

1. INTRODUCTION

1.1 ASSIGNING COST & RESOURCES

As part of the Construction Baseline Schedule development, the schedule shall be cost and resource loaded at the activity level, as described in the Schedule Specifications Section 8.02 and 722.

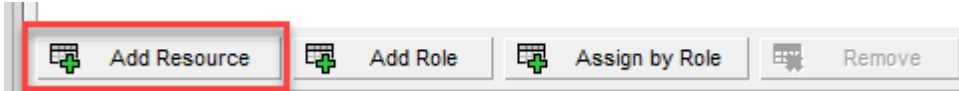
The following guide helps demonstrate one methodology that provides adequate cost and resource loading in Primavera P6. This document is a recommendation only, Specification Section 8.02 and 722 shall control.

2. COST LOADING

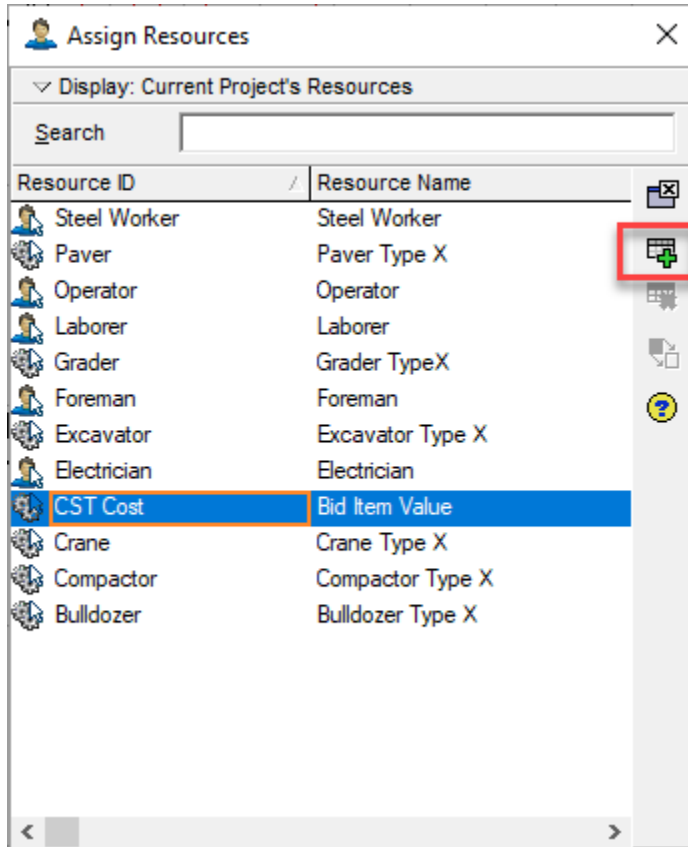
1. General Comments:
 - a. The cost loaded schedule should represent how the bid price translates to schedule and to each individual activity.
 - b. Each bid item presented in the schedule should summarize to the total value that was presented in the Contractor’s bid.
 - c. Cost loading must occur at the activity level.
 - d. For all activities that require cost to complete should be cost loaded.
 - e. No individual activity should be cost loaded for more than \$50,000, per the specification.
 - f. Depending on the type of activity, multiple bid items may be applied to a single activity in order to capture the full cost of construction.
 - i. For example: An activity of “Installation of Drainage Pipe” may be assigned the following bid items: Excavation, Place stone bed, Install pipe, Backfill, and Compaction.
2. Process:
 - a. Once the CPM schedule has been developed, calculated, and verified, the Contractor should begin to add the appropriate Resource ID representing the Cost to each activity.
 - i. Select the Activity
 - ii. Select the Resources Tab
 - iii. Select Add Resource

Activity ID	Activity Name	Budgeted Total Cost
Stage 2		
Step A		
ContractNo_C750	Traffic Switch from Phase I	\$0.00
ContractNo_C765	Install Temporary Shielding - P2SA SB	\$0.00
ContractNo_C755	Install Water Control Measures - P2SA SB	\$0.00
ContractNo_C805	Demo Existing Substructure - P2SA SB	\$0.00
ContractNo_C790	Excavate Abutments & Surrounding Area - P2SA SB	\$0.00
ContractNo_C815	Set & Grout Precast Abutments - P2SA SB (NOTE: Ensure Gi	\$0.00

