

SECTION 010001

BASIC REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Summary of Work:
 - 1. Contract.
- B. Contract Considerations:
 - 1. Schedule of values.
 - 2. Applications for payment.
 - 3. Change procedures.
- C. Coordination and Meetings:
 - 1. Coordination.
 - 2. Field engineering.
 - 3. Cutting and patching.
 - 4. Meetings.
 - 5. Progress meetings.
 - 6. Examination.
 - 7. Preparation.
 - 8. Cutting and Patching.
- D. Submittals:
 - 1. Submittal procedures.
 - 2. Construction progress schedules.
 - 3. Proposed products list.
 - 4. Shop drawings.
 - 5. Product data.
 - 6. Samples.
 - 7. Manufacturers' installation instructions.
 - 8. Manufacturers' certificates.
- E. Quality Control:
 - 1. Quality assurance - control of installation.
 - 2. Tolerances.
 - 3. References.
 - 4. Special Inspections and testing laboratory services.
 - 5. Manufacturers' field services and reports.
- F. Construction Facilities and Temporary Controls:
 - 1. Temporary electricity.
 - 2. Temporary lighting for construction purposes.
 - 3. Temporary heat.
 - 4. Temporary ventilation.

5. Telephone service.
6. Temporary water service.
7. Temporary sanitary facilities.
8. Barriers and fencing.
9. Water control.
10. Exterior enclosures.
11. Protection of installed work.
12. Security.
13. Maintenance of Traffic.
14. Parking.
15. Progress cleaning and waste removal.
16. Field offices and sheds.
17. Removal of utilities, facilities and controls.

G. Material and Equipment:

1. Products.
2. Transportation, handling, storage, and protection.
3. Products options.
4. Substitutions.

H. Starting of Systems:

1. Starting systems.
2. Demonstration and instructions.
3. Testing, adjusting and balancing.

I. Contract Closeout:

1. Contract closeout procedures.
2. Final cleaning.
3. Adjusting.
4. Project record documents.
5. Operation and maintenance data.
6. Spare parts and maintenance materials.
7. Warranties.

1.2 CONTRACT

- A. Contract Description: AIA Document A 121/CMc Standard Form of Agreement Between Owner and Construction Manager, Rider A, Rider B and Supplementary Conditions.

1.3 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703 or equivalent.

1.4 APPLICATIONS FOR PAYMENT

- A. Submit five copies of each application on AIA Document G702 and G703.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: 30 days.

1.5 CHANGE PROCEDURES

- A. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- B. Change Order Forms: AIA G701.

1.6 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable.
- D. In finished areas, conceal pipes, ducts, and wiring within the construction.

1.7 FIELD ENGINEERING

- A. Employ a Land Surveyor to locate a reference datum and protect survey control and reference points.
- B. Establish elevations, lines, and levels and certify that elevations and locations of the Work conform with the Contract Documents.
- C. Provide a final as-built survey.

1.8 PRE-CONSTRUCTION MEETINGS

- A. Architect will schedule a pre-construction meeting after Notice to Proceed for all affected parties.
- B. When required in individual specification section, convene a pre-installation meeting at Project site prior to commencing work of the section.

1.9 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum bi-monthly intervals.
- B. Preside at meetings, record minutes, and distribute copies within four days to those affected by decisions made.

1.10 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that utility services are available, of the correct characteristics, and in the correct location.

1.11 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

1.12 CUTTING AND PATCHING

- A. Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- E. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- G. Refinish surfaces to match adjacent finishes.

1.13 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier; and pertinent Contract Document references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.

1.14 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within 15 days after date established in Notice to Proceed for Architect review.
- B. Submit revised schedules as required, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.
- C. Submit a horizontal bar chart with separate line for each major section of Work or operation, identifying first work day of each week.

1.15 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit list of major Products proposed for use, with name of manufacturer, trade name, and model number of each product.

1.16 SHOP DRAWINGS

- A. Shop Drawings for Review:
 - 1. Submitted to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- B. Shop Drawings for Information:

1. Submitted for the Architect's benefit as contract administrator or for the Owner.
 2. Reports of inappropriate or unacceptable work may be subject to action by the Architect or Owner.
- C. Shop Drawings For Project Close-out:
1. Submitted for the Owner's benefit during and after project completion.
- D. Submit the number of opaque reproductions which Contractor requires, plus three copies which will be retained by Architect.

1.17 PRODUCT DATA

- A. Submit the number of copies which the Contractor requires, plus three copies which will be retained by the Architect.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this project.

1.18 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product.
- B. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect's selection.

1.19 MANUFACTURER INSTALLATION INSTRUCTIONS

- A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

1.20 MANUFACTURER CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Architect, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

1.21 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.22 TOLERANCES

- A. Monitor tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturers' tolerances.

1.23 REFERENCES

- A. Conform to reference standard by date of issue current as of date of Contract Documents.
- B. Should specified reference standard conflict with Contract Documents, request clarification from Architect before proceeding.

