

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Scheduling format.
- B. Submittals
- C. Four-week work plan
- D. Monthly progress status report.
- E. Review, updates, and revisions.
- F. Requests for time extensions.

1.02 DEFINITIONS

- A. Baseline Schedule: The first schedule submitted by the Contractor and approved by the Engineer.
- B. Progress Schedule: Subsequent schedules submitted by the Contractor and approved by the Engineer that modify the Baseline Schedule.
- C. Contract Schedule: The Baseline Schedule and all subsequent Progress Schedules.

1.03 MEASUREMENT AND PAYMENT

- A. Separate measurement or payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included with the related item of work in the Bid Schedule of the Bid Form, or incidental to the Work.

1.04 GENERAL

- A. Contract Schedules shall represent a practical plan to complete the Work within the Contract time(s) of completion indicated in Contract Specifications Section 01 11 00, Summary of the Work, and shall convey the Contractor's intent in the manner of prosecution and progress of the Work.
- B. The scheduling and execution of construction in accordance with the Contract Documents are the responsibility of the Contractor. The Contractor shall involve and coordinate all Subcontractors and material Suppliers in the development and updating of progress schedules.
- C. The submittal of the Contract Schedule shall be understood to be the Contractor's representation that the Contract Schedule meets the requirements of the Contract Documents

and that the Work will be executed in the sequence and duration indicated in the Contract Schedule.

1.05 SCHEDULING FORMAT

- A. The Contract Schedule shall be computer produced in the Critical Path Method (CPM) format. The schedule shall be computer produced utilizing project scheduling software such as Primavera, Microsoft Project, SureTrak, or other equivalent software as approved by the Engineer.
- B. The Progress Schedule shall be updated monthly and submitted as indicated in Article 1.06, Submittals.
- C. The Contract Schedule shall show Contract tasks, percent complete, progress bars, baseline schedules, milestones, start and finish dates, and other breakdowns as required by the Engineer. The Contract Schedule shall show clearly the sequence of activities and shall list specifically the following activities:
 - 1. Interim milestone completion dates. Phasing and staging of the Work as specified shall be prominently identified.
 - 2. Submittals and the Engineer’s review of submittals.
 - 3. District inspection of the Work, including Preliminary Final Inspection, Final Inspection, punch list(s), and Acceptance.
 - 4. Acquisition of permits.
 - 5. Any long lead time (over 60 days) orders for material and equipment.
 - 6. Work to be performed by other contractors or agencies.
 - 7. Delivery of District-furnished materials (DFM) and District-furnished equipment (DFE) indicated for incorporation in the Work.
- D. Descriptions of scheduled activities shall include sufficient detail to identify the work that is to be accomplished.
 - 1. The Contract Schedule shall contain sufficient activities to clearly show the sequence and interdependencies of the Work. The schedule shall be prepared in such a way that an activity or group of activities will correspond directly with the bid item breakdown and/or the breakdown of lump sum bid items. The Engineer may request that additional activities be added.
 - 2. Activity durations shall be expressed in whole days. Work that is to be performed by Subcontract shall be clearly defined.
 - 3. Float suppression techniques, such as preferential sequencing (crew movement, equipment use, and form reuse), extended duration, imposed dates, scheduling of work

not required for the Contract, and others, shall not be used to affect or limit float in the Contract Schedule. The use of constraint dates should be minimized, and must be approved by the Engineer.

4. Critical Path operations are those activities with a total float equal to or less than zero. Contract Schedules with negative total float may be found to be impractical by the Engineer.
- E. A Contract Schedule showing that Work is completed in less than the completion time specified in Contract Specifications Section 01 11 00 may be found to be impractical by the Engineer.
- F. A Contract Schedule showing that Work that is completed in less than the completion time specified in Contract Specifications Section 01 11 00, Summary of Work, that is found to be practical by the Engineer, shall be considered to have Float. The Float shall be the time between the Scheduled Completion Date as indicated on the approved Contract Schedule and the Contract Completion Date, calculated by adding the completion time specified in Contract Specifications Section 01 11 00, Summary of Work, to the Notice to Proceed date.
- G. Float shall not be for the exclusive benefit of either the District or the Contractor. Float shall be a resource available to both parties. Failure to meet the Scheduled Completion Date shall not mean delay, provided the Contract Completion Date is met. The District shall not be responsible for any damages, including the Contractor's extended overhead costs or early completion delay damages, related to the use of Float or failure to meet the Scheduled Completion Date.
- H. Compensable delay, for which liquidated damages or extended overhead may be assessed, shall mean failure to meet the Contract Completion Date or any dates specified in Contract Specifications Section 01 11 00, Article 1.10, Liquidated Damages. Failure to meet the Scheduled Completion Date shall not entitle the Contractor to compensable delay, if the Contract Completion Date is met. Per Supplementary Conditions Article SC8.1.1, the District shall not be responsible for any damages related to the use of Float or to a failure to meet an Early Completion Date, including Contractor's extended overhead costs or early completion delay damages.
- I. The use of Negative Lag is not allowed. Positive Lag may be allowed subject to approval by the Engineer.
- J. A schedule found to be impractical for the preceding reasons or any other reasons shall be revised by the Contractor and resubmitted.

1.06 SUBMITTALS

- A. Refer to Section 01 33 00 - Submittal Procedures, for submittal requirements and procedures.
- B. Schedules shall be submitted in time-scaled bar-chart (Gantt) format with logic lines shown on sheets no smaller than 22 inches wide by 34 inches long, nor larger than 34 inches wide by 44 inches long. A time-scaled logic network diagram may also be required by the

Engineer. An activity report in a tabular form showing the following information shall be submitted with bar-chart: activity ID, description, duration, total float, early start, early finish, late start, late finish, predecessors, successors, constrains, percent complete, and remaining duration.

