February 12, 2006

James R. Powell III, Project Manager Better Roads, Inc. Post Office Box 9979 213 Naples, FL. 34101 Scott Woss, Senior Project Engineer KCCS 9200 Bonita Beach Rd, St.

Bonita Springs, FL. 34135

Re: Fin No. 195376-1-52-01 / 195406-1-52-01 County: Lee / Collier Description: US-41 (SR-45) from the Lee County Line to North of CR-887

Subject: Convene the Dispute Review Board and conduct a hearing to consider Better Roads entitlement to additional contract time and compensation for additional work preformed during the installation of the storm drainage system on the above captioned project.

The hearing was conducted in the offices of KCCS the Departments CEI firm On February 8, 2006 at 9:30 AM IN Bonita Springs, Florida

CONTRACTORS POSITION STATEMENT

INTRODUCTION

Better Roads, Inc. (Better Roads) has requested this Disputes Review Board Hearing for the purpose of attempting to reach an agreement with the Florida Department of Transportation (Department or FDOT) regarding a time extension for delays and additional compensation for extra work and for delays related to change order work performed while installing stormdrain pipe on this project. The pipe was installed by Better Roads' underground subcontractor, Armadillo Underground (Armadillo).

It is the position of Better Roads that Better Roads and Armadillo are entitled to a time extension and to additional compensation for the following change order work:

1. The Department required Armadillo and Better Roads to perform much more pipe backfill density testing than was required by the contract. This additional testing had a significant adverse impact on pipe laying production, including delaying completion of the pipe work and delaying completion of the project. Also, as a result of the pipe laying work taking much longer to perform than should have been expected, the amount of dewatering work was significantly increased. 2. Armadillo encountered a significant amount of rock in the pipe trench that had to be broken, excavated, removed, and disposed of. This rock was a differing site condition. The rock excavation increased the cost of pipe trench excavation and backfill work and significantly slowed pipe laying production, thus delaying completion of the project.

3. Armadillo encountered a significantly higher volume of ground water than was anticipated, or should have been anticipated, in certain portions of the project. In the portions of the job site that were impacted this differing site condition increased the amount of dewatering effort and also slowed production during pipe installation operations.

Please see behind **Tab 1** Armadillo Underground's Position Paper prepared for this hearing. Armadillo's Position Paper is a part of Better Roads' Position Paper.

Better Roads and Armadillo respectfully request that the Board consider the facts pertinent to these issues and the requirements of the contract and issue a recommendation for entitlement for time extensions and additional compensation for matters that are the subject of this hearing. It is Better Roads' understanding that for any issues for which the Board finds that Better Roads and Armadillo are entitled to either additional contract time or additional compensation, Better Roads and Armadillo and the Department will attempt to reach an agreement on quantum after the Board has issued its recommendation regarding entitlement.

There were other problems (in addition to the three issues listed above) related to installation of the storm drain pipe that, in the opinion of Better Roads and Armadillo, entitle Better Roads and Armadillo to additional contract time and additional compensation. However, these other issues are not being brought before the Board at this time. If Better Roads and Armadillo are unable to resolve these other issues with the Department then Better Roads will request a separate Dispute Review Board hearing for these other issues.

The Board is familiar with the three issues listed above that Better Roads and Armadillo are bringing before the Board at this time. These issues have been discussed at several Dispute Review Board meetings during the course of the project. The additional density testing issue dates back to November 18, 2004. The differing site condition (rock in the pipe trench excavation) was first encountered November 23, 2004 Better Roads provided timely notice to the Department that Better Roads and Armadillo intended to ask for additional contract time and additional compensation for these issues.

Better Roads, Armadillo, and the Department spent approximately three months in 2005 (August through October) negotiating a change order for the extra work and the delays associated with installing the storm drain pipe and structures. This change order included the issues that are being brought before the Dispute Review Board at this time. KCCS, on behalf of the Department, prepared an Engineer's Estimate for the additional

compensation and the additional contract time that Better Roads and Armadillo were entitled to and an agreement was reached in late October 2005.

However, on November 3, 2005, KCCS informed Better Roads in a letter that "Due to the amount and nature of this claim, we will be submitting this matter to the Disputes Review Board". In this same letter KCCS also stated "Pursuant to Specification 5-12.9 all claims must be certified by an Officer or Director of your company (and) this certification must be received prior to any claim being brought before the DRB".

