

## **DISPUTES REVIEW BOARD RECOMMENDATION**

July 21, 2007

Robert A. Parks III  
Executive Vice President  
Westwind Contracting, Inc.  
2675 Winkler Avenue  
Fort Myers, FL 33901

Kristina Clarke deMoya, P.E.  
CCEI Sr. Project Engineer/Vice President  
Consul-Tech Construction Management, Inc.  
3434 Hancock Bridge Parkway, Suite 207  
North Fort Myers, FL 33903

RE: Financial Project No. 195705-1-52-01; SR 78 from East of Slater to West of I-75,  
Lee County

Dear Mr. Parks and Ms. deMoya:

The Florida Department of Transportation (the Department) and Westwind Contracting, Inc. (WCI) requested a Dispute Review Board hearing concerning the following five (5) issues:

1. Whether the Department has the authority under the contract to inspect WCI's drainage work on the project by using laser profiling.
2. Whether the Department must first accept WCI's work on the project before the Department can proceed to examine the project drainage system through the use of laser profiling.
3. Whether the Department's stated intention to use laser profiling to inspect the drainage system on the project would constitute a change to the contract.
4. Whether the contract with WCI gives the Department the authority to change the contract after the drainage work is completed by altering the inspection requirements for the drainage system to include laser profiling.
5. A determination of the merits of WCI's claim that it is entitled to compensation for the costs to repair damage to drain pipe on the project because the damage to the pipe was caused by a design error, namely the design failed to provide for necessary cover to adequately protect the pipe from damage caused by traffic loads above.

Summaries of the Department's and WCI's positions were forwarded to the Disputes Review Board and a hearing was held on June 29, 2007.

At the hearing, it was decided that issues 1-4 would be consolidated and heard as one issue. Both parties agreed.

### **ISSUES #1-4 – Laser Profiling**

Mr. Ignacio Halley, Professional Engineer (PE) spoke on behalf of the issues for WCI. Mr. Halley explained that he was not part of the construction for SR 78, Bayshore Blvd., but he is a P.E. and was asked to present the facts for WCI.

Mr. Halley asked that if we would rule on issues 1-4 as one. After some discussion by both parties, it was agreed to hear the issues as one after a clear understanding as to the use of the Laser Profiling by the Department.

WCI position papers state that the Department has no contract right to condition its acceptance of the pipe on the results of a laser profiling analysis because that procedure is not authorized by the contract and is different from the contractually authorized testing procedures.

#### **WCI's Position – Issues #1-4**

WCI contends that the Department has no contract right to condition its acceptance of the pipe on the results of laser profiling analysis because that procedure is not authorized by the contract and is different from the contractually authorized testing procedures.

WCI says the Department must first accept Westwind's work on the project before the Department can proceed to examine the project drainage system through the use of Laser Profiling. The Department's stated intention to use laser profiling to inspect the drainage system on the project would constitute a change to the contract.

WCI believes that on this contract, the Department does not have the authority to change the contract after altering the inspection requirement for the drainage system to include laser profiling of the completed drainage work.

WCI states that videoing of the pipe is the specification requirement and should be the method to determine repairs.

Contractors Quality Control (CQC) was in effect and there were no complaints of pipe placement as to quality control and verification by the Department during installation.

#### **THE DEPARTMENT'S Position – Issues #1-4**

The Department affirms that it has both the legal right as the property owner and the contractual right under the construction contract to perform these inspections. Having specific knowledge of the numerous deficiencies already documented, the Department is acting with due cause and diligence in ascertaining the full extent and nature of these deficiencies prior to performing its own repairs, as it is right to do so in accordance with the contract documents.

The Department affirms that it has not final accepted the project due in large part to the abundance of drainage deficiencies discovered as a result of the video inspections provided by the Department.

The Department affirms that its "*stated intention*" to use laser profiling inspection does not constitute a contract change.

The contractor refused to perform repairs on pipe deficiencies as directed, and as a result, the Department has the right to perform its own repairs, which involves the laser profiling inspections.

The Department affirms that it is performing the laser profiling inspections at its own expense and that these inspections do not alter the responsibilities and obligations of the contractor nor

the intent of the contract and thus does not require a Supplement Agreement to the construction contract.

The Engineer has already identified all pipe work deficiencies during review of videos provided by the contractor. The Department has no intention of holding the contractor to any higher standard or acceptance criteria than that which is already provided for in the contract.

The Department affirms that the drainage work on the project has **not** been completed, and as outlined in response to issue 3, the Department's decision to perform additional inspections at the Department's sole cost does not constitute a change to the contract.

#### **Contractor's Rebuttal Statement on Issues #1-4:**

WCI has elected not to submit a rebuttal as stated in e-mail to all concerned from Mr. Robert Parks on June 25, 2007.

