SUBMISSION OF WORKING SCHEDULE.

(REV 5-30-02) (FA 7-24-02) (1-03)

SUBARTICLE 8-3.2 (Pages 73 and 74) is deleted and the following substituted:

8-3.2 General: For this Contract submit the following schedules and reports. **8-3.2.1 Preliminary Schedule:** Submit a 120-day Preliminary Schedule for the project to the Engineer within 21 calendar days after execution of the Contract or at the preconstruction conference, whichever is earlier.

Show activities on the Preliminary Schedule that will affect completion dates, including but not limited to planning, mobilization, submittals, procurement, utility adjustments, fabrication, and construction. Submit the schedule in a time scaled bar chart format, accompanied by a narrative describing the proposed approach to mobilization, procurement and major construction activities during the first 120 Contract days. In the narrative, describe major assumptions made in developing the schedule.

8-3.2.2 Monthly Status Report: Submit a Monthly Status Report to the Engineer. The report will be due within three days after the monthly estimate cut-off date. Provide a description of the progress made during the past reporting period and objectives for the upcoming reporting period. Address problems encountered and proposed actions to resolve the problems. Submit an updated 120-day Preliminary Schedule showing changes to or deviations from the original preliminary schedule along with each Monthly Status Report.

The Engineer will withhold monthly payments due to failure of the Contractor to submit acceptable schedules and reports within the time frames described above.

8-3.2.3 Contract Schedule: Submit a Critical Path Method (CPM) Contract Schedule to the Engineer for acceptance. Submit the schedule within 90 days after the Notice to Proceed. Include activities, network diagram and reports described herein in the schedule.

Develop the schedule in Precedence Diagram Method (PDM) format, consistent with Contract milestones, showing activities for each discrete Contract activity to be accomplished within each Maintenance of Traffic phase. Include activities for deliverables and reviews in the schedule. Sufficient liaison shall be conducted and information provided to indicate coordination with utility owners having facilities within the project limits. The schedule must reflect the utility adjustment schedules included in the Contract Documents, unless changed by mutual agreement of the utility company, the Contractor and the Department. Assign calendar day durations to each activity.

Failure to include any element of work or any activity relating to utility work will not relieve the Contractor from completing all work within the Contract Time at no additional time or cost to the Department, not withstanding the acceptance of the schedule by the Department.

Prepare a CPM Network Diagram in time-scale logic diagram, by week starting on Monday, grouped (banded) by work areas and sorted by early start days. Prominently identify the critical path activities, defined as the longest continuous path of work activities. Submit the Network Diagram on D size, 22 by 34 inch [559 by 864 mm] or E size, 34 by 44 inch [864 by 1,118 mm] paper.

Submit one copy of schedule reports containing, as a minimum, identification, activity description, estimated total duration, estimated remaining duration,

computed or specified early start date, computed or specified late finish date, and total float. Submit all reports on 8.5 by 11 inch [216 by 280 mm] paper, sorted as follows:

- 1. Activity Report: Include activities shown on the Contract Schedule listed in order of ascending activity number.
- 2. Float Report: Include activities shown on the Contract Schedule listed in order of the ascending total float values.
- 3. Early Start Report: Include activities shown on the Contract Schedule in chronological order by early start date.
- 4. Predecessor/Successor Report: Include activities shown on the Contract Schedule listed in order of ascending activity numbers with the associated predecessor and successor activity numbers.
- 5. Narrative: Explain, in narrative form, how durations were determined and describe the proposed approach for meeting interim and final completion milestone dates specified in the Contract. Include assumptions made, restraints, critical path activities, equipment requirements, activities requiring overtime, additional shifts, permits, coordination requirements, long lead delivery items, or other significant requirements which would affect the ability to meet the interim and final milestone dates. Failure to include in the schedule any element of work will not excuse the Contractor from completing all work required to achieve completion.

All submittals, shall have a copy of the schedule files on a Windows compatible 3.5" diskette attached. The files shall be in one of the following formats:

1. <u>Primavera (P3)</u> project files using the Primavera Project Planner (latest version) "Back up" menu selection. Ensure that the option "Remove access list during backup" is checked.

2. Suretrak (latest version) "Back up" menu selection. Ensure that the option "Remove access list during backup" is checked.

The Engineer will have 30 days to accept the Contract Schedule or to schedule a meeting with the Contractor to resolve any problems that prevent acceptance of the schedule. Attend the meeting scheduled by the Engineer, and submit a corrected schedule to the Engineer within seven days after the meeting. The process will be continued until a Contract Schedule is accepted by the Engineer.

The schedule may indicate a completion date in advance of the Contract completion date. However, the Department will not be liable in any way for the Contractor's failure to complete the project prior to the Contract completion date. Any additional costs, including extended overhead incurred between the Contractor's schedule completion date and the completion of Contract Time, shall be the responsibility of the Contractor. The Contractor shall not be entitled to claim or recover any such cost from the Department.

On each Monday prior to the monthly estimate cutoff date, submit Contract Schedule, updated to reflect actual start dates, actual finish dates, added activities, changes in sequence and days remaining, to the Engineer for acceptance. Include an updated Network Diagram and computer-generated reports and a narrative as specified in 8-3.2.3. In the narrative, address changes in duration of any activity and changes to logic of activities which were performed in a sequence different from those shown in the latest accepted Contract Schedule. Also address activities to be added to the schedule, identification of supplemental agreements and change orders, and the incorporation of accepted schedule revisions. Any changes to the sequencing must be coordinated with the Utility Schedules and utility relocations

shown in the plans. If the schedule provided indicates an actual or potential delay to the completion of the Contract, include in the narrative a discussion of problems, causes, activities affected and describe the means and methods to be utilized to complete the project in the authorized time. Attend meetings scheduled by the Engineer to resolve any problems that prevent acceptance of the updated Contract Schedule, and submit revised schedules as necessary for the Engineer's acceptance. By acceptance of the schedule, the Engineer does not endorse or otherwise certify the validity or accuracy of the activity durations or logic utilized.

The Engineer will withhold monthly payments due for failure of the Contractor to meet the requirements for submittal and acceptance of the Contract Schedule, including the monthly updates.

8-3.2.4 Weekly Meetings: Attend weekly meetings scheduled by the Engineer to discuss Contract progress, near term scheduled activities, including utility relocations, problems and their proposed solutions. Submit a Two-Week Planning Schedule at each weekly meeting, showing the items of work planned for the next two weeks. Develop the schedule in Bar Chart format, identifying current and planned activities and related Contract Schedule work activities, including subcontractor work. Designate all activities that are controlling work items as determined by the currently accepted Contract Schedule.

8-3.2.5 Float: Float is not for the exclusive use or benefit of either the Department or the Contractor. The Engineer will grant time extensions only to the extent that time adjustments to the affected activities exceed the total float along the affected paths of the currently accepted Contract Schedule at the time of delay. Submit a network diagram, total float report and a narrative report to support any request for additional Contract time.

8-3.2.6 Performance of Work: By submitting a schedule the Contractor is making a positive assertion that the project will be constructed in the order indicated on the schedule. Prosecute the work in accordance with the latest accepted Working Schedule. Any costs associated with meeting milestones and completing the project within the authorized Contract Time will be borne solely by the Contractor.

8-3.2.7 As-Built Schedule: As a condition for the release of any retainage, submittal of an as-built schedule which describes the actual order and start and stop times for all activities by the Contractor is required.