

## SECTION 01 3100 - 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 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.
  - 4. Requests for Information (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections include the following:
  - 1. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
  - 2. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

- A. RFI: Request For Information from Contractor seeking interpretation or clarification of the Contract Documents.

#### 1.4 COORDINATION

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and the Owner and entities to ensure efficient and orderly installation of each part of the Work, with the General Contractor ultimately responsible for overall and final coordination. The General Contractor shall coordinate the work of each Prime Contractor with the work of the General Contractor and requirements of the Owner. All contractors shall coordinate with the General Contractor. 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 accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
  4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. The General Contractor shall be in charge of plus be responsible for the entire area of construction of the work of this project from beginning of the work until acceptance by the Owner.
- C. 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.
- D. 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. Pre-installation conferences.
  6. Project closeout activities.
  7. Startup and adjustment of systems.
- E. 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. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.
- 1.5 SUBMITTALS.
- A. Coordination Drawings: Submit coordination drawings as specified herein.

B. Contractor Reports:

1. At each project meeting, submit the CONTRACTOR PROGRESS/SCHEDULE REPORT; typewritten on a copy of the form provided in the Section, or prepared on computer using the same format. This report will be copied and attached to the project meeting minutes;
2. At the end of each day, submit the DAILY CONSTRUCTION REPORT, legibly printed or typewritten on a copy of the form provided in this Section, to the Owner's Representative. Reports will be reviewed during the Project Meeting.

C. Meeting Minutes:

1. The Architect will compile minutes of each project meeting, attach the CONTRACTOR PROGRESS/SCHEDULE REPORT and mail, (or hand out at the next scheduled project meeting), to the Owner's Representative and to each Contractor. The Contractor may make and distribute such other copies as he wishes;
2. The project meeting minutes, as amended and approved by all parties, become a part of the Contract Documents.
3. The Architect may make audio recordings of the project meetings as an aid to the development of the project meeting minutes. However, the audio recording will not constitute a part of the project meeting minutes and shall not be deemed to augment or supercede the written minutes, as approved.
4. It shall be the responsibility of each person attending to take personal notes of discussions and decisions made during the project meetings, to the extent necessary to ensure the prompt execution of such decisions.

D. Key Personnel Names: Within 10 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. Keep list current at all times.

## 1.6 COORDINATION DRAWINGS

A. The Plumbing Contractor, HVAC Contractor, and Electrical Contractor shall prepare coordination drawings to a scale of 1/4"=1'0" or larger; detailing all elements, components, and systems of mechanical equipment and materials in relationship with other systems, installations, and building components. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are of importance to the efficient flow of the Work, including (but not necessarily limited to) the following:

1. Indicate the proposed locations of piping, ductwork, conduit, equipment, and materials. Include the following:
  - a. Clearances for installing and maintaining insulation.

- b. Clearances for servicing and maintaining equipment, including tube removal, filter removal, and space for equipment disassembly required for periodic maintenance.
    - c. Equipment connections and support details.
    - d. Exterior wall and foundation penetrations.
    - e. Fire-rated wall and floor penetrations.
    - f. Sizes and location of required concrete pads and bases.
    - g. Valve stem movement.
  - 2. Indicate scheduling, sequencing, movement and positioning of large equipment into the building during construction. Use space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
  - 3. Prepare floor plans, sections, and details to indicated penetrations in floors, walls, and ceilings and their relationship to other penetrations and installations.
  - 4. Order of priority for construction space:
    - a. Maintaining scheduled finished ceiling height.
    - b. Lighting.
    - c. Drainlines.
    - d. Ductwork.
    - e. Fire protection piping.
    - f. Other piping.
    - g. Conduit.
- B. Layout of plumbing, fire protection, mechanical, and electrical systems, equipment, fixtures, piping, ductwork, conduit, specialty items, and accessories indicated on the Contract Drawings is diagrammatic. Variations in alignment, elevation, and detail will be required to avoid interference and satisfy architectural and structural limitations that are not necessarily shown.
- C. The General Contractor, HVAC, Plumbing, Electrical, and Aquatics Contractors shall work together to coordinate the installation of all equipment and material to be installed. If conflicts are found, and they cannot be worked out in the field, they shall be brought to the attention of the Architect.
- D. The General Contractor shall prepare the base ceiling plans within 30 days of receipt of the Notice to Proceed. Each contractor shall use these base ceiling drawings to develop reflected ceiling plans. The HVAC Contractor shall obtain copies of the General Contractor's base ceiling plans, copies of the Plumbing Contractor and Electrical Contractor's reflected plans and use them to prepare overall coordinated reflected ceiling plans which shall include but not be limited to: air outlets and inlets, light fixtures, communication systems components, sprinklers, and other ceiling-mounted items. The Plumbing and Electrical Contractor shall provide information to the HVAC Contractor, about their components located in the ceiling.
- E. The HVAC Contractor shall obtain copies of the Plumbing and Electrical Contractor's coordination drawings to insure that all installations are coordinated and no conflicts exist. The HVAC Contractor shall utilize the approved structural steel shop drawings to coordinate installation of material and equipment in the ceiling spaces and in chases. If in the event that a conflict arises because of the contractor's lack of coordination, it will be the respective contractor's responsibility to relocate the portion of the work in conflict.

