

IMLA - Baseline Schedule Review Checklist

(Priorities listed in bold type)

Contract Compliance

- 1. Submittal Contents - Check to make sure the contractor has included all the required components of the schedule submission. Tabular and graphical bar chart reports, narrative etc.
- 2. **Contract Completion Date** - Is this date on or before the specified contract completion date in the contract? Is the date more than 30 day before the specified contract completion date? Does an early completion date invoke contract time changes?
- 3. **Data Date** - What date should it be (NTP, Award Date, etc) and does it match?
- 4. **Time/seasonal Restrictions** - Do the activity early and late dates reflect the time/seasonal restrictions/requirements in the contract? (clearing and grubbing, environmental related timeframes, etc)
- 5. **Substantial Completion Date** - Check to see if substantial completion is reflected in the schedule and what activities are necessary to achieve final completion. Is the scheduling of this work reasonable?
- 6. **Regulatory Requirements** – Is the contractor responsible for complying with any regulatory requirements and if so, are there any requirements that should be reflected in the schedule?
- 7. **Permit Requirements** – Is the contractor responsible for complying with any permits and if so are those requirements reflected in the schedule?
- 8. **Permit Issuance** – Is the contractor responsible for securing any permits and if so, does the schedule show the work needed to secure those permits? Is the work that is restrained by the issuance of those permits properly reflected in the schedule?
- 9. **Milestones** - Check to make sure that all contractual completion and interim milestones are represented in the schedule with zero duration milestone activities. Major phase/stage changes should have milestones.
- 10. Contract Access Restrictions - Does the schedule properly reflect contract access restrictions, such as lane closure time or environmental related constraints? Does the schedule properly reflect authorizations required to start work in certain areas, or to gain access to certain areas?
- 11. Activity I.D.s – Are the activity ID's logical and/or do they conform to the format specified?
- 12. Submission Timing – When was this baseline received and when was the submission required by the specification.
- 13. **Phasing / Staging Requirements** – Does the schedule reflect the phasing / staging plans required by the contract?

General

- 1. Calculate the Schedule - Calculate the electronic schedule and compare it to the contractor's version, either printed or electronic, to see if anything changes.
- 2. Retained Logic - Check to see whether the contractor has run the schedule using retained logic or progress override. Contractor should use retained logic.
- 3. Schedule Errors - Run schedule and view the schedule log report to check for loops, errors and other item listed on the report.
- 4. Imposed Finish Date - For informational purposes, check to see if there is an imposed finish date (project must finish by date).
- 5. Number of Activities - Check to see how many activities are in the schedule.
- 6. Claim Digger Report. (for a revised baseline)- Run claim digger and identify the changes that were made from the previous version. Ascertain why these changes were made.

Submittals and Procurement

- 1. **Submittal Duration** – Do the submittal review activity durations conform to the amount of time specified in the contract?
- 2. **Submittals Content** – Review the schedule to see if all the submittals that the contract requires to be in the schedule are included. Each submission should have two (1. Prepare/submit and 2. Review and approve) or three (1. Prepare 2. Submit and 3. Review and approve) activities.
- 3. **Submittal Detail and Priority** –Are there any large submittals on the project and if so should any of them be broken down further, perhaps because they will be worked on in phases or submitted in groups in a certain order?
- 4. **Submittal Priority/Order** – Are there submittal packages that need to be received in a certain order and is that order reflected in the schedule?

