DRB HEARING No 1 RECOMENDATION REPORT

Project:

SR 809 (Military Trail) from Okeechobee Blvd to 45th street

Financial project No. 229587-2-52-01

229587-2-56-01

Federal Job No. FL 6205312 Contract No. T - 4008 County Palm Beach

CONTRACTOR: Community Asphalt Corporation (CAC)

SUBCONTRACTOR: Murphy Construction Corporation (MCC)

CEI: AIM Engineering INC (AIM)

OWNER: FDOT District 4 – Palm Beach Operations

PROJECT OVERVIEW

The project involves total reconstruction of approximately 5.5 miles of SR 809 (Military Trail) from Okeechobee Blvd to 45th street including new drainage improvements, new water mains, noise walls, new signalization and lightning and landscaping.

As part of the contract improvements the plans called for the extension of the existing box culverts at C1 (sta61 + 57) and C-2 (sta83 + 49.56) on the M-1 canal. The C-2 culvert is the center of the disputes.

The following notes found in plan sheet No. 21 were relevant to the construction of the Box Culvert Extensions:

Plan Notes Sheet 21:

- 8. The contractor shall anticipate that dewatering will be required to facilitate Box Culvert and headwall/ wingwall construction. Dewatering by standard methods will not be adequate for proper preparation/compaction of the foundation soils. All Box Culvert and headwall/ wingwall foundations will be constructed in the dry. The contractor shall use well points, sumps, deep wells and/ or other necessary dewatering methods as required to dewater foundation excavations in accordance with article 455-28. and sub article 455-29.2 of the FDOT specifications.
- 9. For Box Culvert C-1, flow through Culvert channel shall be maintained at all times by pumping or other means (e.g. phase construction). See phase construction alternate detail (sheet 22). The contractor shall a plan of the method of maintaining channel flow for approval of the engineer. Cost to be included in cost of class IV concrete. If sheeting is used, the control elevation height of the sheeting shall be 1 meter above the high water 50 year, peak storm height, as shown in the roadway plans.

10. For Box Culvert C-2, at the M-1 canal, the contractor shall maintain an average flow rat of 1.416 M3/sec (50 CFS) through culvert channel by means of phase construction see detail (sheet 22). A maximum flow rate of 5.66 M3/sec (200 CFS) may be required at certain times during the year, depending on the requirements from the city of West Palm Beach, the contractor shall contact Frank Fusiek at (561) 835-7485 from the city of West Palm Beach prior to construction of the Box Culvert widening, in order to coordinate the maximum flow requirements. The maximum headwater elevation for the M-1 canal is 5.73 M (18.80 FT). The contractor shall submit a plan of the method of maintaining channel flow for approval of the engineer. Cost to be included in cost of class IV concrete. When sheeting is used the control elevation height of the sheeting shall be 1 meter above the mean high water 50 year, peak storm height, as shown in the roadway plans.

On December 20th 2007 the Disputes Review Board (DRB) held a hearing to consider the merits of the followings requests made by the contractor:

- 1. Entitlement to costs associated with attempts to construct the box culvert as indicated in the plans.
- 2. Entitlement to costs associated with constructing the Concrete Box Culvert Modification.
- 3. Entitlement to costs associated with additional maintenance of traffic.
- 4. Entitlement to delay costs.

A list of the attendees is included attachment "A".

ISSUE No 1.

ENTITLEMENT TO COSTS ASSOCIATED WITH ATTEMPTS TO CONSTRUCT THE BOX CULVERT AS INDICATED IN THE PLANS.

CONTRACTOR'S POSITION

The following is a brief summary of contractor's position. Complete position paper and rebuttal are included in attachment "B".

The contractor originally submitted a major modification to the department for the construction of the Box Culvert extension at the M-1 Canal that called for utilizing precast Florida double tee beams and casting place caps in lieu of an extension of the box culvert. This modification was later made formal in compliance with article 5-1.4.8 "modifications for construction" following the department's request. This proposal was made at no additional cost to the contract. The proposal was denied by the department due to concerns with the maintenance at the interface of the double tee beams and the existing structure. The decision was made in accordance with article 5-1.4.8 which provides for the decision of the engineer concerning the disposition of the proposal to be final, conclusive and allowing no further discussion. The contractor then proceeded to

construct the Box Culvert extension as per the plans. The contractor drove steel sheet piling and constructed a cofferdam for half of the culvert and attempted to dewater but his efforts were futile, subsequently, the contractor requested authorization to place a concrete seal which the contractor states it was agreed to as an extra by the department to be paid time and materials.

