


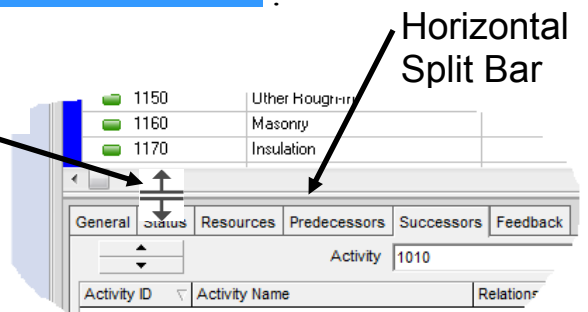



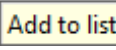
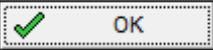
Opening and Customizing the Activity Details (a.k.a. Details) Window

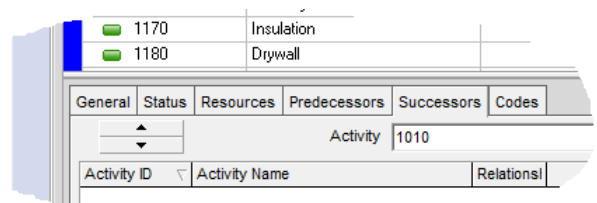
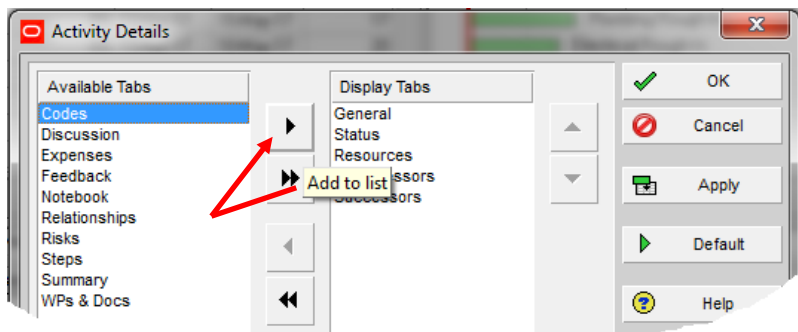
As discussed earlier, most of the screens you will be working with in P6 will have a top and bottom window. If it is not already opened, follow the instructions below to open and customize the Activity Details window – more often referred to in P6 simply as the Details window.

1. If the Details window is turned off, the quickest way to turn it on is by simply clicking the  button in the toolbar. This button will toggle it “on” and the  button (the No Bottom Layout command), will toggle “off”.
2. The other method to open the Activity Details window is to go to **View**, then **Show on Bottom**, then click  Details .

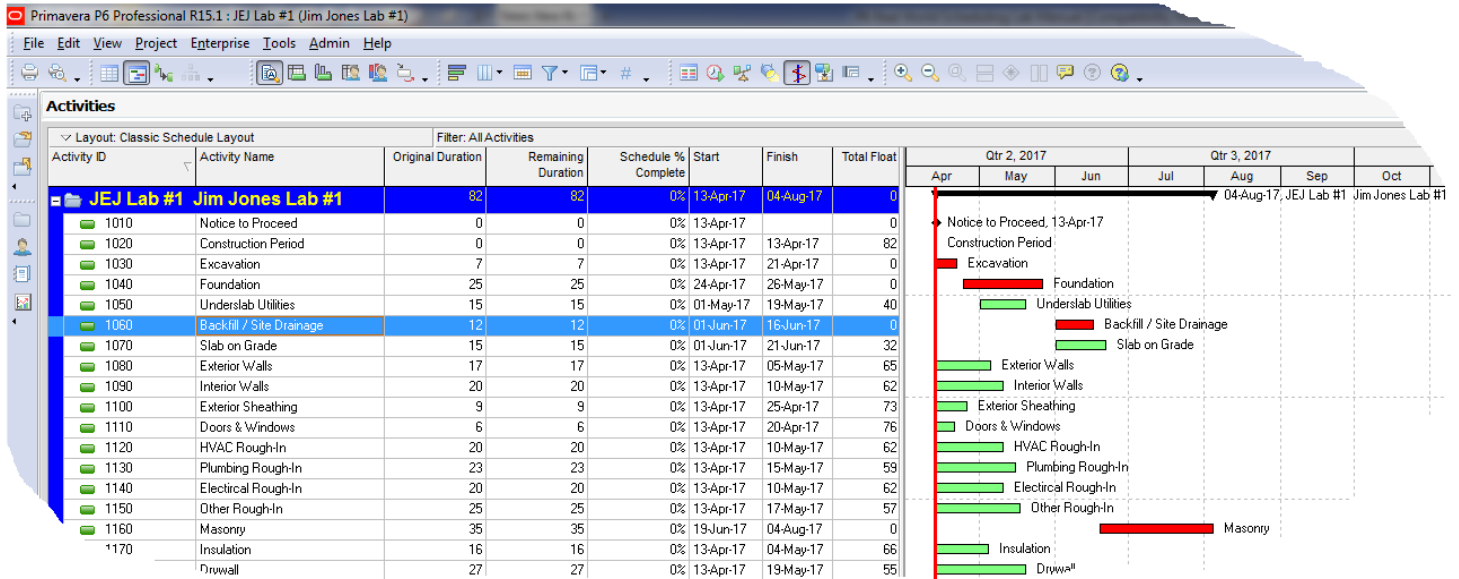
3. Modify the Activity Details window by lowering the window so all of the activities of the schedule are showing. *Do this by hovering your cursor over the horizontal split bar until the cursor turns into a double-sided arrow as shown to the right. Left-click and drag the bar down to uncover the rest of the activities of the schedule, then drop the bar.*



4. You are able to customize the Activity Details window by adding and deleting various tabs to suit your needs. We will add the Codes tab to the window. To do this, go to **View**, then select **Bottom Layout Options** to open the Activity Details window. As illustrated below to the left, select the **Codes** tab, then click the  button to  of display tabs already selected. When complete, click . The Activity Details window should now look like that shown below and to the right.