- 5. **Submittal / Procurement Float** - Check to make sure there is adequate float in any complex submission and procurement activities so as to accommodate possible multiple submittal iterations.
- 6. **Contractor Design Submissions** - Is there any design work that is the responsibility of the contractor and if so, is that design work sufficiently detailed in the schedule enough so that the owner will have a good understanding of how the design process and the status of the design preparation? Consider requiring design phased design preparation activities.
- 7. **Delivery Timing** - How are delivery activities depicted? Should some of the delivery activities be assigned zero free float so that the schedule will show delivery just prior to incorporation of the material into the work on site?
- 8. **Fabrication Activities** - How are fabrication activities depicted? Is the contractor going to fabricate items in advance of when they are needed and if so how is storage of those items going to be accommodated. Is the contractor going to fabricate items just in advance of when they are needed so that storage won't be necessary? Does the schedule properly reflect what needs to happen or the way the contractor is going to proceed with fabrication?
- 9. **Fabrication Activity Detail** - Are there any large, time consuming fabrication activities that need to be broken down and detailed such that the owner will have an understanding of how that fabrication work will proceed and when it gets going, the status of it?

Activity Durations

- 1. **Maximum Activity \$/day** – Are there any large dollar activities that need to be broken up? Do the activity durations conform to the maximum \$/activity amount specified in the contract?
- 2. **Maximum Activity Duration** – Are there any long activities that need to be broken up? Do the activity durations conform to the maximum activity durations specified in the contract? Has the contractor provided a suitable explanation for having certain durations be longer than specified in the contract?
- 3. **Odd Duration Check (float sequestration check)** - Check for odd/strange original durations (not 1 or 2 days or multiples of 5). Activities with odd durations may be areas where the contractor has compressed the work or extended the work to make the scheduled completion date match a certain date, such as the contractual completion date.

Float

- 1. **Negative Float** - Check to see if there is any negative float. Negative float should not be allowed in baseline schedules.
- 2. **Excessive Float** - Check large float values. Does it make sense that the activities with large amounts of float have that float? Activities that seem to have too great float values should be checked to see if there are missing ties along whatever path they are on.
- 3. **Late Date Schedule Review** – Plot the late dates for all the activities in a bar chart format. Review the late date schedule to see if it is reasonable. Can the contractor provide the resources to build the project as shown? Are there activities that are shown unreasonably late?

Calendars

- 1. **Calendars** - Check schedule calendar structure and individual calendars. How many calendars are there in the schedule and what are the working days for each one of them. You will need, at a minimum, a 5 day per week calendar and a 7 day per week calendar. Possible other calendars include 6 day/wk, planting/turf establishment calendars and winter work calendars for 5, 6, and 7 day per week calendars.
- 2. **Holidays** - Check to make sure that planned holidays reflected in the schedule.
- 3. **Activity Calendar Assignments** - Check activity calendars. Is each activity assigned to the correct calendar?

Activity Codes

- 1. **Activity code structure** – Has the contractor included sufficient activity codes such that the schedule can be properly sorted and filtered? Does the activity coding structure conform to what is specified? Can we tell who is responsible for each activity, what type of activity each activity is, where each activity is located, what stage the activity is going to be done in, etc.
- 2. **Work Task Activity Code Assignments** - Check to see if all the various activities are assigned with proper activity codes.
- 3. **Blank Activity Code Values** - Are there blank values for activity codes for any of the activities and if there is, is this allowed?

Logic

- 1. **Missing Successors / Predecessors** - Check for activities with no successors or no predecessors
- 2. **Unusual SF Relationships** - Review/note/inquire about SF relationships. These are unusual.
- 3. **Unusual FS with Positive Lags** - Review/note/inquire about FS relationships with positive lags
- 4. **SS / FF Pairing** - Check SS logic to see SS activities need to be paired with a FF relationship.
- 5. **Negative Lags** – Review and note negative lags. Are there better ways to represent the plan without using negative lags? Inquire with the contractor.

Critical Path / Longest Path

- 1. **Critical Path Definition** – Does the schedule define the critical path as
 - a. Activities with Float less than X or
 - b. Longest path
- 2. **Percent Criticality** - Check to see what percentage of activities are critical and near critical (say float < 10) to get a gauge of how tight the schedule is.
- 3. **Critical Path Reasonableness** - Check critical path and near critical paths or longest path and near longest path. What work is on these paths and does it make sense given what the most difficult and time consuming parts of the project are.

