410. SBA Construction Schedule Requirements

410.01. For the purpose of planning, developing, and executing a school construction project, each project shall be accompanied by a Construction Progress schedule. The Construction Progress Schedule shall be developed in the Critical Path Method (CPM).

400.011. The following definitions have been established:

a. CPM: Critical path method– a method of planning and scheduling a construction project where activities are arranged based on activity relationships. This method calculates the minimum completion time for a project along with the possible start and finish time for the project activities.

b. Owner: On SBA-funded projects, the Local Education Agency (LEA) is referred to as the Owner.

c. Contract Construction Duration: The amount of time specified by the Contract Documents for the completion of the Project.

d. Contract Completion: The date when all Contractor responsibilities have been discharged. The Contractor's Completion date obligations and the Owner's Claims for Delay obligation are based on the Contract Completion Date.

e. Activity / Task: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

i. Critical Activity / Task: An activity on the critical path that, if delayed, will result in a delay of the Contract Completion Date by an amount equal to said delay of the activity.

ii. Predecessor Activity: An activity that precedes another activity in the network.

iii. Successor Activity: An activity that follows another activity in the network.

f. Duration: The amount of time estimated to complete an activity in the time scale used in the schedule (workdays).

g. Actual Start: The date that an activity actually began.

h. Actual Finish: The date that an activity finished.

i. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall project duration and contains no float.

j. Milestone: Zero duration activities that call attention to noteworthy events in the project schedule.

k. Baseline Schedule: A fixed project schedule that is the standard against which project performance is measured.

l. As-Built Schedule: The record of the history of the construction project in the form of a final updated CPM Schedule.

m. Approval of Schedule: The general and unanimous executed agreement by the Contractor, Owner, Architect, Consultant, and/or Construction Manager of the CPM schedule where applicable. *The Owner or Owner Representative's approval of the submitted schedule in no way establishes an obligation of the Owner for Claims for Delay by the Contractor based on the Contractor early*

completion. Any Claims for Delay by the Contractor shall be based on the provision of this specification which only contemplates impact to the proposed contract completion date.

n. Schedule Consultant: An independent third party responsible for the planning, development, update, maintenance, monitoring, and reporting of the CPM schedule.

o. Early Completion: Early completion of the project is permitted, however, neither the Contractor(s) nor the Owner are bound to an early completion, even if projected by and approved in the final version of the CPM schedule. The Contractor's completion date obligation and the Owner's Claims for Delay obligations under this agreement are associated with the proposed Contract Completion Date as defined by the Contract Documents. Notwithstanding the preceding, the Owner reserves the right to reject a proposed CPM Schedule that shows an early completion date if the schedule appears to be unreasonable or unrealistic.

410.02. Scheduling Requirements

401.021. At the Pre-Construction Meeting, the Owner's representative shall review the CPM schedule requirements as indicated in the Contract Documents with the Contractor.

410.022. Unless otherwise specified, the Contractor shall be responsible for the construction progress schedule development, maintenance, monitoring, and reporting, and shall schedule meetings to facilitate / coordinate / maintain the CPM schedule for the duration of the project.

410.022. The Contractor shall demonstrate specialized experience in the development, maintenance, monitoring, and reporting of CPM scheduling. The name and experiences shall be submitted to the Owner and/or Owner's representative, along with examples of the individual's past schedules.

410.023. In the event the Owner and /or Owner's representative determines the Contractor does not possess the capability in-house to perform the requirements of the CPM Schedule, the Owner may elect, at no additional cost to the Owner, to require the Contractor to hire a Schedule Consultant who possesses the specialized experience in performing the requirements as stated herein.

410.024. The Contractor shall submit the Baseline Schedule to the Owner and/or Owner's representatives for review. The baseline schedule must be formatted to indicate the Project Critical Path.

410.025. When submitting a CPM schedule to the Owner for approval, it shall be in the Gantt Chart View. The Contractor shall submit with the proposed Schedule an Activity / Task list corresponding to the Gantt Chart with the following Activity / Task information:

a. Duration (in working days)
b. Anticipated Start
c. Anticipated Completion
d. Dependent Relationships with other Activities / Tasks

410.026. The Approved Construction Progress Schedule shall be submitted for use not later than ten (10) working days prior to submittal of the first Certificate and Application for Payment, in accordance with the Contract Documents.

410.027. A Projected Cash Flow Schedule must be submitted in conjunction with the CPM Schedule, the Submittal Schedule, and the Schedule of Values. This schedule shall indicate the anticipated monthly billings for the duration of the project. In the event of Baseline Changes or Recovery Schedules, the Projected Cash Flow Schedule must be revised accordingly.

410.028. The Construction Progress Schedule shall be developed in conjunction with the Schedule of Values and the Construction Submittal Schedule. The Progress Schedule and the Schedule of Values must reflect the same Activities / Tasks to allow accurate evaluation of monthly Schedule Updates and Requests for Payment.

410.03. Schedule Update – The Contractor shall schedule a monthly meeting with whom to facilitate / coordinate the Construction Progress Schedule update.

410.031. The schedule update shall be conducted in coordination with the application for payment timelines established by the Contract.

410.032. Distribution of the construction progress schedule shall be sorted and provided to the Prime Contractors, Owner, and Owner's representative as follows:

a. Incomplete Activities
b. Critical Activities
c. Percentage of completion for each Activity / Task
d. Activities / Tasks behind schedule

410.04. Baseline Schedule Changes – In the event the scope of the original Contract is significantly increased, which may cause changes to the overall sequence / phasing of Work, the progress construction schedule baseline must be re-established. Upon these modifications being made to the CPM schedule, the Contractor shall establish a new Construction Progress Schedule baseline.

410.041. A revised Baseline Schedule shall then be submitted to the Owner and/or Owner's representatives for review. Once an Approved Schedule is in place, the Owner and /or Owner's representative has the authority to reject any submission that revises the approved schedule's baseline if it is not deemed to be in the express interest of the Owner.

410.042. Schedule Recovery – In the event the schedule update indicates the project progress is not sufficient to maintain the Critical Path and scheduled Completion Date, a recovery schedule shall be required showing the means by which the Contractor intends to regain compliance with the approved Schedule.

410.043. The recovery schedule shall be completed and submitted prior to submission of any Application for Payment to the Owner. Application for payment shall not be approved without an attached recovery schedule.

410.05. Schedule As-Built – At the conclusion of the project an as-built schedule showing actual start and finish dates for all work activities shall be provided to the Owner by the Contractor. The as-built schedule shall be considered a project close out requirement and shall be included, along with the Baseline / Approved Schedule, in the Contractor's O&M manual.