

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**PROGRESS SCHEDULE FOR CATEGORY II PROJECTS**

April 29, 2008

**Section 103.06(e) Progress Schedule** is deleted and replaced by this provision.

**Section 108.03 Progress Schedule** is deleted and replaced by this provision.

**I. GENERAL REQUIREMENTS**

The Contractor shall plan and schedule the work and shall submit his initial plan in the form of a Baseline Progress Schedule for the Engineer's review and acceptance. Upon acceptance, the Progress Schedule shall become the project Schedule of Record (SOR). The Contractor shall maintain the SOR regularly to ensure that the schedule continues to represent the Contractor's current actual work plan and progress. The SOR shall be used by the Engineer for planning and coordination of the Department activities, and for evaluation of the Contractor's progress and the effects of impacts on the project.

Prior to preparing the schedule, the Engineer or the Contractor may request a schedule development planning meeting to discuss any project specific items required for preparation of the progress schedule. The Contractor shall prepare and submit a practicable schedule to reflect a logical progress of the work. The Progress Schedule shall represent the Contractor's overall work plan to accomplish the entire scope of work in accordance with the requirements of the Contract. It shall include all items of work required for coordination and inspection and to show progress of the work including, but not limited to the controlling items of work and other relevant time-based tasks required for timely completion of the work, including as applicable, the work to be performed by sub-contractors, suppliers, the Department, and/or others. When preparing the schedule, the Contractor shall consider all known constraints and restrictions such as holidays, seasonal, weather, traffic, utility, railroad, right-of-way, environmental, permits, or other limitations to the work.

The Contractor may be required, as determined by the Engineer, to attend a scheduling conference. If required, the scheduling conference may be held in conjunction with the pre-construction conference or at a separate meeting called by the Engineer. The Contractor shall be prepared to discuss his planned or contemplated operations relative to the contract requirements and this special provision. Until the Baseline Progress Schedule is accepted by the Engineer, the Contractor shall keep the Engineer informed of his planned or contemplated operations on a continuing basis.

**II. PROGRESS SCHEDULE SUBMITTAL REQUIREMENTS**

**Baseline Progress Schedule** – The Contractor shall submit to the Engineer his initial progress schedule in the form of a Baseline Progress Schedule at least seven (7) calendar days prior to beginning work. The Baseline Progress Schedule submittal shall include three (3) sets of the written Progress Schedule Narrative, Bar-Chart Progress Schedule, and the Progress Earnings Schedule; as well as two (2) sets of data compact disks containing the electronic working files of the Bar-Chart Progress Schedule and Progress Earnings Schedule as specified below:

1. Progress Schedule Narrative: The Progress Schedule Narrative shall consist of the following written information:

- a) A description of the Contractor's overall plan of operations in terms of:
    - i) The proposed overall sequence of construction;
    - ii) The general procedures for completing each feature or major operation;
    - iii) Planned resources in terms of number and types of crew and equipment;
    - iv) Anticipated daily production rates for each major operation;
  - b) A Tabular Milestone Schedule to establish interim milestones to complete each phase or stage of work, feature, major traffic switch, or other milestone dates specified in the Contract or required to assess progress of the work;
  - c) A description of the proposed working calendar to indicate the number of work days per week, number of shifts per day, and number of hours per day as well as the anticipated number of non-working days per month with considerations for:
    - i) Holidays;
    - ii) Normal weather conditions;
    - iii) Known constraints and restrictions (i.e. traffic, local events, time of year, environmental, permits, utility, etc.);
  - d) A description of any potential issues that may impact the schedule.
2. Bar-Chart Progress Schedule: The Bar-Chart Progress Schedule shall be submitted in a format wholly compatible with Microsoft Excel or the latest Primavera project and program management software with the capability to import and export project data in the Primavera proprietary exchange format (XER). The Bar-Chart schedule shall be time-scaled and shall show the following:
- a) A listing of activities to represent the major categories of work and the related time-based tasks required for timely completion of each feature, including but not limited to the controlling items of work. Each activity shall contain the following schedule properties:
    - i) Activity Identification;
    - ii) Activity Description;
    - iii) Original Duration (total anticipated number of days to complete the activity);
    - iv) Remaining Duration (remaining number of days required to complete the activity shall equal the original duration for activities that have not started);
    - v) Planned Start and Finish Dates;
    - vi) Critical Dates (must start by or finish by dates) for the critical activities;
    - vii) Percent Complete;
  - b) Activity bars shall be sequenced according to their relationship to time, other activities, and in order of the intended sequence of progress;
  - c) The Bar-Chart Schedule shall allow for sufficient space for an additional plot per activity for comparison of the actual progress to the baseline schedule.
3. Progress Earnings Schedule: The Progress Earnings Schedule shall be submitted on the Department electronic Form C-13C template. The Progress Earnings Schedule shall be prepared in accordance with the following:
- a) The Progress Earnings Schedule shall indicate the Contractor's anticipated cumulative percent complete for each month as of the Contractor's progress estimate date as defined in Section 109.08(a) of the Specifications;

