DISPUTES REVIEW BOARD RECOMMENDATION

16 April, 2011

Brian Pickard P.E. Resident Engineer Florida Department of Transportation 2822 Leslie Road Tampa, Florida 33619 Atharali Shaikh RE Purcell Cont 510 Gene Green Rd. Tampa, Florida 34275

Ref: SR-597 (Dale Mabry) From W. of Fletcher Ave. to Carrollwood Springs Blvd.. Contract No: T7258, Financial Project No: 426161-1-52-01. Disputes Review Board hearing regarding the quantity of structural treated timber quantity.

Dear Sirs:

The Florida Department of Transportation and R.E. Purcell, Inc. requested a hearing concerning the above referenced issue.

CONTRACTOR'S POSITION

We will state the Contractors position by referencing and paraphrasing their position paper and input from the hearing. Should the reader need additional information please see the complete position paper by the Contractor.

The Contractors position paper has the following statements and references to document their claim for entitlement.

"TSI devised its bid for the Treated Structural Timber item based on all of the bid documents, including plans, plan notes and the standard specifications. In determining our bid, TSI specifically relied on the **plan note** found on **page 136**, which states clearly, "**Quantities based on nominal sizes."** TSI calculated its bid accordingly and derived its unit price in adherence and in compliance to the plan note.

Contrary to the **plan note** on **page 136** that states, "Quantities based on nominal sizes," the Department's stated position as evidenced by FDOT's Daniele Haberle's January 20, 2011 letter is that "this pay item is a Plan Quantity Pay Item as stated in special Provision 9-1.3.2 [and that] Standard Specification 9-3.2.1which refers to Errors in Plan Quantity is quoted as follows: "Where the pay quantity for any item is

designated to be the original plan quantity, the Department will revise such quantity only in the event that the Department determines it is in substantial error. As such, we have determined there is no error and therefore, no additional compensation is warranted.

TSI strongly disagrees with the Department's letter and determination that there is no error. When TSI followed the **plan note** on **page 136** that states, "Quantities based on nominal sizes," TSI's calculations derived a substantially different quantity than that shown in the plans. The "revised" quantity TSI utilized based on "nominal sizes" is **33.93MBF** as compared to the original "plan quantity" of **24.4MBF** resulting in a difference of **9.53MBF** or **39.1%**.

By definition and in accordance with **Standard Specification 9-3.2.1 Error in Plan Quantity** quoted as follows: "As used in this Article, the term **"substantial error"** is defined as the smaller of (a) or (b) below:

- (a) A difference between the original plan quantity and final quantity of more than 5%,
- (b) A change in quantity which causes a change in the amount payable of more than \$5,000.

Accordingly, it is the opinion of TSI that this difference of **39.1**% between the nominal and plan quantity sizes complies with Standard **Specification 9-3.2.1** and therefore constitutes a **"substantial error."**

Section 5.2, Coordination of Contract Documents of the Standard Specifications states the governing order of documents in cases of discrepancy and it is clear that the note in the plans supersede the Standard Specifications. Therefore, the note in the plans which states; "Quantities based on nominal sizes" should govern the method of calculation for the Treated Structural Timber.

Bearing in mind the impact of the plan note on **page 136**, TSI actually lowered its unit price in comparison with past bids because TSI determined the quantity for the treated structural timber would overrun the plan quantity."

RUBUTTAL

"TSI disagrees with the Department's position that the Treated Structural Timber quantities as shown on page 136 are correct. The quantities as shown in the plans are incorrect. The quantities shown in the plans on page 136 are not in accordance with the plan note on page 136 that states, "quantities based on nominal

dimensions." The plan notes are an integral part of the contract documents.

The Department has a duty to provide correct plans and quantities. As such, TSI relied upon the information shown on page 136 in pricing the Treated Structural Timber work.

The Department has stated the **note on page 136, "quantities based on nominal dimensions"** is merely "a guide on the sheet." To our knowledge, there are no Standard Specifications that addresses plan notes as a **"guide."** As a responsible bidder, TSI does not have the option to ignore the notes in the plans as the Department apparently contends it does. TSI is responsible for devising its bid in adherence to the contract documents which includes the plans and plan notes and relies upon their accuracy in determining its bid accordingly.

