Appendix 3: Using the MDL in Primavera Scheduler

The Master Deliverables List (MDL) is a comprehensive listing of project elements that is agreed upon across WSDOT. This list is intended as a starting point for ensuring all appropriate project elements are included in the plan and schedule, and the codes and the related titles and descriptions provide a common communication vocabulary across all projects and between project teams, region and HQ management, and specialty / support groups. The MDL may be used (but is not so required) as the basis for the creation of work breakdown structures (WBS) for projects.

The MDL is organized in project phases (PE, RW, and CN) and listed down to the deliverables level. It also includes common WSDOT milestones and includes elements for the non-deliverable work that a part of the project and its costs. A schedule may have additional activities/tasks to further break down the work of accomplishing a deliverable, with multiple tasks coded with the same MDL code vale. The use of consistently applied task names at the deliverables level is desirable when practical, while the more detailed levels of activity are completely flexible for use by project managers and teams.

The MDL has undergone significant revisions for 2008 and use with Primavera Scheduler including restructuring and rearrangement of items and areas, expansion to cover items and areas not previously included and better alignment with the Work Operation Codes.

The MDL and the Work Operation codes used on all charges have been fully related, so that every Work Operation code relates to a place in the MDL, and every part of the MDL's lowest levels is covered by a Work Operation code. This allows the actual costs and WSDOT labor hours, with the Work Operation code on them, to be related in the Primavera schedule to the work plan and activities for which they are incurred, by aligning the MDL codes for both the actual costs and the planned activities.
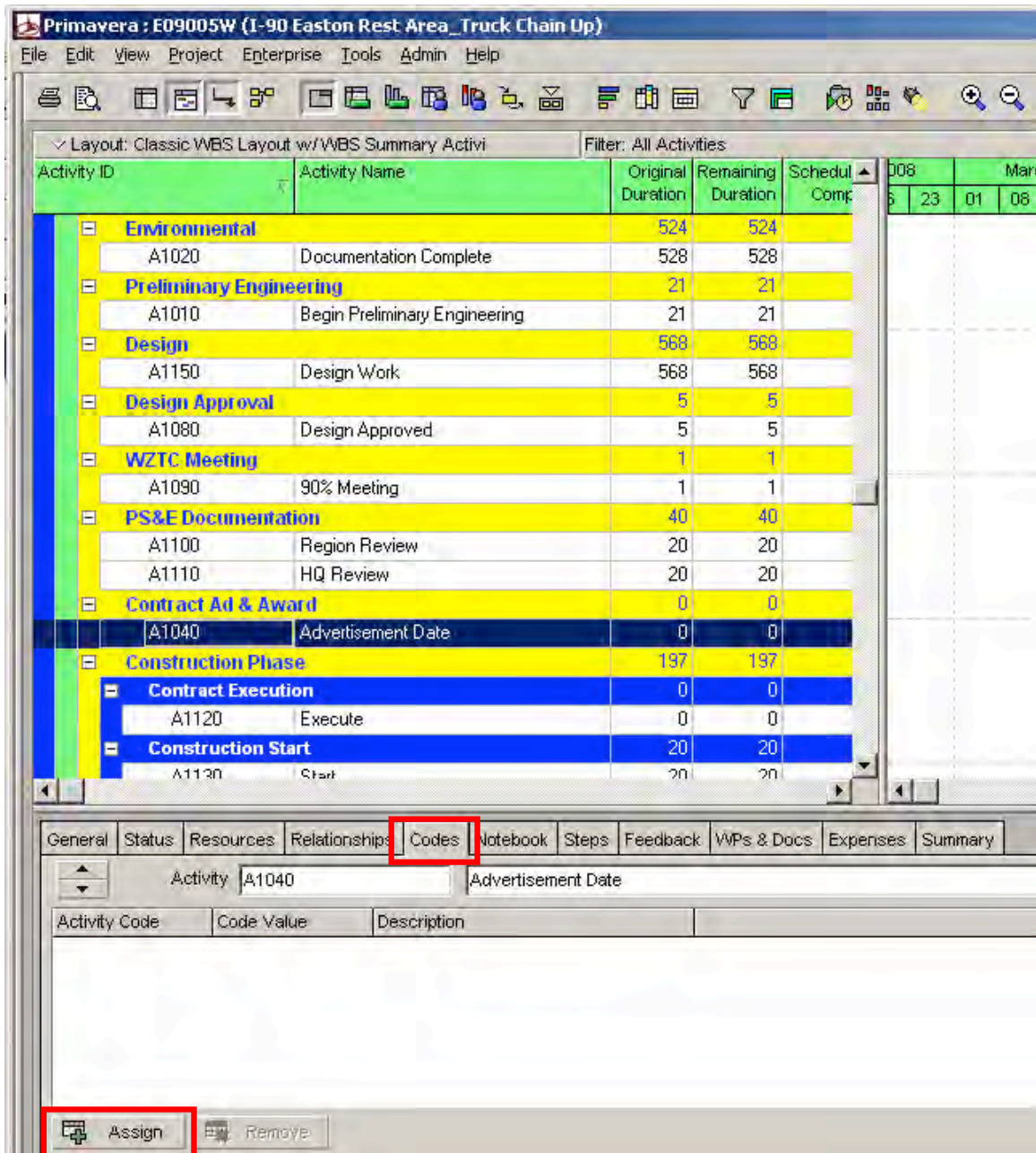
The MDL is represented in Primavera Scheduler as a Global Activity Code. This means that each activity (or milestone) can have a single value assigned to it from the MDL global activity code list. This is significantly different than how it was represented in PDIS where it was the Work Breakdown Structure (WBS), but there are similarities. In Primavera Scheduler, the regions and/or project teams are now free to define the WBS below the phase (PE, RW, CN) level (the first level down) that works best for their particular project. (The project teams may choose, though, to utilize the MDL as a tool in developing their WBS.) That first level down – Phase – of the WBS along with the MDL codes provide the consistency across the PMRS system and the WSDOT enterprise needed for uniform management and reporting. The MDL as a global activity code provides strong capabilities for analyzing and reporting from the schedule with layouts, filters, and reports.

