Work which does not conform to the Contract Documents. Whenever the Construction Manager considers it necessary or advisable for implementation of the intent of the Contract Documents, the Construction Manager will have authority to require additional inspection or testing of the Work in accordance with §3.23, whether such Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of §4.2.14 through §4.2.16 inclusive, with respect to interpretations and decisions of the Architect-Engineer. However, neither the Architect-Engineer's nor the Construction Manager's authority to act under this §4.2.17 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect-Engineer or the Construction Manager to the Contractor, Subcontractors, Suppliers, their agents or employees, or other persons performing any of the Work.

.2 In the event the Architect-Engineer and/or Construction Manager views the Work or some portion thereof and finds that it must be rejected as not in accordance with the Contract Documents, a Notice of Non-Compliance will be issued by the Construction Manager to the Contractor for action. Payment shall not be made for any portion of the Work for which a Non-Compliance Notice has been issued and the Work not corrected to the satisfaction of the Architect-Engineer and Construction Manager.

.3 Upon receipt of a Non-Compliance Notice, the Contractor shall provide a written response to the Construction Manager within Five (5) working days after receipt of the Notice. The Contractor's response shall detail either:

.1 Why they believe that the Work was performed in accordance with the Contract Documents, or,

.2 What corrective action they intend to take, at their sole expense, to correct the non-conforming Work.

.4 Each Contractor agrees to resolve all Notices of Non-Compliance to the satisfaction of both the Architect-Engineer and Construction Manager.

.1 Each Contractor must resolve any open Notices of Non-Compliance in order to receive their Final Payment.

.2 No Proposed Change Orders shall be approved where a related Notice of Non-Compliance is unresolved.

.3 Owner reserves the right to withhold monies from retainage and/or specific line items on the Schedule of Values for any unresolved Notices of Non-Compliance.

§4.3 CLAIMS AND DISPUTES

§4.3.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right,

adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question arising out of or relating to the Contract. Claims must be initiated by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

§4.3.2 Decision of Architect-Engineer. Claims, including those alleging an error or omission by the Construction Manager or Architect-Engineer, but excluding those arising under §10.3, shall be referred initially to the Architect-Engineer for decision. An initial decision by the Architect-Engineer shall be required as a condition precedent to litigation of all Claims (unless the parties agree to some other methodology) arising prior to the date Final Payment is made, unless Thirty (30) Days have passed after the Claim has been referred to the Architect-Engineer with no decision having been rendered by the Architect-Engineer.

§4.3.3 Time Limits on Claims. Claims by any party must be initiated within Ten (10) Days after occurrence of the event giving rise to such alleged Claim or within Ten (10) Days after the claimant first recognizes the condition giving rise to the alleged Claim, whichever is later. Claims must be initiated by written notice to the Architect-Engineer and the other party. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered unless submitted in a timely manner.

§4.3.4 Continuing Contract Performance. Pending final resolution of a Claim, except as otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§4.3.5 Claims for Concealed or Unknown Conditions: Subject to Contractor obligations pursuant to §3.2, if conditions are encountered at the Site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the Construction Manager and Architect-Engineer promptly before conditions are disturbed and in no event later than Ten (10) Days after first observance of the conditions. The Architect-Engineer will promptly investigate such conditions and, if they differ and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect-Engineer determines that the conditions at the Site are not materially different, no change in the terms of the Contract is justified, the Architect-Engineer shall so notify the Owner and Contractor in writing, stating the reasons. Claims by Contractors in opposition to such determination must be made within Ten (10) Days after the Architect-Engineer has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect-Engineer for initial determination, subject to further proceedings pursuant to §4.4.

§4.3.6 Claims for Additional Cost.

.1 If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under §10.3. If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Architect-Engineer, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Architect-Engineer, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension or (7) other reasonable grounds, Claim shall be filed in accordance with the procedure established herein.

.2 If Unit Prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such Unit Prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable Unit Prices shall be equitably adjusted.

§4.3.7 Claims for Additional Time.

.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the time period and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the Master Schedule.

§4.3.8 Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding Ten (10) Days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be filed as provided in §4.3.6 or §4.3.7.

§4.3.9 Claims Procedures.

Claims by the Contractor must be made by written notice in accordance with the following procedures.

.1 The Contractor may submit a claim concerning a matter properly noticed in accordance with the time requirements of this Contract.

.2 Failure by the Contractor to furnish the required claim documentation within the time set forth above shall constitute waiver of the Contractor's right to compensation for such claim.

.3 Contractor shall furnish three (3) certified copies of the required claim documentation. The claim documentation shall be complete when furnished. The evaluation of the Contractor's claim will be based, among other things, upon the Owner project records and the Contractor's furnished claim documentation.

.4 Claim documentation shall conform to Generally Accepted Accounting Principles and shall be in the following format:

- .1 General Introduction
- .2 General Background Discussion
- .3 Issues
 - a. Index of Issues (listed numerically)
 - b. For each issue
 - (1) Background
 - (2) Chronology
 - (3) Contractor's position (reason for Owner's potential liability)
 - (4) Supporting documentation of merit or entitlement
 - (5) Supporting documentation of damages

(6) Begin each issue on a new page

.5 All critical path method schedules, both as planned monthly updates, schedule revisions, and as built along with the electronic files of all schedules related to the claim.

.6 Productivity exhibits (if appropriate)

.7 Summary of Issues and Damages

.8 Supporting documentation of merit for each issue shall be cited by reference, photocopies, or explanation. Supporting documentation may include, but shall not be limited to, general conditions; general requirements; technical specifications; drawings; correspondence; conference notes; shop drawings and submittals; shop drawing logs; survey books; inspection reports; delivery schedules; test reports; daily reports; subcontracts; fragmentary CPM schedules or time impact analyses; photographs; technical reports; requests for information; field instructions; and all other related records necessary to support the Contractor's claim.

.9 Supporting documentation of damages for each issue shall be cited, photocopies, or explained. Supporting documentation may include, but shall not be limited to, any or all documents related to the preparation and submission of the bid; certified, detailed labor records including labor distribution reports; material and equipment procurement records; construction equipment ownership cost records or rental records; subcontractor or vendor files and cost records; service cost records; purchase orders; invoices; project as planned and as built cost records; general ledger records; variance reports; accounting adjustment records; and any other accounting materials necessary to support the Contractor's claim.

.10 Each copy of the claim documentation shall be certified by a responsible officer of the Contractor in accordance with the requirements of these Contract Documents.

§4.3.10 In accordance with §8.4.5, the Owner shall not be liable to the Contractor, Subcontractor or Supplier for claims or damages of any nature caused by or arising out of delays. The sole remedy against the Owner for delays shall be the allowance of additional time for completion of the Work, the amount of which shall be subject to the claims procedure set forth above. Except to the extent, if any, expressly prohibited by law, the Contractor expressly agrees not to make and hereby waives any claim for damages for delay, including, but not limited to, those resulting from increased labor or material; directions given or not given by the Owner, Construction Manager, or Architect-Engineer, including scheduling and coordination of the Work; the Architect-Engineer's preparation of drawings and specifications or the Construction Manager's or Architect-Engineer's review of shop drawings and requests for instruction(s); or, on account of any delay, obstruction or hindrance for any cause whatsoever by the Owner, Construction Manager, Architect-Engineer, or any other contractor on the project whether or not foreseeable or anticipated. The Contractor agrees that its sole right and remedy therefore shall be an extension of time, if appropriate. It is emphasized that no monetary recovery may be obtained by the contractor for delay against the Owner, Construction Manager, or Architect-Engineer based on any reason and that the contractor's sole remedy, if appropriate, is additional time.

§4.4 RESOLUTION OF CLAIMS AND DISPUTES

§4.4.1 The Architect-Engineer will review Claims and take one or more of the following preliminary actions within Ten (10) Days of receipt of a Claim: (1) request additional supporting data from the claimant, (2) submit a schedule to the parties indicating when the Architect-Engineer expects to take action, (3) reject the Claim in whole or in part, stating reasons for rejection, (4) recommend approval of the Claim by the other party or (5) suggest a

compromise. The Architect-Engineer may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

§4.4.2 If a Claim has been resolved, the Architect-Engineer will prepare or obtain appropriate documentation.

§4.4.3 If a Claim has not been resolved, the party making the Claim shall, within Ten (10) Days after the Architect-Engineer's preliminary response, take one or more of the following actions: (1) submit additional supporting data requested by the Architect-Engineer, (2) modify the initial Claim or (3) notify the Architect-Engineer that the initial Claim stands.

§4.4.4 If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Architect-Engineer, the Architect-Engineer will notify the parties in writing that the Architect-Engineer's decision will be made within Seven (7) Days, which decision shall be final and binding on the parties but subject to litigation unless an alternative form of dispute resolution is agreed to by the Owner in writing. Upon expiration of such time period, the Architect-Engineer will render to the parties the Architect-Engineer's written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Architect-Engineer may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§4.4.5 Disputes arising under §4.3 shall be subject to litigation, unless an alternative form of dispute resolution is approved by the Owner in writing.

ARTICLE 5 SUBCONTRACTORS

§5.1 Not Used.

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

§5.2.1 Unless otherwise stated in the Contract Documents or the Bidding requirements, no part of Contractor's Work may be performed by subcontractors without the Owner's written approval (use Subcontractor Approval Form in Section 00 3500).

§5.2.2 Unless otherwise stated in the Contract Documents or the Bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect-Engineer the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Construction Manager will promptly reply to the Contractor in writing stating whether the Owner, Construction Manager or Architect-Engineer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect-Engineer to reply promptly shall not automatically constitute notice of no reasonable objection.

§5.2.3 The Contractor shall not contract with any proposed person or entity to whom the Owner, Construction Manager or Architect-Engineer has made a reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§5.2.4 If the Owner, Construction Manager or Architect-Engineer has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall promptly propose another to whom the Owner, Construction Manager or Architect-Engineer has no reasonable objection.

§5.2.5 The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner, Construction Manager or Architect-Engineer makes reasonable objection to such change.

§5.2.6 In the event of any default hereunder by the Contractor, or in the event the Owner, Construction Manager, or Architect-Engineer fails to approve any application for payment, that is not the fault of a Subcontractor or Supplier, the Owner may make direct payment to the Subcontractor, less appropriate retainage. In that event, the amount so paid the Subcontractor shall be deducted from the payment to the Contractor.

§5.2.7 Nothing contained herein shall create any obligation on the part of the Owner to make any payments to any Subcontractor or Supplier, and no payment by the Owner to any Subcontractor or Supplier shall create any obligation to make any further payments to any Subcontractor.

§5.2.8 The Contractor shall perform at least twenty five percent (25%) of the cost of the Contract (not including the costs of material's, insurance, bonds, submittals and similar items) with its own employees.

§ 5.3 SUBCONTRACTS RELATIONS

§5.3.1 By appropriate written agreement the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner, Construction Manager and Architect-Engineer. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect-Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. The Contractor shall require each Subcontractor to enter into similar agreements with Subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Subcontractors of lower tiers.

§5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

§5.4.1 Each Subcontract shall also provide for the following: In the event of the Contractor's termination by the Owner, the Contractor, at Owner's discretion, shall assign to the Owner all of its interest in any subcontracts and purchase orders entered into by the Contractor for performance of any part of the Work, which assignment will be effective only upon acceptance in writing by the Owner and only as to those subcontracts and purchase orders which the Owner specifically designates in such writing.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

§6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

§6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, (which include persons or entities under separate contracts not administered by the Construction Manager), and to award separate contracts in connection with other portions of the Project or other construction or operations on the Site.

§6.1.2 When the Owner performs construction or operations with the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager, the Owner shall provide for coordination of such forces with the Work of the Contractor, who shall cooperate with them.

§6.2 MUTUAL RESPONSIBILITY

§6.2.1 The Contractor shall provide the Owner's own forces, the Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate its construction and operations with Owner's forces, Construction Manager and other Contractors as required by the Contract Documents or the Construction Manager.

§6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager and Architect-Engineer apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to report shall constitute an acknowledgment that the Owner's own forces or other Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not reasonably discoverable prior to performance of Contractor's Work.

§6.2.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to other Contractors because of delays, improperly timed activities or defective construction by the Contractor.

§6.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to any completed or partially completed construction or to any property of the Owner or other Contractors as provided in §10.2.5.

§6.2.5 The Owner and each separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in §3.14.

§6.3 OWNER'S RIGHT TO CLEAN UP

§6.3.1 If a dispute arises among the Contractor, other Contractors and the Owner as to the responsibility under their respective Contracts for clean up under §3.15, the Owner may clean up and the Architect-Engineer will allocate the cost among those responsible as the Construction Manager, in consultation with the Architect-Engineer, determines to be just. Upon giving written notice, such cost shall be deducted from the next payment request.

ARTICLE 7 CHANGES IN THE WORK

§7.1 GENERAL

§7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or a Field Order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect-Engineer and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect-Engineer and may or may not be agreed to by the Contractor. A Field Order

for a minor change in the Work may be issued by the Architect-Engineer alone.

§7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or Field Order for a minor change in the Work.

§7.1.4 All Change Orders shall be paid at prevailing wage rates and any supplements applicable to the Project at the time such Work is performed. Rates must be approved by the Construction Manager in accordance with the Contract Documents.

§7.2 CHANGE ORDERS

§7.2.1 Process

.1 First, a Proposed Change Order (PCO) must be submitted to the Construction Manager or issued by the Construction Manager and signed for approval by both the Contractor and Construction Manager.

.2 Second, a Change Order Request (COR) must be issued by the Construction Manager and signed for approval by both the Architect-Engineer and the Construction Manager.

.1 A COR shall only be issued if the corresponding PCO has been approved.

.2 Approval of a COR does not imply or guarantee that a CO shall be approved.

.3 Third, a Change Order (CO) must be issued by the Construction Manager and signed for approval by the Architect-Engineer, Contractor, and Owner.

.1 A CO shall only be issued if the corresponding COR has been approved.

.2 The CO must also be processed through the Owner's contract approval system and executed by the County Executive.

.3 An approved CO is required for i) Work to be paid for out of available Contingencies, ii) Work to be paid for by an increase or decrease in the Contract Sum.

.4 Forms for PCOs, CORs and COs shall be provided by the Construction Manager.

.5 Final drafts of CORs and COs shall be prepared by the Construction Manager for the required approvals.

.6 Change Orders will not include any time for Contractor's supervision i.e.: Project Manager, Assistant Project Manager, Superintendent, Foreman, General Foreman or assistant Superintendent.

§7.2.2 Proposed Changed Orders (PCOs)

.1 The purpose of a PCO is to: (a) determine cause of the request and (b) determine if it represents a potential change in the Work as described in the Contract Documents. For a PCO to be approved, it must be signed by both the Contractor and Construction Manager.

.2 Construction Manager Initiated PCOs

.1 The Construction Manager may initiate changes by submitting a PCO to Contractor. Request will include:

.1 Detailed description of the change, products, and location of the change in the Project.

.2 Supplementary or revised Drawings and Specifications.

.3 The projected time span for making the change and a specific statement as to whether overtime Work is, or is not, authorized.

.4 A specific period of time during which the requested price will be considered valid.

.2 Such request is for information only and is not an instruction to execute the changes, nor to stop Work in progress.

.3 If a Contractor does not respond to a PCO request from the Construction Manager within the 48-Hour time frame, the Construction Manager may solicit quotes from others and back charge said Contractor for all expenses associated with preparation of those quotes.

.4 Any costs and delays attributed to lack of response by a Contractor shall be back-charged to said Contractor.

.3 Contractor Initiated PCOs

.1 Contractor may initiate changes by submitting a PCO to the Construction Manager containing:

.1 Description of the proposed changes.

.2 Statement of the reason for making the changes.

.3 Statement of the effect on the Contract Sum and the Contract Time.

.4 A detailed estimate which shall include:

.1 labor with Pre-Approved Labor Rates;

.2 itemized material requirements with supporting documentation from the Supplier(s);

.3 itemized equipment with supporting documentation from the rental company;

.4 itemized breakdown from any Subcontractors;

.5 statement of the effect on the Work of separate Contractors, including an explanation of how this PCO impacts the most recent Master Schedule, if at all. If no indication of schedule impact is provided, the Construction Manager shall reasonably understand the PCO does not impact the Master Schedule or require a change to the Contract Time.

.6 a specific time period during which the requested price will be considered valid; and

.7 documentation supporting any change in Contract Sum or Contract Time, as appropriate.

.2 For Change Orders Involving Allowances

.1 In addition to the requirements noted above, to adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

.1 Include installation costs in purchase amount only where indicated as part of the allowance.

.2 If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.

.3 Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.

.4 Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

.2 Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within forty-eight (48) hours of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than forty-eight (48) hours after such authorization.

.1 Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.

.2 No change to Contractor's indirect expense is permitted for selection of higher- or lower- priced materials or systems of the same scope and nature as originally indicated.

.3 The Contractor must submit a PCO within forty-eight (48) hours of recognition of a potential change in the Work for it to be valid. Failure to notify the Construction Manager within this time period shall provide basis for non-approval.

.4 Failure of the Construction Manager to respond within the 48 -hour period shall be deemed non-approval of the PCO, unless the Construction Manager has requested additional time for review.

.5 All PCOs must be responded to within 48-hours of issuance unless noted otherwise; however, additional time for review may be requested within that 48-hour period.

.6 No PCOs shall be approved where a related Notice of Non-Compliance is unresolved.

§7.2.3 Change Order Requests (CORs)

.1 Following approval of a PCO and issuance of a COR by the Construction Manager, the Architect-Engineer and Construction Manager shall review the COR to determine (a) if it represents a compensable change to the Contractor's Work as described in the Contract Documents and, (b) if the cost is reasonable and accurate in its allocation.

.2 For a COR, the Contractor shall provide additional and sufficient substantiating data to allow the Architect-Engineer and Construction Manager to evaluate the quotation.

.3 On request, provide additional data to support time and cost computations, including, but not limited to:

.1 support for each quotation for a Lump Sum proposal and for each Unit Price which has not previously been established;

.2 equipment required;

.3 products required;

.4 recommended source of purchase and Unit cost;

.5 quantities required;

.6 taxes, insurance and bonds; (only if it exceeds total Contract Sum)

.7 credit for Work deleted from Contract, similarly documented

.8 overhead and profit; and

.9 justification for any change in Contract Time.

.4 Support each claim for additional costs and for Work done on a time-and-material/force account basis, with documentation as required for a Lump Sum proposal, plus additional information; including, but not limited to:

.1 name of the Owner's authorized agent who ordered the Work and date of the order;

.2 dates and times Work was performed and by whom;

.3 Time record, summary of hours worked and hourly rates paid

.5 Provide receipts and invoices for:

.1 equipment used, listing dates and times of use;

- .2 products used, listing quantities;
- .3 subcontracts; and
- .4 document requests for substitutions for products.
- .6 Methods used in determining adjustments to the Contract Sum may include those listed in §7.3.3.

§7.2.4 Change Orders (COs).

- .1 Approved COs are required for any additional Work to be paid for out of a Contingency and any additional Work that shall equitably adjust the Contract Time and/or the Contract Sum by amounts as set forth in approved CORs.

- .1 COs describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.

- .2 COs provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

- .2 In order for a CO to be approved, both a PCO and a COR and must have been previously signed by the Contractor, Construction Manager, Architect-Engineer and Owner for approval.

- .3 Upon approval of a CO, the Contractor shall:

- .1 Proceed with the Work within Five (5) Days unless otherwise noted on the CO.

- .2 Revise Applications for Payment to record each change as a separate item of Work, and to record the adjusted Contract Sum.

- .3 Revise and submit a Draft Construction Schedule to reflect each change in Contract Time.

- .4 Revise sub-schedules to show changes for other items of Work affected by the changes.

- .5 Enter pertinent changes in Record Documents.

§7.2.5 Unit Price Based Change Orders.

- .1 When quantities of each of the items affected cannot be determined prior to start of the Work:

- .1 The Contractor shall establish a not-to-exceed budget amount and a PCO shall be approved for this amount.

- .2 The Construction Manager shall issue a Construction Change Directive directing Contractor to proceed with the change on the basis of Unit Prices and will cite the applicable Unit Prices.

- .3 At completion of the Work, Contractor will calculate the cost of such based on the Unit Prices and quantities used and provide such documentation to the Construction Manager.

- .4 A corresponding COR shall be issued to indicate the final amounts.

§7.2.6 Allowable Markups. NOTE: per Section 01 2000 Sec. 2.1(B) for Contingency based Work, costs of

overhead and profit and related administration, bond, coordination, insurance and superintendence shall be included in the Lump Sum(s) indicated on this Bid Form. Markups and costs for such items shall not be allowed or included in calculating Change Orders funded out of the Contingency.

- .1 Equipment in COR's: Equipment rental rates shall be billed at 80% of the Blue Book Rental Rate with no markup.
- .2 Other mark-ups allowed for COR's, as follows:
 - .1 Self Performance of CO Work by a Contractor
 - .1 Labor Markup: 5%
 - .2 Material Markup: 5%
 - .2 Performance of CO Work by Subcontractors:
 - .1 Contractor's Markup on Subcontractor: 5% of Subcontractor's labor and materials totals prior to any Subcontractor markups (Subcontractors labor and material totals may include labor and materials of Subcontractors of lower tiers without any markup)
 - .2 Subcontractor's Labor Markup: 5%
 - .3 Subcontractor's Material Markup: 5%
 - .4 Subcontractor's Markup on First Tier Subcontractors only: 5% of Subcontractor labor and materials totals prior to any Subcontractor markups **(No markups for lower tier Subcontractors will be accepted.)**
- .3 Labor in all Change Orders shall be at Prevailing Wage Rates and any supplements applicable to the Project at the time such Work is performed.

§7.3 CONSTRUCTION CHANGE DIRECTIVES

§7.3.1 A Construction Change Directive (CCD) is a written order to the Contractor, signed by Owner and Architect-Engineer, which amends the Contract Documents as described and authorizes the Contractor to proceed with additional Work in the absence of a total agreement in terms of a PCO, COR and/or CO. The Owner, without invalidating the Contract, may, by a CCD issued through the Construction Manager, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly. The Contractor agrees that they are required to perform the Work of a CCD with reasonable and timely means and methods without the issuance of a COR and/or CO.

§7.3.2 Procedure for CCD

- .1 The CCD will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change and will designate the method of determining any change in the Contract Sum and any change in Contract Time.
- .2 Owner and Architect-Engineer will sign and date the CCD as authorization for the Contractor to proceed with the changes.

- .3 Contractor may sign and date the CCD to indicate agreement with the terms therein.
- .4 The Construction Manager agrees to approve a PCO within Ten (10) Days of issuance of the CCD.
- .5 Resolution of a CCD into a CO shall follow the process outlined under 'Change Order Procedures' as described in these Supplemental Conditions.
- .6 A CCD form shall be provided by the Construction Manager.

§7.3.3 If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 mutual acceptance of a Lump Sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit Prices stated in the Contract Documents or subsequently agreed upon; or
- .3 as provided in §7.3.6.

§7.3.4 Upon receipt of a CCD, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and the Architect-Engineer of the Contractor's agreement or disagreement with the method, if any, provided in the CCD for determining the proposed adjustment in the Contract Sum or Contract Time.

§7.3.5 A CCD signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be processed as a Change Order.

§7.3.6 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Construction Manager on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a reasonable amount for overhead and profit. In such case, and also under §7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this §7.3.6 shall be limited to the following all as related and necessary to the performance of the Work:

- .1 reasonable and customary costs of labor, including social security, disability, workers' compensation and unemployment insurance and fringe benefits required by agreement or custom;
- .2 reasonable and customary costs of materials, supplies and equipment, whether incorporated or consumed, and including cost of transportation;
- .3 reasonable and customary rental costs of machinery and equipment, exclusive of hand tools, whether rented by the Contractor or Subcontractors;
- .4 reasonable and customary costs of premiums for all bonds and insurance, permit fees and sales, use or similar taxes related and applicable to the Work; and
- .5 reasonable and customary additional costs of supervision and field office personnel directly attributable to the change.

§7.3.7 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager. When both additions and credits covering related Work or substitutions are involved in a change, the mark-up for overhead and profit shall be figured on the basis of net increase in Contract Sum, if any, with respect to that change.

§7.3.8 If the Owner and Contractor do not agree with the adjustment in Contract Time or the method for determining it, the adjustment or the method shall be referred to the Construction Manager for determination.

§7.3.9 When the Owner and Contractor agree with the determination made by the Construction Manager concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

§7.4 FIELD ORDERS

§7.4.1 The Architect-Engineer will have authority, after consulting with the Owner and Construction Manager, to memorialize trade-off agreements and/or order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be affected by a written Field Order on forms provided by and issued through the Construction Manager and signed by the Architect-Engineer, Owner, Contractor and Construction Manager.

§7.4.2 Field Orders shall be binding on the Owner and Contractor.

§7.4.3 The Contractor shall carry out Field Orders promptly.

§7.5 OMITTED WORK

§7.5.1 If any Work in a Lump Sum Contract, or if any part of a Lump Sum item in a Unit Price, Lump Sum, or Percentage-Bid Contract is omitted by the Owner, the Contract Sum, subject to audit, shall be reduced by a pro rata portion of the Lump Sum Bid amount based upon the percent of Work omitted subject to §7.5.4. For the purpose of determining the pro rata portion of the Lump Sum Bid amount, the Schedule of Values shall be considered, but shall not be the determining factor.

§7.5.2 If the whole of a Lump Sum item or Units of any other item is omitted by the Owner in a Unit Price, Lump Sum, or Percentage-Bid Contract, then no payment will be made therefore except as provided in §7.5.4.

§7.5.3 For Units that have been ordered but are only partially completed, the Unit Price shall be reduced by a pro rata portion of the Unit Price Bid based upon the percentage of Work omitted subject to §7.5.4.

§7.5.4 In the event the Contractor, with respect to any omitted Work, has purchased after execution of this Agreement and in accordance with the Master Schedule if such purchase is specified therein, any non-cancelable material, equipment, or both that is not capable of use except in the performance of this Contract and has been specifically fabricated for the sole purpose of this Contract, but not yet incorporated into the Work, the Contractor shall be paid for the material or equipment. Such payment is contingent upon the Contractor's delivery of the material or equipment in acceptable condition to a location designated by the Owner.

§7.5.5 The Contractor agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted Work.

ARTICLE 8 TIME**§8.1 DEFINITIONS**

§8.1.1 Unless otherwise provided, Contract Time is the time period, including authorized adjustments, allotted in the Contract Documents for Substantial Completion or Final Completion of the Work.

§8.1.2 The date of commencement of the Work is the date established in the Agreement.

§8.1.3 The date of Substantial Completion is the date certified by the Architect-Engineer in accordance with §9.8.

§8.2 PROGRESS AND COMPLETION

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the Site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by the Contract Documents or a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than Five (5) Days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.

§8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion and Final Completion within the Contract Time.

§8.2.4 The Owner shall have the right, if it deems it necessary or advisable, to take possession of or use any completed or partially completed portions of the Work even if the time for completing the entire Work has not expired and even if the Work has not been finally accepted. Such possession and use shall not constitute an acceptance or completion of such portions of the Work unless all Punch List items have been completed and accepted by the Owner. Use and occupancy by the Owner prior to Project acceptance does not relieve the Contractor of its responsibility to maintain all insurance and bonds required by the Contract Documents until the Project is fully completed and accepted by the Owner.

§8.3 DELAYS AND EXTENSIONS OF TIME

§8.3.1 To be granted a time extension, the Contractor shall show how the progress of the Work was delayed by such cause or reason and that such delay has affected without question the critical path of the Master Schedule and the completion of the Work.

§8.3.2 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner's own forces, Construction Manager, Architect-Engineer, any of the other Contractors or an employee of any of them, changes ordered in the Work not due any act or omission in whole or in part of Contractor or its employees, fire, adverse weather conditions as hereinafter described, unavoidable casualties, or any other causes beyond the Contractor's reasonable control (but not including delays caused by Subcontractors or Suppliers for reasons other than those which are beyond the control of such Subcontractors or Suppliers), then the date(s) established for Substantial Completion and Final Completion shall be extended by Change Order for a period not exceeding the length of such delay. Such extension shall not be granted unless, promptly after the commencement

of any such delay, the Contractor delivers to the Construction Manager, Architect-Engineer and Owner a written notice of such delay stating the nature thereof and the manner and cost of the action to be taken by Contractor to remedy the delay, with a written request for an extension of the Substantial Completion or Final Completion Date(s) by reason of such delay. Failure to deliver any such notice or request promptly shall constitute an irrevocable waiver of any extension of the Substantial Completion and Final Completion Date(s) by reason of the cause for which such notice and request were required.

§8.3.3 Adverse Weather. No application for an extension of time may be made for adverse weather unless or until the Contractor has lost Working Days due to adverse weather conditions that materially affect the Master Schedule and the dates of Substantial Completion or Final Completion. Such requests shall only be made for the delays due to weather conditions only when such conditions are more severe and extended than those reflected by the ten-year average for the month in question as evidenced by Climatological Data, U.S. Department of Commerce, which includes the State of New York.

§8.3.4 Notwithstanding anything to the contrary in this §8.3, no delay or combination of delays for any cause, whether or not permitted under §8.3.1, other than a major natural, environmental or manmade catastrophic event which directly affects the Project (such as, for example, tornado, earthquake or other condition causing the Project Site to be declared a Disaster Area by the Federal or state government), shall in any event extend the date for Final Completion as defined in this Contract. In the event of any unpermitted delay, in addition to and without prejudice to any other remedies of the Owner, the Contractor shall pay to the Owner upon demand (and the Owner shall be entitled, if the Owner so elects, to offset from any amount payable to the Contractor) the applicable amount of any Liquidated Damages in accordance with the Liquidated Damages provision of the Agreement.

§8.4.5 **No Damages for Delay:** Extension of Contract Time shall be the Contractor's sole remedy for delay, unless the same shall have been caused by facts constituting intentional interference by the Owner with the Contractor's performance of the Work, and where and to the extent such acts continue, after the Contractor's notice to the Owner of such interference. The Owner's exercise of any of its rights or remedies hereunder, the execution of Change Orders (regardless of the extent or number of changes), a suspension of the Work or correction or re-execution of any defective Work, shall not under any circumstances be construed as intentional interference with the Contractor's performance of the Work.

ARTICLE 9 PAYMENTS AND COMPLETION

§9.1 EXECUTORY CLAUSE

§9.1.1 The Owner shall not be liable under this Contract to Contractor or to anyone else beyond funds appropriated and available for this Contract.

§9.2 CONTRACT SUM

§9.2.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§9.3 SCHEDULE OF VALUES

§9.3.1 Before the first Application for Payment, the Contractor shall submit to the Architect-Engineer, through the Construction Manager, a Schedule of Values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect-Engineer may require. This Schedule of Values, unless objected to by the Construction Manager or Architect-Engineer, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§9.4 APPLICATIONS FOR PAYMENT

§9.4.1 All applications for payment shall be on the AIA G702CMa Application and Certificate for Payment with signature lines for both the Architect-Engineer & Construction Manager. Continuation sheets shall be on AIA G703. Line item categories listed on G703 shall be the same as the approved Schedule of Values.

§9.4.2 Pencil Requisitions.

- .1** The Contractor's "pencil requisition" shall be submitted to the Owner on or before the 25th Day of each the month but no later than the last Day of the month for anticipated completion of the Work for the end of that month. A complete pencil requisition shall be defined as a proposed requisition that includes:
 - .1** a cover sheet with all subtotals and a grand total
 - .2** additional sheets with line item breakdowns, proposed percentages for all line items, and totals for all columns;
- .2** Construction Manager and Architect-Engineer reserve the right to return any incomplete pencil requisition to the Contractor without review.
- .3** Construction Manager and Architect-Engineer shall review the pencil requisition in a timely manner.
- .4** If revisions are required, the Contractor shall be responsible to revise and resubmit the pencil requisition for final approval.
- .5** Change Orders shall be listed as separate, individual line items with corresponding percent complete. If the Change Order is to be paid for out of Contingency, list the Change Order as a separate line item under the Contingency.

§9.4.3 Ink Requisitions shall include:

- .1** Two (2) original copies of the AIA requisition, signed in blue ink and notarized
- .2** One (1) original signed in blue ink, and two (2) copies of each of the following:
 - .1** Completed Payment Application Checklist form as provided by the Construction Manager.
 - .2** Claimant Certification Form as provided by the Owner.
 - .3** Contractor Partial Release and Waiver of Lien (Final/Last) on form provided by the Construction Manager. This Waiver shall cover all payments received up to and including the period one (1) month prior. Final Waiver is required for payment.
 - .4** Subcontractor Partial Release and Waiver of Lien (Final/Last) on form provided by the Construction Manager. This Waiver shall cover all payments received up to and including the period one (1) month prior. Final Waiver is required for payment.
 - .5** Certified Payroll Reports for all payments received up to and including the period one (1) month prior.

- .6 Log of all Waivers submitted job-to-date on form provided by Construction Manager.
- .7 Log of all Certified Payroll Reports submitted job-to-date on form provided by Construction Manager.
- .8 Certificates of Insurance for all stored materials listing: i) Location of material stored, ii) Owner as Additional Insured: County of Orange, c/o, Department of Public Works, PO Box 509, 2455-2459 Route 17M, Goshen, NY 10924, and The Palombo Group 22 Noxon Street Poughkeepsie, NY 12601 and Hyman Hayes Associates, LLC Suite 103; 800 Troy Schenectady Rd. Latham, NY 12110
- .9 Batch and/or delivery tickets for any concrete products poured, fill or debris hauled, or similar items transported during the month for which the Payment Application represents.
- .10 Monthly progress schedule updates.

.3 Ink requisitions shall be submitted to Owner for processing only after the Construction Manager and Architect-Engineer determine the Ink Requisition packages to be accurate and complete.

§9.4.3 Such applications may not include requests for payments of amount the Contractor does not intend to pay to a Subcontractor or Supplier because of a dispute or other reason.

§9.4.4 All Notices of Non-Compliance must be resolved to the satisfaction of the Architect-Engineer and Construction Manager before the Application for Final Payment shall be accepted for review.

§9.4.5 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the Site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the Site at a location agreed upon in writing. Payment for materials and equipment stored on or off the Site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the Site for such materials and equipment stored off the Site.

§9.4.6 On or about Thirty (30) Days following the Architect-Engineer's submission of a Certificate for payment, provided the Contractor has submitted its Application for Payment and supporting documentation in the manner and detail required by the Contract Documents, the Owner shall make payment to the Contractor in the amount approved as aforesaid. The payment of any Certificate for Payment by the Owner, including the final Certificate for Payment, does not constitute approval or acceptance of any item of cost in such Certificate for Payment. The Owner shall have the right to require the payment to Subcontractors by the Contractor to be in the form of a joint payee check, payable to the Contractor and Subcontractor.

§9.4.7 Within Thirty (30) Days after Final Completion of the Work, or designated portion thereof approved by the Owner, and acceptance thereof by the Owner, or as soon thereafter as possible, Contractor shall submit a final application for payment ("Final Application for Payment") Which shall set forth all amounts due and remaining unpaid to Contractor with respect to the Work or designated portion thereof and upon issuance by the Architect-Engineer of a final Certificate for Payment and approval thereof by the Owner, the Owner shall pay to the Contractor the amount due under such Final Application for payment. Anything to the Contrary contained herein or elsewhere notwithstanding, Final Payment shall not be made prior to Thirty (30) Days following Final Completion of the Work or designated portion thereof.

§9.4.8 The Contractor warrants that title to all Work covered by an Application for Payment will pass to

the Owner no later than the time of payment. The Contractor further warrants that upon Submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, Suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

§9.4.9 The Contractor shall within Fifteen (15) Days after receipt of notice of the existence of any lien filed against the Project by any Subcontractor, Supplier, or any other person or entity claiming to be a creditor of the Contractor, cause the same to be removed as of record and/or fully bonded at the Contractor's sole cost and expense. Any payment due to the Contractor hereunder shall be reduced by an amount equal to up to one hundred and fifty percent (150%) of the amount of any lien arising out of or related to Contractor's performance under this Contract until such lien is discharged to the Owner's reasonable satisfaction.

§9.5 CERTIFICATES FOR PAYMENT

§9.5.1 The Construction Manager will assemble a Project Application for Payment by combining the Contractor's applications with similar applications for Progress Payments from other Contractors and, after certifying the amounts due on such applications, forward them to the Architect-Engineer within Seven (7) Days.

§9.5.2 Within Seven (7) Days after receipt of the Project Application for Payment, the Construction Manager and Architect-Engineer will either issue to the Owner a Project Certificate for Payment, with a copy to the Contractor, for such amount as the Construction Manager and Architect-Engineer determine is properly due, or notify the Contractor and Owner in writing of the Construction Manager's and Architect-Engineer's reasons for withholding certification in whole or in part as provided in §9.6. Such notification shall be forwarded to the Contractor by the Construction Manager.

§9.5.3 The issuance of a separate Certificate for Payment or Project Certificate for Payment will constitute representations made separately by the Construction Manager and the Architect-Engineer to the Owner, based on their individual observations at the Site and the data comprising the Application for Payment submitted by the Contractor, that the Work has progressed to the point indicated and that, to the best of the Construction Manager's and Architect-Engineer's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the Construction Manager or Architect-Engineer. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a separate Certificate for Payment or Project Certificate for Payment will not be a representation that the Construction Manager or Architect-Engineer has

- .1 made exhaustive or continuous on-Site inspections to check the quality or quantity of the Work,
- .2 reviewed the Contractor's construction means, methods, techniques, sequences or procedures,
- .3 made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum, or
- .4 in the case of the Architect-Engineer, reviewed copies of requisitions received from Subcontractors and Suppliers and other data requested by the Owner to substantiate the Contractor's right to payment.

§9.6 DECISIONS TO WITHHOLD CERTIFICATION

§9.6.1 The Construction Manager or Architect-Engineer may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager or Architect-Engineer's opinion the representations to the Owner required by §9.5.3 cannot be made. If the Construction Manager or Architect-Engineer is unable to certify payment in the amount of the Application, the Construction Manager or Architect-Engineer will notify the Contractor and Owner as provided in §9.5.1. If the Contractor, Construction Manager and Architect-Engineer cannot agree on a revised amount, the Construction Manager and Architect-Engineer will promptly issue a Certificate for Payment for the amount for which the Construction Manager and Architect-Engineer is able to make such representations to the Owner. The Construction Manager or Architect-Engineer may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect-Engineer's opinion to protect the Owner from loss because of:

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or another Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 persistent failure to carry out the Work in accordance with the Contract Documents.

§9.6.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§9.7 PROGRESS PAYMENTS

§9.7.1 After the Construction Manager and Architect-Engineer have issued a Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents and shall so notify the Construction Manager and Architect-Engineer.

§9.7.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Subcontractors of lower tiers in a similar manner. All Subcontractors shall be required to submit a full or partial release or waiver of lien relevant to that portion of the Work for which payment is sought.

§9.7.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the

Owner, Construction Manager and Architect-Engineer and on account of portions of the Work done by such Subcontractor.

§9.7.4 Contractor shall pay all Subcontractors and Suppliers within Seven (7) Days of receipt of payment from Owner (or such other time period as may be provided by General Municipal Law §106-b as amended), representing the value of the Work performed and/or materials furnished by the Subcontractor or Supplier and reflecting the percentage of the Subcontractor's Work completed or the materials provided by Supplier in the requisition approved by the Architect-Engineer and accepted by the Construction Manager and Owner and based upon the actual value of the Subcontract or purchase order less an amount necessary to satisfy any claims, liens or judgments against the Subcontractor or Supplier which have not been suitably discharged and less any retained amount not in excess of the percentage requirements specified in Article 7 of the Agreement. Neither the Owner, Construction Manager, nor Architect-Engineer, shall have an obligation to pay or to see to the payment of money to a Subcontractor or Supplier except as may otherwise be required by law.

§9.7.5 Payment to Suppliers shall be treated in a manner similar to that provided in §9.7.2 through §9.7.4.

§9.7.6 A Certificate for Payment, a Progress Payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§9.8 SUBSTANTIAL COMPLETION

§9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§9.8.2 When the Construction Manager is able to randomly survey an area of the Project and determine that less than three (3) deficiencies on average remain in every room seen, at the request of Contractor, the Construction Manager shall initiate the Punch List process by requesting a list of deficiencies for that area from Contractors, Architect-Engineer, Construction Manager and Owner. These lists shall be compiled by the Construction Manager into a Master Punch List. Contractors, Architect-Engineer, Construction Manager, and Owner can add items to the Master Punch List at any time. The Construction Manager will provide rolling updates to the Master Punch List to the Contractor on a floor-by-floor basis as often as deemed necessary by the Architect-Engineer and/or the Construction Manager. Failure to include an item on the Master Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§9.8.3 The Contractor will have no longer than Ten (10) Days to address and complete the Punch List items. If the Contractor requires more than Ten (10) Days to complete a Punch List item, the Contractor shall notify the Construction Manager of the required time within the Ten- (10-) Day period described above.

§9.8.4 Agreement by the Architect-Engineer and Owner is required to close-out Punch List items. The Contractor shall inform the Construction Manager when the Punch List Items for an area are complete. The Construction Manager will review all open Punch List items for that area and determine if they are ready for review by the Architect-Engineer and Owner for close-out. If any items remain open after the Construction Manager's review:

- .1** The Construction Manager may solicit quotes from others to complete the open Punch List Work and back-charge the Contractor for all expenses associated with preparation of those quotes and completion of the Work; and
- .2** The Owner reserves the right to retain twice the value, as determined by the Construction Manager,

of any incomplete Punch List items.

§9.8.5 Before an inspection for Substantial Completion, Contractor must complete the Preliminary Procedures and Requirements for Substantial Completion listed in the Specifications. If the Architect-Engineer's inspection discloses any item, whether or not included on the Punch List, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect-Engineer. In such case, the Contractor shall then submit a request for another inspection by the Architect-Engineer, assisted by the Construction Manager, to determine Substantial Completion. If the Contractor fails to complete open items, the provisions of §9.8.4 shall apply.

§9.8.6 When the Work or designated portion thereof is Substantially Complete, the Architect-Engineer will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the Punch List accompanying the Certificate. The Contractor shall complete all Punch List Work as required with no additional cost to the Owner. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§9.8.7 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§9.9 PARTIAL OCCUPANCY OR USE

§9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required by §9.9.3 and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is Substantially Complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion Substantially Complete, the Contractor shall prepare and submit a list to the Architect-Engineer as provided under §9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, then by decision of the Architect-Engineer after consultation with the Construction Manager.

§ 9.9.2 In the event that the Owner partially occupies the building(s), the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the Site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until Final Payment has been made as provided in §9.10 or until no person or entity other than the Owner has an insurable interest in the property required to be covered by this §9.9, whichever is later. This insurance shall include interests of the Owner, the

Contractor and Subcontractors in the Project. Owner reserves the right to self-insure its interests as they may be in the Project and as they may appear in the Contract Documents.

§9.9.3 Partial occupancy or use in accordance with this §9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§9.9.4 Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect-Engineer shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§9.9.5 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§9.10 FINAL COMPLETION AND FINAL PAYMENT

§9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a written notice that the Work is ready for final inspection and acceptance and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt the Construction Manager will forward the notice and Application to the Architect-Engineer who will promptly make such inspection. When the Architect-Engineer, based on the recommendation of the Construction Manager, finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect-Engineer will promptly issue a Final Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of the their observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the Final Certificate is due and payable. The Construction Manager and Architect-Engineer's Final Certificate for Payment will constitute a further representation that conditions listed in §9.10.2 as precedent to the Contractor's being entitled to Final Payment have been fulfilled.

§9.10.2 Final Inspection shall not occur and neither Final Payment nor any remaining retained percentage shall become due until the Contractor, as applicable to each Summary of Work, submits to the Architect-Engineer, through the Construction Manager:

- .1** a Final Application for Payment;
- .2** certified Payrolls in accordance with New York State Labor Law §220(3-a)(iii) and all statements and verifications required by New York State Labor Law §220-a;
- .3** an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, noting any outstanding claims or dispute resolutions in progress;
- .4** a certificate evidencing that insurance required by the Contract Documents is and shall remain in force and effect after Final Payment and will not be canceled or allowed to expire until at least 30 Days' prior written notice has been given to the Owner;
- .5** a written statement that the Contractor knows of no substantial reason that the insurance will not

be renewable to cover the period required by the Contract Documents;

.6 Completed AIA forms: G-706 Contractor's Affidavit of Payment of Debts and Claims, G706-A Contractor's Affidavit of Release of Liens, and G707 Consent of Surety to Final Payment;

.7 As-Built Drawings as required pursuant to §3.19;

.8 a complete unconditional full and final waiver and release of liens arising out of or in connection with the Work, or designated portion thereof covered by such final Application;

.9 other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner;

.10 a copy of the Substantial Completion Punch List, certified as completed by the Architect-Engineer;

.11 warranties, maintenance bonds and service agreements, final certifications and similar documents;

.12 pest control final inspection report and warranty;

.13 demonstration and training videotapes after instructing Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems;

.14 such data, documents, and any other items set forth in the Close-Out Requirements listed in Division 01 of the Specifications;

and the Work, or designated portion thereof, has been fully performed in accordance with the Contract Documents and all Close-Out Requirements have been resolved to the satisfaction of the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

§9.10.3 If, after Substantial Completion of the Work, Final Completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting Final Completion, and the Construction Manager and Architect-Engineer so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect-Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect-Engineer through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing Final Payment, except that it shall not constitute a waiver of claims.

§9.10.4 Owner shall pay to the Contractor the amount due under such Final Application for Payment. Anything to the contrary contained herein or elsewhere notwithstanding, Final Payment shall be made within Thirty (30) Days of submission of an invoice issuance of Final Completion of the Work or designated portion thereof.