The concrete seal was placed and it subsequently failed to control the strong flow of water underneath the culvert. This prompted the contractor to submit a notice of intent to seek additional compensation. The contractor stated the department's agreement to pay for the seal concrete as an addition to the contract is a positive assessment that all dewatering procedures had been exhausted. The contractor then proceeded to design a bypass system with the department's concurrence. The bypass system was denied by the city of West Palm Beach on the basis of reduced flow and turbidity caused by the construction methods. Subsequently, the contractor resubmitted the double tee bridge alternate which this time was approved for construction.

It is the opinion of the contractor that the Box Culvert was not constructible in accordance with the plans and specifications and that all cost associated with the exhaustion of proving this lack of constructability shall be granted in accordance with the contract specifications.

Additional points made by the contractor quoted from his rebuttal paper were:

- "MCC has been in business for over 50 years. During this time they have successfully completed numerous box culvert projects of which a good majority included dewatering."
- "The Department states that the initial dewatering effort created a drainage path that was dangerous, irreparable and the root cause of the failed subsequent dewatering attempts. While the Department makes this supposition in their position paper, they offer no engineering analysis, tests or other documentation proving their assumption. There is an attempt by the Department to explain that the excavation below the existing box created a void that was never sealed by either rock or concrete, and thus created a drainage path but, this is merely an assumption that we adamantly dispute.

There are only a few methods available to dewater and they are 1) an open sump pump, 2) gravity drainage with a large sum pump encased in a gravel filter, 3) well points and 4) a deep well. These methods all can be used individually or in combination with any or all. The fourth method is not a viable one since it would require the lowering of the water table in the entire area with the use of a bypass pipe and as you may recall in earlier statements, this method was denied by the City. Methods 1, 2 and 3 were all attempted but were unsuccessful. As the department mentions in their position paper, the main reason for our inability to dewater the area resulted from water streaming along the bottom of the box culvert and from the middle wall towards the wing walls.

- Based on our experience from decades of working in this County, the inability to cut off the flow of water underneath the box while maintaining flow in one half of the culvert would be nearly impossible, if not impossible. As a prudent, experienced contractor, we did part in notifying the Department, well in advance, of our concerns with constructability issues concerning the box culvert. After the department denied our modification, it was our job to construct the culvert and to the best of our ability we attempted to build this culvert.
- CAC has reaffirmed above that ALL dewatering methods were exhausted and the culvert was not constructible per the plans and specifications. The Department's position paper does not demonstrate that the inability to dewater was the fault of the contractor nor does it adequately dispute or change the fact that CAC exhaustively attempted to dewater. Therefore, all cost associated with the failed dewatering attempts and the construction of the new structure are considered additional work to the contract and shall be reimbursed by the Department.

OWNER'S POSITION

The following is quoted from the Department's position paper. Complete position paper and rebuttal are included in attachment "B".

Description:

• The contract plan included the extension of two existing ten feet by eight feet double barrel Box Culverts. The first Box Culvert (C-1) located at station 61+57 was successfully completed by the contractor (Murphy Construction) utilizing a subordinate (Carroll Brothers and was assisted with dewatering by Johnson Davis Inc). The second Box Culvert (C-2) extension located at station 83+49 the M-1 canal was attempted by Murphy Construction utilizing their own forces and is the center of this dispute.

The contractor knew of the challenges (by plan dewatering notes Plan Sheet 21, Notes: 8 & 10) that the second culvert (C-2) presented and as a result, proposed a pedestrian bridge in lieu of the conventional extension "at no additional cost" over the original contract amount. The contractor proposed this "no cost change" in a letter dated on March 15, 2005.

On July 19, 2005 the Department decided the Contractor's proposed design change as submitted did not serve the Department's best interest in regard to long term maintenance. The Contractor began work on the conventional culvert extension in February 2006 and proceeded over the next few months with 3 attempts using his own means and methods to achieve a conventional culvert extension. Approximately 7 months later, the Senior Project Engineer became increasingly concerned about the negative impact that this activity (or lack thereof) may have on the overall completion of the project and potential impact to the existing box culvert and roadway as a result of the undermining. In the Contractor's means and method, he constructed a sheet piled coffer dam at the south barrel and excavated approximately 5-6 feet below the existing box

culvert aprons, thus created a void that was never sealed by either the #57 rock or sealed concrete and hence created a drainage path (or void) for water intrusion that became irreparable. There was clear evidence of severe displacements of the existing box culvert wing walls and settlement with repeated washouts of the roadway shoulders resulting from water streaming along the bottom of the box culvert apron and from the middle wall towards the wing walls caused by the Contractors methods in attempting to dewater by open pumping only. The Engineer became increasingly concerned about the negative impact that the Contractor's activities may have on the overall completion of the project and the potentially dangerous situation at the existing box culvert and roadway which could lead to undermining and collapsing.

