

SECTION 01 32 00:
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1: GENERAL

1.01 SECTION INCLUDES

- A. This section includes administrative and procedural requirements for documenting the progress of construction during performance of the work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Photographs of job site conditions.

1.02 SUBMITTALS

- A. Contractor's Construction Schedule: Submit two printed copies of initial schedule, large enough to show entire schedule for entire construction period.
- B. Construction Photographs: Submit electronic files (via e-mail) on a weekly basis to Architect and Owner, and a complete record of all submitted photographs as a Project Record Document. Identify electronic files with dates photographs were taken. Submit images that have the same aspect ratio as the sensor, uncropped.

1.03 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in scheduling and reporting.
- B. Prescheduling Conference: Conduct conference at project site to review methods and procedures related to the Contractor's Construction Schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.
 - 3. Discuss constraints, including phasing, work stages and area separations.
 - 4. Review delivery dates for Owner-furnished products.
 - 5. Review schedule for work of Owner's separate contracts.
 - 6. Review time required for review of submittals and resubmittals.
 - 7. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 8. Review time required for completion and startup procedures.
 - 9. Review and finalize list of construction activities to be included in schedule.
 - 3. Review submittal requirements and procedures.
 - 4. Review procedures for updating schedule.

1.04 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

PART 2 - PRODUCTS

2.01 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontractors, the Schedule of Values, and Contractor's Construction Schedule.
 - 2. Initial Submittal: Submit concurrently with preliminary schedule. Include submittals required during the first 60 days of construction. List those required to maintain orderly progress of the work and those required early because of long lead time for manufacture or fabrication.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning and Scheduling."
- B. Time Frame: Extend schedule from date established for commencement of the work to date of Final Completion.
- C. Activities: Treat each separate area or phase as a separate activity for each principal element of the work. Comply with the following:
 - 1. Activity Duration: In general, define activities so no activity is longer than 20 days.
 - 2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.

4. Startup and Testing Time: Include not less than seven days for startup and testing.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's and Construction Manager's administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
 2. Work Under More Than One Contract: Include a separate activity for each contract.
 3. Owner-Furnished Products: Include a separate activity for each product with delivery date. Delivery dates indicated stipulate the earliest possible delivery date.
 4. Work Restrictions: Show the effect of the following items on the schedule:
 - a) Limitations of continued occupancies.
 - b) Uninterruptible services.
 - d) Seasonal variations.
 - e) Environmental control.
 - f) Coordination with existing construction.
 5. Work Stages: Indicate important stages of construction for each major portion of the work, including, but not limited to, the following:
 - a) Subcontract awards.
 - b) Submittals.
 - c) Purchases.
 - d) Mockups.
 - e) Fabrication.
 - f) Sample testing.
 - g) Deliveries.
 - h) Installation.
 - i) Tests and inspections.
 - j) Adjusting.
 - k) Curing.
 - l) Startup and placement into final use and operation.
 6. Area Separations: Identify each major area of construction for each major portion of the work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
 - a) Structural completion.
 - b) Permanent space enclosure.
 - c) Completion of mechanical installation.
 - d) Completion of electrical installation.
 - e) Substantial Completion.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.
- G. Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules.

2.03 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within seven days of date established for commencement of the work.
- B. Preparation: Indicate each significant construction activity separately. Identify first work-day of each week with a continuous vertical line. Outline significant construction activities for first 60 days of construction. Include skeleton diagram for the remainder of the work and a cash requirement prediction based on indicated activities.

2.04 CONTRACTOR'S CONSTRUCTION SCHEDULE (HORIZONTAL BAR CHART)

- A. Horizontal Bar-Chart Schedule: Submit a comprehensive, fully developed, horizontal bar-chart-type, Contractor's Construction Schedule within 30 days of date established for commencement of the work. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of project.
- B. Preparation: Indicate each significant construction activity separately. Identify first work-day of each week with a continuous vertical line.
 - 1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

PART 3 - EXECUTION

3.01 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the work progresses, indicate Actual Completion percentage for each activity.

- B. Distribution: Distribute copies of approved schedule to Owner, Program Manager, Architect, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. Post copies in project meeting rooms and temporary field offices.
 - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in performance of construction activities.

3.02 CONSTRUCTION PHOTOGRAPHS

- A. Pre-construction Photographs: Before starting construction, take color photographs (digital photographs) of project site and surrounding properties from different vantage points, as well as interior photographs. Take sufficient views and vantage points to ensure all areas to be modified or affected by the work are represented. Show existing conditions adjacent to property and existing interior conditions.
- B. Construction Photographs: During construction, take color photographs (digital photographs) of work in progress or recently completed on regular basis, not less than once per week. When applicable, submit digital photographs of conditions to Architect to facilitate Architect's review of Payment Application and responses to Contractor's Requests for Information.

END OF SECTION

BUILDING FOR ROGERS FACILITIES DEPARTMENT
ROGERS, AR

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DEMX ARCHITECTURE
FAYETTEVILLE, AR