

Disputes Review Board Decisions

September 14, 1998

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Mr. Donald Tharpe
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2404 North Park Road
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Re: State Job No. 10190-3432 & 6434
State Road 400 (I-4) Segment 5
Disputes Review Board

Subject: Dispute No. 1
Jack and Bore Issues

On August 24, 1998, the Disputes Review Board (DRB) held a hearing to consider Claim No. 1 - Jack and Bore Issues. Written documentation had previously been furnished to the DRB by Hubbard Construction Company (HCC) and the Florida Department of Transportation (FDOT).

There are three issues involved in the subject dispute:

1. **Pay Items** - The plans show several drainage pipe crossings to be constructed by the jack and bore method, with the RCP carrier pipe installed inside a steel casing. The size of both pipes is shown on the plans. The summary of pay items in the Plans and Proposal Form call for casing steel (jack and bore) but the sizes indicated (24", 30", 36") are the sizes of the carrier pipe instead of the steel casing pipe. HCC bid a nominal amount for these items and stated that they intended to negotiate prices for the correct items after the job was awarded. The FDOT contends that the intent of the plans and specifications was clear and that renegotiations of the existing price is not justified.
2. **Tunneling** - The subcontractor for HCC requested additional compensation for hand tunneling to construct the casing at Sta. 1326+00. They stated that the existing ground line was not shown on the drainage structure sheets and they were not aware that they would have to hand tunnel this structure when they quoted the job. The FDOT stated that the existing ground was shown at other locations in the plans and the plans must be considered as a whole.

3. **Delay - HCC stated that due to errors in the plans and failure by the FDOT to timely respond to HCC's request to correct them that they were delayed in constructing the jack and bore drainage crossings and are due a compensable time extension of 132 days. The FDOT contends that they responded to any technical issues impeding the jack and bore construction in a timely manner and that poor production on the South Frontage Road was the cause of the delay.**

The Disputes Review Board (DRB) analyzed the three items in dispute and has reached the following decisions based on the information furnished and presented at the hearing, and observations of construction activities during the life of the project:

- **Pay Items - The plans show the following sizes and quantities of jack and bore pipe:**

<u>Carrier Pipe</u>	<u>Steel Casing</u>
24" RCP - 272 LF	36" - 260 LF
30" RCP - 760 LF	44" - 725 LF
36" RCP - 240 LF	50" - 234 LF

The Summary of Pay Items in the plans and the proposal form, on which the contractor submits his bid, contain the following jack and bore items:

**Casing Steel (jack and bore) (24") - 260 LF
Casing Steel (jack and bore) (30") - 725 LF
Casing Steel (jack and bore) (36") - 234 LF**

HCC bid the jack and bore items at a nominal amount (\$20.00 per LF). They stated that they had encountered similar situations on prior FDOT projects and after award, they had negotiated with FDOT unit prices for items not shown.

FDOT's position is that the intent is clear and that the contractor took advantage of an error in the specifications, disregarding Section 5-4 - Errors and Omissions in Plans and Specifications of the Standard Specifications. The intent of the Proposal Form may be apparent to some, including several other contractors bidding the work, but there is still an element of ambiguity involved. The Proposal Form should be absolutely clear. The contractor should know exactly what items he is bidding. In addition, when HCC bid nominal prices for the jack and bore items, they obviously unbalanced their bid. Section 2-6 - Rejection of Irregular Proposals gives the FDOT the right to reject proposals if the unit prices are obviously unbalanced either in excess of or below the reasonable cost analysis values. The FDOT accepted this proposal and awarded the contract to HCC.

Section 5-4 referred to above requires the contractor to forthwith notify the Engineer of any error or omissions he might discover in the plans or specifications, but this is often impossible during the bidding phase due to the limited time involved.

It is the opinion of the DRB that HCC is entitled to negotiate unit prices for the steel casing sizes not shown on the proposal. The prices quoted in their letter of September 18, 1997, of \$338.30 per LF for 44"/48" casing and \$372.91 per LF for 50"/54" casing appears reasonable based on I-4 bid records. The unit prices for the 36" steel casing remains at \$20.00 per LF and the unit price of \$273.54 for the 30" steel casing which was added at Sta. 1280+50 also appears reasonable..