Additionally, the error in quantity clearly meets the definition of a substantial error as defined in **Standard Specification 9-3.2.1.** Furthermore, TSI did not take advantage of the plan quantity error as TSI's unit price is below the state wide average for Treated Structural Timber."

DEPARTMENT'S POSITION

We will state the Departments position by referencing and paraphrasing their position paper and input from the hearing. Should the reader need additional information please see the complete position paper by the Department.

The Departments position paper has the following statements and references to document their claim for entitlement.

The Prime Contractor, R.E. Purcell Construction Co. Inc., (REPCI) and their subcontractor, Transportation Structures Inc. (TSI) have presented the position that they should receive compensation for the "quantities based on nominal sizes" due to a reference on plan sheet 136.

The Plan Quantity was calculated correctly. The Contractor should receive compensation for the plan quantity which is based on actual sizes and has already paid REPCI for those quantities. The reference on plan sheet 136 describes (erroneously) how the quantity was derived, but, doesn't override how the treated timber is measured and paid. Any such revision would be found as a pay item note and none exists for this pay item. Further, Special Provision 4-1 (page 3) makes all pay items Plan Quantity and the only guidance for error in Plan Quantity is found

in Standard Specification 9-3.2.1 (page 4) which requires the use of final dimensions measured to resolve any such error. Those final dimensions reflect the contracted Plan Quantity for Pay Item 470-1 (page 34 and ps 2).

A letter from TSI informed REPCI (pages 6-12) that they had identified a quantity calculation error on a plan quantity pay item. It further indicated that notes in the contract plans state on sheet 136 "quantities based on nominal sizes" for the Treated Timber Structural pay item 470-1." They requested that the Plan Quantity amount be adjusted by 9.53 MB to allow payment to be based on nominal sizes for the entire project

The Department responded to the December 22, 2010 (pages 13-14) letter on January 20, 2011 (page 15) making it clear that by Special Provision 9-1.3.2 (page 3) and Standard Specification 9-3.2.1 (page 4) the Department will pay in accordance with the Plan Quantity and has determined that there is no error in that quantity. It further indicated that the Contractor should follow Specification 5-12 should they wish to pursue the matter further.

The annotation "Quantities are based on nominal sizes" found on plan sheet 136 is a guide on the sheet, which shows dimensions, sizes, lengths and widths and in no way represents how treated timber is measured and compensated. The Plan Quantity shown in the plans of 24.4 MB is accurate and is what was reimbursed. This is further supported by the following:

- The Department has requested several times for the contractor to present some means to justify this request such as to how they were damaged, if they were out money, etc.. There has not been a satisfactory response to that request.
- In TSI's December 22, 2010 letter (pages 13-14), they state that they were aware of this discrepancy before the bids were submitted. This discrepancy should have been addressed as a prebid question. This is especially true since this is the third project in District Seven with the plan note relative to nominal vs. actual structural treated timber dimensions. This project was Let nearly two months after the first one.
- Specification 5-4 Errors or Omissions in Contract Documents (page 4) states: "Do not take advantage of any apparent error or omission discovered in the Contract Documents, but <u>immediately</u> notify the Engineer of such discovery." This allows the Department to make corrections immediately to reflect the intent of the Contract.
- The quantities shown in the plans have been paid and are representative of the "Plan Quantity", plan sheet 2, pay item 470-1;

- Treated Timber, Structural, plan sheet 4 "Summary of Treated Timber, Structural", and the bid blank (page 34).
- This project is a stream line project making each item plan quantity. (Special Provisions, included).
- The number and sizes of treated timber represented in the plan set is undisputed by either party as to what was required to build the boardwalks and is representative of the contract and specifications.
- Standard Specification 470-14 (page 4-5) discusses how the boardwalk is to be measured and paid and requires the use of "actual dimensions". There is no discrepancy between the NOTE in the plans (ps 136) referring to the "estimated" quantities and specification 470-14 (pages 4-5) which specifically details how treated timber is measured.