As a result, the Engineer was placed in a position whereby he had no choice but to request that the Department revisit the Contractor's proposed pedestrian bridge and also asked the DOT Structural Department assist the Contractor in producing an acceptable plan that addressed the maintenance concerns of the Department.

During the Contractor's first attempt to dewater the cofferdam of the south barrel of the existing box culvert, the Contractor excavated approximately 5' to 6' below the bottom slab/apron directly adjacent to the existing box culvert and placed #57 rocks in his coffer dam. The Contractor then attempted to dewater the cofferdam by using open pumps sucking from a sump embedded in #57 rock but this dewatering method failed due to several leakages, primarily between the box culvert middle walls on either side and the sheet piling connection plates. During this operation, there seemed to be a flow of fine material (sand) from behind and underneath the wing wall foundations which was evident by the settlement and movement of the wing walls (both sides). There was also settlement of the existing roadway shoulders over the existing culvert.

The Contractor then decided to use Seal Concrete adjacent to the south barrel and wing walls on both sides (east & west) in order to control the flow of water adjacent and under the existing box culvert. The Engineer approved the Contractor's request for the use of seal concrete to construct a concrete seal in accordance with Standard Specification, Article 400-8 (Seals) to facilitate dewatering for construction of a box culvert extension at the M-1 canal.

The Contractor excavated adjacent to the box culvert and wing walls and placed Seal Concrete. The Contractor then proceeded to dewater using open pumps supplemented with some well-points. Well points were never used around the entire perimeter of the cofferdam. Again, this method failed. Initially, the water inside the cofferdam was drawn down almost to the bottom. The west side of the culvert had a few leaks but the east side had major leaks at the connection point between the Steel sheet piling plate and the middle wall of the existing box culvert, between the culvert barrel and the wing wall and also water was streaming from the west side of the south wing wall located near the bottom of the slab causing undermining of the adjacent utilities. There was also settlement of the existing roadway shoulders behind the wing walls on both sides east and west of the culvert.

The Engineer approved the Contractor's request for the initial use of seal concrete in order to facilitate dewatering operations. This consisted of two (2) days work of constructing the steel sheet piling cofferdam and two (2) days of tremie pouring the seal concrete into the cofferdams.

The CEI stated verbally and in correspondence that any additional seal concrete poured without a formal submittal and concurrence would not be compensated for and that the Contractor would be performing within his own means and methods of construction.

The Department compensated the Contractor under a Unilateral Payment of \$25,900.38 for the Department authorized seal. The payment was based on actual equipment, invoice material, certified payroll labor and subcontractor costs, plus allowable markups.

The Engineer denied reimbursement for use of any seal concrete beyond what was initially approved and poured on 4/18-4/19/2006. Without authorization, the contractor placed additional seal concrete within the limits of the cofferdam away from the box culvert where it served no purpose. In addition, the subsequent placement of seal concrete left no way to install well points within the coffer dam perimeter. The contractor then proceeded to dewater by means of open pumping in combination with well points placed behind the wing wall and again this method failed because there water was streaming at the connection point at the center wall and behind the wing walls. The open pumping of previous attempts had caused drainage paths that the contractor did not seal with any substance and more movement of the wing walls, undermining and erosion of the shoulders were observed and documented. After this failed attempt, the Contractor conceded and proposed a pipe-bypass method which would dam the canal and allow water to pass through temporarily bypass culverts. The bypass culverts failed to meet the City of West Palm Beach's flow requirements as required by Plan Sheet 21.

The Department does not dispute that the Contractor incurred additional costs. However, the Department position is that it will not take responsibility for the Contractor's failed means and methods described above. The plans are exceptionally clear in that the dewatering for construction of a conventional box culvert extension would be difficult. The plan note below states that dewatering by standard methods will not be adequate for proper preparation/compaction of the foundation soils. The Contractor did not exhaust all of the methods or combination of methods indicated on plan sheet 21 to determine if dewatering was in fact impossible.

Additional points made by the owner quoted from his rebuttal paper are:

- Contractor also did not attempt to use any combination of methods as indicated in the contract documents (Plan Sheet 21) such as Deep Wells, Well Points or a combination thereof and the resulting complications that arose were the complete responsibility and fault of the contractor.
- The issue at the box culvert were solely a Contractor caused problem created by
 over-excavation below the culvert foundation and apron toe wall which was never
 positively sealed and worsened by open pumping adjacent to sandy soil. Other
 FDOT culvert extensions within the West Palm Beach local area were constructed
 conventionally by others under similar conditions and were successful.