§9.10.5 ACCEPTANCE OF FINAL PAYMENT

.1 The acceptance by the Contractor, or by anyone claiming by or through it, of the Final Payment,

whether such payment be made pursuant to any judgment of any Court, or otherwise, shall constitute and operate as a release to the Owner from any and all claims of and liability to the Contractor for anything done or furnished for the Contractor relating to or arising out of this Contract and the Work done hereunder, and for any prior act, neglect or default on the part of the Owner or any of its officers, agents or employees, excepting only a claim against the Owner for the amounts deducted or retained in accordance with the terms and provisions of the Contract Documents or by applicable laws, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the Contractor's Substantial Completion and Final Completion Applications for Payment pursuant to §9.10.2.3.

.2 The Contractor is warned that the execution by it of a release in connection with the acceptance of the Final Payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article, or those for amounts deducted by the Owner from the Final Application for Payment, or from the Final Payment, as certified by the Construction Manager and approved by the Owner, shall not be effective to reserve such claims, anything stated to the Contractor orally or in writing by any officer, agent or employee of the Owner to the contrary notwithstanding.

.3 Should the Contractor refuse to accept the Final Payment as tendered by the Owner, it shall constitute a waiver of any right to interest thereon.

.4 The Contractor, however, shall not be barred from commencing an action for breach of contract under this provision to the extent permitted by law and by the terms of the Contract, provided that a detailed and verified statement of claim is served upon the Owner not later than Forty (40) Days after the mailing of such Final Payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items. This statement shall be in addition to any other filings required by law or by the terms of the Contract Documents in order to assert a claim or commence and prosecute an action.

§9.11 BOOKS AND RECORDS

§9.11.1 Contractor agrees to maintain separate and accurate books, records, documents, other evidence, and accounting procedures and practices that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Contract.

§9.12 RETENTION OF RECORDS

§9.12.1 Contractor agrees to retain all books, records, and other documents relevant to this Contract for six (6) years after the Final Payment or termination of this Contract, whichever occurs later.

§9.12.2 County, State, or Federal auditors, or any person duly authorized by the Owner, shall have full access to all documents relevant to this Contract and the right to examine all such documents during the retention period.

§9.13 AUDIT BY THE COUNTY AND OTHERS

§9.13.1 All Claimant Certification forms or invoices presented for payment to be made under this Contract, and all books, records, and accounts upon which the certification forms or invoices are based are subject to audit by the Owner. Contractor shall submit any and all documentation and justification in support of expenditures under this Contract as may be required by the Owner so that the Owner may evaluate the reasonableness of the charges. Contractor shall also make its records available to the Owner upon request. All books, Claimant's Certification forms,

invoices, records, reports, cancelled checks, and all similar documentation may be subject to periodic inspection, review, and audit by the Owner, the State of New York, the Federal Government, or other persons duly authorized by the Owner. Such audits may include examination and review of the source and application of all funds whether from the County, State or Federal Governments; private sources; or otherwise. Contractor shall not be entitled to any Progress or Final Payments under this Contract if audit requirements or requests have not been satisfactorily met.

§9.14 RESERVED

§9.15 SET-OFF RIGHTS AND BACK CHARGES

§9.15.1 The Owner shall have all of its common law, equitable, and statutory rights of set-off. These rights include, but are not limited to, the Owner's right to withhold for the purpose of set-off any monies otherwise due to Contractor:

- .1** under this Contract;
- .2** under any other agreement or contract with the Owner, including any agreement or contract for a term commencing prior to or after the term of this Contract;
- .3** from the Owner by operation of law.

§9.15.2 The Owner has the right to withhold any monies otherwise due under this Contract for the purposes of set-off as to any amounts due and owing to the Owner for any reason whatsoever including, without limitation, tax delinquencies, fee delinquencies, monetary penalties, or interest relative thereto.

§9.15.3 The Owner also reserves the right to back charge Contractor, through a Deductive Change Order, for the cost of the total and complete remedy due to the failure of Contractor to comply with any portion(s) of the Contract Documents.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§10.1 SAFETY PRECAUTIONS AND PROGRAMS

§10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors.

§10.1.2 In the event the Contractor encounters on the Site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner, Construction Manager and Architect-Engineer in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it has been rendered harmless, by written agreement of the Owner and Contractor, or in accordance with final determination by the Architect-Engineer or by litigation or other alternative form of dispute resolution approved in writing by Owner.

§10.1.3 The Contractor shall not be required, pursuant to Article 7, to perform without consent any Work

relating to asbestos or polychlorinated biphenyl (PCB).

§10.1.4 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Construction Manager, Architect-Engineer, their consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if, in fact, the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Owner, anyone directly or indirectly employed by the Owner or anyone for whose acts the Owner may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this § 10.1.4.

§10.1.5 The Owner shall not be responsible under §10.1.4 for materials and substances brought to the Site by the Contractor or other parties or for Contractor's or its employees, Subcontractors or others mishandling of any such hazardous materials.

§10.1.6 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance encountered on the Site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner, Construction Manager and Architect-Engineer in writing. The Owner, Contractor, Construction Manager and Architect-Engineer shall then proceed in the same manner described in §10.1.2.

§10.1.7 The Owner shall be responsible for obtaining the services of a licensed laboratory to verify a presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect-Engineer the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. When the material or substance has been rendered harmless, Work in the affected area shall resume.

§10.2 SAFETY OF PERSONS AND PROPERTY

§10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

- .1** employees on the Work and other persons who may be affected thereby including, but not limited to, the Owner, Architect-Engineer, delivery persons or other third parties;
- .2** the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site, under care, custody or control of the Contractor or its Subcontractors or Suppliers;
- .3** other property at the Site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and
- .4** construction by the Owner or other Contractors.

§10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

§10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

§10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in §10.2.1.2 through §10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Supplier, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under §10.2.1.2 through §10.2.1.4 caused, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect-Engineer or anyone directly or indirectly employed by either of them, or by anyone for whose acts any of them may be liable. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Article 3.

§10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the Site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect-Engineer.

§10.2.7 The Contractor shall not load or permit any part of the construction or Site to be loaded so as to endanger its safety.

§10.2.8 Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended – For contracts in excess of \$150,000, Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

§10.3 EMERGENCIES

§10.3.1 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

ARTICLE 11 RESERVED.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§12.1 UNCOVERING OF WORK

§12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect-Engineer's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

§12.1.2 If a portion of the Work has been covered which the Construction Manager or Architect-Engineer has not specifically requested to examine prior to its being covered, the Construction Manager or Architect-Engineer may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, correction shall be at the Contractor's expense unless the condition was caused by the Owner or another Contractor in which event the responsible party shall be responsible for payment of such costs.

§12.2 CORRECTION OF WORK

§12.2.1 The Contractor shall promptly correct Work rejected by the Construction Manager, Architect-Engineer or Owner or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections and compensation for the Construction Manager's, Architect-Engineer's or Owner's services and expenses made necessary thereby, shall be at the Contractor's expense.

§12.2.2 In addition to the Contractor's obligations under §3.5, if, within one (1) year after the date of Substantial Completion of the Work, or designated portion thereof, or after the date for commencement of warranties established under §9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. The one- (1-) year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation under this §12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract.

§12.2.3 The Contractor shall remove from the Site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§12.2.4 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with §2.4. If the Contractor does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the Architect-Engineer issued through the Construction Manager, the Owner may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay cost of such removal and storage within Ten (10) Days after written notice, the Owner may upon Ten (10) additional Days' written notice sell or auction such materials and equipment and shall account for proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Construction Manager's and Architect-Engineer's services and expense made necessary thereby. If proceeds of the sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

§12.2.5 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

§12.2.6 Nothing contained in this §12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the one (1) -year period for correction of Work as described in §12.2.2 relates only to the specific obligation of the Contractor

to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§12.3 ACCEPTANCE OF NONCONFORMING WORK

§12.3.1 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall occur regardless of whether Final Payment has been made.

ARTICLE 13 RESERVED

END OF SECTION

SECTION 00 7000A**TABLE 1-1****COMPLETION DATES & LIQUIDATED DAMAGES**

<u>Substantial Completion Date</u>	<u>Final Completion Date</u>	<u>Liquidated Damages Per Calendar Day</u>
411 days from NTP	60 days from Substantial Completion	\$1,000.00

Liquidated damages shall apply to both the Substantial and Final Completion date. If a change order extending the Contract Time is issued, unless otherwise provided in that change order, liquidated damages will apply as above but to the new dates of Substantial and Final Completion specified in the change order.

SECTION 00 8100**PREVAILING WAGE SCHEDULE****PART 1 GENERAL****1.1 GENERAL**

Wage rates shall apply as shown in the Prevailing Wage Schedule with PRC# 2022013101 prepared by the New York State Department of Labor, a copy of which is available at:

<https://applications.labor.ny.gov/wpp/showFindProject.do?method=showIt#>

and updates may be found at:

<https://applications.labor.ny.gov/wpp/publicViewPWChanges.do?method=showIt#>

PART 2 PRODUCTS (Not Applicable)**PART 3 EXECUTION (Not Applicable)****END OF SECTION**

PROJECT LABOR AGREEMENT

COVERING CONSTRUCTION

OF

ORANGE COUNTY MEDICAL EXAMINERS

OFFICE

FINAL 10/24/22

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PROJECT LABOR AGREEMENT

PREAMBLE

WHEREAS, County of Orange ("County") desires to provide for the cost efficient, safe, quality, and timely completion of the ("ORANGE COUNTY MEDICAL EXAMINERS OFFICE") project in a manner designed to afford the lowest reasonable costs to the County, and the public it represents, and the advancement of permissible statutory objectives;

WHEREAS, the County of Orange engaged Arace & Company ("Arace") to undertake a study of which a copy is on file with the "County" of whether the use of a Project Labor Agreement will best serve the County's interest in obtaining the best work at the lowest possible price, preventing favoritism, fraud and corruption, and other considerations such as the impact of delay, the possibility of cost saving advantages, and any local history of labor unrest; and

WHEREAS, the Arace Due Diligence Assessment of the Impacts and Implementation of a Project Labor Agreement, (the "Study"), concluded that use of a Project Labor Agreement would provide the County with measurable economic benefits and would promote the County's interest in obtaining the best work at the lowest prices as well as preventing favoritism, fraud and corruption; and

WHEREAS, the County has carefully reviewed and considered the Study and determined, among other things, that the County's interest in obtaining the best work at the lowest possible price, preventing favoritism, fraud and corruption, preventing the impact of delay owing to labor unrest, obtaining cost savings advantages, and gaining measurable management flexibility and benefits are best met by requiring a Project Labor Agreement and, therefore, directs that a Project Labor Agreement be made part of the Project; and

WHEREAS, this Project Labor Agreement will foster the achievement of these goals, inter alia, by:

- (1) expediting the construction process and otherwise minimizing the disruption to the project;
- (2) avoiding the costly delays of potential strikes, slowdowns, and walkouts arising from work disputes and promoting labor harmony and peace for the duration of the project;
- (3) standardizing the terms and conditions governing the employment of labor on the project;
- (4) permitting flexibility in work scheduling where necessary at affordable pay rates;
- (5) permitting adjustments to work rules and staffing requirements from those which otherwise might apply;
- (6) providing comprehensive and standardized mechanisms for the settlement of work disputes, including those relating to jurisdiction;
- (7) promoting work opportunities for those within the Town of Goshen and

- surrounding areas.
- (8) ensuring a reliable source of skilled and experienced labor;

WHEREAS, County of Orange, has, through independent investigation and analysis, determined the likelihood of substantial cost savings to the Project will result from the application of this Agreement; and

WHEREAS, Hudson Valley Building & Construction Trades Council, and its affiliated Local Unions and their members, desire to provide for stability, security and work opportunities which are afforded by a Project Labor Agreement; and

WHEREAS, the Parties desire to maximize project safety conditions for both workers and others;

NOW, THEREFORE, the Parties enter into this Agreement:

ARTICLE 1 – PARTIES TO THE AGREEMENT

SECTION 1.1 PARTIES TO THE AGREEMENT

This is a Project Labor Agreement ("Agreement") entered into for all Project construction, as defined herein, as part of the ORANGE COUNTY MEDICAL EXAMINERS OFFICE Project (as defined below) between (i) the County of Orange ("County") (ii) the Hudson Valley Building and Construction Trades Council ("Council") on behalf of itself and its affiliated Local Unions ("Local Unions"); and (iii) the signatory Local Unions on behalf of themselves and their members.

ARTICLE 2 - GENERAL CONDITIONS SECTION

SECTION 2.1 DEFINITIONS

Throughout this Agreement:

- (A) **"Contractor(s)"** means any contractor and subcontractors of whatever tier engaged in Project Work within the scope of this Agreement as defined in Article 3, subject to exclusions defined in Section 3.3; 20.3 and 20.4.
- (B) **"Council"** means the Hudson Valley Building & Construction Trades Council, AFL-CIO.
- (C) **"Local Union(s)"** means the Local Unions signatory to this Agreement, individually and collectively.
- (D) **"Owner"** means County of Orange ("County").
- (E) **"Owner's Representative"** means any Construction Manager or other individual

or entity designated by the Owner to enter into this Agreement or otherwise act on its behalf.

- (F) **“The Project”** means the work to be performed in connection with all construction of the ORANGE COUNTY MEDICAL EXAMINERS OFFICE project as more fully set forth in Article 3, Section 3.1, subject to exclusions defined in Sections 3.3, 20.3 and 20.4.
- (G) **“Project Work”** means the work covered by this Agreement and fully defined in Article 3, Section 3.1, subject to exclusions defined in Section 3.3; 20.3 and 20.4.
- (H) **“Schedule A”** means and refers to collective bargaining agreements of affiliated Local Unions.
- (I) **“Union Parties”** and **“Unions”** means the Hudson Valley Building & Construction Trades Council, AFL-CIO and the signatory Local Unions to this Agreement, individually and collectively.

SECTION 2.2 CONDITIONS FOR AGREEMENT TO BECOME EFFECTIVE

This Agreement shall not become effective unless each of the following conditions are met: (1) the Agreement is signed by the Council and the Local Unions having jurisdiction over the Project Work; (2) the Agreement is approved by the NYS Building & Construction Trades Council (NYSBCTC); (3) the Agreement is approved by the Building & Construction Trades Department (BCTD); (4) the Agreement is authorized by the Owner and signed by the Owner and Construction Manager (CM).

SECTION 2.3 ENTITIES BOUND & ADMINISTRATION OF AGREEMENT

This Agreement shall be binding on all signatory Unions and their affiliates and all Contractors performing Project Work as defined in Article 3, subject to exceptions in Sections 3.3, 20.3 and 20.4. The Contractors shall include in any subcontract that they let for performance during the term of this Agreement a requirement that their Subcontractors, of whatever tier, become bound by this Agreement with respect to that subcontracted Project Work performed within the scope of Article 3, and require that each Subcontractor, of whatever tier, sign a Letter of Assent (Schedule B). This Agreement shall be administered by the Designee named by the Owner pursuant to Schedule C.

SECTION 2.4 SUPREMACY CLAUSE

This Agreement, together with the local Collective Bargaining Agreements appended hereto and referred to herein as “Schedule A” represents the complete understanding with respect to the Project and supersedes any national agreement, local agreement, or other collective bargaining agreement of any type which would otherwise apply to Project Work, in whole or in part, with the following exception: to the extent a Contractor is a signatory to the NTL Articles of

Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and the National Agreement of the International Union of Elevator Constructors (the "National Agreements"), those National Agreements shall apply, except that when Contractor is also a signatory to an agreement listed in Schedule A hereof, Articles 7, 8, 9, and 10 of this Agreement shall prevail over the applicable National Agreement and any Schedule A agreement. Where a subject covered by the provisions of this Agreement is also covered by a Schedule A agreement, the provisions of this Agreement shall prevail. If this Agreement is silent on any matter addressed in the applicable Schedule A agreement, the Schedule A agreement shall govern. It is understood that by virtue of having become bound by this Project Labor Agreement, the Contractors will not be obligated to sign any other local, area, or national agreement.

SECTION 2.5 LIABILITY

The liability of any Contractor and the liability of any Union under this Agreement shall be several and not joint. The Contractors, and Subcontractors shall not be liable for any violations of this Agreement by any other Contractor or Subcontractor; and the Council and Local Unions shall not be liable for any violations of this Agreement by any other Union. Notwithstanding the above, every signatory to the Agreement further acknowledges that it will be liable for its own breach, partial breach or otherwise, whether related or not to the breach of another signatory.

SECTION 2.6 THE BID SPECIFICATIONS

The Owner shall require in its bid specifications for all Project Work within the scope of Article 3 that all successful bidders and their Subcontractors of whatever tier (unless otherwise excepted under this Agreement) become bound by this Agreement. Every Contractor shall require its Subcontractors, of whatever tier, to execute the Letter of Assent in Schedule B and to become bound by this Agreement.

SECTION 2.7 AVAILABILITY AND APPLICABILITY TO ALL SUCCESSFUL BIDDERS

This Agreement shall be binding on all signatory Unions and their affiliates, and all Contractors, Unions and/or non-Unions performing Project Work, unless otherwise excepted under this Agreement. Unless expressly provided for in this Agreement, this Agreement shall not apply to the work of any Contractor which is performed at any location other than the site of Project Work.

ARTICLE 3 - SCOPE OF THE AGREEMENT

SECTION 3.1 PROJECT WORK

This Agreement shall only apply to Project Work as defined in this Article.

Subject to the exclusions in this Article, Project Work means solely that work performed

in connection with construction of the ORANGE COUNTY MEDICAL EXAMINERS OFFICE Project located at Wells Farm Road, Town of Goshen, New York. Project Work, unless otherwise excepted under Sections 3.3, 20.3 or 20.4, shall include all sitework, utilities, demolition, environmental work, MEP's and all construction related to the ORANGE COUNTY MEDICAL EXAMINERS OFFICE project.

SECTION 3.2 TIME LIMITATIONS

- A. To be covered by this Agreement, Project Work must be awarded after the effective date of this Agreement.
- B. This Agreement shall expire upon completion and acceptance by the Owner of the Project.
- C. This Agreement may be extended by written mutual agreement of the parties.

SECTION 3.3 EXCLUDED EMPLOYEES

Notwithstanding the provisions of Section 3.1 of this Article, the following person/entities are not subject to the provisions of this Agreement even though performing work on or in connection with the Project:

- A. Superintendents, supervisors (excluding general and forepersons specifically covered by a craft's Schedule A), engineers, inspectors and testers, quality control/assurance personnel, timekeepers, mail carriers, clerks, office workers, messengers, guards employed by Owner, technicians, non-manual employees, and all professional, engineering (except field surveyors), administrative and management persons;
- B. Employees of the Project Owner;
- C. Employees and entities engaged in off-site manufacture, modifications, repairs, maintenance, or painting, handling or fabrication of project components, materials, equipment, or machinery except for any local deliveries of materials such as fill, ready mix, asphalt, concrete and other aggregates which shall be covered under this Agreement.
- D. Employees of the Construction Manager, except that performing manual, onsite construction labor who will be covered by this Agreement.
- E. Employees engaged in onsite equipment warranty work;
- F. Employees engaged in geophysical testing (whether land or water) other than boring for core samples;
- G. Employees engaged in laboratory or specialty testing or inspections, unless

ordinarily done by a member of a Trade Union;

- H. Employees engaged in ancillary Project Work performed by third parties such as electric utilities, gas utilities, telephone companies, and railroads. Utility work provided by gas, electric, and cable companies, which is not performed by utility company employees, shall be subject to the terms of this Agreement.

ARTICLE 4 - UNION RECOGNITION AND EMPLOYMENT

SECTION 4.1 PRE-HIRE RECOGNITION

The Contractors recognize the signatory Unions as the sole and exclusive bargaining representatives of all craft employees who are performing Project Work within the scope of Article 3 of this Agreement.

SECTION 4.2 UNION REFERRAL

- A. The Contractors agree to hire craft employees for Project Work covered by this Agreement through the job referral systems and hiring halls established in the Local Unions' area collective bargaining agreements (attached as Schedule A to this Agreement), where those referrals meet the qualifications set forth in items 1, 2, and 4 of subparagraph B. The Unions agree to provide such craft employees (including apprentices) to all Contractors on a non-discriminatory basis. Notwithstanding this, Contractors shall have sole right to determine the competency of all referrals; the number of employees required; and the selection of employees for layoff (subject to Article 5, Section 5.3). In the event that a Local Union is unable to fill any request for qualified employees within a 48-hour period after such requisition is made by a Contractor (Saturdays, Sundays and holidays excepted), a Contractor may employ qualified applicants from any other available source. In the event that the Local Union does not have a job referral system, the Contractor shall give the Local Union first preference to refer applicants, subject to the other provisions of this Article. The Contractor shall notify the Local Union of craft employees hired for Project Work within its jurisdiction from any source other than referral by the Union. The Local Unions will cooperate with Contractor requests for minority, women, or economically disadvantaged referrals to meet the goals of Article 4, Section 4.4. These workers may be delivered under a "Direct Entry" designation or by use of a Department of Labor waiver.
- B. A Contractor may request by name, and the Local Union will honor, referral of persons who have applied to the Local Union for Project Work and who meet the following qualifications:
 - (1) possess any license required by New York State law for the Project Work to be performed;
 - (2) Have worked a total of at least 1000 hours in the construction craft during

- the prior two years, and
- (3) Were on the Contractor's active payroll for at least 60 out of the 180 calendar days prior to the contract award.
 - (4) Have the ability to safely perform the basic functions of the applicable trade.
 - (5) Have not committed a felony or misdemeanor, or other violation that would render such person unfit to work on County property.
- C. With the exception of Section 4.2(f) below, no more than twelve and a half (12.5%) per centum of the employees covered by this Agreement, per Contractor by craft, shall be hired through the provisions of Paragraph B of this section (any fraction shall be rounded to the next highest whole number). Craft forepersons and/or general forepersons shall be included in these twelve and a half (12.5%) percent. If requested by the appropriate Union, a Contractor utilizing this provision for by-name referrals shall furnish the Union with a written certification that the individuals requested for referral meet the requirements of (1) - (5) above.
- D. The Local Unions shall exert their utmost efforts to recruit sufficient numbers of skilled craft workers to fulfill the manpower requirements of the Contractor. When a Contractor of any tier is contracted to perform Project Work and such Contractor is not signatory to a Schedule A agreement (not including signatory through this Agreement) and the Union cannot provide ample labor to support the construction schedule or project, then the Contractor shall hire outside the Union hiring halls and the Contractor shall, at their discretion, replace the non-Union or non-dispatched employee when notified by the Union that labor has become available through the Union. The Contractor shall use other employees affiliated with the Council before hiring except, where specifically addressed in this Agreement if those employees from the other Unions have the required trade skills to perform the Project Work. Those hired through this provision shall be laid off before those of an affiliated Union.
- E. Notwithstanding the foregoing, the "County" shall have the sole discretion to request that a person be removed from working on this Project.
- F. Due to specialty work related to geothermal systems, for subcontractors involved directly in the work related to geothermal under a Prime Contract, no more than fifty percent (50%) of the employees covered by this Agreement, per such subcontractors, by craft, shall be hired through the provisions of Paragraph B of this section (any fraction shall be rounded to the next highest whole number). Craft forepersons and/or general forepersons shall be included in these fifty percent (50%). If requested by the appropriate Union, a subcontractor utilizing this provision for by-name referrals shall furnish the Union with a written certification that the individuals requested for referral meet the requirements of 4.2(B)(1)-(5) above.

SECTION 4.3 NON-DISCRIMINATION IN REFERRALS

- A. The Local Unions represent that their hiring halls and referral systems shall be operated in a non-discriminatory manner and in full compliance with all applicable federal, state and local laws and regulations which require equal employment opportunities. Referrals shall not be affected in any way by the rules, regulations, bylaws, constitutional provisions or any other aspects or obligations of Union membership, policies, or requirements and shall be subject to such other conditions as are established in this Article. No employment applicant shall be discriminated against by any referral system or hiring hall because of the applicant's Union membership, or lack thereof.
- B. All parties to this Agreement acknowledge that funding for this Project includes but is not limited to funds from the American Rescue Plan Act ("ARPA") State and Local Fiscal Recovery Funds ("SLFRF"), which are also governed by the "Uniform Guidance" requirements in 2 C.F.R. Part 200 and funds from the New York State Energy Research and Development Authority ("NYSERDA"). As a condition of contract with the County, Project Contractors will be required to comply with all non-discrimination requirements pertaining to such funding.

SECTION 4.4 WORKFORCE DIVERSITY UTILIZATION

- A. The Unions recognize and acknowledge that workforce diversity of minorities and women are employment goals consistent with our values of fair play. The Local Unions agree and will strive to utilize their best efforts to provide qualified minority and female applicants.
- B. All parties to this Agreement acknowledge that funding for this Project includes but is not limited to funds from the American Rescue Plan Act ("ARPA") State and Local Fiscal Recovery Funds ("SLFRF"), which are also governed by the "Uniform Guidance" requirements in 2 C.F.R. Part 200 and funds from the New York State Energy Research and Development Authority ("NYSERDA"). As a condition of contract with the County, Project Contractors will be required to comply with all workforce diversity utilization requirements pertaining to such funding.

SECTION 4.5 CROSS AND QUALIFIED REFERRALS

The Local Unions shall not knowingly refer to a Contractor an employee then employed by another Contractor working under this Agreement. The Local Unions shall exert their utmost efforts to recruit sufficient numbers of skilled and qualified crafts employees to fulfill the requirements of each Contractor.

SECTION 4.6 UNION DUES

Nothing in this Agreement requires employees to join a Union or pay dues or fees to a Union as a condition of working on the Project. This Agreement is not, however, intended to

supersede independent requirements in applicable Local Union Agreements as to Contractors that are otherwise signatory to those Agreements in relation to employees of such Contractors performing Project Work.

ARTICLE 5 – UNION REPRESENTATION

SECTION 5.1 LOCAL UNION REPRESENTATIVE

Each Local Union signatory to this Agreement shall be entitled to designate a representative and/or Business Manager who shall be afforded access to the Project site only during times when Project Work is being conducted.

SECTION 5.2 STEWARDS

- A. Each Local Union shall have the right to designate from among those referred to the Project a working journey person as a Steward or Lead Engineer and one alternate per shift, and shall notify the Construction Manager of the identity of the designated Steward or Lead Engineer (and alternate) prior to the assumption of such duties. Stewards or Lead Engineer shall not exercise supervisory functions and shall receive the rate of pay for their craft classifications. There will be no non-working Stewards or Lead Engineer on the Project.
- B. In addition to his/her work as an employee, the Steward or Lead Engineer shall have the right to receive complaints or grievances and to discuss and assist in their adjustment with the Contractor's appropriate supervisor; such activities, however, are not to interfere with the Steward's work unless an emergency situation exists. Each Steward or Lead Engineer shall be concerned with the employees of the Steward's Contractor and, if applicable, Subcontractors of that Contractor, but not with the employees of any other Contractor. The Contractor will not discriminate against the Steward or Lead Engineer in the proper performance of Union duties.
- C. Requirements for stewards or lead engineer shall be as per the applicable Schedule A agreement.

SECTION 5.3 LAYOFF OF A STEWARD

Contractors agree to notify the appropriate Union 24 hours prior to the layoff of a Steward or Lead Engineer, except in cases of discipline or discharge for just cause. If a Steward is protected against layoff by a Schedule A agreement, such provisions shall be recognized to the extent the Steward or Lead Engineer possesses the necessary qualifications to perform the Project Work required. In any case in which a Steward or Lead Engineer is discharged or disciplined for just cause, the Local Union involved shall be notified immediately by the Contractor.

SECTION 5.4 UNION STANDARDS

- A. The Council and its affiliates have a legitimate interest in preventing the undermining of the work opportunities and standards gained through collective bargaining and desire to preserve and protect work opportunities for its members.
- B. The County, while recognizing this interest, must maintain its ability to utilize the services of off-site fabricators and those entities involved in deliveries of construction materials, except those materials included in Section 3.3, when not covered under New York State Labor Law 220.
- C. While the scope of the Agreement is limited to Project Work as defined and subject to exceptions herein, Contractors should, whenever economically feasible, make reasonable efforts to use Union signatory vendors, which includes, but not limited to, UA Yellow Label and SMW Blue Label products for off-site assemblies or fabrications.
- D. This Section does not refer to construction material normally purchased pre-assembled or manufactured, it references Project Work normally and historically done on-site or in Local Union fabrications shops.
- E. If any dispute should arise with respect to this Section, the Contractors agree to install any off-site assemblies or fabricated items regardless of the source. The parties shall endeavor to settle such dispute in the Labor Management forum or appropriate sub-committee before a grievance is filed under Article 9.

ARTICLE 6 – MANAGEMENT RIGHTS

SECTION 6.1 RESERVATION OF RIGHTS

Except as expressly limited by a specific provision of this Agreement, Contractors retain full and exclusive authority for the management of their operations including, but not limited to: the right to direct the Project Work force, including determination as to the number to be hired and the qualifications therefore; the promotion, transfer, layoff of its employees; or the discipline or discharge for just cause of its employees; the assignment and schedule of Project Work; the promulgation of reasonable Project Work rules; and the requirement, timing and number of employees to be utilized for overtime Project Work. Nothing contained herein shall be construed so as to allow direction of an Employee to perform Project Work outside the jurisdiction of that Employee's Labor Union affiliation, if any. No rules, customs, or practices which limit or restrict productivity or efficiency of the individual (as determined by the Contractor) and/or joint working efforts with other employees shall be permitted or observed.

SECTION 6.2 MATERIALS, METHODS & EQUIPMENT

- A. There shall be no limitation or restriction upon the Owner's choice of materials, techniques, methods, technology or design, or, regardless of source or location, upon the use and installation of equipment, machinery, package units, pre-cast, pre-fabricated, pre-finished, or pre-assembled materials, tools, or other labor-saving devices. Contractors may, without restriction, install or use materials, supplies or equipment regardless of their source, subject to the requirements of Section 6.2(B). The on-site installation or application of such items shall be performed by the craft having jurisdiction over such Project Work pursuant to an applicable collective bargaining agreement; provided, however, it is recognized that other personnel having special qualifications may participate, in a supervisory capacity, in the installation, check-off or testing of specialized or unusual equipment or facilities as designated by the Contractor.
- B. All parties to this Agreement acknowledge that funding for this Project includes but is not limited to funds from the American Rescue Plan Act ("ARPA") State and Local Fiscal Recovery Funds ("SLFRF"), which are also governed by the "Uniform Guidance" requirements in 2 C.F.R. Part 200 and funds from the New York State Energy Research and Development Authority ("NYSERDA"). As a condition of contract, Project Contractors will be required to comply with all procurement requirements pertaining to such funding, including but not limited to Buy American requirements and Recovered/Recycled Product Content requirements.

ARTICLE 7 - WORK STOPPAGES AND LOCKOUTS

SECTION 7.1 NO STRIKES-NO LOCK OUT

There shall be no strikes, sympathy strikes, picketing, work stoppages, slowdowns, demonstrations or other disruptive activity on Project Work site for any reason by any signatory to this Agreement. There shall be no Union or concerted or employee activity which disrupts or interferes with the Project Work. Should any employee breach this provision, the Local Unions will use their best efforts to immediately end the breach and return all employees to work. There shall be no lockout by any signatory to this Agreement.

SECTION 7.2 DISCHARGE FOR VIOLATION

A Contractor may discharge any employee violating Section 7.1, above, and any such employee will not be eligible thereafter for referral under this Agreement for a period of 100 working days.

SECTION 7.3 NOTIFICATION

If a Contractor contends that any Union has violated this Article, it shall notify the Council of such fact, with copies of the notification to the Local Union involved. The Council and Local Union shall instruct, order, and otherwise use their best efforts to cause the employee(s) to

immediately cease and desist from any violation of this Article. The Council shall not be liable for the unauthorized acts of a Local Union or its members. Similarly, a Local Union and its members shall not be liable for any unauthorized acts of its members, the Council, or another Local Union.

SECTION 7.4 EXPEDITED ARBITRATION

Any Contractor or Union alleging a violation of Section 7.1 of this Article or Section 8.3(D)(ii) of Article 8 may utilize the expedited procedure set forth below (in lieu of, or in addition to, any actions at law or equity) that may be brought.

- A. A party invoking this procedure shall notify J.J. Pierson, Neal M. Eiseman and Thomas Hines who shall alternate as Arbitrator under this expedited arbitration procedure. If the Arbitrator next on the list is not available to hear the matter within 24 hours of notice, the next Arbitrator on the list shall be called. Copies of such notification will be simultaneously sent to all parties (the alleged violator, the Council, the Local Union, the Contractor, and the Owner).
- B. The Arbitrator shall hold a hearing within 48 hours of receiving the notice invoking the procedure if it is contended that the violation still exists. The Arbitrator shall provide at least 24 hours' notice (excluding Sundays and holidays) to all parties as to time and place of the hearing.
- C. All notices pursuant to this Article must be delivered to all parties (Local Union, Council, Contractor, alleged violator, and Owner) and may be provided by telephone, telegraph, hand delivery, fax, email, or confirmed overnight delivery. The hearing may be held on any day including Saturdays or Sundays. The hearing shall be completed in one session which shall not exceed 8 hours duration (no more than 4 hours being allowed to either side to present their case and conduct their cross examination) unless otherwise agreed. A failure of any party to attend the hearing shall not delay the hearing of evidence by those present or the issuance of an award by the Arbitrator.
- D. (i) Section 7.1 hearings:
The sole issue at the hearing shall be whether a violation of Section 7.1 occurred. If a violation is found to have occurred, the Arbitrator shall issue a Cease-and-Desist Award restraining such violation and serve copies on all parties. The Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages (any damages issue is reserved solely for court proceedings, if any). The Award shall be issued in writing within 3 hours after the close of the hearing, and may be issued without an Opinion. If any involved party desires an Opinion, one shall be issued within 15 calendar days, but its issuance shall not delay compliance with, or enforcement of, the Award.

(ii) Section 8.3(D)(ii) hearings:
The sole issue at the hearing shall be whether a violation of Section 8.3(D)(ii)

occurred. If a violation is found to have occurred, it shall be prima facie evidence of intentional mis-assignment, and the Arbitrator shall issue an immediate stop-work order with respect to the Project Work involved and reassign the Project Work as necessary. The Arbitrator is also authorized to (a) award damages or back pay in order to make the aggrieved trade whole, and (b) remove the offending Contractor from the job in egregious situations.

- E. An Award issued under this procedure may be enforced by any court of competent jurisdiction upon the filing of this Agreement together with the Award. Notice of the filing of such enforcement proceedings shall be given to all parties. In any court proceeding to obtain a temporary or preliminary order enforcing the Arbitrator's Award as issued under this expedited procedure, the involved Union and Contractor waive their right to a hearing and agree that such proceeding may be commenced by order to show cause. Such agreement does not waive any party's right to participate in a hearing for a final court order of enforcement or in any contempt proceeding.
- F. Any rights created by statute or law governing arbitration proceedings which are inconsistent with the procedure set forth in this Article, or which interfere with compliance thereto, are hereby waived by the Contractors and Unions to whom they accrue.
- G. The fees and expenses of the Arbitrator shall be equally divided between the involved Contractor and Union.

SECTION 7.5 ARBITRATION OF DISCHARGES FOR VIOLATION

Procedures contained in Article 9 shall not be applicable to any alleged violation of this Article, with the single exception that an employee discharged for violation of Section 7.1, above, may have recourse to the procedures of Article 9 to determine only if the employee did, in fact, violate the provisions of Section 7.1 of this Article; but not for the purpose of modifying the discipline imposed where a violation is found to have occurred.

ARTICLE 8 – LABOR MANAGEMENT COMMITTEE

SECTION 8.1 SUBJECTS

The Project Labor Management Committee ("Committee") will meet as established by the Committee to: 1) promote harmonious relations among the Contractors and Unions; 2) enhance safety awareness, cost effectiveness and productivity of construction operations; 3) protect the public interest; 4) discuss matters relating to staffing and scheduling with safety and productivity as considerations; 5) review Affirmative Action and equal employment opportunity matters pertaining to the Project, if any and increase work opportunity within the County for County residents.

SECTION 8.2 COMPOSITION

The Committee shall be jointly chaired by a designee of the Owner and the Council. It may include representatives of the Local Unions and Contractors involved in the issues being discussed. The Committee may conduct business through mutually agreed upon sub-committees.

SECTION 8.3 PRE-JOB CONFERENCE

- A. So that the start and continuation of Project Work may progress without interruption, the Committee shall require each Contractor and Subcontractor of whatever tier to conduct a pre-job conference with the Council prior to commencing work. The Construction Manager or General Contractor shall be advised in advance of such conferences and may participate if they wish. This pre-job conference with the Council is in addition to any pre-job/pre-construction conferences required by the Project Contract Documents.
- B. The purpose of the pre-job conference with the Council shall be for the parties to gain an understanding of each Contractor's proposed work assignments, the standard work day and work week, the number of employees to be employed, the method of referral, the applicable wage rates and fringe benefit contributions and any other matters in accordance with this Agreement.
- C. Proposed Trade Assignments. In conjunction with the pre-job conference with the Council required by this Section, each Contractor shall fill out the attached Schedule E – Proposed Trade Assignments identifying all Subcontractors and indicating what trades will be used to perform the Project Work. This form shall be submitted to the Council at least fourteen (14) days in advance of the commencement of Project Work. If any Local Union(s) objects to or disagrees with the Proposed Trade Assignment of either the Contractor or Subcontractor, the Local Union will state its objection within three (3) days of the submission of the Proposed Trade Assignments and there shall be a good faith discussion among the Contractor or Subcontractor and the objecting Local Union and other affected Unions to resolve the matter. If no resolution is reached, any involved Local Union may submit their objection position in writing, together with support documentation, within seven (7) calendar days of the submission of the Proposed Trade Assignments to the Contractor or Subcontractor with a copy to all affected Local Unions. Failure of any objecting Local Union and/or other affected Unions to timely object or submit such objection positions in writing waives any objection to the Proposed Trade Assignments. The Contractor or Subcontractor will review all submitted supporting documentation regarding the Proposed Trade Assignments and will submit to the Construction Manager, the Council, and all affected Local Unions a "Final Trade Assignment" letter within fourteen (14) days calendar days of the pre-job meeting at which the Proposed Trade Assignments were made.

D. Disputes and Violations.

- (1) Unresolved disputes concerning trade assignments shall be handled in accordance with Section 10.1, 10.2, and 10.3 of Article 10 in accordance with the National Plan for Settlement of Jurisdictional Dispute in the Construction Industry established by the Building and Construction Trades Department, incorporated by reference in Schedule D, provided however, that disputes concerning intra-trade assignments (assignments between trades within the same International Union) will be determined by the applicable International Union.
- (2) Contractor's failure to conduct a pre-job conference with the Council, failure to include all required parties in a pre-job conference with the Council, or failure to adhere to agreed-upon Schedule E trade assignments is a violation of this Agreement and prima facie evidence of intentional mis-assignment. Alleged violations of this provision shall be considered a lock-out and subject to the expedited arbitration procedures of Article 7, Section 7.4.
- (3) All remaining unresolved issues shall be subject to the provisions of Article 9.

ARTICLE 9 - GRIEVANCE & ARBITRATION PROCEDURE

SECTION 9.1 CLOSE COOPERATION

The Contractors, Unions, and employees, collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of Project Work and agree to resolve disputes in accordance with the grievance-arbitration provisions set forth in this Article.

SECTION 9.2 PROCEDURE

Any question, dispute or claim arising during the term of this Agreement involving the interpretation or application of this Agreement (other than jurisdictional disputes and alleged violations of Section 7.1, and Section 8.3(D)(2)), shall be considered a grievance and shall be resolved pursuant to the following procedure.

Step 1:

- A. When any employee covered by this Agreement feels aggrieved by a claimed violation of this Agreement, the employee shall give notice of the claimed violation to the Local Union representative or job steward, who shall notify the Project Work site representative of the involved Contractor and the Construction Manager. To be timely, such notice must be in writing given within 7 calendar days after the act, occurrence or event giving rise to the grievance. Strict compliance with this 7-day

notice is a condition precedent to proceeding with such grievance. The Local Union representative or the job steward shall meet with the Project Work site representative of the involved Contractor and the Construction Manager and endeavor to adjust the matter within 7 calendar days after timely notice has been given. The representative of the involved Contractor shall keep the minutes of the meeting and shall respond to the Union representative in writing, with copy to the Construction Manager, within twenty-four (24) hours after the conclusion of the meeting. If they fail to resolve the matter within the prescribed period, the grieving party, may, within 7 calendar days thereafter, pursue Step 2 of the grievance procedure by serving the involved Contractor with written copies of the grievance setting forth a description of the claimed violation, the date on which the grievance occurred, and the provisions of the Agreement alleged to have been violated. Grievances and disputes settled at Step 1 are non-precedential except as to the specific Local Union, employee and Contractor directly involved, unless the settlement is accepted in writing by the Labor-Management Committee as creating a precedent with respect to Project Work.

- B. Should any signatory to this Agreement have a dispute [excepting jurisdictional disputes and alleged violations of Section 7.1 or Section 8.3(D)(i) or (ii) with any other signatory to this Agreement and, if after conferring, a settlement is not reached within 7 calendar days, the dispute may be reduced to writing and the grieving party may proceed to Step 2 in the same manner as outlined in subparagraph (a) for the adjustment of employee grievances.

Step 2:

Upon timely receiving a written grievance, the involved Contractor shall notify and schedule a meeting with the Business Manager of the involved Local Union, the Council, and the Construction Manager, and their respective representatives, for the purpose of arriving at a satisfactory settlement. Such meeting shall be held within 7 calendar days of the involved Contractor's receipt of the written grievance. Meeting minutes shall be kept by the Contractor with copies to the parties within twenty-four (24) hours.

Step 3:

- A. If the grievance shall have been submitted but not resolved in Step 2, any of the participating Step 2 entities may, within 21 calendar days after the initial Step 2 meeting, submit the grievance in writing (copies to other participants, including the Construction Manager) along with copies of the minutes from Step 1 and Step 2, to the acting Arbitrator under this procedure (alternating between J.J. Pierson, Roger Moyer and Thomas Hines). The Labor Arbitration Rules of the American Arbitration Association shall govern the conduct of the arbitration hearing, at which all Step 2 participants shall be parties. The decision of the Arbitrator shall be final and binding on the involved Contractor, Local Union, and employees, and the fees

and expenses of such arbitrations shall be borne equally by the involved Contractor and Local Union.

- B. Failure of the grieving party to adhere to the time limits set forth in this Article shall render the grievance null and void. These time limits may be extended only by written consent of the Construction Manager, the involved Contractor, and the involved Local Union at the particular step where the extension is agreed upon. The Arbitrator shall have authority to make decisions only on the issues presented to him and shall not have the authority to change, add to, delete or modify any provision of this Agreement.

ARTICLE 10 - JURISDICTIONAL DISPUTES

SECTION 10.1 ASSIGNMENT

The assignment of Project Work shall be solely the responsibility of the Contractor performing the Project Work involved, subject to the pre-job conference with the Council and the procedures set forth in Section 8.3(C), and such Project Work assignments shall be in accordance with the National Plan for the Settlement of Jurisdictional Disputes in the Construction Industry ("National Plan"), incorporated by reference into Schedule D, or any successor Plan approved by the Building & Construction Trades Department, AFL-CIO.

SECTION 10.2 PROCEDURE FOR SETTLEMENT OF JURISDICTIONAL DISPUTES

All jurisdictional disputes involving Project Work shall be settled according to the National Plan, provided however, that disputes concerning intra-trade assignments (assignments between trades within the same International Union) will be determined by the applicable International Union.

SECTION 10.3 NO DISRUPTIONS

There will be no strikes, work stoppages, or slowdowns, arising out of any jurisdictional dispute. Pending the resolution of the dispute, the Project Work shall continue uninterrupted and as assigned by each Contractor. No jurisdictional dispute shall excuse a violation of Article 7.

SECTION 10.4 AWARD

Any jurisdictional award pursuant to this Article shall be final and binding on the disputing Unions and the involved Contractor on this Project only and may be enforced in any court of competent jurisdiction. Such award or resolution shall not establish a precedent on any other construction work not covered by this Agreement.

SECTION 10.5. LIMITATIONS

Awards made under this Article shall determine only to whom the disputed Project Work belongs. The deciding person or group hereunder shall have no authority to (a) assign Project Work to a double crew, that is, to more employees than the minimum required by the Contractor to perform the Project Work involved; (b) assign work to employees who are not qualified to perform the work involved; or (c) assign Project Work being performed by non-Union employees to Union employees. This provision does not prohibit the establishment, with the agreement of the involved Contractor, of composite crews where more than (1) employee is needed for the job.

ARTICLE 11 - WAGES AND BENEFITS

SECTION 11.1 CLASSIFICATION AND HOURLY RATE

All employees covered by this Agreement shall be classified in accordance with the work performed and paid the wage rates applicable for those classifications as required by the Schedule A applicable to the work. The term "straight time" in this Agreement shall mean the hourly wage rate applicable for those classifications as required by the applicable New York State Labor Law Section 220 ("Section 220") prevailing wage determination.