Special Provisions and Standard Specifications Related to Issue

9-1.3.2 Plan Quantity: For this Contract, all pay items are Plan Quantity items. All references to pay item adjustments contained in the Contract Documents are superseded by this Specification and do not apply except as provided for in this Sub-article and the provisions of 9-3.2.

5-2 Coordination of Contract Documents.

These Specifications, the Plans, Special Provisions, and all supplementary documents are integral parts of the Contract; a requirement occurring in one is as binding as though occurring in all. All parts of the Contract are complementary and describe and provide for a complete work. In addition to the work and materials specified in the Specifications as being included in any specific pay item, include in such pay items additional, incidental work, not specifically mentioned, when so shown in the plans, or if indicated, or obvious and apparent, as being necessary for the proper completion of the work under such pay item and not stipulated as being covered under other pay items.

In cases of discrepancy, the governing order of the documents is as follows:

- 1. Special Provisions.
- 2. Technical Special Provisions.
- 3. Plans.
- 4. Design Standards.
- 5. Developmental Specifications.
- 6. Supplemental Specifications.
- 7. Standard Specifications.

Computed dimensions govern over scaled dimensions.

470-14 Method of Measurement.

470-14.1 General: The quantity to be paid for will be the plan quantity, in feet board measure, of such timber actually incorporated in and forming a part of the completed structure.

470-14.2 Method of Calculation: For calculating the quantity of timber, the width and thickness will be taken as the <u>actual</u> sizes shown in the plans or ordered by the Engineer. Where special sizing is required, the width and thickness to be used will be that of the smallest commercial size from which the special piece could be cut. Lengths to be used in the calculations will be the overall lengths of the pieces as shown in the plans, except that, where the lengths actually incorporated in the structure are less than the lengths shown in the plans, the lengths actually incorporated will be used in the calculations. Deductions will not be made for copes, scarfs, or crownings.

470-15 Basis of Payment.

Prices and payments will be full compensation for all the work specified in this Section, including all copper covering over pile heads, caps, etc., as shown in the plans, all hardware except such plates, lag screws, and other metal parts as may be shown in the plans to be paid for as structural steel and all paint materials and all excavation, painting, and incidentals necessary to complete the work.

Payment will be made under:

Item No. 470- 1- Treated Structural Timber - per

Thousand Board Measure.

REBUTTAL

R.E. Purcell's (REPCI) Position Paper includes the following quotation: "Bearing in mind the impact of the plan note on **page 136**, Transportation Structures, Inc. (TSI) actually lowered its unit price in comparison with past bids because TSI determined the quantity for the treated structural timber would overrun the plan quantity."

The Subcontract between TSI and REPCI shows reimbursement of \$4,950.00 per MB. The contract unit price with R.E. Purcell is \$4,350.00 per MB. The subcontract between REPCI and TSI doesn't appear to support the statement that TSI lowered their price in anticipation of having the quantity increased. In fact, it appears that the Prime Contractor, R.E. Purcell will actually lose money if the quantity is increased.

Additionally, the Subcontract states "Should inconsistencies or omissions appear in the Contract Documents, it shall be the duty of the Subcontractor to so notify the Contractor in writing within three calendar days of the Subcontractor's discovery thereof. Upon receipt of said notice,

the Contractor shall instruct the Subcontractor as to the measures to be taken."

In summary, REPCI is not entitled to additional compensation, based on the following reasons:

The contractor agrees that the plans accurately describe the sizes and number of treated timbers needed to construct the boardwalks.

The contract plans and bid tabs clearly presented a Plan Quantity of 24.4 MB that is consistent with how specification 470-14 outlines that timber should be measured and paid.

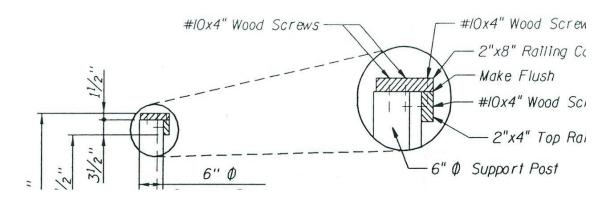
The contract describes the methods to handle errors in plan quantity and requires the use of final measurements. Since the final measurements reflect the 24.4 MB paid, there are no adjustments warranted.

