

June 12, 2000

Mr. John Meagher Johnson Bros. Corporation 3500 Pinellas Bayway (SR 679) Tierra Verde. FL. 33714 Ms. Theresa Driscoll FDOT Asst. Resident Engineer 3204 Gulf to Bay Blvd. Clearwater, FL. 33759

Re: FN 256905-1-52-01, Pinellas County Bunces Pass Bridge, Ft. Desoto DRB Issue No. 1 Sheet Piling

Dear Sirs:

The Florida Department of Transportation (Department) and Johnson Bros. Corporation (JBC) requested a hearing concerning payment for temporary sheet piling. Summaries of the Department's and JBCs' positions were forwarded to the Disputes Review Board (DRB), and a hearing was held on June 6, 2000.

ISSUE: Is the Contractor entitled to compensation for sheet piling installed at the approaches to the bridge?

# **Contractor's Position**

Johnson Bros. does not believe that the new concrete piling or the footings/end bent caps for piers 2, 3, 18, and end bents I and 19 can be safely constructed without sheet piling being installed. The edge of the existing roadway/bridge abutment is approximately 12 feet away from the side of the new end bent wingwall/footings. Without sheet piling, the existing roadway/bridge abutment could deteriorate because of undermining from the new construction causing a danger to the traveling public. This problem then triggers a constructability issue.

It is JBC's understanding that the designer apparently did not make allowance for any sheet piling in the engineer's estimate for the project. When sheet piling is required the designer indicates the sheet piling on the plans and includes a pay item for it. In the 1999 FDOT Standard Specification for Road and Bridge Construction, Section 455 (Steel Sheet Piling), references temporary sheet piling as a pay item. Also, Section 455-12-10 (Protection of Existing Structures), refers to a pay item for protection of structures such as existing bridges. The Department uses the low bid process to select contractors and during the bidding process specific questions regarding the contract plans and specifications are not answered. In order to be competitive contractors must bid the project as shown in the plans and outlined in the specifications. JBC believes that the designer omitted the temporary sheet piling, possibly as an oversight, and JBC is entitled to compensation for furnishing, installing, and removing the temporary sheet pile.

#### Department's Position

The sheet pile are being placed to protect the existing approaches from the <u>excavation</u> for the placement of the <u>proposed footings</u>. This is not a changed condition to the contract and JBC is not entitled to additional compensation. Compensation for the sheet pile is included in the related foundation bid items.

### Supporting Documentation:

1) Standard Specification for Road and Bridge Construction 1999, Section 7-11 Preservation of Property. Under this specification it is the contractor's responsibility to protect existing structures including highways and bridges.

- 2) Standard Specification for Road and Bridge Construction 1999, Section 125 Excavation for Structures. Under subsection 125-1, there is a discussion of cofferdams, sheeting and bracing, etc. for excavation. And compensation is addressed under subsection 125-12.1 stating that it "shall be included in the contract unit price for the concrete for other items covering the applicable structure".
- 3) Pay item note 120-6. This note addresses the method of excavation under the proposed structure and relates to the phasing of the construction operations.

The Department provided copies of the plans and Standard Specifications to support the above positions.

### **DRB Findings**

Section 7-11.1, Preservation of Property is a general requirement. More specific instructions can be found in Article 455-1.1, Protection of Existing Structures, which states in part:

"When the plans require excavations for construction of footings or caps, the Contractor is responsible for evaluating the need for, design of, and providing any necessary features to protect adjacent structures. Construct sheeting and shoring as detailed in the plans. When sheeting and shoring are not detailed in the plans, employ a Specialty Engineer to design the sheeting and shoring, and to sign and seal the plans and specification requirements. Send these designs to the Engineer for his record before beginning construction."

Unfortunately, this specification is silent as to who is to absorb the cost of the above. The Board then examined Section 455 B of the Supplemental Specifications (pps. 244 through 279). This Supplemental Specification, of course, supercedes the Standard Specifications. There are several applicable articles:

455-11.11 Protection of Existing Structures: The quantity to be paid for will be at the Contract lump sum price. When the Contract Documents do not include an item for protection of existing structures, the cost of settlement monitoring as required by these Specifications will be included in the cost of the piling items; however, work in addition to settlement monitoring will be paid for as Unforeseeable Work (emphasis added) when such additional work is ordered by the Engineer.

455-12.6 Steel Sheet Piling: Price and payment will be full compensation for all labor, equipment, and materials required for furnishing and installing steel sheet piling, but will not include furnishing and placing anchors when an anchored wall system, temporary or permanent, is designed and detailed in the plans. In such cases, furnishing and installing anchors will be paid for separately. For installations designed by the Contractor, the cost of furnishing and installing anchors will be incidental to the cost of steel sheet piling. For temporary installations, removal of the sheet piling, anchors, and incidentals will be included in the cost per square meter for Steel Sheet Piling (Temporary).

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455-12.14 Payment Items: Payment will be made under:
Item No. 2455- 2-
                        Treated Timber Piling - per meter.
Item No. 2455- 3-
                        Prestressed Concrete Piling Furnished - per meter.
                        Prestressed Concrete Piling Driven - per meter.
Item No. 2455- 4-
Item No. 2455- 7-
                        Steel Piling Furnished - per meter.
                        Steel Piling Driven - per meter.
Item No. 2455- 8-
                        Concrete Sheet Piling - per meter.
Item No. 2455- 14-
Item No. 2455- 15-
                        Preformed Pile Holes - each.
Item No. 2455- 18-
                        Protection of Existing Structures - lump sum.
Item.No. 2455-119-
                        Test Loads- each.
Item No. 2455-120-
                        Point Protection - each.
Item No. 2455-133-
                        Steel Sheet Piling - per square meter.
Item No. 2455-137-
                        Dynamic Load Tests - each.
Item No. 2455-140-
                        Test Piles Furnished - per meter.
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Item No. 2455-141- Test Piles Driven - per meter.

Section 125-1, Excavation for Structures, is another general description submitted by the Department. It is superceded by the piling articles above.

Plan Note 120-6 on page 5 of the plans alerts the contractor that special equipment or hand excavation may be required. The Department pointed out that, upon discussions with the Designer of Record, it was intended that this note covers the sheeting issue. While this may have been the designer's intent, the note is extremely vague. Sheet piling is considered material, not equipment. The Contractor cannot guess what the intent of the designer might be at the time of bid.

During oral testimony the Department was questioned as to whether this sheet pile could be considered a critical wall according to the Florida Department of Transportation's Plans Preparation Manual. The Department conceded that this wall could be considered critical. Further, the Department conceded that it was standard design industry practice according to FDOT to include a pay item in contracts when a critical wall is necessary.

## DRB Recommendation

In reviewing and interpreting the contract documents (Article 455-11.11 and Article 455-12.14) and standard Department policy leads the Board to the conclusion that the Designer omitted the pay item contrary to these specifications.

The Board finds entitlement to the Contractor's position and recommends that the Department and JBC enter into negotiations to compensate the JBC for the furnishing, installing, and removal of temporary sheet piling at both bridge approaches.

The Board appreciates the cooperation by all parties involved and the information provided to make this recommendation. Please remember that failure to respond to the DRB and the other party concerning your acceptance or rejection of the DRB recommendation within 15 days will be considered acceptance of the 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

Rammy Cone, DRB Chairman John Norton, DRB Member Mike Zembillas, DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:

DRB Chairman

CC: Theresa Driscoll, FDOT

John Meagher, Johnson Brothers