DATE: May 8, 2011

J. B. COXWELL CONTRACTING, INC. JOAQUIN OLIVELLA ATTN: EDDIE GREENE PROJECT ENGINEER 6741 LLOYD Rd. GAINESVILLE OPERATIONS CENTER JACKSONVILLE, FL 32254-1200 FDOT DISTRICT 2

RE: SR 329 RECONSTRUCTION FIN PROJ ID 20778515603

The D2 Regional Dispute Review Board held a hearing April 29, 2011 to determine entitlement for time and/or money involving the Traffic Control Plan for the re-construction of SR 329.

DEPARTMENTS POSITION

PROJECT DESCRIPTION

Work under this contract consists of the reconstruction of existing pavement (1.083 miles) to include 12 inches of stabilized sub-grade, optional base, and 2.5 inches of asphalt; replacement of existing curb; drainage and ADA improvements; signing and pavement markings and signalization to include new mast arm installation for FPID 20778515201; water and sewer line construction for FPID 20778515603, both on SR 329 (South Main Street from Depot Avenue to NW 8th Avenue) in Alachua County.

SUMMARY OF ISSUE

The Main Street reconstruction project Traffic Control Plan (TCP) is divided in 4 Phases. Phase-I constitutes the full reconstruction of the left side of the roadway from station 168+00 to station 193+00 to include 12 inches of stabilized sub-grade, optional base, and 2.5 inches of asphalt. Phase-II of construction, the subsequent phase, consists of the reconstruction of the right side of the roadway from station 168+00 to station 193+00 that mirrors the roadway composition of Phase-I. J.B. Coxwell Contracting, Inc, who will be referred as JBCCI, states the TCP of the Contract plans did not provide a way to protect a drop-off condition that would be created with

the reconstruction of the roadway between phases. JBCCI requested the Department to be compensated for the installation of a temporary barrier wall for the Phase-II of construction.

The Department denied this request using the following reasoning:

The Traffic Control Plan instructs the Contractor to maintain traffic in accordance with Standard Index 600 series. Sheet No. 128 of the TCP includes two drawings, for Phase-I and II of construction, which mirror the roadway reconstruction called for under the typical sections. JBCCI successfully utilized a 1:4 wedge of existing (on-site) material, and traffic control devices, to eliminate any drop-off condition during the reconstruction of the roadway in Phase-I and Phase-II of the TCP.

TRAFFIC CONTROL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH FDOT DESIGN STANDARDS. INDEX 600 SERIES.

It is the Department position that the conditions for the roadway reconstruction between phases are clearly shown in the Contract plan. They also show the Contractor the space allowed for the reconstruction while keeping traffic flowing safely. JBCCI is solely responsible for assessing the resources necessary to carry out the construction, and it is up to the Contractor's means and methods to protect the work zone during the reconstruction of the roadway. Furthermore the Contractor may have opted to protect any drop-off condition utilizing any of the different methods allowed by the Standard Index 600 series, and any cost derived from the Contractor's construction method is included under the maintenance of traffic lump sum pay-item.

PHASED CONSTRUCTION

It is the Contractor's argument that the Traffic Control Plan (TCP) did not contain information That would have indicated that a drop-off condition would be created during the phased construction. The TCP shows a phased construction, where Phase I constitutes the full reconstruction of the left side of the roadway from station 168+00 to station 193+00 to include 12 inches of stabilized subgrade, optional base, and 2.5 inches of asphalt, and Phase II constitutes the full reconstruction of the right side of the roadway from station 168+00 to station 193+00 to include 12 inches of stabilized sub-grade, optional base, and 2.5 inches of asphalt.

The typical section sheets clearly indicate that, depending on the thickness of existing asphalt and brick pavers, an excavation depth of between 12 to 18 inches would be required. In addition, the difference in surface elevation between the proposed roadway and the existing roadway is clearly shown in the contract plans cross-section sheets. The only conclusions that can be derived, from reviewing the typical section sheets and the cross-section sheets, is that reconstruction of the roadway would necessitate excavation and therefore a drop off would be created between the existing roadway and the construction. There is no ambiguity in the TCP plan notes, or the TCP typical sections; and nothing that would lead any one to conclude anything other than a drop-off condition would be created during the construction of Phase I and Phase II.

TRAFFIC CONTROL PLAN

Contrary to what JBCCI is arguing, the Engineer of Record followed the Plans Preparation Manual to develop the TCP and included all the information necessary in the TCP notes and TCP typical sections. A redundant note to indicate what is already instructed under Standard Index 600 was not necessary, and it is standard practice not to include such redundant notes in the roadway construction plans. Standard Index 600, page 10 of 13, served as a guideline to the Engineer of Record when developing the TCP.

