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Taylor Davis Project Manager Anderson Columbia Company, Inc. 1301-C Highway 90 West Holt, Florida 32564

Michael Lenga Project Administrator Hatch Mott MacDonald, Inc. 4974 Highway 87 South Milton, Florida 32583

Re: DRB Hearing FIN No. 220402-1-52-01 S.R. 87 from S.R. 30 Santa Rosa County

### Dear Sirs:

The Contractor, on behalf of his Sub-Contractor, Highway Safety Devices, Inc.; requested a hearing regarding the necessary placement of Guardrail Pedestrian Safety Treatment Pipe Rail on a section of Guardrail. Position papers were forwarded to the DRB Members and a hearing was held on November 11, 2004.

## CONTRACTORS POSITION:

Highway Safety Devices, Inc. (HSD) believes that the Florida Department of Transportation (FDOT) and its Designer erred in the compilation of the Contract Documents for this project. This error led to an unclear set of Plans.

It is the Department's responsibility to provide Contract documents that clearly portray the entire scope of work. In this case, the Department failed to provide that clarity.

The Contract Documents fail to provide clear direction that the guardrail pedestrian safety treatment pipe rail (safety pipe rail) will be required on this project. As such, HSD has submitted pricing for the installation of the safety pipe rail and we request that the FDOT issue a Change Order providing additional compensation for this extra work.

The issue revolves around a run of guardrail from station 149+3 to station 152+16, as depicted on plans sheet 103 and 104.

HSD mobilized to the project and installed this particular run of guardrail as detailed in the plan sheets. However, after HSD's installation of this guardrail Hatch Mott MacDonald (HMM) requested that a

Guardrail Pedestrian Safety Treatment Pipe Rail (safety pipe rail) be installed due to the guardrail's close proximity to the concrete sidewalk. HSD notified Anderson and HMM that since the Designer had failed to show the safety pipe rail in the plans, our pricing for guardrail installation did not include the safety pipe rail. HMM has refused to authorize additional payment for the work.

HSD maintains that the contract Documents for this project do not demonstrate that safety pipe rail would be required at this run of guardrail. Upon review of the Contract Documents, you will note there are no plan notes, general notes, or pay item notes specifying a need for a safety pipe rail. Nor do the typical roadway cross-sections or the actual roadway cross sections depict guardrail with safety pipe rail attached to it. There is also no mention of the need for safety pipe rail in the Summary of Guardrail Table.

If the Designer intended that the Contractor install the safety pipe rail, why did he fail to depict his intent in the plans? Why keep it a secret and force the Contractor to make assumptions?

It is a Designer's responsibility to clearly demonstrate his intent and all requirements of his design. This provides the level playing field at bid time that all Contractors, Designers, and the FDOT strive to achieve. It eliminates guesses and assumptions. The Designer for this project could have achieved that level playing field by utilizing any of several simple methods to portray the need for the safety pipe rail.

The Designer for this project failed to utilize any of the methods during his plan preparations. Now, HMM is demanding that HSD install the pipe safety rail without compensation. IT IS UNFAIR TO ASK THAT HSD BE RESPONSIBLE FOR A DESIGN ERROR.

Mr. Jim Mills of the FDOT's Design office confirmed that it is the FDOT Design office's position that if safety pipe rail is required on a run of guardrail, IT MUST BE SHOWN IN THE PLANS by using plan notes, pay item notes, or in the Summary of Guardrail Table. It should not be left up to a Contractor to guess.

The FDOT's Plans Preparation Manual clearly directs Designers to include safety pipe rail quantities in the Summary of Guardrail Table. The FDOT's Plans Preparation Manual provides clear direction to the Designer that "When a Pedestrian Safety Treatment, and/or Rub Rail is to be provided for a run of guardrail, the beginning and end station is to be noted in the Summary of Guardrail above. Otherwise, these columns may be deleted". The Summary of Guardrail table for this project fails to list any Pedestrian Safety Treatment quantities.

