

DISPUTE REVIEW BOARD RECOMMENDATION

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August 23, 1999

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RE: State Job No. 97160-3308/6315  
W.P.I. No.: 1157808  
Contract No. 19388  
Polk County Parkway - Section 3A  
Disputes Review Board

Subject: Issue # 2  
Reinforced Earthwall Pay Quantity Dispute

Dear Sirs:

On August 09, 1999, at the request of the Contractor, Cone Constructors, Inc. (Cone), and the Florida Department of Transportation (FDOT), the Disputes Review Board (DRB) held a hearing to consider the subject dispute. Cone and the FDOT presented certain testimony and copies of data prior to and during the hearing.

The Board was requested to determine "Entitlement" for the issues. Should Entitlement in favor of the Contractor be found, the parties would negotiate the value.

**ISSUE:**

The dispute centers over the FDOT desire to reduce the quantity for pay item #1-545-70 Retained Earth Wall (RE Wall) on the Polk Parkway Section 3A Project.

**Cone's Position:**

*"The FDOT is attempting to unfairly reduce the pay quantity for the RE wall pay item on the referenced project. The Method of Measurement for payment for pay item #1-545-70 is described in Section 545 of the Special Provisions ... which states in part that:*

*The area of the Retained Earth Wall to be used for payment shall be the area bounded by the top of the cast in place barrier, (or the top of the Retained Earth Wall in areas with no barrier), the proposed final ground line at the front face of the wall and the beginning and end wall limits as shown. The costs of all foundations and walls below the proposed final ground line shall be included in the unit cost for Item #545-70.*

*The quantity to be paid for as described in the Section shall be plan quantity, in square feet of Retained Earth Wall completed ...*

*This is vital information that Cone relied on at bid time. We felt assured that all work required for the completion of the RE Wall would be paid for at the Bid unit price for item 545-70 multiplied times the plan quantity, basically a lump sum amount. Now the FDOT is unfairly attempting to lower the RE*

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*Wall pay quantity, which will in turn reduce the funds payable to Cone. Cone anticipated the full contract amount to cover the costs associated with this work.*

*With the method of measurement specification in mind, at bid time, Cone assembled its costs to provide a complete RE wall for the project. The complete RE wall is comprised of many components including the following:*

- *Leveling pad construction,*
- *Setting of panels,*
- *Backfill of panels,*
- *Setting of precast coping,*
- *Setting of precast barrier,*
- *Forming & pouring the barrier counterweight,*
- *Forming & pouring light pedestals and coping,*
- *Forming & pouring sidewalks at barrier,*
- *Class V finish,*
- *Various conduits,*
- *All labor, equipment and materials associated with this work*

*Regardless of the plan quantity, all labor, equipment, material and subcontract costs associated with the RE Wall item, were calculated based on takeoff quantities derived from the bid documents. As such, these takeoff quantities defined the actual amount of work required to complete the RE walls. Once the total costs were determined, this total cost was then divided by the plan quantity to determine a unit price.*

*The FDOT has now determined that the original plan quantity was in error. Further, the FDOT seeks to reduce Cone's final pay quantity for the RE wall item. This is wrongful, since the original plan quantity error has in no way reduced the actual amount of work required to complete the RE wall. Regardless of the plan quantity error, Cone was still required to performed all work anticipated at bid time. Therefore, Cone must be credited with the entire plan quantity as payment for the RE Wall item.*

*The FDOT's desire to reduce the RE Wall item pay quantity, because of an error by the designer in calculating the plan quantity, will unjustly punish Cone and its subcontractors for someone else's mistake.*

*...a Summary of Negotiations dated July 11, 1997, which settled claims for discrepancies in the final quantities on Section 7.1 of the Veterans Expressway. This settlement contains a precedent setting payment to Cone for the RE Wall pay item #570-11. The \$44,509.50 payment is intended to compensate Cone for a 2,826 SF underrun of the RE Wall plan quantity on this project.*

<i>Original Plan Qty</i>	<i>68,568 SF</i>
<i>Previous</i>	<i>65,743 SF</i>
<i>Shortfall</i>	<i>2,826 SF</i>
<i>Unit Price</i>	<i>15.75 per SF</i>
<i>Amount</i>	<i>\$44,509.50</i>

*The FDOT's agreement to pay this amount sets a precedent for the payment to the Contractor for any underrun in the RE Wall plan quantity. Again, Cone relied on this information at bid time."*

### **FDOT's Position:**

*"Cone Constructors, Inc., claims that the original pay quantity is due and payable for pay item I-545-70 Retained Earth Wall. The basis for this claim is that the materials associated with this pay item were purchased for a lump sum amount based on the original plan quantity and therefore Cone is entitled to that same quantity.*

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*The Department of Transportation's position is that pay item 1-545-70 is a plan quantity item and the adjustment of plan quantity was necessary and correct. Therefore, the Contractor is not due the original plan quantity.*

*The basis of payment for retained earth wall is described in Section 545 of the Special Provisions and is subject to the provisions of Section 9-3.2, Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 1991 ...*

*The CEI performed a plan quantity check based on original plans and found the plan quantity to be substantially in error. There was a decrease within 5% of the original plan quantity, but the amount due decreased in excess of \$5,000 ... Therefore, the revised quantity as determined by the CEI is the final quantity and will be paid at the contract unit price. The Resident Engineer informed the Contractor of this error in Letter #404 dated May 6, 1997 ...*