SECTION 11.2 EMPLOYEE BENEFITS

- A. Unless expressly provided differently in this Agreement, Contractors agree to pay employee benefits/supplements on behalf of all of their employees covered by this Agreement in the amounts required by the applicable Section 220 schedule in effect. Except as provided herein, the Contractors agree that such payments shall be made to those established jointly trustee employee benefit funds designated in the applicable Schedule A agreement, and in the amounts so designated, to the extent such payments are required by and satisfy the Section 220 obligation. Bona fide jointly trustee fringe benefit plans established or negotiated through collective bargaining during the life of this Agreement may be added if they similarly fall within Section 220. Contractors not otherwise contractually bound to do so, shall not be required to contribute to non-Section 220 benefits, trusts or plans; however, this provision does not relieve Contractors which are signatory to local collective bargaining agreements with any Local Union from complying with the benefit requirements for all funds contained in those collective bargaining agreements.
- B. Notwithstanding Section 11.2(A):
 - (1) Contractors who designate employees pursuant to Article 4, Section 4.2(B), may satisfy the above benefits obligation with respect to those employees by: (1) providing those employees with coverage under their private benefit plans for health, welfare, pension, annuity and 401(k); or (2) paying the full amount of such benefit to the employee in employees' wages. The total benefit payments to be made on behalf of each such employee must equal

the total Section 220 benefit/supplement amount. If the Contractor's contribution into the private benefit plan for the above funds is less than the amount required by Section 220, the difference must be paid to the employee in cash. Payments of other benefits covered under Section 220 shall be paid to the respective Unions on behalf of each employee.

- (2) This same option shall apply with respect to any other employee who is referred to the Contractor through the hiring hall process provided such employee was previously employed by the Contractor and was a participant in a bona fide private benefit plan maintained by the Contractor which satisfies the requirements of Section 220.
 - (3) The option for a private plan equivalent supplement shall not apply to contributions into Joint Apprentice Training Committee (JATC), or similar apprentice funds designated in the applicable Schedule A agreement, if the Contractor does not have an apprentice training program approved by the Department of Labor (However, all Contractors with contracts for this Project in excess of \$500,000 must participate in apprenticeship training programs pursuant to New York State Labor Law §222(2)(e)). Upon request by the Council, any Contractor providing coverage under this provision will provide the Council with documentation of benefit payments made to individual employees during the term of their employment on the Project.
 - (4) Contractors who exercise the option under Section 11.2(B) of this Article to pay into their own private benefit plans rather than the applicable jointly trusted funds designated in the applicable Schedule A agreement shall be responsible for and guarantee employee benefit/supplement payments and shall indemnify and hold harmless the jointly trusted funds designated in the applicable Schedule A agreement against any and all benefit/supplement claims by its employees.
- C. Contractors who contribute to jointly trusted funds under this Section agree to be bound by the written terms of the legally-established jointly trusted Trust agreements specifying the detailed basis on which payments are to be paid into, and benefits paid out of, such trust funds but only with regard to Project Work done and only for those employees for whom this Agreement requires such benefit payments. Notwithstanding the foregoing, a Contractor's liability shall be at all times limited to the amount of contributions required to be made to the Trust Funds.
- D. Each Contractor shall be responsible for and guarantee the payment of all required fringe benefits on the Project. The Local Unions and/or the Council shall notify the Construction Manager within 120 hours excluding weekends whenever a Contractor or Subcontractor fails to make a required benefit

payment and such delinquency remains outstanding after 30 days. Notification must be in writing and may be by email. If written notice of such a delinquency is received by the Construction Manager within that 120-hour period it shall withhold from any funds due to the delinquent Contractor the amount of that delinquency, up to the total amount due, until any dispute regarding the delinquency has been resolved. The Construction Manager shall have no other obligation with respect to contributions owed by any Contractor (or its Subcontractor); but that each Contractor shall continue to be obligated with respect to contributions based on Project Work done by that respective Contractor. If notice of a delinquency is not received by the Construction Manager within the required time periods, Owner shall have no basis upon which to withhold, with respect to that delinquency, any part of a payment which is otherwise due. Construction Manager shall require Contractors to submit proof of benefit payment with pay request.

ARTICLE 12 – HOURS OF WORK, PREMIUM PAYMENTS, SHIFTS AND HOLIDAYS

SECTION 12.1 WORK WEEK AND WORK DAY

- C. Unless otherwise provided for in this Agreement, the standard work week shall be five days, Monday through Friday, eight hours per day plus ½ hour unpaid lunch period each day. The starting time for the standard work week shall start at either 6:00 a.m., 6:30 a.m., 7:00 a.m., 7:30 a.m. or 8:00 a.m. Multiple starting times shall be allowed.
- B. Four-tens: notwithstanding any other provision of the Agreement, when working a four-day work week, the work shall consist of 4 days, Monday through Thursday, ten hours per day plus ½ hour unpaid lunch period at the straight time rate. The starting time for four-tens shall be 6:00 a.m. 6:30 a.m. 7:00 a.m. A three-day minimal notice shall be required for four-tens to the respective involved Unions.
- C. On a 5-day work week, Saturday may be used as a make-up day at straight time to fulfill the 40-hour work week due to inclement weather. On a 4-day work week, Friday may be used as a make-up day at straight time to fulfill the 40-hour work week. Make-up days shall be scheduled for a minimum of 8 hours, except in the case of inclement weather in which Section 12.5 shall apply. This minimum shall also apply when more than one shift or multiple shifts are worked.
- D. The changing of the regular starting time, except in the case of overtime and the switch from a 5- day and 4-day work weeks shall be a 4-week minimum.

SECTION 12.2 OVERTIME

Overtime pay for hours outside of the standard work week and work day, defined in Section 12.1, and all work on Saturdays shall be paid at time and one half the hourly rate and benefits will

be paid on straight time. All work on Sundays shall be paid at two times the hourly rate and benefits will be paid at straight time.

SECTION 12.3 SHIFTS

- A. Flexible Schedules – Scheduling of shift work, including Saturday and Sunday work, shall be within the discretion of the Contractor in order to meet Project Work schedules and existing Project Work conditions. Shifts must have prior approval of the Construction Manager and Owner and must be scheduled with not less than three work days' notice to the Local Union.

- B. Second and/or Third Shifts – Saturday and/or Sunday Work.

The second shift shall start between 3 p.m. and 6 p.m. and the third shift shall start between 11 p.m. and 2 a.m. Shift differentials shall be straight time plus fifty percent (50%) of the applicable Schedule A agreement shift differential. No other premium or payments for such work shall be required unless such work is in excess of 40 hours during the week. There shall be no reduction in hours worked on a second and/or third shift, except that when 3 shifts are working together, the length of one or more shifts can be reduced to accommodate a 24-hour day and only actual hours worked will be paid. Work performed on Saturdays or Sundays shall be paid as provided in the applicable Schedule A agreement.

- C. To clarify above, Schedule A Shift Differential designated percentage rates vary according to each trade's prevailing Collective Bargaining Agreement. Shift work as part of this Project Labor Agreement is 50% of the designated percentage of the shift percentages of each trade, for example if a trade's shift differential is 15% it would be 7.5%.

SECTION 12.4 HOLIDAYS

- A. Schedule - There shall be seven (7) recognized holidays:

New Year's Day
President's Day
Memorial Day
Fourth of July
Labor Day
Thanksgiving Day
Christmas Day

All said holidays shall be observed on the dates designated by New York State Law. In the absence of such designation, they shall be observed on the calendar date, except that holidays which occur on Sunday shall be observed on the following Monday and holidays which occur on a Saturday shall be observed on the previous

Friday.

- B. Payment - Regular holiday pay, if any, for work performed on a recognized holiday shall be in accordance with the applicable Schedule A agreement. There will be no benefits paid on holidays unless worked.
- C. Exclusivity - No holidays other than those listed in Section 12.4 shall be recognized or observed in relation to holiday pay and benefits.

SECTION 12.5 REPORTING PAY

- A. When on a five-day work week, employees who report to the work location pursuant to a regular schedule and who are not provided with work for whatever reason, shall receive two (2) hours reporting pay, four (4) hours if work starts and (8) hours pay if work occurs after the 4th hour except in the case of inclement weather in which hours worked after the four hours shall be paid and when on a four-day work week with a 10-hour day, (3), (5) and (10) shall apply as per the same terms above.
- B. When an employee who has completed his or her scheduled shift and has left the Project site is "called out" to perform special work of a casual, incidental, or irregular nature, the employee shall receive pay for actual hours worked at applicable straight time or overtime rates in accordance with this Agreement, but no less than a minimum guarantee of two (2) hours at the employee's straight time rate.
- C. When an employee leaves the job or work location of their own volition, is discharged for cause, or is not working as a result of the Contractor's invocation of Section 12.8 below, he or she shall be paid only for the actual time worked.
- D. There shall be no pay for time not actually worked except as specifically set forth in this Article 12 and where an applicable Schedule A agreement applies to Forepersons, Stewards and Lead Engineer in reference to pay.

SECTION 12.6 PAYMENT OF WAGES

- A. Payday: Payment shall be made by check, drawn on a New York bank with branches located within commuting distance of the job site. Paychecks shall be issued by the Contractor at the job site by 3:00 p.m. on Thursdays. In the event that the following Friday is a bank holiday, paychecks shall be issued on Wednesday of that week. Not more than one week's wages shall be held back in any pay period. Paycheck stubs shall contain the name and business address of the Contractor, together with an itemization of deductions from gross wages.
- B. Termination: Employees who are laid off or discharged for cause shall be paid in full for that which is due them at the time of termination. The Contractor shall also provide the employee with a written statement setting forth the date of layoff or

discharge.

SECTION 12.7 INJURY/DISABILITY

An employee who, after commencing Project Work, suffers a work-related injury or disability while performing Project Work duties, shall receive no less than eight (8) hours wages for that day. Further, the employee shall be rehired at such time as the employee is able to return to duties provided there is still Project Work available for which the employee is qualified and able to perform.

SECTION 12.8 EMERGENCY WORK SUSPENSION

A Contractor may, if considered necessary for the protection of life, property, and/or safety of employees or others, suspend all or a portion of Project Work. In such instances, employees shall be paid for actual time worked; provided however, that when a Contractor requests that employees remain at the job site available for Project Work, employees shall be paid for “stand-by” time at their hourly rate of pay.

ARTICLE 13 - APPRENTICESHIP & HELMETS TO HARDHATS

SECTION 13.1 APPRENTICE RATIOS

Recognizing the need to maintain continuing supportive programs designed to develop adequate numbers of competent workers in the construction industry and to provide craft entry opportunities for minorities, women, and economically-disadvantaged non-minority males, Contractors will employ apprentices in their respective crafts to perform such Project Work as is within their capabilities and that is customarily performed by the craft in which they are indentured. Contractors may utilize apprentices and such other appropriate classifications as are contained in the applicable Schedule A agreement in a ratio of not less than twenty-five percent (25%) of the work force by craft (without regard to whether a lesser ratio is set forth in the applicable Schedule A agreement), unless the applicable Schedule A agreement provides for a higher percentage. The first person assigned to the job shall be a Journeyman. The second person assigned may be an apprentice. Subsequent assignments shall be Journeymen until the applicable ratio is achieved. This assignment shall be repeated until staffing needs are satisfied. Apprentices and such other classifications as are appropriate will be employed in a manner consistent with the provisions of the applicable Schedule A agreement.

SECTION 13.2 NYS DEPARTMENT OF LABOR- APPRENTICESHIP

To assist the Contractors in attaining a maximum effort on this Project, the Unions agree to work in close cooperation with, and accept monitoring by, the New York State Department of Labor to ensure that minorities and women are afforded every opportunity to participate in apprenticeship programs that result in the placement of apprentices on this Project.

SECTION 13.3 NEW YORK HELMETS TO HARDHATS

The Contractors and the Unions desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractors and the Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (the “Center”) and the Center’s “New York Helmets to Hardhats” program as a resource for preliminary orientation and assessment of construction aptitude; referral to apprenticeship programs or hiring halls; counseling and mentoring; and support networks, employment opportunities, and other needs as identified by the parties.

The Unions and the Contractors agree to work with the Center to create and maintain an integrated database of veterans interested in working on the Project as well as information about apprenticeship and employment opportunities related to this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

SECTION 13.4 PARTICIPATION GOALS (MBE, WBE, SDVOB, LABOR SURPLUS AREA)

- A. The County, Construction Manager, Contractors, the Hudson Valley Building and Construction Trades Council and its affiliated Unions are committed to meeting federal and New York State Participation Goals, if any are applicable to the Project, and shall be in alignment with the current goals or standards set for by federal or New York State requirements for Minority Business Enterprises (MBE), Woman Owned Business Enterprise (WBE), Service-Disabled Veteran Owned Business (SDVOB), and federal Labor Surplus Area requirements, to ensure participation on the project by MBE, WBE and SDVOB firms and job-seekers from federal Labor Surplus Areas (for 2022, City of Middletown, Town of Monroe, and City of Newburgh) while maintaining fiscal responsibility.
- B. Outreach by the Construction Manager, Contractors, Hudson Valley Building and Construction Trades and affiliated Unions and contractor associations to ensure participation goals of NYS Certified MBE, WBE and SDVOB firms and Labor Surplus Area recruitment are met will be required through the project.
- C. All parties to this Agreement acknowledge that funding for this Project includes but is not limited to funds from the American Rescue Plan Act (“ARPA”) State and Local Fiscal Recovery Funds (“SLFRF”), which are also governed by the “Uniform Guidance” requirements in 2 C.F.R. Part 200 and funds from the New York State Energy Research and Development Authority (“NYSERDA”). As a condition of contract with the County, Project Contractors will be required to comply with all participation goals for MBE, WBE, SDVOB and Labor Surplus Areas pertaining to such funding.

ARTICLE 14 – NO DISCRIMINATION

SECTION 14.1 COOPERATIVE EFFORTS

The Contractors and Unions agree that they shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, marital status, age, Union or non-Union status, real or perceived sexual orientation or any other status protected by law, in any manner prohibited by law or regulation. It is recognized that special procedures may be established by Contractors and Local Unions and the New York State Department of Labor for the training and employment of persons who have not previously qualified to be employed on construction projects of the type covered by this Agreement. The parties to this Agreement shall assist in such programs and agree to use their best efforts to ensure that the goals for female and minority employment are met on this Project. Nothing in this section shall be grievable.

SECTION 14.2 LANGUAGE OF AGREEMENT

The use of the masculine or feminine gender in this Agreement shall be construed as including all genders.

ARTICLE 15– GENERAL TERMS SECTION

SECTION 15.1 PROJECT RULES

- A. The Construction Manager and Contractors may establish from time to time such reasonable Project rules as are necessary for the good order of the Project. These rules shall be outlined at the pre-job conference with the Council, detailed in the contract documents, posted at the Project site, and may be amended thereafter as necessary.
- B. Security Protocols – The Construction Manager with Owner’s approval and in their sole discretion, will determine security protocols for the entire Project Site. Strict compliance by all Contractors and subcontractors of all tiers and their respective personnel with security procedures, protocols, and directives issued by these entities or its delegated, is required at all times.

SECTION 15.2 TOOLS OF THE TRADE

The welding/cutting torch and chain fall are tools of the trade having jurisdiction over the Project Work performed. Employees using these tools shall perform any of the Project Work of the trade. There shall be no restrictions on the emergency use of any tools or equipment by any qualified employee or on the use of any tools or equipment for the performance of Project Work within the employee's jurisdiction.

SECTION 15.3 SUPERVISION

Employees or other personnel shall work under the supervision of the craft foreperson or general foreperson for the applicable hiring or subcontracting Contractor.

SECTION 15.4 FULL WORKDAY

- A. Employees shall be at their Project Work area at the starting time established by the Contractor.
- B. The signatories to this Agreement reaffirm their policy of a fair day's work for a fair day's wage.

ARTICLE 16 - SAFETY PROTECTION OF PERSON AND PROPERTY

SECTION 16.1 SAFETY REQUIREMENTS

Each Contractor will ensure that applicable OSHA and New York State mandated safety requirements are at all times maintained on the Project and the employees and Unions agree to cooperate fully with these efforts. Employees must perform their Project Work at all times in a safe manner and protect themselves and the property of the Contractor from injury or harm. Failure to do so may be grounds for discipline, including discharge. Prevention of accidents at the site is the responsibility of the Contractors, its employees, subcontractors and suppliers, persons, and entities at the Project Site. The Contractors shall establish their own safety programs implementing safety measures, policies, and standards conforming to those required or recommended by governmental and quasi-governmental authorities having jurisdiction. The Construction Manager is not responsible for identifying unsafe practices, nor for failure to stop the Contractors' unsafe practices; and the Construction Manager's failure to stop the Contractors' unsafe practices shall not relieve the Contractors of the responsibility therefore.

SECTION 16.2 CONTRACTOR RULES

Employees covered by this Agreement shall at all times be bound by the reasonable safety, security, and visitor rules as established by the Owner. Such rules will be referenced in the Contract Documents and may be distributed to Contractors for further distribution to personnel and/or posted in conspicuous places throughout the Project.

SECTION 16.3 INSPECTIONS

The Contractors, Owner, Architect/Engineer, and Construction Manager retain the right to inspect incoming shipments of equipment, apparatus, machinery, and construction materials of every kind.

ARTICLE 17 – TEMPORARY SERVICES

Temporary light, power, cooling, ventilation and other services shall only be required on the specific request of a Contractor and when requested shall be assigned in accordance with the

Contract Documents. Temporary coverage may be provided by the supplying Contractor's employees already working under this Agreement during regular work hours. The supplying Contractor will determine the need for temporary coverage requirements during non-work hours. For safety reasons, temporary light and power panels will only be accessed by employees of the Contractor responsible for supplying the temporary light and power panels. Coverage requirements shall not require a standby employee who is not performing Project Work. There shall be no stacking of trades on temporary services. In the event temporary services are claimed by multiple trades, the matter shall be resolved pursuant to Article 10.

ARTICLE 18 - SAVINGS AND SEPARABILITY

SECTION 18.1 THIS AGREEMENT

In the event that the application of any provision of this Agreement is enjoined, on either an interlocutory or permanent basis, or is otherwise determined to be in violation of law, the provision involved (and/or its application to a particular part of the Project, as necessary) shall be rendered, temporarily or permanently, null and void, but the remainder of the Agreement shall remain in full force and effect to the extent allowed by law. In the event a court of competent jurisdiction finds any portion of the Agreement to be invalid, the parties will immediately enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the court determination and the intent of the parties hereto for contracts to be let in the future.

SECTION 18.2 NON-WAIVER

Nothing in this Agreement is intended to be or shall be construed as a waiver by any Union(s) of any prevailing wage determination or schedule that is applicable to their trade for any public work that has been or may be performed in the future on any work outside the scope of this Agreement. Nothing contained in this Agreement is intended to be or shall be construed as a waiver by any Union(s) of any more favorable term or condition of employment that may be contained in any collective bargaining agreement applicable to work outside the scope of this Agreement.

ARTICLE 19 - FUTURE CHANGES IN SCHEDULE A AREA CONTRACTS

SECTION 19.1 CHANGES TO AREA CONTRACTS

Each Schedule A agreement incorporated by reference into this Agreement by Schedule A shall continue in full force and effect until the Contractor and/or Union parties to the area collective bargaining agreements which are the basis for the applicable Schedule A agreement, notify the Owner and Construction Manager in writing of the agreed upon changes in the Schedule A agreement which is applicable to the Project, and their effective dates. Such changes shall only be effective to the extent consistent with this Agreement. Any disagreement between signatories to this Agreement over the incorporation into Schedule A of provisions agreed upon in the renegotiation of area collective bargaining agreements shall be resolved in accordance with the procedure set forth in Article 9 of this Agreement.

SECTION 19.2 LABOR DISPUTES DURING AREA CONTRACT NEGOTIATIONS

The Unions agree that there shall be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity or other violations of Article 7 affecting the Project by any Local Union involved in the renegotiation of area local collective bargaining agreements, nor shall there be any lock-out on this Project affecting a Local Union during the course of such renegotiations.

ARTICLE 20 – PROJECT SPECIFIC

SECTION 20.1 WORKERS COMPENSATION ADR

At the written option of the Contractor and with the written approval of the Hudson Valley Building Trades Council, all Local Unions, Contractors and subcontractors working on this Project agree to be bound by the Collectively Bargained Workers Compensation Alternative Dispute Resolution Agreement (ADR Agreement), incorporated by reference into Schedule F to this Agreement, and to the ADR program set forth therein, by and between the Construction Industry Council of Westchester and the Hudson Valley, Inc., and the Building and Construction Trades Council of Westchester and Putnam County, New York, entered into on January 26, 2007, as amended

SECTION 20.2 HUDSON VALLEY BUILDING AND CONSTRUCTION TRADES LABOR MANAGEMENT ALLIANCE

If not prohibited by law and there are no direct or additional costs to the parties to this Agreement, the parties agree to participate in the Hudson Valley Building and Construction Trades Labor Management Alliance.

SECTION 20.3 CLEAN UP

A clean work site results in a safe and more productive job site. All cleanup during construction shall be performed by the trades having jurisdiction for cleanup in accordance with the Project Contract Documents. The Owner will ensure a clean and safe workplace. The Owner or Construction Manager may back charge Contractors accordingly if clean up becomes unsatisfactory.

Once construction is complete and a building, section or floor is turned over to a professional cleaning company for final cleaning, including but not limited to, windows and floor prep, up to 33.3% of the Employees may be a direct employee of the cleaning company. Those direct employees shall be exempt from this Agreement.

SECTION 20.4 FURNITURE, FIXTURES AND EQUIPMENT (FFE)

Project Work related to furniture, fixtures and equipment that is free standing and requires no onsite assembly and is not fastened, mounted or anchored to any part of the building structure

by glue, screws, nails, mechanical fastener or by other means is excluded from this Agreement. Accordingly, for the avoidance of doubt, all unloading, handling, assembly, installation and cleanup of all furniture, fixtures and equipment which requires fastening, mounting or anchoring to any part of the building structure by glue, nails, screws, mechanical fasteners or by other means, or requires any onsite assembly, shall be included Project Work under this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed and effective as of the 1st day of September 2022.

**FOR THE HUDSON VALLEY BUILDING AND
CONSTRUCTION TRADES COUNCIL:**

By: 
L. Todd Diorio, President

FOR COUNTY OF ORANGE:

BY: 
(Name/Title)

FOR CONSTRUCTION MANAGER:

BY: 
(Name/Title)
LUIS H. RODRIGUEZ, PRESIDENT

For Local Unions:

International Union of Bricklayers and Allied Craftworkers Local NO. 1

Signed: Michael Clifford Title: Field Rep

Email: mclifford@bac1ny.com Phone: 845 522 4561

International Brotherhood of Boilermakers, Iron Ships Builders, Blacksmiths, Forgers & Helpers
District NO. 5

Signed: Thomas F. Ryan Title: BM-ST

Email: BoilermakersLocal5@verizon.net Phone: 516-326-2500x12

Bricklayers and Allied Crafts, Tile, Marble & Terrazzo Union of New York & New Jersey Local NO. 7

Signed: Shirley Title: Business Agent

Email: SVIR94@BACLocal7.com Phone: 917-734-7429

United Union of Roofers, Waterproofers and Allied Workers Local NO. 8

Signed: Bill Wilmer Title: B.A.

Email: WWILMER (A) Local 8.org Phone: 646 294 1510

District Council NO. 9, International Union of Painters and Allied Trades,
A.F.L.-C.I.O.

Signed: [Signature] Title: BA

Email: Shirley d Adl Phone: 914 260 4807

Laborers International Union of N.A. Local 17

Signed: R. Todd

Title: Business Manager

Email: tdiorio555@aol.com

Phone: 914 474 6222

International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) Local NO. 38

Signed: Jamie Neri

Title: BA

Email: unionoffice@smart38.org

Phone: 203-994-0394

International Association of HBAT and Frost Insulators and Allied Workers Local NO. 91

Signed: TL LLA

Title: Business Manager

Email: aw/91@insulators.org

Phone: (914) 788-0500

O.P.C.M.I.A. Plasters Union Local NO. 262

Signed: 

Title: Business Manager

Email: Jalkeyne@necdc.org

Phone: 914-255-8601

North Atlantic States Regional Council of Carpenters Local NO. 279

Signed: Scott J Smith

Title: Business Manager

Email: ssmith@nasrcc.org

Phone: 845-263-7516

International Brotherhood of Electrical Workers Local NO. 363

Signed: Sam Fub

Title: BUS MAN

Email: SEMTU1IBEWLU363.ORG

Phone: 845-211-7023

Plumbers, Steamfitters & Service Technicians Local NO. 373

Signed: Robert Ambrecht

Title: BUSINESSMANAGER

Email: RA 373 @AOL.COM

Phone: 845-656-8091

International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Local NO. 417

Signed: Matt P. Matta

Title: B.M.

Email: matts417@verizon.net

Phone: 845 629-1185

International Brotherhood of Teamsters Local Union NO. 445

Signed: [Signature]

Title: Business Agent

Email: Schinner@teamstersunion445.org Phone: 845-394-4763

Road Sprinkler Fitters Union Local NO. 669

Signed: [Signature]

Title: Business Agent

Email: Kliley669@gmail.com Phone: 914-475-9158

New York City District Council of Carpenters Local NO. 740 & Local NO. 2287

Signed: [Signature]

Title: Millwright Per NYECCC

Email: Montgomery@NYC
DistrictCouncil.org

Phone: 646-483-5892

United Cement Masons Local NO. 780

Signed: [Signature]

Title: Financial Secy

Email: gcash@uicm780.org

Phone: 718-357-3750

International Union of Operating Engineers Local NO. 825

Signed: [Signature] Wood

Title: Business Agent

Email: Wood@iuo825.org

Phone: 908-347-0502

SCHEDULE A – LOCAL COLLECTIVE BARGAINING AGREEMENTS

ARTICLES OF AGREEMENT between the INTERNATIONAL BROTHERHOOD OF BOILERMAKERS, IRON SHIP BUILDERS, BLACKSMITHS, FORGERS & HELPERS, AFL-CIO and THE FIRMS WHOSE SIGNATURES ARE AFFIXED HERETO January 1, 2018 -December 31, 2020

AGREEMENT by and between THE CONSTRUCTION CONTRACTORS' ASSOCIATION OF THE HUDSON VALLEY, BUILDING CONTRACTORS ASSOCIATION, AND THE MASON AND CONCRETE CONTRACTORS ASSOCIATION OF THE HUDSON VALLEY and THE INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTWORKERS LOCAL 1 NEW YORK June 1, 2017 - May 31, 2020

AGREEMENT between THE ASSOCIATIONS and the NORTH ATLANTIC STATE REGIONAL CONCIL OF CARPENTERS LOCAL UNION 279 May 1, 2019 -April 30, 2022

AGREEMENT by and between the HUDSON VALLEY CHAPTER, NATIONAL ELECTRICAL CONTRACTORS' ASSOCIATION and LOCAL UNION 363, INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS April 1, 2018 - March 31, 2022

AGREEMENT by and between the NATIONAL ELEVATOR BARGAINING ASSOCIATION and the INTERNATIONAL UNION OF ELEVATOR CONSTRUCTORS July 9, 2017 -July 8, 2022

MEMORANDUM OF AGREEMENT by and between the WINDOW AND PLATE GLASS DEALERS' ASSOCIATION and DISTRICT COUNCIL NO. 9 GLAXIERS LOCAL UNION #1087 May 1, 2017- April 30, 2023

AGREEMENT OF WORKING CONDITIONS between INDUSTRIAL INSULATION CONTRACTORS OF SOUTHERN NEW YORK and THE INTERNATIONAL ASSOCIATION OF HEAT AND FROST INSULATORS AND ALLIED WORKERS LOCAL #91 May 30, 2016 - May 26, 2019

AGREEMENT between FABRICATORS, ERECTORS AND REINFORCING CONTRACTORS' ASSOCIATION OF THE HUDSON VALLEY, INC. and LOCAL UNION NO. 417 OF THE INTERNATIONAL ASSOCIATION OF BRIDGE, STRUCTURAL, ORNAMENTAL AND REINFORCING IRON WORKERS July 1, 2018-June 30, 2021

INDEPENDENT MILLWRIGHT AGREEMENT between NEW YORK CITY MILLWRIGHT CONTRACTORS' ASSOCIATION and THE DISTRICT COUNCIL OF NEW YORK CITY AND VICINITY OF THE UNITED BROTHERHOOD OF CARPENTERS AND JOINERS OF AMERICA and MILLWRIGHT LOCAL 740 July 1, 2011 -June 30, 2017

AGREEMENT between MASTER PAINTERS and DISTRICT COUNCIL NO. 9 May 1, 2014 -April 30,2020

RESILIENT FLOOR COVERERS AGREEMENT between THE GREATER NEW YORK FLOOR COVERERS ASSOCIATION, INC. and THE DISTRICT COUNCIL OF NEW YORK AND VICINITY OF THE UNITED BROTHERHOOD OF CARPENTERS AND JOINERS OF AMERICA September 16, 2016 -June 30, 2024

AGREEMENT between UNITED UNION OF ROOFERS, WATERPROOFERS AND ALLIED WORKERS, LOCAL UNION NO. 8 and ROOFING & WATERPROOFING CONTRACTORS ASSOCIATION OF NEW YORK AND VICINITY July 1, 2019 -April 30, 2022

COMMERCIAL AGREEMENT between LOCAL UNION NO. 38 OF THE INTERNATIONAL ASSOCIATION OF SHEET METAL, AIR, RAIL AND TRANSPORTATION WORKERS (SMART) and SHEET METAL AND ROOFING CONTRACTORS' ASSOCIATION OF SOUTHEASTERN

NEW YORK May 1, 2019-April 30, 2024

AGREEMENT between NATIONAL FIRE SPRINKLER ASSOCIATION, INC. and ROAD SPRINKLER FITTERS' LOCAL UNION NO. 669 April 1, 2016-March 31, 2021

AGREEMENT HEAVY & HIGHWAY between TEAMSTERS UNION LOCAL 445, IBT, AFL-CIO and INDIVIDUAL EMPLOYERS May 1, 2017 -April 30, 2020

LOCAL UNION NO. 7 TILE, MARBLE, AND TERRAZZO, AFL-CIO OF NEW YORK AND NEW JERSEY AGREEMENT between the MARBLE INDUSTRY OF NEW YORK, INC. and THE MARBLE POLISHERS AND MAINTENANCE FINISHERS, LOCAL NO. 7 of the INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTSMEN July 1, 2018-June 30, 2022

AGREEMENT HEAVY & HIGHWAY between TEAMSTERS UNION LOCAL 445, IBT, AFL-CIO and INDIVIDUAL EMPLOYERS May 1, 2017 -April 30, 2020

AGREEMENT between THE GREATER NEW YORK AND NEW JERSEY TILE CONTRACTORS' ASSOCIATION, INC. and THE TILE SETTERS AND TILE FINISHERS UNION OF NEW YORK AND NEW JERSEY, LOCAL UNION NO. 7 OF THE INTERNATIONAL UNIO OF BRICKLAYERS AND ALLIED CRAFTWORKERS June 2, 2017 -June 2, 2021

AGREEMENT between the MOSAIC, TERRAZZO AND CHEMICAL PRODUCT DECORATIVE FINISHER MASONS WORKERS ASSOCIATION LOCAL NO. 7 OF NEW YORK NEW JERSEY & VICINITY INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTWORKERS and MARBLE TERRAZZO AND SPECIALTY CONTRACTORS ASSOCIATION, INC. July 1, 2017-June 30,2022

BUILDING AGREEMENT between LABORERS' LOCAL UNION NO. 17 and CONSTRUCTION CONTRACTORS' ASSOCIATION of the HUDSON VALLEY, INC. June 1, 2017 - May 31, 2020

HEAVY, HIGHWAY & SITE AGREEMENT between LABORERS' LOCAL UNION NO. 17, AGC OF AMERICA and CONSTRUCTION INDUSTRY COUNCIL May 1, 2017 – April 30, 2020

MECHANICAL CONTRACTORS' ASSOCIATION OF ROCKLAND, ORANGE, SULLIVAN COUNTIES and PLUMBERS & STEAMFITTERS LOCAL NO. 373 May 2019 – April 2021

AGREEMENT between INTERNATIONAL UNION OF NORTH AMERICA OPERATING ENGINEERS LOCAL UNION NO. 825 INDEPENDENT AGREEMENT July 1, 2019

SCHEDULE A COLLECTIVE BARGAINING AGREEMENT can be viewed by visiting the Hudson Valley Building and Construction Trades Council website: builditunion.org
Username: hudsonvalley
Password: buildingtrades

IT SHALL BE THE REPSONSIBILITY OF THE CONTRACTOR TO VERIFY SCHEDULE A AGREEMENTS WITH THE RESPECTIVE UNIONS SIGNATORY TO THIS PROJECT LABOR AGREEMENT.

For questions about this Agreement or Schedule A contact:

Todd Diorio (845) 565-2737 or email tdiorio555@aol.com
President, HVBCTC

SCHEDULE B - LETTER OF ASSENT

The undersigned party confirms that it agrees to be bound to the ORANGE COUNTY MEDICAL EXAMINERS OFFICE Project Labor Agreement ("PLA") entered into between Hudson Valley Building and Construction Trades Council ("Council") and the County of Orange ("County"), to the same extent as if it were a party thereto and understands that such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms. The terms of the Agreement and its Schedules are hereby incorporated by reference herein.

The undersigned, as a Contractor or Subcontractor ("Contractor") on the Project known as the ORANGE COUNTY MEDICAL EXAMINERS OFFICE project and located within the County (the "Project"), for and in consideration of the award to it of a contract to perform work on the Project, and in further consideration of the mutual promises made in the PLA, a copy of which was received and is acknowledged, hereby:

(1) Accepts and agrees to be bound by the terms and conditions of the PLA, together with any and all schedules, amendments, and supplements now existing or which are later made thereto;

(2) Agrees to be bound by, and incorporates and adopts the legally established collective bargaining agreements in Schedule "A" of the PLA and local trust agreements referred to Article 11 of the PLA and this Letter of Assent for this Project;

(3) Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;

(4) Certifies that it has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of the PLA. The Contractor agrees to employ labor that can work in harmony with all other labor on the Project and shall require labor harmony from every lower tier Subcontractor it engages to work on the Project. Labor harmony disputes/issues shall be subject to Articles 7, 8, 9 and 10 of the PLA;

(5) Agrees to secure from any Contractor(s) (as defined in the PLA) which is or becomes a Subcontractor (of any tier) on the Project, a duly executed Agreement identical to this document;

(6) Agrees that it will not invoke any "Most Favored Nations Clause" that may be

contained in any of its Collective Bargaining Agreements with affiliated Unions as a result of the application of the PLA to this Project.

Dated: _____
Name of Contractor

By: _____

Print Name: _____

Title _____

Address:

Phone:

E-mail:

Employer EIN _____ Employer NYS IU _____ WC# _____

Sworn to before me this

_____ day of _____, 20 _____

Notary Public

SCHEDULE C – ADMINISTRATION OF AGREEMENT; DESIGNEE

Name of Project: ORANGE COUNTY MEDICAL EXAMINERS OFFICE

The Owner shall name a Designee to administer this Agreement. The Designee shall be notified in the event any jurisdictional issue, grievance, or other matter concerning this PLA arises, and such Designee shall actively take part in the resolution of the issue. Any signatory Union may request the Designee's assistance in rectifying an issue.

Brian Titsworth, Deputy Commissioner

The Designee's contact information is as follows: Scott Razzano, Director of Professional Services

BT: (845)291-2770

SR: (845)291-4744 _____ (Office Phone)

BT: (845)590-5890

SR: (845)545-4012 _____ (Cell Phone)

btitsworth@orangecountygov.com

srazzano@orangecountygov.com _____ (Email)

OWNER

Harold J. Porr III

(Signature)

Harold J. Porr III

(Print)

Deputy County Executive

(Title)

SCHEDULE D – NATIONAL PLAN

A copy of National Plan for the Settlement of Jurisdictional Disputes can be viewed by visiting the Hudson Valley Building and Construction Trades website: builditunion.org

Username: hudsonvalley

Password: buildingtrades

SCHEDULE E – PROPOSED TRADE ASSIGNMENTS

**SCHEDULE F – COLLECTIVELY BARGAINED WORKERS
COMPENSATION ALTERNATIVE DISPUTE RESOLUTION
(ADR Agreement)**

A copy of the Collectively Bargained Workers Compensation Alternative Dispute Resolution (ADR Agreement) can be viewed by visiting the Hudson Valley Building and Construction Trades website: builditunion.org

Username: hudsonvalley

Password: buildingtrades

SECTION 01 0100**SUMMARY OF WORK****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract, including General Conditions and Divisions 00 & 01 of the Specifications, apply to this Section.

1.2 SUMMARY

- A. Project Locations: ORANGE COUNTY MEDICAL EXAMINER'S OFFICE, WELLS FARM ROAD, GOSHEN, NEW YORK 10924
- B. Owner: ORANGE COUNTY DEPARTMENT OF HEALTH, WELLS FARM ROAD, GOSHEN, NEW YORK 10924
- C. Owner's Representatives: Brian Titsworth and Scott Razzano
- D. Architect Identification: Hyman Hayes Associates, LLC, Suite 103; 800 Troy Schenectady Road, Latham, NY 12110. T: (518) 452-3470
- E. Construction Manager: The Palombo Group, 22 Noxon Street, Poughkeepsie, NY 12601 T: (845) 868-1239
 - 1. Construction Manager Representative: Luis Rodriguez, President.
 - 2. Construction Manager has been engaged for this Project to serve as an advisor to Owner and to provide assistance in administering the Contract for Construction between Owner and each Contractor, according to a separate contract between Owner and Construction Manager.
- F. Project Identification: Project consists of but is not limited to the demolition of existing structures and construction of the Orange County Medical Examiner's Office with all associated parking lots, sidewalks, storm water management basins, utilities, fire suppression, water lines and geothermal well piping.

1.3 SUMMARY OF WORK

- A. The Work will be constructed under multiple prime contracts. One set of Contract Documents is issued covering the multiple contracts. Each Prime Contract is defined as:
 - 1. CONTRACT 1 - GENERAL CONSTRUCTION WORK
 - 2. CONTRACT 2 - GEO-THERMAL WELLS WORK
 - 3. CONTRACT 3 - PLUMBING WORK
 - 4. CONTRACT 4 - HVAC WORK
 - 5. CONTRACT 5 - ELECTRICAL WORK

1.4 WORK UNDER SEPARATE CONTRACTS

- A. The Project will be constructed under a multiple-prime contracting arrangement.
- B. One set of Contract Documents is issued covering all multiple prime contracts. Each Contractor is to review all Drawings and Specifications for complete understanding and knowledge of the Work.
- C. The following Contract Documents are specifically included and defined as integral to each Prime Contract.
 - 1. Bidding Requirements
 - 2. Performance and Payment Bonds
 - 3. Conditions of the Contract, including
 - a. General Conditions
 - b. Insurance Requirements
 - c. NYS Prevailing Wage Rates.
 - d. Project Labor Agreement (PLA)
 - 4. All other Contracts Documents as defined in §1.1.11 of the General Conditions
- D. Extent of Contract: Unless the Contract Documents contain a more specific description of the Work, names and terminology on Drawings and in Specification Sections determine which Contract includes a specific element of Project.
 - 1. Unless otherwise indicated, the Work described in this Section for each Contract shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
 - 2. Trenches, excavation, fill and compaction for the Work of all Contracts shall be provided by the General Construction Contractor. The General Construction Contractor shall provide dewatering, shoring, bracing, excavation and backfill for all Contractors to the existing building footprint. The General Construction Contractor shall provide dewatering, shoring, bracing and excavation for all work within the new building footprint and outside of building footprint. Refer to **ALL** Drawings for locations of utilities requiring shoring, bracing, excavation and backfilling.
 - 3. Concrete for the Work of each Contract shall be provided by each Contractor for its own Work, unless specifically assigned to another Contract.
 - 4. Cutting and patching for the Work of each Contract shall be provided by each Contractor for its own Work.
 - 5. Firestopping for the Work of each Contract shall be provided by each Contractor for its own Work. Firestopping shall comply with Division 07 Sections "Through-Penetration Firestop Systems."
 - 6. Access doors not shown on architectural Drawings and required for access to junction boxes, valves and similar equipment for the Work of each Contract shall be furnished by each Contractor for its own Work to the General Construction Contractor for installation. (*Installation by the General Construction Contractor is N.I.C. and will be accomplished by use of a portion of the contingency allowance*). All access doors shall comply with Division 08 Section "Access Doors and Frames."
 - 7. Lead Based Paint precautions for the Work of each Contract shall be provided by each Contractor for its own Work.
 - 8. Each Contractor shall designate a full-time Superintendent to supervise the Work of the Contractor, who shall always be present on the job Site when Work is being performed; this person shall be familiar with Project and authorized to conclude matters relating to progress.

9. Termination and removal of each Contractors' temporary facilities shall be provided by each Contractor for its own Work.
 10. Each Contractor shall provide and adhere to procedures for OSHA Lead precautions.
 11. Each Contractor shall adhere to current federal, state and local COVID 19 policies / protocols, as applicable.
 12. Each Contractor has been given the opportunity prior to bid to inspect the entire Project Site for interferences to their Contract Work and agrees to accept the Site as it exists on the date of the bid opening.
 - a. It is the Owner's intention to continue to occupy the existing buildings and Site for normal operations during the Construction process. The Contractors all agree to:
 - 1) Cooperate with the Owner's personnel in maintaining and facilitating access to the buildings and its facilities by the staff, Owner's agents, service consultants and the public, throughout the construction process.
 - 2) Keep driveways and entrances serving the occupied building clear and available to the Owner, the Owner's employees, the public, and to emergency vehicles at all times. Do not obstruct access to, or use these areas for parking, staging of equipment or materials. All access through these existing areas must be coordinated in advance and in accordance with the Owner's usage and occupancy schedule.
 - 3) Schedule construction operations so as to minimize any conflicts or interruptions to the daily functions. Coordinate any necessary interruptions with the designated project representative.
 - 4) All existing Owner-occupied buildings on the entire Property around the Project Site need to remain operational at all times. The Contractors are responsible to ensure continuity of operations for all systems, such as but not limited to: communications, fire alarm, clocks, electric, public address system, gas service, heat etc.
- E. Temporary Facilities and Controls: In addition to specific responsibilities for temporary facilities and controls indicated in this Section and in Division 1 Section 01500 "Temporary Facilities and Controls," each Contract is responsible for the following:
1. Installation, operation, maintenance, and removal of each temporary facility usually considered as its own normal construction activity, and costs and use charges associated with each facility.
 2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
 3. Its own field office complete with necessary furniture, utilities, and telephone service.
 4. Its own storage and fabrication sheds.
 5. Temporary heat for construction at isolated Work areas.
 6. Temporary enclosures for its own construction activities.
 7. Hoisting requirements for its own construction activities.
 8. Each Contractor is to stockpile its debris on a daily basis and place it in the dumpster. Dumpsters will be provided by the General Construction Contract for use by all Contractors, recycling of materials will be instituted daily. General Construction Contractor shall monitor progress and have dumpsters delivered and removed. Waste disposal facilities, including collection and legal disposal of its own hazardous, dangerous, unsanitary, or other harmful waste materials will be by the Hazardous Material Abatement Contractor.
 9. Secure lockup of its own tools, materials, and equipment.
 10. Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
 11. Safety procedures as dictated by OSHA and the NYS Department of Labor.
 12. Labor for daily clean-up

13. Provide for a thorough final cleaning of the site, building, and equipment provided under their Contract immediately before the final inspection. Each Contractor is responsible for cleaning and dust and debris generated from the work of their own Contract.
 - a. Maintain areas in a cleaned condition until the Owner occupies the space.
 - b. Personnel: Experienced workman or professional cleaners approved by the Construction Manager.

1.5 CONTRACT 1 - GENERAL CONSTRUCTION WORK:

- A. Including any General Construction Work that may be noted in §1.10 of this Section, the Work of the General Construction Contract includes but is not limited to, the following descriptions:

1. Coordination:
 - a. ***Coordinate all work associated with parking lots, circulation, curbs, stormwater and utility demolition with occupants of the existing Orange County Emergency Services Building. The operation of the Emergency Services Building CANNOT be disrupted and is a 24/7/365 working facility.***
 - b. Coordination with the work of all of the other Contractors.
2. Demolition:
 - a. Removal of any existing curbing, roadways, bituminous paving, and walks
 - b. Removal and relocation of trees, shrubs and ground cover.
 - c. Removal of all underground utilities and/or equipment as shown or described.
 - d. Removal and disposal of miscellaneous equipment including equipment not shown if impacting work to be demolished.
 - e. CLEARING AND GRUBBING:
 - 1) General: The Contractor shall consult with the Owner, Architect-Engineer, and Construction Manager prior to beginning clearing, and a full understanding is to be reached as to procedure that best meets the Contract Documents' intent. The Contractor shall then conduct clearing and grubbing operations in strict accordance with these agreements. The Contractor's operations shall be conducted with full consideration of all proper and legal rights of the Owner, adjacent property owner's and the public, and with the least possible amount of inconvenience to them.
 - 2) Construction Site: The Work shall consist of clearing and grubbing within the limits of the construction Site, road rights-of-way and elsewhere as indicated or necessary to complete the Work, except pipelines. All trees, stumps, roots, shrubs, and brush shall be removed as required for construction. Stumps and roots shall be grubbed and completely removed. The resulting depressions shall be filled with suitable material placed and compacted. Sound trees and shrubs, which do not interfere with construction, shall remain in place as marked and shall be adequately protected from damage. Cleared and grubbed material, including debris and rubbish, shall be completely disposed of off-site.
 - 3) Structures: Minor structures shall be removed and disposed of as directed by the Architect-Engineer and Construction Manager.
 - 4) Burning: Burning of Cleared Material is not allowed within the Site limits.