Third Party or Owner Work

- 1. **Third Party Work** - Does the schedule properly reflect the third party work upon which the project and the contractor's work are dependent? These may include utility relocations, adjacent contractor work, municipal work etc.
- 2. **Owner Work** – Other than the submission reviews, is all owner work properly reflected in the schedule? Are the timeframes and durations of this work reasonable?
- 3. **Owner Furnished Equipment / Deliveries** – Are Owner furnished equipment and deliveries reflected in the schedule?

Completion Activities

- 1. **Punch List Reasonableness** - Is there adequate time for punch list work and is this work properly reflected in the schedule?
- 2. **Commissioning, Inspections & Testing** - Is there adequate time for commissioning, inspections and testing and is this work properly reflected in the schedule?

Good Schedule Practice

- 1. **Activity Descriptions** - Check activity description wording. Do the descriptions accurately summarize the scope and location of work for each activity? Are descriptions for similar work tasks in different areas distinct so that the reader will know which is which?
- 2. **One Trade per Activity** - Check to make sure work activities do not encompass more than one trade (example – Form concrete and place rebar).
- 3. **Shift Work** - Does the schedule provide enough information so that the owner can see what time of day and shift and how long the contractor plans on working on each activity? Methods for doing so include using the activity codes, calendars or resource functions.
- 4. **Cold Weather Work** - Cold weather sensitive work
 - a. When does the schedule show being able to do this work?
 - b. Are the early and late dates ok?
 - c. Are the proper calendars applied to these activities to reflect the periods when cold weather is anticipated to affect the work?
- 5. **Missing Activities** - Check for missing activities – Are all the components, steps, tasks properly reflected in the schedule?
- 6. **Minimize Constraint Use** - Check to make sure that constraint use is kept to a minimum. What constraints are there and why are they needed? Should logic or calendars be used in lieu of the constraints?
- 7. **Access limitations** – Do any space and access limitations prevent the contractor from working in the areas when shown. Is there room for access, deliveries, staging, storage, temporary works and equipment?

- 8. Bad Weather- How is potential bad weather accounted for in the schedule? Ask contractor if it is not apparent.
- 9. Curing Time - Does the schedule allow for curing time prior to loading or the next item of work, such as stripping or false work removal?
- 10. Interim Inspection Work - Does the schedule properly reflect any interim and final inspections that need to take place during the course of the project and if so, are the timeframes and durations of this work reasonable?
- 11. **No Extra Work in Baseline** - Check to make sure that the baseline schedule does not contain any activities for work not in the original contract.
- 12. **Preferential logic** - Are there logic ties shown in the schedule which are preferential, meaning they reflect the contractor's choice in ordering the tasks rather the way the tasks need to be done? Assess whether preferential logic is reasonable or should be eliminated. Request an explanation for any apparent preferential logic ties.
- 13. Resource Leveling Check – Is the schedule resource loaded and if so, has the schedule been resource leveled? Have any early or late dates changed because of resource leveling and if so which trades are affecting the schedule?

P6 Considerations

- 1. Check Project Details Settings Including:
 - a. Activity Types – Usually, most activities are usually task dependent or milestones. Investigate other types in schedule.
 - b. Activity Duration Types – Usually, most activities are fixed duration type. Investigate other types in schedule.
 - c. Activity % Complete Types
- 2. **Confirm & Document Contractor's Schedule Options** – Ask the Contractor what schedule options/settings were selected in calculating the schedule. Document what those settings are.
- 3. WBS Structure – Review WBS setup. Is WBS being used and if so is it adequately set up?
- 4. **Review Multiple Float Paths** – Run/calculate the schedule with multiple float path option selected. Print bar chart grouped by float path. Review most critical path and near critical paths.
- 5. Review Notebook – Review contractor notes in activity notebook