# DISPUTE REVIEW BOARD RECOMMENDATION December 8, 2017

# I-75 WIDENING (SR 93) FROM SOUTH OF CR 470 TO SOUTH OF FLORIDA TURNPIKE SUMTER COUNTY, FLORIDA FDOT CONTRACT NO. E5W11 FIN PROJECT No. 242626-3-52-01

#### INTRODUCTION:

D.A.B. Constructors, Inc. (D.A.B.) is the Design-Build Firm for the Florida Department of Transportation's (FDOT) (Department) I-75 Widening project from South of CR 470 to South of Florida Turnpike in Sumter County, Florida (Project). Inwood Engineering is the Engineer of Record (EOR) for the Design-Build Firm.

The Department awarded the low bid Design-Build Project to D.A.B. on December 15, 2014, and the Contract was executed on January 29, 2015. The Notice to Proceed (NTP) was dated February 26, 2015. The requirements of the Contract included the adoption of the 2014 Edition of the Department's Standard Specifications and the 2014 Edition of the Design Standards, as amended by Contract Documents. The Department's Request for Proposal (RFP) included an initial Pavement Design Report dated in 2007 which was updated in 2010.

During the review process of the 90% roadway plans for the Project, the Department noted D.A.B. had incorporated into its asphalt pavement evaluation an interim milling and resurfacing project which was done in 2011. The 90% roadway design plans submitted only required the milling of the asphalt friction course on the existing roadway from Sta. 812+00 to Sta. 1095+00, with the one exception area from Sta. 920+00 to Sta. 923+00, and replacing and applying the friction course over the existing lanes and the added lanes.

The Department met with the Design-Build Firm and directed it to revise its pavement design and comply with the Department's understanding of the RFP pavement design report requirements (the Pavement Design Reports' Recommended Milling and Resurfacing Pavement designs). The Design-Build Firm revised its roadway design plans in accordance with the Department's direction.

D.A.B. filed a Notice of Intent (NOI), dated May 26, 2015, for additional compensation for additional work resulting from the Department's direction. The Department acknowledged receipt of the NOI on May 29, 2015, and in a follow up response dated June 11, 2015, denied entitlement for monetary compensation and additional time.

In accordance with D.A.B.'s request, on July 9, 2015, the issue was escalated to District 5 Design Engineer, Annette Brennen. Ms. Brennan's decision to uphold the Department's position that no additional compensation or time was warranted was conveyed to D.A.B. on July 17, 2015.

On September 11, 2015, in accordance with D.A.B.'s request, an escalation meeting was held with District 5's Director of Transportation Operations, Alan Hyman. Mr. Hyman upheld the original denial by the Department.

On October 30, 2015, an escalation meeting was held with Noranne Downs, District 5 Secretary of Transportation. Ms Downs noted she did not see any entitlement based on the documents provided and the arguments discussed in the meeting. However, she did direct her staff to refer the issue to the Project's Dispute Review Board (DRB) to address entitlement due to the complexity of the issues.

D.A.B. escalated the issue to the State Secretary of the Department of Transportation, Mr. Buckholz, with a meeting with Mr. Buckholz taking place on December 14, 2015. Mr. Buckholz upheld all previous decisions by the Department.

On June 22, 2017, there was an agreement by D.A.B. and the Department to move the issue forward to a Dispute Review Board (DRB) hearing for a recommendation of entitlement.

Via a letter to the DRB, dated October 6, 2017, D.A.B. requested that the DRB commence DRB hearing proceedings for entitlement of the following dispute:

"The Contractor maintains that the Department failed to clearly state its intent for a desired pavement structure in the referenced contract due to misleading and ambiguous contract documents which ultimately govern the pavement design for the project. Is the Contractor entitled to additional compensation for additional work resulting from the Department's subsequent clarification of its desired pavement structure instead of another pavement structure which adheres to the pavement design for the referenced project?"