DRB FINDINGS AND CONCLUSIONS

At the DRB hearing held December 20th, 2007 the Board heard presentations made by the contractor and the owner declaring their respective positions. Subsequently to the hearing the Board asked several questions via email and received a response to the questions from both parties. After reviewing all this information along with the previously submitted position and rebuttal papers taken all together with the contract documents the Board is of the unanimous opinion on the following:

- a) The box culvert extension at the M-1 canal was constructible with the information provided in plan sheet 21 and the contract documents. The Board was not convinced that the contractor with his means and methods may have created an irreparable damage to the culvert as indicated by the CEI and the Department, however, the Board through an extensive investigation determined there were other methods the contractor could have employed to complete the dewatering and construct the culvert extension as indicated in the plans.
- b) The Board concluded that specification 400-8 "Seals" allows the Department to authorize placement of a seal to assist the contractor to dewater an excavation and/or cofferdam. The Board also concluded that the payment of the seal by the Department did not constituted an admission that all dewatering methods had been exhausted prior to or at the time the seal was placed.
- c) The Board acknowledges that the use of piezometer wells may not have been practical for the dewatering at the C-2 culvert, however, the Board did find that the contractor could have used other dewatering methods than the one actually utilized addressing the permeability of the A-3 material underneath the culvert to control the flow of water.
- d) The Board was not convinced from reasons given by the contractor as to why the contractor's proposed dewatering plan dated February 6, 2006 had well points inside the perimeter of the cofferdam and these were never installed.
- e) The Board concluded that since there was no requirement for submittal of a dewatering plan for the engineer's approval the contractor had all available means and methods to develop a dewatering plan without intervention from the owner.
- f) The Board is of the opinion the contractor had the opportunity to investigate the conditions at the site and bid the culvert C-2 extension taking into account that the dewatering methods to be employed would be difficult and certainly not standard methods.
- g) The Board concluded that the I-95 project referenced by the CEI in their presentation had no relevance to this dispute since in the opinion of the Board the conditions at the

I-95 project were significantly different than the conditions at the Military Trail culvert C-2 site.

- h) The Board concluded there was no relevance between the methods utilized by the contractor at the culvert C-1 vs. the culvert C-2 and analyzed the conditions at the culvert C-2 independently.
- i) The identification of the Toe wall confirmed that this issue was not an unforeseen condition at the C-2 culvert site.
- j) The bypass system proposed by the contractor could have been approved by the City of West Palm Beach had the contractor proposed a stronger plan to address the City's concerns.
- k) Section 125-3 Cofferdams, of the 2000 Standard Specifications define the requirements of constructing a cofferdam. This specification (125-3.1.4) requires the contractor to:
 - 1. "Obtain the Engineer's approval of the type and clearance of cofferdams,"
 - 2. "Retain a Professional Engineer, registered in the State of Florida, to prepare the above construction drawings, and keep a signed and sealed copy on hand at the site at all times."

The Board concluded, the contractor attempted to construct a cofferdam and did not submit the required construction drawings, in accordance with this specification. The Board is of the opinion this fact could have contributed to the inability of the contractor to complete the dewatering.

DRB RECOMMENDATION

Based on these findings and conclusions the Board is of the opinion there is no entitlement to the contractor to cost associated with attempts to construct the C-2 box culvert as indicated in the plans.

ISSUE No. 2: ENTITLEMENT TO COSTS ASSOCIATED WITH CONSTRUCTING THE CONCRETE BOX CULVERT MODIFICATION.

CONTRACTOR'S POSITION

The following is quoted from the Contractor's position paper:

On September 7, 2006 a meeting was held with the City Palm Beach concerning the proposal to use an earthen dike and by pass pipes in M-1 canal. The result of this meeting was the city did not like the proposal and denied us the opportunity to proceed with this method of construction. Immediately following this meeting the Department requested a resubmittal of the bridge alternate method of construction. By contract under Article 4-4 of the Special Provisions the Department requesting work to be completed that is not covered by a contract unit price item is considered unforeseeable.

4-4 Unforeseeable Work.