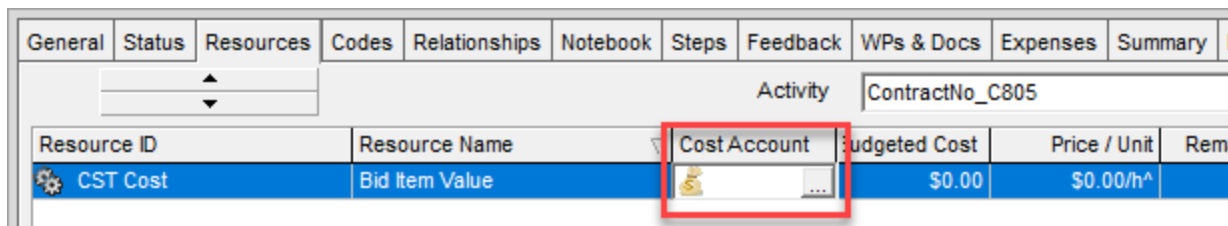
General	Status	Resources	Codes	Relationships	Notebook	Steps	Feedback	WPs & Docs	Expenses
								Activity	ContractNo_C805



b. Begin by selecting a Resource ID of "CST Cost". Click "Assign" to add.



- c. Once a Resource ID of "CST Cost" is assigned, select a "Cost Account" equal to the Bid Items associated with the activity. In this case, "Demo Existing Superstructure". In this case only one bid item applies.
 - i. It may be helpful to use the search feature to find the correct bid item, begin by typing a key term, in this case: 'demo'
 - ii. Find the appropriate bid item and Click "Assign" to add.



Select Cost Account ✕

▼ Display: Current Project's Cost Account

Search

Cost Account ID	Cost Account Name	
112.01	DEMOLITION OF BUILDING OR STRUCTURE NO. ____	
112.02	DEMOLITION OF BUILDING OR STRUCTURE NO. ____-1	
112.03	DEMOLITION OF BUILDING OR STRUCTURE NO. ____-2	
114.1	DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. ____	
114.2	DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. ____-1	
114.3	DEMOLITION OF SUPERSTRUCTURE OF BRIDGE NO. ____-2	
115.1	DEMOLITION OF BRIDGE NO. ____	
115.2	DEMOLITION OF BRIDGE NO. ____-1	

- d. Assigning Budget Value
- i. Once the Cost Account is assigned, type in the cost for this item in the “Budgeted Account” field.
 - ii. Price/Unit can be left blank as only the total budgeted cost will be entered (no need to enter price/units, etc)

General	Status	Resources	Codes	Relationships	Notebook	Steps	Feedback	WPs & Docs	Expenses	Summary	Predecessors	Successors
Activity <input type="text" value="ContractNo_C805"/>												
Resource ID	Resource Name	Cost Account	Budgeted Cost	Price / Unit	Remaining Cost	Actual Cost	Completion Cost					
CST Cost	Bid Item Value	112.01	\$25,000.00	\$0.00/h^	\$25,000.00	\$0.00	\$25,000.00					

3. RESOURCES

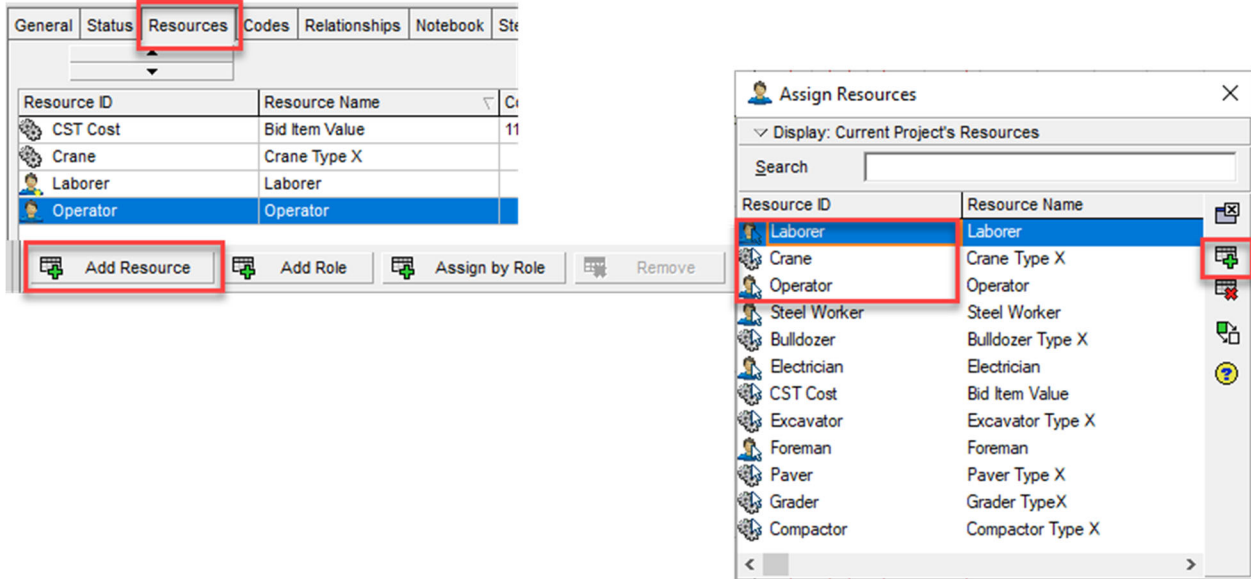
1. General Notes:

