

Statewide Scheduling Engineers Meeting

May 6 - 7, 2008

Video-Teleconference

Attendees: Richard Massey(SCO), Alan Autry & Larry Zagardo (D-1), Nancy Bright & Doug McBriarty (D-2), Jimmy Miller & Hal Gore (D-3), Charlie Manganaro & Pat McCann & Shelly ChinQuee & Carlos Bermudez (D-4), Abel Sierra & Jonathan Duazo & Lori Wilson & John Philbrick (D-5), Mikhail Dubrovsky (D-6), Terry Jones & Michael Feliciano (D-7), David Morgan & Alvin Crow (Tpk), Charlie Green. Guest: Yimin Yu (FIU).

Richard Massey started the meeting by having everyone introduce themselves. After that, Brian Blanchard talked to the group of his visions and about the Office of Inspector General's findings and his thoughts and responses back to the OIG. Richard read out the agenda items, and then went to Agenda item #1 introducing Professor Yimin Yu of Florida International University to discuss the Road User Cost program they are developing for FDOT. Yimin gave a presentation of the scope of the program. There was a question on occupancy rates used in the program (FIU uses 1.41/vehicle)-Yimin will look into. Dist. 2 questioned what the "total cost" related to, was it daily cost or hourly cost? (FIU will define this more clearly). Dist. 3 asked "Will it work for more than one work zone?" Tpk asked if project types could be input into the program, this will be reviewed also. On "location" input, it was suggested to have this variable by "county" instead of "district". Richard thanked Yimin for his time to come and give the group an overview and informed the group they would be kept up to date with the status of the program.

ACTION ITEM: Send presentation and spreadsheet to districts to beta test.

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

DISTRICT	FIN. # 222593-2-52-01 (I-10 Project)	FIN. # 421885-1-52-01 (TPK Project)
1	1,325	90
2	1,087	110
3	1,010 (CEI-1,203)	90
4	1,190	94
5	900	80
6	1,390	142
7	1,005	50
8	1,195	120

Note: days are in calendar days

FIN. PROJ. ID # 222593-2-52-01 (I-10 Project)

District 1 –

Calculated 1,325 days basing their assumptions on the following:

Larry Zargardo 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 established the time assuming a 5 day workweek. There were 250 pay items on this project and they set them up based on the TCP. They limited overlap in work crews and used the Roadway work as the critical path. The bridge work was calculated concurrently, with their assumption of lag time approximately 3 weeks between test pile and production pile. They realize that the procurement time may need to be adjusted.

Question (D4-Pat): How long did it take to calculate the contract time on this project? It took around 3 – 5 days.

One General comment (by Terry Jones): Request the Designers to provide a break down in the Computation Book – by phase of work, this might help in calculating time. See if this could be done statewide.

District 2 –

Calculated 1,087 days basing their assumptions on the following:

Basically they followed the same guidelines as District 1 by looking at the TCP and the plan notes. They reviewed the pay item quantities along with the phasing of the project.

Question (D4-Charlie): What determines the controlling work? Major items control the work and this sets the critical path.

District 3 -

Calculated 1,010 days (PBS&J – 1,203 days) basing their assumptions on the following: They basically follow the same guidelines as D1 above look at items that have adverse affects and controlling items, group items of work where applicable. Even though this project had a lot of bridge work, 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. PBS&J (consultant that D3 uses mainly for calculating contract time), calculated the original time on this project.

Question (D4-Pat): How long did it take to calculate the contract time on this project? It took around 10 hours.

District4 -

Calculated 1,190 days basing their assumptions on the following:

They basically follow the same guidelines as D1 above look at items that have adverse affects and controlling items. They reviewed the utility requirements and the TCP and set up the phasing this way while using old and new production rates. They utilized 2 work crews on the earthwork phase of work and based their schedule on a 5 day work week. They identified any duplicate bridge work and combined this, basically calculated for one side and then doubled this. Phases established by the Designer don't sometimes reflect actual work or don't reflect the overlap of work. On a project this size you may want to accelerate the work but may lack the resources even if you wanted to.

District 5 -

Calculated 870 days (say 900 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 rates with the exception of MSE wall which were taken at twice the high rates assuming the use of two crews. The schedule provided sequencing of activities in the same phase which used the same crews.

District 6 -

Calculated 1,390 days basing their assumptions on the following:
They followed the TCP and phasing as was calculated by the others above. They determined that the bridges showed the critical path on MSE walls and approach slabs. Would probably use 1,200 days for the Incentive/Disincentive.
They spent 3-4 days to calculate time on this project.

District 7 -

Calculated 1,005 days basing their assumptions on the following:
They followed the TCP and phasing as was calculated by the others above. They used 60 day acquisition period. Would have liked to see the Computation Book have a breakdown of the work by phases. Built a spreadsheet with all activities and came up with 2,500 days, then loaded these activities into Primavera using hammocks and letting it adjust the activities accordingly. Another thing this district does, is meet with field personnel to go over the scope of the project, this helps in calculating the contract time. They used the statewide production rates.
Question (D3-Jimmy): Is the flex time applied to the start date or on the Utility relocate?

District 8 -

Calculated 1,195 days basing their assumptions on the following:
This district used the statewide production rates and would add 75 days for utility work.

FIN. PROJ. ID # 421885-1-52-01 (TPK Project)

District 1-

Calculated 90 days basing their assumptions on the following:
Larry 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. Due to quantities being so small on this project you have to review the production rates and make adjustments based on the type of work being performed.