Every activity and milestone should have an MDL code selected for it, but it is imperative that significant milestones and activities in areas of coordination between the project office and specialty or support groups be coded with the appropriate MDL code.
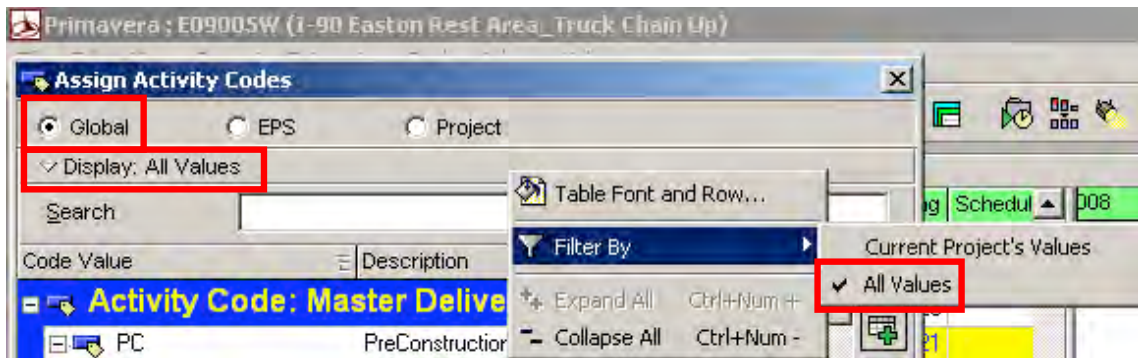
Thus it is very important that the MDL be universally and consistently applied to the activity and milestone in projects. The use of this MDL structure will simplify the development of the project plan and also the WBS for project managers and teams. Because categories, deliverables and milestones are consistently named across the state, WSDOT will also be able to track and monitor project delivery more easily. This will increase our ability to be accountable to the public.