- **Tunneling - The jack and bore method of constructing drainage pipe is normally specified so that the pipe may be constructed without disturbing the existing roadway and thereby disrupting traffic. The FDOT Utility Accommodation Guide mandates a clearance of 4 ft. from profile grade to top of casing pipe in order to safely achieve this purpose. In this case, the existing ground lines were not shown on the drainage structure plans, and HCC stated they were unaware at time of bidding that adequate clearance was not available at Sta. 1326+00, (J & B 10). Although the existing ground line is shown on other plans sheets and could be transferred to the drainage structure plans, the board feels that the contractor's assumptions that the jack and bore construction conformed to FDOT safety standards and that he had adequate clearance to jack and bore was reasonable.**

The DRB, therefore, feels that HCC is entitled to additional compensation for hand tunneling the jack and bore at Sta. 1326+00 (J&B 10). The contractor quoted an additional cost for hand tunneling of \$47,030.46 on November 17, 1997, and the DRB recommends that HCC be paid this amount.

<u>Tunneling</u>		
160 @ \$372.91 =	\$59,665.60	
Tunneling extra	<u>47,030.46</u>	
	\$106,696.06	

- **Delays - The construction schedule if properly prepared and logically correct is a valid tool for determining time impacts and delays. In this case the DRB looked at the original 120 day schedule accepted December 18, 1996, the original CPM Baseline Schedule Revision 2, accepted July 1, 1997, and the September 1997 CPM Baseline Schedule Update, accepted October 13, 1997. The DRB also reviewed minutes of the weekly progress meetings and observations from the monthly field review of the project.**

The original 120 Day Schedule provided information for such basic items as required approvals, relocation of utilities and clearing and grubbing. It is difficult to determine any delays from it.

The Baseline Schedule Revision 2, accepted July 1, 1997, provided some logic as to time impacts related to project delays and durations. The major conflict and schedule delays were related to construction of the South Frontage Road.

The update to the Baseline Schedule, accepted October 13, 1997, contained revised progress time for the jack and bore work, showing this work commencing after completion of the South Frontage Road. The updates showed J & B 10 to have a negative float of 54 days.

Some critical dates looked at by the DRB were:

- **January 1997 - Trujillo sublet approval. Jack and bores could begin.**
- **February 3, 1997 - Meetings 9 through 15. Additional pipe crew needed. 1-1/2 weeks behind (11 days).**
- **March 24, 1997 - Meetings 16 through 28. Additional concrete crew needed 1-4 weeks behind (14 days).**
- **April 3, 1997 - HCC asked to use casings as carrier pipe.**
- **April 9, 1997 - PBS & J and FDOT asked for 8 items to be answered to use casing as carrier pipe. (HCC dropped request at this time.)**
- **April 18, 1997 - RFI 14 for jack and bore information.**
- **May 15, 1997 - Moreland advises to open cut.**
- **June 30, 1997 - Meeting 30 - 6 weeks behind - 42 days.**
- **July 1, 1997 - CPM baseline schedule approved.**
- **July 28, 1997 - Meeting 34 - Jack and bore is beginning to delay South Frontage Road completion 6-1/2 weeks behind (46 days).**
- **September 3, 1997 - Revision #9 sent to contractor. (Requesting prices for item in PR #9).**
- **October 4, 1997 - September 1997 logic schedule approved.**
- **October 27, 1997 - Jack and bore 10 begin.**

The following information was in the plans:

Plan sheet - #252, Phase I = 220 days (Maintenance of Traffic)

Plan sheet - #277, Phase I, Stages 1 and 2 - Note B-12. Concurrent with frontage road construction. Construct cross drains complete with jack and bore sections.

The construction of the south frontage road has been delayed by a shortage of available crews and by bad weather. The jack and bore construction which could have been done simultaneously with south frontage road construction was delayed until Revision No. 9 was sent to the contractor on September 4, 1997. The above items have delayed overall completion of the project.


HCC has requested a time extension of 132 calendar days with compensation for his home and division overhead and job site support costs for each of those days.

The DRB feels that HCC is entitled to a time extension of 65 calendar days and that HCC should be compensated for overhead and support costs for these days.

I certify that I participated in all of the meetings of the DRB regarding the Dispute indicated above and concur with the findings and recommendations.

I-4 Segment 5 - Disputes Review Board


Dolph Hanson
Chairman


Keith Richardson
Member


Frank E. Proch
Member

CC: J. R. Brandvick, P. E.
Brian McKishnie, P. E.