When the Department requires work that is not covered by a price in the contract and such work does not constitute a "Significant Change" as defined in 4-3.1, and the Department finds that such work is essential to the satisfactory completion of the contract within its intended scope, the Department will make an adjustment to the contract. Such adjustment will be made by work Order when the contract documents provide for contingency Work. When the contract documents do not provide for contingency work or the available funds for contingency work are insufficient, such adjustment will be made by Supplemental Agreement. The cost of unforeseeable work will be a negotiated amount or, in lieu of negotiations or ether agreement, an amount based on material invoices, equipment costs, labor payroll and markups provided in 4-3.2

To expand this Article to cover our particular project;

The Department required us to submit an alternate design not covered by a price in the contract. The Department found this request to be essential in the satisfactory completion of the contract within its intended scope. Therefore, the Department will make an adjustment to the contract. Since the contingency fund was insufficient such adjustment will be made by Supplemental Agreement or this case a Unilateral Agreement.

Unilateral Payment.

A payment of money made to the contractor by the Department pursuant to Section 337.11(11), Florida Statutes (1997), for sums the Department determines to be due to the Contractor for work performed on the project, and whereby the Contractor by acceptance of such payment does not waive any right the Contractor may otherwise have against the Department for payment of any additional sums the Contractor claims are due for the work.

By using a Unilateral Agreement the Department agrees this work is unforeseeable but they do not agree to the cost of this work and hence the Unilateral Agreement. However, Article 4-4 specifically states the cost of unforeseeable work will be a **negotiated** amount or an amount based on material invoices, equipment cost, labor payrolls and markups provided in 4-3.2. Since we never had negotiations with the Department concerning the cost of this proposal, we are obligated to prepared our cost in accordance with Article 4-3.2 and this is what we did.

In conclusion, in accordance with Article 4-4 of Special Provisions CAC is entitled to all additional cost required to complete the construction of the alternate in M-1 Canal.

OWNER'S POSITION

The following is quoted from the Department's position paper:

In the Contractor's means and method, he constructed a sheet piled coffer dam at the south barrel and excavated approximately 5-6 feet below the existing box culvert aprons, thus created a void that was never sealed by either the #57 rock or sealed concrete and hence created a drainage path (or void) for water intrusion that became irreparable. There was clear evidence of severe displacements of the existing box culvert wing walls and settlement with repeated washouts of the roadway shoulders resulting from water streaming along the bottom of the box culvert apron and from the middle wall towards the wing walls caused by the Contractors methods in attempting to dewater by open pumping only. The Engineer became increasingly concerned about the negative impact that the Contractor's activities may have on the overall completion of the project and the potentially dangerous situation at the existing box culvert and roadway which could lead to undermining and collapsing.

As a result, the Engineer was placed in a position whereby he had no choice but to request that the Department revisit the Contractor's proposed pedestrian bridge and also asked the DOT Structural Department assist the Contractor in producing an acceptable plan that addressed the maintenance concerns of the Department. After several meetings the re-submitted shop drawings for the Pedestrian Bridge was approved. Prior to the Contractor submitting their claim for additional compensation for this substitution, the Department had no idea that the Contractor would seek additional compensation since he never retracted his original offer to construct a pedestrian bridge at no additional cost over the original contract amount of \$165,772. The Contractor's original offer was never rescinded.

The subcontractor (Murphy Construction) submitted a claim dated June 22, 2007 detailing his expenses for \$765,000 dollars after completion of the pedestrian bridge. The Department determined that the Contractor was only entitled to the items described in the analysis below and therefore processed a unilateral payment for that amount.

The pedestrian bridge was a no "no cost" design change proposed by the contractor at no additional cost to the Department which was never rescinded. The Department would not have approved the design change if the proposal involved additional cost to the Department.

DRB FINDINGS AND CONCLUSIONS

From the presentations at the hearing as well as review of the position and rebuttal papers taken together with the contract documents the Board is of the unanimous opinion on the following:

- a) The Department approved the change without negotiating a supplemental agreement or any kind of formal agreement. A unilateral payment was made by the Department but only after the fact and not prior to commencement of the work.
- b) The decision made by the Department to reject the first bridge alternate proposal was final. The Board did not find any information that would lead the Board to believe or ascertain the second bridge alternate proposal had also been submitted at no additional cost.
- c) The CEI was aware of the actual costs incurred by the contractor since daily reports of construction were maintained during construction of the bridge alternate.
- d) The Board finds it difficult to understand the contractor and the CEI/FDOT met every other week prior to and during construction of the bridge alternate and yet payment of the bridge alternate was never brought up or discussed.

DRB RECOMMENDATION

Based on these findings and conclusions the Board is of the opinion the contractor is entitled to costs associated with constructing the concrete box culvert modification.