1.24 SPECIAL INSPECTIONS & MATERIAL CERTIFICATIONS FOR STRUCTURAL SYSTEMS

- A. The Owner shall employ and pay for the services of an independent firm to perform special inspections as required in section 1704 of the 2015 International Building Code.
- B. Service shall include but are not limited to geotechnical inspections, compaction test, concrete testing, and topsoil chemical composition test. Field Inspections of Welds, Bolted Connections and Periodic Wood Framing Inspections. The Owner and Architect shall receive copies of all test reports.
- C. The Contractor/ CM will coordinate scheduling of all Special Inspections.
- D. All deficient work will be corrected and re-tested.
- E. Material Certification
The Contractor shall submit Material Certifications for the following:
 - 1. Foundation Reinforcing Steel
 - 2. CMU Certification – ASTM C90, Grade N, Type I
 - 3. Mortar Certification – ASTM C270, Type S
 - 4. CMU Reinforcing Submittal
 - 5. Structural Steel Manufacturer's Certification
 - 6. Lumber Grade Certification
 - 7. Floor Truss Shop Drawings

1.25 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions that are supplemental or contrary to manufacturers' written instructions.

1.26 TEMPORARY ELECTRICITY

- A. Cost: Contractor provide and pay for power service required from source. Provide power outlets for construction operations, branch wiring, distribution boxes, and flexible power cords as required.

1.27 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain temporary lighting for construction operations.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- C. Permanent building lighting may be utilized during construction. Repair, clean, and replace lamps at end of construction.

1.28 TEMPORARY HEAT

- A. Provide heating devices and heat as needed to maintain specified conditions for construction operations.

- B. Contractor to pay cost of energy used.
- C. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- D. Maintain minimum ambient temperature of 55 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

1.29 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.30 TELEPHONE SERVICE

- A. Provide, maintain and pay for telephone service to field office at time of project mobilization. Allow Architect and the Owner incidental use.

1.31 TEMPORARY WATER SERVICE

- A. Provide, maintain and pay for suitable quality water service required. Connect to existing water source for construction operations.

1.32 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. New facilities may not be used.
- B. Maintain in clean and sanitary condition.

1.33 BARRIERS AND FENCING

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage.
- B. Construction: Contractor's option.

1.34 WATER CONTROL

- A. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Provide erosion control.

1.35 EXTERIOR ENCLOSURES

- A. Provide temporary insulated weather tight closures to exterior openings to permit acceptable working conditions and protection of the Work.

1.36 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces.

1.37 SECURITY

- A. Provide security and facilities to protect Work and Owner's operations from unauthorized entry, vandalism, or theft.

1.38 MAINTENANCE OF TRAFFIC

A. DESCRIPTION

1. Maintain vehicular and pedestrian traffic to protect the public from damage to person and property within the limits of and for the duration of the contract work.
2. Construct temporary pavements if required to maintain traffic.
3. Erect and maintain barricades and signs.
4. Provide competent flagmen.
5. Provide lights and flashers where required.
6. Control dust, dirt and other accumulations on roads.

B. REFERENCED STANDARDS, REQUIREMENTS

- C. Comply with applicable provisions of New York State Department of Transportation Standard Specifications, January 2, 1985 (NYSDOT), Section 619 - Maintenance and Protection of Traffic.
- D. Comply with New York State Department of Transportation Manual of Uniform Traffic Control Devices.

1.39 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

1.40 FIELD OFFICES AND SHEDS

- A. Office: Weather tight, with lighting, electrical outlets, heating and air conditioning and equipped with sturdy furniture and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 8 persons.

1.41 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion review.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.42 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
- B. Provide interchangeable components of the same manufacture for components being replaced.

1.43 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

- A. Transport, handle, store, and protect Products in accordance with manufacturer's instructions.

1.44 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

1.45 SUBSTITUTIONS

- A. Architect will consider requests for Substitutions only within 15 days after date established in Notice to Proceed.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.

1.46 STARTING SYSTEMS

- A. Provide seven days notification prior to start-up of each item.
- B. Ensure that each piece of equipment or system is ready for operation.
- C. Execute start-up under supervision of responsible persons in accordance with manufacturers' instructions.
- D. Submit a written report that equipment or system has been properly installed and is functioning correctly.

1.47 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, at designated location.

1.48 TESTING, ADJUSTING, AND BALANCING

- A. Owner will appoint and employ services of an independent firm to perform testing, adjusting, and balancing. Contractor shall pay for services from a Cash Allowance specified in this section.
- B. Reports will be submitted by the independent firm to the Architect indicating observations and results of tests and indicating compliance or non-compliance with specified requirements and with the requirements of the Contract Documents.
- C. Cooperate with independent firm; furnish assistance as requested.
- D. Re-testing required because of non-conformance to specified requirements will be charged to the Contractor.

1.49 CONTRACT CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum/Price, previous

payments, and amount remaining due.