3. Temporary Facilities

- a. Provide dust protection and temporary fencing.
- b. Provide continuous exits.
- c. Provide frost protection during excavation; protect concrete slab and masonry from cold temperatures during and after pour.
- d. Provide temporary building heat where indicated on milestone schedule.
- e. Provide temporary plywood at all existing window openings to protect the interior of the building from bad weather. Assure the interior of the building is not exposed to the outside elements.
- f. Provide snow protection/removal for building slabs, construction site ingress/egress, and Contractor parking.
- g. Provide temporary roads/access, continuous exits, and temporary fencing. Provide site security, gates to be chain locked at the end of the day.
- h. Provide all necessary dewatering erosion/waste-water control measures except for those that are specific to Geo-Thermal Well drilling.
- i. Provide wash out area for construction vehicles.
- j. Provide Jersey Barriers if needed.
- k. Provide project identification signage.
- l. Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01500, "Temporary Facilities and Controls"

4. New Construction:

- a. Provide services of a licensed surveyor for geothermal well layout, new building layout, elevation, and as-built point of reference locations.
- b. Earthwork: All site earthwork, excavation, bedding, backfill, sub-base, and base material, including dewatering as required for the installation of work of this Contract. Dewatering shall remain in place until directed to be removed by the Construction Manager.
- c. STRUCTURE EXCAVATION AND BACKFILL:
 - 1) General: Excavations shall be in compliance with current OSHA regulations. Structure Excavation shall be made to the elevations, slopes and limits shown on the plans. Bottom of excavations shall be level and in firm, solid material; where soft or otherwise unsuitable material is encountered, such material shall be removed and replaced with properly compacted earth material, stone or flowable fill, as directed by the Architect-Engineer, Geotechnical Engineer, or Construction Manager in accordance with Division 31-33 sections. Topsoil and other excavated material suitable for fill or backfill shall be stockpiled on the Site for future use. Excess material and unsuitable material shall be properly disposed of. Excavated areas shall be kept free of water during construction. Where necessary, excavations shall be protected by shoring, sheeting, cofferdams or other suitable methods. Wherever excavation for a foundation extends below the water table or where specifically indicated on the plans, a 12-inch layer (unless otherwise noted) of crushed stone or gravel shall be spread and compacted in the excavation bottom prior to placing the foundation. Crushed stone or gravel shall conform to ASTM C33, Size 57. A non-woven filter fabric, Mirafi 140N or equivalent shall be placed beneath the stone layer. An adequate dewatering system shall be provided at all structure excavations and elsewhere as directed by the Architect-Engineer and Construction Manager. The system shall be capable of removing any water that accumulates in the excavation and maintaining the

excavation in a dry condition while construction is in progress. The surface of the ground shall be sloped away from the excavation or piping provided to prevent surface water from entering the excavation. Disposal of water resulting from the dewatering operation shall be done in a manner that does not interfere with normal drainage and does not cause damage to any portion of the work or adjacent property. All drains, culverts, storm sewers and inlets subject to the dewatering operation shall be kept clean and open for normal surface drainage. The dewatering system shall be maintained until backfilling is complete or as otherwise directed by the Architect-Engineer and Construction Manager. All damages resulting from the dewatering operation shall be repaired by the Contractor to the satisfaction of the Architect-Engineer and Construction Manager and at no cost to the Owner.

- d. Provide shoring and bracing and excavation for all work related to new building, and all excavation for other Contractors related to new building. Provide shoring, bracing, excavation and backfill for all other Contractors to the new building footprint.
- e. Provide all Site and perimeter underground storm systems at new building.
- f. Provide excavations and earthwork including topsoil stripping, stockpiling and fill.
- g. Provide concrete and asphalt paving, landscaping, Site appurtenances, flag poles, concrete bollards, and curbing. The General Construction Contractor shall perform all necessary excavation, backfilling, and compaction and field required concrete. The Electrical Contractor will provide conduit, structures, and manholes for electrical ductbank and telephone and data bank only.
- h. Provide all concrete-filled pipe bollards shown.
- i. Provide all Site fencing and Site signage
- j. Provide all landscaping.
- k. Provide concrete pad for new generator and transformer, see electrical drawings for rough dimensions.
- l. Provide concrete light pole bases for Electrical contractor. Coordinate installation.
- m. Provide:
 - 1) All Site signage, see 01 5000 Temporary Facilities Section.
 - 2) Erosion/waste-water controls, coordinate with Geothermal Contractor, all necessary documentation and regular inspections of erosion / waste-water control.
 - 3) Contractor shall obtain and pay for any permits, inspections, or certifications from governing authorities having jurisdiction over the Work to be performed, or over the finished product to be installed by this Contractor. Project Building Permit is by others.
- n. Earthwork: All Site earthwork, excavation, bedding, backfill, sub-base, and base material, including dewatering as required for the installation of work of this Contract. Dewatering shall remain in place until directed to be removed by the Construction Manager.
- o. Provide access doors that are shown on Architectural Drawings.
- p. Provide suitable fill to replace unsuitable fill, footings, foundations and masonry walls as required. Unit price to be carried. Fill is to be tested before reused on the project to ensure proper compaction and compaction testing after placement.
- q. Provide concrete and masonry.
- r. Provide self-leveling underlayment where required to allow for an acceptable flooring installation.
- s. Provide all steel beams / columns and associated lintels at new openings as shown. Coordinate with mechanical trades. Install miscellaneous metal fabrications furnished by other Contractors but scheduled to be installed under the General Construction Contractor as shown and/or specified in the Contract Documents.
- t. Loose lintels are furnished, installed and grouted by General Construction Contractor.

- u. Provide labor, material and equipment to install all exterior louvers that are furnished by the HVAC Contractor as part of their system.
- v. Provide rough and finish carpentry.
- w. Provide architectural woodwork.
- x. Provide thermal and moisture protection.
- y. Provide doors, frames, builders' hardware, and windows, curtain wall glazing system, glazing and finishing for same. Provide miscellaneous steel required at new openings, coordinate with all prime contracts. Power for electrical hardware to be provided by the Electrical Contractor.
- z. Provide gypsum wallboard and finishing for same.
- aa. Provide finishes including terrazzo flooring, tile flooring, resilient vinyl tile, carpet, painting, suspended acoustical ceilings, ceramic tile, and borrowed lights.
- bb. Provide toilet partitions, impact-resistant wall protection, signs including building directory, lockers, fire-protection specialties, toilet and bath accessories (as indicated), and corner guards typical at all locations as indicated.
- cc. Provide decorative canopies, fabric blinds, interior and exterior furnishings, projection screens, modular casework, recessed floor mats and frames.
- dd. Provide Mortuary Equipment as specified or equal.
- ee. Provide all roofing work for new building. Roof blocking and plywood, including:
 - 1) Provide roof penetrations and blocking for mechanical equipment curbs. Roof drains are to be furnished by the Plumbing Contractor and installed by the General Construction Contractor. Plumbing Contractor to coordinate with General Construction Contractor.
 - 2) For cutting holes through new deck, the following shall apply:
 - a) General Construction Contractor shall cut and remove material.
 - b) All Contractors requiring holes shall provide the necessary layout.
 - c) Temporary and final roofing and weather-tight protection for roof at new building shall be by the General Construction Contractor.
 - d) Flashing and counter flashing for all penetrations.
 - 3) Provide new coping at parapet.
 - 4) Provide roof walkway pads entirely around roof mounted mechanical equipment.
 - 5) Provide standing seam metal roof.
- ff. Include (furnish, and install, unless noted otherwise) - locations to be determined in field:
 - 1) Provide interior equipment and housekeeping pads and all exterior pads and stairs tied to the building.
 - 2) Include in base bid to furnish and install the following access doors beyond those already shown on drawings:
 - a) Two 18" x 18" fire-rated access doors for gypsum wallboard construction.
 - b) One 18" x 18" fire-rated access doors for masonry construction.
 - c) Five 12" x 12" stainless steel access doors for masonry construction.
 - d) Five 8" x 8" non-rated, primed steel, trimless, access doors for gypsum wallboard construction.

5. Geothermal Specific Scope and Coordination:

- a. Provide Site Work at Geothermal Wells in its entirety including; Demo and removal, cuts and fills, asphalt, striping, concrete, concrete structures, fencing, plantings, topsoil, seed, and signage. (Provide topsoil and seeding at all disturbed areas.)
- b. Survey and establishment of benchmark elevations and offsets

- c. Proposed Phasing of Work at Geothermal Wells – This method appears to be the industry standard for Geothermal Well installation. If upon coordination of the entire Project Team, including the Architect, Construction Manager, Owner and all Contractors, a more efficient and more practiced construction method exists, and does not incur any additional costs to any member of the Project Team; it may be submitted to the Construction Manager for review and approval prior to start of activity.
 - 1) General Construction Contractor establishes benchmark and offset elevations including locating all wells.
 - 2) General Construction Contractor installs all necessary Site Work management controls including all necessary erosion / waste-water controls
 - 3) General Construction Contractor performs all removals and topsoil stockpiling.
 - 4) General Construction Contractor excavates trench from all well areas to the manifold structure within the building, installation elevation (+/- 5 feet cut).
 - 5) Geothermal Wells Contractor drills geothermal wells.
 - 6) General Construction Contractor installs all pre-cast concrete structures, including light poles and storm water basins. (This Work to be performed as coordinated between General Construction Contractor and Geothermal Well Driller to avoid damage to wells and piping loops.)
 - 7) Geothermal Wells Contractor installs all piping loops, well casing and well grouting.
 - 8) Geothermal Wells Contractor installs piping from wells to manifold structure within the building footprint.
 - 9) Geothermal Wells Contractor performs pressure test on all piping and caps lines as necessary.
 - 10) General Construction Contractor backfills all well piping in bedding material as specified.
 - 11) General Construction Contractor backfills all areas necessary to install remainder of General Construction Contractor's Work according to specifications. Well pipes to remain pressurized until backfilling is complete. If pipes are damaged during backfilling operations, they are to be repaired immediately and re-pressurized.
 - 12) HVAC Contractor supplies and installs pipe header / manifold with all necessary valves, fittings, etc. as specified.
 - 13) HVAC Contractor provides pipe from the new building heating system to manifold structure.
 - 14) General Construction Contractor backfills and compacts trench from building to all wells.
 - 6. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
- B. The Work of the General Construction Contract includes but is not limited to the Work that is specified in the Contract Documents. The Contractor is directed to examine all Drawings since certain details and/or notes may appear anywhere therein that apply to its particular Work. This General Construction Work is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:
- 1. Division 01 –General Requirements, all Sections, including Temporary Facilities indicated.
 - 2. Division 02 – Selective Demolition
 - 3. Division 03 – Concrete, all Sections.
 - 4. Division 04 – Masonry, all Sections.
 - 5. Division 05 – Metals, all Sections.

6. Division 06 – Wood, Plastics and Composites, all Sections.
7. Division 07 – Thermal and Moisture Protection, all Sections.
8. Division 08 – Openings, all Sections.
9. Division 09 – Finishes, all Sections.
10. Division 10 – Specialties, all Sections.
11. Division 11 – Equipment, all Sections.
12. Division 12 – Furnishings, all Sections.
13. Division 13 - Specialties, all Sections.
14. Division 31 - Earthwork, all Sections.
15. Division 32 - Exterior Improvements, all Sections.
16. Division 33 - Utilities, all Sections.

- C. The General Construction Contractor is responsible for installation of and maintenance of all Temporary Erosion/Waste-water and Sediment Control measures for the duration of the Project as specified in Drawing and Specifications, "Erosion/Waste-water Control."

1.6 CONTRACT 2 – GEO-THERMAL WELLS CONSTRUCTION:

- A. Including any Geo-Thermal Wells Work that may be noted in §1.10 of this Section, the Work of the Geothermal Wells Contract, includes but is not limited to, the following descriptions:

1. Coordination:
 - a. Coordination with the Work of all of the other Contractors.
2. Temporary Facilities
 - a. Provide temporary fencing around well drilling areas.
 - b. Provide temporary roads/ access and continuous exits in and out of well drilling areas.
 - c. Provide all necessary erosion/waste-water control measures specific to well drilling.
 - d. Each Contractor is to stockpile its debris on a daily basis and place it in the dumpster. Dumpsters will be provided by the General Construction Contractor for use by the Contractors, recycling of materials will be instituted daily.
 - e. Provide Temporary Facilities indicated as Work of this Contract in Division 01 Section 01500, "Temporary Facilities and Controls"
3. Geothermal Specific Scope and Coordination:
 - a. Include (furnish and install, unless noted otherwise):
 - b. Geothermal Well Drilling: Perform all well drilling as shown on the Drawings and described in the Specifications. Supply water as necessary for drilling operation.
 - c. Well Drilling shall include;
 - 1) 20LF of 6" well casing per well to be included in base bid, "880 LF". All additional casing to be priced as a unit rate per foot. Any casing NOT required to be credited at same unit rate per foot.
 - 2) All well grouting will use Thermal Enhanced Bentonite Grout.
 - 3) All well drilling to well depth as specified in construction documents, 360'.
 - 4) All well piping to manifold structure in Mech. / Elec. Room 121 within the new building as specified in Contract Documents.

- 5) All pressure / leak testing loops.
- d. Proposed Phasing of Work at Geothermal Wells – This method appears to be the industry standard for Geothermal Well installation. If upon coordination of the entire Project Team, including the Architect, Construction Manager, Owner and all Contractors, a more efficient and more practiced construction method exists, and does not incur any additional costs to any member of the Project Team; it may be submitted to the Construction Manager for review and approval prior to start of activity.
 - 1) General Construction Contractor establishes benchmark and offset elevations including locating all wells.
 - 2) General Construction Contractor installs all necessary Site Work management controls including all necessary erosion/waste-water controls
 - 3) General Construction Contractor performs all removals and topsoil stockpiling.
 - 4) General Construction Contractor excavates trench from all well areas to the manifold structure within the new building, installation elevation (+/- 5 feet cut).
 - 5) Geothermal Wells Contractor drills geothermal wells.
 - 6) General Construction Contractor installs all pre-cast concrete structures, including light poles and storm water basins. (This Work to be performed as coordinated between General Construction Contractor and Geothermal Well Driller to avoid damage to wells and piping loops.)
 - 7) Geothermal Wells Contractor installs all piping loops, well casing and well grouting. All piping to be labeled as specified.
 - 8) Geothermal Wells Contractor installs piping from wells to manifold structure within the new building addition footprint.
 - 9) Geothermal Wells Contractor performs pressure test on all piping and caps lines as necessary.
 - 10) General Construction Contractor backfills all well piping in bedding material as specified.
 - 11) General Construction Contractor backfills all areas necessary to install remainder of General Construction Contractor's Work according to Specifications. Well pipes to remain pressurized until backfilling is complete. If pipes are damaged during backfilling operations, they are to be repaired immediately and re-pressurized.
 - 12) HVAC Contractor supplies and installs pipe header / manifold with all necessary valves, fittings, etc. as specified.
 - 13) HVAC Contractor provides pipe from building heating system to manifold structure.
 - 14) General Construction Contractor backfills and compacts trench from building to all wells.
- B. The Work of the Geothermal Wells Contract includes but is not limited to the Work that is specified in the Contract Documents. The Contractor is directed to examine all Drawings since certain details and/or notes may appear anywhere therein that apply to its particular Work. This Geothermal Wells Work is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:
 1. Division 01 –General Requirements, all Sections, including Temporary Facilities indicated.
 2. Division 23 - Section 238149 Ground-Source Heat Pumps.
- C. The Geothermal Wells Contractor is responsible for installation of and maintenance of all Temporary Erosion/Waste-water and Sediment Control measures associated with the "well drilling" scope of the project as specified in the Drawings and Specifications, "Erosion/waste-water Control."

1.7 CONTRACT 3 - PLUMBING WORK CONTRACT

- A. Including any Plumbing Work that may be noted in §1.10 of this Section, the Work of the Plumbing Contract includes but is not limited to, the following descriptions:
1. Coordination:
 - a. Coordination with the Work of all the other Contractors.
 2. Demolition:
 - a. All cutting and patching necessary for work of this Contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
 3. Temporary Facilities
 - a. Provide Temporary Facilities indicated as Work of this Contract in Division 01 Section 01500, "Temporary Facilities and Controls"
 4. Construction:
 - a. Provide all new piping, fixtures and trim for all new mortuary equipment and toilet rooms. Extra coordination will be required for mortuary equipment.
 - b. Supply new roof drains. Coordinate with General Contractor
 - c. Provide storm water piping to 5' outside building line. Coordinate with General Contractor.
 - d. Provide all sanitary piping to 5' outside building line. Coordinate with General Contractor
 - e. Provide drinking fountains/water coolers.
 - f. Provide all exterior hose bibs.
 - g. Provide water distribution pumps.
 - h. Provide fire protection system and fire pumps. Wet and dry system.
 - i. Make final connections.
 - 1) Plumbing Contractor is to coordinate locations of and furnish all roof drains to the General Construction Contractor for installation through the roof.
 - 2) Plumbing Contractor will make all final connections and ensure the drains are installed correctly.
 - j. Provide all insulation, painting and labeling of new plumbing piping.
 - k. Provide all hot- and cold-water piping to other Contractor provided sinks, faucets and appliances. Make all final connections.
 - l. Provide all testing, balancing and disinfection of all new and modified systems.
 - m. All fees required for inspections and permits.
 - n. Provide support framing for plumbing equipment.
 - o. Furnish access doors for plumbing access as indicated above (to be installed by the General Contractor).
 - p. Provide firestopping and sealing all plumbing penetrations.

5. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
- B. The Work of the Plumbing Contract includes but is not limited to the Work that is specified in the Contract Documents.
- C. The Contractor is directed to examine all Drawings since certain details and/or notes may appear anywhere therein that apply to its particular Work. This Plumbing Work is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:
 1. Division 01 –General Requirements all Sections, including Temporary Facilities indicated
 2. Section 078413, Penetration Firestopping, as required for the Work of this Contract
 3. Section 079200, Joint Sealants, as required for the Work of this Contract
 4. Division 21 – Fire Suppression, all Sections
 5. Division 22 – Plumbing, all Sections

1.8 CONTRACT 4 - HEATING, VENTILATING, & AIR CONDITIONING WORK CONTRACT

- A. Including any HVAC Work that may be noted in §1.10 of this Section, the Work of this HVAC Contract includes, but is not limited to, the following descriptions:
 1. Coordination:
 - a. Coordination with the Work of all of the other Contractors.
 2. Demolition
 - a. All cutting and patching necessary for Work of this Contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
 3. Temporary Facilities
 - a. Provide Temporary Facilities indicated as Work of this Contract in Division 01 Section 01500, "Temporary Facilities and Controls"
 4. Construction:
 - a. Provide and install new exhaust fans, controls and ductwork for all toilet rooms and offices.
 - b. Provide boilers
 - c. Provide Hydronic piping and pumps
 - d. Provide split system air conditioning unit
 - e. Provide water source Heat Pumps
 - f. Provide Fan Coil Units
 - g. Provide and install new unit heaters, piping controls
 - h. Provide and install new air handling units, controls and ducting for all areas shown.
 - i. Provide final replacement filters and final duct cleaning.
 - j. Provide and install all insulation, painting and labeling of new and modified piping, ductwork and equipment.
 - k. Provide all testing, adjusting and balancing of all new HVAC systems.
 - l. All fees required for inspections and permits.

- m. Provide support framing for HVAC equipment, i.e. mechanical equipment curbs.
 - n. Furnish access doors for HVAC access as indicated above (to be installed by GC)
 - o. Provide firestopping and sealing all HVAC penetrations
 - p. Furnish motor controllers/disconnects to Electrical Contract for installation and wiring.
 - q. Provide owner training/commissioning of equipment and controls
5. Geothermal Specific Scope and Coordination:
- a. Specific scope associated with Work at Geothermal Wells – This method appears to be the industry standard for Geothermal Well installation. If upon coordination of the entire Project Team, including the Architect, Construction Manager, Owner and all Contractors, a more efficient and more practiced construction method exists, and does not incur any additional costs to any member of the Project Team; it may be submitted to the Construction Manager for review and approval prior to start of activity.
 - 1) General Construction Contractor establishes benchmark and offset elevations including locating all wells.
 - 2) General Construction Contractor installs all necessary Site Work management controls including all necessary erosion / waste-water controls
 - 3) General Construction Contractor performs all removals and topsoil stockpiling.
 - 4) General Construction Contractor excavates trench from all well areas to the manifold structure within the building, installation elevation (+/- 5 feet cut).
 - 5) Geothermal Wells Contractor drills geothermal wells.
 - 6) General Construction Contractor installs all pre-cast concrete structures, including light poles and storm water basins. (This Work to be performed as coordinated between General Construction Contractor and Geothermal Well Driller to avoid damage to wells.)
 - 7) Geothermal Wells Contractor installs all piping loops, well casing and well grouting.
 - 8) Geothermal Wells Contractor installs piping from wells to manifold structure within the building footprint.
 - 9) Geothermal Wells Contractor performs pressure test on all piping and caps lines as necessary.
 - 10) General Construction Contractor backfills all well piping in bedding material as specified.
 - 11) General Construction Contractor backfills all areas necessary to install remainder of General Construction Contractors Work according to specifications. Well pipes to remain pressurized until backfilling is complete. If pipes are damaged during backfilling operations, they are to be repaired immediately and re-pressurized.
 - 12) HVAC Contractor supplies and installs pipe header/manifold with all necessary valves, fittings, etc. as specified.
 - 13) HVAC Contractor provides pipe from new building addition to manifold structure.
 - 14) HVAC Contractor to provide geothermal energy recovery piping.
 - 15) General Construction Contractor backfills and compacts trench from building to all wells.
6. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
7. Provide multiple shift work as needed to complete Work as shown on milestone schedule.

- B. The Work of the HVAC Contract includes but is not limited to the Work that is specified in the Contract Documents. The Contractor is directed to examine all Drawings since certain details and/or notes may appear anywhere therein that apply to its particular Work. This HVAC Work is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:

1. Division 01 –General Requirements all Sections, including Temporary Facilities indicated
2. Section 078413, Penetration Firestopping, as required for the Work of this Contract
3. Section 079200, Joint Sealants, as required for the Work of this Contract
4. Division 23 – Mechanical, Ventilating and Air Conditioning, all Sections, except section 238149 Ground-Source Heat Pumps.

1.9 CONTRACT 5 - ELECTRICAL WORK CONTRACT

- A. Including any Electrical Work that may be noted in §1.10 of this Section, the Work of this Contract includes, but is not limited to, the following descriptions:

1. Coordination:
 - a. ***The Electrical Contractor shall take “extra care” to coordinate with Orange County and the three data carriers that support the site from initial contact to cutover. The Emergency Response Center is a 24/7/365r operation that CANNOT be disrupted in any way with the three carriers.***
 - b. Coordination with the Work of all of the other Contractors.
2. Demolition:
 - a. Removal of items as shown and/or required.
 - b. Coordinate with the General Construction Contractor for necessary shutdowns and removal of Site lighting.
 - c. Removal of Site lighting fixtures and wiring.
 - d. All cutting and patching necessary for Work of this Contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
3. Temporary Facilities
 - a. Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 5000, “Temporary Facilities and Controls”.
4. Construction:
 - a. Provide new service to new building, including transformer, power, telephone, and data
 - b. Provide new communications / data lines to the existing emergency operations center. This Work is to be closely coordinated with Owner, Construction Manager and three (3) communication service providers Spectrum, Crown Castle and Frontier, PRIOR to modifications of existing communications network.
 - c. Provide new power lines to the existing emergency operations center. This Work is to be closely coordinated with Owner, Construction Manager and Orange & Rockland Utilities, PRIOR to modifications of existing power lines.

- d. For the new building:
 - 1) Provide power to new boiler, evaporative cooler, and heat pump equipment.
 - 2) Provide all wiring to all HVAC equipment. (Install motor controllers/disconnects supplied by HVAC Contract).
 - 3) Provide power to all ADA hardware and electric hardware shown in door hardware schedule. Provide control wiring and connection for electrified door hardware.
 - 4) Provide all interior and exterior lighting including lighting control.
 - 5) Provide all fire alarm, access control, and networking systems.
 - 6) Provide all cutting and patching required installing all electrical fixtures, devices, wire and conduit.
 - 7) Provide all Site lighting wiring and fixtures including any necessary cutting and patching. Site light pole bases to be supplied by the General Construction Contractor.
 - 8) The Electrical Contractor will be responsible for the electrical duct bank installation as follows: The General Construction Contractor will perform all necessary excavation, backfilling, and compaction. The Electrical Contractor will provide and install conduit, pull boxes, and manholes for electrical ductbank and data bank. The General Construction Contractor to supply light pole bases.
 - 9) Provide support framing for electrical equipment and conduits.
 - 10) Furnish access doors for electrical access as indicated above (to be installed by General Construction Contractor).
 - 11) Provide firestopping and sealing all electrical penetrations.
 - 12) Provide owner training.
 - 13) Provide control wiring and connection for electrified door hardware.

- 5. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.

- B. The Work of the Electrical Contract includes but is not limited to the Work that is specified in the Contract Documents. The Contractor is directed to examine all plan Drawings since certain details and/or notes may appear anywhere therein that apply to its particular Work. This Electrical Work is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:

- 1. Division 01 –General Requirements all Sections, including Temporary Facilities indicated
- 2. Section 078413, Penetration Firestopping, as required for the Work of this Contract
- 3. Section 079200, Joint Sealants, as required for the Work of this Contract
- 4. Division 08 – Openings, Section 08 4229 SLIDING AUTOMATIC ENTRANCES and Section 087100 Door Hardware as required for the Work of this Contract
- 5. Division 11 - Equipment, Medical and Mortuary equipment as required for the Work of this Contract
- 6. Division 26 - Electrical - All Sections
- 7. Division 27 – Communications - All Sections
- 8. Division 28 - Electronic Safety and Security, all Sections.

1.10 ADDITIONAL SCOPING

- A. Definition of Extent of Prime Contract Work; Additional Prime Contract Work not previously described

1. All Contractors are responsible for reviewing plans and specs as it pertains to their scope of Work mentioned in the Contract Documents. Scopes of Work referenced may be found in multiple locations throughout the Drawing and Specifications.
2. Local custom and trade union jurisdictional settlements do not control the scope of Work included in each Contract. When a potential jurisdictional dispute or similar interruption of Work is first identified or threatened, the affected Contractors shall promptly negotiate a reasonable settlement, in accordance with the Project Labor Agreement, to avoid or minimize the pending interruption and delays.
3. All OSHA safety and hazardous materials regulations will be enforced on this Project. All Contractors must submit a safety program, a hazardous materials program, (all required data must be maintained at the job site) and attend safety meetings. Toolbox talks will be required from each Contractor.
4. All Contractors are responsible for any debris caused by their work. A daily clean-up and disposal is required by each Contractor for the periods in which that Contractor is performing Work on site, on a day selected by the Construction Manager. Each trade will assign at least one person to the weekly clean-up; the name of this person is to be submitted to the Construction Manager. Any Contractor not providing personnel will be charged for labor provided by the Construction Manager.
5. All Contractors are responsible for cutting/patching required to complete their Work. All exposed finishes must be ready to receive paint, etc.; all concealed openings (piping, ductwork, conduit, etc.) must be repaired to comply with specified wall or deck conditions.
6. Multiple Crews: To maintain the project schedule, each Contractor is to provide multiple crews. Each crew is to be furnished with its own supervision, cranes, scaffold and other means necessary to maintain the Project Schedule.
7. Supervision: The proposed project manager and field superintendent for the Project is to have at least five (5) years' experience in the proposed position. Each shall submit resumes to the Construction Manager for the proposed project manager and field superintendent for the Project. This information will be reviewed with the Owner, Architect and Construction Manager for approval. Should the Project Managers and/or Superintendent prove unqualified for the position at any point in the Project, the Construction Manager shall issue a letter stating that the person is to be removed from involvement in the Project. Action by the Contractor must be made within seven (7) working days of receipt of such letter.
8. Each Prime Contractor shall furnish and coordinate exact locations of embedded items in concrete or masonry Work with General Construction Contractor. Each Contractor shall monitor such items throughout concrete/masonry activities to ensure proper placement.
9. General Construction Contractor shall provide shoring identified on the Drawings and any other shoring as may be required during construction.
10. Miscellaneous steel including stairs, ladders and loose lintels shall be furnished and installed by General Contractor. Coordinate with all Contractors.
11. When selective demolition or cutting and patching (all demolition necessary for Work of their Contract, including layout, sleeves, coring, debris removal, sawcuts, drywall work, plaster work, grouting, painting, ceiling removal, etc) is required solely by another Contractor to perform their Work it shall be by the Contractor requiring the Work to achieve the result indicated. Under this condition, the Contractor needing the demolition to perform the Work will accomplish the demolition and the cutting and patching as indicated in Subparagraph 5 above.
12. The General Construction Contractor shall have sole responsibility of keeping the existing building roof water-tight during the construction period.
13. Each Contractor shall return areas disturbed by their Work activities to condition prior to start of Work.

14. Each Contractor shall maintain within its field office a complete and current set of Contract Documents (including any Addenda, Change Orders, and Modifications thereto), approved shop drawings, samples, color schedules and other data pertinent to the Project.
15. Plumbing Contractor shall tie in roof drainpipe as soon as roofing is complete or provide temporary piping to divert water from inside the building. Particular care is to be taken with protecting the existing building from possible water leaks.
16. Each Contractor is to survey existing work and submit to the Construction Manager a list of damaged areas prior to commencing Work. Any damaged areas not identified prior to the Work shall be the responsibility of the Contractor(s) working in that area. Construction Manager will have photos of existing conditions on file for reference.
17. Roof penetration Work is assigned as follows:
 - a. All blocking, flashing, and cutting of roof material and installation is by the General Construction Contractor.
 - b. Support framing for roof, and floor penetrations and equipment suspended from steel structure is by General Construction Contractor. All hung lintels are by General Construction Contractor.
 - c. Cutting of roof deck is by the General Construction Contractor and coordinated with Contractor requiring the penetration.
 - d. Roof curbs are furnished by the HVAC Contractor and set in place by the General Construction Contractor.
 - e. The General Construction Contractor shall provide all required boot, pitch pocket, flashing materials, etc., for making roofing penetrations by other trades watertight.
 - f. The General Construction Work Contractor is responsible for cabling or roping off all roof openings in an OSHA approved manner. Provide all necessary fall protection.
18. Clean up: Each Contractor is to stockpile its debris on a daily basis and place it in the dumpster. Dumpsters for non-asbestos containing materials will be provided by the General Construction Contractor for use by the Contractors, recycling of materials will be instituted daily.
19. Construction Manager shall monitor progress and have dumpsters delivered and removed if General Contractor fails to adequately deliver and remove dumpsters. General Contract shall provide dumpsters throughout the Project.
20. The General Construction Contractor is required to submit a construction and submittal schedule based on the milestone dates to the Construction Manager for review and comment no later than two (2) weeks after a Notice to Proceed for the Work is issued. The other Prime Contractors have ten (10) days to complete their construction and submittal schedules after the Construction Manager distributes the General Construction Contractor's schedule.
21. When the building is occupied and fire alarm and safety system Work is in progress, the Electrical Contractor shall continuously maintain the existing building's fire alarm and detection system and exit and emergency lighting system or provisions must be made by the Electrical Contractor to provide equivalent safety. Electrical Contractor must notify the local fire department of any non-operating systems.
22. Electrical Contractor (shall be responsible for all electrical conduit and associated work on Site. Electrical Contractor shall coordinate and install conduits as required for transformer, meter pad construction, and duct bank. The Electrical Contractor shall coordinate with all local utilities for installation of their Work.
23. All personnel required to be on Site shall at all times have all required personnel protective equipment on at all times.
24. All personnel on Site shall at all times have a photo ID displayed where visible. Those without will be removed from Site at once. If the same individual fails to have the ID a second time they will be removed from Site and not be allowed back on Site.

1.11 TESTING

- A. Required testing and test procedures are indicated under each Division of the Technical Specifications. Other testing shall be performed per generally accepted standards.
- B. The Architect-Engineer shall reserve the right to require additional information as is deemed necessary to fully evaluate testing results.
- C. The Owner shall employ and pay for an independent testing and inspection agency for testing requirements of the Work. All testing shall be per Technical Specification requirements. The Contractor requiring testing will notify the Construction Manager forty-eight (48) hours in advance of the required testing to allow for coordination and scheduling. Failure to give sufficient notice will require the Prime Contractor to pay for alternate testing to satisfy the Specification.

1.12 WORK SEQUENCE

- A. The Work will be conducted to provide the least possible interference to the activities of the Owner's personnel.
- B. All Contractors' scopes of Work in unoccupied areas of Work can be performed weekdays from 7:00 AM to 3:30 PM unless otherwise noted. Work cannot be performed in occupied areas. A Construction Manager Superintendent must be on site at all times that Work is being performed. If a Contractor fails to maintain the progress as indicated by the milestone schedule by no other fault but its own and requires overtime to complete the Work; the Contractor shall make arrangements with the Construction Manager twenty-four (24) hours in advance and pay for a Construction Manager's superintendent at \$125.00 per hour. In the event that the cause for delay is multi-contract, then the costs shall be distributed evenly among Contractors. Advise the Construction Manager forty-eight (48) hours prior to commencing Work inside the building.
- C. Coordination of any utility and/or power interruption must be done with the Construction Manager. Shutdowns must occur during off-hours and on days as directed by the Owner.
- D. Construction access to the Site shall be limited to those designated for Contractor's personnel, equipment and deliveries by the Owner. Contractors' staging, parking and storage shall be coordinated by the Construction Manager.

1.13 OCCUPANCY REQUIREMENTS

- A. The General Construction Contractor shall provide indoor air quality management as specified by the New York State Department of Labor and OSHA for the building, when the building is enclosed, as determined by the Construction Manager.
 - 1. Provide an exhaust air system for the project indoor areas that could produce fumes, VOC's off-gasses, gasses, dusts, mists, or other emissions.
 - 2. Exhaust air system for the project areas that could produce emissions listed in subdivision 1 shall be utilized.
 - 3. Provide temporary partitions and air seals to prevent the migration of airborne contaminants from unoccupied areas to occupied areas when applicable.
- B. Quality assurance:

1. Maintain a negative pressure between the Work area and the space surrounding the Work area.
2. Before start of Work, submit a design for the exhaust air system.
 - a. The number of machines required.
 - b. Location of the machines in the Work space.
 - c. Description of the methods used to test air flow and pressure differential.
3. Work will be occurring adjacent to the Orange County Emergency Response Center. Care must be taken to limit interaction and exposure to construction activities.

C. System operation:

1. A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated in accordance with the following applicable standards.
2. Exhaust air system shall operate for a minimum of seventy-two (72) hours after Work is completed, or until all materials have cured sufficiently as to stop out gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
3. Maintain twenty-five (25) feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.

1.14 PROJECT MILESTONE SCHEDULE

- A. See the milestone schedule included in Specifications Section 01 0110 [to be provided via Addendum to the RFB].
- B. All Contractors are required to submit a schedule based on the milestone dates to the Construction Manager for review and comment no later than ten (10) days after a Notice to Proceed for the Work is issued.

1.15 ALTERNATES

- A. The Contractor shall state where requested on the Bid Form the amount to be added to or deducted from the base bid for the alternates described.

END OF SECTION

SECTION 01 1900

REFERENCE STANDARDS & DEFINITIONS

PART 1 GENERAL

1.1 KEY DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect/Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect/Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect/Engineer. 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": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- 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.

1.2 DEFINITIONS

- A. Air Handling Unit: A blower or fan used for the purpose of distributing supply air to a room, space or area.
- B. Approved Agency: An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved according to the requirements established in this Section and as required by the Code Official having jurisdiction over this project.
- C. Architect/Engineer: Shall mean the design professional for this Project. Other terms including "Architect" and "Engineer" have the same meaning as "Architect/Engineer". The entity serving as the Architect/Engineer is named in Article 2 of the Agreement between Owner and Contractor.

- D. Company Field Adviser: An employee of the Company which lists and markets the primary components of the system under the name who is certified in writing by the Company to be technically qualified in design, installation, and servicing of the required products or an employee of an organization certified by the foregoing Company to be technically qualified in design, installation, and serving of the required products. Personnel involved solely in sales do not qualify.
- E. Concealed Location: A location that cannot be accessed without damaging permanent parts of the building structure or finish surface. Spaces above, below or behind readily removable panels or doors shall not be considered as concealed.
- F. Concealed Piping: Piping that is located in a concealed location. (See "concealed location".)
- G. Connect: A term contraction and unless otherwise specifically noted is to mean "The labor and materials necessary to join or attach equipment, materials or systems to perform the functions intended".
- H. Construction Manager: The entity serving as Construction Manager is named in Article 2 of the Agreement between Owner and Contractor.
- I. Drain: Any pipe that carries wastewater or water-borne wastes in a building drainage system.
- J. Drainage Fittings: Type of fitting or fittings utilized in the drainage system. Drainage fittings are similar to cast-iron fittings, except that instead of having a bell and spigot, drainage fittings are recessed and tapped to eliminate ridges on the inside of the installed pipe.
- K. Drainage System: Piping within a public or private premise that conveys sewage, rainwater or other liquid wastes to a point of disposal. A drainage system does not include the mains of a public sewer system or a private or public sewage treatment or disposal plant.
1. Building Gravity: A drainage system that drains by gravity into the building sewer.
 2. Sanitary: A drainage system that carries sewage and excludes storm, surface and ground water.
 3. Storm: A drainage system that carries rainwater, surface water, condensate, cooling water or similar liquid wastes.
- L. Duct: A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts.
- M. Duct System: A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.
- N. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- O. Headroom: Minimum clearance between the floor and the underside of the point of lowest installed mechanical construction above. In case of stairways and walkways, the minimum clearance between the step or surface of the walkway and the lowest installed mechanical construction above the stairway or the walkway.

- P. Include: When used in any form other than "inclusive", is non-limiting and is not intended to mean "all-inclusive."
- Q. 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."
- R. Inspection Certificate: Identification applied on a product by an approved agency containing the name of the manufacturer, the function and performance characteristics, and the name and identification of an approved agency that indicates that the product or material has been inspected and evaluated by an approved agency.
- S. Installer: An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
1. Trades: Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter". It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
 2. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
 3. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.
- T. Label: An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency and that indicates that the representative sample of the product or material has been tested and evaluated by an approved agency.
- U. Location:
1. Damp Location: Partially protected locations under canopies, marquees, roofed open porches and like locations, and interior locations subject to moderate degrees of moisture, such as some basements, some barns and some cold-storage warehouses.
 2. Dry Location: A location not normally subject to dampness or wetness. A location classified as dry may be temporarily subject to dampness or wetness, as in the case of a building under construction.

3. Wet Location: Installations underground or in concrete slabs or masonry in direct contact with the earth and locations subject to saturation with water or other liquids, such as vehicle-washing areas, and locations exposed to weather and unprotected.
- V. Manufacturer's Designation: Identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules (see also "Inspection Certificate," "Label" and "Mark").
- W. Mark: An identification applied on a product by the manufacturer indicating the name of the manufacturer and the function of a product or material (see also "Inspection Certificate," "Label" and "Manufacturer's Designation").
- X. Mechanical: Other terms including "HVAC", "Plumbing", "Sprinkler", "Laboratory Equipment", "Food Service Equipment", "Laundry Equipment", and "Refrigeration" have the same meaning as "Mechanical".
- Y. Owner: County of Orange.
- Z. Piping: This term includes pipe, tube and appurtenant fittings, flanges, valves, traps, hangers and supports.
- AA. Piping, Concealed: Piping built into construction and not accessible without removal of construction Work such as masonry, plaster or other finish material, and piping installed in floors, furred spaces, suspended ceilings, non-walk-in tunnels, conduits, and behind removable panels and cabinet doors.
- BB. Piping, Distribution: Domestic water supply piping, starting with a connection to service piping, and continuing throughout the building to point of connection to equipment and fixture supply piping.
- CC. Piping, Exposed: Piping directly accessible by normal accesses without removal of any construction Work or material.
- DD. Piping, Service: Underground domestic water supply piping with a connection to a water main or supply as noted, and continuing to and into a building and terminating with the exposed fitting inside the building.
- EE. Piping, Tunnel: Piping installed in walk-in or non-walk-in tunnels or conduits up to first shut-off valve inside building.
- FF. Plumbing System: Includes the water supply and distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste and vent pipes; and sanitary and storm sewers and building drains, in addition to their respective connections, devices and appurtenances within a structure or premises.
- GG. Product: As used includes materials, systems and equipment.
- HH. Registered Design Professional: An individual who is a registered architect (RA) in accordance with Article 147 of the New York State Education Law or a licensed professional engineer (PE) in accordance with Article 145 of the New York State Education Law.
- II. Space, Finished: A space which has a finishing material applied to walls or ceilings, such as paint, plaster, ceramic tile, enamel glazing, face brick, vinyl wall covering, etc. to provide a finished appearance or which will have such finishes applied under a related Contract.

- JJ. Space, Unfinished: A space which does not meet the definition of a finished space.
- KK. Special Inspection: Inspection as herein required of the materials, installation, fabrication, erection, or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards.
- LL. Steam-Heating Boiler: A boiler operated at pressures not exceeding 15 psi for steam.
- MM. Supplier: Any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design.
- NN. Utility: Any gas, steam, water, sanitary sewer, storm sewer, electrical or other such service.
- OO. Water Supply System: The water service pipe, water distribution pipes, and the necessary connecting pipes, fittings, control valves and all appurtenances in or adjacent to the structure or premises.
1. Chilled: Water-cooled by refrigeration.
 2. Cold: Water with a temperature between 33 degrees F and 80 degrees F and which is neither cooled nor heated mechanically.
 3. Domestic: Water for use in buildings, except water used in connection with space heating and space cooling.
 4. High Temperature: Water with a supply water temperature above 350 degrees F.
 5. Hot: Water at a temperature greater than or equal to 110 degrees F.

1.3 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. Conflicting Requirements: 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 uncertainties and requirements that are different, but apparently equal, to Architect/Engineer for a decision before proceeding.
1. 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 Architect/Engineer for a decision before proceeding.

- D. 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.

1.4 ABBREVIATIONS AND ACRONYMS

AA	Aluminum Association, Inc. (The)
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	ACI International (American Concrete Institute)
ACPA	American Concrete Pipe Association
AF&PA	American Forest & Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America (The)
AHA	American Hardboard Association (part of CPA)
AI	Asphalt Institute
AIA	American Institute of Architects (The)
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ALSC	American Lumber Standard Committee, Incorporated
AMCA	Air Movement and Control Association International, Inc
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts, Inc.
APA	Architectural Precast Association
APA	APA - The Engineered Wood Association
ARI	Air-Conditioning & Refrigeration Institute

ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	ASME International
ASSE	American Society of Sanitary Engineering
ASTM	ASTM International
AWCMA	American Window Covering Manufacturers Association (WCSC)
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association (The)
CCC	Carpet Cushion Council
CDA	Copper Development Association
CISCA	Ceilings & Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CPA	Composite Panel Association
CRI	Carpet & Rug Institute (The)
CRSI	Concrete Reinforcing Steel Institute
CSI	Cast Stone Institute
CSI	Construction Specifications Institute (The)
CTI	Cooling Technology Institute
DHI	Door and Hardware Institute
EIA	Electronic Industries Alliance
EIMA	EIFS Industry Members Association

EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ESD	ESD Association
FM Approvals	Factory Mutual Approvals
FSA	Fluid Sealing Association
GA	Gypsum Association
GANA	Glass Association of North America
GSI	Geosynthetic Institute
HI	Hydraulic Institute
HI	Hydronics Institute
HMMA	Hollow Metal Manufacturers Association
HPVA	Hardwood Plywood & Veneer Association
ICEA	Insulated Cable Engineers Association, Inc
ICRI	International Concrete Repair Institute, Inc.
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)
IESNA	Illuminating Engineering Society of North America
IEST	Institute of Environmental Sciences and Technology
IGCC	Insulating Glass Certification Council
IGMA	Insulating Glass Manufacturers Alliance
ILI	Indiana Limestone Institute of America, Inc
ISO	International Organization for Standardization
ISSFA	International Solid Surface Fabricators Association
ITU	International Telecommunication Union
KCMA	Kitchen Cabinet Manufacturers Association
LEED	Leadership in Energy and Environmental Design

MBMA	Metal Building Manufacturers Association
MFMA	Maple Flooring Manufacturers Association, Inc.
MFMA	Metal Framing Manufacturers Association, Inc.
MIA	Marble Institute of America
MPI	Master Painters Institute
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc.
NAAMM	National Association of Architectural Metal Manufacturers
NACE	NACE International
NADCA	National Air Duct Cleaners Association
NAIMA	North American Insulation Manufacturers Association
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCTA	National Cable & Telecommunications Association
NEBB	National Environmental Balancing Bureau
NECA	National Electrical Contractors Association
NeLMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NETA	National Electrical Testing Association
NFHS	National Federation of State High School Associations
NFPA	National Fire Protection Association
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NOFMA	NOFMA: The Wood Flooring Manufacturers Association
NRCA	National Roofing Contractors Association

NRMCA	National Ready Mixed Concrete Association
NSF	NSF International (National Sanitation Foundation International)
NSSGA	National Stone, Sand & Gravel Association
NTMA	National Terrazzo & Mosaic Association, Inc. (The)
NWWDA	National Wood Window and Door Association (WDMA)
PCI	Precast/Prestressed Concrete Institute
PDCA	Painting & Decorating Contractors of America
PDI	Plumbing & Drainage Institute
PGI	PVC Geomembrane Institute
PTI	Post-Tensioning Institute
RCSC	Research Council on Structural Connections
RFCI	Resilient Floor Covering Institute
SAE	SAE International
SDI	Steel Deck Institute
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers
SGCC	Safety Glazing Certification Council
SIA	Security Industry Association
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SPIB	Southern Pine Inspection Bureau (The)
SPRI	Single Ply Roofing Industry
SSINA	Specialty Steel Industry of North America

SSPC	SSPC: The Society for Protective Coatings
STI	Steel Tank Institute
SWRI	Sealant, Waterproofing, & Restoration Institute
TCA	Tile Council of America, Inc.
TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance
TMS	The Masonry Society
TPI	Turfgrass Producers International
UL	Underwriters Laboratories Inc.
UNI	Uni-Bell PVC Pipe Association
USGBC	U.S. Green Building Council
WASTEC	Waste Equipment Technology Association
WCSC	Window Covering Safety Council

1.5 FEDERAL GOVERNMENT AGENCIES:

- A. 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.

