

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes
 - 1. General Project coordination procedures.
 - 2. Coordination meetings.
 - 3. Coordination of construction operations.
 - 4. Requests for interpretation (RFIs).

1.3 RELATED WORK

- A. Related Work of Other Sections:
 - 1. Section 01 11 00 – Summary of Work: Requirements for Work covered by Contract Documents, contract method, work by others, Work sequence, Contractor's use of the premises, Owner occupancy, questions and interpretations.
 - 2. Section 01 31 19 – Project Meetings: Requirements for pre-construction conference and progress meetings.
 - 3. Section 01 33 00 – Submittal Procedures: Requirements for electronic copies of submittals, Post-Bid, administrative, shop drawings, product data and sample submittals.
 - 4. Section 01 45 29 – Testing Laboratory Services: Contractor's required quality assurance testing and Owner's quality control testing requirements.
 - 5. Section 01 42 00 – References: Referenced standards, organizations and codes.
 - 6. Section 01 50 00 – Temporary Facilities and Controls: Temporary utilities, controls, and construction aids required during construction, maintenance, housekeeping and removals, and protection of existing improvements and property.
 - 7. Section 01 60 00 - Product Requirements: General procedures for delivery, storage, handling and installing materials and equipment, and substitution procedures after receipt of Bids.
 - 8. Section 01 71 16 – Acceptance of Conditions: Requirements for examination of the Site and existing facilities, concealed utilities and services, and protection of existing facilities and services.
 - 9. Section 01 71 23 – Field Engineering: Requirements for layout and dimensional control of the Work and verification of measurements.
 - 10. Section 01 74 19 – Construction Waste Management.
 - 11. Section 01 73 00 – Execution: Examination, preparation and installation requirements.
 - 12. Section 01 77 00 –Closeout Procedures: Closeout procedures, record drawings, maintenance manuals, warranties and other closeout submittals.

1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction 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 accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. If necessary, 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 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.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

1.5 SUBMITTALS

- A. Coordination Drawings: Within 90 days of Notice To Proceed provide coordination drawings for the integration of the work, including work first shown in detail on shop drawings or product data. Show sequencing and relationship of separate units of work which must interface in a restricted manner to fit in the space provided, or function as indicated. Coordination drawings are considered shop drawings and must be definitive in nature. Submitted coordination drawings are for information only and typically will not be returned to Contractor. Architect will not take any action but may define coordination conflicts or problems and inform Contractor of such conflicts or problems.
1. Prepare and submit Coordination Drawings when required by other Sections.
 2. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:

- a. Prepare and submit coordinated composite layouts of the mechanical systems and equipment for all areas, drawn at a scale not less than 1/4" per foot showing on both plan and elevation, including, but not limited to, all equipment, ducts, pipe sleeves, piping including plumbing and sprinkler system, lighting, special supports and other items contained within the space and finished ceiling. Show mechanical and electrical services as well as architectural and structural features drawn to scale. Provide composite drawings for all areas such as corridors, specialty spaces, mechanical rooms, shafts, tunnels, and all congested areas. Distribute copies of composite drawings to all trades to assure a complete, coordinated installation of work within the space available. Include elevation drawings indicating finish ceiling heights, and heights above finished floor to bottom of ductwork, piping, and conduit.
 - b. Indicate functional and spatial interrelationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - c. Indicate required installation sequences.
 - d. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
 - e. Submit certificate guaranteeing that coordination drawings have been done and are being utilized at the project site.
 - f. Call attention in advance to Architect of any dimensional or detail information needed to complete the coordination drawings.
 - g. Refer to Division 21, 22, 23 and 26 Sections "Basic Materials and Methods" for specific Coordination Drawing requirements for fire protection systems, plumbing systems, mechanical systems, and electrical system installations.
 - h. The architect will not process sheet metal shop drawings until such time as the coordination drawings have been sufficiently completed and conflicts resolved. This may be done on a floor by floor basis as a minimum.
3. Sheet Size: At least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 4. Number of Copies: Submit two opaque copies of each submittal. Architect will return one copy.
 - a. Submit five copies where Coordination Drawings are required for operation and maintenance manuals. Architect will retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Drawing.
 5. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. 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.