The DRB hearing was held on November 27, 2017, at the Department's Leesburg, Florida Operations Office. Those in attendance on behalf of D.A.B and the Department were:

## For D.A.B:

Foster Bachschmidt – D.A.B. Constructors, Inc.; Vice President William Gelner – D.A.B. Constructors, Inc.; Project Manager David Nyenhuis – D.A.B. Constructors, Inc.; Operations

# For the Department:

Eric Jaggers – FDOT; Construction Project Manager
Philip Maggio – FDOT; Operations Engineer
Brett Pielstick– Eisman & Russo Consulting Engineers; Senior Project Engineer
Elie Assi – Eisman & Russo Consulting Engineers; Project Administrator

# POSITIONS OF THE PARTIES:

### D.A.B. POSITIONS AND REBUTTAL

- The Department's RFP contained several areas where the intent of the RFP is unclear and ambiguous.
- It is the Department's duty to ensure that the RFP, its Attachments, and Reference Documents are free of erroneous errors, ambiguity, and contradiction.
- The Department's intent to impose the Recommended Milling and Resurfacing Pavement Design, rather than the Structural Number Required, strays from the requirements of the RFP and its supporting documents.
- D.A.B and its engineering team analyzed the RFP and its supporting documents which resulted in their conclusions that are not aligned with the Department's intent which only became clear after the Project had begun.
- The Department relied on an outdated and ill-suited attachment to clarify the RFP's intent for the pavement design rather than providing a more direct, clear, and concise description of the desired pavement design.
- By including the Department's own pavement design manuals as a requirement for design work on the Project, the Department intended for the Engineer to maintain responsibility for assuring the pavement design would meet the requirements of the Project.

- Five (5) excerpts from the RFP, when combined, show that the Department intended for the Design-Build Firm to maintain design responsibility for the Project, including producing the construction plans and all designs necessary to meet the intent of the RFP. The five (5) excerpts are:
  - 1. Page 1 of the RFP states that Pavement Design Reports may not be changed by the Design-Build Firm. The Department, however, failed to list the Pavement Design Report Update as a requirement that may not be changed.
  - 2. Page 4 of the RFP states the Design-Build Firm must examine the Contract Documents and site work to determine the character, quality, and quantity of work to be performed and materials to be furnished as to the requirements of all Contract Documents.
  - 3. Page 10 of the RFP requires that the following Department manuals be followed when preparing the design for the Project:
    - (1) Department Flexible Pavement Coring and Evaluation Procedure
    - (2) Department Flexible Pavement Design Manual
    - (3) Department Pavement Type Selection Manual
  - 4. Page 19 of the RFP states that the Design-Build Firm shall be responsible for the verification of existing conditions, including research of all existing Department records and other information.
  - 5. Page 35 of the RFP states that the Design-Build Firm shall submit to the Department design documentation, notes, calculation, and computations to document the design conclusions reached during the development of the construction plans.
- By including Department design manuals relevant to pavement design, the Department misled D.A.B.'s engineering team to believe that the Design-Build Firm would be responsible for providing an acceptable pavement design for the Project.
- If the Department intended for the pavement design to remain unchanged, it is irrational for the Department to provide the Department's Flexible Pavement Design Manual, Pavement Type Selection Manual, and Flexible Pavement Coring and Evaluation Procedure as governing documents for the design of the Project. Those documents should not have been included by reference in the RFP if the Department's intent was for the pavement design to remain unchanged.
- It is clear that the Design-Build Firm is to assume responsibility for the existing conditions in all scenarios, to the extent they can be reasonably known to the Design-Build Firm including extensive analysis of the existing pavement condition and knowledge of recently completed work within the corridor. If the existing pavement condition proved to be defective, it would surely be the Design-Build Firm's responsibility to have accounted for this condition in its proposal for the Project.