Better Roads does not agree with either position of the Department as stated in the KCCS letter to Better Roads dated November 3, 2005. Better Roads can find no requirement in the contract that a change order request or claim must be submitted to the Disputes Review Board based upon whether or not the change order request or claim is of a certain size or is of a particular nature. It is Better Roads' interpretation of the contract that if the contractor and the Department are able to agree on the amount of compensation and additional time that the contractor is entitled to for change order work, including delays, then the change order is to be reduced to a supplemental agreement and the contract modified accordingly. There is no requirement in the Disputes Review Board provision of the contract that a change order be submitted to the Dispute Review Board if the contractor and the Department are able to agree order be submitted to the Dispute Review Board if the contract or and the Department are able to agree order be submitted to the Dispute Review Board if the contract or and the Department are able to agree order be submitted to the Dispute Review Board if the contractor and the Department are able to agree on the terms of a supplemental agreement.

Additionally, Better Roads does not agree that the contract requires that a certified claim be submitted to the Department before a matter may be brought before the Disputes Review Board. It is Better Roads' interpretation of the contract that any matter or dispute may be brought before the Board for a hearing to determine either entitlement or quantum regardless of whether or not a certified claim has been filed. In fact, it is our understanding that one of the primary purposes of having a Disputes Review Board participate in a FDOT construction project is to attempt to avoid claims. Better Roads is not bringing a certified claim before the Disputes Review Board at this hearing. Better Roads is hopeful that a settlement may be reached without Better Roads and Armadillo having to resort to filing a certified claim.

Please see behind **Tab 2** a copy of Article 8-3.7, <u>Dispute Review Board</u>, of the specifications.

Better Roads and Armadillo request that the Dispute Review Board, based upon its knowledge of the project and based upon the information furnished by Better Roads, Armadillo, and by the Department at this hearing, issue recommendations regarding entitlement for the following items:

<u>Issue No. 1 – Additional compensation and a time extension for additional density testing</u> required by the Department during the stormdrain pipe installation backfilling operations.

- 1. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe as a result of having to perform much more density testing during the backfilling operation. This includes compensation for the cost of dewatering for a much longer period of time than expected.
- 2. Additional compensation for the cost of the additional density tests.
- 3. Better Roads markup on any additional compensation that Armadillo is entitled to.
- 4. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance. This also includes compensation for the indirect impacts of delay.
- 5. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of the additional density testing. Installation of the stormdrain pipe was a controlling item of work.
- 6. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive Disincentive for A + B, of the specifications.

<u>Issue No. 2 – Additional compensation and a time extension for the impacts of Armadillo</u> encountering a differing site condition (rock in the pipe trench excavation) during installation of the stormdrain pipe and structures.

- 1. Additional compensation for Armadillo Underground for the additional crew time required to excavate the rock.
- 2. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe and structures as a result of lost productivity due to having to excavate the rock. This includes compensation for the cost of dewatering for a much longer period of time than expected due to the low productivity during pipe installation operations.
- 3. Additional compensation for the additional cost of removing the rock from the job site.
- 4. Better Roads markup on any additional compensation that Armadillo is entitled to.
- 5. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance.
- 6. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of encountering

rock in the pipe trench excavation. Installation of the stormdrain pipe was a controlling item of work.

7. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive – Disincentive for A + B, of the specifications.

Issue No 3 – Additional compensation and a time extension for the impacts of Armadillo having encountered a higher volume of ground water than expected and having to perform more dewatering work than expected in certain portions of the project during pipe laying operations.

- 1. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe and structures as a result of encountering an unusually high volume of groundwater.
- 2. Additional compensation for the additional dewatering work.
- 3. Better Roads markup on any additional compensation that Armadillo is entitled to.
- 4. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance.
- 5. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of encountering more groundwater than expected. Installation of the stormdrain pipe was a controlling item of work.
- 6. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive Disincentive for A + B, of the specifications.

BRIEF DESCRIPTION OF THE PROJECT

The amount of the original contract was \$10,764,084.83. The original Contract Time allowed was 600 calendar days. The first chargeable workday was September 8, 2003. The original required completion date was April 30, 2005. The work is ongoing at this time. See behind **Tab 3** a copy of the Bid Blank cover page. The 2000 edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction applies to this contract.

Although the Department has recognized during change order negotiations that Better Roads is entitled to a time extension for delays resulting from the impacts of the

additional density testing in the pipe trenches, the impacts of the rock encountered in the pipe trench, and the impacts of an extraordinary high volume of water encountered during pipe laying operations in certain areas, no time extension has been granted for these delays to date. The Department has not yet withheld any liquidated damages but the Department is withholding retainage from progress pay estimates.

This is a fixed price contract, including unit price and lump sum line items based upon estimated quantities of work. A copy of the line item bid proposal is behind **Tab 4**.

The contract includes provisions for utilizing a Disputes Review Board to assist in resolution of disputes and claims. The Disputes Review Board has met 13 times to date for regularly scheduled project review meetings.

The contract is being administered by KCCS, Inc., on behalf of the Department.

The contract includes an incentive – disincentive provision to encourage early completion of the project. See a copy of this provision behind **Tab 5**.