1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
1. Include special personnel required for coordination of operations with other contractors.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Architect of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Record significant discussions and agreements achieved. Contractor will record and distribute the meeting minutes.
- B. Quality Control Pre-Construction Conference: Schedule and conduct a quality control pre-construction conference to review the detailed quality control and construction requirements for all materials and/or systems as appropriate, not less than 10 working days prior to commencement of the applicable portion of the work.
1. The Contractor shall require responsible representatives of each party concerned with that portion of the work to attend the conference, including but not limited to the following:
 - a. Contractor's superintendent.
 - b. Materials supplier(s) or fabricator.
 - c. Installation subcontractor(s).
 - d. Agency responsible for Contractor-furnished testing.
 2. The Architect, responsible Engineer and Owner's Testing Agency will be present and shall be notified by the Contractor at least 5 days prior to the scheduled date of each such conference. Representatives from the Owner's Testing Agency shall include the specific individuals who will be performing the testing and inspection as well as the Project Manager for the Testing Agency.
 3. Reporting: Minutes of each conference shall be recorded by the Contractor and shall be distributed to each party in attendance within 5 days of the meeting. One copy of these minutes shall also be transmitted to the Owner's representative for information.
 4. Records: Contractor shall maintain correct records on an appropriate form for all inspections and tests performed, instructions received from the Architect, responsible Engineer or Testing Agency, and actions taken as a result of those instructions. These records shall include evidence that the required inspections or tests have been performed (including type and number of inspections or tests, nature of defects, causes for rejection, etc.), proposed or directed remedial action and corrective action taken. Contractor shall document inspections and tests as required by each section of the Specifications. Contractor shall provide updated daily report records to the Architect not less than bi-weekly.

- C. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner, and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. 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. Procedures for processing field decisions and Change Orders.
 - f. Procedures for requests for interpretations (RFIs).
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of Record Documents.
 - l. Preparation of operating and maintenance manuals.
 - m. Use of the premises.
 - n. Work restrictions.
 - o. Owner's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Construction waste management and recycling.
 - r. Parking availability.
 - s. Office, work, and storage areas.
 - t. Equipment deliveries and priorities.
 - u. First aid.
 - v. Security.
 - w. Progress cleaning.
 - x. Working hours.
 - y. Indoor air quality procedures.
 - z. Review environmental goals and sustainable design procedures for the Project.
 3. Minutes: Contractor will record and distribute meeting minutes.
- D. 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 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 requests for interpretations (RFIs).
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Trade responsibilities.
 - k. Compatibility problems.
 - l. Time schedules.
 - m. Weather limitations.
 - n. Manufacturer's written recommendations.
 - o. Warranty requirements.
 - p. Compatibility of materials.
 - q. Acceptability of substrates.
 - r. Temporary facilities and controls.
 - s. Space and access limitations.
 - t. Regulations of authorities having jurisdiction.
 - u. Testing and inspecting requirements.
 - v. Installation procedures.
 - w. Coordination with other work.
 - x. Required performance results.
 - y. Protection of adjacent work.
 - z. Protection of construction and personnel.
- 3. Record significant conference discussions, agreements, and disagreements.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - 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.
- E. Progress and Coordination Meetings: Conduct Project progress and coordination meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests.
- 1. Attendees: In addition to representatives of Owner, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference 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 progress and coordination meeting. Report on outstanding issues from the previous meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's 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 Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - (1). Interface requirements.
 - (2). Sequence of operations.
 - (3). Status of submittals.
 - (4). Construction waste management and recycling.
 - (5). Deliveries.
 - (6). Off-site fabrication.
 - (7). Access.
 - (8). Site utilization.
 - (9). Temporary facilities and controls.
 - (10). Work hours.
 - (11). Hazards and risks.
 - (12). Progress cleaning.
 - (13). Quality and work standards.
 - (14). Status of correction of deficient items.
 - (15). Field observations.
 - (16). Requests for interpretations (RFIs).
 - (17). Status of Proposal Requests (PRs).
 - (18). Pending changes.
 - (19). Status of Change Orders.
 - (20). Pending claims and disputes.
 - (21). Documentation of information for payment requests.
 - d. Minutes: Architect will record meeting results and distribute copies to everyone in attendance and to parties that should have been present.
- F. Construction Operations: Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
- 1. Schedule construction operations in sequence to obtain satisfactory 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 utilize space efficiently to assure maximum accessibility for required maintenance, service, and repair. Coordinate use of Project space for installation of mechanical, plumbing, and electrical work that is indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building.
 - 3. Make provisions to accommodate items scheduled for later installation.
 - 4. Refer to Section 01730 - Execution for additional requirements.

1.8 REQUESTS FOR INTERPRETATION (RFIS)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.

2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
1. Project name.
 2. Date.
 3. Name of Contractor.
 4. Name of Architect[and Construction Manager].
 5. RFI number, numbered sequentially.
 6. Specification Section number and title and related paragraphs, as appropriate.
 7. Drawing number and detail references, as appropriate.
 8. Field dimensions and conditions, as appropriate.
 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 10. Contractor's signature.
 11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
 - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above. Submit in the form of a .pdf (portable document file)
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working 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's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following: Software log with not less than the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - a. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS

(NOT USED)

PART 3 - EXECUTION

(NOT USED)

END OF SECTION 01 31 00