- C. All schedule submittals shall include one reproducible and six full-size copies.
- D. Schedule submittals will be reviewed by the Engineer, and shall be updated and revised as indicated in Article 1.09, Review, Updates, and Revisions. Resubmittals shall conform to the same requirements as original submittals.
- E. The Contractor shall prepare and submit all schedules and schedule analysis reports in electronic format on MS Windows-compatible CD-ROM as well as hard copies.
- F. All Contract Schedule submittals are subject to review and approval by the Engineer. The Engineer retains the right to withhold progress payments until the Contractor submits a Contract Schedule acceptable to the District.
- G. The Contractor shall submit the Baseline Schedule within 30 days after the date of the Notice to Proceed.
- H. The first of each type of schedule and the first Monthly Progress Status Report submitted by the Contractor will be reviewed for format, as well as content. The Engineer may request format changes. Once the format has been approved, all subsequent schedules and Progress Status Reports shall be submitted in the approved format.

1.07 FOUR-WEEK WORK PLAN

- A. A schedule in calendar time-scaled bar chart format depicting the Contractor's intended work activities for the upcoming four-week period shall be submitted on a weekly basis and shall be due on the first working day of each week. Each activity of one day or more in duration shall be indicated.
- B. Any deviations, such as sequences of work, timing, and durations of activities from the approved Contract Schedule, shall be noted and explained in writing.
- C. The Four-Week Work Plan shall be submitted on sheets not less than 8-1/2 inches by 11 inches, or as approved by the Engineer.

1.08 MONTHLY PROGRESS STATUS REPORT

- A. The Monthly Progress Status Report shall be a narrative report that describes work activities accomplished in the reporting period, intended work activities for the upcoming reporting period, problems and actions intended by the Contractor to mitigate the problems, work that is being performed out of sequence with approved schedules, status of Change Orders, Notices of Potential Claims, status of submittals, and status of Contractor procurement items.

- B. The Contractor shall submit the report format and obtain the Engineer's approval of the format.
- C. The Monthly Progress Status Report shall be submitted monthly on sheets no larger than 11 inches by 17 inches, nor any smaller than 8-1/2 inches by 11 inches.

1.09 REVIEW, UPDATES, AND REVISIONS

- A. The Engineer will review and return the Contractor's schedule submittals with written comments according to the following schedule from the date of receipt.

Contract Schedule: 10 calendar days

Four-Week Work Plan: 5 calendar days

- B. The Contractor shall make all corrections to the Contract Schedule requested by the Engineer and resubmit the schedule for approval. If the Contractor does not agree with the Engineer's comments, the Contractor shall provide written notice of disagreement within five days from the receipt of the Engineer's comments. The Engineer's comments on the Four-Week Work Plan for which the Contractor disagrees shall be resolved in a meeting held for that purpose, if necessary.
- C. At least once each month, or as often as deemed necessary by the Engineer, the Contractor shall submit a Progress Schedule showing the progress of the Work to date and anticipated activities to be worked on, and the Monthly Progress Status Report as specified in Article 1.07. The submittal of the Progress Schedule update and Monthly Progress Status Report shall be at least five days prior to the submittal of a payment invoice. No invoice will be accepted nor payment made if there is not an approved current update in place.
- D. If, according to the approved Contract Schedule, the Contractor is thirty or more days behind the Contract Completion Date or the completion date of any milestone indicated, considering all approved time extensions, the Contractor shall submit a revised schedule, showing a practical plan to complete the Work within the specified Contract completion time. The District may withhold progress payments until a revised schedule, acceptable to the Engineer, is submitted by the Contractor.

1.10 REQUESTS FOR TIME EXTENSIONS

- A. If the Contractor requests an extension of time for the completion of an interim milestone date or Contract Completion Date, the Contractor shall furnish necessary justification for such extension so that the Engineer can determine whether or not the Contractor is entitled to an extension of time under the provisions of the Contract. Submission of proof based on revised activity logic, duration, and costs is obligatory to any approvals. The cost of such justification or subsequent schedule revisions shall be borne solely by the Contractor.

- 1. The schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved in its request.

2. The Engineer's determination as to the total number of days of Contract extension will be based upon the current approved Progress Schedule for the time period in question, and all other relevant information. Actual delays in activities that, according to the schedule, do not affect the extended and predicted Contract completion dates as shown by the Critical Path, will not be the basis for a change to the Contract Completion Date.
 3. After receipt of such justification and supporting evidence, the Engineer will review the facts and advise the Contractor in writing of the Engineer's decision. If the Engineer determines that the Contractor is entitled to an extension of time to an interim milestone, the Contract Completion Date will remain the same, unless the Engineer specifies another date. Any change to Contract milestones or to the Contract Completion Date will be made by Change Order.
- B. As part of each request for extension, a fragnet showing all schedule logic revisions, duration changes, and cost changes for the work in question and its relationship to other activities on the current approved Progress Schedule for the time period in question shall be submitted.
1. If the Engineer has not yet made a full determination as to the amount of time extension to be granted and the parties are unable to agree as to the amount of extension to be reflected in the schedule, the Contractor shall reflect that amount of time extension in the Progress Schedule as may be determined to be appropriate by the Engineer for such interim purpose. It is understood and agreed that such interim determination by the Engineer for the purposes of this Article 1.10.B.1 will not be binding upon either party for any other purpose, and that, after the Engineer has made a final determination as to any time extension, the Contractor shall revise the Progress Schedule in accordance with the final decision.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION 01 32 16