- F. Coordination drawings shall be prepared, reviewed, coordinated and finalized well in advance of any work being performed, by any trade in any area. The drawings and coordination shall follow the project phasing. A coordination drawing completion schedule shall be prepared by the HVAC Contractor and agreed upon by the Plumbing and Electrical Contractor. The initial drawings shall be prepared within 30 days of receipt of the General Contractor's base ceiling drawings.
- G. The HVAC, Plumbing, Electrical and Aquatics Contractors shall hold weekly meetings. The HVAC Contractor shall organize and chair the meetings. The General Contractor shall be asked to attend when it is necessary to coordinate their work. Meeting minutes shall be prepared and copies sent to all attendees as well as the Owner's representative Architect and Engineer.

#### 1.7 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.

#### 1.8 PROJECT MEETINGS

- A. General: The Architect will schedule and conduct meetings at Project site, on a bi-weekly basis, unless otherwise indicated. Coordinate as necessary to establish mutually acceptable schedule for meetings.
  - 1. Location: The Architect will establish meeting location. To maximum extent possible, meetings will be held at the job site.
  - 2. Attendees: The Architect will inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Persons designated by a Contractor to attend and participate in the project meetings shall have all required authority to commit the Contractor to solutions agreed upon in the project meetings.
  - 3. Minimum Agenda: The Architect will prepare the meeting agenda and distribute the agenda to all invited attendees.
    - a. Review, revise as necessary, and approve minutes of previous meeting;
    - b. Review progress of the Work since last meeting, including status of submittals for approval;
    - c. Discuss work planned to the next project meeting, including review of job progress with construction schedule.
  - 4. Revisions to minutes:
    - a. Unless published minutes are challenged in writing prior to the next regularly scheduled progress meeting, they will be accepted as properly stating the activities and decisions of the meeting;
    - b. Challenge to minutes shall be settled as priority portion of "old business" at the next regularly scheduled meeting.
  - 5. Minutes: The Architect will record minutes of each meeting, significant discussions and agreements achieved, attach the CONTRACTOR'S PROGRESS/SCHEDULE REPORT and mail, (or hand out at next scheduled

meeting) the meeting minutes to everyone concerned, including Owner and Architect.

- B. The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of project meetings content.
- C. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner, and Architect, but no later than 10 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; 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. Minimum Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and Architect;
    - b. Channels and procedures for communications;
    - c. Construction schedule, including phasing and sequence of critical work.
    - d. Contract Documents, including distribution of required copies of original Documents and revisions;
    - e. Processing of Shop Drawings and other data submitted to the Architect for review;
    - f. Processing of 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.
    - 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.
  - 3. Minutes: Architect 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. The 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 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.

## 1.9 REQUESTS FOR INFORMATION (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. If needed, insert requirements for frivolous RFIs. Some owners and design professionals include a provision that assesses the cost of the design professional's time and materials to Contractor for unnecessary or frivolous RFIs.
- C. 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.
  - 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.
- 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 01 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 5 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 five 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 at each project meeting. Include 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.
  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.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 3100

CONTRACTOR PROGRESS/SCHEDULE REPORT (typewritten for each Project Meeting)

PROJECT \_\_\_\_\_  
—

CONTRACTOR \_\_\_\_\_ DATE \_\_\_\_\_  
—

CONTRACT \_\_\_\_\_

PROGRESS/WORK COMPLETED

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

(5) \_\_\_\_\_

(6) \_\_\_\_\_

(7) \_\_\_\_\_

(8) \_\_\_\_\_

WORK PROJECTED

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

(5) \_\_\_\_\_

(6) \_\_\_\_\_

(7) \_\_\_\_\_

(8) \_\_\_\_\_

CONFORMANCE WITH SCHEDULE

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