- The RFP contains many restrictions and explanations for the work to be completed, but not for the pavement design. Instead, the Department simply referenced a document attached to the RFP and stated the document may not be changed.
- By not clearly stating the intent for Pavement design, the Department provided ambiguous direction to the Design-Build Firms which ultimately caused D.A.B.'s alternate interpretation of the Department's intent for Pavement Design.
- The Department cites the Pavement Design Report as the single document which conveys its intent regarding the pavement design for the Project. The Pavement Design report is a design reference document developed for use on design-build projects.
- The RFP utilizes the Pavement Design Report, without modification, to specify the pavement design on the Project. The Pavement Design Report is ill suited for the task.
- Ambiguity exists within the Pavement Design Report in addition to the ambiguity which exists within the RFP.
- Two specific items of the Pavement Design Report are the primary reason for the dispute between D.A.B and the Department: (a) the Structural Number (SN) Required, and (b) the Recommended Milling and Resurfacing Pavement Design.
- D.A.B. maintains the SN Required is precedent to the Recommended Milling and Resurfacing Pavement Design, and as such, is the requirement that must be adhered to as a requirement of the Contract. The Department disagrees and has stated that the pavement structure must include the Recommended Milling and Resurfacing Pavement Design. It is reasonable for a reader to reach either conclusion from a cursory review, but after careful analysis of the entire set of Contract Documents, it is clear that only the SN Required can be considered as a governing contractual requirement.
- In the Pavement Design Report Flexible Pavement Design Summary Sheet, the area for SN Computed is left blank for the areas of intended milling and resurfacing, further implying that the pavement design is subject to further calculation.
- If the Department had written the RFP to restrict the Design-Build F Pavement Design Reports include Recommended Milling and Resurfacing Pavement designs irm from altering the pavement design, instead of restricting changes to the Pavement Design Report, no ambiguity would exist and neither would this dispute.
- The pavement design proposed in the Early Works package plan submittal meets all requirements of the Pavement Design reports attached to the RFP and included within the Contract Documents, but it is not the same as the Recommended Milling and Resurfacing Pavement Design which the Department intended to be utilized on the Project.

- Had the Department provided a SN Computed for the areas of milling and resurfacing, the intent
  for the ultimate pavement design might have been clearer. The omission further increases the
  ambiguity that is prevalent throughout the RFP.
- In response to Bid Question #8396, the Department's answer directs the Design-Build Firm to assume the risk of the existing pavement condition which would directly affect the SN of any pavement design proposed in the construction plans. The Design-Build Firm took the answer to mean that it shall not be at risk for completing an update to the Pavement Design Report, but that any pavement design must comply with the SN Required by the attached Pavement Design Report. The bid question shows the Department's intent was unclear at best.
- The Department failed to clarify the intent of its requirement for the Design-Build Firm to adhere to the Pavement Design Report.
- It is unclear why the Department chose to leave the Pavement Design Report un-updated. Had the Department chosen to update the Pavement Design Report to reflect the current pavement condition, perhaps the ambiguity could have been lessened, as the existing pavement condition would be more clearly known.
- The language on the Flexible Pavement Design Summary Sheet is misleading and required supplemental information to convey the Department's actual intent for the pavement design on this Project. By allowing the language on the Flexible Pavement Design Summary Sheet to go unchanged and un-clarified, the Department misrepresented its intent for the pavement design on the Project.
- The Department's requirement for the Design-Build Firm to adhere to the Recommended portion of the summary sheet is at best arbitrary. The summary sheet included conditions that are both Required and Recommended and it is only reasonable that the Required portion of the document would govern.
- The Pavement Design Report attached to the RFP is commonly used by the Department for the design of all projects and is created to serve conventional procurement methods such as design-bid-build. The report was not created to serve as a specification or contract clause defining the scope of work on a design-build project, which is one reason why the wording of the Flexible Pavement Design Summary Sheet is ambiguous.
- As a design-build procurement document, the Pavement Design Report must be taken literally as informal clarification. Questioning is not permitted during the procurement process.
- The Department could have provided accurate and up-to-date information in the Pavement Design Report, as it is required to do so per Statute, but failed to do so in this instance.