- b) It shall be based on the dollar value of the work to be completed each month as depicted on the Bar-Chart Schedule;
- c) The anticipated cumulative percent complete shall be based on the anticipated cumulative progress earnings relative to the total contract value. Total contract value will be considered to mean the original amount of the contract including any authorized adjustments for changes to the work in accordance with, but not limited to, the provisions of Sections 109.04 and 109.05 of the Specifications;
- d) Anticipated payments for Material on Hand in accordance with Section 109.09 of the Specifications or for other adjustments including asphalt, fuel, retainage, incentives, disincentives, etc., will not be considered in the Progress Earnings Schedule;
- e) The Progress Earnings Schedule shall include a plot of the anticipated monthly cumulative earnings progress curve.

**Progress Schedule Update** – The Contractor shall on a monthly basis submit for the Engineer’s review and acceptance the Contractor’s Progress Schedule Update within five (5) working days after the Contractor’s progress payment estimate cut-off date. The Contractor shall update the Bar-Chart and Progress Earnings Schedule to reflect the actual progress of accomplished work and the proposed plan for completing the remaining work as of the progress payment estimate cut-off date. The Progress Schedule Update submittal shall include three (3) sets of the printed copies and two (2) sets of data compact disks containing the electronic working files of the Bar-Chart Progress Schedule and Progress Earnings Schedule Update as defined below:

1. Bar-Chart Progress Schedule Update: The Bar-Chart Progress Schedule Update shall be based on the currently accepted Bar-Chart Progress Schedule and shall show the following:
  - a) Actual start/finish dates for completed activities, actual start/planned finish dates for on-going activities, and planned start/finish dates for the remaining activities.
  - b) Remaining duration for unfinished activities shall be based on the amount of time required to complete the remaining work;
  - c) Activity percent complete for work-in-place shall be based on the amount of work completed relative to the total amount of work represented by the activity (cumulative actual dollar value of work completed relative to the total allocated contract value for the activity);
  - d) A parallel plot of the Progress Schedule Update activity bars against the currently accepted Baseline Progress Schedule.
2. Progress Earnings Schedule Update: The Progress Earnings Schedule Update shall be based on the currently accepted Progress Earnings Schedule and shall show the following:
  - a) Actual monthly and cumulative earnings for each payment period for work completed and the projected monthly and cumulative earnings for each period for the remaining work;
  - b) A plot of the actual and projected cumulative earnings progress curve against the currently accepted Baseline or Revised Progress Earnings curve.

**Revised Progress Schedule** - A Revised Progress Schedule will be required when:

- The Contractor proposes to revise his work plan. (The Contractor may revise his Progress Schedule at any time at his discretion.)
- The Engineer determines the **Contractor's work plan** or the progress of the work differs or deviates significantly from the SOR. Differs or deviates significantly will be construed to mean major deviations from the SOR that will affect the schedule milestone(s), progress earnings, or project completion.
- The Engineer issues a written request for changes or a directive for changes
- Any of the above conditions impacts or will impact the progress earnings or scheduled dates of any project milestones including project completion

Examples of changes, relative to the above, that will prompt the Engineer to require a Revised Progress schedule include but are not limited to: major deviations from the SOR such as changes to phasing, changes to the general sequence, changes to the proposed method or means, additions or deletions to the work, unanticipated changes deemed beyond the Contractor's control such as those caused by other parties (utilities and railroads) or changes as defined in Section 104 of the Specifications.