CE	Army Corps of Engineers
CPSC	Consumer Product Safety Commission
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDA	Food and Drug Administration
GSA	General Services Administration
HUD	Department of Housing and Urban Development

NIST	National Institute of Standards and Technology
OSHA	Occupational Safety & Health Administration
PHS	Office of Public Health and Science
SD	State Department
TRB	Transportation Research Board
USDA	Department of Agriculture
USPS	Postal Service

- B. Codes, 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.

ADAAG	Americans with Disabilities Act (ADA) Accessibility Guidelines
BCNYS	Building Code of New York State
CFR	Code of Federal Regulations
DOD	Department of Defense Military Specifications and Standards
FS	Federal Specification
MILSPEC	Military Specification and Standards

1.6 NEW YORK STATE GOVERNMENT AGENCIES:

- A. 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.

DASNY	Dormitory Authority of the State of New York
DEC	Department of Environmental Conservation
DHCR	Division of Housing and Community Renewal
DOH	Department of Health
NYSDOL	New York State Department of Labor
DOS	Department of State
DOT	Department of Transportation
NYSPA	New York State Power Authority

OGS	Office of General Services
OCFS	Office of Children and Family Service
OMRD	Office of Mental Retardation and Developmental Disabilities
OPRHP	Office of Parks, Recreation and Historic Preservation
NYSED	New York State Education Department (Department of Education)
SHPO	State Historic Preservation Office
SUCF	State University Construction Fund
SUNY	State University of New York

1.7 OTHER TERMS OR ACRONYMS:

- A. Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name in the following list.

ACM	Asbestos Containing Materials
ACT	Acoustical Tile
ICRA	Infection Control Risk Assessment
RVT	Resilient Vinyl Tile
SAT	Suspended Acoustical Tile
SFRM	Spray on Fire Resistive Materials
TSI	Thermal Systems Insulation
VAT	Vinyl Asbestos Tile
VCT	Vinyl Composition Tile

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 2000**PRICE AND PAYMENT PROCEDURES****PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Contingency
- B. Unit prices and bid alternates
- C. Substitution Procedures
- D. Time and material tickets
- E. Owner's ability to back charge
- F. Owner's right to cure

PART 2 PRODUCTS**2.1 CONTINGENCY**

- A. Contractor's costs for products, delivery, installation, labor, and equipment will be included in proposals authorizing expenditure of funds out of the Contingency.
- B. For Contingency based Work, costs of Contractor's overhead and profit and related administration, bond, coordination, insurance, and superintendence shall be included in the Contractor's Lump Sum as per Contractor's signed Bid Form. Markups and costs for such items shall not be allowed or included in calculating change orders funded out of the Contingency.
- C. The scope of Work and associated costs for items charged to the Contingency must be reviewed and approved in writing by the Architect/Engineer, Construction Manager, and the Owner in accordance with the General Conditions, Article 7, Changes in the Work.
- D. The amount of each Contingency shall be listed as a separate line item(s) on the Contractor's Schedule of Values.
- E. At closeout of Contract, funds remaining in the Contingency will be credited to the Owner by deductive Change Order.

2.2 UNIT PRICES AND ADD ALTERNATES

- A. Submit Unit Prices and Add Alternates based upon the Specification standards and as noted herein.
 - 1. Write in Unit Prices and Add Alternates on Bid Forms as required.
 - 2. Provide line item breakdowns of calculations for Unit Prices and Add Alternate Prices upon request of the Construction Manager.
- B. Unit Prices and Add Alternates, unless otherwise noted, are to include incidental Work normally included in connection with the particular type of Work involved and are to include, but not necessarily be limited to, the following:

1. Engineering, including calculations, detailing, coordination, and Shop Drawings;
 2. All material costs;
 3. Necessary accessories, e.g., hangers, inserts, clips, bolts, painting, labeling, testing, etc.;
 4. Fabrication and shop costs;
 5. Shop and field labor, including supervision and engineering layout costs;
 6. Temporary utilities required, including safety precautions;
 7. Costs of standby trades during or beyond normal working hours;
 8. Transportation, hoisting, rigging, freight, taxes of any kind, fringe benefits, overhead and profit (excluding Insurance Cost);
 9. Tools and equipment; and
 10. Testing, cleaning, balancing and controlled inspection.
- C. Architect/Engineer documents will be used as the basis for calculating changes to Contract Work.
- D. Unit Prices shall apply equally to Work when added and also to Work when deleted, except where specifically modified below.
- E. No mark-ups will be allowed upon Unit Prices and Alternates.
- G. Where reference is made in the description of the Alternate to products, materials or workmanship, the Specification requirements applicable to products, materials or workmanship in the Total Bid shall govern the products, materials and workmanship of the Alternate as if these Specifications requirements were included in full in the description of the Alternates.
- H. MEASUREMENT OF QUANTITIES
1. Take all measurements and compute quantities. Provide Construction Manager with a log and itemized breakdown of total quantities.
 2. Assist by providing necessary equipment, workers, and survey personnel as required.
 3. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
 4. Measurement by Area: Measured by square dimension using mean length and width or radius.
 5. Perform surveys required to determine quantities, including control surveys to establish measurement reference lines. Notify Construction Manager prior to starting Work.

2.03 SUBSTITUTION PROCEDURES

A. GENERAL

1. Substitutions will not be considered if:

- a. they are indicated or implied on shop drawings submissions without the formal request required in this Section
 - b. for their implementation they require a substantial revision of the Contract Documents in order to accommodate their use.
 2. The Architect/Engineer will examine, with reasonable promptness, such Substitution Submittals, and return of submittals to the Contractor shall not relieve the Contractor from responsibility for deviations and alternatives from the Contract Plans and Specifications, nor shall it relieve Contractor from responsibility for errors in the Submittals.
 - a. A failure by the Contractor to identify material deviations from the Plans and Specifications in its letter of transmittal shall void the Submittals and any action taken thereon by the Architect/Engineer.
 - b. When specifically requested by the Architect/Engineer, the Contractor shall resubmit such Shop Drawings, descriptive data and samples as may be required to evaluate Substitutions.
 3. If any mechanical, electrical, structural, or other changes are required for the proper installation and fit of alternative materials, articles, or equipment, or because of deviations from the Contract Plans and Specifications, such changes shall not be made without the consent of the Architect/Engineer. Costs for said changes shall be borne by the Contractor responsible for said changes.
- B. PRODUCT APPROVAL STANDARDS: For all Substitutions, or where other synonymous terms are used, it is expressly understood that the approval of any such submission is vested in the Architect/Engineer, whose decision shall be final and binding upon all concerned.
- C. ACCEPTANCE OF NON-SPECIFIED PRODUCTS PRIOR TO BID DATE
1. For approval of products other than those specified, Bidders shall submit a request in writing at least Ten (10) Days prior to bid date and hour. Requests received after this time will not be reviewed or considered regardless of cause.
 2. Requests shall clearly define and describe the product for which approval is requested. Requests shall be accompanied by manufacturer's literature, specifications, drawings, cuts, performance data, list of references or other information necessary to completely describe the item.
 3. Approval by the Architect/Engineer will be in the form of an Addendum to the Specifications issued to all prospective Bidders of record. The Addendum will indicate the additional products which are approved for this Project.
- D. SUBSTITUTION AFTER AWARD OF CONTRACT
1. After the Contract has been executed, the Architect/Engineer will consider a formal request for the substitution of products in place of those specified, only if the Contractor submits a Request for Substitution to the Construction Manager on the form provided by the Construction Manager.
 2. A Substitution is a product, unit, device, material, etc. that deviates from the specified manufacturer and/or specified standards as required in the Contract Documents. A substituted product shall meet or exceed the performance criteria of the comparable product as specified in the Contract Documents. A Request for an Approved Equal shall be synonymous with a Request for

Substitution.

3. All Contractors may submit to the Construction Manager Requests for Substitutions. Requests must be supported by evidence such as technical data, test results, or other pertinent information that demonstrate the substitute offered is equal to or better than the Specifications requirements.
 - a. The Architect/Engineer shall review Requests for Substitution based upon the criteria stipulated on the form provided in form at the end of this section.
 - b. Submitting a Request too late in the overall schedule of the Project to ensure proper coordination with other trades is grounds for the Architect/Engineer and/or the Construction Manager to 'Reject' the Request.
4. Contractor submitting Request for Substitution shall be aware of and agree to the following:
 - a. The Contractor has personally investigated the proposed substitute product and determined that it is equal to or superior in all respects to that specified.
 - b. Same warranty will be furnished for proposed Substitution as for specified product.
 - c. Same level of maintenance service and a source of replacement parts, as applicable, is available.
 - d. Proposed Substitution will have no adverse effect on other trades and will not affect or delay the progress of the Construction Schedule.
 - e. Cost data as stated on the Request is accurate and complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived by the Contractor submitting the Request.
 - f. Proposed Substitution does not affect dimensions and functional clearances.
 - g. Coordination, installation, and changes in the Work as necessary for accepted Substitution will be complete in all respects and coordinated by the Contractor submitting the Request.
 - h. The Request is accompanied by complete data on the proposed Substitution substantiating compliance with the Contract Documents including product identification and description, performance and test data, references and samples where applicable, and an itemized comparison of the proposed substitution with the products specified or named by Addenda, with data relating to Contract time schedule, design and artistic effect where applicable, and its relationship to separate contracts.
 - i. Contractor submitting the Request agrees to make payment through a Deductive Change Order to the Owner for changes to building design, including A/E design, detailing, and construction costs caused by the Substitution.
 - j. Contractor submitting request agrees to make payment through a Deductive Change Order to the Owner for any costs related to the revision of other Contractors' Work.
 - k. No schedule relief will be provided to any Contractor for time consumed by this Request and/or the processing of this request by the Architect/Engineer and Construction Manager.
 - l. No extension of time shall be granted for any Work associated with a Substitution. The

Architect/Engineer and Construction Manager reserve the right to reject the Request without further review if it includes a Request for an extension of time.

- m. The Contractor may have only (1) one rejection for a submitted Request for a Substitution. Following that, the Contractor shall make payment through a Deductive Change Order to the Owner for all expenses associated with additional review time by the Architect/Engineer and Construction Manager, and the Contractor shall be solely responsible for the any loss of time with respect to the Construction Schedule.

2.4 TIME AND MATERIAL TICKETS

- A. The Construction Manager will sign all tickets as a Verification of Time Only (VTO). This provides verification of the time (# of hours listed), but it does not verify or confirm that the equipment and or labor was required for Work being performed.
- B. The Construction Manager's signature on any tickets shall not be construed as:
 - 1. Agreement that items and costs listed on the ticket represent additional Work or a change in the Scope of Work;
 - 2. Agreement that the Contractor shall be compensated for the items and costs listed on the ticket; or
 - 3. Agreement that the Construction Manager shall issue and approve a Proposed Change Order for the items and costs listed on the ticket.
- C. The Contractor agrees to provide original copies of all tickets to the Construction Manager at time of signing.
- D. The Contractor agrees to maintain and share with the Construction Manager accurate logs of ticket numbers, associated dates and amounts.

2.5 BACK CHARGES

- A. The Owner reserves the right to back charge a Contractor, through a Deductive Change Order, for the cost of total and complete remedy due to the failure of Contractor to comply with any provision(s) of the Contract Documents.

2.6.1 RIGHT TO CURE

- A. If the Contractor refuses or fails to supply enough properly skilled workers; proper materials; maintain the Construction Schedule, as amended by the Construction Manager from time to time; make prompt payment for its workers, subcontractors, sub-subcontractors or suppliers; comply with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction; or otherwise fails to comply with any provision of the Contract Documents, and fails to commence and maintain satisfactory correction of such default with diligence and promptness, within Three (3) Working Days after receipt of written notice from the Construction Manager, then the Owner, without prejudice to any other rights or remedies, shall have the right to any or all of the following remedies:
 - 1. Supply such number of workers and quantity of materials, equipment and other facilities as the Construction Manager deems necessary for the completion of the Contractor's Work, or any part thereof, which the Contractor has failed to complete or perform after the aforesaid notice, and charge the cost thereof to the Contractor, who shall be liable for the payment of same including

reasonable markup as allowed by this Agreement.

2. Contract with one or more additional Contractors or use its own forces to perform such part of the Contractor's Work as the Construction Manager shall determine will provide the most expeditious completion of the total Work and charge the costs thereof to the Contractor.
3. Withhold payment of any moneys due the Contractor, pending corrective action to the extent required by and to the satisfaction of the Construction Manager and the Owner.
4. Charge the Contractor for all costs incurred by the Owner due to its failure to comply, delay or breach, including but not limited to, markup as allowed by this agreement, attorney's fees and additional actual expenses incurred for supervision, equipment rental, and the like.
5. In the event of any emergency affecting the health or safety of persons or property, the Construction Manager may proceed as above without notice.

END OF SECTION

SECTION 01 2000-A SUBSTITUTION REQUEST

Project

From: _____

Re: _____ Substitution Request Number: _____

Contract For: _____

Specification Title: _____ Description: _____

Section Number: _____ Page: _____ Part/Paragraph: _____

Proposed Substitution: _____

Manufac-
turer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

☐ Point-by-point comparative data attached

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect/Engineer: _____

Contractor: _____ Owner: _____

Date Installed: _____

Proposed substitution affects other parts of Work:

☐ No☐ Yes, explain _____

Savings to Owner for accepting substitution: _____ (\$ _____)

Proposed substitution changes Contract Time:

☐

Yes; explain

☐ No☐ Yes

[Add] [Deduct]

_____ days

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

The Undersigned certifies that (the):

- Proposed substitution has been fully investigated and determined to be equivalent or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to proposed substitution which may subsequently become apparent are waived.
- Proposed substitution does not affect dimensions and functional clearances.
- All costs caused by the substitution, including costs for changes to building design, including Architect/Engineer design fees, detailing, and construction costs will be paid by the Contractor.
- Coordination, installation, and changes in the Work, as needed to accommodate proposed substitution, will be complete in all respects.

Submitted By: _____

Signed By: _____

Firm: _____

Address _____

Phone: _____

Attachments: _____

ARCHITECT/ENGINEER REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 3300.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Clark Patterson Lee

By: _____ Date: _____

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ Architect/Engineer

☐ _____

SECTION 01 2200**UNIT PRICES****PART 1 GENERAL****1.1 SUMMARY**

- A. This Section includes administrative and procedural requirements for Unit Prices.

1.2 DEFINITIONS

- A. Unit Price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if Work required by the Contract Documents is increased or decreased.

1.3 PROCEDURES

- A. Unit Prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for Work that requires establishment of Unit Prices.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established Unit Prices and to have this Work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: Unit Prices are included on the Form of Proposal.

PART 2 PRODUCTS (Not Used)**PART 3 EXECUTION (Not Used)****END OF SECTION**

SECTION 01 2600**CONTRACT MODIFICATION PROCEDURES****PART 1 GENERAL****1.1 SUMMARY**

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

1.2 MINOR CHANGES IN THE WORK

- A. Architect/Engineer will issue through Construction Manager supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on the Information Bulletin bound in the Project Forms Section of Project Manual

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect/Engineer through Construction Manager 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. Proposal Requests issued by Architect/Engineer are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request or Ten (10) Days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include 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.

- 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 Construction Manager.
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.

1.5 ADMINISTRATIVE CHANGE ORDERS

- B. Unit Price Adjustment: Refer to Division 01 Section "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit price work.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect/Engineer through Construction Manager will issue a Change Order for signatures of Owner and Contractor on the Information Bulletin bound in the Project Forms Section of Project Manual.

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect/Engineer through Construction Manager may issue a Construction Change Directive on the Information Bulletin bound in the Project Forms Section of Project Manual.
- B. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- C. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 3000**ADMINISTRATIVE REQUIREMENTS****PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Initial project deliverables
- B. Site requirements
- C. Concrete tickets, providing CM with copies
- D. Cooperation
- E. Daily reports
- F. Document tracking and change control
- G. Meetings
- H. Project office provisions
- I. Project personnel
- J. Project photography
- K. Project signs
- L. Scheduling
- M. Submittal procedures & requirements
- N. Requirements for Substantial Completion

PART 2 PRODUCTS**2.1 INITIAL PROJECT DELIVERABLES – 10 DAYS AFTER NOTICE TO PROCEED**

- A. Each Contractor shall provide, within Ten (10) Days after receipt of the Notice to Proceed, all information requested in this section. This information must be provided prior to mobilizing operations on site.
- B. ROAD USE PLAN
 - 1. Each Contractor shall submit a plan to the Construction Manager showing all streets that will be used to access the Work areas for all Work under this Contract. Plan for each route used shall indicate types of vehicles, loading, anticipated vehicular noises, Days and hours of use, and other reasonable information that may be requested by the Construction Manager. To assure that the routes are followed in compliance with the restrictions, provide all necessary notification and training to personnel operating vehicles associated with this project, directional signage and

workers to direct traffic in compliance with NYS DOT Standard Specifications.

C. NAMES OF AUTHORIZED PERSONS

1. Designate in writing the member of Contractor's organization:
 - a. Who is authorized to accept changes in the Work.
 - b. Who is responsible for informing others in the Contractor's employ of the authorization of changes in the Work.

D. STAFF NAMES

1. Submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the Project Site. Identify individuals and their titles. List their addresses and telephone numbers.
2. Post copies of the list in the Project Meeting room and the Construction Manager's Superintendent's office.

E. SITE SAFETY PLAN

1. Each Contractor shall submit their corporate Safety Plan for review and approval. No Contractor will be permitted on Site or to begin any Work unless their Safety Plan has been submitted and approved.
2. Each Contractor will need to designate a licensed safety officer for the entire duration of their Work on the Project.

2.2 INITIAL PROJECT DELIVERABLES – 20 DAYS AFTER NOTICE TO PROCEED

- A. Each Contractor shall provide, within Twenty (20) Days after receipt of the Notice to Proceed, all information requested in this section.

B. DRAFT CONSTRUCTION SCHEDULE

1. Provide the Construction Manager with a list of durations and sequencing for individual line task items as related to the Master Construction Schedule.
2. Construction Manager shall review and approve the task list. At a minimum, the task list shall include all major line items in the approved Schedule of Values.
3. Professional Scheduler shall incorporate tasks, durations & sequencing into the Master Construction Schedule.

C. LABOR RATES

1. All Labor rates must conform with the requirements of the PLA.
2. Each Contractor shall submit labor rates for review and approval on a form provided by the

Construction Manager.

D. EQUIPMENT RATES

1. All equipment rates shall conform with 'Allowable Markups' as described in the Section 00 7000 General Conditions § 7.2.6.
2. Each Contractor shall submit equipment rates for review and approval on form as provided by the Construction Manager.

E. SCHEDULE OF VALUES

1. Each Contractor's Schedule of Values shall include the following:
 - a. Bonds & insurance based on actual costs.
 - b. Labor & material on all line items.
 - c. Punch List – 2% of Contract Sum.
 - d. Close-out documentation & warranties – 1% of Contract Sum.
 - e. Coordination Drawings – 1% of Contract Sum.
 - f. Meetings – 1% of Contract Sum.
 - g. Retainage – 5% of payment due to date.
 - h. Contingency – The amount of the Contingency shall be listed as a separate line item.
 - i. Alternates – If applicable, Alternates shall be listed as a separate line item.
2. All Schedules of Values shall be reviewed and approved by the Architect/Engineer, Owner and Construction Manager. If revisions are required, Contractor shall make such revisions as requested by the Construction Manager.
3. The Contractor's Schedule of Values must be approved by the Architect/Engineer, Owner and Construction Manager prior to submission of the first Pencil Requisition.
4. Payment for all Schedule of Values items shall be in accordance with the payment application process described in the §9.4 of Section 00 7000 General Conditions.

2.3 INITIAL PROJECT DELIVERABLES – 30 DAYS AFTER NOTICE TO PROCEED

- A. Each Contractor shall provide, within Thirty (30) Days after receipt of the Notice to Proceed, all information requested in this section.

B. SUBMITTAL SCHEDULE

1. Submit a schedule of Submittals, arranged in chronological order, by dates in accordance with the

Construction Schedule.

- a. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
2. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
 - a. Each Contractor shall sequence Submittals, Shop Drawings, MSDS sheets, product data, samples, and mock-ups such that all related information is available at the time of review of each portion of Work in accordance with the record schedule.
3. Initial Submittal
 - a. Identify Submittals required to maintain orderly progress of the Work.
 - b. Identify Submittals required early because of long lead time for manufacture or fabrication.
4. Final Submittal
 - a. Submit complete list of all required submittals concurrently with the first complete submittal of Contractor's Construction Schedule.

- C. **OWNER'S PROPERTY AND FACILITIES** The facilities will remain in full operation during the implementation of the Project.
- D. All Contractors and personnel must comply with Owner's rules and regulations at all times, including but not limited to, parking, traffic, permits, shutdowns, security, access, fire and emergency access, and ADA access, as well as orders of Campus sponsored entities having jurisdiction.
- E. Shutdowns of existing services during construction shall be scheduled and approved by the Construction Manager one week in advance of such disruptions of service. This shall apply to overnight or longer disruptions. Those disruptions of less than eight hours shall be scheduled for afterhours Work (between 9:00 PM and 6:00 AM) and be approved by the Construction Manager one week in advance of such Work. The Emergency Services Center must maintain fully operational status 24/7/365 so temporary facilities will be required if any existing services to the Emergency Services Center are to be impacted.
- F. Provide all utility relocations and re-routings necessary to maintain the existing utilities at their current level of service, including limiting their shutdowns for tie-ins and cutovers to those periods specified. All new Work shall be in place, tested and accepted prior to scheduling a shutdown for the required tie in.

2.6 CONCRETE TICKETS

- A. All Contractors shall provide the Construction Manager with One (1) copy of Concrete Tickets at the end of the Day for all concrete, including lean concrete, poured on that Day.

2.7 COOPERATION

- A. All firms or persons authorized to perform any Work under this Contract shall cooperate with other Contractors and subcontractors or trades and assist in incorporating the Work of other trades where

necessary or required.

- B. Cutting and patching, drilling and fitting shall be carried out where required by the Contractor having jurisdiction, unless otherwise indicated herein or directed by the Construction Manager.
- C. All Contractors shall complete their Work in a timely fashion in harmony with all trades.

2.8 Not used.

2.9 DAILY REPORTS

- A. Each Contractor shall keep a daily log of activity including ongoing Work, manpower, weather, and visitors.
- B. Daily Reports shall be submitted to the Construction Manager on a monthly basis with the submission of each Application for Payment.
- C. Daily Reports can be typed or hand-written.
- D. Daily Reports should record information concerning the following events at the 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. High and low temperatures and general weather conditions.
 - 5. Accidents.
 - 6. Meetings and significant decisions.
 - 7. Unusual events (refer to special reports).
 - 8. Stoppages, delays, shortages, and losses.
 - 9. Meter readings and similar recordings.
 - 10. Emergency procedures.
 - 11. Orders and requests of authorities having jurisdiction.
 - 12. Change Orders received and implemented.
 - 13. Construction Change Directives received and implemented.
 - 14. Field Orders received and implemented.
 - 15. Issuance of any Time & Material tickets.
 - 16. Services connected and disconnected.

17. Equipment or system tests and startups.
18. Partial Completions and occupancies.
19. Substantial Completions authorized.

2.10 DOCUMENT TRACKING AND CHANGE CONTROL

- A. Each Contractor shall maintain a computerized document and change control system to prepare, monitor status, and electronically file and send all documents and changes associated with, and required for the Project.
- B. The Contractor's home office, Project trailer and Superintendent must have a MAPI-compliant e-mail system, such as Microsoft Outlook or Exchange. All Project Personnel agree to use email and monitor their email.
- C. The Contractor must provide experienced and trained personnel to maintain the document control system per this requirement. If the Construction Manager determines that experienced personnel are not operating the control system, then the Contractor's personnel must attend training sessions as specified by the Construction Manager at Contractor's sole expense.

2.11 LEED (Not Applicable)

2.12 MEETINGS

- A. To the maximum extent practicable, each Contractor shall assign the same person or persons to represent the Contractor at meetings throughout the construction period.
- B. Persons designated by the Contractor to attend and participate in meetings shall have all the required authority to commit the Contractor to solutions as agreed upon in the Project meetings.
- C. All Meetings shall be held at the Project Office unless notified otherwise.
- D. Construction Manager will compile minutes of all meetings and distribute to all parties. As part of standard procedure, the audio from meetings will be recorded at the Construction Manager's discretion on a regular basis for record purposes only. The audio recording will not be transcribed.
- E. It is acknowledged and agreed that an integral part of the contractual obligations of each Contractor is to attend all job meetings.
 1. A cost of \$500 multiplied by the total number of unexcused absences shall be credited to the Owner out of the 'Meeting' line item on the Schedule of Values to each Contractor on each occurrence that their personnel do not attend a required meeting as described in this section. This cost shall be credited to Owner through a deductive Change Order.
- F. Contractor's shall abide by the planning, scheduling and related accommodations arising out of decisions made at said job meetings, without claim for additional time or compensation, except where said determination materially affects the time or cost of performing the Contractor's Work in a way not reasonably contemplated by the meeting attendees, by customary practice in the industry, or by Contract Documents.

G. TYPES OF MEETINGS & REQUIRED ATTENDANCE

1. PRE-AWARD CONFERENCE: will be held by the Construction Manager with each Contractor prior to the award of Work by the County of Orange to confirm the inclusion of certain portions of scope. Contractor's Estimator, Superintendent and Officer of Contractor's Company must attend.
2. PRE-CONSTRUCTION CONFERENCE: will be held prior to the commencement of Work. Contractor's Superintendent and Foreman must attend.
3. PROJECT MEETINGS: To enable orderly review of progress during construction and to provide for systematic discussions of problems, the Construction Manager's Project Manager will conduct Project meetings on a weekly basis until Final Completion is achieved. Contractor's Superintendent must attend.
4. FOREMAN MEETINGS: To coordinate Work among the Contractors, the Construction Manager's Project Manager shall conduct Foreman Meetings on a weekly basis until Final Completion is achieved. Contractor's Foreman must attend.
5. COORDINATION DRAWING MEETINGS: Shall be scheduled by the Construction Manager and shall be working meetings where Contractor's review and resolve Coordination Drawing issues. Either Contractor's Foreman or Superintendent must attend.
6. SCHEDULE REVIEW MEETINGS: To review schedule process, these meetings will be conducted by the Professional Scheduler and will be scheduled to coincide with Project meetings. Contractor's Superintendent must attend.
7. INDIVIDUAL CONTRACTOR MEETINGS: As required, the Construction Manager may request meetings with individual Contractors on a weekly basis. Contractor's Superintendent and Foreman must attend.
8. CHANGE ORDER REVIEW MEETINGS: As requested by Contractor or Construction Manager, Change Order Review Meetings shall be held to resolve any outstanding PCOs, CORs and or COs. Attendance as required by Construction Manager.
9. SPECIAL ISSUE MEETINGS: Owner, Architect/Engineer or Contractor may request a special issue meeting with the approval of the Construction Manager. Attendance as required by Construction Manager.

2.13 PROJECT OFFICE PROVISIONS

- A. Each Contractor has inspected the Site and acknowledges the limited availability of Project office space and space on-site for Project office space.
 1. **The Owner shall not provide Project offices.**
- B. Telephone and data (i.e. DSL) service is to be procured separately by each Contractor and will not be provided by the Owner.
- C. Each Contractor shall provide for their own use within their Project office for the duration of the Project uninterrupted:

1. phone,
2. voicemail,
3. data (i.e. business class DSL or high-speed internet),
4. email, and
5. fax capabilities.

The Construction Manager, Architect/Engineer and Owner shall reasonably assume all of these services are operational and available for communication with each Contractor.

- D. INSURANCE FOR PROJECT OFFICE – Each Contractor shall provide fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage for their Project office spaces and contents in the amount of no less than \$100,000. Provide proof of coverage to CM upon request.

2.14 PROJECT PERSONNEL

- A. Each Contractor shall provide a full-time designated Project Manager, Superintendent and Safety Officer to facilitate the Project requirements.
- B. Each Contractor's full time Project Manager and lead Superintendent on site shall be English speaking and have complete Authority to make all decisions on behalf of the Company regarding every aspect of the Project to include but not limited to Change Order Requests, Change Orders, RFI's, Schedule Changes, etc.
- C. If the Owner or Construction Manager deems the Contractors' on-site supervision as inadequate at any time, that Contractor shall provide additional or replacement supervision immediately and at no additional cost to the Owner.
- D. Entry & Exit: Authorized Contractors' Employees shall have access to the premises through the main entrance gate only.
- E. Each Contractor agrees that a minimum of 10% of their Work must be performed directly by their employees and not by subcontractors.

2.15 PROJECT PHOTOGRAPHY

- A. Each Contractor must submit with every Payment Application Three (3) complete and separate copies on compact discs containing electronic files of all photographs taken on-site during the month for which that Payment Application represents.
- B. Contractors shall take a minimum of Twenty (20) different photographs per week. Photographs shall represent the various aspects of Work that each Contractor is requesting payment for.

2.16 PROJECT SIGNS

- A. No signs or advertisements will be allowed to be displayed on the premises without the prior approval of

the Construction Manager.

- B. Each Contractor shall be allowed Two (2) Project signs, identifying their company, no larger than 4'x8' to be placed at locations approved by the Construction Manager.
- C. The formal Project sign shall be designed and provided by the Construction Manager with County Executive approval.

2.17 SCHEDULING

A. GENERAL

- 1. Time is of the Essence: Time is of the essence for the completion of the Work, and all Contractors mutually agree to see to the performance of their respective Work and the Work of their subcontractors, so that the entire Project may be completed in accordance with the Contract Documents and the Construction Schedule.
- 2. Each Contractor agrees to supply sufficient manpower, resources, and all means necessary to meet or exceed all stipulated activity durations, start and completion dates, and to use its best efforts to comply with the objectives of the Project Schedule.
- 3. All Contractors shall include all out of sequence Work necessary to maintain the Master Schedule, or the Contractor's Schedule.
- 4. Contractors shall be permitted to Work Saturdays, Sundays, and/or nights to make up for lost time only with prior approval from the Construction Manager.
- 5. The Contractor will be responsible for Supervision costs from the Owner, Construction Manager, and the Architect/Engineer, if lost time is due to the Contractor's own schedule deficiency.
- 6. The Contractor is responsible for all conditions necessary to finish the Project as per schedule at no cost to the Owner. This will include but not be limited to winter conditions, snow, ice, wind, rain, etc.. It is the Contractor's responsibility to protect the Work area from these elements so Work can proceed in a timely manner in spite of the elements.

B. NECESSARY INFORMATION

- 1. Each Contractor agrees to provide to the Construction Manager all necessary information regarding scheduling, material and equipment purchases, engineering and approvals, fabrication, delivery, manpower estimates, and cost loading of activities in order to produce a detailed Critical Path Method (CPM) Schedule.
- 2. This obligation shall include, but is not limited to, developing a detailed schedule of the Contractor's Work reflecting all major activities, durations, sequences and relationships of its Work with the Work of others.
- 3. Each Contractor shall supply the Construction Manager with regular schedule progress information reports on a monthly basis, or more often as may be necessary or as directed. The Contractor will update actual start dates, completion dates, remaining durations, and resources for all activities at regular intervals designated by the Construction Manager.

4. At the request of the Construction Manager, Contractors shall supply additional schedule related information such as schedules for individual tasks, equipment lead times, field activity durations, manpower loadings (types and quantities), critical long lead time items.

C. DRAFT CONSTRUCTION SCHEDULE

1. A Draft Construction Schedule shall be established by a Professional Scheduler relying upon tasks, durations and sequencing provided by all Contractor's as part of their initial project deliverables.
2. The Draft Construction Schedule shall include the following:
 - a. Cost of activities expected to be completed or partially completed before submission and approval of the complete network;
 - b. Constraints, including Work stages, area separations, interim milestones, and partial Owner occupancy;
 - c. Delivery dates for Owner-furnished products;
 - d. Address schedules of Work for other Contractors;
 - e. Time required for review of submittals and resubmittals;
 - f. Requirements for tests and inspections by independent testing and inspecting agencies;
 - g. Review time required for completion and startup procedures; and
 - h. Complete list of construction activities
3. The Draft Construction Schedule shall be reviewed and refined through a series of initial Schedule Review meetings, held on a weekly basis, until all Contractors, Owner, Construction Manager and Architect/Engineer agree that the most current draft schedule accurately represents their respective Work. It shall then be issued as the Master Construction Schedule.

D. ACCEPTANCE OF THE MASTER CONSTRUCTION SCHEDULE

1. The Master Construction Schedule (Master Schedule) shall be accepted and signed by all Contractors, Construction Manager, Architect/Engineer and the Owner. Following that, it shall be the approved Master Schedule to be used for planning, organizing and directing the Work, and reporting progress.
2. Draft Construction Schedules, which contain activities showing negative float or which negatively impact the Substantial or Final Completion Dates in the Master Schedule, will not be accepted.
3. Omissions and errors in the approved Master Schedule shall not excuse performance less than that required by the Contract Documents.

E. PROGRAM DESCRIPTION

1. A Critical Path Method (CPM) construction schedule shall be used as the Master Schedule to control

the Work of this Contract and to provide a definitive basis for determining job progress. This Master Schedule shall be prepared and maintained by a Professional Scheduler.

2. The Master schedule shall be prepared and submitted by the Professional Scheduler as provided by the Construction Manager and shall consist of a CPM network prepared on commercially available software such as P3 manufactured by Primavera Systems, Inc., or equal.
3. All Work shall be done in accordance with the established Master Schedule and the Contractors and subcontractors shall be responsible for cooperating fully with each other, Architect/Engineer, Construction Manager and the Owner in effectively utilizing the Master schedule.

F. NETWORK REQUIREMENTS

1. The network shall show the order and inter-dependence of activities and the sequences in which the Work is to be accomplished as planned by all Contractors. It shall also include the Owner's schedule activities pertaining to equipment deliveries and installs, Submittal schedules from all Contractors, and Testing schedule activities. The basic concept of a network analysis diagram shall be followed to show how the start of a given activity is dependent on the completion of preceding activities and its completion restricts the start of following activities.
2. Detailed network activities shall include: construction activities, the submittal and approval of samples of materials and Shop Drawings, the procurement of materials and equipment, fabrication of materials and equipment and their delivery, installation and testing, start-up and training. Break the Work into activities with durations no longer than Twenty (20) Working Days each, except as to non-construction activities (such as procurement of materials and delivery of equipment) and any other activities for which Construction Manager may approve the showing of longer duration. To the extent feasible, activities related to a specific physical area of the Work, such as a room name/number, shall be grouped on the network for ease of understanding and simplification.
3. Separate activities shall be provided for each significant identifiable function in each trade area in each facility. Activities shall be so identified that there will be no reasonable doubt as to how much Work remains on each. Specific activities which shall be included are: all subcontract Work, all interface Work between subcontractors and between the Contractor and subcontractors, leakage tests of tanks and pipelines, electrical connections to each item of equipment, supplier and manufacturer technical assistance, all tests, concrete finishing, each item of Site Work, (including restraints on other activities) and all utilities, fuels and chemicals.
4. Each activity on the network shall have the following indicated on the NODE representing it.
5. A single duration (i.e., the single best estimate of elapsed time considering the scope of the Work involved in the activity and the resources planned for accomplishing the activity) expressed in Working Days.
6. A code indicative of the party responsible for accomplishing the activity.
7. A brief description of the activity.
8. The detailed network need not be time scaled but shall be drafted to show a continuous flow from left to right with no flow from right to left. In addition to the brief description, submit a separate

list of all activities containing a detailed narrative of the scope of each activity, including the trades and subcontractors involved and the number of man-hours estimated.

9. Failure to include on a network any element of Work required for the performance of this Contract shall not excuse the Contractor from completing all Work required within any applicable completion date.
10. Except where earlier completions are specified, Draft Construction Schedules which show completion of all Work prior to the Substantial or Completion Dates may be approved by the Architect/Engineer but in no event shall they be acceptable as a basis for claim for delay against the Owner by the Contractor.

G. DRAFT CONSTRUCTION SCHEDULE REQUIREMENTS

1. Each Draft Construction Schedule shall be computer-generated schedule submittal from the CPM activity network which shall include the following tabulations: a list of activities in numerical order, a list of activity precedents, a schedule sequenced by Early Start Date and a schedule sequenced by Total Float. Each schedule shall include the following minimum items:
 - a. Activity numbers
 - b. Estimated duration
 - c. Activity description
 - d. Early start date (calendar dated)
 - e. Early finish date (calendar dated)
 - f. Latest allowable start date (calendar dated)
 - g. Latest allowable finish date (calendar dated)
 - h. Status (whether critical)
 - i. Estimated cost of the activity
 - j. Total float and free float
 - k. In addition, each schedule shall be prefaced with the following summary data:
 - i. Project name and address
 - ii. Contract schedule
 - iii. The effective or starting date of the schedule
 - iv. Run date of schedule
2. The Working Day to Calendar Day correlation shall be based on an 8-hour Day and a 40-hour week

with adequate allowance for holidays, adverse weather and all other special requirements of the Work.

H. SCHEDULE REVIEW MEETINGS

1. Schedule Review Meetings will be held on a weekly basis for the first (2) two months, following receipt of Notice to Proceed to establish the Master Schedule. Following that, Schedule review meetings will continue on a monthly basis for the duration of the Project.
2. Once the Master Schedule is accepted, progress will be evaluated monthly by the Professional Scheduler through a combination of observation of the Work and analysis of Contractor's monthly, regular schedule progress information reports.
 - a. Not less than Seven (7) Days prior to each monthly Schedule Review Meeting, the Professional Scheduler shall meet at the jobsite with Contractor's and jointly evaluate the status of each activity on which Work has started or is due to start, based on the Master Schedule; to show actual progress, to identify those activities started and those completed during the previous period, to show the estimated time required to complete or the percent complete of each activity started but not yet completed and to reflect any changes indicated for the network.
 - b. Activities shall not be considered to be complete until they are, in fact, 100 percent complete.
3. The Professional Scheduler will produce from this evaluation an updated computer-generated Master Schedule and CPM Status Report for the Project.
 - a. At each Progress Meeting, the Professional Scheduler must submit a typed, narrative report based on the Master Schedule evaluation described above, in a format agreed upon by the Construction Manager.
 - b. The Narrative Report shall include a description of the progress during the previous period in terms of completed activities, an explanation of each activity which is showing a delay, a description of problem areas, current and anticipated delaying factors and their estimated impact on performance of other activities and completion dates and an explanation of corrective action taken or proposed.
 - c. This Narrative Report, as well as the CPM Status Report, will be discussed at each Progress Meeting.
4. All Contractors agree to prepare for, attend, and actively participate in the monthly Schedule Review Meetings.

I. RESPONSIBILITY FOR SCHEDULE COMPLIANCE

1. Whenever it becomes apparent from the current Master Schedule and the CPM Status Report that delays to the critical path have resulted and the Contract completion date will not be met, or when so directed by the Construction Manager, take some or all of the following actions at no additional cost to the Owner. Submit to the Construction Manager for approval, a written statement of the

steps intended to remove or arrest the delay to the critical path in the approved Master Schedule.

- a. Increase construction manpower in such quantities and crafts as will substantially eliminate the backlog of Work.
 - b. Increase the number of working hours per shift, shifts per Day, Working Days per week, the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate the backlog of Work.
 - c. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities and comply with the revised Master Schedule.
2. If when so requested by the Construction Manager, failure to submit a written statement of the steps intended to take or should fail to take such steps as approved by the Construction Manager, the Construction Manager may direct the Contractor to increase the level of effort in manpower (trades), equipment and schedule (overtime, weekend and holiday Work, etc.) to be employed by the Contractor in order to remove or arrest the delay to the critical path in the approved Master Schedule and the Contractor shall promptly provide such level of effort at no additional cost to the Owner.

J. ADJUSTMENT OF MASTER SCHEDULE AND COMPLETION TIME

1. If the Contractor desires to make changes in its method of operating which affect the approved Master Schedule it shall notify the Construction Manager in writing, stating what changes are proposed and the reason for the change. If the other Contractors, Construction Manager, Owner and Architect/Engineer approve these changes, the Contractor shall revise and submit for approval, without additional cost to the Owner, all of the affected portions of the CPM network.
 - a. The Master Schedule shall be adjusted by the Contractor only after prior approval of its proposed changes by the other Contractors, Construction Manager, Owner and Architect/Engineer. Adjustments may consist of changing portions of the activity sequence, activity durations, division of approved activities, or other adjustments as may be approved by the Architect/Engineer. The addition of extraneous, non-Working activities and activities which add unapproved restraints to the Master Schedule shall not be approved.
2. If the completion of any activity, whether or not critical, falls more than 100 percent behind its approved duration, submit for approval to the Construction Manager a schedule adjustment showing each such activity divided into two activities reflecting completed versus uncompleted Work.
3. Shop Drawings which are not approved on the first submittal or within the scheduled timeframe and equipment which does not pass the specified tests shall be immediately rescheduled.
4. The Contract completion time will be adjusted only for causes specified in this Contract.
 - a. In the event the Contractor requests an extension of any Contract completion date, it shall furnish such justification and supporting evidence as the Construction Manager may deem necessary to determine whether the Contractor is entitled to an extension of time under the provisions of this Contract.

- b. Each request for change in any Contract completion date shall be submitted by the Contractor in accordance with Change Order Procedures as described in the General Conditions. No time extension will be granted unless a Change Order has been approved.
 - c. If a Change Order is approved that entitles a Contractor to any extension of any Contract completion date, the total number of Days extension shall be based upon the currently approved Master Schedule and on all data relevant to the extension. Such data shall be included in the next updating of the Master Schedule. Actual delays in activities, which according to the Master Schedule, do not affect any Contract completion date shown by the critical path in the network will not be the basis for a change therein.
- 5. The Owner controls the float time in the approved CPM network and, therefore, without obligation to extend the overall completion dates set out in the CPM network, the Owner may initiate changes to the Work that absorb float time only.
 - a. Owner initiated changes that affect the critical path on the approved CPM network shall be the sole grounds for extending (or retracting) said completion dates.
 - b. Contractor-initiated changes that encroach on the float time identified in the approved CPM network may be accomplished with the Owner's concurrence. Such changes, however, shall give way to Owner-initiated changes competing for the same float time.

K. RECOVERY SCHEDULE

- 1. If at any time the Contractor falls behind on the Master Schedule, the Contractor must submit to the Construction Manager a Recovery Schedule using the Master Schedule for the baseline. Any financial burden to the Owner, Architect/Engineer, or Construction Manager caused by this failure or the Recovery Schedule will be the sole responsibility of the Contractor. Further, the Construction Manager may withhold from the Contractor's payment due an amount equal to the per Day Liquidated Damages for every Day the Contractor falls behind and withhold that amount until Contractor is back on schedule.
- 2. The Contractor must provide sufficient manpower and equipment to meet the Recovery Schedule and continue until the Recovery Schedule is met.

L. MILESTONES AND TABLE 1-1

- 1. The established Notice to Proceed date for each Contract will be determined by the County of Orange.
- 2. **The established Substantial Completion date for this Project is indicated in Section 00 7000-A Table 1-1**
- 3. Substantial Completion is the stage in the progress of Work when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner or Tenant may occupy or utilize the Work for its intended use.
- 4. **The established Final Completion date for this Project is indicated in Section 00 7000-A Table 1-1.**

5. Final Completion is the stage in the progress of Work where all requirements of the Contract Documents have been met in their entirety and accepted by the Owner.
6. MILESTONE SCHEDULE – see Section 01 0110.
7. TABLE 1-1 – see Section 00 7000-A.

2.18 SUBMITTALS

A. GENERAL

1. All submittals shall be accompanied by the Architect/Engineer's Submittal Cover Sheet as filled out, printed/copied and attached to each individual copy of the submittal by the Contractor.
2. The Contractor shall be responsible for coordinating the schedule for submittal of Shop Drawings and samples with its progress schedule and the requirements of the Master Schedule and submit a coordinated schedule of submission of all Shop Drawings and samples to the Construction Manager.
3. Failure of the Contractor to schedule and submit Shop Drawings and samples with ample time for checking, correction, and rechecking will not justify any delay in the Master Schedule. Contractor shall allow ample time for items to be tested, including time for retesting if the tests or mock-ups fail.
4. Samples, Shop Drawings, manufacturer's literature, and other required information shall be submitted in sufficient time to permit proper consideration and action on same before any materials and items are delivered on the Work.
5. Contractor shall stagger submissions so that the Architect/Engineer can review the documents in an orderly and timely manner.
6. All samples of materials requiring laboratory tests shall be submitted to the laboratory for testing not less than Ninety (90) Days before such materials are required to be used in the Work.
7. All other samples, manufacturers' literature, and other sample information shall be submitted for approval not less than Thirty (30) Days before such materials are required to be used in the Work.
8. Shop Drawings for each Section of the Work shall be numbered consecutively, and the numbering system shall be retained throughout all revisions.
9. Each Drawing shall have a clear space for the stamps of the Contractor, Architect/Engineer, and one of the Architect/Engineer's consultants.
 - a. All Shop Drawings shall be thoroughly checked by the Contractor for compliance with the Contract Documents before submitting them to the Construction Manager and shall bear the Contractor's signature of approval certifying that they have been so checked.
10. Any Submittals submitted without this signature and certification and which, in the Architect/Engineer's opinion, are incomplete, contain errors, or have not been checked, or only checked superficially, will be returned unreviewed by the Architect/Engineer for resubmission by the Contractor.

11. In checking Shop Drawings, the Contractor shall verify all dimensions and field conditions and shall check and coordinate the Shop Drawings of any Section or trade with the requirements of all other Sections or trades whose Work is related thereto, as required for proper and complete installation of the Work.
 - a. The Contractor shall be solely responsible for any quantities which may be shown on the Shop Drawings.
 - b. Each subcontractor shall prepare its Shop Drawings in accordance with the Coordination Drawings as described in this section.