- The Department made no effort to clarify or modify the Pavement Design Report for use as a
  Contract Document; it chose instead to rely on the Design-Build Firm's experience and
  knowledge as a means for clarification. This ideology violates the Superior Knowledge Doctrine
  as it allows the Department to take advantage of a Design-Build Firm that is new or
  inexperienced.
- The Department's clarification of the Contract Documents has required D.A.B. to perform extensive milling and resurfacing throughout the Project that was not contemplated in D.A.B.'s proposal for the Project.
- Based upon the legal premise established in Spearin v. United States, D.A.B. is entitled to
  additional compensation for its costs for extensive milling and resurfacing throughout the Project
  incurred due to the Department's clarification of the ambiguity in the Contract Documents.
- At the time of bid, D.A.B. and its design team remained unaware that its interpretation of the Contract Documents did not align with the Department's intent. If any doubt existed, D.A.B would have asked a bid question or sought further information.
- The Department chose to rely on an outdated design document to convey a significant portion of the scope of work for the Project.
- The Contract Documents must be written such that superior knowledge and understanding is not required in order to submit a responsible bid.
- The Department has a responsibility to convey its intent clearly and without room for alternate interpretation.
- The Department's analysis of the engineering requirements of the Pavement Design Report are self-serving and not in good faith. The Department omitted the word "Recommended" in the title of the Recommended Milling and Resurfacing Pavement Design.
- The Department's analysis of the Structural Number provided by D.A.B.'s pavement design is self-serving. D.A.B. took the answer to Bid Question 8396 (Pavement Design Report shall not be updated) to mean that the Department considered the condition of the existing pavement (beneath the 2011 milling and resurfacing work) to remain unchanged since the development of the report. As such, when the Pavement Design Report's pavement condition is utilized (and it must remain unchanged) the Structural Number provided in D.A.B.'s design is adequate and fulfilling of all pavement design criteria specified in the Pavement Design Report.
- The engineering behind the pavement design is not at question before the DRB. The question before the Board is one of contractual circumstance.

- It is clear that the Pavement Design Report was woefully outdated. It is only reasonable to assume that the engineering calculations, which are based in the laws of mathematics, would not be outdated. Other empirical conditions, relative to the selection of the pavement materials, would have changed and were open to the use of engineering judgment as a condition of the RFP.
- The Department knew that the 2011 milling and resurfacing was simply to act as a patch, yet that information was not contained in the RFP.
- The RFP and governing Contract Documents were ambiguous as to the Department's intent for the pavement design for the Project.
- The Department should have provided updated and current information to the fullest extent possible.
- The Department relied on outdated information to relay its intent for the proposed pavement design.
- If the DRB considers D.A.B.'s interpretations to be reasonable and prudent, it must find entitlement for D.A.B. in this dispute.
- The following provided guidance regarding the required Pavement Design: (1) RFP, (2) December 2007 Pavement Design Report, (3) August 2010 Pavement Design Report Update, (4) Addenda to RFP, and (5) the Department's various design manuals.
- The RFP: (1) requires the Pavement Design Report not be changed, (2) incorporates all applicable Department Pavement Design Manuals, (3) does not directly define the Pavement Design for the Project, and (4) requires all subsequent Addenda to be incorporated into the proposal.
- The Pavement Design Report: (1) defines the Pavement Design for the Project, (2) analyzed traffic volumes, pavement structure loads, design parameters, and existing pavement conditions, (3) was not updated to reflect the existing pavement condition after the 2011/2012 milling and resurfacing, and (4) is not used exclusively to define construction or design parameters for a specific project.
- Department Pavement Design Manuals: (1) are generic documents intended to guide the design of pavements on a specific project, (2) do not provide project specific pavement designs, (3) must be followed when developing a pavement design for any project.
- Addendum #6 modified the pavement design for the Project, but did not alter the Pavement Design Report, only the pavement design.
- D.A.B. assumed liability for the existing pavement condition.

- The Pavement Design Report only defines criteria.
- Improved existing conditions could be leveraged to provide better value to the Department while still meeting pavement design criteria.
- The Pavement Design Report only "recommended" the proposed Milling & Resurfacing Pavement Design.
- A change to the pavement design does not require a change to the Pavement Design Report.
- The Department's interpretation of the Contract's requirements is reasonable and prudent as is D.A.B.'s interpretation. The Department's interpretation need not be wrong for entitlement to be established for D.A.B.
- The Contract's requirements were arbitrary and ambiguous.
- At the time of bid, D.A.B did not have information that the 2011/2012 milling and resurfacing
  work did not fix cracks noted by the 2007 Pavement Design Report and 2010 Updated Pavement
  Design Report.