The Contractor shall submit a **Schedule Impact Analysis (SIA)** for all changes to the work that will impact the schedule, including changes requested by the Engineer or the Contractor. If the Engineer and the Contractor agree changes to the work do not or will not affect or impact the progress schedule, the Engineer will not require a written Schedule Impact Analysis (SIA) be submitted but will require the Contractor to certify in writing that such changes did not impact the schedule.

**Schedule Impact Analysis (SIA)** – The Contractor will be required, as determined by the Engineer to submit a written Schedule Impact Analysis for any of the following reasons:

1. The Contractor discovers any previously unknown or unanticipated issue that he believes may impact the work plan or schedule; in such cases the Contractor shall notify the Engineer within forty-eight (48) hours of any discovered issues;
2. When the Engineer issues a written request for changes to the work that will impact the work plan or schedule;
3. When the work is impacted by other changes that are deemed by the Engineer to be beyond the control of the Contractor

The written Schedule Impact Analysis (SIA) shall explain the effects of the impact(s) on the Contractor's work plan or schedule; and if appropriate shall substantiate any requests for adjustment of the Contract. Such changes may include, but not be limited to, changes caused by others (i.e. railroads, utilities, etc.) or changes to the work as defined in Section 104 of the Specifications. The Contractor shall submit the written SIA within fourteen (14) calendar days after the finish date of the impact. The written SIA shall include a description of the impact; explanation and justification of the effects of the impact on the work plan or schedule; and a description of any proposed plan to mitigate the effects of the impact. The SIA will be evaluated against the SOR for any adjustments to the Contract in accordance with the provisions of Section 108.04 of the Specifications.

If no SIA is required for changes to the work the Contractor shall submit a Revised Progress Schedule within the timeframe stated below.

When a Revised Progress Schedule is required by the Engineer for revisions in the work plan or schedule or for authorized changes to the Contract, the Contractor shall submit for the Engineer's review and acceptance the Revised Progress Schedule within fourteen (14) calendar days of

receipt of the Engineer's written request. The Revised Progress Schedule shall be prepared and submitted in the form of a Baseline Progress Schedule; however, it shall reflect the actual progress of accomplished work as of the submittal date, any impact as a result of the change(s), and the proposed plan for completing the remaining work. The Revised Progress Schedule submittal will be reviewed by the Engineer for acceptance as specified herein. The accepted Revised Progress Schedule shall then replace the previous SOR for the remainder of the work.

**Failure to Furnish Progress Schedules** – Work shall not commence until the Contractor submits his complete Baseline Progress Schedule in accordance with the requirements of this special provision, unless otherwise approved in writing by the Engineer.

If the Contractor fails to provide an acceptable Baseline Progress Schedule within sixty (60) calendar days from the Contract Notice to Proceed date, a Progress Schedule Update, or if a Revised Progress Schedule is required as specified herein and the Contractor fails to provide such a schedule, the Engineer will delay approval for payment of the Contractor's monthly progress estimate until such time as the Contractor has satisfied the submittal requirements.

Delays resulting from the Contractor's failure to provide the progress schedule in accordance with the requirements set forth herein will not be considered just cause for extension of the contract time limit or for additional compensation.

### III. REVIEW AND ACCEPTANCE

The Engineer will review all progress schedule submittals within seven (7) calendar days of receipt of the Contractor's complete submittal. The progress schedule submittal shall be considered complete only when all required submittal items and schedule information as defined herein are provided. Acceptance by the Engineer will be based on completeness and conformance with the requirements of this provision and the Contract. Such contract requirements may include phasing, sequence of construction, Maintenance of Traffic (MOT), interim milestone(s), or other specified constraints or restrictions.

If the Contractor's progress schedule is deemed to be unacceptable, the Engineer will issue a written notification of non-conformance or incompleteness with a request for resubmission. The Engineer's response will include comments describing the deficiencies prompting the Engineer's decision.

If the Contractor's progress schedule is deemed to be acceptable, the Engineer will issue a written notice of acceptance that may include comments or concerns on the schedule or a request for clarification. When the Engineer's responses include any comments, concerns, or requests for clarification, the Contractor shall respond accordingly within seven (7) calendar days of receipt of the Engineer's response. Failure on the part of the Contractor to respond to the Engineer may adversely affect the Engineer's ability to completely evaluate the Contractor's schedule.