The Engineer of Record opted to use temporary barricades to delineate the work zone for Phase I and Phase II of construction. It is common practice to do this in areas where business access has to be maintained at all times, and side streets cannot be blocked for long periods of time. The use of temporary barrier wall would have required a continuous closure between phases that would have closed access to side streets and driveways, and otherwise increased the cost of the contract. The Engineer of Record took into consideration that, since access to commercial driveways and side streets had to be maintained the use of temporary barrier wall would have required protective end treatments when placed next to open traffic. And the close proximity between side streets and high frequency of driveways in the area would have made the use of barrier wall difficult and prohibitively expensive. JBCCI makes mention in their position paper that the contract plans include a pay-item for temporary barrier wall (pay-item 102-71-14), and that the pay-item could have been used to shield any drop-off condition created during the roadway reconstruction. This pay-item was included under this contract specifically to protect a possible drop-off condition of approximately 5ft to 6ft created by the pipe excavation in front a building located at approximately station 146+76 and that can only be accessed through Main Street. Sheet 144 of the TCP shows the use of the temporary barrier wall, and the quantity found in the summary of pay-items sheet matches the limits shown on sheet 144. Therefore, the use of this pay-item in any other location should not have been considered by the Contractor and was not considered by the Engineer of Record.

ALTERNATIVE TRAFFIC CONTROL PLAN

JBCCI requested that the Department share the cost of the use of alternate methods to protect the difference in elevations created during construction operations. The Department contends that such changes in methods of construction could have been considered for use by the Contractor but, <u>no</u> additional payment would be due to the Contractor, if they chose to use it, since such methods are within the purview of the Contractor's means and methods. In their letter, the Contractor points out that these methods would enhance the overall safety. Neither the Department nor the Engineer of Record saw any need for enhancement of the methods outlined in the Standard Index 600 which clearly allows for the work to be done without the use of temporary barrier wall.

Although the issue at hand is not the direction given to the Contractor, but that all information necessary was included in the TCP, the Department did respond in time to JBCCI's email correspondence. Email correspondence dated 10-29-09 makes reference to the answer given on October 1st, 2009. In the email sent to JBCCI on October 1st, 2009, the Department indicated that the use of an alternative Traffic Control Plan could be evaluated for use at no extra cost to the Department. JBCCI was allowed to use an alternative TCP after the

Department's review. The alternative TCP used temporary barrier wall instead of temporary barricades/drums to delineate the work zone. This method was found to be ineffective and impractical for this area by JBCCI, who ultimately decided to utilize the original TCP for Phase II of construction. JBCCI continued to utilize the shoulder treatment option of Standard Index 600 (warning devices and utilization of a 1:4 wedge). JBCCI's alternative TCP (using temporary barrier wall) was in place for only 13 days of the 238 days of Phase I and Phase II, before the method was abandoned.

The Department respectfully requests that there is no entitlement to time and/or money for this dispute.

CONTRACTOR'S POSITION

POSITION

J.B. Coxwell Contracting, Inc, (JBCCI), contends that the Department did not address the drop off hazard created by the phased construction of the northern portion of this project between traffic control plans/ maintenance of traffic (herein after referred to as TCP/MOT) phases 1 and 2. JBCCI discussed this matter with the Department on several occasions. Reference is made to the discussions held between JBCCI & the Department at various construction progress meetings and in written format via email dated 9-30-09, 10-1-09, 10-29-09, 10-30-09 (see exhibit 2.1, pages 1 thru 8), and formal letters dated 9-30-09, 10-28-09, and 10-29-09 (see

JBCCI contends that the contract plans do not address the drop off hazard created during construction of Phase 1 and 2 between the new roadway elevations versus the existing roadway elevations. The TCP/MOT typical section for this project (see exhibit 3.1, page 1) directs the contractor to use temporary barricades (Type I, II, or drums – covered under pay item # 0102-74-1) to delineate and separate the work zone from the shifted traffic pattern

during construction of Phase 1 & 2. The use of MOT devices such as Type I,II barricades or drums does not meet the requirements of FDOT Index 600 for the treatment of drop off conditions greater than 3". JBCCI asked the Department to use the existing pay item # 0102-71-14 for temporary barrier wall to eliminate the drop off conditions created during the construction of this project, and our request was denied (see exhibit 2.1, page 2). The TCP/ MOT typical section included in the contract documents for Phase 1 & 2 (see exhibit 3.1, pages 1 and 3), does not identify the drop off condition created during construction. Rather the typical section indicates the roadways (new & existing) to be similar in elevation. It was brought to our attention (by Gainesville Regional Utilities) that late in design for this project, the profile grade for the roadway was lowered. After that change was made, it appears that the TCP/MOT typical sections were not updated to reflect the elevation changes. Reference is made to the written communication between JBCCI & the Department concerning this subject matter dated, 9-30-09 which voiced our concerns for the safety of the traveling public and our workers. To further explain our position to the Department, JBCCI recorded the new roadway template elevations for the phase 1 construction (measured at the top of the structural asphalt minus 1" friction course), and compared the measurements to the elevations recorded at the top of the existing roadway (still under traffic) and developed the table (see exhibit 2.1, page 20). The table depicts the elevation changes anywhere from 3/10 of a foot to 9/10 of a foot along the segment of roadway under construction at that time. The elevations were temporarily treated with 4:1 wedges during the demolition, stabilized sub-grade, and part of the lime rock base construction. However, this drop off treatment (4:1 wedge) encroached into the construction area and prevented JBCCI from constructing the full width of the new roadway (under phase 1) to be built as shown in the TCP/ MOT plans. The roadway to be constructed was wider than the area left available for construction while the drop off hazard correction wedge was in place. This caused JBCCI to remove and replace the wedge every work day, creating the work crews to loose 2 to 3 hours of production each day. JBCCI provided the Department with several options that met FDOT Standard Index 600 requirements for treatment of the drop off hazards created by the elevation changes during construction (see exhibit 2.1, page 18 thru 21).