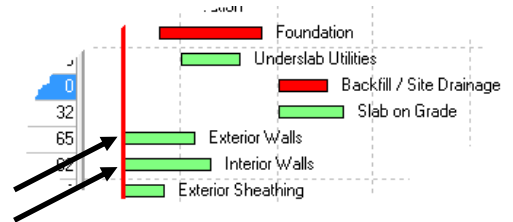
At this point, your schedule should look like the partial view of the schedule below. Some of the logic has been added using the Successors window. We will next review a different way to add the logic to the schedule by linking activities together graphically on the screen.



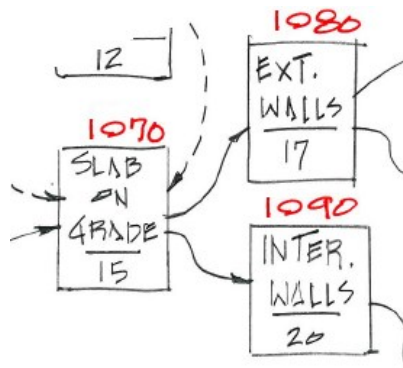
Adding Logic to the Schedule Using Drag and Drop

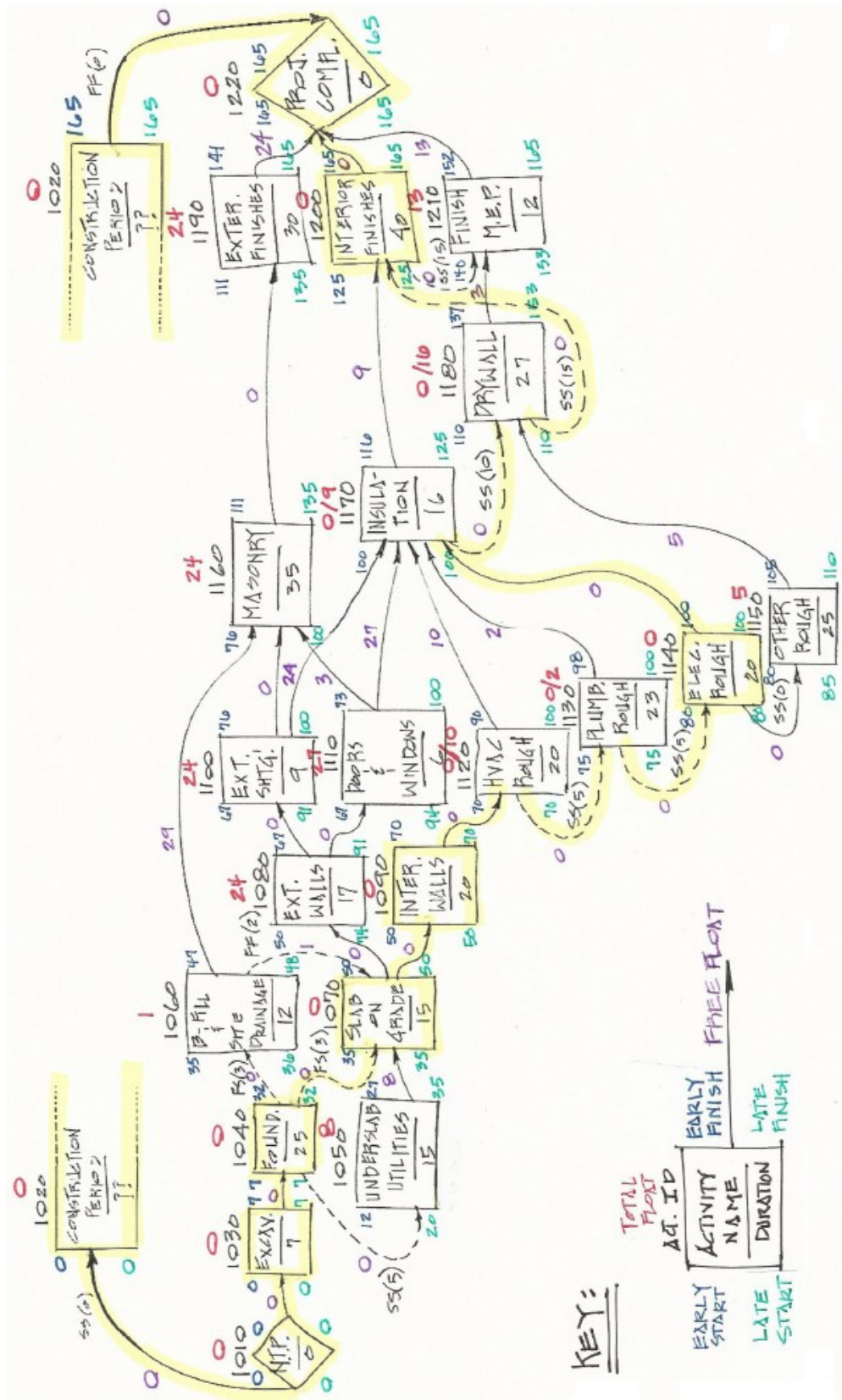
P6 allows you to quickly and accurately add logic to the schedule by linking one activity to another directly in the Gantt chart view using the *drag and drop* feature of the software.

Follow the instructions on the next pages to link the Slab on Grade activity to the Exterior Walls and Interior Walls activities. Notice to the right, that the Exterior Walls and Interior Walls activities **currently are not linked** to any other activities.



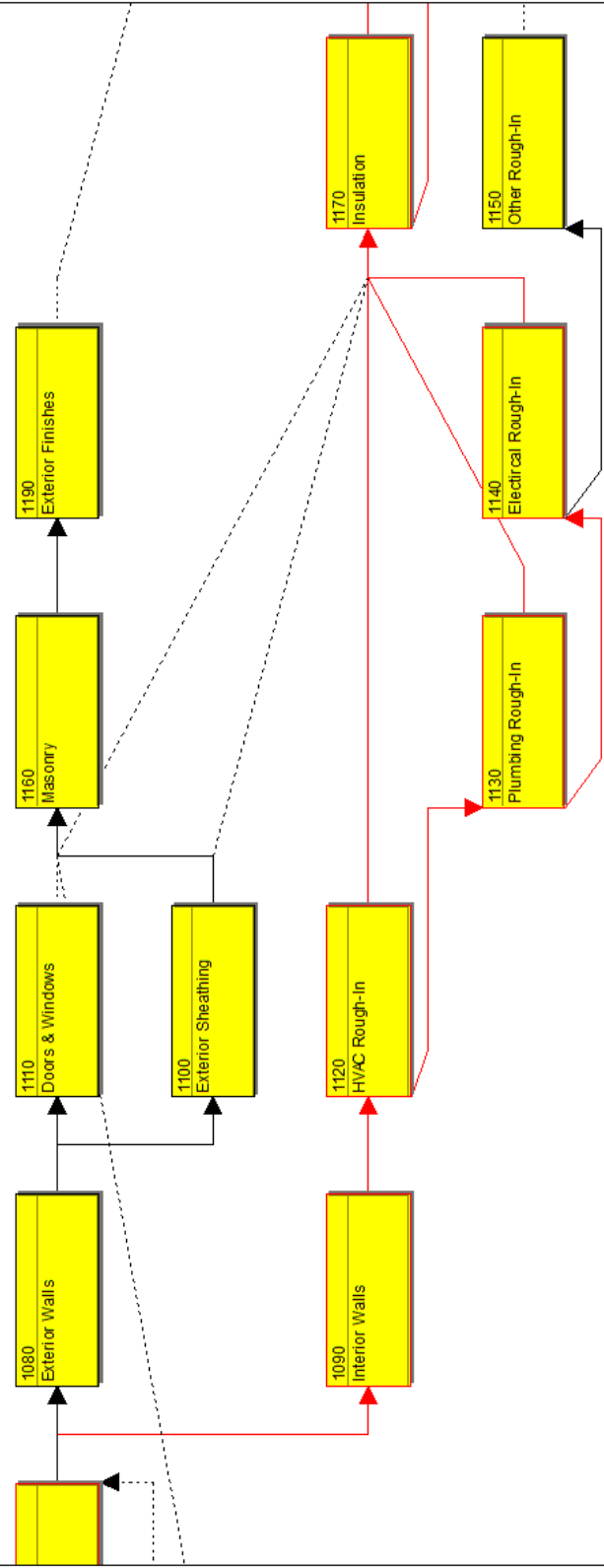
The partial hand-drawn schedule to the right shows the logic relationship between Slab on Grade and the Exterior Walls and Interior Walls activities.





Same Schedule – Hand Drawn with Hand Calculations

JEJ Lab #1 Jim Jones Lab #1



Activity ID
Activity Name

Critical Path – Logic View (page two)

blue project summary band shows 175 days – even though each has the same start date of April 13, 2017 and end date of December 13, 2017 as shown below.

So which is correct? Here is what is going on. Scheduling softwares can be a bit quirky when activities from the same schedule are on different calendars – which is the case here. When a project has activities on more than one calendar, P6 will count for the summary bar total project duration of the higher number when there is a conflict of different “nonwork” days. So the difference of (4) days represents the four holidays that occur during the span of the project – thus the difference between $175 - 171 = 4$. Therefore, there are only 171 workdays.

Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float
JEJ Lab #3c Jim Jones L		175	13-Apr-17	13-Dec-17	0
1010	Notice to Proceed	0	13-Apr-17		0
1020	Construction Period	171	13-Apr-17	13-Dec-17	0
1030	Evacuation	7	13-Apr-17	20-Apr-17	0

- To save the changes you just made to the layout, go to **View**, then to **Layout**, and then to Save Layout. You could also save these changes to the layout by clicking Layout: JEJ Lab #3c (with Added Weather Calendar), then clicking Layout, and then Save.
- Go to **File**, then **Print Preview...** to view the schedule. Compare your schedule to the one on the next page and verify it reflects the changes made.

Print out this schedule. Go to **File**, then **Print...**, or click from either the Bar Chart screen or from Print Preview. **Remember:** The information in the header on your schedule will not match exactly the header shown here.

- Use this schedule printout as well as the on-screen schedule and the other printouts from this lab to answer questions on the **Schedule Analysis – Lab #3**, then neatly staple the Schedule Analysis on top of the Lab #3 printouts in the exact order you have created them and turn all in to your instructor.

Primavera P6 Professional: Real World Scheduling

Schedule Analysis – Lab #3

Name _____

After completing Lab #3, answer the following questions from the (3) schedule printouts, then staple the printouts in the order you created them, with Schedule Analysis – Lab #3 on top, and turn in to your instructor.

Holidays Calendar (compared to schedule before Calendar changes):

1. Did the schedule end date change when holidays were added to the calendar? **Yes No**
If yes, what is the new end date? _____ If no, why didn't it change? _____

2. Did the total project duration change? **Yes No.** If yes, what is the new project duration?
_____ If no, why didn't it change? _____

3. Did the critical path change? **Yes No** If yes, what new activities are now critical that were not previously? (list by activity IDs) _____

Weather Calendar (compared to the Holiday Calendar):

4. Did the end date change with Weather Calendars added to the schedule? **Yes No**
If yes, what is the new end date? _____ If no, why didn't it change? _____

5. Did the total project duration change? **Yes No.** If yes, what is the new duration?
_____ If no, why didn't it change? _____

6. Did the critical path change? **Yes No** If yes, what new activities are now critical that were not previously? (list by activity IDs) _____ **and**
what new activities are no longer critical that were previously? (list by activity IDs)

7. When the weather calendars were assigned to the (8) activities, only the assignment to activities 1030, 1050, 1060, and 1070 effected the project end date. Explain why ?

8. Analyzing the two durations shown to the right, circle the true total project duration. **175** **171**

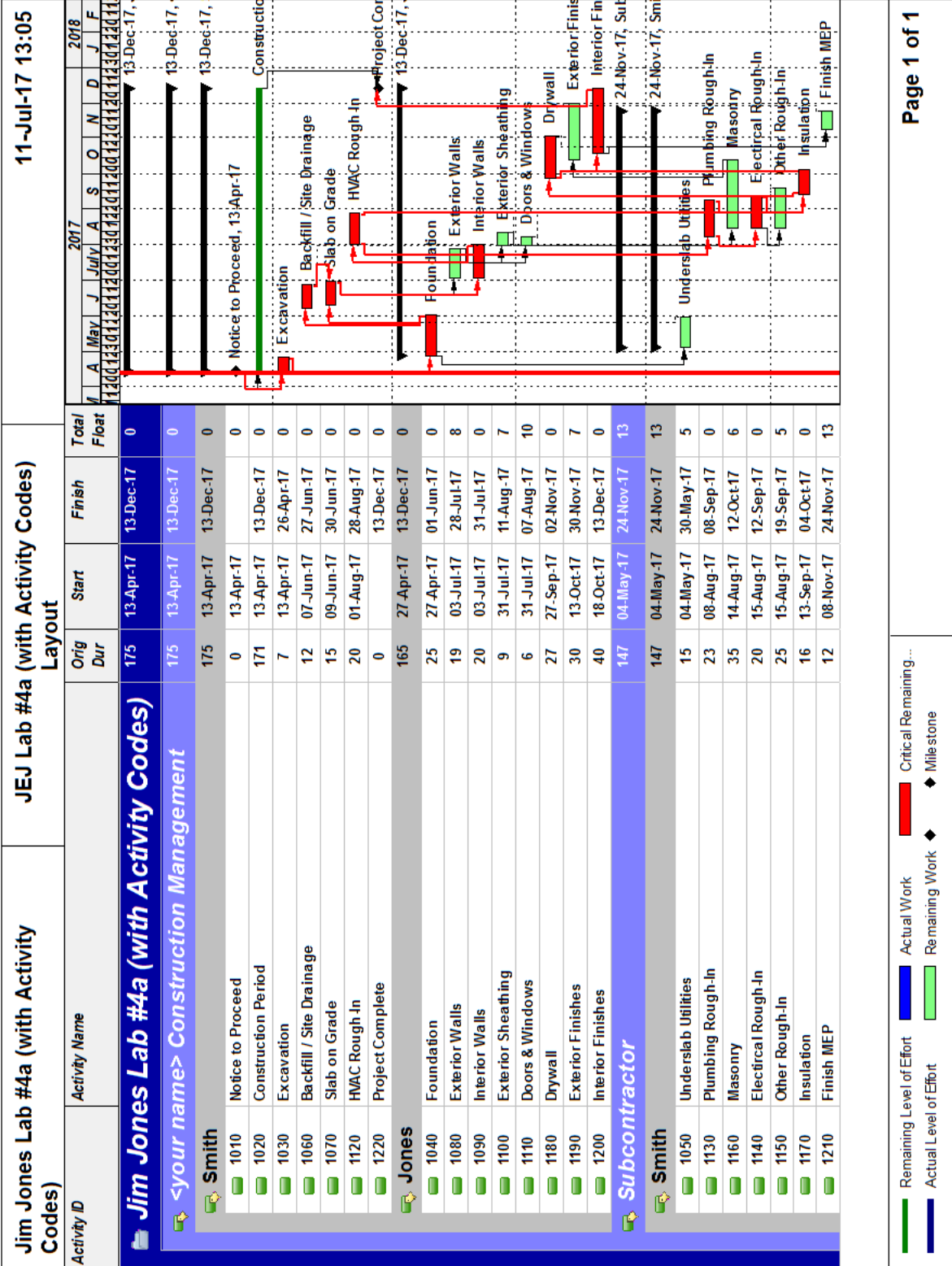
Activity ID	Activity Name	Orig Dur	Start	Finish
	JEJ Lab #3c	175	13-Apr-17	
1010	Notice to Proceed	0	13-Apr-17	
1020	Construction Period	171	13-Apr-17	

Explain the difference between the two durations.

Your contract for this project with the owner has Incentive Clauses that stipulate that the owner will pay you a **bonus** of \$2000 per day for every day the project is finished prior to its scheduled December 13th, 2017 end date – and – that you will have to pay the owner a \$2000 per day **penalty** for every day the project goes beyond this same scheduled end date. Based on that information, answer the next two questions using the **Weather Calendars** schedule.

9. Your boss was told by your Interior Finishes subcontractor that they could accelerate the completion of the interior finishes activity by 12 workdays if your company would agree to pay their crew time-and-a-half (1.5 x normal rate) to work 12 weekend days. The normal rate for their crew is \$2700/day. He has asked you to determine if this would gain or lose money for your company, and by how much ? **Gain** **Lose** (circle one)
 By how much ? \$_____ . What would be accelerated project end date ? _____

10. That same contractor said that if they rent a specialized piece of equipment for one week (which must be rented for a (5) day minimum rental at \$750/day) they could accelerate the completion of their work an additional (3) days. If your company would pay for the rental, determine if your company would gain or lose money ? **Gain** **Lose**
 By how much ? \$_____ . (**Note:** Use the new accelerated end date resulting from the overtime weekend proposal in the previous question to calculate this gain or loss).




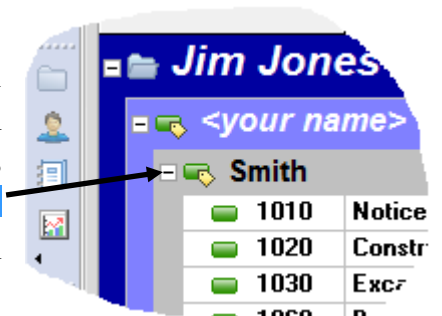
Schedule Sorted Using Activity Codes


Creating Summary Schedules Using Activity Codes


Activity Codes can be used to create summary schedules where the different activity codes can act as a summary activity by rolling up into the code all the activities that are placed beneath it.

Follow the instructions below to create various summary schedules using the activity codes.

1. “Roll up” (collapse) all of the activities that fall beneath the **Responsibility 1** activity code. Start with the **Smith** responsibility that your company is performing. Do this by placing the cursor over the  sign as shown to the right, then *single-clicking* to roll up the activities beneath Smith.



2. Do the same for **Jones** and for the subcontractor activities that **Smith** is responsible for. Go to **File, Print Preview** - or - simply click the  button to see a preview of the summary schedule as partially shown below.

After your review, click  to close the print preview.

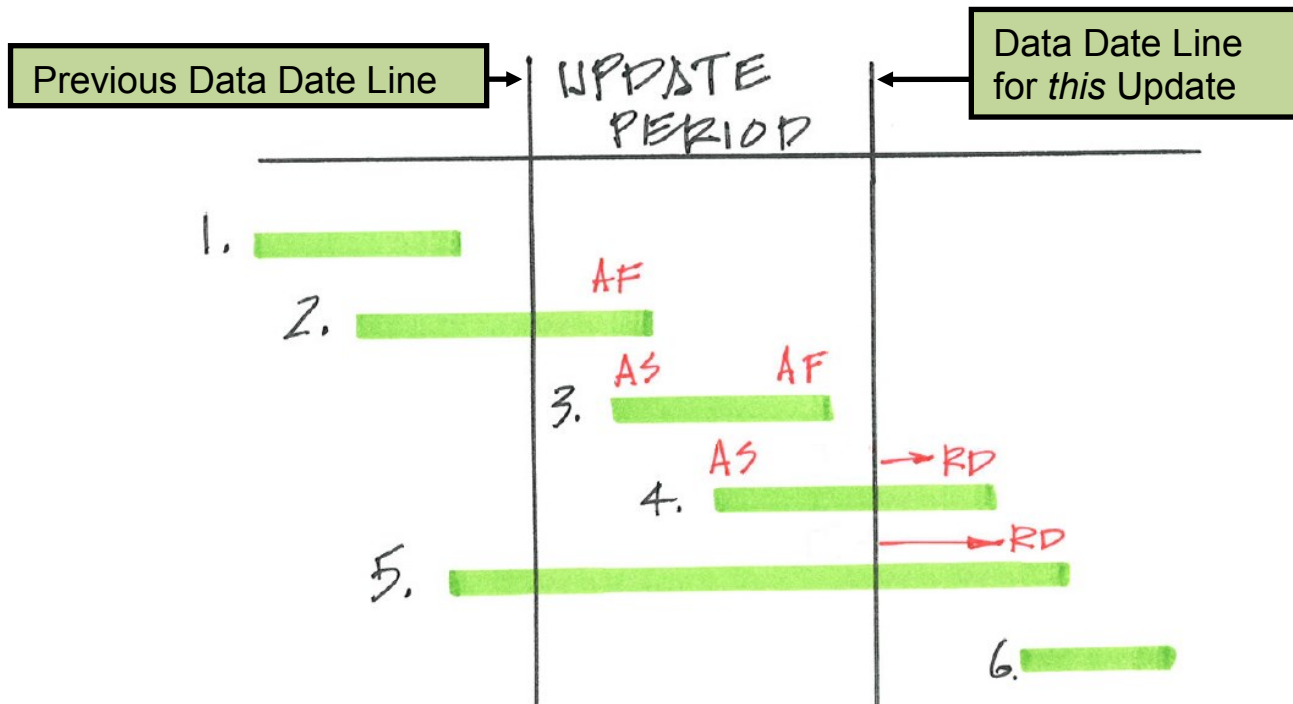
Jim Jones Lab #4a (with Activity Codes)		JEJ Lab #4a (with Activity Codes) Layout				11-Jul-17 14:28													
Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float	2017												2018	
						M	T	W	Th	F	S	S	O	N	D	J	F		
	Jim Jones Lab #4a (with Activity Codes)	175	13-Apr-17	13-Dec-17	0	[Gantt bar from 13-Apr-17 to 13-Dec-17]													
	<your name> Construction Management	175	13-Apr-17	13-Dec-17	0	[Gantt bar from 13-Apr-17 to 13-Dec-17]													
	Smith	175	13-Apr-17	13-Dec-17	0	[Gantt bar from 13-Apr-17 to 13-Dec-17]													
	Jones	165	27-Apr-17	13-Dec-17	0	[Gantt bar from 27-Apr-17 to 13-Dec-17]													
	Subcontractor	147	04-May-17	24-Nov-17	13	[Gantt bar from 04-May-17 to 24-Nov-17]													
	Smith	147	04-May-17	24-Nov-17	13	[Gantt bar from 04-May-17 to 24-Nov-17]													

3. Summarize the schedule even further by collapsing the Contractor activity code by collapsing **<your name> Construction Management** and **Subcontractor**, as shown below from the print preview.

Jim Jones Lab #4a (with Activity Codes)		JEJ Lab #4a (with Activity Codes) Layout				11-Jul-17 14:43													
Activity ID	Activity Name	Orig Dur	Start	Finish	Total Float	2017												2018	
						M	T	W	Th	F	S	S	O	N	D	J	F		
	Jim Jones Lab #4a (with Activity Codes)	175	13-Apr-17	13-Dec-17	0	[Gantt bar from 13-Apr-17 to 13-Dec-17]													
	<your name> Construction Management	175	13-Apr-17	13-Dec-17	0	[Gantt bar from 13-Apr-17 to 13-Dec-17]													
	Subcontractor	147	04-May-17	24-Nov-17	13	[Gantt bar from 04-May-17 to 24-Nov-17]													

Possible Updating Scenarios

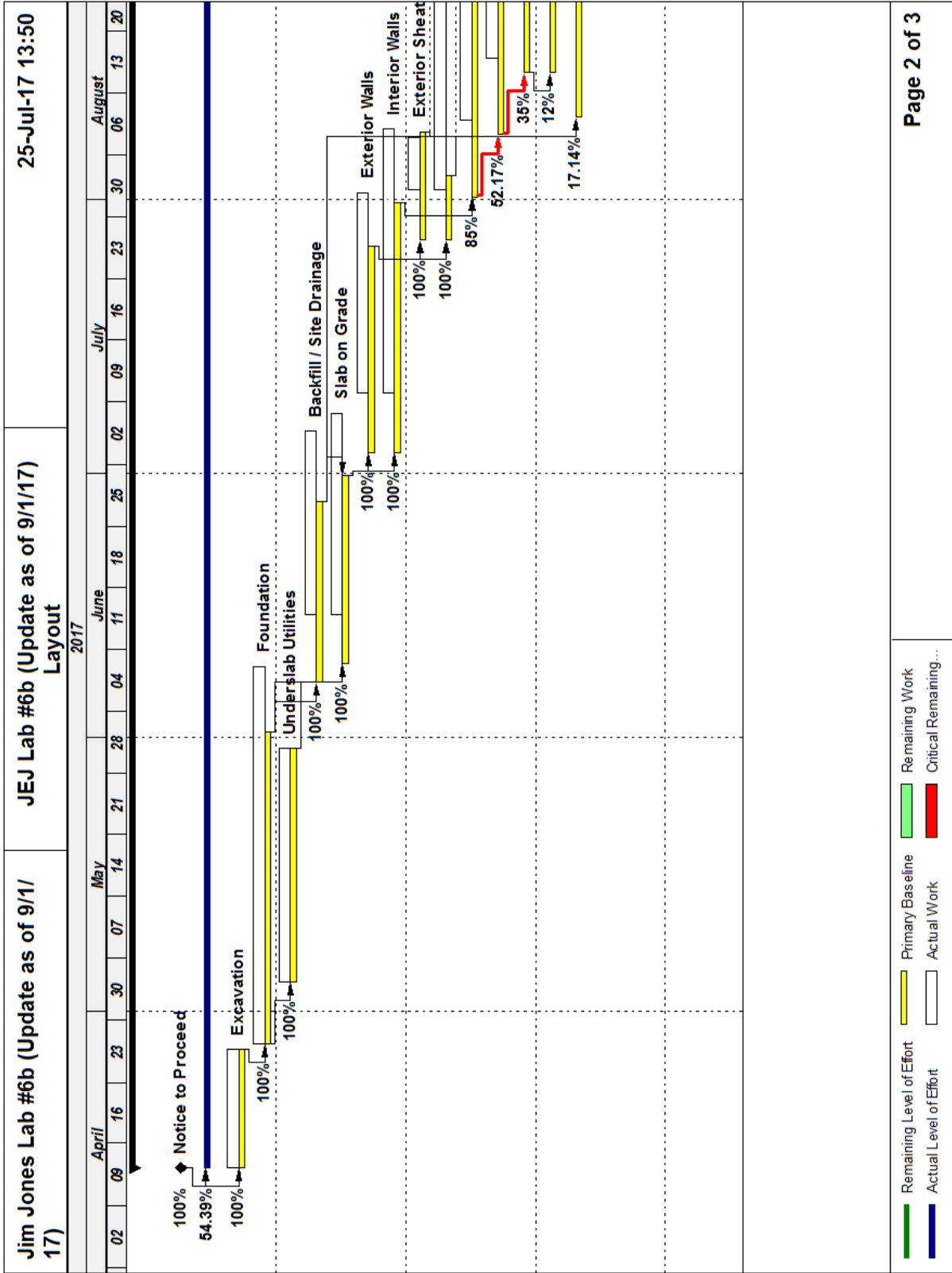
When updating activities from one period to the next, there are (6) possible update scenarios for any given activity. They are illustrated below in the graphic and described in detail below that. What you need to do to perform the update in P6 for each of these scenarios is shown in the graphic directly below, **handwritten in red**; and is described in detail below that with the action **in blue font**.



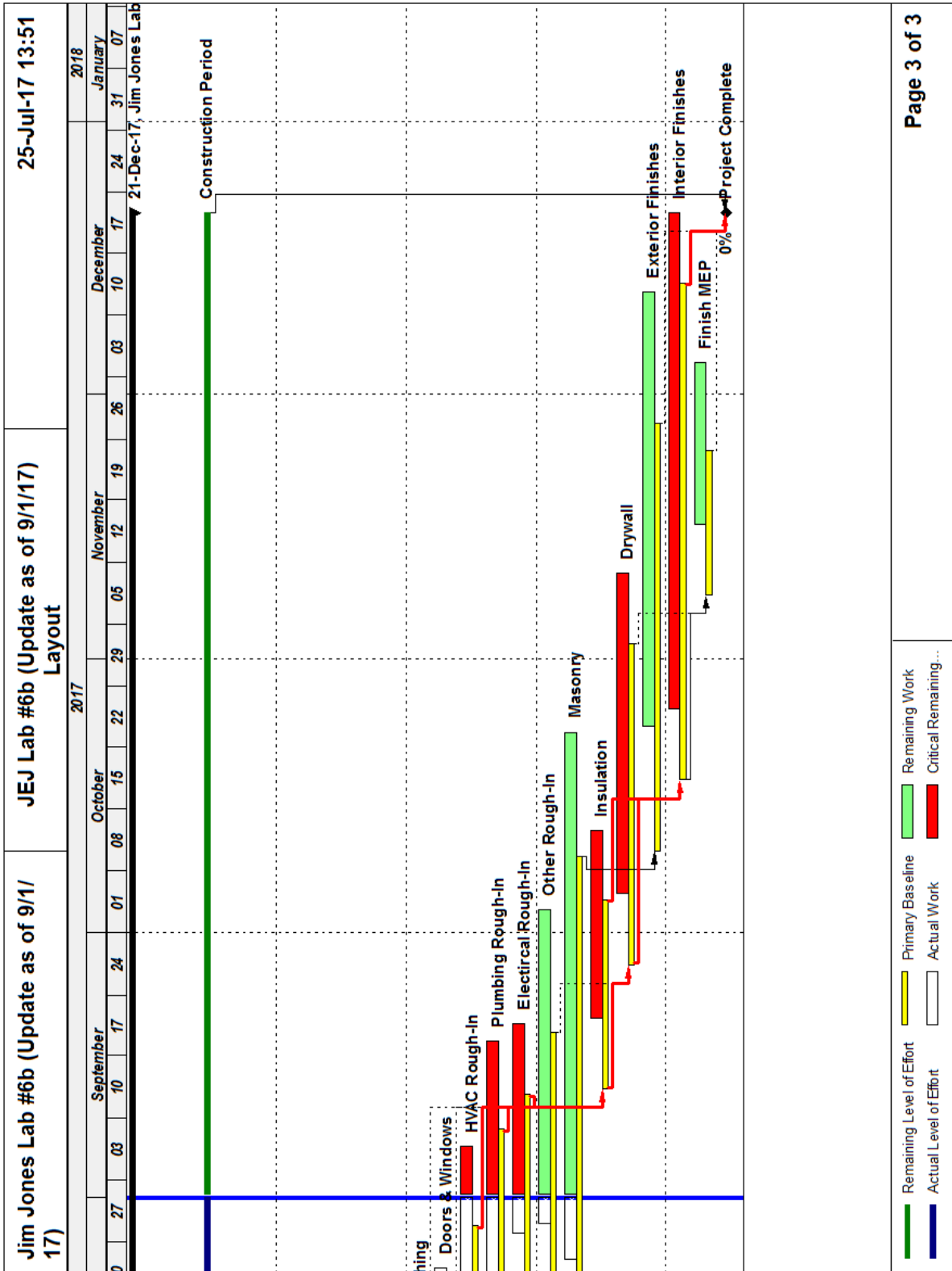
1. **Activity is already complete** ↔ Nothing should be entered for the activity.
2. **Activity had already started before the update period and finished during the update period** ↔ Enter the **Actual Finish** date of the activity.
3. **Activity started and finished during the update period** ↔ Enter the **Actual Start** and **Actual Finish** date of the activity.
4. **Activity started during the update period and the activity is still in progress** ↔ Enter the **Actual Start** date of the activity and your estimate of the activity's **Remaining Duration**.
5. **Activity had already started before the update period and the activity is still in progress** ↔ Enter your estimate of the activity's **Remaining Duration**.
6. **Activity has not started yet** ↔ Nothing should be entered for the activity yet.

Jim Jones Lab #6b (Update as of 9/1/17)			JEJ Lab #6b (Update as of 9/1/17)				Layout				25-Jul-17 13:48		
Activity ID	Activity Name	BL Dur	Orig Dur	Rem Dur	BL Project Start	Start	Actual Start	BL Project Finish	Finish	Actual Finish	Total Float		
Jim Jones Lab #6b													
		175	181	80	13-Apr-17	13-Apr-17A	13-Apr-17	13-Dec-17	21-Dec-17		0		
1010	Notice to Proceed	0	0	0	13-Apr-17	13-Apr-17A	13-Apr-17						
1020	Construction Period	171	171	78	13-Apr-17	13-Apr-17A	13-Apr-17	13-Dec-17	21-Dec-17		0		
1030	Excavation	7	7	0	13-Apr-17	13-Apr-17A	13-Apr-17	26-Apr-17	26-Apr-17A	26-Apr-17			
1040	Foundation	25	25	0	27-Apr-17	27-Apr-17A	27-Apr-17	01-Jun-17	09-Jun-17A	09-Jun-17			
1050	Underslab Utilities	15	15	0	04-May-17	04-May-17A	04-May-17	30-May-17	30-May-17A	30-May-17			
1060	Backfill / Site Drainage	12	12	0	07-Jun-17	15-Jun-17A	15-Jun-17	27-Jun-17	05-Jul-17A	05-Jul-17			
1070	Slab on Grade	15	15	0	09-Jun-17	15-Jun-17A	15-Jun-17	30-Jun-17	07-Jul-17A	07-Jul-17			
1080	Exterior Walls	17	17	0	03-Jul-17	10-Jul-17A	10-Jul-17	26-Jul-17	01-Aug-17A	01-Aug-17			
1090	Interior Walls	20	20	0	03-Jul-17	10-Jul-17A	10-Jul-17	31-Jul-17	09-Aug-17A	09-Aug-17			
1100	Exterior Sheathing	9	9	0	27-Jul-17	02-Aug-17A	02-Aug-17	08-Aug-17	08-Aug-17A	08-Aug-17			
1110	Doors & Windows	6	6	0	27-Jul-17	02-Aug-17A	02-Aug-17	03-Aug-17	24-Aug-17A	24-Aug-17			
1120	HVAC Rough-In	20	20	3	01-Aug-17	10-Aug-17A	10-Aug-17	28-Aug-17	06-Sep-17		0		
1130	Plumbing Rough-In	23	23	11	08-Aug-17	17-Aug-17A	17-Aug-17	08-Sep-17	18-Sep-17		0		
1140	Electrical Rough-In	20	20	13	15-Aug-17	28-Aug-17A	28-Aug-17	12-Sep-17	20-Sep-17		0		
1150	Other Rough-In	25	25	22	15-Aug-17	29-Aug-17A	29-Aug-17	19-Sep-17	03-Oct-17		1		
1160	Masonry	35	35	29	10-Aug-17	25-Aug-17A	25-Aug-17	09-Oct-17	23-Oct-17		5		
1170	Insulation	16	16	16	13-Sep-17	21-Sep-17		04-Oct-17	12-Oct-17		0		
1180	Drywall	27	27	27	27-Sep-17	05-Oct-17		02-Nov-17	10-Nov-17		0		
1190	Exterior Finishes	30	30	30	10-Oct-17	24-Oct-17		27-Nov-17	12-Dec-17		5		
1200	Interior Finishes	40	40	40	18-Oct-17	26-Oct-17		13-Dec-17	21-Dec-17		0		
1210	Finish MEP	12	12	12	08-Nov-17	16-Nov-17		24-Nov-17	04-Dec-17		13		
1220	Project Complete	0	0	0				13-Dec-17	21-Dec-17		0		

Schedule – After First Update on 9/1/17 (Page One)






Schedule – After First Update on 9/1/17 (Page Two)





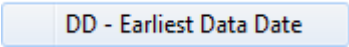

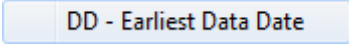



Schedule – After First Update on 9/1/17 (Page Three)

Creating a Six Week Look-Ahead Filter

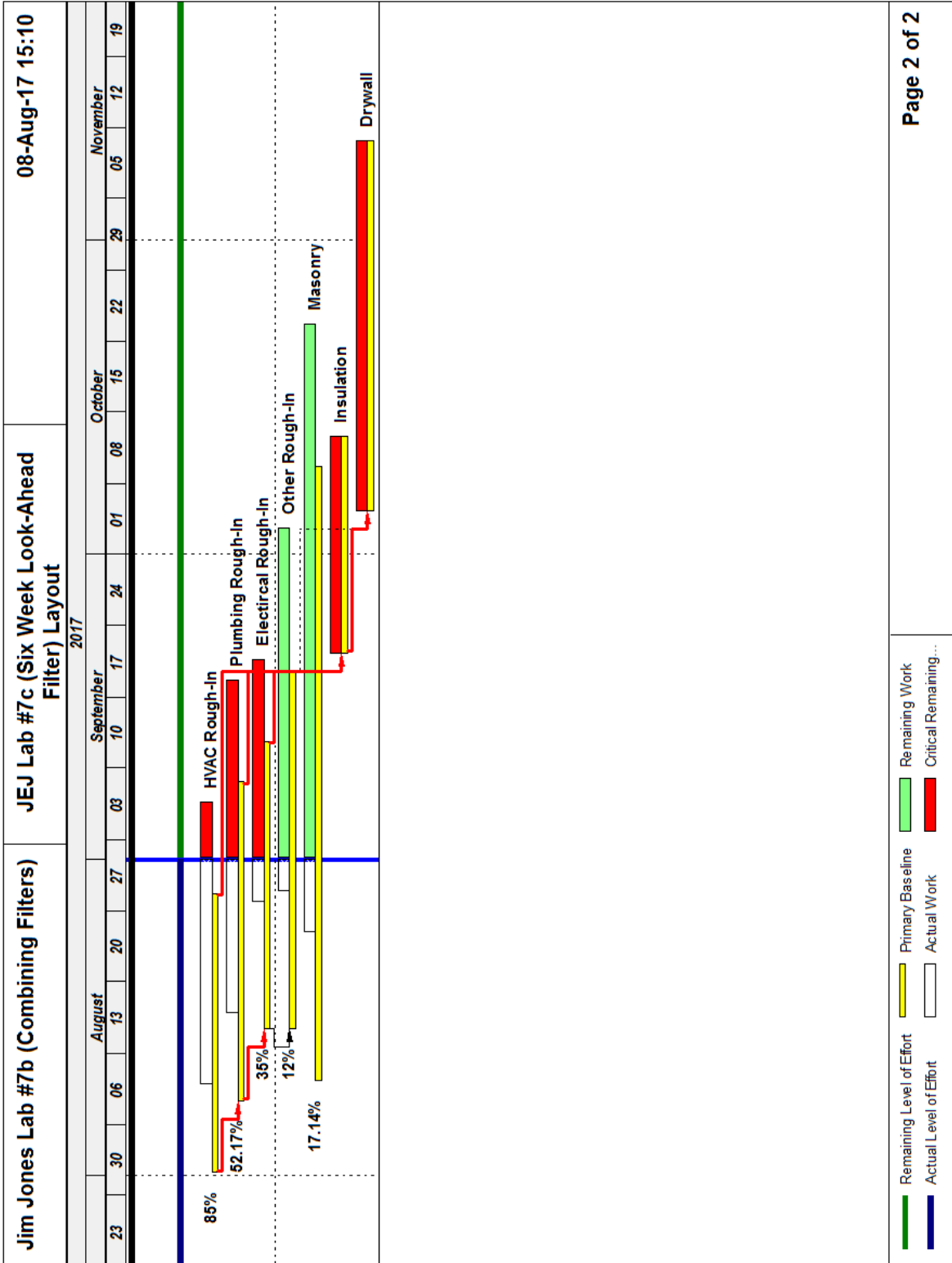
Follow the instructions to create the Six Week Look-Ahead filter. The first step is to add to the filter all of the activities that **have already started**.

1. Re-open  the Filters window. Click the  command to open the other Filters window. In the Filter Name field, type in **Six Week Look-Ahead**.
2. Next, move down into the lower part of the window and in the Parameter column, just to the right of the word , *click in that field* to launch the pull-down. Scroll down and select **Start**.

Note: In P6, after the project has been updated, the Early Start and the Start date fields do not act in a similar fashion and I would suggest **not to use** the Early Start or Early Finish date fields at all in P6 after the schedule has been updated.

3. Move to the next column entitled **Is** and *click into the*  cell to launch the pull-down to select **is within range of**.
4. In the Value cell, click the pull-down  to select . This will establish the left side – or the early side – of the six week window.
5. In high value will be **six weeks beyond** the Data Date, so click in the High Value cell, then click the pull-down  to select  again to start with the data date. Next, click inside the  cell to make it dynamic, so it looks like this  with the cursor positioned directly to the right of the DD. Type into this cell directly after the DD, **+6w**, so the cell looks like this . P6 knows by default under the preferences that “w” is an abbreviation for a week. This now establishes the right side – or the late side – of the six week window.

The first criterion of the filter is now complete. We next need to add into the filter a criterion which will include all of the activities that are **currently in progress**. Move to the next page to add these activities to the filter.



Six Week Look-Ahead Schedule (page two)