Upon acceptance, the Baseline or Revised Progress Schedule will become the Schedule of Record (SOR) and will replace any previous SOR. For the purposes of this Special Provision the SOR is defined as the currently accepted progress schedule by which all schedule references will be made and progress will be compared. The currently accepted Progress Schedule Update will not replace the SOR, but will be used as the contemporaneous schedule with which to assess current progress, and to evaluate the effects of any time-related changes or impacts on the work.

Review and acceptance by the Engineer will not constitute a waiver of any contract requirements and will in no way assign responsibilities of the work plan, scheduling assumptions, and validity of the schedule to the Department. Failure of the Contractor to include in the Progress Schedule any element of work required by the Contract for timely completion of the project will not excuse the

Contractor from completing the entire scope of work within the Contract specified completion milestone(s).

#### **IV. MONITORING THE WORK AND ASSESSING PROGRESS**

**Monitoring The Work** – The Engineer will monitor the work regularly to identify any deviations from the Contractor’s scheduled performance relative to the SOR. The Engineer may request a meeting with the Contractor to discuss the Contractor’s current progress or to review the approximate date for starting each critical inspection stage during the following thirty (30) days. At least once a week, the Contractor shall advise the Engineer of the approximate timing for anticipated critical stages for the subsequent week. The Contractor must advise the Engineer at least twenty-four (24) hours in advance of any changes in the Contractor’s planned operations or critical stage work requiring Department inspection.

**Progress Evaluation** – Progress will be evaluated by the Engineer at the time of the monthly progress estimate relative to the Schedule of Record (SOR). The Contractor’s actual progress may be considered unsatisfactory if any of the following conditions occurs:

1. The actual Total earnings to date percentage for work completed is more than ten (10) percentage points behind the cumulative earnings percentage for work scheduled; or
2. Any interim milestone or critical activity completion date is later than the scheduled completion date by more than twenty-one (21) calendar days or ten (10) percent of the contract duration, whichever is less; or
3. The projected project completion date is later than the contract completion date by twenty-one (21) calendar days or ten (10) percent of the contract duration, whichever is less.

**Progress Deficiency and Schedule Slippage** – When the Contractor’s actual progress is trending toward unsatisfactory status, the Engineer will encourage the Contractor to meet to specifically and substantially discuss reversing this trend and the steps he is taking to recover satisfactory progress.

When the Contractor’s actual progress is deemed to be unsatisfactory as defined by any of the conditions listed under **Progress Evaluation** of this provision, the Engineer will issue a written notice of unsatisfactory performance to advise the Contractor that five (5) percent retainage of the monthly progress estimate is being withheld and will continue to be withheld as described in Section 109.08(c), for each month the Contractor’s actual progress is determined to be unsatisfactory. When the Contractor fails to respond with good faith efforts as described herein to restore satisfactory progress, the Engineer will issue a notice to indicate that he may recommend the Contractor be temporarily disqualified from bidding on contracts with the Department as described in Section 102.08 of the Specifications, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate following the Engineer’s notice. Prior to recommendation for removal from the list of pre-qualified bidders, the Engineer will allow the Contractor fourteen (14) calendar days from the date of the notice to respond. As an example of good faith efforts, the Contractor may submit to the Engineer, a proposed recovery plan in the form of a Revised Progress Schedule and a written statement to describe the Contractor’s proposed actions and timeframe to correct the progress deficiency or schedule slippage. The Contractor may also submit to the Engineer a written explanation and supporting documentation to establish that such delinquency was attributable to conditions beyond his control. Any schedule revisions resulting from a recovery plan will be reviewed in accordance with Section III, but shall not replace the current SOR.

When the Engineer determines the Contractor’s progress is again satisfactory the five (5) percent retainage previously withheld will be released to the Contractor in accordance with the provisions of Section 109.08 (c) of the Specifications.

If the Contractor is temporarily disqualified from bidding on contracts with the Department, the Contractor will not be reinstated until either the Engineer deems that his progress has improved to the extent that the work can be completed within the contract time limit or the project has received final acceptance in accordance with the provisions of Section 108.09.

**V. MEASUREMENT AND PAYMENT**

Category II progress schedule submittals including the baseline and any subsequent revisions requested by the Engineer as described herein, will not be measured or paid for separately. All associated costs to prepare, update, revise, and/or furnish the progress schedules for Category II projects in accordance with the requirements herein shall be considered incidental to the work.