ISSUE No. 3:

ENTITLEMENT TO COSTS ASSOCIATED WITH ADDITIONAL MAINTENANCE OF TRAFFIC.

CONTRACTOR'S POSITION

The following is quoted from the Contractor's position paper:

Entitlement to costs associated with additional maintenance of traffic (MOT) is warranted due to delays in completion of box culvert C-2 at the M-1 Canal.

Proof of entitlement:

Plan sheet 248 indicates the typical MOT phasing for the project. Plan sheet 248 notes that box culvert extension along the southbound roadway should be constructed in phase

II and box culvert extension along the northbound roadway should be constructed in Phase IV. Plan sheets 259 and 267 show the roadway phase construction at box culvert C-2.

This phasing however conflicts with the box culvert phasing notes on plan sheet 22 requiring one barrel of the box culvert to remain active while other half is under construction. This phasing dictates that the box culvert extensions must be completed at the same time and prior to shifting to traffic to Phase II.

Constrained by delays in completion of the C-2 box culvert extension, additional traffic shifts were introduced in order to mitigate impacts to the project and allow the reconstruction to continue in the sections to the south and north of box culvert. AIM was notified of this change on October 10, 2006. Once the box culvert extension or concrete box culvert modification was completed, roadway construction was able to proceed in accordance with the typical MOT phasing in the vicinity of C-2 box culvert, sta78 to sta85.

It must be noted that construction of the concrete box culvert modification was impacted by FPL overhead power lines along the east right of way. The overhead power had to be de-energized to provide clearance for pile driving and beam placement for the northbound extension. CAC originally intended to construct the northbound extension first allowing Phase II traffic to be implemented as soon as this side was completed. The schedule for this work however was delayed by FPL's schedule for de-energizing the power lines, forcing MCC to proceed with the southbound (west side) extension first. Overall this impacted the project by delaying Phase II work in the vicinity of box culvert C-2.

The contractor's position entitlement to additional MOT costs is warranted due the delay experienced at box culvert C-2. This delay isolated roadway reconstruction from sta78 to sta85 and introduced additional traffic shifts and MOT cost.

OWNER'S POSITION

The following is quoted from the owner's position and rebuttal papers:

A year into the project, the contractor received permission to work on two MOT phases concurrently. The Department allowed the contractor to work on Phase I and Phase II concurrently even though the contract requirement was that Phase II could only start after Phase I was satisfactorily completed, therefore the Department allowed the contractor to prosecute the work faster than originally bid.

MOT expenses could have been mitigated if the contractor adhered to his original baseline schedule. All expenses related to additional MOT costs were a direct result of the contractor proposed no cost change. No entitlement is due. It should he noted that the contractor had ample time to coordinate an outage with FPL to avoid additional traffic shifts. MOT shifts were for their convenience. It is the contractor's responsibility to coordinate utilities for his proposed change as clearly defined in supplemental specifications 4-3.8.

DRB FINDINGS AND CONCLUSIONS

From the presentations at the hearing as well as review of the position and rebuttal papers taken together with these contract documents the Board is of the unanimous opinion on the following:

- a) As indicated in Issue No. 1 the Board is of the opinion that the box culvert extension at the M-1 canal was constructible, therefore, additional MOT traffic shifts due to construction activities at the culvert were the result of the contractor's means and methods employed.
- b) The Board acknowledges there is a conflict in the MOT plans between sheets 248, 259 and 267 and sheet 22, however, the Board concluded the Department satisfactorily addressed this conflict by allowing changes in the construction phasing that enable the contractor to complete work ahead of schedule.
- c) The coordination of the FPL outage to complete the bridge alternate work was the responsibility of the contractor as per section 4-3.8.

DRB RECOMMENDATION

Based on these findings and conclusions the Board is of the opinion there is no entitlement to costs associated with additional maintenance of traffic.

ISSUE No. 4: ENTITLEMENT TO DELAY COSTS

CONTRACTOR'S POSITION

The following is quoted from the Contractor's position paper:

Entitlement to delay costs associated with attempts to construct box culvert C-2 extension is warranted due to constructability issues with the box culvert extension as indicated in plans.