B. ARCHITECT/ENGINEER'S REVIEW

1. The Architect/Engineer's review of Submittals is for design only and not method of assembly or erection. Review shall in no way be construed as:
 - a. Permitting any departure whatsoever from the Contract Documents;
 - b. Relieving the Contractor of full responsibility for any error in details, dimensions, omissions, or otherwise that may exist;
 - c. Relieving the Contractor of full responsibility for adequate field connections, erection techniques, bracing, or deficiencies in strength;
 - d. Relieving the Contractor of full responsibility for satisfactory performance of all Work and coordination with the Work of all subcontractors and other contractors;
 - e. Permitting departure from additional details or instructions previously furnished by the Architect/Engineer; or
 - f. Relieving the Contractor from responsibility for proper fitting of the Work, nor from the necessity of furnishing any Work which may not be indicated on Shop Drawings when approved.
2. No Work shall be fabricated, manufactured, or installed from Shop Drawings stamped "Revise and Resubmit" or "Rejected," and such Shop Drawings shall be corrected and resubmitted by the Contractor until accepted by the Architect/Engineer.
3. At least one complete set of "No Exceptions Taken, Make Corrections Noted" Shop Drawings shall be kept at the site in the Contractor's field office for reference at all times. "Revise and Resubmit" or "Rejected" Shop Drawings shall not be permitted at the Site.
4. Submittals marked "No Exceptions Taken" or "Conforms":
 - a. Submittals which require no corrections by the Architect/Engineer will be marked "No Exceptions Taken."
5. Submittals marked "Make Corrections Noted" or "Conforms as noted" or "Furnish as Corrected":
 - a. Submittals which require only a minor amount of correcting shall be marked "Make

Corrections Noted." This mark shall mean review is complete and all corrections are obvious without ambiguity. Fabrication will be allowed on Work marked "Make Corrections Noted" provided such action will expedite construction and noted corrections are adhered to. If fabrication is not made strictly in accordance with corrections noted, the item shall be rejected in the field, and the Contractor will be required to replace such Work in accordance with corrected Submittals.

- b. If also marked "Resubmit for Record", the Contractor shall provide the Construction Manager with Four (4) revised submittals, in which all marks have been redrafted or corrected.
6. Submittals marked "Revise and Resubmit" or "Rejected:"
 - a. When Submittals are contrary to Contract requirements or too many corrections are required, they shall be marked "Revise and Resubmit" or "Rejected." No Work shall be fabricated under this mark. The Architect/Engineer shall list its reasons for rejection on the Submittals or in the transmittal letter accompanying their return. The Submittals must be corrected and resubmitted for approval.
7. If the Contractor wishes to deviate from the materials or details as shown in Specifications or Drawings, it shall submit the proposed deviation with Shop Drawings and/or samples stating the extent and the materials or details being replaced. The Contractor shall also submit information on the allowed credit or extra cost required for the proposed deviation, and also all information relating to the Work of other Sections revised by the proposed deviation.
8. The Architect/Engineer will endeavor to review and approve Shop Drawings and Samples for approval within Fifteen (15) Days, but only for conformance with the design concept of the Work and with information contained in the Contract Documents.
9. Incomplete Shop Drawings will be returned without checking for proper submission, and this shall not be considered as cause for delay of the Work or extra compensation to the Contractor.
10. The Contractor shall submit appropriate transmittal forms and approved Submittal Cover Sheets, as provided by the Construction Manager, with every submittal of Shop Drawings, manufacturer's literature, and samples.

C. SUBMISSION OF SHOP DRAWINGS

1. Quantity: Submit Six (6) copies to the Construction Manager for review. Following review by the Architect/Engineer, the Construction Manager shall return a minimum of Two (2) copies to the Contractor. Contractor should supply additional copies for review if more than Two (2) returned copies are required.
2. Prints: The Contractor shall provide all prints or Shop Drawings as reasonably required by subcontractors, material suppliers, superintendents, inspectors, and others as required for the Work, or as directed by the Architect/Engineer. The Contractor shall pay all costs in connection with printing and distribution of Shop Drawings.
3. Resubmission: If resubmission of the Shop Drawings is required per the Architect/Engineer's

review, the Contractor shall bear all of its own costs and its subcontractors' costs in connection with the resubmittal including but not limited to printing, distribution, drafting, sketching and review time.

D. SUBMISSION OF MANUFACTURER'S LITERATURE

1. Quantity: Submit six (6) copies to the Construction Manager for review. Following review by the Architect/Engineer, the Construction Manager shall return a minimum of Two (2) copies to the Contractor. Contractor should supply additional copies for review if more than Two (2) returned copies are required.
2. All copies of manufacturer's literature required to be resubmitted hereunder shall be original printed material. Reproductions of printed material will not receive consideration. All copies must be properly denoted, circled or highlighted where more than one option is available.

E. SUBMISSIONS OF SAMPLES

1. Submit Four (4) copies to the Construction Manager for review. Following review by the Architect/Engineer, the Construction Manager shall return a minimum of one (1) copy to the Contractor.
2. Samples will receive consideration only when accompanied by the transmittal form properly filled out, as indicated, and listing each sample, as well as the listing of any ASTM, Federal or other standard references specified or applicable and such additional information as may be required by the Specifications for the materials being submitted. Any deviation from the Contract requirements shall be so stated on the above form or attached to it.
3. The Architect/Engineer shall have the right to require submission of samples of any materials, whether or not specifically indicated in the various Sections of the Specifications.
4. Unless otherwise specified, samples of sufficient size to indicate general visual effect shall be submitted. Where samples must show a range of color, texture, finish, graining, or other similar property, the Contractor shall submit sets of pairs illustrating the full scope of the range.
5. All samples stamped "No Exceptions Taken" or "Make Corrections Noted" shall be kept at the site in the Contractor's field office facilities for reference at all times. "Revise and Resubmit" or "Rejected" samples shall not be kept at the Site.

F. MANUALS

1. Quantity: Submit six (6) copies to the Construction Manager for review. Following review by the Architect/Engineer, the Construction Manager shall return a minimum of Two (2) copies to the Contractor. Contractor should supply additional copies for review if more than Two (2) returned copies are required.
2. Where manuals are required to be submitted covering items included in this Work, prepare all such manuals in durable plastic binders approximately 8-1/2 x 11" in size with at least the following:
 - a. Identification on, or visible through, the front cover stating general nature of the manual.

- b. Neatly typewritten index near the front of the manual furnishing immediate information as to location in the manual of all emergency data regarding the installation.
 - c. Complete instructions regarding operation and maintenance of all equipment involved.
 - d. Complete nomenclature of all replaceable parts, their part numbers, current cost, and name and address of nearest vendor of parts.
 - e. Copy of all guarantees and warranties to be provided.
 - f. Copy of the approved Shop Drawings with all data concerning changes made during construction.
3. Where contents of manuals include manufacturer's catalog pages, clearly indicate the precise items included in this installation and delete or otherwise clearly indicate all manufacturer's data with which this installation is not concerned.

G. COORDINATION OF SUBMITTALS

- 1. Prior to submittal for Architect/Engineer's review, use all means necessary to fully coordinate all material, including the following procedures:
 - a. Determine and verify all field dimensions and conditions, materials, catalog numbers and similar data.
 - b. Coordinate as required with all trades and with public agencies involved.
 - c. Secure all necessary approvals from public agencies and others and signify by stamp, or other means, that they have been secured.
 - d. Clearly indicate all deviations from the Contract Documents.
- 2. Unless otherwise specifically permitted by the Architect/Engineer, make all Submittals in groups containing all associated items; the Architect/Engineer may reject partial Submittals as not complying with the provisions of the Contract Documents.

H. ELECTRONIC SUBMITTALS

- 1. Electronic Submittals, via email, shall be allowed. Paper submittals may be allowed only with prior approval of the Architect/Engineer and Construction Manager. However, if the Owner, Architect/Engineer or Construction Manager requests or requires paper submittals and/or related documents the Contractor shall supply them.
- 2. Emailed submittals must contain, within the same email as the submittal, appropriately completed Transmittals and Submittal Cover Sheets.

2.19 SUBSTANTIAL COMPLETION – REQUIREMENTS FOR

- A. Substantial Completion is the stage in the progress of Work when the Work or designated portion is sufficiently complete in accordance with the contract documents so that the Owner or Tenant may occupy

or utilize the Work for its intended use.

B. PRELIMINARY PROCEDURES: Before requesting inspection for determining date of Substantial Completion, the items below must be completed:

1. Each Contractor shall provide disconnects, cutting, safe-offs, and patching for its own trades governed materials and equipment that are proposed to remain, including clearly identifying each with paint, marker, label, or other permanent means.
2. Prepare a list of items to be completed and corrected (Punch List), the value of items on the list, and reasons why the Work is not complete.
3. Advise Owner of pending insurance changeover requirements.
4. Obtain and submit releases permitting Owner's unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs and photographic negatives, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

C. REVIEW OF COMPLETION

1. Submit a written request for review for Substantial Completion.
 - a. On receipt of request, Architect/Engineer will either proceed with review or notify Contractor of unfulfilled requirements.
 - b. Architect/Engineer will prepare the Certificate of Substantial Completion after review or will notify Contractor of items, either on Contractor's list or additional items identified by

Architect/Engineer, that must be completed or corrected before certificate will be issued.

2. Revisit: Request revisit when the Work identified in previous reviews as incomplete is completed or corrected.
3. Results of completed review will form the basis of requirements for Final Completion.
4. Form designating substantial completion shall be provided by the Construction Manager

D. REQUIREMENTS FOR SUBSTANTIAL COMPLETION

1. Permanent utilities must be in place, gas (hot water), water, electric, telephone (alarms) and in the Owner's name
2. UL certification for electrical Work (inspection sticker must be obtained)
3. Label all panels
4. All fixtures shall be in place
5. All equipment shall be powered
6. Temporary power/lighting removed
7. Plumbing inspector sign-off
8. Elevator inspector sign-off
9. The following shall be operational/complete:
 - a. Elevator recall
 - b. Elevator telephone line
 - c. Elevator Flooring
 - d. Emergency lighting
 - e. Signage (Exit Signs)
 - f. Fire alarm, central station monitoring verification
 - g. Stairwell and elevator shaft hatch releases
 - h. Emergency generator switch over test
 - i. Fire pump pressure test
 - j. Fire sprinkler system inspection with hydrostatic test results
 - k. Fire sprinkler flow test

- l. Egress, all entry, exit, stairwell doors
 - m. Fire extinguishers placed & tagged
 - n. All safety and security requirements
- 10. Roads, parking lot and site improvements complete
- 11. Health department sign off when required
- 12. DEC/ DEP certification when applicable
- 13. Affidavits from all subcontractors (all plumbing, electrical and HVAC) certifying completion of Work in compliance with NY state codes
- 14. Architect/Engineer certification on all Work required by drawings
- 15. Flame spread rating documentation on acoustical ceiling, wall covering, carpet, etc.
- 16. HVAC balance system report
- 17. Underground pipe test certification
- 18. Owners training complete
- 19. Label and tag all valves including drain valves, Fire Dept. connection
- 20. Provide all Attic Stock

END OF SECTION

SECTION 01 3100**PROJECT MANAGEMENT AND COORDINATION****PART 1 GENERAL****1.1 SUMMARY**

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
1. General project coordination procedures.
 2. Administrative and supervisory personnel.
 3. Coordination drawings.
 4. Requests for Information (RFIs).
 5. Project meetings.
- B. Each Contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Sections:
1. Section 01 3000 Administrative Requirements for preparing and submitting Contractor's Draft Construction Schedule.
 2. Section 01 7000 Execution Requirements for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 3. Section 01 7700 Closeout Procedures for coordinating closeout of the Contract.

1.2 DEFINITIONS

- A. RFI: Request from Owner, Construction Manager, Architect/Engineer, or Contractor seeking information from each other during construction.

1.3 INFORMATIONAL SUBMITTALS

- A. If not required with Bid submission, Subcontract list is required to be submitted as soon as practical prior to award of the Contract for Owner review and approval. Coordinate with submittal requirements for subcontract list in Procurement Requirements and Contracting Requirements if any.

- B. 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. Include the following information in tabular form:
1. Name, address, and telephone number of the 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.
- C. Key Personnel Names: Within Fifteen (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.
 2. Keep list current at all times.

1.4 COORDINATION

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each 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 with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's Draft Construction Schedule.
 2. Preparation of the Schedule of Values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.
 9. Project closeout activities.
- E. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

1.5 COORDINATION DRAWINGS

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

- e. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - f. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - g. Indicate required installation sequences.
 - h. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect/Engineer indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
- 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 - 2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
 - 3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
 - 4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
 - 5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
 - 6. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
 - 7. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4 inch diameter and larger.

- b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
 - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
- 8. Fire Protection System: Show the following:
 - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
- 9. Review: Architect/Engineer will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility. If the Architect/Engineer determines that the coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, the Architect/Engineer will so inform the Contractor, who shall make changes as directed and resubmit.
- 10. Coordination Drawing Prints: Prepare coordination drawing prints in accordance with requirements of Section 01 3300 Submittal Procedures.

1.6 KEY PERSONNEL

- A. Key Personnel Names: Within Five (5) 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 email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys 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.
 - 2. Keep list current at all times.

1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Do not submit an RFI if information is readily available in the contract documents. Verify by contacting and questioning the Architect/Engineer prior to submitting an RFI.
 - 2. Architect/Engineer will return RFIs submitted to Architect/Engineer by other entities controlled by Contractor with no response.
 - 3. 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 Architect/Engineer and Construction Manager.
 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 solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Form provided by Architect/Engineer or a Software- generated form with substantially the same content as indicated above, acceptable to Architect/Engineer.
- D. Architect/Engineer's and Construction Manager's Action: Architect/Engineer and Construction Manager will review each RFI, determine action required, and respond. Allow Five (5) Business Days for Architect/Engineer's response for each RFI. RFIs received by Architect/Engineer or Construction Manager after 1:00 p.m. will be considered as received the following Business Day.
1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.

- c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect/Engineer's actions on submittals.
 - f. Incomplete RFIs or inaccurately prepared RFIs.
- 2. Architect/Engineer's action may include a request for additional information, in which case Architect/Engineer's time for response will date from time of receipt of additional information.
- 3. Architect/Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 7000 General Conditions Article 7 Changes in the Work.
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect/Engineer and Construction Manager in writing within Five (5) Working 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. Use CSI Log Form 13.2B. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect/Engineer and Construction Manager.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect/Engineer's and Construction Manager's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- F. On receipt of Architect/Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect/Engineer and Construction Manager within Five (5) Working 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.

1.8 PROJECT WEB SITE

- A. Use Architect/Engineer's Project Web site for purposes of hosting and managing project communication and documentation until Final Completion. Project Web site shall include the following functions:
1. Project directory.
 2. Project correspondence.
 3. Meeting minutes.
 4. Contract modifications forms and logs.
 5. RFI forms and logs.
 6. Submittals forms and logs.
 7. Payment application forms.

1.9 PROJECT MEETINGS

- A. General: Construction Manager will 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 Owner and Architect/Engineer of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Construction Manager will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect/Engineer, within Three (3) Days of the meeting.
- B. Preconstruction Conference: Construction Manager will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect/Engineer, but no later than Fifteen (15) Days after execution of the Agreement.
1. Conduct the conference to review responsibilities and personnel assignments.
 2. Attendees: Authorized representatives of Owner, Construction Manager, Architect/Engineer, 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
- u. Parking availability
- v. Office, work, and storage areas

- w. Equipment deliveries and priorities
 - x. First aid
 - y. Security
 - z. Progress cleaning
4. Minutes: Construction Manager will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
- 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect/Engineer, Construction Manager of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents
 - b. Options
 - c. Related RFIs
 - d. Related Change Orders
 - e. Purchases
 - f. Deliveries
 - g. Submittals
 - h. Review of mockups
 - i. Possible conflicts
 - j. Compatibility problems
 - k. Time schedules
 - l. Weather limitations
 - m. Manufacturer's written recommendations
 - n. Warranty requirements

- o. Compatibility of materials
 - p. Acceptability of substrates
 - q. Temporary facilities and controls
 - r. Space and access limitations
 - s. Regulations of authorities having jurisdiction
 - t. Testing and inspecting requirements
 - u. Installation procedures
 - v. Coordination with other work
 - w. Required performance results
 - x. Protection of adjacent work
 - y. Protection of construction and personnel
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Construction Manager will conduct progress meetings at biweekly intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner, Construction Manager, and Architect/Engineer, 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 and the Master 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.

- i. Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
 - i. Interface requirements.
 - ii. Sequence of operations.
 - iii. Status of submittals.
 - iv. Deliveries.
 - v. Off-site fabrication.
 - vi. Access.
 - vii. Site utilization.
 - viii. Temporary facilities and controls.
 - ix. Progress cleaning.
 - x. Quality and work standards.
 - xi. Status of correction of deficient items.
 - xii. Field observations.
 - xiii. Status of RFIs.
 - xiv. Status of proposal requests.
 - xv. Pending changes.
 - xvi. Status of Change Orders.
 - xvii. Documentation of information for payment requests.
- 4. Minutes: Construction Manager will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's Draft Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised Master Schedule concurrently with the report of each meeting.

- E. Coordination Meetings: Construction Manager will conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
1. Attendees: In addition to representatives Construction Manager, 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 meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Master Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Master 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.
 - b. Schedule Updating: Revise Master Schedule after each coordination meeting where revisions to the Master Schedule have been made or recognized. Issue revised Master Schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - i. Interface requirements.
 - ii. Sequence of operations.
 - iii. Status of submittals.
 - iv. Deliveries.
 - v. Off-site fabrication.
 - vi. Access.
 - vii. Site utilization.
 - viii. Temporary facilities and controls.
 - ix. Work hours.
 - x. Hazards and risks.

- xi. Progress cleaning.
 - xii. Quality and work standards.
 - xiii. Change Orders.
 - 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.
- F. Project Closeout Conference: Construction Manager will schedule and conduct a Project closeout conference, at a time convenient to Owner and Architect/Engineer, but no later than Sixty (60) Days prior to the scheduled date of Substantial Completion.
 - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner, Construction Manager, Architect/Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - b. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - c. Preparation of Contractor's punch list.
 - d. Responsibility for removing temporary facilities and controls
 - e. Requirements for preparing operations and maintenance data
 - f. Requirements for the Submittal of written warranties.
 - g. Requirements for demonstration and training.
 - h. Requirements for submission of record documents, record specifications and record submittals.
 - i. Owner's partial occupancy requirements.
 - j. Coordination of separate contracts for owner related work prior to occupancy.
 - k. Installation of Owner's furniture, fixtures, and equipment.

- I. Responsibility and schedule for final cleaning
- 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION

SECTION 01 3300**SUBMITTAL PROCEDURES****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals. This specification explains the procedures for E-mailed Submittals in PDF format.
- B. Action Submittals: Written and graphic information and physical samples that require Architect/Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as action submittals.
- C. Informational Submittals: Written and graphic information and physical samples that do not require Architect/Engineer'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.
- 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.

1.2 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 modifications to submittals noted by the Architect/Engineer 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 start-up construction schedule. Include submittals required during the first Sixty (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.
 - 4. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 5. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal
 - b. Specification Section number and title

- c. Submittal category: Action, informational
 - d. Name of subcontractor
 - e. Description of the Work covered
 - f. Scheduled date for Architect/Engineer's final review
6. See Section 01 3000 Administrative Requirements for additional requirements.

1.3 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. The Contractor shall prepare a Submittal Schedule containing the information required to be submitted under the Submittal article from each respective Specification Section. With each item listed the Contractor shall provide anticipated dates for submission to the Architect/Engineer. The Architect/Engineer will review and accept or request that corrections be made for subsequent acceptance. This acceptance will constitute an approval for the submittal, shop drawings and sample submissions to commence. **No Submittals or Shop Drawings will be reviewed by the Architect/Engineer until an approved Submittal Schedule is in place.**

- 1. The Submittal Schedule shall be coordinated with the overall Project Schedule to ensure that submittals are submitted and reviewed as not to delay the Project Schedule. The Contractor shall allow adequate processing time for the Architect/Engineer's review of the initial submittal and equivalent time to review re-submissions.
 - 2. The Architect/Engineer will not be responsible to ensure that all required Shop Drawings, Product Data, Samples or similar submittals that are required to be submitted and reviewed under the Contract Document are submitted by the Contractor. Submissions of Shop Drawings, Product Data, Samples or similar submittals are the Contractor's sole responsibility.
- B.** Architect/Engineer's Digital Data Files: Architect/Engineer will not furnish Contractor with digital drawings.
- C.** Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
- 1. Use the submittal cover sheet provided by Architect/Engineer. Fill out the form completely. Submittal cover sheets not indicating that the submission has been reviewed by the submitting contractor will be returned un-reviewed.
 - 2. If additional space is required provide an additional sheet and label to record Contractor's review and approval markings and action taken by Architect/Engineer.
 - 3. 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.
 - 4. Include the following information for processing and recording action taken:
 - a. Project name
 - b. Date
 - c. Name of Architect/Engineer

- d. Name of Contractor
- e. Name of subcontractor
- f. Name of supplier
- g. Name of manufacturer
- h. Submittal number or other unique identifier, including revision identifier.
 - i. Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Re- submittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.R1)
 - ii. Category and type of submittal
 - iii. Submittal purpose and description
 - iv. Number and title of appropriate Specification Section
 - v. Drawing number and detail references, as appropriate
 - vi. Location(s) where product is to be installed, as appropriate
 - vii. Transmittal number, numbered consecutively
 - viii. Submittal and transmittal distribution record
 - ix. Remarks
 - x. Other necessary identification
 - xi. Signature of transmitter
- 5. File Naming: (For emailing): Each submittal or shop drawing file emailed to the designated Architect/Engineer's Representative shall have in the file name, the Specification section number followed by a numerical reference to each product that is submitted. For re-submissions a space will be entered followed by the re-submission number. This will be followed by a space and the following letter reference. (without parenthesis) Include the following information as keywords in the electronic submittal file metadata:

(IS) Incoming Submittal (ISD) Incoming Shop Drawing (R1 or R2) Revision 1, 2 etc.

Example:

Product	Re-submittal	Incoming	
<u>Spec Sec</u>	<u>in Section</u>	<u>(if required)</u>	<u>Submittal</u>
102113	01	R1	IS

The file name should appear as follows: 102113 01 R1 IS pdf.

6. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect/Engineer.
 7. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect/Engineer will return without review submittals received from sources other than Contractor.
- D. Options: Identify options requiring selection by Architect/Engineer.
- E. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect/Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- F. Re-submittals: Make re-submittals 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. Place red 'cloud' marking around all revisions. It is understood that all 'unclouded' information in resubmittals is the same as that provided in previous submissions.
 3. Resubmit submittals until they are marked with "NO EXCEPTION TAKEN" or "FURNISH AS CORRECTED" notation from Architect/Engineer's action stamp.
- G. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, and installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- H. Use for Construction: Retain complete copies of submittals on Project site. Use only action submittals that are marked with "NO EXCEPTION TAKEN" or "FURNISH AS CORRECTED" notation from Architect/Engineer's action stamp.
- I. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.

3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect/Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- J. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect/Engineer'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 Fifteen (15) Days for initial review of each Submittal. Allow additional time if coordination with subsequent submittals is required. Architect/Engineer 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. Re-submittal Review: Allow Ten (10) Days for review of each re-submittal.
 4. Sequential Review: Where sequential review of submittals by Architect/Engineer's consultants, Owner, or other parties is indicated, allow Twenty-one (21) Days for initial review of each Submittal.

1.4 SAMPLES

- A. Only samples requiring color selection, verification of a sample or review of an assembled product should be submitted to the Architect/Engineer for review. A completed Submittal Cover Sheet is to be provided with all submitted samples. If samples are delivered with product data, only the samples will be reviewed.
- B. When action has been taken on the sample(s), only the Submittal Cover Sheet with the corresponding color or selection noted will be returned.

PART 2 PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 1. Submit submittals, except samples, electronically via email as PDF files.
 - a. Architect/Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 2. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 7700 Closeout Procedures.

3. 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.
 4. Test and Inspection Reports Submittals: Comply with requirements specified in Section 01 4000 Quality Requirements.
- B. Product Data: Comply with requirements specified in Section 00 7000 General Conditions, 01 3000 Administrative Requirements and 01 6000 Product Requirements. 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 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. PDF electronic file for emailed submittals

- C. Shop Drawings: Comply with requirements specified in Section 00 7000 General Conditions and 01 3000 Administrative Requirements. 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 which can be printed on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
 3. Submit Shop Drawings in the following format:
 - a. Emailed PDF electronic file.
- D. Samples: Comply with requirements specified in Section 00 7000 General Conditions and 01 3000 Administrative Requirements. 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
 3. 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.
 - 4. 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. Architect/Engineer will return submittal with options selected.
 - 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect/Engineer will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project record sample.
 - i. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - ii. 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 and 01 6000 Product Requirements, 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.
 - 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. PDF electronic file for emailed submittals.
- F. Contractor's Construction Schedule: Comply with requirements specified in Section 00 7000 General Conditions and 01 3000 Administrative Requirements.
- G. Application for Payment: Comply with requirements specified in Section 00 7000 General Conditions.

- H. Schedule of Values: Comply with requirements specified in Sections 00 7000 General Conditions and 01 3000 Administrative Requirements.
- I. 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. Include the following information in tabular form:
1. Name, address, and telephone number of the 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.
 4. Submit subcontract list in the following format:
 - a. PDF electronic file for emailed submittals.
- J. Coordination Drawings: Comply with requirements specified in Section 01 3100 Project Management and Coordination.
- K. 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.
- L. 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 American Welding Society (AWS) forms. Include names of firms and personnel certified.
- M. 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.
- N. 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.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. 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.
- R. Product Test Reports: Submit written reports indicating 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.

- S. 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.
- T. Schedule of Tests and Inspections: Comply with requirements specified in Section 01 4000 Quality Requirements.
- 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 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. Maintenance Data: Comply with requirements specified in Section 01 7823 Operation and Maintenance Data.
- Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect/Engineer.

- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally-signed PDF electronic file 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.

PART 3 EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect/Engineer.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Section 01 7700 Closeout Procedures.
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT/ENGINEER'S ACTION

- A. General: Architect/Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect/Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect/Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows:
1. **No Exception Taken:** Architect/Engineer takes no exception to the submittal. That part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
2. **Furnish as Corrected:** No exceptions taken except what is identified by the Architect/Engineer. The part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
3. **Revise and Resubmit.** Revise the submittal based on the Architect/Engineer's comments and resubmit the submittal. Do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat, if necessary, to obtain a different action mark.
- a. Do not permit submittals marked "Revise and Resubmit" to be used at the Project Site, or elsewhere where Work is in progress.

4. **Rejected** The submittal is rejected. See Architect/Engineer's comments on why submittal was rejected:
 - a. Submittal has not been reviewed by the Contractor and so noted.
 - b. Submittal has been prepared without due regard for information called for or logically implied by the Contract Documents.
 - c. Information is not sufficiently complete or accurate to verify that work represented is in accordance with the Contract Documents.
 - d. Do not permit submittals marked "Rejected" to be used at the Project Site, or elsewhere where Work is in progress.
- C. Informational Submittals: Architect/Engineer will review each submittal and will not return it or will return it if it does not comply with requirements. Architect/Engineer will forward each submittal to appropriate party.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect/Engineer.
- E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded without action.

END OF SECTION

SECTION 01 4000**QUALITY REQUIREMENTS****PART 1 GENERAL****1.1 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.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect/Engineer, Owner, Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections:
 - 1. Section 01 7000 General Conditions for developing a schedule of required tests and inspections.
 - 2. Section 01 4533 Special Inspections for tests and inspections ordered by the Owner.
 - 3. Individual Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and 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 actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect/Engineer or Construction Manager.
- 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.

1. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on Project site, consisting of multiple products, assemblies, and subassemblies.
 2. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.
- D. Preconstruction Testing: Tests and inspections performed specifically for the 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, i.e., 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 or trades.
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 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 Architect/Engineer 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 Architect/Engineer for a decision before proceeding.

1.4 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.
1. Indicate manufacturer and model number of individual components.
 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

1.5 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems.
1. Seismic-force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by the Architect/Engineer.
 2. Main wind-force resisting system or a wind-resisting component listed in the wind-force-resisting system quality assurance plan prepared by the Architect/Engineer.
- B. 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.
- C. 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.

1.6 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 retesting and reinspecting.
- 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.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:

1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement that equipment complies with requirements.
 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions, products, and installation will affect warranty.
 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.7 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. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. 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.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f. When testing is complete, remove test specimens, assemblies, mockups; do not reuse products on Project.
 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect/Engineer, through Construction Manager, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect/Engineer.

2. Demonstrate the proposed range of aesthetic effects and workmanship.
3. Obtain Architect/Engineer's approval of mockups before starting work, fabrication, or construction.
4. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
5. Demolish and remove mockups when directed, unless otherwise indicated.

1.8 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. 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. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
 6. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 3300 Submittal Procedures.
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services

- include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect/Engineer, Construction Manager, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Architect/Engineer, Construction Manager, 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.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 6. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. 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.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.9 SPECIAL INSPECTIONS AND TESTS

- A. Special Tests and Inspections: Owner will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in Statement of Special Inspections, and as follows:
1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
 2. Notifying Architect/Engineer, Construction Manager, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect/Engineer, through Construction Manager, with copy to Contractor and to authorities having jurisdiction.
 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 6. Retesting and reinspecting corrected work.

PART 2 PRODUCTS (Not Applicable)**PART 3 EXECUTION****3.1 TEST AND INSPECTION LOG**

- A. 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 Architect/Engineer.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect/Engineer's and Construction Manager's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 01 7000 Execution Requirements.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 01 4533**SPECIAL INSPECTIONS AND STRUCTURAL TESTING****PART 1 - GENERAL****1.1 GENERAL REQUIREMENTS**

- A. Special Inspections and Structural Testing shall be in accordance with Chapter 17 of the *2020 Building Code of New York State* (BCNYS).

1.2 DEFINITIONS

- A. Registered Design Professional: Licensed Professional Engineer or Registered Architect whose seal appears in the Construction Drawings. Unless noted otherwise, references to the Registered Design Professional in this section refer to the Structural Engineer for building design.
- B. RDP for Geotechnical Engineering: Licensed Professional Engineer whose seal appears on the Geotechnical Investigation. The RDP for Geotechnical Engineering shall perform or oversee Agent 2 services as indicated in the Schedule of Special Inspections. If a Geotechnical Investigation was not performed or if the RDP for Geotechnical Engineering is not retained to perform Agent 2 services, a licensed Geotechnical Engineer shall be retained to perform these duties.
- C. Code Enforcement Official: Officer or other designated authority charged with administration and enforcement of the *2020 New York State Building Code*.
- D. Special Inspector (SI): Professional Engineer licensed in the State of New York acting on behalf of the Owner, that implements the Special Inspection Program for the project.
- E. Testing/Inspecting Agency: Agent retained by Special Inspector or Owner and coordinated by Special Inspector to perform some inspection services on behalf of Special Inspector.
- F. Testing/Inspecting Agency (Agent 1): Professional Engineer licensed in the State of New York that is qualified to perform structural inspections. The Special Inspector shall have a minimum of three years of experience performing inspections for similar projects.
- G. Testing/Inspecting Agency (Agent 2): Professional Geotechnical Engineer licensed in the state of New York, that is qualified to perform inspections for preparation of building subgrades and foundations.
- H. Testing/Inspecting Agency (Agents 3 or 4): Agency or firm qualified to inspect certain structural elements and perform field and laboratory tests to determine the characteristics and quality of building materials and workmanship.
- I. Statement of Special Inspections: Documents prepared by the Registered Design Professional and filed with and approved by the Code Enforcement Official as a condition of

obtaining a building permit. These documents include this specification and the Schedule of Special Inspections [including Special Inspection for Seismic/Wind Resistance.]

- J. Schedule of Special Inspections: An itemized list of inspections, verifications, and tests (including frequency) required for the project and individuals, agencies, or firms who will be retained to perform these services. The Schedule of Special Inspections is located in Drawing S003.
- K. Seismic/Wind-Force-Resisting System: Components of the structural system that provide resistance to seismic/wind forces. These components are identified in the Schedule of Special Inspections.
- L. Inspect and Inspection: Visual observation of materials, equipment, or construction Work as defined in the Statement of Special Inspections, to determine that the Work is in substantial conformance with the requirements of the Contract Documents.
- M. Continuous Special Inspection: Full-time observation of work by the Special Inspector or Testing Agency while the work is being performed.
- N. Periodic Special Inspections: Part-time or intermittent observation of Work by the Special Inspector or Testing Agency for Work that has been or is being performed and at completion of Work.

1.3 QUALIFICATIONS

- A. Special Inspector and Testing/Inspecting Agency shall be accepted by the Registered Design Professional (RDP) and the Code Enforcement Official.
- B. Special Inspections shall be performed by agents who have relevant experience for each category of inspections indicated in the drawings.
- C. Minimum qualifications of inspection agents are indicated in the Contract Documents.

1.4 SUBMITTALS

- A. Special Inspector and Testing/Inspecting Agency shall submit to the Registered Design Professional, Construction Manager, and Owner for review, a copy of their qualifications including names and qualifications of each inspector and technician who will be performing inspections or tests.
- B. Special Inspector and Testing/Inspecting Agency shall disclose past or current business relationship or potential conflict of interest with Contractor or Subcontractors whose work will be inspected or tested.

1.5 PAYMENT

- A. Construction Manager or Owner will engage and pay for services of Special Inspector and Testing/Inspecting Agency.

- B. If materials requiring Special Inspections are fabricated in a plant not within 200 miles of project site, Contractor shall be responsible for travel expenses of Special Inspector or Testing/Inspecting Agency.
- C. Contractor shall be responsible for cost of retesting or reinspection of work failing to comply with requirements of Contract Documents.

1.6 OWNER RESPONSIBILITIES

- A. Construction Manager or Owner will provide Special Inspector with complete set of Contract Documents sealed by the Registered Design Professional and approved by the Code Enforcement Official.

1.7 CONTRACTOR RESPONSIBILITIES

- A. Each Contractor responsible for construction of a seismic/wind-force-resisting system listed in the Schedule of Special Inspections and indicated in drawings shall submit a written Contractor's Statement of Responsibility to the Owner, Special Inspector, and Registered Design Professional prior to commencement of work on system or component. Use form provided at end of this section or other similar form.
- B. Contractor shall cooperate with Special Inspector and its agents so Special Inspections and testing may be performed without hindrance.
- C. As indicated in the Schedule of Special Inspections, Contractor shall notify Construction Manager at least 48 hours in advance of a required inspection or test.
- D. Contractor shall provide incidental labor and facilities to provide access to Work to be inspected or tested, to obtain and handle samples at site or at source of products to be tested, to facilitate tests and inspections, and for storing and curing of test samples.
- E. If Special Inspections or testing require the use of Contractor's scaffolding to access Work areas, Contractor shall provide competent person to perform daily evaluation of scaffolding to verify it is safe to use. Contractor shall notify Special Inspector and Testing Agent of this review before each use. Contractor is responsible for safe assembly and stability of scaffolding.
- F. Contractor shall keep latest set of Construction Drawings, field sketches, accepted shop drawings, and Specifications at Project Site for field use by Inspectors and Testing Technicians.
- G. Contractor shall perform remedial Work if required and sign nonconformance reports stating remedial work has been completed. Contractor shall submit signed reports to Special Inspector as Work proceeds.
- H. The Special Inspection program shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents or from implementing an effective Quality Control program.

- I. Contractor shall be solely responsible for construction site safety.

1.8 SPECIAL INSPECTOR RESPONSIBILITIES

- A. Special Inspector shall hold a Special Inspections preconstruction meeting at least seven (7) days prior to initial planned date for start of construction. Attendees shall include Contractors, Owner, Construction Manager, Testing Agency, Special Inspector, and Registered Design Professionals for Structural Engineering and for Architecture. Discussions shall include the following:
 1. Review of Specifications and Schedule of Special Inspections for work requiring Special Inspections.
 2. Responsibilities of Contractors, Owner, Construction Manager, Testing Agency, Special Inspector, and Registered Design Professional.
 3. Notification and reporting procedures.
- B. Special Inspector shall record and distribute minutes from the Special Inspection Preconstruction meeting.
- C. Special Inspector shall review inspection and material testing reports and coordinate the services of the Testing/Inspecting Agencies as follows:
 1. Verify inspections have been performed in accordance with the Schedule of Special Inspections.
 2. Verify reports are being distributed to the Contractor, Owner, Architect, Construction Manager, and Registered Design Professional (RDP) for Structural Engineering.
 3. Verify discrepancies have been recorded and are being tracked.
- D. Special Inspector shall make site visits to inspect work as designated in the Statement of Special Inspections. Discrepancies will be brought to the attention of the Contractor, Construction Manager, and RDP.
- E. Special Inspector shall keep records of inspections.
- F. Special Inspector shall review Certificates of Compliance for conformance with the standards specified in the Contract Documents. Discrepancies will be brought to the attention of the Contractor, Construction Manager, and RDP.
- G. Special Inspector shall submit a final report of Special Inspections in accordance with Section 3.4 of this specification.

1.9 LIMITS ON AUTHORITY

- A. Special Inspector or Testing/Inspecting Agency shall not release, revoke, alter, or enlarge on requirements of Contract Documents.
- B. Special Inspector or Testing/Inspecting Agency shall not have control over Contractor's means and methods of construction.

- C. Special Inspector or Testing/Inspecting Agency shall not be responsible for construction site safety.
- D. Special Inspector or Testing/Inspecting Agency shall not have authority to stop work.

PART 2 - INSPECTIONS AND TESTING

2.1 EXCAVATION, BACKFILL, COMPACTION, AND DEEP FOUNDATIONS (BUILDING AREA)

- A. Special Inspector shall perform inspections and verifications or coordinate the RDP for Geotechnical Engineering to perform inspections and verifications including the following:
 - 1. Identify soils requiring undercutting and replacing while observing proof rolling and when subgrade is exposed.
 - 2. Verify footing bearing strata.
 - 3. Review and accept materials proposed by Contractor for use as compacted fill based on test data and information submitted by Testing Agency. Material approval shall be based on requirements and recommendations stated in Project Geotechnical and Subsurface Investigation.
 - 4. Observe and accept filling and compaction procedures.
 - 5. Observe and accept preparation of slab-on-grade subgrade and subbase.
- B. Testing Agency shall perform field density tests for building subgrades and for fill materials including slab subbase within building area in accordance with ASTM D 6938 as follows:
 - 1. Footing subgrade and each stratum of soil on which footings will be placed.
 - 2. Building subgrade including slab subbase and each lift of compacted material.
 - 3. Inspect each subgrade and fill layer before further backfill or construction work is performed. Approval shall be based on satisfactory achievement of compaction criteria.
 - 4. Verify use of fill material and lift thicknesses in field.
- C. Testing Agency shall perform moisture content testing of slab subbase in accordance with ASTM D 6938.

2.2 CAST-IN-PLACE CONCRETE

- A. Special Inspector shall perform the following:
 - 1. Inspect reinforcing steel and placement.
 - 2. Inspect embedded bolts and anchor rods prior to concrete placement.
- B. Testing Agency shall perform the following:
 - 1. Verify use of required design mix.
 - 2. Sample and test concrete during placement as follows. Test shall be taken at point of discharge into structure:
 - a. Record specific locations where concrete was placed. Refer to column lines where possible.

- b. For every third truck, record time concrete is batched as shown in truck ticket, time placement begins/sample time, and time truck is emptied.
- c. For every third truck, sample fresh concrete in accordance with ASTM C 172, except modified for slump to comply with ASTM C 94.
- d. For every third truck, perform slump test in accordance with ASTM C 143. Perform two slump tests for pumped concrete; one at truck and one at point of discharge.
- e. For normal-weight concrete, measure air content in accordance with ASTM C 231, pressure method.
- g. Record temperature of concrete for each truck. Test in-place concrete temperature hourly when ambient temperature is 40 degrees F and below and when 80 degrees F and above.
- h. Record air temperature and general weather conditions (cloudy, windy, sunny, etc.).
- i. Record unit weight of fresh normal-weight concrete in accordance with ASTM C 138. Perform one test for each 50 cubic yard of concrete.
- j. Perform concrete compressive tests as follows:
 - I. Prepare compressive test specimens in accordance with ASTM C 31. Take a set of six 6 x 12 cylinders or nine 4 x 8 cylinders for each 50 cubic yards of concrete or each 5,000 square feet of slab area for each type of concrete. Store undisturbed in insulated box during cold weather. Deliver to laboratory between 16 and 32 hours after making. Perform compressive tests in accordance with ASTM C 39: two 6 x 12 specimens (three 4 x 8 specimens) tested at 7 days, two 6 x 12 specimens (three 4 x 8 specimens) tested at 28 days, and two 6 x 12 specimens (three 4 x 8 specimens) retained for later testing if required.
 - II. In cold weather or whenever steel erection is scheduled to commence less than 14 days after placement of supporting foundation concrete, cast additional set of four 6 x 12 specimens (six 4 x 8 specimens) for each 50 cubic yards or fraction thereof of supporting foundation concrete. Field-cure cylinders, and test two 6 x 12 specimens (three 4 x 8 specimens) at 7 days, retaining two 6 x 12 specimens (three 4 x 8 specimens) for later testing if required. Steel erection may not begin until supporting concrete obtains 75 percent of its design strength.
 - III. If concrete will be placed in separate buildings on a given project, make individual compressive strength test cylinders for each building.
- k. Perform additional testing as follows if required:
 - I. Take additional set of cylinders for compressive strength testing for each truck in which total time period between batching and completing placement has exceeded ACI-recommended, 90-minute-maximum time limit. Take additional cylinders within 10 minutes of placement completion.
 - II. Make additional tests of in-place concrete when test results indicate specified concrete strengths or other characteristics have not been attained in structure.
 - III. Perform tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods acceptable to Architect.
 - IV. Contractor shall reimburse Owner for cost of additional tests.
- 3. Inspect concrete placement for proper application techniques.
- 4. Inspect for maintenance of specified curing temperature and techniques.

2.3 UNIT MASONRY

- A. Special Inspector shall perform the following:

1. As masonry construction begins, the following shall be verified to ensure compliance:
 - a. Construction of mortar joints.
 - b. Location of joint reinforcement and connectors.
 2. Verify:
 - a. Size and location of structural elements.
 - b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.
 - c. Specified size, grade, and type of reinforcement.
 - d. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).
 3. Prior to grouting, verify:
 - a. Grout space is clean.
 - b. Placement of reinforcement and connectors.
 - d. Construction of mortar joints.
 4. Verify grout placement to ensure compliance with code and Construction Document provisions.
 - a. Grouting of CMU cells.
- B. Testing Agency shall perform the following:
1. Verify for compliance with approved submittals:
 - a. Proportions of site-prepared mortar.
 2. Observe preparation of required mortar specimens and grout specimens in accordance with ASTM C 780, ASTM C 1019, and ASTM C 1314 Rev B.
 3. Field Quality Control Testing: Perform tests and evaluations listed below during construction for each 5,000 square feet of wall area or portion thereof.
 - a. Sample and evaluate mortar composition and properties in accordance with ASTM C 780.
 - b. Sample and test grout compressive strength in accordance with ASTM C 1019.

2.4 STRUCTURAL STEEL AND METAL DECK

- A. Special Inspector shall perform the following:
1. Verify Fabricator maintains detailed fabrication and Quality Control procedures:
 - a. Review procedures for completeness and adequacy relative to code requirements.
 - b. If Fabricator is designated as AISC-Certified Fabricator, Special Inspection for shop-fabricated members and assemblies is not required.
 - c. If Fabricator is not designated as AISC-Certified Fabricator, Contractor shall reimburse Owner via execution of credit change order for cost of Special Inspections and testing in Fabricator's shop.
 2. Review manufacturer's Certificates of Compliance for high-strength bolts and weld filler material.
 3. Review certified mill test reports.
 4. Inspect steel frame joint details for compliance with approved Construction Documents.

B. Testing Agency shall perform the following:

1. Material verification of high-strength bolts, nuts, and washers, including review of identification markings and manufacturer's Certificate of Compliance.
 - a. Test high-strength bolt assemblies in a tension measuring device to verify material conformance prior to installation. Assemble bolt, nut, and washer on a loose plate and tension by tightening nut to develop required tension in Table 4 of "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
2. Verification that copies of accepted field welding procedure specifications are available on site for reference by erector's welders.
3. Verification that erector's welder's qualifications are current and appropriate for joint type, welding position, and welding process to be used.
4. Inspect high-strength bolting.
 - a. Joints designated as snug tight require only visual inspection.
5. Material verification of structural steel and metal deck, including review of identification markings.
6. Perform pull-out tests on adhesive anchors.
7. Material verification of weld filler materials, including review of identification markings.
8. Inspect welding of structural steel and metal deck.
 - a. Visually inspect welds according to AWS.
 - b. Schedule inspection of field welding in timely manner utilizing vertical access means and methods utilized by Contractor to perform the welding.
9. Inspect condition of erected materials.
 - a. Visually inspect erected steel for damage.
 - b. Visually inspect connections and framing to verify compliance with Contract Documents and accepted shop drawings.
10. Inspect column plumbness:
 - a. Inspect erected columns for plumbness within tolerances specified in Section 051200, Part 3: Execution.
11. Additional testing shall be performed as follows if required.
 - a. Testing Agency shall perform additional tests of connections and framing members field modified by Contractor to correct errors in shop drawings, fabrication, or erection.
 - b. Anchor rods and embedded structural supports incorrectly located or damaged after installation shall be field modified by Contractor as indicated in Section 033000, Paragraph 3.4 and tested by Testing Agency.
 - c. Testing and reporting of field modifications shall be in accordance with this section, Special Inspections, and have the following additional requirements:
 - I. Magnetic particle inspection according to ASTM E 709 is required for 100 percent of fillet welds.
 - II. Perform pull-out tests on 100 percent of each type of adhesive anchor used by applying a load equal to 125 percent of allowable pull-out strength listed in manufacturer's literature.
 - d. Contractor shall reimburse Owner for cost of additional tests performed.

