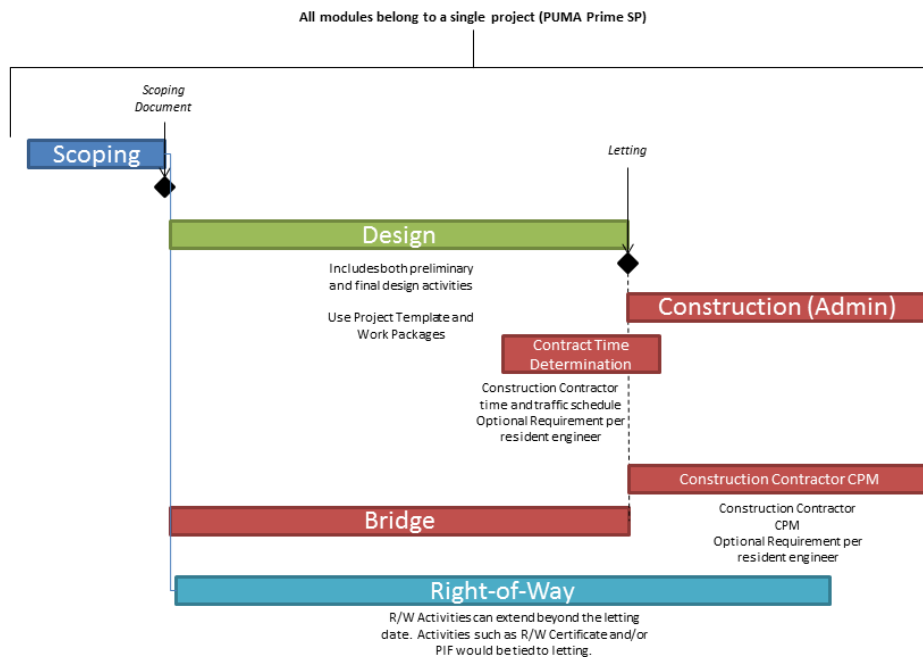# Schedule Module Overview

November 20, 2014

Project Lifecycle

Every MnDOT project has a lifecycle.

MnDOT project schedules are developed using seven modules that mimic the lifecycle of a project. Each module has a clearly defined end deliverable. The seven modules are maintained within a single Prime SP Schedule in P6. Having multiple modules for one project allows the progressive elaboration (the schedule information is expanded as the project proceeds along its lifecycle journey) of the project schedule.

The seven modules are:

Scoping   The scoping module includes the activities required to generate a signed scoping document and the creation of the schedule for the next stage of the project - design. The design schedule at this time may be a single activity line representing the duration of the work and the Roles/Resources planned to do the work; or, it may be a detailed schedule developed from work packages.

The Project Manager will own all activities and update status complete in P6. The module includes the key performance indicators required for WIG reporting. The project manager will establish the activity durations and work with the SSC to enter information in P6.

Design

This module encompasses the project lifecycle stages between the signed scoping document and letting, other than bridge and right-of-way. These activities include conceptual development, environmental documentation, preliminary design, final design, construction document generation and preletting activities for MnDOT and locally let projects. No activities will extend beyond the letting date.

The design schedule is generated by selecting individual project templates and work packages that have been developed by MnDOT Functional and District groups. The templates and work packages are maintained by the Office of Project Management and Technical Support, with input from the districts via the Template Group. The project manager will coordinate with MnDOT staff to establish the appropriate activities, duration and personnel for the work. The project manager will work with SSC to enter the information in P6.

Bridge

The bridge module includes the activities required to generate bridge letting documents.

This module encompasses the lifecycle stages between the signed scoping document and letting. This module is separated from the design module because of the unique reporting requirements for bridge projects (bridges have separate SP numbers, activities that may span multiple stages of a project life cycle, and schedule code maintenance is simplified on a module basis rather than an activity basis). No activities will extend beyond the letting date.

The bridge work packages were developed and will be maintained by the Bridge Office. The project manager will coordinate with Bridge Office staff to establish the appropriate activities, duration and personnel for the work. The project manager will work with SSC to enter the information in P6.

Right-of-way

The right-of-way module includes the activities required to generate right-of-way documents.

This module encompasses the lifecycle stages following the signed scoping document and can extend beyond the project letting. This module is separated from the design module because activities span multiple phases of a project life cycle and some activities occur after the letting date.

The right-of-way work packages were developed and will be maintained by the Office of Land Management (OLM). The project manager will coordinate with district Right-of-Way staff and OLM to establish the appropriate activities, duration and personnel for the work. The project manager will work with SSC to enter the information in P6.

Construction Administration	The Construction Administration module includes the activities MnDOT staff will perform after the project has been let.
	This module encompasses the lifecycle stages after the project letting through the completion of construction.
	The construction administration work packages will be developed and maintained by the Resident Engineer Group. The project manager will coordinate with Resident Engineer staff to establish the appropriate activities, duration and personnel for the work. The project manager will work with SSC to enter the information in P6.
Contract Time Determination	The Contract Time Determination module is generated at the request of the Resident Engineer. This schedule is developed to estimate construction activity durations and to forecast potential impacts to the project.
	This module encompasses the lifecycle stages after the project letting through construction is complete.
	The contract time determination schedules will be developed by MnDOT.
Construction – Contractor	The Construction – Contractor module includes the activities the Contractor will complete to construct the project. This module will only be required if the Resident Engineer decides to include a P6 CPM schedule requirement in the Special Provisions.
	This module encompasses the lifecycle stages after the project letting through construction is complete.
	The construction control work packages will be developed and maintained by the Contractor. The project manager will coordinate with Contractor to confirm the appropriate milestones are met.

The system is intended to be tailored to a specific project while maintaining data integrity to report on key project indicators on a statewide basis. Standard Work Breakdown Structures (WBS) nodes can't be modified, but additional sub-level WBS nodes can be added.

MnDOT functional groups and district staff have developed multiple work packages that facilitate the creation of project schedules. These work packages contain the activities that are required to complete work on a project. See the CS-10-04_Adding Work Package for creating a schedule using work packages.

Multiple staff are involved in creating and maintaining each project schedule. The primary groups actively involved in project schedules are: Admin, SSC, PM, District and Central Office Functional Groups and Activity Owners.

MnDOT project schedules are generated by having the PM select work packages applicable to the specific project. The work packages contain activities which are role loaded and have generic durations for completion. The project manager will work with project team members to adjust the durations for each project and assign ownership to staff that will complete the project activities. See Process Document, PD-10-01_Schedule Creation and Baseline Process.docx and PD-10-02_CTD Schedule Creation and Access Process, for additional information.

During the project lifecycle, all project team members will monitor their activities using reports available on the P6 web site. Activity owners will update the remaining duration and percent complete for each activity assigned to them using the process outlined in CS-20-01_Team Member Update. The reports will be updated by Admin staff as shown in the OP-00-17_report-generation-schedule.pdf on the P6 web site.

For More Information

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