The Department's response was to place the burden for the treatment solely on the contractor (see exhibit 2.1, page 2), while ignoring the fact that the EOR did not represent the correct information in the contract plans. The next letter correspondence from JBCCI, dated 10-28-09 (see exhibit 2.1, pages 16 & 17) referenced the original letter, as we had not received a written response from the Department on their position or to provide direction as to how we were to proceed in this case. Due to the additional costs being created during this operation, JBCCI felt that it was in the best interest of both parties to investigate further MOT modifications to help eliminate the drop off hazard during the continuance of the construction. After evaluating the potential cost impacts, JBCCI suggested installing water filled barrier wall that met FDOT Standard Index 600 requirements, and would potentially reduce the cost impact to JBCCI during the construction by eliminating the need to install, remove, and replace the earthen wedge along the Phase 1 & 2 corridor. The Department allowed JBCCI to use the water filled barrier wall as a treatment option, and approved an alternate traffic control plan (see exhibit 4.1, page 1 thru 12). JBCCI requested additional compensation and contract time in accordance with FDOT standard specifications 5-12 (claim for extra work) for the alternate TCP design and reimbursement for the water filled barrier wall rental/ handling, in our letter dated October 29, 2009 (see exhibit 2.1, page 4).

This project has a lump sum MOT pay item # 0102-1 in this contract, which states that the contractor should include the costs of any work that is necessary to meet the requirements of the Contract Documents under the MOT pay item, when there is not a pay item provided. Since there were items associated with the MOT devices & temporary barrier wall (0102-71-14, and 0102-74-1) included in this contract, JBCCI did not included additional devices in our lump sum MOT item for this project. Adding additional MOT devices not shown in the Department's TCP/MOT plan would have made our bid non-competitive.

CONCLUSION

The traffic control plans, and or the general plan notes should have identified the potential drop off hazard during construction. The Department's Plans Preparation Manual (PPM),

Chapter 4- 4.2.2 (Exhibit 5.1, page 1), Chapter 10- 10.3.1.1.1 (Exhibit 5.1, page 2), Chapter 19 (Exhibit 5.1, pages 1 thru 6) requires the EOR to identify such drop off hazards, and describe the treatment method to be used during construction. Chapter 19 of the PPM describes the level of detail to be provided in the temporary traffic control plan, when you have a drop off issue, and in our opinion this requirement was not met. Anytime there is a drop off hazard of the magnitude as we had on this project (3/10 to 9/10 of a foot), there are typically temporary barriers (temporary barrier wall) used to prevent injury to the traveling public and construction workers. Due to the restricted work area and conditions with the existing right of way, JBCCI could not make other concessions to shift traffic further and reduce the drop off hazard (see exhibit 6.1, page 1). JBCCI tried to partner with the Department on this issue very early on in the process; however we were met with resistance and left to handle the issue on our own. Thus, we feel that the Department should reimburse JBCCI for the unforeseen extra work we have incurred while treating the drop off hazard during construction. JBCCI asks the regional disputes review board to assign entitlement for this issue to the contractor, which will allow us to negotiate fair and equitable compensation as well as additional contract time for the work performed under the drop off hazard conditions created by the construction.

A contractor prepares their bid for a project considering the information provided by the owner, more specifically the plans and specifications provided at the time of bid. In this case, the contract plans do not indicate there may be or will be an issue with drop-offs in excess of 3" during construction. Therefore no additional measures were included in our bid. Requiring a contractor to cover "what if" scenarios as discussed in the Department's position paper would cause contractors to add unnecessary monies to their bids, and in turn make the bids non-competitive. We can only prepare our estimate in accordance with the plans and specifications provided at the time of bid.

BOARD FINDINGS

The EOR attended the Hearing and made the point that he followed the requirements of the Plans Preparation Manual. He considered barrier wall but had "line of sight" problems. The Contractor is an experienced FDOT contractor and is well aware that he has to "Bid the Plans". The fact that he did not like the TCP is irrelevant there is typically more than one approach to traffic control that meets with the FDOT standards. The TCP was used by the contractor and the project was able to proceed. He could have filed an alternate TCP signed and sealed by a specialty engineer using low profile barrier wall that would not have "line of sight" problems. When the EOR was asked by the Board if this would have been a viable solution, he agreed, and said he did not think of it.

The traffic control plan in the bid set of plans was an acceptable solution to provide access and control traffic and pedestrian safety.

RECOMMENDATION

The Board recommends that there is no entitlement to time and/or money. The Board appreciates the time and effort of the FDOT and J.B.Coxwell Contracting, Inc. in the preparation of the documentation and their presentations.

Signed with concurrence of the entire Board.

Peter A. Markham, PE

Chairman