- a. Resource loading is required for both labor and major equipment.
 - i. Labor:
 1. All planned labor resources should be loaded to all activities in the schedule, as required.
 2. Labor resources must be loaded including both the General Contractor and all Subcontractors work.
 3. Labor resources must be loaded to the individual labor trade. For example, laborers, operators, carpenters, etc.
 4. Labor resources are recommended to be loaded using a unit of man-hours. , Alternatively, 'crew-loading' can be used, if the narrative provides details on the components of all crews.
 5. The intent is to assign the total number of manhours required to complete each activity as a resource to the activity.
 - ii. Equipment:
 1. The intent is to tack major equipment items only.
 2. Major equipment includes, but is not limited to: cranes, excavators, bulldozers, compactors, graders, etc.
 3. Please assign the total number of days (or hours) of usage to each activity as a resource to the activity. The narrative should described the unit of measurement, hours or days.

2. Process:

- a. Add the appropriate Resource ID of Equipment and Labor to each activity.
 - i. Select the Activity
 - ii. Select the Resources Tab
 - iii. Select Add Resource
 1. Find the appropriate Labor and Equipment resources needed to complete this task.
 2. For this activity, we will need 4 laborers, 1 operator and 1 crane.
 3. We select each resource independently and select "Assign", repeat for each.

Activity ID	Activity Name	Budgeted Total Cost
Stage 2		
Step A		
ContractNo_C750	Traffic Switch from Phase I	\$0.00
ContractNo_C765	Install Temporary Shielding - P2SA SB	\$0.00
ContractNo_C755	Install Water Control Measures - P2SA SB	\$0.00
ContractNo_C805	Demo Existing Substructure - P2SA SB	\$0.00
ContractNo_C790	Excavate Abutments & Surrounding Area - P2SA SB	\$0.00
ContractNo_C815	Set & Grout Precast Abutments - P2SA SB (NOTE: Ensure Gi	\$0.00



3. Assigning the correct “Budgeted Units”

a. Manpower

- i. Manpower should be tracked in total number of labor-hours for the resource/activity.
- ii. For Laborer: This activity requires 4 laborers at 8 hours/day and 5 days (4*8*5)= 160 units (total hours)
- iii. For Operator: This activity requires 1 operator at 8 hours/day and 5 days (1*8*5)= 40 units (total hours)

b. Equipment

- i. Equipment should be tracked by days of usage.
- ii. This task will require only one piece of major equipment – a crane.
- iii. For Crane: This activity requires 1 crane for each of the 5 days (1*5)= 5 units (crane-days)

Resource ID	Resource Name	Budgeted Units	Budgeted Units / Time	Remaining Units	At Completion Units	Cost Account	Budgeted Cost	Remaining Cost	At Completion Cost
CST Cost	Bid Item Value	0	0/d	0	0	112.01	\$25,000.00	\$25,000.00	\$25,000.00
Crane	Crane Type X	5	1/d	5	5		\$0.00	\$0.00	\$0.00
Laborer	Laborer	160	32/d	160	160		\$0.00	\$0.00	\$0.00
Operator	Operator	40	8/d	40	40		\$0.00	\$0.00	\$0.00