#### **The Department's Rebuttal Statement on Issues #1-4:**

The Department rebuts several of the statements made in WCI's position paper submittal. They contend they offered to let WCI do the laser profiling under a Unilateral Supplemental Agreement, but WCI refused. Thus the Department is performing their own laser profiling.

#### **DRB Explanation on Issues #1-4:**

WCI states that they have met all contract obligations per the video taping of the pipe as required in the 2004 Standard Specifications, Section 430-4.8.1, Page 393, and this is the method which repairs were made or are to be made, once agreement has been reached by both parties.

The Department states that the contractor has not made all repairs as required by the contract. This includes approximately 800 deficiencies in 8,000 linear feet of pipe.

The Contractor strongly disagrees with the number of deficiencies. If the pipe work was of such poor quality, the Department would not have paid for it under the pay items on past monthly estimates.

In rebuttal of the Department's statement that the pipe was no good, the contractor stated that the pipe was stamped approved for use.

The Contract calls for Filter Fabric to be used at every joint of pipe per specification 430-4 Laying Pipe, page 391.

The Department owns the right-of-way for this project and has the right to inspect the pipe by any means that they desire. Florida Department of Transportation **Standard Specification For Road and Bridge Construction 2004, Section 1-3, Definitions, Page 6, Right-of-Way states:** *The land that the Department has title to, or right of use, for the road and its structures and appurtenances, for material pits furnished by the Department.*

However, the Department **MAY NOT** use laser profiling to force the contractor to a higher standard of repairs beyond those which would be discovered on the standard videos without additional compensation.

Inspectors inspected the pipe and if at that time laser profiling were to be offered by the Department as a new method of acceptance, a Supplemental Agreement would have been processed and agreed to by both parties. Contracts are generally completed per the existing specifications and pay items.

#### **DRB Recommendation on Issues #1-4:**

The Board recommends that the Contractor be held to the normal standard of substantial conformance with the following specification be followed.

##### **Section 430-7.2 Laying Requirements for Concrete Pipe with Rubber Gasket Joints:**

*Do not allow the gap between sections of pipe to exceed 5/8 inch for pipe diameters of 12 inches through 18 inches [16 mm for pipe diameters of 300 through 450 mm], 7/8 inch for pipe diameters of 24 through 66 inches [25 mm for pipe diameters 600 mm through 1.7 m] and 1 inch for pipe diameters 72 inches and larger [25 mm for pipe diameters 1.8 m and larger]. Where minor imperfections in the manufacture of the pipe create an apparent gap in excess of the tabulated gap, the Engineer will accept the joint provided that the imperfection does not exceed 1/3 the circumference of the pipe, and the rubber gasket is 1/4 inch [6 mm] or more past the pipe joint entrance taper. Where concrete pipes are outside of these tolerances, replace them at no expense to the Department. Do not apply mortar, joint compound, or other filler to the gap that would restrict the flexibility of the joint.*

It is ultimately the responsibility of the Department to determine the amount of deficiencies and method of repairs it wishes to have performed. Should such determination be unreasonable the Contractor would be entitled to additional compensation. It should be noted that the Board was not given or offered the tapes for review.

The Board finds entitlement of the Owner to re-video the pipe to better ascertain the amount and level of repairs necessary due to the poor quality of the original video furnished by the Contractor.

**ISSUE #5: WCI requests entitlement to compensation for costs to repair damage to drain pipes caused by design deficiency/error for inadequate traffic load protection.**

#### **WCI's Position – Issue #5**

WCI contends that the pipe was installed per the lines and grades of the contract but was too shallow for traffic loads and was not adequately protected. The lack of cover left the pipe unprotected against dynamic loadings from traffic above. Repairs were not from performance problems but stemmed from design problems.

WCI states that Design criteria of cover over the drainage structures were not followed per Standard Index 205. Westwind pointed out the note on Standard Index 205, lower right corner.

#### ASPHALT CONCRETE BASE

Note: Extra material is required when cross culverts are located on facilities subject to high-speed traffic (greater than 55 MPH) **or high traffic volumes (greater than 1600 ADT)** and the cover is less than 12 inches for Concrete Pipe, 15 inches for Corrugated Steel and 18 inches for Corrugated Aluminum Pipe,

WCI states that the traffic volume from typical section shows an ADT of + 22,000 and Index 205 should have been used.

WCI pointed out letter number 104, dated March 23, 2006 contains a statement that Index No. 205 which addresses cover heights over pipe, but this index was found to be not applicable since the actual speed limit proposed was less than that required by the standard in question.

The letter contains the following: *May we suggest a review of Sheet No. 79 in the Contract Documents, which states “Special attention is drawn to the fact that portions of some drainage structures extend into the stabilized portion of the road bed and extreme caution will be necessary in stabilized operations at these locations”.*

WCI pointed out in their position papers submittal, in close proximity there was another project FPN 195756 -2-52-01, SR 78 and that Drainage sheet no’s. 39, 40, & 41 have plan notes to construct extra base material and this the proper way to address this issue. The plans for the WCI project did not address it in the same matter as being accustomed to in the Department’s pipe work.