# DEPARTMENT'S POSITIONS AND REBUTTAL

- The Contract Documents clearly and unambiguously defined the scope of work and that the Design-Build Team was contractually obligated to provide the specified Milling and Resurfacing as shown in the Pavement Design Report for the contract bid amount.
- The Design-Build Firm's Technical Proposal did not include any specifics regarding its design intent at that time.
- The RFP and supporting Contract Documents provide clear and unambiguous direction to all bidders on the scope of milling and resurfacing work.
- The incorporation into the Contract of the Pavement Design Report (December 2007) and the Pavement Design Report Update (2010) shows the Department's intent to utilize them as given and demonstrates that the Department was aware of the date of issuance of those reports.
- The RFP clearly states, with the understanding of the defined dates of the Pavement Design Reports, that they are to be incorporated into the Contract and are considered "Integra et plena" and should be used as a whole, unbroken, intact, not to be changed.

- The Design-Build Firm did not submit a question related to the Pavement Design Report per RFP requirements.
- The Department's response to Bid Question #8396 clearly addresses the requirement that the Pavement Design Report was not to be updated in the areas impacted by the 2011 milling and resurfacing project. The Department without ambiguity acknowledged the work done in 2011, but continued to state that the Project should be rehabilitated per the Pavement Design Report attached to the RFP Documents. That rehabilitation clearly points to the scope of work in the milling and resurfacing noted in the Report.
- In the governing order of documents, the Special Provisions, and by extension the bid question responses, become one of the highest requirements of the Contract.
- If D.A.B. thought there were problems with the Pavement Design Report, it should have sought clarification through the procedures provided in the RFP. Through the Design-Build process, the Department provided the Design-Build Firm multiple contractual avenues to seek clarification or provide an Alternate Change Proposals (ATC's) to the Department prior to bid. The Design-Build Firm failed to exercise any of those opportunities.
- The Design-Build Firm did not disclose to the Department its intended changes to the Pavement Design Reports.
- The Department expressed its intent to utilize the existing Pavement Design Reports in the RFP.
- The requirement that the Design-Build Firms were not to change the Pavement Design Reports was clearly defined in the Contract.
- The pavement design had to be submitted and approved by the Department in order to become valid. That avenue was not exercised by D.A.B.
- The Design-Build Firm is contractually obligated to disclose any perceived errors and omissions.
- The Department provided enough information and clear direction through the contract documents that a prudent bidder could gain enough knowledge to measure its risk and provide an informed bid for the Project.
- The Department considers D.A.B an experienced and sophisticated contractor with an intimate knowledge of contract documents and the process of preparing bids and executing contracts.
- The RFP amendments that were provided are part of the normal Design-Build process with some of the specific modifications based on questions supplied by other bidders.

- The Early Works package and the 90% roadway design submitted utilized the Concept Plans as the basis for design. The only change appeared to be related to the asphalt in the areas noted. The D/B Team demonstrated the sophistication and superior knowledge to review and utilize pertinent documents included in the RFP in the design process.
- Per the RFP, the Approved Pavement Design was attached to the RFP and was to be fully incorporated and not to be changed.
- The Pavement Design Report, dated 2007, is still the Approved Pavement Design.
- D.A.B.'s statement that the Pavement Design Report as a reference document is not correct. The report was an attachment to be incorporated into the Project by the defined hierarchy of the RFP.
- There is no direction or allowance that would lead bidders to arbitrarily follow only the Structural Number of the Pavement Design Report.
- The Department is not in agreement that the plan submitted met all the requirements of the Pavement Design Reports. When proper adjustment to the quality of the existing asphalt to realistically account for the age, wear and tear, is made, the Structural Number is not met.
- The D.A.B team's unilateral decision to implement only the Structural Number from the Pavement Design Report occurred during the bidding process when there were ample opportunities and venues available to D.A.B. to remove any ambiguity or correct any alleged erroneous errors.
- D.A.B holds the responsibility for the decision it made outside the contract documents during the bidding process.
- The Roadway Conceptual Design Plans and the I-75 Existing Plans were provided with the RFP for reference only and were not incorporated into and were not made part of the RFP, the Contract Documents, or any other document that is considered related to the Project except as otherwise specifically stated therein.