1.50 FINAL CLEANING

- A. Execute final cleaning (move-in quality) prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
- C. Clean debris from site, roofs gutters, downspouts, and drainage systems.
- D. Clean filters of operating equipment.
- E. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.51 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.52 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section a description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Final As-Built Drawings
 - 1. Final submission of as-built drawings shall be submitted either printed on Mylar Sheets, or on bond paper suitable for permanent storage plus three copies of the documents on CD-ROMs submitted in Adobe PDF format. A preliminary submission of the final drawings printed on bond paper may be submitted for review before producing the final as-built set. Drawing files submitted on CD-ROMs must comply with the following:
 - a. Include a generic text file that explains the contents of the disk and the format of the drawing files.
 - b. Saved in folders and with file names that correlate to the printed documents.
 - c. Saved in a format that matches the final version of the printed drawings. Provide only information relevant to each drawings and do not include extraneous information and details which are not included in the final documents.
 - d. Include the Certificate(s) of Occupancy in a separate file.
 - 2. Label all drawing sheets with an as-built title and final date. Any sheets with no changes are to have a statement added that no changes have been made from the original drawing sheet.
 - 3. Drawings shall consist of a reproduction of the complete contract drawings updated to reflect changes made during the construction of the project and with added information, as necessary, to explain aspects of the project in further detail than in the contract set.
 - a. Add details to the contract set of drawings issued during construction by the project architect for change orders and supplementary instructions.
 - b. Add sheets which include shop drawings, manufacture data, or details from product submissions issued during construction which explains this information in better detail. (Boilers, schematics of controls, & piping are good examples of this).
 - c. Update the drawing index to denote changes made by adding or deleting drawings from the original contract drawings.
 - 4. Ensure that special attention is given to explain locations, with dimensions, of buried utilities & structures, utility valves & shut-offs, electrical controls, and other maintenance devices.
 - 5. Drawings shall be submitted with a cover memo from the project architect stating that he/she has reviewed the set and is satisfied that the set is complete and that included information is

well coordinated without inaccuracies or confusing duplications.

F. Photographic documentation that provides a full record of the "as-built" conditions may be utilized as an alternative to as-built record drawings, providing that the system utilized meets or exceeds the following criteria:

1. Photographic documentation and related services are provided by an independent third party service specializing in construction photography of as-built conditions.
2. Photographs are keyed to the construction documents.
3. Photographs are taken at a suitable frequency at each location including individual rooms (generally three times each) to record conditions of : buried utilities; foundations; rough-in utilities; framing and superstructure; systems and controls; special features; and finished construction.
4. The documentation includes product and warranty information of building systems, components and finishes. Sufficient documentation of building products and warranties will satisfy the warranty submission below.
5. The documentation includes training video sessions of HVAC and other building systems for the use of maintenance staff.
6. The documentation includes a letter from the firm responsible for the service stating that the final submission includes a complete record of the as-built conditions.
7. The documentation is an Adobe PDF format suitable for archiving purposes and submitted on three CD-ROMs or DVDs.
8. A full set of the most recent version of the construction documents, including change orders and supplemental drawings issued during construction in Adobe PDF format, is to be included with each CD-ROM or DVD set (or supplemental discs) to accompany the photographic documentation.

G. Warranties must comply with the following:

1. All components and building systems to have a minimum of one year materials and labor warranty.
2. All warranties and guarantees listed in the project specifications that have a warranty period greater than one year must be submitted at the project close out. The following items, although not entirely inclusive, must be submitted: roof; doors; door hardware and accessories; windows; flooring; specialties; mechanical system; electrical systems; and plumbing.
3. Include a copy of each warranty, properly labeled by warranty section, in a separate warranty folder on the CD-ROM.

H. Other Submissions:

In addition to the above, provide copies of the following prior to project closeout at construction completion:

1. Third party clearance reports and testing result summaries for hazardous material mitigation applicable to the project, such as;
 - a. Closed building radon testing performed prior to occupancy
 - b. Asbestos clearance report(s)
 - c. Lead based paint clearance or abatement report(s)
 - d. Other mitigated hazardous conditions, such as: mold mitigation, removal of underground petroleum or other hazardous material storage tanks, etc.
2. Final Certificate(s) of Occupancy
3. Project Architect's Certificate of Substantial Completion (AIA G704)
4. Contractor's final application for payment (AIA G703/703) certified by project Architect
5. Project Architect's Certification in accordance with Appendix C
6. Contractor's Affidavit of Release of Liens (AIA G706A)

7. Contractor's Affidavit Payment of Debts and Claims (AIA G706)
 8. Final summary report by the energy consultant
 9. Certification from the energy efficiency program, if applicable
 10. Final summary report by the green building consultant, if applicable
 11. Certification from the green building program, if applicable
- I. Building Systems
- It is strongly recommended to record and provide videos of training sessions for HVAC and other building systems for the use of building maintenance staff.

END OF SECTION