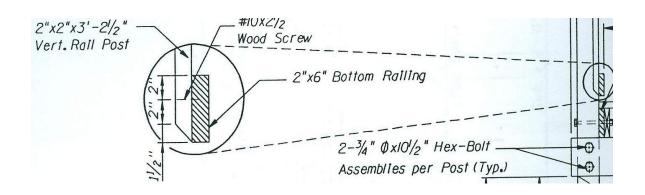
TSI acknowledged that they were aware of the alleged discrepancy prior to the bid, but, did not notify the Department immediately as per specification 5-4 and section H. 1. of their subcontract with RE Purcell.

FINDINGS OF FACT

- 1. In the Special Provisions for this contract under Article 4-1 Intent and Scope it states "This is a Streamline Plan Quantity contract. For this Contract, all pay items are Plan Quantity items as defines in Subarticle 9-1.3.2."
- 2. Subarticle 9-1.3.2 states, "For this Contract, all pay items are Plan Quantity items. All references to pay item adjustments contained in the Contract Documents are superseded by this Specification and do not apply except as provided for in this Sub-article and the provisions of 9-3.2".
- 3. The Contractor has implied in letters that he was aware of a discrepancy between the plans and bid quantities prior to bid. The Contractor did not notify the Department of the discrepancy as required by Specification 5-4, Errors or Omissions in Contract Documents. "Do not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the Engineer of such discovery. The Engineer will then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents".

4. The Standard Specification 470-14 Method of Measurement states part that; The quantity to be paid for will be the plan quantity, in feet board measure, of such timber actually incorporated in and forming a part of the completed structure. While the method of calculation will be; ...calculating the quantity of timber, the width and thickness will be taken as the **actual** (emphasis added) sizes shown in the plans or ordered by the Engineer. The following drawings from page 134 of the plan sheets show the measurements of the timbers to be actual, not nominal.





As can be seen from, the drawings the 2"x6" Bottom Railing is shown to be actually $5\ 1/2"$ wide. The 2"x8" railing called for in the top picture is shown to be actually $1\ 1/2"$ thick. The specification states that the actual sizes of the timbers used will be the quantity calculated for pay.

5. Specification 9-3.2.1 Error in plan Quantity states in part; Where the pay quantity for any item is designated to be the original plan quantity, the Department will revise such quantity only in the event that the Department determines it is in substantial error. In general, the

Department will determine such revisions by final measurement, plan calculations, or both, as additions to or deductions from plan quantities. The Department measured the final quantity and determined it to be in conformance with the plan quantity.

- 6. Specification 5-2 Coordination of Contract Documents states in part; *In cases of discrepancy, the governing order of the documents is as follows:*
- 1. Special Provisions.
- 2. Technical Special Provisions.
- 3. Plans.
- 4. Design Standards.
- 5. Developmental Specifications.
- 6. Supplemental Specifications.
- 7. Standard Specifications.

Computed dimensions govern over scaled dimensions.

This specification indicates that the note on plan sheet 136 (*Quantities based on nominal sizes*) takes precedents over the plan quantity as shown in the bid documents. The Contractor stated at the hearing that he was aware of the discrepancy between the note and the plan quantity, however he was too busy to notify the Department of the discrepancy. This lack of notification leads the Board to believe that the discrepancy is insignificant. Specification 5-4 states that regarding errors or omissions in the contract documents *immediately notify the Engineer*. This did not happen.

DISPUTES REVIEW BOARD RECOMMENDATION

The Board is governed in our decision making process by the plans, specifications (standard, supplemental, technical, special), and the contract. Therefore our recommendation is based on the above documents.

The Board sincerely appreciates the cooperation of all parties and the information presented for our review in making this recommendation.

Based on the contract documents the Board finds that there is no entitlement to the Contractor for additional compensation for the treated timber quantities.

The Board unanimously reached the recommendation and reminds the parties that it is only a recommendation. If the Board has not heard from either party within 15 days of receiving this recommendation, the recommendation will be considered accepted by both parties.

Submitted by the Disputes Review Board

Don Henderson, Chairman, Keith Richardson, Member, William Waddell, Member

Signed for and with concurrence of all members

Don Henderson, PE