WCI gave examples of inadequate cover at the following locations.

S-529 to S-529A		S-103 to S- 106
Edge of Pavement	11.88’	10.02’
Bottom of Base	10.55’	8.69’
Top of pipe (bell)	9.96’	7.50’
Difference of cover	.59’	1.19’ WCI stated 0.88’ (?)

#### **The Department’s Position – Issue #5**

The Department affirms that the Contractor’s “claim” has no merit and further believes there to be no contractual entitlement whatsoever for additional costs incurred as a result of the required pipe repairs for the following reasons:

The contractor has not complied with the contractual requirements for submittal of a claim and the contract clearly states that these requirements are “***...a condition precedent to the Contractor being entitled to additional compensation...***”

The Department states that the Contractor has provided no factual support to their theory that “traffic loads above” are to blame for the pipe damage/defects that they allege have resulted in additional repair costs.

Despite the Contractor's failure to provide supporting evidence of their claim as required by the contract, the Department has performed a detailed engineering analysis and comparison of the pipe cover and traffic loads versus pipe repairs performed. The analysis indicates conclusively that there is no causal relationship between "traffic loads above" and pipe repairs as is being alleged by the Contractor.

The Department presented detailed marked plan-profile and drainage sheets showing deficiencies such as leaks and breaks in storm sewer system. The Engineering pipe depth analysis Summary of Contractor Pipe Repairs shows detail areas of cover between bottom of base and top of pipes for clearance. There is only one area that did not have the one (1) foot cover. S-101 to S-101B shows an 11.59" difference.

#### **Contractor's Rebuttal Statement on Issue #5:**

WCI has elected not to submit DRB rebuttal papers as stated in E-mail to all concerned from Mr. Robert Parks on June 25, 2007.

#### **Department's Rebuttal Statement on Issue #5:**

The Department's rebuttal contains many statements that WCI's position papers did not contain factual backup for either part of several statements. No evidence has been submitted to support there are "not actual deficiencies" nor that the deficiencies noted "reveal Consult-Tech's inexperience and lack of qualifications..."

The Department states that traffic was not on the westbound roadway, and thus it was never subject to "dynamic loadings from traffic above" prior to having been videotaped.

The Department rebuts WCI's statement that, "It is a standard for FDOT designers to identify in the plans those specific locations where a thickened base would be installed to protect shallow pipe". The Department states that there is no "standard" that requires that specific locations requiring a thickened base be identified in the plans. (E-mail from Don G. Witmer, P.E., to Kristina Clarke dated 6-20-07)

#### **DRB Findings on Issue #5:**

Both parties had a difference of opinion as to the definition of cross drains and storm drains being "soil-tight". Standard Specifications (Red Book) dated 2004, section 430-4.1 Laying Pipe, page 392, ... soil tight joints must be watertight to 2 PSI.

In Section 449, precast concrete drainage products as referenced in section 430 of the Standard Specifications expands further as to acceptance on joints, chips, etc. on concrete pipe.

WCI submitted a Rinker chart at the hearing to show thickness of pipe walls, etc. The Department did not have an issue with WCI's presentation. The same information is contained on Standard Index 205, sheet 2 of 5.

**DRB Recommendation on Issue #5:**

The Board sincerely appreciates the cooperation of all parties and the information presented for its review in making this recommendation. Based upon material supplied and presentations made to the Board at the DRB hearing, the Board finds Entitlement to WCI for claims for payment for repairs to pipes that do not have the clearance of one foot (1') cover between the bottom of the base and top of the pipe bells for such that may reasonably be determined not to be caused by the Contractor whether by improper installation or inadvertent destruction.

Video taping, identification of anomalies, method of repair and acceptance by the Department of storm sewers in part based on the video is a relatively new specification that is still under review as to its implementation.

Further, it appears that due to the time taken to come to an agreement on the design issues and pipe repairs, and since the roadway has been substantially complete and is being used by the traveling public, concurrent delay and liquidated damages should not be charged for this period. Each Party should bear their own costs. This might possibly be arrived at through partnering of a final settlement between the parties. This recommendation should also apply to Issues 1-4 above.

The Disputes Review Board's Recommendation should not prevent, or preclude, the parties from negotiating an equitable solution (should it be appropriate) to any issue pursuant to their partnering agreement.

Please remember that a response to the DRB and the other party of your acceptance or rejection of this recommendation is required within 15 days. Failure to respond constitutes an acceptance of this recommendation by non-responding party.

I certify that I participated in the Hearings of the DRB regarding the Disputes indicated above and concur with the findings and recommendations.

Respectfully submitted,  
Disputes Review Board

Frank E. Proch, Dispute Review Board Chairman  
Carson Carner, Dispute Review Board Member  
John Duke, Dispute Review Board Member

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DRB Chairman

cc: Carson Carner  
John Duke