2.5 COLD-FORMED METAL FRAMING

A. Special Inspector shall perform the following:

1. Verify Fabricator maintains detailed fabrication and Quality Control procedures:
 - a. For Fabricators not previously registered and approved to perform such work without Special Inspection, review Quality Control procedures for completeness and adequacy relative to code requirements for Fabricator's scope of work.
 2. Visually inspect installation of clips and miscellaneous connectors.
 3. Visually inspect framing and details.
- B. Testing Agent shall perform the following:
1. Verify member size and thickness.
 2. Verify weight of galvanized coating according to ASTM A 90.
 3. Visually inspect framing for damage.
 4. Visually inspect welds according to AWS.
 5. Perform pull-out tests on adhesive anchors.

PART 3 - DOCUMENTATION

3.1 RECORDS AND REPORTS

- A. Prepare detailed reports of each test or inspection. Include the following general information:
1. Project name and number.
 2. Date of test or inspection.
 3. Name of Testing Agency or Inspecting Agency.
 4. Name of technician or inspector.
 5. Weather conditions.
 6. Locations and elevations of specific areas tested or inspected referenced to grid lines.
 7. Description of test or inspection.
 8. Reference to applicable ASTM standard.
 9. Summary of observations, results, and recommendations.
 10. Description of areas or materials requiring retesting or reinspection.
- B. Reports for each drilled pile or pier shall contain the following information:
1. Elevation of bottom and top.
 2. Centerline location at top.
 3. Variation of shaft from plumb.
 4. Elevation of top and bottom of casings left in place.
 5. Volume of grout or concrete in each pile or pier.
 6. Condition of bearing strata and verification of review by RDP for Geotechnical Engineering.
 7. Water seepage.
 8. Unusual conditions.
 9. Delays in placement of grout or concrete, and location of construction joints in shafts.

10. Dates of starting excavation or drilling, completion of excavation or drilling, inspections, and placement of concrete.
 11. Number of blows for every foot penetration and rate of penetration under last five blows of hammer.
 12. Kind and size of hammer used in driving.
- C. Concrete compressive strength test reports shall contain the following information:
1. Name of Contractor and concrete supplier.
 2. Name of concrete testing service.
 3. Name of technician making and testing specimens.
 4. Truck number and delivery ticket number.
 5. Date and location within structure of concrete placement.
 6. Concrete type, class, mix proportions of materials, and design compressive strength at 28 days.
 7. Slump, air content, unit weight, and concrete temperature.
 8. Total time period between batching and completing placement for each truck.
 9. Compressive strength and type of break for tests.
- D. Field reports for concrete inspection shall contain general information noted above plus ambient temperature and cylinder numbers.
- E. Test reports for masonry materials shall include proportions, composition, and compressive strength.

3.2 COMMUNICATION

- A. Testing/Inspecting Agency shall immediately notify Contractor, Owner and Construction Manager, Special Inspector, and Registered Design Professional by telephone, fax, or e-mail of test results failing to comply with requirements of Contract Documents.
- B. Special Inspector shall immediately notify Contractor, Owner and Construction Manager of Work found to be in nonconformance with Contract Documents during inspections. If nonconforming Work is not corrected while Special Inspector is on-site, Special Inspector shall notify Registered Design Professional within 24 hours (one business day) and issue an inspection report noting the non-conformance.
- C. Special Inspector and each Testing/Inspecting Agent shall use a log to record and track non-conforming Work during construction. Non-Conformance log shall include the following information:
1. Description of non-conformance.
 2. Date of non-conformance.
 3. Description of RDP response if received.
 4. Status of nonconformance: 'Open' or 'Closed.'

Updated log shall be attached to each inspection report. Special Inspector or Testing/Inspecting Agent may use Non-Conformance Log form provided at end of this section or other similar form.

- D. If non-conforming Work is not corrected at time of substantial completion of structure or other appropriate time, Special Inspector shall notify Code Enforcement Official.

3.3 DISTRIBUTION OF REPORTS

- A. Testing/Inspecting Agency shall submit reports to Special Inspector and Registered Design Professional within 7 days of inspection or test. Legible handwritten reports may be submitted if final typed copies are not available.
- B. Special Inspector shall distribute reports to the Contractor, Owner, Architect, Construction Manager, and RDP for Structural Engineering within 7 days of inspections. Legible handwritten reports may be submitted if final typed copies are not available.
- C. If requested by the Owner, Special Inspector shall submit interim reports that include inspections and tests performed since beginning of construction or since previous interim report. Interim reports shall be addressed to the Owner with copies sent to the Registered Design Professionals (Structural Engineer and Architect) and Contractor. Interim reports shall be signed by Agent performing inspections.

3.4 FINAL REPORT OF SPECIAL INSPECTIONS

- A. At completion of Work, each Testing/Inspecting Agency shall submit Agent's Final Report of Special Inspections to Special Inspector stating Work was completed in substantial conformance with Contract Documents and appropriate inspections and tests were performed. Testing/Inspecting Agency may use Agent's Final Report of Special Inspections form provided at end of this Section or other similar form.
- B. At completion of work, Special Inspector shall compile a Final Report of Special Inspections including each Agent's Final Report of Special Inspections. The Final Report of Special Inspections shall state required inspections have been performed and itemize nonconforming work not corrected or resolved as required by the 2020 Building Code of New York State. Interim reports from all Agents will not be included unless specifically requested by the Owner or Construction Manager. The Final Report shall be stamped by a New York State Professional Engineer.
- C. Special Inspector may use Final Report of Special Inspections form provided at end of this section or other similar form based on CASE Form 102-2001.
- D. Special Inspector shall submit Final Report of Special Inspections to Registered Design Professional, Construction Manager and Owner prior to issuance of a Certificate of Use and Occupancy.

END OF SECTION

SECTION 01 5000**TEMPORARY FACILITIES AND CONTROLS****PART 1 - GENERAL****1.1 SUMMARY**

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Water service and distribution.
 - 2. Temporary electric power and light.
 - 3. Temporary heat.
 - 4. Ventilation.
 - 5. Telephone service.
 - 6. Sanitary facilities, including drinking water.
 - 7. Storm and sanitary sewer.
- C. Support facilities include, but are not limited to, the following:
 - 1. Field offices and storage sheds.
 - 2. Architect-Engineers field office.
 - 3. Temporary roads and paving.
 - 4. Dewatering facilities and drains.
 - 5. Temporary enclosures.
 - 6. Hoists and temporary elevator use.
 - 7. Temporary project identification signs and bulletin boards.
 - 8. Waste disposal services.
 - 9. Rodent and pest control.
 - 10. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities include, but are not limited to, the following:
 - 1. Temporary fire protection.
 - 2. Barricades, warning signs, and lights.
 - 3. Environmental protection.
 - 4. Tree and plant protection.
 - 5. Pest control.
 - 6. Security enclosure and lockup.
 - 7. Temporary enclosures.
 - 8. Temporary partitions.

1.2 DIVISION OF RESPONSIBILITIES

- A. General: Each Contractor is specifically assigned certain responsibilities for temporary services and facilities to be used by other Contractors, and other separate entities at the Site, Owner's workforces, Construction Manager, Architect-Engineer, testing agencies, personnel of governing authorities, and personnel authorized to be at Project Site during contract time. The General Construction Contractor is responsible for providing temporary facilities and controls that are not normal construction activities of other Contractors and are not specifically assigned otherwise by the Contract Documents.

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities are not chargeable to the Owner or the Architect-Engineer. The Architect-Engineer will not accept a Contractor's cost or use charges for temporary services or facilities as a basis of claim for an adjustment in the Contract Sum or the Contract Time.
- B. Water Service: Use water from the Owner's existing water system without metering and without payment of use charges. Access to water shall be designated by the Owner.
- C. Electric Power Service: Temporary electric power including set-up, maintenance and use charges is the responsibility of the Electrical Contractor.
 - 1. Use electric power from the Owner's permanent power system (when operational) will be granted to all Contractors without payment of use charges.
- D. Temporary Heating, Cooling, and Ventilation for the Building: The General Construction Contractor is responsible for temporary building heating if needed, cooling, and ventilation, and shall pay for all utility use charges. Electric heat may not be used.

1.4 SUBMITTALS

- A. Temporary Utilities: The Contractor shall submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.
- B. Implementation and Termination Schedule: Within fifteen (15) days of the date established for submittal of the Contractor's Construction Schedule, each Contractor shall submit a schedule indicating implementation and termination of each temporary utility for which the Contractor is responsible.
- C. Temporary Signage: Provide shop drawings, indicating the size and layout of the signs, color choices for Owner selection and installation details.

1.5 QUALITY ASSURANCE

- A. Regulations: The Contractor shall comply with industry standards and with applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, fire department and rescue squad rules.
 - 5. Environmental protection regulations.
- B. Standards: The Contractor shall comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions.
 - 2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- C. Inspections: Arrange for Authorities Having Jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Temporary Utilities: The Contractor shall prepare a schedule indicating dates for implementation and termination of each temporary utility for which the Contractor is responsible. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.
1. Temporary Use of Permanent Facilities: The Installer of each permanent service shall assume responsibility for its operation, maintenance, and protection during use as a construction facility prior to the Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

PART 2 - PRODUCTS**2.1 MATERIALS**

- A. General: The Contractor shall provide new materials. If acceptable to the Architect-Engineer, undamaged, previously used materials in serviceable condition may be used. Provide materials suitable for use intended.
- B. Lumber and Plywood: Comply with requirements in Division 6 Section "Rough Carpentry."
1. For job-built temporary offices, shops, and sheds within the construction area, provide UL-labeled, fire-treated lumber and plywood for framing, sheathing, and siding.
2. For signs and directory boards, provide exterior-type, Grade B-B high-density concrete form overlay plywood of sizes and thicknesses indicated.
3. For fences and vision barriers, provide minimum 3/8-inch- thick exterior plywood.
4. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8-inch- thick exterior plywood.
- C. Pavement: Comply with Division 2 Pavement Sections.
- D. Insulation: Unfaced mineral-fiber blanket manufactured from glass, slag wool, or rock wool; with maximum flame spread and smoke developed indices of 25 and 50, respectively.
- E. Gypsum Wallboard: Provide gypsum wallboard on interior walls of temporary offices.
- F. Roofing Materials: Provide UL Class A standard-weight asphalt shingles or UL Class C mineral-surfaced roll roofing on roofs of job-built temporary offices, shops, and sheds.
- G. Paint: Comply with requirements of Division 9 Section "Painting."
1. For job-built temporary offices, shops, sheds, fences, and other exposed lumber and plywood, provide exterior-grade acrylic-latex emulsion over exterior primer.
2. For sign panels and applied graphics, provide exterior-grade alkyd gloss enamel over exterior primer.
3. For interior walls of temporary offices, provide 2 coats interior latex-flat wall paint.
- H. Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.
- I. Water: Provide potable water approved by local health authorities.
- J. Open-Mesh Fencing: Provide 0.12-inch- thick, galvanized 2-inch chainlink fabric fencing 6 feet high with galvanized barbed-wire top strand and galvanized steel pipe posts, 1-1/2 inches I.D. for line posts and 2-1/2 inches I.D. for corner posts.

2.2 EQUIPMENT

- A. General: The Contractor shall provide new equipment. If acceptable to the Architect-Engineer, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.
- B. Water Hoses: Provide ¾-inch heavy-duty, abrasion-resistant, flexible rubber hoses 100 feet long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.
- C. Electrical Outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.
- D. Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
- E. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered-glass enclosures, where exposed to breakage. Provide exterior fixtures where exposed to moisture.
- F. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.
- G. Temporary Offices: Each Contractor shall provide its own prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows, and serviceable finishes. Provide heated and air-conditioned units on foundations adequate for normal loading.
- H. Temporary Toilet Units: Provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
- I. Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

PART 3 - EXECUTION

3.1 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with company recommendations.
 - 1. Arrange with the company and existing users for a time when service can be interrupted, if necessary, to make connections for temporary services.
 - 2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
 - 3. Obtain easements to bring temporary utilities to the site where the Owner's easements cannot be used for that purpose.

- B. Water Service: The Plumbing Contractor shall provide and maintain temporary water service and distribution piping of sizes and pressures adequate for construction and hose bibs on Site as to provide service to all areas of construction activities as directed by the Architect-Engineer, as required throughout the construction period.
1. Water service shall be potable and modified as required or as directed by the Architect-Engineer, as Work progressed.
 - a. Sterilization: Sterilize temporary water piping prior to use.
 2. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel who handle materials that require wash up. Dispose of drainage properly. Supply cleaning compounds appropriate for each type of material handled.
 3. Drinking Water Facilities: Provide bottled water drinking water units.
 - a. Where power is accessible, the Plumbing Contractor shall provide electric water coolers to maintain dispensed water temperature at 45 to 55 deg F. Provide one per floor.
 - b. Each Contractor shall provide containerized, tap-dispenser, bottled-water drinking-water units, including paper cup supply.
 4. Provide safety showers, eyewash fountains, and similar facilities for convenience, safety, and sanitation of personnel.
 5. Users shall provide their own hoses to points of need, but shall practice prudent conservation.
- C. Temporary Electric Power Service: The Electrical Contractor shall provide and maintain temporary electric service consisting of main power hook-up and panel board and temporary lighting for site and existing building. Temporary service shall be maintained during all work days, and shall comply with all codes and regulations. System shall be modified as required or as directed by the Construction Manager as Work progresses. Each Prime shall provide power distribution for its own use from EC's panel.
- Electrical service:
1. Obtain temporary service from existing building service or local power pole. If practical, power to each location shall be tapped at transformer vault or main distribution panel, ahead of main breakers to minimize demand on service equipment from operations. Overcurrent protection shall be installed as required.
 2. Provide disconnect at connection to service.
 3. Provide service conductors and equipment.
 4. Minimum power characteristics: 240/120 volt, single phase.
 5. Provide distribution equipment, feeders, and branch circuit panelboards to serve:
 - a. Temporary lighting.
 - b. Temporary convenience receptacles. (4 gang outlet boxes to allow for 50' extension cord; enough to accommodate requirements of the entire building).
 - c. To accommodate construction operations requiring power, use of power tools, electric heating and start up testing of permanent electric powered equipment prior to its permanent connection to electrical system.
 6. Each Contractor shall provide its own extension lines, and other special equipment; welding equipment shall run from generator trucks.
 7. The Electrical Contractor shall be responsible for initial connections and final demolition of all temporary fixtures and wiring at direction of the Construction Manager.
 8. Security lighting for building exteriors shall be continuously operational and maintained. Electrical Contractor to provide three (3) @ 500 Watt exterior halogen lights each **ON SITE TO BE LOCATED**.
 9. The Electrical Contractor shall maintain OSHA standards for power and foot candle levels in all areas while workers occupy the space. The temporary lighting shall be energized daily at 6:50 A.M. to 4:35 P.M. as a minimum duration until permanent fixtures are installed.
 10. Not unlike other equipment in this Contract, upon installation, the temporary electric system becomes the property of the Owner and shall not be controlled by any one Contractor.

11. Temporary Site Lighting: Electrical Contractor to maintain existing exterior Lighting to adequately light the entrances and exits of Project Site. Temporary lighting shall be controlled by time clocks and lighting contactors; settings to be coordinated by the Construction Manager.
 12. Each Contractor will be responsible for hookup of their own project trailers to temporary electric pedestal. If abused, power from temporary service will be disconnected. The Electrical Contractor shall erect poles safely sufficient for site power and telephone service. All installations shall conform to strictest standards. The Electrical Contractor shall disconnect all items upon Project completion.
- D. Temporary Lighting: When an overhead floor or roof deck has been installed, the Electrical Contractor shall provide temporary lighting with local switching.
1. Install and operate temporary lighting that will fulfill security and protection requirements without operating the entire system. Provide temporary lighting that will provide adequate illumination for construction operations and traffic conditions.
 - a. Temporary lighting shall be maintained in accordance with OSHA standards for power and foot candle levels in all areas while workers occupy the space.
 2. Temporary lighting shall be controlled by time clocks and lighting contactors; settings to be coordinated by the Architect-Engineer.
- E. Temporary Heat:
1. Upon enclosure of the new building (by either temporary barriers or permanent wall systems) or as indicated by the milestone schedule, whichever is sooner, the General Construction Contractor shall provide temporary heating equipment and all fuel necessary to continue construction Work at proper heated conditions in the buildings. The means and methods shall be as field determined for specific buildings and/or areas. In no case shall temperature be less than 50°F; electrical power and connections shall be by Electrical Contractor; gas piping by the Plumbing Contractor. Ventilation requirements by the General Construction Contractor.
 2. The General Construction Contractor shall provide manpower for maintenance, operation and supervision for the temporary heating system, first and second shifts where applicable.
 3. The Owner will not accept utilization of permanent HVAC system for temporary heat until project acceptance.
 4. Temporary heating plants utilizing electric power as energy source, shall not be used on this project.
 5. Temporary Heating and Cooling for Isolated work area: Each Contractor shall provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required and minimize energy consumption.
 6. Use of gasoline-burning space heaters, open flame, or salamander-type heating units is prohibited.
- F. Temporary Telephones: Each Contractor shall provide temporary telephone service throughout the construction period for all personnel engaged in construction activities.
1. Contractors are required to lease or purchase a cellular telephone – to be used by their Site superintendents for communication with the other primes and the Architect-Engineer.
 2. Provide telephone lines for the following:
 - a. Provide a dedicated data line in each Contractor's field office.
 - b. At each telephone, post a list of important telephone numbers.
- G. Sanitary Facilities: The General Construction Contractor shall provide temporary portable chemical toilet facilities for all construction personnel. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.

1. Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Provide covered waste containers for used material.
2. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
 - a. Provide separate facilities for male and female personnel.

H. Temporary Construction:

1. Temporary bridging, decks, hoists, lifts, scaffolding, and cranes shall be the responsibility of Contractor requiring same.
2. Provide temporary partitions to separate construction area from adjacent occupied areas. Construct partitions with non-combustible materials or fire-retardant plywood and seal seams and gaps to control transmission of dust to occupied areas. After completion of work, remove partitions and restore surfaces damaged by temporary provisions. This work is the responsibility of the General Construction Contractor.
3. Temporary perimeter and stairwell barricades at grade changes and multiple levels, shall be installed and maintained under the General Construction Contractor; if a Contractor should need to temporarily relocate barrier, same Contractor shall protect personnel in the area and replace barrier to original location. This clause does not void any Contractor's liability to maintain a safe work site, but merely to assign temporary work to one Contractor.
4. Temporary entrances and exits to the building, shall be furnished, installed and maintained under the General Construction Contractor as directed by the Construction Manager. Exits shall be maintained for exiting in emergency conditions until permanent structures are in place.

I. Daily cleanup

1. Dumpsters are to be provided by the General Construction Contractor. Dumpsters will be inspected and removed and hauled to a recycling center off site for processing. General Construction Contractor will not be responsible for the removal of any hazardous materials, this will be the responsibility of the Contractor doing the same.
2. The maintenance of a clean work site shall be the responsibility of each Contractor.
3. Each Contractor shall remove own debris daily from work area to waste disposal containers (dumpsters), time lapse not acceptable.
4. The condition of cleanliness in which an area is found, is the condition each Contractor shall leave.
5. Each and every Contractor working on Site shall submit manpower on Friday at 8:00 A.M. to work as a team to remove debris to dumpsters until complete. At discretion of Construction Manager, a Contractor not complying may be back-charged for work performed by others. The responsibility of broom cleaning and debris disposal remains with General Construction Contractor and shall include use of sweeping compound.
6. Final cleaning shall be the responsibility of each Contractor for its own Work.
7. Protection of Work: Each Contractor is reminded to temporarily protect Work in place until accepted by the Owner per Article 10 of the General Conditions of the Contract.
8. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 3 days during normal weather or 1 day when the temperature is expected to rise above 80°F (27°C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material lawfully. First aid requirements are the responsibility of each Contractor.

3.2 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Each Contractor shall provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
- C. Each Contractor will be responsible for hookup of their own project trailers. Use of energy, including heat (shall be set back at night) if practical from electric service will be available. If abused, power from temporary service will be disconnected. All installations shall conform to strictest standards.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Locate field offices, storage sheds, sanitary facilities, and other temporary construction and support facilities for easy access as directed by the Construction Manager.
 - 1. Maintain support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.
- B. Provide incombustible construction for offices, shops, and sheds located within the construction area or within 30 feet of building lines. Comply with requirements of NFPA 241.
- C. Field Offices: The General Construction Contractor shall provide the Construction Manager an insulated, weathertight temporary office of sufficient size to accommodate required office personnel at the Project Site. Regular cleanings for use for small meetings. Furnish and equip offices as follows:
 - 1. Furniture: Furnish with a desk and chairs, a 2-drawer file cabinet, plan table, plan rack, and a bookcase.
 - 2. Equip with a water cooler and private toilet complete with water closet, lavatory, and medicine cabinet unit with first aid box.
- D. Storage and Fabrication Sheds: Install storage and fabrication sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility service. Sheds may be open shelters or fully enclosed spaces within the building or elsewhere on-site.
- E. Temporary Parking/Staging and Access Roads
 - 1. Temporary roads are installed and/or maintained by General Construction Contractor where designated on site logistics plans.
 - 2. Contractors will be permitted to utilize existing roads, as designated by Owner - if required.
 - 3. Road Cleaning: Maintain roads and walkways in an acceptably clean condition. This includes the removal of debris daily, if required, and/or a minimum of once a week due to all project traffic. Road cleaning equipment to be wet/vacuum type. General Construction Contractor will clean the roads affected by its Contract Work. The General Construction Contractor will maintain roads until Final Completion.
 - 4. Snow Plowing: General Construction Contractor will provide snow plowing of temporary road, parking area, access route, and a 5' walkway to all office trailers.
 - 5. Snow Removal: General Construction Contractor will provide snow removal within temporary fence area.
 - 6. Contractor Parking/ Staging Area: General Construction Contractor shall maintain access for suitable parking areas as indicated on Logistics plans. Re-grade, re-seed and restore any areas disturbed by parking/ staging.

- a. Parking Areas: Includes Contractors' employees and construction vehicle parking. Minimum of 6" reference Item. #304.3 course.
 - b. Access Roads: Includes access roads for delivery through staging area to building Work areas, and to equipment and storage areas and sheds. Minimum of 9" reference Item. #304.3 course.
 7. Temporary parking by construction personnel shall be allowed only in areas so designated.
 8. Traffic Regulations:
 - a. Utilize only entrances/temporary roads as designated
 - b. Construction parking will not be allowed adjacent to residential buildings, additions or monuments.
 9. Traffic Controls: General Construction Contractor shall provide temporary traffic controls at junction of temporary roads with public roads. Include warning signs for public traffic and "STOP" signs for entrance onto public roads. Comply with requirements of authorities having jurisdiction. This Contract will also provide all barricades required sidewalks on the Site and surrounding County property.
- F. De-watering Facilities and Drains:
1. For temporary drainage and dewatering facilities and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division 02 Sections. Where feasible, use the same facilities. Maintain the Site, excavations, and construction free of water.
 2. For temporary drainage and de-watering facilities and operations directly associated with the building and other construction activities, comply with Division 02; General Construction Contractor is directly responsible for de-watering of all excavations.
- G. Temporary Enclosures / Signage: The General Construction Contractor shall provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations, and similar activities as follows unless otherwise noted:
1. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 sq. ft. (2.3 sq. m) or less with plywood of similar materials.
 2. Close openings through floor decks and horizontal surfaces with load-bearing, wood-framed construction.
 3. Where temporary wood or plywood enclosure exceeds 100 sq. ft. (9.2 sq. m) in area, use UL-labeled, fire-retardant treated material for framing and main sheathing.
 4. Generally, temporary closures for specific openings for a prime contractor to perform their work openings are the responsibility of Contractor creating the opening and shall be installed to protect building from exterior elements.
 5. Temporary partitions shall be installed at all openings where additions connect to existing buildings, and where required to protect areas, spaces, property, personnel, students, and faculty; to separate and control dust, debris, noise, access, sight, fire areas, safety and security and to separate phased construction areas per the phasing plan. Temporary partitions shall be installed and maintained. Construction material and methods to suit need as determined by Construction Manager.
 6. Temporary Lifts and Hoists: Provide facilities for hoisting materials and employees. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
 7. Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors as follows: The General Construction Contractor shall furnish and install construction signage as required:

- a. Engage an experienced sign painter to apply graphics. Comply with details indicated.
 - b. For construction traffic control/flow at entrances/exits, as designated by the Owner (4 required)
 - c. To direct visitors (1 required)
 - d. For construction parking (1 required)
 - e. To direct deliveries (2 required)
 - f. For warning signs as required
 - g. Per OSHA standards as necessary
 - h. Per DOL standards as necessary
 - i. For trailer identification
 - j. Temporary exit signs
- H. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than seven (7) days during normal weather or three (3) days when the temperature is expected to rise above 80 deg F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material lawfully.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Operations of the Contractor may not block, hinder, impede, or otherwise inhibit the safe and expeditious exiting of the building's occupants during an emergency.
- B. In the event of an emergency, (designated by the sounding of the fire alarm system) all construction activities must immediately cease. Contractor's Work force will evacuate themselves from Work areas and remain outside of Work areas until the "all clear" is given. No Work operations will be tolerated during the evacuation of the building or during an emergency.
- C. Temporary Facility Changeover: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion, or longer, as requested by the Architect-Engineer.
- D. Temporary Fire Protection: General Construction Contractor shall provide, until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10, "Standard for Portable Fire Extinguishers," and NFPA 241, "Standard for Safeguarding Construction, Alterations, and Demolition Operations."
- 1. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.
 - 2. Store combustible materials in containers in fire-safe locations.
 - 3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for fighting fires. Prohibit smoking in hazardous fire-exposure areas.
 - 4. Provide supervision of welding operations, combustion-type temporary heating units, and similar sources of fire ignition.
 - 5. Permanent Fire Protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire-protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- E. Fall Protection:

1. The General Construction Contractor shall provide temporary cable top and mid railings per OSHA regulations around mechanical floor openings. Most of the exterior can be done by running cables from column to column, but some areas may require you to install posts as well. Include toe boards around perimeter and openings where required. Each Contractor must provide its own means for providing OSHA approved fall protection for its Work persons. Temporary railings removed by a Contractor for some reason other than constructing the permanent wall, must be immediately replaced by that Contractor.
 2. The General Construction Contractor shall rope off all roof openings in an OSHA approved manner. Include fluorescent ribbons or flags to accent the ropes.
- F. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- G. Enclosure Fence: General Construction Contractor shall before, excavation begins, install an enclosure fence with lockable entrance gates. Locate where indicated or enclose the entire site, or the portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, deer, dogs, and other animals from easily entering the site, except by the entrance gates.
1. Provide open-mesh, 8-foot high chainlink fencing with posts at 8-feet on center, set in a compacted mixture of gravel and earth.
 2. Provide min. 3 double swing access gates and man gates. Each gate is to have a chain and padlock.
 - a. Provide (2) keys for each lock to the Construction Manager.
 3. Remove fence upon completion of all exterior activities or sooner if directed by Architect-Engineer.
- H. Security Enclosure and Lockup: General Construction Contractor shall install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- I. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid using tools and equipment that produce harmful noise. Restrict use of noise-making tools and equipment to hours that will minimize complaints from persons or firms near the Site.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities and good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
 2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

- C. Termination and Removal: Unless the Construction Manager requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that constitute temporary facilities are the property of each prime contractor. The Owner reserves the right to take possession of project identification signs.
 2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at the temporary entrances, as required by the governing authority.
 3. At Substantial Completion, clean and renovate permanent facilities used during the construction period including, but not limited to, the following:
 - a. Replace air filters and clean inside of ductwork and housings.
 - b. Replace significantly worn parts and parts subject to unusual operating conditions.
 - c. Replace lamps burned out or noticeably dimmed by hours of use.

END OF SECTION

SECTION 01 5723

TEMPORARY STORM WATER POLLUTION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Temporary stormwater pollution controls.

1.2 STORMWATER POLLUTION PREVENTION PLAN

- A. The Stormwater Pollution Prevention Plan (SWPPP) is part of the Contract Documents and is bound into this Project Manual.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Meet with Owner, Architect, Construction Manager, General Contractor and earthwork subcontractor.
2. Review requirements of the SWPPP, including permitting process, worker training, and inspection and maintenance requirements.

1.4 INFORMATIONAL SUBMITTALS

- A. Stormwater Pollution Prevention Plan (SWPPP): Within fifteen (15) days of date established for commencement of the Work, submit completed SWPPP.
- B. EPA authorization under the EPA's "2017 Construction General Permit (CGP)."
- C. Stormwater Pollution Prevention (SWPP) Training Log: For each individual performing Work under the SWPPP.
- D. Inspection reports.

1.5 QUALITY ASSURANCE

- A. SWPPP Coordinator: Experienced individual or firm with a record of successful water pollution control management coordination of projects with similar requirements.

1. SWPPP Coordinator shall complete and finalize the SWPPP form.
2. SWPPP Coordinator shall be responsible for inspections and maintaining of all requirements of the SWPPP.

B. Installers: Trained as indicated in the SWPPP.

PART 2 - PRODUCTS

2.1 TEMPORARY STORMWATER POLLUTION CONTROLS

A. Provide temporary stormwater pollution controls as required by the SWPPP.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with all best management practices, general requirements, performance requirements, reporting requirements, and all other requirements included in the SWPPP.
- B. Locate stormwater pollution controls in accordance with the SWPPP.
- C. Conduct construction as required to comply with the SWPPP and that minimize possible contamination or pollution or other undesirable effects.
 1. Inspect, repair, and maintain SWPPP controls during construction.
 - a. Inspect all SWPPP controls not less than every seven (7) days, and after each occurrence of a storm event, as outlined in the SWPPP.
- D. Remove SWPPP controls at completion of construction and restore and stabilize areas disturbed during construction.

END OF SECTION

SECTION 01 5734**INDOOR AIR QUALITY****PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Construction procedures to promote adequate indoor air quality after construction.
- B. Building flush-out after construction and before occupancy.
- C. The Project is not seeking LEED certification, however, LEED standards shall be met as described in this Section.

1.2 PROJECT GOALS

- A. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
 - 1. Contractor shall bear the cost of additional cleaning beyond the requirements indicated in the ductwork and equipment specifications which is required due to failure to protect ducts and equipment from construction dust.
- B. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants:
 - 1. Furnish products meeting the specifications.
 - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.
- C. Moisture Damage: Protect all absorptive materials from moisture damage including those which are installed, stored on-site, or stored off-site.

1.3 RELATED REQUIREMENTS

- A. Section 23 0593: Testing HVAC systems for proper air flow rates, adjustment of dampers and registers, and settings for equipment.

1.4 REFERENCE STANDARDS

- A. ASHRAE Std 52.2 – Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size: 2007.
- B. ASHRAE Std 62.1 – Ventilation for Acceptable Indoor Air Quality: 2007 (errata 2008).
- C. ASHRAE Std 129 – Measuring Air-Change Effectiveness: 1997 (Reaffirmed 2002).
- D. ASTM E779 – Standard Test Method for Determining Air Leakage Rate by Fan Pressurization: 2003.

- E. CAL (EESR) – California Energy Efficiency Standards Residential Alternative Calculation Method (ACM) Approval Manual, Chapter 7; 2005.
- F. SMACNA (OCC) – IAQ Guideline for Occupied Buildings Under Construction: 2007.

1.5 DEFINITIONS:

- A. Absorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

1.6 SUBMITTALS:

- A. See Section 01 3300 for Submittal Procedures.
- B. Indoor Air Quality Management Plan: Describe in detail the measures to be taken to promote adequate indoor air quality during construction and prior to occupancy based on the requirements of SMACNA IAQ Guidelines for Occupied Buildings under Construction. In addition to the detailed minimum requirements indicated in Part 3, the plan shall address the following:
 - 1. Construction IAQ Management Plan: Submit the completed Construction Management Plan for review not less than Sixty (60) Days before enclosure of building:
 - a. The plan shall specifically address the five areas outlined in the Guideline:
 - i. HVAC Protection
 - ii. Source Control
 - iii. Pathway interruption
 - iv. Housekeeping
 - v. Scheduling
 - b. Identify and evaluate the following:
 - i. Potential sources of odor and dust.
 - ii. Construction activities likely to produce odor or dust.
 - iii. Possible moisture sources, or construction activities likely to result in moisture damage of installed absorptive materials.
 - iv. Areas or project potentially affected, especially occupied areas.

- v. Potential problems by severity and describe methods of control.
 - vi. Describe cleaning and dust control procedures.
 - c. Interior Finishes Installation Schedule: Identify each interior finish that either generates odors, moisture, or vapors or is susceptible to absorption of odors and vapors, and indicate air handling zone, sequence of application, and curing times.
- 2. Pre-Occupancy IAQ Management Plan: Submit the completed Pre-Occupancy Management for review not less than Sixty (60) Days before enclosure of building.
 - a. Prepare Pre-Occupancy Management Plan in accordance with USGBC Guidelines.
 - b. Prepare a building flush-out schedule and temperature and humidity monitoring plan.
- 3. Air Contaminant Test: If the building flush-out procedure is not feasible, prepare and submit an Air Contaminant Test Plan and reports:
 - a. The Test Plan shall identify the following:
 - i. Testing agency qualifications
 - ii. Locations and scheduling of air sampling
 - iii. Test procedures, in detail
 - iv. Test instruments and apparatus
 - v. Sampling methods
 - b. Air Contaminant Test Reports shall indicate the following:
 - i. Location where each sample was taken, and time
 - ii. Test values for each air sample; average the values of each set of 3
 - iii. HVAC operating conditions
 - iv. Certification of test equipment calibration
 - v. Other conditions or discrepancies that might have influenced results
- C. Submit IAQ checklist at the completion of the construction and the required photographs.
- D. Submit documentation of building flush-out along with recorded indoor temperature and humidity logs.
- E. Submit results of indoor air contaminant testing.

1.7 QUALITY ASSURANCE

- A. Testing and Inspection Agency Qualifications: If it is necessary to perform an air contaminant test, retain the services of an independent testing agency having minimum of Five (5) years' experience in performing the types of testing specified.

PART 2 PRODUCTS**2.1 MATERIALS**

- A. Low VOC Materials: See other sections for specific requirements for materials with low VOC content.

PART 3 EXECUTION**3.1 CONSTRUCTION IAQ MANAGEMENT PLAN**

- A. As a minimum, the IAQ plan shall include the following requirements in each of the sections as outlined in the SMACNA Guideline.
- B. HVAC Protection:
1. Temporary heat: The permanent HVAC system shall not be used for temporary heat, air conditioning, or building flush-out until all dust producing activities in the building are completed including gypsum board finishing, final cleaning prior to carpet and flooring installation, etc.
 2. Duct/Equipment Protection:
 - a. Much of the building steel is protected with spray-on fire proofing. If feasible, avoid storing any equipment on-site until this activity is completed. If necessary to store ductwork on-site during the process, exceptional care must be taken to protect the duct and equipment.
 - b. Exposed surfaces of ductwork shall be sealed with plastic during the shipment to the project site and during on-site storage. Ductwork shipped in un-assembled form shall be sealed during shipment and shall be protected on-site prior to and during the assembly process.
 - c. Exposed surfaces of duct silencers, VAV boxes, air handling units, cabinet heaters, fan coil units, etc. shall be sealed with plastic during the shipment from the factory to the project site and during on-site storage. In addition to dust contamination, this equipment also includes insulation that is subject to moisture damage. Take exceptional care to protect this equipment during shipping and on- site storage.
 - d. During the installation of stored ductwork and equipment, the inside of the duct shall be wiped down to a visually clean appearance.
 - e. As the installation of the ductwork progresses, the open end of the ducts shall be sealed at the end of each Day's work with plastic to prevent infiltration of dust.

3. System Start-up

- a. Do not start the air handling system until all dust producing activities in the building are completed including gypsum board finishing, final cleaning prior to carpet and flooring installation, etc.
 - i. Inspect duct intakes, return air grilles, and terminal units for dust.
 - ii. Clean plenum spaces, including top sides of lay-in ceilings, outsides of ducts, tops of pipes and conduit.
 - iii. Clean tops of doors and frames.
 - iv. Clean mechanical and electrical rooms, including tops of pipes, ducts, and conduit, equipment, and supports.
- b. Activities within the air handling equipment after installation often contaminate the insides of the units. Prior to starting any air handling equipment, the inside of each unit shall be cleaned to a visually clean appearance.
- c. Do not store the air handling filters within the units or on-site during construction. Prior to the start of the units, install clean filtration media.
- d. At the completion of all start-up, air balance activities, and pre-occupancy building flush-out, replace all air filtration media with new media.
- e. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.

C. Source Control:

1. Refer to other specification sections for the required VOC limits for adhesives, caulks, paints, cleaning solutions, etc. to minimize the introduction of odors and contaminants into the building.
2. Smoking shall not be permitted in the building at any time.
3. All absorptive materials shall be suitably protected from moisture damage or dust contamination during construction. Protection is particularly important for insulation products, gypsum board, carpet and liners, and wood products. It is preferred that these materials not be delivered to the site until the building is fully weather enclosed with permanent construction. If this is not feasible due to project schedule, all materials shall be stored on pallets off the floor level and shall be fully sealed with plastic. All damaged materials shall be removed from the site immediately.
4. Air filters are often shipped with the air handling equipment and stored on-site, particularly in unfinished penthouse spaces. All air filters shall be stored off-site until the building HVAC systems are suitable for start-up.
5. The spray-on fire proofing presents a substantial level of contamination to any products stored on-site during the application. Take special precaution to either prohibit on-site storage of materials until the spray-on fireproofing is completed and cleaned or carefully protect all stored materials.

D. Housekeeping:

1. Standing water and puddles within the building shall be immediately cleaned and dried to minimize the potential for mold growth. Locate the source of water and repair immediately.
2. Use sweeping compounds for floor sweeping during the construction period to minimize dust generation.
3. During the final stages of construction and during the installation of floor finishes, all flooring shall be carefully protected against water, moisture and dust damage.
 - a. Installed or stored carpet damaged by water shall be removed from the site and replaced.
 - b. ALL carpet shall be fully protected from construction foot traffic during construction activities and during punch list periods. Carpet with excessive dust loading shall be removed and replaced.
4. Do not store construction materials or waste in mechanical or electrical rooms.

E. Scheduling:

1. Schedule the construction activities to assist with the prevention of damage and contamination to materials rather than relying on plastic protection.
2. Prevent the absorption of moisture and humidity by absorptive materials by:
 - a. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
 - b. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
 - c. Provide sufficient ventilation for drying within reasonable time frame.
3. If feasible, do not store equipment and finishes on-site until the completion and clean-up of the spray-on fire proofing activities.

3.2 PRE-OCCUPANCY IAQ MANAGEMENT PLAN

- A. It is preferred that the building be flushed with 14,000 cubic feet of outdoor air per square foot of floor area while maintaining indoor conditions. The permanent HVAC system may be used for this purpose, however, the system will not have suitable capacity during extreme outdoor air conditions to maintain the required indoor conditions. If, due to schedule or unacceptable outdoor conditions at the time of occupancy, this method is not feasible, an alternate method may be used.
- B. If, due to construction schedule prior to occupancy, there is insufficient time to complete the flush-out prior to occupancy, the alternate procedure as described in the LEED 2.2 Reference Guide may be used if approved by the Owner.
- C. If neither of the previous options are not feasible, the indoor air quality testing as outlined in the Reference Guide may be used if approved by the Owner.

3.3 CONSTRUCTION PROCEDURES

- A. After submission and approval of the IAQ Plan, all construction activities shall be monitored to ensure compliance with the Plan.
- B. Each Contractor shall assign an individual staff member responsible to ensure the Contractor's compliance with the applicable portions of the IAQ Plan.
- C. The Contractor shall prepare an IAQ Management Checklist to verify all aspects of the Plan are being enforced through the duration of the construction activities. The inspection checklists shall be completed monthly to confirm the IAQ Plan is being followed. At the time of the inspection, photographs shall be taken to support the checklist.

3.4 BUILDING FLUSH-OUT

- A. Perform building flush-out before occupancy in accordance with the IAQ Plan.
- B. Do not start flush-out until:
 - 1. All construction including punch list work is complete.
 - 2. HVAC systems have been tested, adjusted, and balanced for proper operation.
 - 3. Inspection of inside of return air ducts and terminal units confirms that cleaning is not necessary.
 - 4. New HVAC filtration media have been installed.
- C. Building Flush-Out: Operate all ventilation systems at normal flow rates with 100 percent outside air until a total air volume of 14,000 cubic feet per square foot of floor area has been supplied.
 - 1. Obtain Construction Manager's concurrence that construction has reached a sufficient level of completion before beginning flush-out.
 - 2. Maintain interior temperature of at least 60 degrees F and interior relative humidity no higher than 60 percent. Using the permanent Building Automation System, log temperatures at representative locations through the building, and log humidity at the return to each air handling unit.
 - 3. If additional construction involving materials that produce particulates or any of the specified contaminants is conducted during flush-out, start flush-out over.
 - 4. If interior spaces must be occupied prior to completion of the flush-out, supply a minimum of 25 percent of the total air volume prior to occupancy, and:
 - a. Begin ventilation at least 3 hours prior to daily occupancy.
 - b. Continue ventilation during all occupied periods.
 - c. Provide minimum outside air volume of 0.30 cfm per square foot or design minimum outside air rate, whichever is greater.
- D. Install new HVAC filtration media after completion of flush-out and before occupancy or further testing.

3.5 AIR CONTAMINANT TESTING

- A. Air Contaminant Testing is only required if the building flush-out options are not feasible due to building occupancy schedule or due to adverse outdoor conditions that cause excessive temperature and humidity conditions in the space.
- B. Perform air contaminant testing before occupancy.
- C. Do not start air contaminant testing until:
 - 1. All construction is complete, including interior finishes.
 - 2. HVAC systems have been tested, adjusted, and balanced for proper operation.
 - 3. New HVAC filtration media have been installed.
- D. Indoor Air Samples: Collect from spaces representative of occupied areas:
 - 1. Collect samples while building is unoccupied, operable windows and exterior doors are closed, and the HVAC system is running in occupied mode with design minimum outdoor air.
 - 2. Collect samples from spaces in each contiguous floor area in each air handler zone, but not less than one sample per 10,000 square feet; take samples from areas having the least ventilation and those having the greatest presumed source strength.
 - 3. Collect samples from height from 36 inches to 72 inches above floor.
 - 4. Collect samples from same locations on Three (3) Days during normal business hours; average the results of each set of Three (3) samples.
 - 5. Exception: Areas with normal very high outside air ventilation rates do not need to be tested.
 - 6. When retesting the same building areas, take samples from at least the same locations as is first test.
- E. Outdoor Air Samples: Collect samples at outside air intake of each air handler at the same time as indoor samples are taken.
- F. Analyze air samples and submit report.
- G. Air Contaminant Concentration Determination and Limits:
 - 1. Carbon Monoxide: Not more than 9 parts per million and not more than 2 parts per million higher than outdoor air.
 - 2. Airborne Mold and Mildew: Measure in relation to outside air; not higher than outside air.
 - 3. Formaldehyde: Not more than 50 parts per billion.
 - 4. Formaldehyde: Measure in micrograms per cubic meter, in relation to outside air; not more than 20 micrograms per cubic meter higher than outside air.

5. Total Volatile Organic Compounds (TVOC): Not more than 500 micrograms per cubic meter.
6. Total Volatile Organic Compounds (TVOC): Measure in micrograms per cubic meter, in relation to outside air; not more than 200 micrograms per cubic meter higher than outside air.
7. Particulates (PM10): Not more than 50 micrograms per cubic meter.
8. Total Particulates (PM): Measure in micrograms per cubic meter, in relation to outside air; not more than 20 micrograms per cubic meter higher than outside air.

END OF SECTION

SECTION 01 6000**PRODUCT REQUIREMENTS****PART 1 GENERAL****1.1 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.

1.2 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.

1.3 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 2. Architect/Engineer's Action: If necessary, Architect/Engineer will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect/Engineer will notify Contractor through Construction Manager of approval or rejection of proposed comparable product request within Ten (10) Days of receipt of request, or Seven (7) Days of receipt of additional information or documentation, whichever is later.
 - a. See Section 01 3300 Submittal Procedures for additional information and requirements.

- b. Use product specified if Architect/Engineer does not issue a decision on use of a comparable product request within time allocated.

- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 3300 Submittal Procedures. Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. 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/Engineer will determine which products shall be used.

1.5 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.

1.6 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 other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 01 7700 Closeout Procedures.

PART 2 PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected", the Architect/Engineer will make the 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. 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. Substitutions for Contractor's convenience will not be considered.
- 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.

2. 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. Substitutions for Contractor's convenience will not be considered.
- 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.