Washington State Department of Transportation

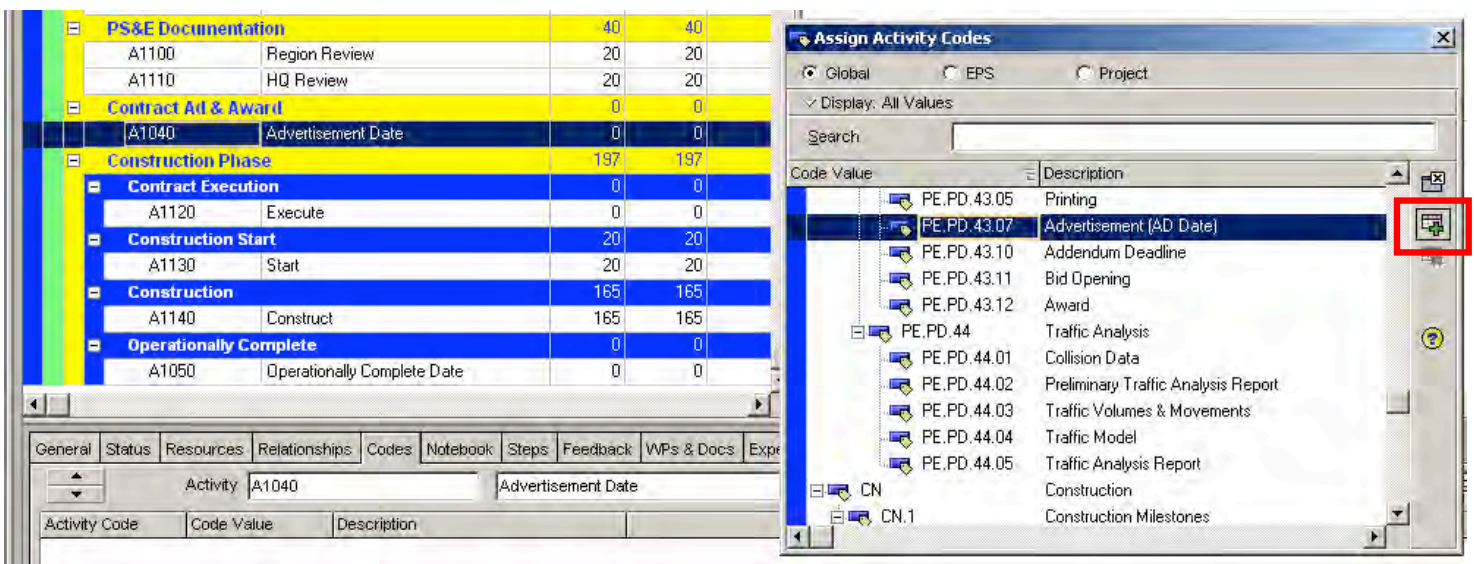**Application of the MDL in Primavera Scheduler**

To begin, open the project, and select the activity or milestone to be coded. In the lower portion of the screen, select the Codes tab, and click the Assign button to assign an Activity Code.

Within the pop-up box for Assign Activity Codes, make sure Global button is selected (not EPS or Project) and the list of codes is filtered to Display: All Values (as shown); right-click on the Display: bar to change it.

Scroll in the list of the various Activity Codes (the blue bars) to the Master Deliverables List section, and select the one most appropriate code value for the activity or milestone, and click the button towards the right side of the window that has the green **+** to add the activity code and assign that code value.

An activity code can be assigned to each activity only once. For example, only one "MDL" code value can be assigned to Activity A1040. Additionally, Activity A1040 can have a single "Constraints Indicator" code value assigned, a "Regional Confidence Report Activity" code value assigned, etc.

Using the MDL in Layouts, Filters, and Reports in Primavera Scheduler
The MDL provides a consistent structure and extensive list of standard codes, titles and descriptions for elements of projects. As a global activity code, the MDL can be extensively used in several ways:
- Activities can be grouped by the code values in Primavera Scheduler layouts (on-screen or for printouts) or in reports;
- Activities can be filtered in Primavera Scheduler on certain code values in layouts and reports;
- Reports (such as the Confidence Report) or data queries can be built external to Primavera Scheduler that extract certain data based on a desired MDL code value.