*In summary, the method of adjustment of the plan quantity is according to the specifications which govern this project. When a contractor establishes a purchase order on a lump sum basis for a plan quantity item, he is risking the chance of the item requiring adjustment. ... The relevant facts and specifications support our interpretation and administration of the contract."*

### **In rebuttal to Cone's position:**

#### **1. The plan quantity is not guaranteed.**

*Cone correctly relates the requirements of the specifications in determining the quantity of RE Wall for payment. The payment is made on a square foot basis for the plan quantity, and this plan quantity is correctly defined in Cone's letter. However, Cone jumps to the conclusion that this specification is essentially a lump sum basis for payment. The Department categorically rejects this conclusion. Nowhere in this specification is the plan quantity shown to be fixed or to be exact. The very note that payment is made on a unit price basis shows that the bid unit price applies to the quantity calculated between the limits shown, except when the quantity or cost is small. ... Both parties can, and should check the quantities to know how to manage their costs.*

#### **2. Cone should not have relied on Claim Settlement.**

*Cone states that the negotiation and settlement of a claim on a Veterans Expressway Project wherein the Department agreed to pay the listed plan quantity instead of the CEI calculated plan quantity was precedent-setting. As such, they relied on this ruling during their bid for the Section 3A Project.*

*The Section 3A Project was bid on January 24, 1996. The precedent-setting claim settlement (The Department does not accept this claim settlement as precedent setting) did not occur until July 11, 1997, more than a year later. The fact that it took a claim settlement to pay for this quantity suggests that the Department was in fact applying the same interpretation as shown in Section 1 above.*

#### **3. RE Wall quantities on Cone's projects nearly balanced.**

*Cone's reference to Veterans project causes a look at other projects for our examples. ... The CEI calculated quantities were sometimes negative, sometimes positive and sometimes the same in comparison to the original plan quantities for RE Wall. We note that there is no demand for a deduction or credit in the case where the difference is positive.*

*In summary, the Department continues to hold that the specifications have been properly applied.*

### **FINDINGS:**

#### **Contract Special Provisions - Section 545-4 Method of Measurement states:**

*"The area of Retained Earth Wall to be used for payment shall be the area bounded by the top of the cast-in-place barrier, (or the top of the Retained Earth Wall in areas with no barrier), the proposed final ground line at the front face of the wall and the beginning and end wall limits as shown. The cost of all foundations and walls below the proposed final ground line shall be included in the unit cost for Item No. 545-70.*

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*The quantity to be paid for as described in this Section shall be plan quantity, in square feet of Retained Earth Wall completed and accepted subject to provisions of 9-3.2.*

1991 Standard Specifications, as amended by the 1994 Supplemental Specifications, Section 9-3.2 Payment Based on Plan Quantity states in part:

*"9-3.2.1 Error in Plan Quantity: Where the pay quantity for any item is designated to be the original plan quantity, such quantity will be revised only in the event that it is determined to be substantially in error. An error shall be deemed substantial if the quantity will increase or decrease in excess of five percent of the original plan quantity for that item or the amount due for that item will increase or decrease in excess of \$5,000 (whichever is smaller). In general, such revisions will be determined by final measurement or plan calculations or both as additions to or deductions from plan quantities. Changes resulting in pay quantity increase or decrease in excess of 25 percent will be in accordance with the criteria for significant changes as defined in 4-3.2.1."*

1991 Standard Specifications Section 4-3 Alteration of Plans or of Character of Work states in part:

*"4-3.1 General: Alterations provided for herein shall not be considered as a waiver of any conditions of the contract or the bond, nor to invalidate any of the provisions thereof.*

*4-3.2 Increase or Decrease in Quantities:*

*4-3.2.1 Significant Changes in the Character of Work: The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.*

*If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.*

*If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.*

*The term "significant change" shall be construed to apply only to the following circumstances:*

- (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or*
- (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed."*

There was a substantial plan error in the Reinforced Earth Wall bid quantity.

The pay quantity is subject to revision and to provisions of Section 9-3.2."

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Both the Contractor and the Department stated at the hearing that Section 4-3.2.1 did not apply to this issue.

**Recommendation:**

Based upon the Board's review of all documents presented by both parties to this dispute, and the representations made at the hearing, the Board recommends that there is no entitlement to the Contractor's position.

The Board appreciates the cooperation by all parties involved and the information provided to make this recommendation.

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.

Respectfully Submitted,

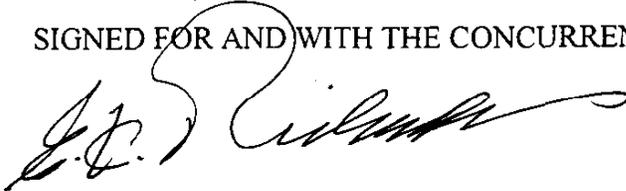
Disputes Review Board

Keith Richardson, DRB Chairman

John H. Duke, DRB Member

John Norton, DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:



Keith Richardson

DRB Chairman

CC: Joseph M. Chao, Jr., P.E.

Jerry Smith, Cone Constructors, Inc.

Kent Seltzer, Cone Constructors, Inc.

Charles B. Wegman, P.E., FDOT