Proof of Entitlement:

CAC is a well-known, established, experienced contractor that has completed countless public and private projects requiring extensive dewatering to perform the work, including typical box culvert extensions. MCC our subcontractor has these same credentials if not more. CAC attempted to identify, along with MCC help, a potential construction nightmare prior to the start of construction of the box culvert. With the issue identified prior to construction, the Department felt comfortable that box culvert could be constructed in accordance with the plans and specifications. We started construction and after all methods of dewatering were exhausted it was determined the culvert could not be

built. Due to the constructability issues with the culvert construction time became critical and resulted in a significant delay. It can be stated the Department did not take seriously the professional beliefs of both CAC and MCC concerning the constructability of the box culvert. The Department had an obligation under the contract to research and identify all potential problems with the construction of the box culvert. The mere insertion of notes in the plans does not relieve the Department of implementing due diligence concerning construction items. CAC provided the Department with all of the information they needed to correctly identify a problem with the construction of this box culvert. It was the Department obligation to act on this information; however they chose the maintenance department concern to override all pertinent information and denied our professional opinion that the design was flawed. The contract states that when failure by the Department to fulfill an obligation under contract results in delays of the controlling construction operation, the Department will consider such delays as basis for granting a time extension to the project.

Our original schedule was submitted at the preconstruction conference. Activity ID 20-1014 PH II Culvert Extension Sta83+40 is used to identify the construction of the culvert extension. The schedule indicates the early start for this item is December 21, 2005 with duration of 30 contract days, a late finish date of March 26, 2006 a total float of 65 days. With the construction of the box starting in February 2006, the box culvert was on a late finish construction schedule with a late completion of the extension schedule for March 26, 2006.

With the start of construction on box culvert not commencing until December 13, 2006 it can be fairly stated the performance of this work was a controlling item and it delayed the finishing of the project. By specifications, listed above, the Contractor shall be granted a time extension when additional work, authorized by the Department, delays the performance of his work and delays the finishing of the project.

OWNER'S POSITION

The following is quoted from the owner's position paper for this issue:

Community submitted cost presentations requesting compensation that incorporated both 5-12 indirect compensation and 4-3 Labor, Equipment and Material markups. Under specification 5-12, you do not receive both methods of compensations. This original contract time is 1398 calendar days. The contract contained two "No excuse Bonus incentives as follows:

- 1) No Excuse Bonus Milestone Date 4/12/2006 (795 Calendar Days) \$200,000 to complete section one from Okeechobee Blvd to just north of the C-1 Box Culvert.
- 2) No Excuse Bonus Milestone Date 7/3/2007 (1240 Calendar Days) \$200,000 Final Completion.

Department's Position

The Contract clearly supports entitlement for the direct work; however, the Department contends that considering the early completion circumstance of the Military Trail project, the Contract does not support Contractor entitlement for the indirect impact of Delay

cost. The Contract Special Provisions specifically relieves the Department of liability for the Contractor's failure to complete the project prior to the Contract completion date.

Contract Schedule:

It is exceedingly clear that Community Asphalt does not have contractual rights to receive additional overhead compensation. Special Provision, SUBARTICLE 8-3.2.3 "Contract Schedule", page 27 of the Contract Special Provision, states the following: Special Provision 8-3.2.3 Contract Schedule Page 26:

• The schedule may indicate a completion date in advance of the Contract completion date. However, the Department will not be liable in any way for the Contractor's failure to complete the project prior to the Contract completion date. Any additional costs, including extended overhead incurred between the Contractor's schedule completion date and the completion of Contract Time, shall be the responsibility of the Contractor. The Contractor shall not be entitled to claim or recover any such cost from the Department.

Specification 1-3 Definitions of the Standard Specification (2000) states:

• Contract Time. The number of calendar days allowed for completion of the Contract work, including authorized time extensions.

The Department's interpretation of the Contract specifies that entitlement for delay cost, such as the Indirect Impact of Delay Cost and the Field Direct Delay Cost referenced in Community Aphalt's time impact cost presentations, applies only after contract time has expired. The original contract time was declared prior to bid; the bidder is expected to incorporate sufficient overhead costs to carry the project through original contract time, therefore, the potential for delay cost entitlement does not exist unless contract time has expired.

If one examines Special Provision SUBARTICLE 8-3.2.3 "Contract Schedule" with the Contract as a whole, the Department's interpretation is the only reasonable interpretation.

Incentive/Disincentive:

Since Community tried to receive both contract incentive payments, Supplemental Specification 8-13.1 applies. Supplement Specification 8-13.1 states the Contractor is not entitled to receive indirect cost regardless of whether the Contractor successfully does so or not.

Supplement Specifications Package Number One 8-13.1 Page 3 Incentive – Disincentive states:

• ". . . any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Contractor's work to overcome or absorb such delays or events in an effort to complete the Contract prior to expiration of the Original Contract Time, regardless of whether the Contractor successfully does so or not, shall be the sole responsibility of the Contractor in every instance."

