

Section 01325

CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.01 SUMMARY

This Section includes the following:

- A. Provide Construction Schedules for Work included in Contract in accordance with requirements in this Section. Create Construction Schedule using Critical Path Method (CPM) computer software capable of mathematical analysis of Precedence Diagramming Method (PDM) plans. Provide printed activity listings and bar charts in formats described in this Section.
- B. Combine activity listings and bar charts with narrative report to form Construction Schedule submittal for Project Manager.

1.02 MEASUREMENT AND PAYMENT

No separate payment will be made for this item. Include the cost of construction scheduling in overhead cost for this project.

1.03 REFERENCES (NOT USED)

1.04 SUBMITTALS

- A. Conform to requirements of Section 01330 – “Submittal Procedures”.
- B. During preconstruction meeting, as described in Section 01312 – “Coordination and Meetings”, provide sample bar charts and activity listings produced from scheduling software proposed. Scheduling software is subject to review by Project Manager and must meet requirements provided in this Section.
- C. Within 10 days from the Effective Date of the Agreement, submit proposed Construction Schedule for review. Base Construction Schedule submittal on following:
 - 1. Level of detail and number of activities required in schedule are dependent on project type.
 - 2. For projects with multiple types of tasks within scope, indicate types of Work separately within schedule.

3. For projects with work at different physical locations or service areas, or different facilities within a site, indicate each location or facility separately within schedule.
 4. For projects with multiple crafts or significant subcontractor components, indicate elements separately within schedule. Unless permitted by Project Manager, tasks shall consist of work covered by only one division of Project Manual.
 5. Unless permitted by Project Manager, each scheduled task shall be same as Schedule of Values line item, and vice versa.
 6. For projects with significant major equipment items or materials representing over 5 percent of Total Contract Price, indicate shop drawing submittal and review, purchase, delivery, and installation dates. Include activities for testing, adjustment, and delivering O & M manuals.
 7. Duration of tasks may not exceed 30 calendar days.
 8. For projects where operating facilities are involved, identify each period of work which will impact any process or operation in schedule and must be agreed to by Project Manager and facility operator prior to starting work in area.
 9. Construction Schedule submittals shall include:
 - a. Color printed bar charts that meet criteria outlined in this Section and are produced by Contractor's approved scheduling software.
 - b. Activity listings that meet criteria outlined in this Section and are produced by Contractor's approved scheduling software.
 - c. Predecessor/successor listing sorted by Activity ID that meets criteria outlined in this Section and which is produced by Contractor's scheduling software.
 - d. A logic network diagram is required with first Construction Schedule submittal.
 - e. Narrative Report that provides information outlined in this Section.
- D. No payment will be made until Construction Schedule has been accepted by Project Manager.
- E. If Contractor desires to make changes in his method of operating and scheduling, after original schedule has been reviewed by Project Manager, notify Project Manager in writing, stating reasons for changes. When Project Manager considers these changes

to be significant, Contractor may be required to revise and resubmit for review all or affected portion of Contractor's Construction Schedule to show effect on Work.

- F. Upon written request from Project Manager, revise and submit for review all or any part of Construction Schedule submittal to reflect changed conditions in Work or deviations made from original plan and schedule.
- G. Updated Construction Schedule with Actual Start and Actual Finish Dates, Percent Complete, and Remaining Duration of each Activity shall be submitted monthly. Data date used in updating monthly Construction Schedule shall be same date as is used in monthly Payment Application. This monthly update of schedule shall be required before monthly Payment Application will be processed for payment.

1.05 RELATED REQUIREMENTS

- A. Section 01312 – “Coordination and Meetings”
- B. Section 01330 – “Submittal Procedures”

1.06 – 1.11 NOT USED

1.12 SCHEDULING

- A. Scheduling Staff

Employ or retain services of individual experienced in critical path scheduling for duration of Contract. Individual shall cooperate with Project Manager and update schedule monthly as required to indicate current status of Work.

- B. Scheduling Computer Software Requirements
 - 1. Create Contractor's Construction Schedule using CPM computer software that provides mathematical analysis of PDM plans. Use software capable of creating bar charts and activity listings which can be sorted by various fields, i.e., Sort by Activity ID; Sort by Early Start; Sort by Total Float. Use software capable of producing logic network diagram.
 - 2. Use PDM scheduling software capable of producing activity listings and bar charts with following information for each activity in schedule:
 - a. Activity ID
 - b. Activity Description
 - c. Estimated (Original) Duration
 - d. Remaining Duration

- e. Actual Duration
 - f. Early Start Date
 - g. Late Start Date
 - h. Early Finish Date
 - i. Late Finish Date
 - j. Free Float
 - k. Total Float
 - l. Activity Codes (such as Work Type, Specification Section, Subcontractor)
- 3. Use PDM scheduling software capable of printing calendars using mathematical analysis of schedule, indicating standard work days of week and scheduled holidays.
 - 4. Use Scheduling software capable of printing activity listing that indicates Predecessors and Successors, Lag Factors and Lag Relationships used in creating logic of schedule.
 - 5. Use scheduling software to provide monthly time in Bar Chart Format and scale with 12-month scale not to exceed one page width. Bar charts may be printed or plotted on 11x17 inch sheet size. Over-size plots are not acceptable.
- C. Narrative Schedule Report
- 1. Narrative Schedule Report shall list Activities Started This Month; Activities Completed This Month; Activities Continued This Month; Activities Scheduled To Start or Complete Next Month; Problems Encountered This Month; Actions Taken to Solve These Problems.
 - 2. Narrative Schedule Report shall describe changes made to Construction Schedule Logic (i.e., changes in Predecessors and Lags); Activities Added to Schedule; Activities Deleted from Schedule; any other changes made to Schedule other than addition of Actual Start Dates and Actual Finish Dates and changes of Data Date and Remaining Durations for recalculation of mathematical analysis.

1.13 WARRANTY (NOT USED)

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION