

Statewide Scheduling Engineers Meeting

July 25 - 26, 2012

Orlando Construction Office
Hands on & Video-Teleconference

Attendees: Richard Massey(SCO), Larry Zagardo (D-1), Nancy Bright (D-2), Jimmy Miller (D-3), Charlie Manganaro & Pat McCann (Video Conference) D-4), Leo Cortes (D-5), Mikhail Dubrovsky (D-6), Michael Feliciano (D-7), Alvin Crow (Tpk)

Richard Massey started the meeting by having everyone introduce themselves.

Agenda item # 1, was the 2 projects exercise of calculating contract duration. (See table below for each districts calculated time).

DISTRICT	PROJECT	CAL. DAYS	WORK DAYS
1	219843-1-52-01	1050	750
	208373-1-52-01	600	430
2	219843-1-52-01	1440	1030
	208373-1-52-01	550	395
3	219843-1-52-01	930	521
	208373-1-52-01	655	468
4	219843-1-52-01	1386	990
	208373-1-52-01	550	393
5	219843-1-52-01	1145	818
	208373-1-52-01	575	463
6	219843-1-52-01	1188	842
	208373-1-52-01	460	326
7	219843-1-52-01	1543(1243)	1102(888)
	208373-1-52-01	320(420)	229
8	219843-1-52-01	835	596
	208373-1-52-01	-	-

FIN. PROJ. ID # 219843-1-52-01 (D3)(US 90 Mahan Project)

District 1 –

Calculated 1,050 Calendar days basing their assumptions on the following:

They explained how they calculated contract time for this project by first looking at the pay items, then looking at the Traffic Control Plans (TCP). They used the statewide production rates in calculating the days. They determined that critical path was drainage/utilities. They established the time assuming a 5 day workweek.

District 2 –

Calculated 1,440 Calendar days basing their assumptions on the following:

Basically they looked at the project from a materials viewpoint and not by pay items or phasing of the project. They take the volume or quantity of materials and use the average production rates with the Summary of Pay Items to come up with contract duration.

District 3 -

Calculated 930 Calendar days basing their assumptions on the following:

They followed the Traffic Control Plan in setting up schedule. They basically look at items that have adverse affects and controlling items, group items of work where applicable. Even though this project had a couple of bridges, they didn't consider it as a controlling item. They mostly used the ponds and drainage structures as the controlling item of work, due to there being several retainage ponds and many drainage structures. Originally the TCP called for the crossing back and forth across the alignment installing drainage. The City of Tallahassee agreed to realign the sewer line with the expectation of lowering the time. Within this time, the dependant utility work of 200 calendar days were added to the calculated 730 calendar days equaling 930 calendar days.

District4 -

Calculated 1,386 Calendar days basing their assumptions on the following:

They basically follow the same guidelines as the others above. They reviewed the utility requirements and the TCP and set up the phasing this way while using statewide production rates. After the group analyzed this schedule it looked as though the total days for Friction Course was way out of line with 112 days applied to the schedule where it should have been 17-18 days total to be more in line with the others.

District 5 -

Calculated 1,145 Calendar days basing their assumptions on the following:

They used average production rates of the FDOT Guidelines for Establishing Construction Duration. They used a spreadsheet to verify all the quantities on this project. All durations calculated based on statewide standard average production rate. Just as the others they used the TCP phases as controlling the work, then reviewed the utility operations that may have affected the work and adjusted for that.

District 6 -

Calculated 1,188 Calendar days basing their assumptions on the following:

They followed the TCP and phasing same as the others above. They determined that the drainage showed the critical path. This district feels the Designer should have phased the water and sewer work together and not in separate phases.

District 7 -

Calculated 1,543 (1,243) Calendar days basing their assumptions on the following:

They used the main items and not all the items of activities to estimate contract time. After review of this schedule it was determined that some of the activities logics could have been set with a "start to start" relationship. The Gravity Wall, Drainage and several other items could have been cut back by using this logic. So this schedule could have been reduced by 300 calendar days easily, bringing it more in line with some of the other schedules. Built a spreadsheet with all activities, then loaded these activities into Primavera using hammocks and letting it adjust the activities accordingly. They used the statewide production rates.

District 8 -

Calculated 835 Calendar days basing their assumptions on the following:

This district used the statewide production rates and used the same logic as the others by using the TCP phases to control work flow. They chose to use two work crews on major work to reduce the schedule.

FIN. PROJ. ID # 208373-1-52-01 (D2)(US 90 Project)

District 1-

Calculated 600 Calendar days basing their assumptions on the following:

They calculated contract time on this project the same as the first project. However there were several issues that were brought up about this project. First of all the plans appeared to be incomplete. The Type F Curb & Gutter pay item for the Summary of Quantities and the Computation Books quantities did not match, 2,050 LF versus 20,454 LF. There appeared to be no stabilization or curb pad under the Type F curb. The EOR shows where work was being performed required Temp Low Profile Barrier Wall was moved twice, didn't see a need for that. Critical Path was drainage then roadway work, also used the assumption of 1 dedicated work crew for cross drain and a separate work crew for the main trunk line. Then estimated quantities for each of the operations for each phase and used production rates then tied the logic together. They did show some overlap in activities and used "start to start" relationships with some of the items and where it seemed appropriate applied a reasonable lag time.

District 2-

Calculated 550 Calendar days basing their assumptions on the following:

Same scenario as the first project, they look at the materials on the project and converted quantities of pay items by using the production rates.

District 3-

Calculated 655 Calendar days basing their assumptions on the following:

After review of these plans, they appeared to be incomplete. They followed the TCP phases and listed out pay items then applied the production rates to the quantities of work. It was determined that the Drainage operations were the controlling item and set Critical Path. These were the recorded onto on a Bar Chart as a final output.

District 4 -

Calculated 550 Calendar days basing their assumptions on the following:

They used the guidelines set forth in the CPAM. They determined that Drainage was controlling item of work. Initially set all activities relationships to "start to finish", then recalculated some of the activities to "finish to finish". The hammock was set to workdays.

District 5 -

Calculated 575 Calendar days basing their assumptions on the following:

They used average production rates of the FDOT Guidelines for Establishing Construction Duration. They calculated this project in the same manner as the first project.

District 6 -

Calculated 460 Calendar days basing their assumptions on the following:
They used the same guidelines as with the first project.

District 7 -

Calculated 320 Calendar days basing their assumptions on the following:
They used the same process as the first project. After analyzing this project it was determined that there could have been another 100 days added to the Drainage operations of this contract. The Milling operation could have been moved after the Curb & Gutter operation. This would have given a total of 420 calendar days which appeared to be more in line with the other estimated contract time.

District 8 -

Calculated 0 days basing their assumptions on the following:
This district did not have time to calculate contract time on this project.

AGENDA ITEMS:

2.) *Workshop to develop standard scenarios to calculate contract time.* - No time allotted.

3.) *Other issues going on around the state.* - Discuss with Upper Management why the Construction Scheduling Engineers can't be allowed to have more leeway to the types of contracts that are being bid, ie; A+B with Incentives?

OTHER ISSUES AND COMMENTS ADDRESSED:

ACTION ITEM: Statewide Production Rates unit of measure don't match what the Basis of Estimates use on some items.

ACTION ITEM: Need more guidelines for Design Build Projects, maybe put Design Schedule in the Request for Proposals (RFPs).

Meeting adjourned at 1:30 PM.