### **DRB ANALYSIS:**

The basis of the dispute is whether the rehabilitation (milling and resurfacing) between Sta. 812 and Sta. 1140 was required to be in accordance with the "Recommended Milling and Resurfacing Pavement Design" noted in the Pavement Design Reports provided in the RFP attached documents, which is the Department's position. Or instead, could the rehabilitation be in accordance another pavement design developed by D.A.B. which adhered to the pavement design indicated in the Pavement Design Reports provided in the RFP attached documents, but was different than the reports' "Recommended Milling and Reconstruction Pavement Design", which is D.A.B's position.

D.A.B. contends that both the Department's and D.A.B.'s interpretations of the Contract's requirements regarding this issue, although contrary to one another, are both reasonable and prudent. Thus, D.A.B. contends, the Contract's requirements regarding this issue are ambiguous and the Department's direction to D.A.B. to adhere to the Department's interpretation is arbitrary.

The Department contends the Contract's requirements regarding this issue are clear and unambiguously defined and that D.A.B. was contractually obligated to provide milling and resurfacing in accordance with the "Recommended Milling and Resurfacing Pavement Design" included in the Pavement Design Reports provided in the RFP attached documents.

The Pavement Design Report (December 2007), prepared by URS, and the Pavement Design Report Update (August 2010), prepared by URS, which addressed revised traffic volumes on CR 470, CR 475, and CR 470 interchange ramps, were attachments to the RFP and were incorporated into and made part of the RFP as though fully set forth therein. In accordance with the RFP, the Pavement Design Reports were not to be changed by the Design-Build Firms. The Pavement Design Reports analyzed traffic volumes, pavement structure loads, design parameters, and existing pavement condition at the time of the reports. The reports indicated extensive milling and resurfacing required between Sta. 812 and Sta. 1140. Milling and resurfacing work was performed in that area in 2011/2012, however, the Pavement Design Reports did not reflect the existing pavement conditions after the 2011/2012 milling and resurfacing work was performed.

The RFP also incorporated all applicable Department Pavement Design Manuals.

The Conceptual Design Plans – Roadway, I-75 Existing Plans, and a set of milling and resurfacing plans from 2011 for the area between Sta. 812 and Sta. 1140, were reference documents provided with the RFP for reference and general information only and were not incorporated into and were not made part of the RFP. None of the information contained in those documents was to be construed as a representation of any field condition or any statement of facts which D.A.B. could rely upon in performance of the Contract.

Prior to the bid, one bidder asked, via Bid Question #8396, "Should the Pavement Design Report be updated for stations impacted by the 2011 milling and resurfacing work, or should we plan on doing this work again?" The Department's response was; "The Pavement Design Report shall not be updated for the stations impacted by the 2011 milling and resurfacing work. The limits of the 2011 milling and resurfacing project shall be rehabilitated as indicated in the Pavement Design Report provided in the RFP attachment documents." The bid question and response was a part of the Contract.

Both D.A.B. and the Department acknowledged the URS prepared Pavement Design Reports provided in the RFP attached documents were not to be updated.

The response to Bid Question #8396 states the limits of the 2011 milling and resurfacing project was to be rehabilitated. Both the Department and D.A.B. acknowledge that rehabilitation was to be done within the limits of the 2011 milling and resurfacing work. The disagreement, however, is based upon what is the rehabilitation "indicated" in the Pavement Design Reports provided in the RFP attachment documents.

The Pavement Design Reports include Recommended Milling and Resurfacing Pavement designs prepared by URS. The response to Bid Question #8396 does not specify that the Pavement Design Reports' Recommended Milling and Resurfacing Pavement designs prepared by URS are the only designs that provide rehabilitation "indicated" in the Pavement Design Reports.