3. **Basis-of-Design Product:** Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

4. Uniform Guidance Compliance Requirements for ARPA-SLFRF Funding

Contractor will supply Product Data as requested by Owner, during the Contract or after Project completion, as necessary, to support compliance with the following requirements.

a. Procurement of Recovered Materials

Pursuant to 2 CFR §200.323, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the

item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year [by Owner] exceeded \$10,000.

b. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

- i. To effectuate Owner's compliance with 2 CFR §200.216, Contractor shall not:
 - A. Procure or obtain;
 - B. Extend or renew a contract to procure or obtain; or
 - C. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - 1. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - 2. Telecommunications or video surveillance services provided by such entities or using such equipment.
 - 3. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- ii. In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

c. Domestic Preferences for Procurements

- i. Pursuant to 2 CFR §200.322, Contractor shall, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all [subcontracts] including all contracts and purchase orders for work or products under this [Contract].
 - ii. For purposes of this section:
 - A. "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - B. "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.
- C. Visual Matching Specification: Where Specifications require "match Architect/Engineer's sample", provide a product that complies with requirements and matches Architect/Engineer's sample. Architect/Engineer's decision will be final on whether a proposed product matches.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect/Engineer from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect/Engineer will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect/Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect/Engineer 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 7000**EXECUTION REQUIREMENTS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Safety requirements
- B. Sequencing of Work
- C. Coordination of Work
- D. Control of Work
- E. Execution of Work
- F. System Startup
- G. Cleaning
- H. Protection of Work
- I. Correction of Work
- J. Cutting and patching
- K. Warranty Submittals
- L. Closeout procedures

PART 2 PRODUCTS**2.01 SAFETY**

- A. Each Contractor shall be responsible for all required safety (Personal Protective Equipment) items per OSHA and the New York State Building Codes and in accordance with the Contract Documents.
 - 1. The Contractor's employees must comply with and be certified in accordance with OSHA 10 Regulations.
- B. Each Contractor shall take all necessary precautions to insure the safety of the existing or adjacent structures, occupants, general public, and the construction workmen.
 - 1. Each Contractor shall maintain safety barricades and partitions in its areas of Work in good working condition and in the same condition that they are turned over.
 - 2. Each Contractor shall be responsible for traffic control and pedestrian safety when working outside the property lines of the Owner's Site. Means for completing these requirements shall include, but not be limited, to flagman, barriers, providing level walking surfaces, and signage. These services shall be provided as coordinated with or requested by the Construction Manager.
 - 3. Additional barricades will be required by each Contractor performing Work outside of the defined or enclosed construction area
- C. Each Contractor will be required to have all workers as well as Foreman, Superintendents and Project Managers attend all Safety training orientations, sessions and classes as outlined, scheduled and/or determined by the Construction Manager.

- D. Each Contractor shall hold weekly safety meetings for all of their employees and subcontractors. Each Contractor shall submit attendance log and written copy of the material covered for each meeting to the Construction Manager.
- E. Each Contractor is responsible for the implementation and monitoring of an approved Site Safety Program.
- F. The Contractor must have their own New York State and OSHA competent employee at the Site during construction.
- G. Any safety violations or accidents must be documented in written form and a copy immediately issued to the Construction Manager.
- H. The Contractor's Safety Officer must report and be responsible to the Construction Manager's Safety Officer.
- I. All employees of each Contractor shall wear hard-hats and proper footwear approved by the Construction Manager. Anyone found in violation of any of these provisions may be removed from the jobsite by the Construction Manager's Project Superintendent.
- J. FIRE SAFETY
 - 1. Open fire will not be permitted within the building enclosure or on the Project Site.
 - 2. Take adequate precautions against fire; keep flammable material at an absolute minimum; and ensure that such material is properly handled and stored.
 - 3. Use of open salamanders will not be allowed.
 - 4. Torches: Contractor shall complete Hot Work Permit as provided by Construction Manager for all torch work. Hot work permit shall be submitted to Construction Manager for review no less than (24) twenty-four hours prior to use of any torches. Requirements include, but shall not be limited to: qualified operator carrying card indicating certification, fire extinguisher next to operation, fire watch, eye wash station next to operator, proper personal protection.

2.02 SEQUENCING OF WORK

- A. Each Contractor may be required to complete their Work in phases where separate floors or areas require such phasing or as unanticipated by the Master Schedule.
- B. At the Construction Manager's request, each Contractor shall be required to submit Monthly Man Loading Schedules on a floor-by-floor, sub-by-sub basis.
- C. The Work may not always be performed in a continuous manner but in various stages as determined by the Construction Manager' coordination of construction activities. Contractor shall perform the Work out of sequence as directed by the Construction Manager at no increase to its Contract Sum. In addition, Contractor will be required to leave out portions of its Work and return at a later date to complete the Work. Comeback time will be at no additional cost to the Owner and Construction Manager
- D. Each Contractor agrees to provide sufficient manpower to the satisfaction of the Construction Manager to maintain the actual or desired pace of progress in the field as areas become available for the Work or as required to meet the overall Project completion date.
- E. Furnish plant and equipment, which will be efficient, appropriate and large enough to secure a satisfactory quality of Work and a rate of progress that will ensure the completion of the Work within the requirements

of the Master Schedule. If at any time such plant appears to be inefficient, inappropriate or insufficient for securing the quality of Work required, or for producing the rate of progress aforesaid, Construction Manager may order the Contractor to increase the efficiency, change the character, or increase the plant equipment, and the Contractor shall conform to such order. Failure of the Construction Manager to give such order shall in no way relieve the Contractor of its obligations to secure the quality of the Work and rate of progress required.

2.03 COORDINATION OF WORK

- A. It is the responsibility of each Contractor to coordinate with the architectural details and elements, such as soffits, variations in ceiling height and materials, ducts, fire/smoke separations, doors, piping, and any other general construction items that impact the affected or adjacent spaces.
 - 1. Each Contractor acknowledges that no item shall be installed such that it interferes with the operation of any doors, windows, roof hatches and access panels. If the Contractor is aware of such potential conflict, they should inform the Construction Manager immediately.
- B. Each Contractor shall be aware that equipment cuts, piping and duct layouts are required in order to determine physical size of equipment. They also are required for the concrete pads both interior and exterior. Each Contractor is responsible for layout of their own pads and coordination of said layout with other Contractors on-Site.
- C. Each Contractor will be responsible to assure that equipment they are required to provide as per the Contract Documents will fit through the building openings, i.e. doors, windows, areaway, stairways, etc., as shown on the drawings in order to access the final installation location of the unit. This includes but is not limited to the switchgear and transformers for the Electrical Contractor, the geo-thermal equipment and expansion tanks for the HVAC Contractor, and the water heaters for the Plumbing Contractor.
- D. Each Contractor will be responsible for all cutting, saw cutting, excavation, controlled fill, backfill, patching, and fire stopping required or caused by installation of their Work.
- E. Each Contractor will be responsible for providing their own sleeves and the location for those sleeves. They must coordinate with the General Contractor or Construction Manager prior to installation.
- F. Each Contractor shall:
 - 1. Schedule construction operations in the 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 assure maximum accessibility for required maintenance, service, and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
 - 4. Where necessary or requested by the Construction Manager, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 - a. Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.
 - 5. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

- a. Preparation of schedules.
 - b. Installation and removal of temporary facilities.
 - c. Delivery and processing of submittals.
 - d. Holding special meetings.
 - e. Project closeout activities.
6. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - a. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.

G. REQUIRED SUBMITTALS

1. When necessary or requested by the Architect/Engineer, Owner or Construction Manager, each Contractor shall prepare special coordination drawings (in addition to Coordination Drawings described in Section 01 3000) where careful coordination is needed for installation of products and materials fabricated by separate entities, and/or where limited space availability necessitates maximum utilization of space for efficient installation of different components.
2. Submittal shall be comprised of drawings, sketches, photographs and narratives as produced solely by each Contractor or their respective subcontractors and suppliers. Submittal shall:
 - a. Show the relationship of components shown on separate Shop Drawings.
 - b. Indicate required installation sequences.
 - c. Comply with requirements contained in Specifications and Drawings
3. Coordination Submittals, as pertaining to this Section, shall be:
 - a. Prepared by each Contractor as required at no additional cost to the Owner.
 - b. Subject to review and approval of Architect/Engineer, Owner and Construction Manager

H. PREINSTALLATION MEETINGS

1. When required in individual Specification Sections, convene a preinstallation meeting at the Site prior to commencing Work of the Section.
2. Require attendance of parties directly affecting, or affected by, Work of the specific Section.
3. Notify Construction Manager Four (4) Days in advance of meeting date.
4. Prepare agenda and preside at meeting:
5. Review conditions of examination, preparation and installation procedures.
6. Review coordination with related Work.
7. Record minutes and distribute copies within Two (2) Days after meeting to participants, with Two (2) copies to Construction Manager, Owner, participants, and those affected by decisions made.

2.04 CONTROL OF WORK

A. GENERAL

1. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
2. Dust Control: Execute Work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
3. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
4. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.
5. In order to prevent environmental pollution arising from the construction activities related to the performance of the Contracts, Contractors shall comply with all applicable Federal, State and local laws and regulations concerning waste material disposal, as well as the specific requirements stated in this Section and in other related Sections.
6. Disposal of excess excavated material in wetlands, stream corridors and plains is strictly prohibited even if the permission of the property owner is obtained. Any violation of this restriction by the Contractor or any person employed by it, will be brought to the immediate attention of the responsible regulatory agencies, with a request that appropriate action be taken against the offending parties. The Contractor will be required to remove the fill and restore the area impacted at no increase in the Contract Sum and indemnify, defend and hold harmless the Owner from all claims, damages, fees, fines and all other costs, including attorneys' fees, arising out of such disposal.

B. GENERAL INSTALLATION REQUIREMENTS

1. Install products as specified in individual Sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
2. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
3. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
4. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
5. Make neat transitions between different surfaces, maintaining texture and appearance.

C. LAYOUT

1. Each Contractor is responsible for the layout and engineering required for the accurate installation of all items under their scope of Work. Contractor is responsible to coordinate with other Contractors to ensure that all Work is installed flush, true and plum. Contractor is also required to establish and maintain lines and grades required for the performance of their Scope of Work.
2. Each Contractor shall be responsible to offset or protect their survey or layout markings from anything that may disturb them.
3. 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 the Construction Manager promptly.

4. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
5. Inform installers of lines and levels to which they must comply.
6. Check the location, level and plumb, of every major element as the Work progresses.
7. Notify Construction Manager when deviations from required lines and levels exceed allowable tolerances.

D. INSTALLATION AS DIRECTED BY MANUFACTURER

1. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the respective manufacturers, unless otherwise specified. If the installation of said items do not meet or equal manufacturer guidelines, the Architect/Engineer at its sole discretion may allow said Work to remain and shall request an extended warranty and maintenance bond on the present value of said items.
2. Name plates and other identifying markings shall not be affixed on exposed surfaces of manufactured items installed in finished spaces.
3. MANUFACTURER'S REPRESENTATIVE: As required by Specifications or requested by Construction Manager, each Contractor shall provide a Manufacturer's Representative to review installations. Architect/Engineer, Construction Manager and Owner shall be notified Five (5) Days in advance of such review.

E. PROTECTION OF EXISTING CONDITIONS

1. Each Contractor shall be responsible for the protection of all existing surfaces; utilities and surfaces intended to remain including adjacent structures and spaces that are affected by the Work. Any damages or disturbances to the existing conditions or adjacent structures during the execution of the Work under this Contract shall be repaired and/or replaced by the Contractor at no cost to the Owner, Tenant, Construction Manager, Architect/Engineer, adjacent property owners and/or easement holders.

F. UTILITY/SERVICE PROVIDER COORDINATION

1. Each Contractor shall assume full responsibility for the protection and preservation of all public utilities, if any, adjacent to or on the Site. The Contractor shall comply with all requirements of New York State Department of Labor Industrial Code Rule 753.
2. Each Contractor shall coordinate with Local Utility/Service Provider having jurisdiction over Work related to that Contractor including but not limited to providing all labor (including overtime) and equipment necessary to adjust, move, relocate, or remove existing structures, utility poles, pipes, wires, equipment, lines, services, or other appurtenances located in, or affected by the construction.
3. Each Contractor shall use special caution while chopping, cutting and excavating and performing Work at existing underground and above ground utilities. Should Contractor undermine same, Contractor shall immediately support, brace and protect utilities from damage. Further, the Contractor must submit an engineered drawing for the Architect/Engineer's review. The cost of any repair Work shall be borne by the Contractor.
4. Each Contractor shall install and maintain temporary connections and perform final connection of all utilities within their scope to all equipment, regardless of which Contractor supplies the

equipment or device.

G. PRIVATE LAND

1. Do not enter or occupy private land or areas outside of Owner's property or easements, except by permission of the property owner and easement holder as applicable.

H. TEST PITS

1. Excavate test pits as indicated in the Contract Documents, and/or at the direction of the Construction Manager, to locate underground pipelines or structures in advance of the construction. Backfill test pits immediately after their purpose has been satisfied and restore and maintain the surface in a manner satisfactory to the Architect/Engineer.

I. ROADS

1. Each contractor shall assume full responsibility for any damage caused by them or their subcontractors to public and private roads and/or sidewalks surrounding the site. General Contractor shall perform all repairs. Cost to repair any such damage, including allowable markups, shall be back charged to the responsible Contractor.

2.05 EXECUTION OF WORK

- A. The existence and location of Site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning Work, each Contractor agrees to investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

- B. Existing Utilities: Before beginning Site Work, investigate and verify the existence and location of underground utilities and other construction affecting the Work. Verify the location and points of connection for such items.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
2. Furnish location data for Work related to Project that must be performed by public utilities serving Project Site.

- C. Acceptance of Conditions: 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. Each Contractor acknowledges that they accept the existing conditions on a particular task or segment of Work once they have started such Work.

- D. Written Report of Deficiencies ("Notice of Non-Compliance"): Where a written report listing conditions detrimental to performance is deemed necessary, the Contractor shall provide the following information to the Construction Manager within One (1) Day of noticing such deficiency in the form of a Notice of Non-Compliance.

1. Description of the Work.
2. List of detrimental conditions, including substrates.
3. List of unacceptable installation tolerances.
4. Recommended corrections.

- E. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or

primers.

- F. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
- G. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
- H. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.
- I. PREPARATION
 - 1. Existing Utility Information: Furnish information to local utility 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.
 - 2. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 3. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
 - 4. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Construction Manager. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.
- J. INSTALLATION
 - 1. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 2. Make vertical Work plumb and make horizontal Work level.
 - 3. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 4. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
 - 5. Maintain minimum headroom clearance of 8 feet in spaces without a suspended ceiling.
 - 6. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
 - 7. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Final Completion.
 - 8. 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.
 - 9. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
 - 10. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
 - 11. Anchor and Fastener type for any particular application shall match type listed in reviewed

submittal for corresponding product/material and as required by the Contract Documents.

12. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect/Engineer.
13. Allow for building movement, including thermal expansion and contraction.
14. 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.
15. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

2.06 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. Submit a written report that equipment or system has been properly installed and is functioning correctly.
- G. ADJUSTING: Adjust operating products and equipment to ensure smooth and unhindered operation.

2.07 CLEANING

- A. Each Contractor will be responsible to maintain its immediate Work areas and equipment in clean and organized condition, and to remove and clean up all debris generated in the performance of its Work into centralized debris collection areas and separated by material in accordance with Project requirements. This Work is to be completed by the end of each Working Day.
- B. The Owner reserves the right to engage laborers to clean debris left by any Contractor and may charge all associated costs plus overhead and profit for same against each Contractor's contract with the Owner. Costs will be charged at the prevailing overtime rate plus 15% if the debris remains after 4 hour's notification by the Construction Manager.

2.08 PROTECTION OF WORK

- A. Each Contractor will be responsible for damage to all finished Work by their forces. At the Construction Manager's discretion, individual Contractor's may be back-charged for such damage.
- B. All Work shall be coordinated with all trades so that the building remains watertight during construction including attached adjacent structures, bridges, walkways, and temporary enclosures.
- C. Each Contractor is responsible to install protection materials that may be required to protect all finishes including but not limited to all glass, signage, railings, walls, doors, frames, hardware, equipment and furnishings.
- D. Each Contractor shall provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

- E. Each Contractor shall comply with manufacturer's written instructions for temperature and relative humidity. The Architect/Engineer, Owner and Construction Manager may deem an entire installation defective due to any singular defects resulting from such non-compliance.
- F. Each Contractor shall clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- G. Each Contractor shall clean and provide maintenance on their completed Work as frequently as necessary through the remainder of the construction period and shall adjust and lubricate operable components to assure operability without damaging effects.
- H. Limiting Exposures: Each Contractor shall 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. Where applicable, such exposures include, but are not limited to, the following:
 - 1. Excessive static or dynamic loading
 - 2. Excessive internal or external pressures
 - 3. Excessively high or low temperatures
 - 4. Thermal shock
 - 5. Excessively high or low humidity
 - 6. Air contamination or pollution
 - 7. Water or ice
 - 8. Solvents
 - 9. Chemicals
 - 10. Light
 - 11. Radiation
 - 12. Puncture
 - 13. Abrasion
 - 14. Heavy traffic
 - 15. Soiling, staining, and corrosion
 - 16. Bacteria
 - 17. Rodent and insect infestation
 - 18. Combustion
 - 19. Electrical current
 - 20. High-speed operation
 - 21. Improper lubrication
 - 22. Unusual wear or other misuse

23. Contact between incompatible materials
24. Destructive testing
25. Misalignment
26. Excessive weathering
27. Unprotected storage
28. Improper shipping or handling
29. Theft
30. Vandalism

2.09 CORRECTION OF WORK

- A. Each Contractor shall repair any items as requested by the Architect/Engineer, Owner or Construction Manager within Five (5) Working Days of such request or provide explanation and proposed schedule for correction to the Construction Manager in writing within that same time period.
- B. Without notice from the Architect/Engineer, Owner or Construction Manager, each Contractor shall:
 1. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in "Cutting and Patching."
 2. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
 3. Restore permanent facilities used during construction to their specified condition.
 4. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
 5. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
 6. Remove and replace glass or reflective surfaces that have been chipped, scratched, and/or broken.

2.10 CUTTING AND PATCHING

- A. Cutting is defined as the removal of in place construction necessary to permit installation or performance of other Work. Patching is defined as the fitting and repair Work required to restore surfaces to original conditions after installation of other Work.
- B. Costs for cutting and patching shall be included in each Contractor's Lump Sum bid as required for completion of the completion of Work as required by the Contract Documents
- C. SUBMITTAL: Each Contractor shall submit a method describing procedures at least Five (5) Working Days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 2. Changes to In Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.

3. Products: List products to be used and firms or entities that will perform the Work.
4. Dates: Indicate when cutting and patching will be performed.
5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
7. At request of the Construction Manager, provide a submittal for review of cutting and patching before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory Work.

D. QUALITY ASSURANCE

1. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
 - a. Provide a list of additional elements that are structural elements and that require Architect/Engineer's or Construction Manager's approval of a cutting and patching proposal.
2. Operational Elements: Do not cut and patch the following operating elements and related components in a manner that results in reducing their capacity to perform as intended or that result in increased maintenance or decreased operational life or safety.
 - a. Primary operational systems and equipment.
 - b. Air or smoke barriers.
 - c. Fire-protection systems.
 - d. Control systems.
 - e. Communication systems.
 - f. Conveying systems.
 - g. Electrical wiring systems.
 - h. Operating systems of special construction in Division 13 Sections.
3. Miscellaneous Elements: Do not cut and patch the elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. These elements include, but are not limited to:
 - a. Water, moisture, or vapor barriers
 - b. Membranes and flashings
 - c. Exterior curtain-wall construction
 - d. Equipment supports
 - e. Piping, ductwork, vessels, and equipment

f. Noise- and vibration-control elements and systems

4. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect/Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
5. Cutting and Patching meeting: Before proceeding, meet at Project Site with the Construction Manager and other parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
6. Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void warranties.

E. MATERIALS

1. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
2. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in place materials.

F. EXAMINATION

1. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
2. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
3. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

G. PERFORMANCE: 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.

H. 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. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. In Place Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Divisions 31-33 Sections.
5. Proceed with patching after construction operations requiring cutting are complete.

- I. PATCHING: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 4. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 5. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.
 6. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

2.11 WARRANTY SUBMITTALS

- A. REQUIRED SUBMITTALS: Submit written warranties to the Construction Manager prior to the date fixed by the Architect/Engineer for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner.
- B. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner within Fifteen (15) Days of completion of that designated portion of the Work.
- C. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner for approval prior to final execution.
- D. Refer to individual Specification Sections for specific content requirements, and particular requirements for submittal of special warranties.
- E. Submit copies of warranties prior to Final Completion as described in Closeout Procedures in this Section 01 7000 and in Section 01 7700 Closeout Procedures.

2.12 CLOSEOUT PROCEDURES

- A. CLOSE OUT CHECK LIST
1. Following Substantial Completion, the Construction Manager shall provide each Contractor with a Close Out Check List based upon the requirements of this Section and the Contract Documents.
 2. All items on the Contractor's Close Out Check List must be resolved to the satisfaction of the Owner in order for Final Payment to be made to said Contractor.

3. All Close Out items shall be submitted in complete and final form. Partial submittals will not be accepted.

B. MANUALS - FORM OF SUBMITTALS

1. Prepare data in the form of an instructional manual for use by Owner's personnel. Format:
 - a. Size: 8-1/2 x 11 in.
 - b. Paper: 20 pound minimum, white for typed pages.
 - c. Text: Manufacturer's printed data, or neatly typewritten.
2. Drawings – fold large sheets
3. Fold larger drawings to the size of the text pages.
4. Provide fly-leaf for each separate product, or each piece of operating equipment.
5. Provide typed description of product, and major component parts of equipment.
6. Provide indexed tabs.
7. Cover: Identify each volume with typed or printed title such as "OPERATING AND MAINTENANCE INSTRUCTIONS." List: Title of Project, identity of separate structure as applicable, identity of general subject matter covered in the manual.
8. Submit complete manual in final form as One (1) copy in binders and Two (2) copies in letter sized file folders.
9. Binders: Commercial quality three-ring binders with durable and cleanable plastic covers. Maximum ring size: 3 inch. When multiple binders are used, correlate the data into related consistent groupings.
10. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
11. Additional requirements for operating and maintenance data: The respective Sections of Specifications.

C. MANUALS FOR MATERIALS AND FINISHES

1. Submit complete manual in final form as One (1) copy in binders and Two (2) copies in letter sized file folders.
2. Content, for architectural products, applied materials and finishes
 - a. Manufacturer's data, giving full information on products.
 - b. Catalog number, size, composition.
 - c. Color and texture designations.
 - d. Information required for re-ordering special-manufactured products.
 - e. Instructions for care and maintenance.
 - f. Manufacturer's recommendation for types of cleaning agents and methods.
 - g. Cautions against cleaning agents and methods which are detrimental to the product.

- h. Recommended schedule for cleaning and maintenance.
- 3. Content, for moisture-protection and weather-exposed products
 - a. Manufacturer's data, giving full information on products.
 - b. Applicable standards.
 - c. Chemical composition.
 - d. Details of installation.
- 4. Instructions for inspection, maintenance, and repair.

D. MANUAL FOR EQUIPMENT AND SYSTEMS

- 1. Submit complete manual in final form as One (1) copy in binders and Two (2) copies in letter sized file folders.
- 2. Content, for each unit of equipment and system, as appropriate.
 - a. Description of unit and component parts.
 - b. Function, normal operating characteristics, and limiting conditions.
 - c. Performance curves, engineering data and tests.
 - d. Complete nomenclature and commercial number of all replaceable parts.
- 3. Operating procedures
 - a. Start-up, break-in, routine and normal operating instructions.
 - b. Regulation, control, stopping, shut-down and emergency instructions.
 - c. Summer and winter operating instructions.
 - d. Special operating instructions.
- 4. Maintenance procedures
 - a. Routine operations.
 - b. Guide to "trouble-shooting".
 - c. Disassembly, repair and reassembly.
 - d. Alignment, adjusting and checking.
- 5. Servicing and lubrication schedule.
 - a. List of lubricants required.
- 6. Manufacturer's printed operating and maintenance instructions.
- 7. Description of sequence of operation by control manufacturer.
- 8. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.
 - a. Predicted life of parts subject to wear.
 - b. Items recommended to be stocked as spare parts.

9. As-installed control diagrams by controls manufacturer.
10. Each Contractor's coordination drawings.
11. As-installed color-coded piping diagrams.
12. Charts of valve tag numbers, with the location and function of each valve.
13. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
14. Other data as required under pertinent Sections of Specifications.

E. MANUAL FOR ELECTRIC AND ELECTRONIC SYSTEMS

1. Submit complete manual in final form as One (1) copy in binders and Two (2) copies in letter sized file folders.
2. Content, for each electric and electronic system, as appropriate:
 - a. Description of system and component parts.
 - b. Function, normal operating characteristics, and limiting condition.
3. Performance curves, engineering data and tests.
4. Complete nomenclature and commercial number of replaceable parts.
5. Circuit directories of panel boards indicating:
 - a. Electrical service.
 - b. Controls.
 - c. Communications.
6. As-installed color-coded wiring diagrams.
7. Operating procedures
 - a. Routine and normal operating instructions.
 - b. Sequences required.
 - c. Special operating instructions.
8. Maintenance procedures
 - a. Routine operations.
 - b. Guide to "trouble-shooting."
 - c. Disassembly, repair and reassembly.
 - d. Adjustment and checking.
9. Manufacturer's printed operating and maintenance instructions.
10. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
11. Other data as required under pertinent Sections of Specifications.

F. MANUAL FOR WARRANTIES AND BONDS

1. Submit complete manual in final form as One (1) copy in binders and Two (2) copies in letter sized file folders.
2. Compile copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
3. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the Section in which specified and the name of the product or Work item.
4. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address and telephone number of the installer, supplier and manufacturer.
5. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the Project title or name and the name, address and telephone number of the Contractor.
6. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

G. OC RISK MANAGEMENT REQUIRED DOCUMENTS

1. As assigned below, each Contractor shall provide Two (2) copies of each required document in separate letter sized file folders.
2. Concrete (These documents shall be provided by the General Contractor.)
 - a. Steel bar reinforcement: certified field inspection reports referencing all steel reinforcement components.
 - b. Compression test results: certified test result reports.
 - c. Fibrous reinforcement: product specification sheet, manufacturer's instructions, certification with appropriate standards, batch tickets, statement of quality control from the subcontractor performing the Work.
3. Special Inspections: copy of fully executed Statements of Special Inspections for required special inspections and testing. (These documents shall be provided by ALL Contractors as necessary or requested by the Owner.)
4. Sheet Membrane Waterproofing: manufacturer's representative report of acceptance. (These documents shall be provided by General Contractor.)
5. Firestopping: Product manufacturer's Specification sheet & MSDS's. (These documents shall be provided by General Contractor.)
6. Fixed Audience Seating: Certification from the manufacturer on material in seats. (These documents shall be provided by General Contractor.)
7. Electrical (These documents shall be provided by Electrical Contractor.)
 - a. Log of Electrical Inspector visits.
 - b. Final report from Electrical Inspector.

8. Fire Protection (These documents shall be provided by Plumbing & Fire Protection Contractor.)
 - a. Sprinklers: submit flow test report.
 - b. Sprinklers: provide Operation & Maintenance instructions for Pre-action System.
 - c. Fire pump: submit pump test report.
9. Alarm System (These documents shall be provided by Electrical Contractor.)
 - a. Letter of installer's qualification from Mfr. of alarm system.
 - b. Written instructions: "Sequence of Operation".
 - c. Certification of Inspection and Testing.
 - d. Copy of as-built drawings.
10. Lightning Protection (These documents shall be provided by Electrical Contractor.)
 - a. Certificate of Compliance for lightning protection system.
 - b. Copy of as-built drawings.
11. Fire & Smoke Dampers (These documents shall be provided by HVAC Contractor.)
 - a. Copy of as-built drawings.
 - b. Certification by Contractor that dampers are in good operating condition.
12. HVAC system (These documents shall be provided by HVAC Contractor.)
 - a. Certification by Contractor of completed HVAC system.
 - b. Operation and Maintenance Manuals provided to DPW for all systems impacting energy use.
13. Descriptive narrative of energy-related systems: mechanical systems, water heating, lighting systems, building envelope and electric power distribution systems. (These documents shall be provided by the Architect/Engineer.)
14. COMcheck Compliance Guideline Documents, or equivalent, for performance ratings including R-value and U-value ratings. (These documents shall be provided by Architect/Engineer.)
15. Copy of As-Built Drawings (These documents shall be provided by ALL Contractors.)
 - a. All Contractors shall provide One (1) set of As-Built Drawings specifically for County Risk Management. Additional requirements for As-Built Drawings are listed below in 'Project Record Documents'.

H. PROJECT RECORD DOCUMENTS

1. Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect/Engineer's and Construction Manager's reference during normal working hours.
2. Each Contractor shall provide Record / As-Built drawings via AutoCAD (compatible with most current version of AutoCAD and AutoCAD LT) with Three (3) complete copies on compact disc and Three (3) complete sets in large format prints in accordance with the Contract Documents and within One (1) month from Substantial Completion of the Project or their Scope of Work.

3. RECORD DRAWINGS: Maintain and submit One (1) set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
 - a. 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 prepare the marked-up Record Prints.
 - b. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - c. Accurately record information in an understandable drawing technique.
 - d. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - e. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
 - f. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 - g. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - h. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
 - i. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
4. RECORD SPECIFICATIONS: Submit One (1) copy of Project's Specifications, including Addenda and Contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, Addenda, and Contract modifications.
 - a. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - b. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - c. Note related Change Orders, Record Drawings and Product Data, where applicable.
5. RECORD PRODUCT DATA: Submit One (1) copy of each Product Data submittal. Mark one set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.
 - a. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - b. Include significant changes in the product delivered to Project Site and changes in manufacturer's written instructions for installation.
 - c. Note related Change Orders, Record Drawings and Record Specifications, where applicable.

6. MISCELLANEOUS RECORD SUBMITTALS: 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.

I. RESOLUTION OF ALL NOTICES OF NON-COMPLIANCE

1. In order for Final Payment to be processed by the Owner, all Notices of Non-Compliance must be resolved to the satisfaction of the Owner.

J. RESOLUTION OF ALL PUNCH LIST OPEN ITEMS

1. In order for Final Payment to be processed by the Owner, all open Punch List items must be resolved to the satisfaction of the Owner.

K. TRAINING SESSIONS

1. Contractor shall instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - a. Provide instructors experienced in operation and maintenance procedures.
 - b. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 - c. Schedule training with Owner with at least Seven (7) Days' advance notice.
 - d. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
2. Contractor shall develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
 - a. System design and operational philosophy
 - b. Review of documentation
 - c. Operations
 - d. Adjustments
 - e. Troubleshooting
 - f. Maintenance
 - g. Repair

END OF SECTION

SECTION 01 7419**CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition, construction waste.
 - 2. Recycling nonhazardous demolition, construction waste.
 - 3. Disposing of nonhazardous demolition, construction waste.
- B. Related Requirements:
 - 1. Section 01 0100 " Summary of Work" for coordination of responsibilities for waste management.
 - 2. Section 04 2000 "Unit Masonry" for disposal requirements for masonry waste.
 - 3. Section 31 1000 "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.

1.2 DEFINITIONS

- A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction. Construction waste includes packaging.
- B. Demolition Waste: Site improvement materials resulting from demolition operations.
- C. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition and construction waste becomes property of

Contractor.

- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

- 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.4 ACTION SUBMITTALS

- A. Waste Management Plan: Submit plan within fifteen (15) days of date established for commencement of the Work in the Notice to Proceed.

1.5 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- B. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- C. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- D. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- E. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

1.6 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, or individual employed and assigned by General Contractor, with a record of successful waste management coordination of projects with similar requirements. Superintendent may serve as Waste Management Coordinator.
- B. Regulatory Requirements: Comply with transportation and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference(s): Conduct conference(s) at Project site to comply with requirements in Section 01 3100 "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:

1. Review and discuss waste management plan including responsibilities of each contractor and waste management coordinator.
2. Review requirements for documenting quantities of each type of waste and its disposition.
3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
5. Review waste management requirements for each trade.

1.7 WASTE MANAGEMENT PLAN

- A. General: Develop a waste management plan according to requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume but, use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition, site-clearing, construction waste generated by the Work. Use Form CWM-1 for construction waste, Form CWM-2 for demolition waste. Forms to be provided by Construction Manager. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work in compliance with Section 02 4119 "Selective Demolition."
 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
 - 1. Comply with operation, termination, and removal requirements in Section 01 5000 "Temporary Facilities and Controls."
- B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
 - 1. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged and recycled.
 - 2. Comply with Section 01 5000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 SALVAGING DEMOLITION WASTE

- A. Comply with requirements in Section 02 4119 "Selective Demolition" for salvaging demolition waste.
- B. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 - 3. Store items in a secure area until installation.
 - 4. Protect items from damage during transport and storage.
 - 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

- C. Salvaged Items for Owner's Use: Salvage items for Owner's use and handle as follows:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's storage area designated by Owner.
 - 5. Protect items from damage during transport and storage.
- D. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- E. Lighting Fixtures: Separate lamps by type and protect from breakage.
- F. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor as often as required to prevent overfilling bins.

3.4 RECYCLING DEMOLITION WASTE

- A. Asphalt Paving: Grind asphalt to maximum 1-1/2-inch size.

1. Crush asphaltic concrete paving and screen to comply with requirements in Section 312000 "Earth Moving" for use as general fill.
- B. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
- C. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
 1. Pulverize concrete to maximum 1-1/2-inch size.
 2. Crush concrete and screen to comply with requirements in Section 31 2000 "Earth Moving" for use as satisfactory soil for fill or subbase.
- D. Piping: Reduce piping to straight lengths and store by material and size. Separate supports, hangers, valves, sprinklers, and other components by material and size.
- E. Conduit: Reduce conduit to straight lengths and store by material and size.
- F. Lamps and Lamp Posts: Separate lamps by type and store according to requirements in 40 CFR 273.

3.5 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 2. Polystyrene Packaging: Separate and bag materials.
 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
 - a. Comply with requirements in Section 32 9300 "Plants" for use of clean sawdust as organic mulch.
- C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.
 - a. Comply with requirements in Section 32 9300 "Plants" for use of clean ground gypsum board as inorganic soil amendment.

- D. Paint: Seal containers and store by type.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. General: Except for items or materials to be salvaged or recycled, remove waste materials and legally dispose of at designated spoil areas on Owner's property.
- C. Burning: Do not burn waste materials.
- D. 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.

END OF SECTION

SECTION 01 7700**CLOSEOUT PROCEDURES****PART 1 GENERAL****1.1 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

1.2 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.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

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

1.5 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. The Architect/Engineer will not perform a Punch List inspection until the Contractors Punch List is received and reviewed.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of Ten (10) Working 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, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Construction Manager. 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 Construction Manager's signature for receipt of submittals.
 5. Submit test/adjust/balance records.
 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of Ten (10) Working Days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 2. Complete startup and testing of systems and equipment
 3. Submit test/adjust/balance records.
 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 5. Perform preventive maintenance on equipment used prior to Substantial Completion.
 6. Complete startup testing of systems.
 7. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Section 01 7900 Demonstration and Training.
 8. Complete final cleaning requirements, including touchup painting

- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of Ten (10) Working Days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect/Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect/Engineer, 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.
 - a. The Architect/Engineer's basic services include one initial Punch List and one follow up Punch List inspection to insure all corrective action and or incomplete work has been finished. The Contractor is responsible to the Owner for all costs incurred by the Architect/Engineer for additional services to provide multiple Punch Lists for the same work area. This cost may be deducted for the Contractor's Contract by Change Order.
 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.6 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
1. Submit a final Application for Payment according to Section 01 2000 Price and Payment Procedures.
 2. Certified List of Incomplete Items: Submit certified copy of Architect/Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect/Engineer. 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.
 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 5. Advise Owner of pending insurance changeover requirements.
 6. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
 9. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.

10. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 11. Prepare and submit Project Record Documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
- B. Inspection: Submit a written request for final inspection to determine acceptance, a minimum of Ten (10) Working Days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect/Engineer 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.

1.7 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 CSI Form 14.1A.
1. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 2. Include the following information at the top of each page:
 - a. Project name
 - b. Date
 - c. Name of Architect/Engineer and Construction Manager
 - d. Name of Contractor
 - e. Page number.
 3. Submit list of incomplete items in the following format:
 - a. MS Excel electronic file. Architect/Engineer, through Construction Manager, will return annotated file.

1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect/Engineer 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 Fifteen (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 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

2.1 MATERIALS

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

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a 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. Remove snow and ice to provide safe access to building.
 - f. 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.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - h. Sweep concrete floors broom clean in unoccupied spaces.
 - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - k. Remove labels that are not permanent.
 - l. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - m. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - n. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - o. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
 - i. Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning.
 - p. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- C. Construction Waste Disposal: Comply with waste disposal requirements in Section 01 5000 Temporary Facilities and Controls.

3.2 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 specified condition.
1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 4. Replace burned-out bulbs.

END OF SECTION

SECTION 01 7823**OPERATION AND MAINTENANCE DATA****PART 1 GENERAL****1.1 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. Individual Sections for any specific closeout requirements for the Work in those Sections.

1.2 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.

1.3 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. Architect/Engineer 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. Two 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 Twenty (20) Days prior to Substantial Completion to Architect/Engineer. Architect/Engineer will comment on whether general scope and content of manual are acceptable

1. Correct or revise each manual to comply with Architect/Engineer's comments. Submit copies of each corrected manual within Fifteen (15) Days of receipt of Architect/Engineer's comments and prior to commencing demonstration and training.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least Fifteen (15) Days before commencing demonstration and training. Architect/Engineer will return copy with comments.

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 ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION AND MAINTENANCE MANUALS

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
1. Title page
 2. Table of contents
 3. Manual contents
- B. Title Page: Include the following information:

1. Subject matter included in manual
 2. Name and address of Project
 3. Name and address of Owner
 4. Date of submittal
 5. Name and contact information for Contractor
 6. Name and contact information for Construction Manager
 7. Name and contact information for Architect/Engineer
 8. Name and contact information for Commissioning Authority
 9. Names and contact information for major consultants to the Architect/Engineer that designed the systems contained in the manuals
 10. Cross-reference to related systems in other operation and maintenance manuals
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders, if necessary, to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL", Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.

3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
 1. Type of emergency
 2. Emergency instructions
 3. Emergency procedures
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 1. Fire
 2. Flood
 3. Gas leak
 4. Water leak
 5. Power failure
 6. Water outage
 7. System, subsystem, or equipment failure
 8. Chemical release or spill
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
 1. Instructions on stopping

2. Shutdown instructions for each type of emergency
3. Operating instructions for conditions outside normal operating limits
4. Required sequences for electric or electronic systems
5. Special operating instructions and procedures

2.4 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.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.5 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.

2.6 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. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. 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.
- E. 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.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. 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 Section 01 7839 Project Record Documents.
- G. Comply with Section 01 7700 Closeout Procedures for schedule for submitting operation and maintenance documentation.

END OF SECTION

SECTION 01 7839**PROJECT RECORD DOCUMENTS****PART 1 - GENERAL****1.1 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
- B. Related Requirements:
 - 1. Section 01 7700 Closeout Procedures for general closeout procedures.
 - 2. Section 01 7823 Operation and Maintenance Data for operation and maintenance manual requirements.
 - 3. Individual Sections for specific requirements for project record documents of the Work in those Sections.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - i. Submit one paper-copy set(s) of marked-up record prints.
 - ii. Architect/Engineer will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - i. Submit PDF electronic files of scanned record prints and two set(s) of prints.
 - ii. Print each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy and an annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.

- C. Record Product Data: Submit one paper copy and annotated PDF electronic files and directories 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. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one paper copy and annotated PDF electronic files and directories of each submittal.
- E. Reports: Submit written report weekly 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. Depths of foundations below first floor.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.

- g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Change Directive.
 - k. Changes made following Architect/Engineer's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. 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. 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: Submit record Drawings as paper copy **and** scanned PDF electronic file(s) of marked-up paper copy of Drawing.
 - 3. Identification: As follows:
 - a. Project name
 - b. Date
 - c. Designation "PROJECT RECORD DRAWINGS"
 - d. Name of Architect/Engineer and Construction Manager
 - 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, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as paper copy and scanned PDF electronic file(s) of marked-up paper copy of Specifications.

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, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as paper copy and scanned PDF electronic file(s) of marked-up paper copy of Product Data.
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 paper copy and scanned PDF electronic file(s) of marked-up miscellaneous record submittals.

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/Engineer's and Construction Manager's reference during normal working hours.

END OF SECTION

SECTION 01 8000**PERFORMANCE REQUIREMENTS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Complete Systems.

PART 2 PRODUCTS**2.01 COMPLETE SYSTEMS**

- A. Each Contractor acknowledges that they are responsible for providing complete systems in every respect, capable of operating as indicated in the Contract Documents. It is not intended that every fitting, minor detail or feature be shown or described.
- B. The Contractor shall be responsible for any detail necessary for completion of any system in accordance with standard industry practice. Installation shall be executed so as to contribute to the efficiency of operation, minimum maintenance, ease of accessibility and minimization of unsightliness.
- C. Contract Drawings for Mechanical and Electrical work are in part diagrammatic, intended to cover the general design and extent of the systems and indicate the general arrangement of equipment, ducts, conduits, piping and approximate sizes and locations of equipment and outlets. Mechanical and Electrical Drawings are not intended to be scaled for roughing-in measurements nor to serve as Shop Drawings. Where Drawings are required for these purposes or have to be made from field measurements, they shall be prepared by the Contractor who is responsible for such Work and distributed to the Construction Manager and other Contractors as necessary. These Drawings shall be prepared at no additional cost to the Owner.

PART 3 EXECUTION (NOT USED)**END OF SECTION**

SECTION 01 8200**DEMONSTRATION AND TRAINING****PART 1 GENERAL****1.1 SUMMARY**

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
1. Demonstration of operation of systems, subsystems, and equipment.
 2. Training in operation and maintenance of systems, subsystems, and equipment.

1.2 SUBMITTALS

- A. Instruction Program: Submit two copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
1. At completion of training, submit one complete training manual for Owner's use.
- B. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Attendance Record: For each training module, submit list of participants and length of instruction time.
- D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.
- E. Demonstration and Training Videotape: Submit two copies at end of each training module.

1.3 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 01 4000 Quality Requirements, experienced in operation and maintenance procedures and training.
- C. Pre-instruction Conference: Conduct conference at Project site to comply with requirements in Section 01 3100 Project Management and Coordination. Review methods and procedures related to demonstration and training including, but not limited to, the following:
1. Inspect and discuss locations and other facilities required for instruction.

2. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
3. Review required content of instruction.
4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

1.4 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect/Engineer.

PART 2 PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:
 1. Motorized doors, including, overhead coiling doors, overhead coiling grilles and automatic entrance doors
 2. Equipment, including stage equipment, projection screens, loading dock equipment, waste compactors, food-service equipment, residential appliances and laboratory fume hoods
 3. Fire-protection systems, including fire alarm, fire pumps and fire-extinguishing systems
 4. Intrusion detection systems
 5. Conveying systems, including elevators, wheelchair lifts and cranes
 6. Gas equipment, including medical gas equipment and piping
 7. Laboratory equipment, including laboratory air and vacuum equipment and piping
 8. Heat generation, including, boilers, feedwater equipment, pumps, steam distribution piping and water distribution piping
 9. Refrigeration systems, including chillers, cooling towers, condensers, pumps and distribution piping
 10. HVAC systems, including air-handling equipment, air distribution systems and terminal equipment and devices

11. HVAC instrumentation and controls
 12. Electrical service and distribution, including transformers, switchboards panelboards, uninterruptible power supplies and motor controls
 13. Packaged engine generators, including transfer switches
 14. Lighting equipment and controls
 15. Communication systems, including intercommunication, surveillance, clocks, programming voice and data and television equipment
 16. Any other equipment not specifically listed that is part of these construction documents
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions
 - b. Performance and design criteria if Contractor is delegated design responsibility
 - c. Operating standards
 - d. Regulatory requirements
 - e. Equipment function
 - f. Operating characteristics
 - g. Limiting conditions
 - h. Performance curves
 2. Documentation: Review the following items in detail:
 - a. Emergency manuals
 - b. Operations manuals
 - c. Maintenance manuals
 - d. Project Record Documents
 - e. Identification systems
 - f. Warranties and bonds
 - g. Maintenance service agreements and similar continuing commitments

3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages
 - b. Instructions on stopping
 - c. Shutdown instructions for each type of emergency
 - d. Operating instructions for conditions outside of normal operating limits
 - e. Sequences for electric or electronic systems
 - f. Special operating instructions and procedures
4. Operations: Include the following, as applicable:
 - a. Startup procedures
 - b. Equipment or system break-in procedures
 - c. Routine and normal operating instructions
 - d. Regulation and control procedures
 - e. Control sequences
 - f. Safety procedures
 - g. Instructions on stopping
 - h. Normal shutdown instructions
 - i. Operating procedures for emergencies
 - j. Operating procedures for system, subsystem, or equipment failure
 - k. Seasonal and weekend operating instructions
 - l. Required sequences for electric or electronic systems
 - m. Special operating instructions and procedures
5. Adjustments: Include the following:
 - a. Alignment
 - b. Checking adjustments
 - c. Noise and vibration adjustments
 - d. Economy and efficiency adjustments

6. Troubleshooting: Include the following:
 - a. Diagnostic instructions
 - b. Test and inspection procedures
7. Maintenance: Include the following:
 - a. Inspection procedures
 - b. Types of cleaning agents to be used and methods of cleaning
 - c. List of cleaning agents and methods of cleaning detrimental to product
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance
 - f. Procedures for routine maintenance
 - g. Instruction on use of special tools
8. Repairs: Include the following:
 - a. Diagnosis instructions
 - b. Repair instructions
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions
 - d. Instructions for identifying parts and components
 - e. Review of spare parts needed for operation and maintenance

PART 3 EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

1. Architect/Engineer will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
 2. Owner will furnish an instructor to describe Owner's operational philosophy.
 3. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
1. Schedule training with Owner, through Architect/Engineer, with at least Seven (7) Days' advance notice.
- D. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.
- E. Demonstration and Training Videotape: Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
1. At beginning of each training module, record each chart containing learning objective and lesson outline.
- F. Cleanup: Collect used and leftover educational materials and remove from Project site. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

END OF SECTION