



INTEGRATED PROJECT DELIVERY (IPD)

a CULTURE where we PROMISE
what we are GOING TO DO and
DELIVER what we PROMISE.

— NCDOT's Project Delivery Vision

6 Key Areas to Review on Your Project Schedule

Consider these schedule elements when reviewing your project schedule.

Alignment with Project Scope of Work

- The schedules' end date matches the Letting date.
- SAP and Project Delivery Network (PDN) milestones align.
- Consultants' activities align with their scope of work.
- All final deliverables and interim milestones are represented with zero duration.
- Time restrictions and seasonal restrictions are accounted for. For example, photogrammetry must occur during Fall and Winter to take advantage of "leaf drop."
- Seasonal work is reasonably scheduled.
- Holidays impacting the project schedule are accounted for.

Tasks & Activities

- The number of tasks provides an appropriate level of detail to easily understand the work being performed and to effectively manage the work.
 - The task descriptions clearly and accurately summarize the work.
 - The tasks on the critical path (indicated in red on the Gantt chart) make sense. Discuss any tasks or activities that are expected to be on the critical path but are not with the consultant project manager.
 - Identify additional opportunities to concurrently perform work.
- ★ **Tip:** By default, new tasks added to the schedule are automatically scheduled to start on the project's start date. The Automatic/Manual Scheduling setting is noted in the bottom left corner of the Microsoft® Project application screen.

Relationships

- The summary line items do not have a predecessor. If they do, determine if the dependency can be represented by a milestone within the activity.
- All tasks have predecessors and successors.
Exceptions: Summary line items and the project start and end milestones.
- Identify all Start-to-Finish relationships, indicated by “SF” in the predecessor column. Inquire with the consultant project manager about using these relationships because they are rare.

Constraints

- Identify all constraints in the schedule. For schedules with many constraints, discuss if a different relationship (predecessor) would be more appropriate with the project team.
- ★ **Tip:** Avoid unintentionally setting constraints by NOT manually adjusting the start and end dates of individual tasks. Allow the software to calculate these by entering the task, the predecessor, and the duration. The automatic scheduling feature of Microsoft® Project will use these parameters to adjust the start and end dates of each task.

Durations

- The durations are not unusually long. If so, the tasks may need to be broken into smaller, more detailed steps.
- The durations are realistic, feasible, and achievable. It is best practice for the project’s subject matter experts to estimate the durations.
- Durations are not followed by a question mark, indicating a default duration. Ensure each duration is confirmed and entered, removing the question mark.
Note: Summary line items will have question marks if a task beneath it has a question mark.
- ★ **Tip:** Sometimes changes to durations change the critical path. Review the critical path to ensure there are no broken links.

Critical Path

- The critical path extends from start to finish without any breaks. If not, investigate the task with the break, specifically its constraints, predecessors and successors.
- The critical path sequence of work makes sense. Check this with the project team.
- Changes to the critical path since the previous submittal were discussed and make sense.
- Identify the tasks that can be delayed without impacting the project end date. Generally, delays to non-critical tasks (indicated in blue on the Gantt chart) will not impact the project end date. As the float on non-critical tasks is used up, the task will move onto the critical path, where any delay will impact the end date.