The Pavement Design Reports "indicated" a minimum Required Structural Number (SN) and other factors required for the design such as ESAL's, pavement survey and evaluation reports, etc. Thus, rehabilitation milling and resurfacing pavement designs that utilized the Pavement Design Reports' "indicated" factors and that were in conformance with the requirements of the Department's Pavement Design Manuals would be in conformance with the response of Bid Question # 8396 even if those designs were not the same as the Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs prepared by URS and provided in the RFP attached documents.

Even though it may have been the intent of the Department that the Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs provided in the RFP attached documents to be the sole and only designs to be utilized by D.A.B. for the rehabilitation work to be done within the limits of the 2011 milling and resurfacing work, that was not clearly and unambiguously defined by the Department to the bidders prior to the Project bid date. The use of the word "indicated" in the response to bid Question #8396 does not single out the Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs from other designs that may result from other information "indicated" in the Pavement Design Reports.

D.A.B. was to consider and utilize the information included in the Pavement Design Reports, but D.A.B. was not bound to fully adopt the Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs. D.A.B., however, was not relieved of the responsibility to provide a design that provided rehabilitation in accordance with the required factors indicated by Pavement Design Reports and which would be in accordance with the requirements of all of the applicable Department Pavement Design Manuals.

Section 3.5 of the Department's Pavement Design Manual states that a complete pavement design package, as part of the design criteria for Design/Build projects, may be provided by the Department if sufficient data is available and that if the pavement design is not provided by the Department, project specific pavement design criteria should be provided as part of the Request for Proposal/Design Criteria Package to assure a reasonable pavement design is provided by all competing Design/Build teams.

Even though the Department may have provided a complete "recommended" pavement design in the RFP, the Department did not specify that the "recommended" design was the sole and only design that could be utilized by the Design-Build Firm.

Section 3.5 also states the project specific pavement design criteria may include the minimum ESALs, minimum design reliability, roadbed resilient modulus, minimum structural asphalt thickness and whether or not modified asphalt binder should be used in the structural layer(s). For resurfacing designs, a minimum milling depth and whether a crack relief layer is required may be included in the criteria. The Pavement Evaluation Coring and Condition Data will normally be provided with the criteria. In addition to project specific criteria, all standard requirements of the Department's pavement design manuals are to be followed.

Section 7.4.3 of the Department's Pavement Design Manual states the designer should not be satisfied with simply providing an adequate structural number, but should also consider other factors including, for example, an unstable lower layer that has repeatedly contributed to rutting in the past, and by studying the pavement history, the problem could be identified and evaluated and a deeper milling depth set.

#### **DRB RECOMMENDATION:**

This DRB recommendation is based upon the Contract, information presented to the DRB by both parties in their position papers and rebuttals, testimony presented at the DRB hearing, and the DRB's analysis of that information. This recommendation is a unanimous recommendation of the DRB members: Matthew L. Michalak, DRB Chairman, Dr. Ralph D. Ellis, Jr., P.E, DRB Member, and Patrick McCann, DRB Member.

The DRB recommends that D.A.B. is entitled to additional compensation for additional work, in accordance with applicable Contract provisions, which resulted from the Department's subsequent clarification of its desired pavement structure (Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs) instead of another pavement structure design by D.A.B. which provides rehabilitation in accordance with applicable design related factors indicated in the Pavement Design Reports, (not solely the Pavement Design Reports' Recommended Milling and Resurfacing Pavement Designs), and which is in accordance with the requirements of all of the applicable Department Pavement Design Manuals. This recommendation for entitlement to additional compensation is conditioned on D.A.B. providing such a pavement structure design.

The DRB has not been asked to nor has it performed an analysis or made a determination of whether or not D.A.B's 90% design, or if any design, provided rehabilitation in accordance with factors indicated by the Pavement Design Reports and which is in accordance with the requirements of all of the applicable Department Pavement Design Manuals.

Submitted by and for the DRB

Matthew L. Michalak, DRB Chairman

Matthew L. Michalat