District 2-

Calculated 110 days basing their assumptions on the following:
Same scenario as above project they look at phasing operations to determine how to calculate time. The removal of the Barrier Wall, thought it would be more complex, assuming there maybe a footer etc, used the "Means" catalog for productions rates on calculating the removal of the wall.

District 3-

Calculated 90 days basing their assumptions on the following:

Reviewed the TCP and pay items then applied the production rates to the quantities of work. Need to create production rates for double guardrail, also need production rates for Temporary Barrier Wall.

District 4 -

Calculated 94 days basing their assumptions on the following:
They used the guidelines set forth in the CPAM.

District 5 -

Calculated 80 days basing their assumptions on the following:
They used average production rates of the FDOT Guidelines for Establishing Construction Duration. Included 30 day acquisition period.

District 6 -

Calculated 142 days basing their assumptions on the following:
They used the same guidelines as above, and based their stripping cure period on 14 days between applications.

District 7 -

Calculated 50 days basing their assumptions on the following:
Would probably have used normal 120 day flex time on a project his small. Add 14 days of cure period to the 50 days equaling to 64 days for contract time. Would require a mandatory start date.
Comment: District 1 uses flex time also. Turnpike uses 60 day flextime and contractor typically uses all the days.

District 8 -

Calculated 120 days basing their assumptions on the following:
If the cure period for thermoplastic had been removed the calculated time would have been set at 90 days.

AGENDA ITEMS:

3.) *Review and Discuss Internal Auditor's findings.* - Went over the OIG's report, Advisory Memorandum 06P-0007 Contract Duration. Basically discussed the findings to the districts and informed them that this office did not totally agree with some of the findings. I told the districts that this office had explained to the auditors that all districts would interpret contract time differently based on their knowledge and understanding of specific projects that were being reviewed. Brian Blanchard responded in a like manner to the IG's office on their findings. Basically we would try and be more uniformed in following statewide guidelines. The guidelines and procedures have been revised and the production rates have been revised and would continue to be revised as rates changed and additional activities would be incorporated.

4.) *Discuss current production rates (new Excel spreadsheet). Establishment of regional production rates by district or area.* – Talked about production rates and Richard informed districts that he would keep rates up to date as new data was received and would add new or additional activities as needed. The more data that was gathered

from around the state the rates could then be categorized by area or district. The spreadsheet has comments inserted from different districts now.

5.) *When in the Plans Development process is the best time to develop a hard and fast contract time?* – D3 likes to have plans at 90 %. D4 would like to have plans complete before they establish a time. D5 plans are preliminary at phase 3. Turnpike likes to have 100 % by phase 4.

6.) *UWS and UAO work as it relates to the development of contract time.* – You need back-up Utility schedule before you can calculate contract time.

Question asked: Are there special provisions for this?

7.) *What to do when your project contains a JPA, the UAO rejects bids submitted by the Contractor and elects to perform the work themselves?* Having an option of a “back out schedule”- If a JPA doesn’t like the schedule you can calculate the schedule that way.

8.) *Material Acquisition time, use of Flex Time and Mandatory start date.* – (D8) We don’t have Material Acquisition specs. There are Special Provisions for Flex Time. (D3) doesn’t do hardly any Flex Time on projects. Flex Time is used to allow Contractor time to procure materials. Keep Flex Time and eliminate Acquisition Spec.

ACTION ITEM: Check to see if we could do away with Acquisition Specification.

9.) *Supporting back-up documents for establishing Contract Time.* – Please provide back up documents when calculating contract time, even if you scribble on a piece of paper, include that with your schedule package. We had a Contractor dispute contract time on a project and wanted to see how the Department calculated this time. So, please provide back up documents.

10.) *Road User Cost – Discuss results of data gathered from districts in early 2007.* – Once all the data was gathered I compiled this information onto a spreadsheet to see how the RUC compared to the Liquidated Damages we were applying within the Specifications table. The overall results showed that the Department is very conservative when applying LD’s to a project. In most categories the LD amount was well below the actual RUC in that category that would be applied on a given project. Richard informed the districts that he would like to see another exercise of this nature be performed later this year to see how would compare to the data that was gathered in 2007. Richard will notify the districts when this would occur.

11.) *Template for projects, which would be available from SCO website.* – Richard informed the districts that the SCO would like to see if we could establish generic templates for different mixes of work in a project. This generic template would be stored on the SCO website for a district to use as a basis to build contract time on a specific project. (Tpk) says they sent 2 projects in to Richard a while back. Other districts said they would send what they have.

12.) *Discuss Contractor's requesting schedules from Scheduling Engineer, poll district to see if they're getting them.* – There have been a few districts where Contractor request schedules.

13.) *Production Rates-Bridge painting.* – D5 has requested that we add production rates for different components of bridge painting. One district uses 2,000 SF/day.

OTHER ISSUES AND COMMENTS ADDRESSED:

ACTION ITEM: Look into create in an Ad Hoc report in SiteManager to derive at production rates. Get with Jim Johnson, SCO to see if this can be achieved.

ACTION ITEM: Revise the Scheduling specifications – Richard informed that he had re-written a section to bring current the type of deliverables the Contractor is to provide with his schedule.

ACTION ITEM: Do an analysis on contract time versus actual calculated time on a project.

Meeting adjourned at 4:00 PM.

**SEE ZIP FILE FOR
PROJECT SCHEDULES FROM EACH DISTRICT**

BEGINNING WITH

FINANCIAL PROJECT

222593-2-52-01

THEN

421885-1-52-01