• ".....extended or unabsorbed home office or job site overhead, lump sum maintenance of traffic adjustments, lost profits, prime mark-up on Subcontractor work, acceleration costs, any and all direct and indirect costs, any other adverse impacts, events, conditions, circumstances or potential damages, on or pertaining to, or as to or arising out of the Contract.

Increase, Decrease or Alteration in the Work:

In addition, when you examine Standard Specification (2000) 4-3.2 Increase, Decrease or Alteration in the Work (Page 19), you will find that the markups will compensate for all indirect costs and expenses.

CPM Schedule:

Under Special Provision 8-3.2.3 Contract Schedule, the Contractor was required to submit a Critical Path Method (CPM) Contract Schedule to the Engineer for acceptance. Community submitted a baseline CPM schedule, but never submitted a monthly CPM update. The first monthly update was submitted with the claim package.

When an item is not on the critical path, it is considered to have "Float". In addition, the contract Special Provisions provide the following definition of Controlling Work Items: Special Provisions Article 1-3 Definitions Page 7, Controlling Work Items:

• "The activity or work item on the critical path having the least amount of total float. The controlling item of work will also be referred to as a Critical Activity."

Special Provision 8-3.2.5 "Float" Page 27:

• "Float is not for the exclusive use or benefit of either the Department or the Contractor. The Engineer will grant time extensions only to the extent that time adjustments to the affected activities exceed the total float along the affected paths of the currently accepted Contract Schedule at the time of delay. Submit a network diagram, total float report and a narrative report to support any request for additional Contract time."

Therefore, the Department could not grant a time extension until the CPM finish date passed the allowable Contract date.

Notice of Delay / Time Extension Concerns:

In addition to the above mentioned specifications, Community Asphalt did not submit a written notice of intent to the Engineer within ten days after commencement of a delay to a controlling work item, expressly notifying the Engineer that the Contractor intends to seek additional compensation, and is seeking a contract time extension.

In addition, Community Asphalt never submitted a preliminary request for time extension that included a CPM schedule activity to satisfy 8-7.3.2, within the ten calendar days after the commencement of a delay to a controlling work item. The time extension request never included a statement of commencement of delay, cause of the delay, and the controlling work item affected by the delay, or never submitted a network diagram,

total float report and a narrative report to support any request for additional Contract Time, as per 8-3.2.5.

Both Standard Specification 5-12.2.2 "Claims for Delay" and Supplemental Specification 8-7.3.2 "Contract Time Extensions" are clear on this requirement. The Department was hindered by being unable to monitor the impacts and the detail of Community's actions by not submitting the required documents within the specified timeframe.

Conclusion:

It is the Department's position that Community Asphalt is not due any additional compensation for field direct delay costs and for the Indirect Costs as detailed under Specification 5-12.6.2.2 Overhead Compensation, for any delays or extra work that moves the Contractor's Early Project Completion Date to a later date.

DRB FINDINGS AND CONCLUSIONS

From the presentations at the hearing as well as review of the position and rebuttal papers taken together with the contract documents the Board is of the unanimous opinion on the following:

- a) As stated in Issue No. 1 in the opinion of the Board the C-2 box culvert extension was constructible so the Board views the contractor as responsible for any delay he might have incurred related to construction of the box culvert as indicated in the plans.
- b) The construction of the box culvert was shown in the "controlling item work form" to be a controlling item at the time it was being constructed, however, the fact no schedule updates were submitted throughout the project or during construction of the box culvert extension and the bridge alternate made it impossible for the Board to ascertain whether the box culvert was a controlling item in the schedule and whether the project was indeed delayed.
- c) The Board concluded the contractor submitted a written notice of intent for extra cost (dated May 1st, 2006) but failed to submit a notice of intent to the engineer within 10 days after the commencement of the alleged delay at the C-2 culvert site. This coupled with lack of schedule updates again made it impossible for the Board to determine accurately when the alleged delay occurred.
- d) The contractor did not aggressively pursued construction of the box culvert C-2. There were many long extended periods of inactivity.

DRB RECOMMENDATION

Based on these findings and conclusions the Board is of the opinion there is no entitlement to delay cost.

The Board appreciates the cooperation of all parties and the information presented for its review in making these recommendations. Please remember that a response to the committee and the other party of your acceptance or rejection of the recommendations is required within 15 days. Failure to respond constitutes an acceptance of this recommendation by the non-responding party.

Should you have any questions or need further clarification please feel free to contact the Chairman.

Sincerely,

DISPUTE REVIEW BOARD

Nelson V. Perez Chairman

James C. Lynch, P.E.

Geoff Waite