HSD has shown proof that the project design omitted any reference to the requirement of safety pipe rail from the Plans. Further, we have shown that by omitting the safety pipe rail quantities from the Summary of Guardrail Table, the Designer failed to follow the FDOT's Plans Preparation Manual. HSD also provided examples of methods utilized by other Designers to clearly portray the safety pipe rail. This sets the precedence that the FDOT and bidding Contractors can expect that Designers will show pipe safety rail on the plans.

### DEPARTMENT POSITION:

# HATCH MOTT MACDONALD PRESENTED THE DEPARTMENT'S POSITION.

Article 5-2 of the 2000 STANDARD SPECIFICATIONS for ROAD AND BRIDGE CONSTRUCTION states that the plans are integral to the Contract. The 2000 ROADWAY and TRAFFIC DESIGN STANDARDS are the governing Standards for the above referenced project, as identified on the Project Plans Key Sheet. Index 400, sheet 16 of 31 of the 2000 ROADWAY and TRAFFIC DESIGN STANDARDS clearly identifies that Special Safety Pipe Rail is "required on steel guardrail posts when pedestrian ways and bike ways are located 1.2 meters or less from the back of the posts." Further, "the cost for the pipe rail, mounting components, and the installation is included in the contract unit price for the guardrail." Sub-article 536-7.1 Guardrail of the 2000 STANDARD SPECIFICATIONS FOR ROAD and BRIDGE CONSTRUCTION states, "all components of the complete guardrail installation will be included in the price per meter...".

Sheets 103 and 104, of the Project Plans, clearly identify the location of the new guardrail, type F curb & gutter, miscellaneous asphalt, and the aluminum handrail. The Cross-Section sheets 313, 314, 315 and 316, 317, 318, and 319, clearly identify the location of the guardrail and the location of the sidewalk (edge of sidewalk is less than 1 meter from the back of the guardrail posts). Typical Section, sheet 11 of the Contract Plans, further indicates that the sidewalk is located .9 meters from the back of the curb.

Our position is that the cost of the Special Safety Pipe Rail is incidental to the guardrail and that there is no entitlement to additional compensation.

The Plans Preparation Manual was revised after this Project was designed to require the Pedestrian Safety Treatment to be shown in the Summary of Guardrail. Therefore, it does not apply to this project.

#### BOARD FINDINGS:

The Plans typical Section, summary of quantities, cross-sections, or profile sheets did not show the Special Safety Pipe Rail. The 2000 Roadway and Traffic Design Standards Index 400 sheet 16 of 31 does show where Special Safety Pipe Rail is required on all FDOT Projects.

The Plans do not show a direct measurement from Guardrail to Sidewalk, but this measurement can be determined from overall measurements on typical Sections and using Profile Sheets 103 and 104.

The FDOT Plans Preparation Manual in use in 2000 did not have a note concerning a summary for Pedestrian Safety Treatment. The newer updated Manual does have the note. But in 2000, not showing the note in the summary did not constitute a plan error.

The 2000 Roadway and Traffic Design Standards are included with the plans and 2000 Specifications as governing documents for Design and Construction of this Project. The same index sheet that defines the location requirement for the safety treatment of the post option selected for locations used by pedestrians and cyclists.

## BOARD RECOMMENDATION:

The Board finds that there was sufficient information available to an experienced Contractor to ascertain the need for safety Rail Protection due to the location of the sidewalk in relation to the guardrail.

The Board recommends that there is No Entitlement due the Contractor on the Safety Rail Protection issue.

The Board sincerely appreciates the co-operation of all parties and the information presented for its review in making this recommendation.

Please remember that a response to DRB and the other party of your acceptance or rejection of this recommendation is required within fifteen (15) days. Failure to respond constitutes your acceptance of this recommendation.

Signed for and with the concurrence of all Members.

Sincerely yours,

Jimmy Lairscey Chairman

cc: Glen Ivey Tom Shafer