The scope of work is described in the bidding documents as, "the improvements under this contract consist of milling, widening, resurfacing, paved shoulders, drainage improvements, signalization and lighting on SR 45 (US 41). The site of the work is SR 45 (US 41) from Old 41 Collier County to the Imperial River Bridge Lee County. U S 41 is a four-lane divided highway within the area of the project.

The project includes a significant amount of drainage work. The drainage work is being performed by Better Roads' underground utility subcontractor, Armadillo Underground. The original amount of Armadillo's subcontract agreement was \$1,755,615.37. The drainage work that is the subject of this Disputes Review Board hearing is the installation of 1350mm and 1200 mm RCP stormdrain pipe and associated drainage structures. Armadillo Underground's work for this stormdrain pipe was required to be done in a trench box due to the depth and proximity of the roadway.

BRIEF CHRONOLOGY OF THE PROJECT

- 6/1/03 Notice to Proceed.
- 9/8/03 First chargeable workday.
- 9/9/03 Better Roads began work at the job site.
- 11/24/03 Armadillo Underground began work at the job site.

11/15/04 Armadillo first gave notice to Better Roads that Armadillo's production was being impacted by the number of density tests being required by the Department for pipe trench backfill material. Armadillo asked for relief.

11/18/04 KCCS notified Better Roads that the Department would not reduce the frequency of density testing for pipe trench backfill material.

12/3/04 Armadillo first gave notice that Armadillo was being impacted by a differing site condition (rock in the pipe trench excavation).

12/3/04 KCCS notified Better Roads that the Department would not provide additional compensation for the contractors for rock encountered in the pipe trench.

4/30/05 Original required contract completion date.

4/29/05 Approximate date that Armadillo was last impacted by rock in the pipe trench excavation work.

7/25/05 Approximate date that Armadillo was last impacted by additional density testing in pipe trenches.

7/25/05 All drainage work completed by Armadillo.

8/1/05 Better Roads submitted a preliminary estimate of cost to KCCS for additional costs incurred by Armadillo and Better Roads as a result of additional work and delays during drainage pipe installation work.

10/31/05 Better Roads notified KCCS in a letter that Better Roads and Armadillo Underground agreed to accept a change order based upon the Engineer's Estimate of Cost provided to Better Roads by KCCS on October 18, 2005 as modified after further discussions following receipt of the October 18 estimate.

11/3/05 KCCS notified Better Roads in a letter that "Due to the amount and nature of this claim we will be submitting this matter to the Disputes Review Board".

For a more complete chronology of correspondence and other documentation pertinent to the issues being brought before the Disputes Review Board at this hearing, please see the section entitled <u>Chronology of Documentation and Events Pertinent to the Issues Being</u> <u>Considered by the Disputes Review Board</u> later in this position paper. This chronology includes references to Tabs where copies of the referenced documents may be found.

EXPLANATION – ADDITIONAL DENSITY TESTING ISSUE

Overview

Armadillo Underground prepared its cost estimate and submitted its bid to Better Roads based upon its interpretation of the pipe backfill density testing requirements in the contract specifications. After the start of the work the Department advised Armadillo that the Department either did not agree with Armadillo's interpretation of the specifications or that the Department felt that the number of density tests being performed were not enough to satisfy the Department and therefore the Department would require Armadillo to perform significantly more backfill density tests than planned by Armadillo. Based upon its interpretation of the specifications Armadillo expected to perform approximately 1,216 backfill density tests. As a result of the directions given to Armadillo by the Department for density testing, Armadillo actually performed in excess of 3,900 density tests.

The effect of all of the additional density tests was to significantly slow the rate of pipe installation. Since drainage pipe installation was a controlling item of work the delay to completion of the pipe installation delayed completion of the entire project. There were several factors that impacted pipe installation production but the additional density testing was the most significant in terms of delay to completion of the work. As a direct result of the impact of the additional density testing, as well as the impact of the differing site conditions (encountering rock in the pipe trench and encountering an extraordinary volume of groundwater in certain areas during pipe installation), pipe and structures installation work that should have been completed in approximately 4 months took 12 months to complete.

This does not include the delay caused by the Department's problem with obtaining a special dewatering permit. The dewatering permit issue is not an issue that is being brought before the Board at this hearing.

<u>Facts</u>

For pipe installation in the dry Armadillo based its price on performing one compliance density test per lift per LOT for a normal 6-inch lift of backfill. For thick-lift backfill (12 inches), Armadillo planned to perform five compliance density tests per lift per LOT. A LOT is defined in the specifications as a pipe run between two structures or a pipe run of 500 feet, whichever is less. The number of tests required for the drainage pipe and structures, using Armadillo's interpretation of the specifications, would have been approximately 1,216 tests.

The Department required Armadillo to perform one compliance density test per lift per trench box setup. It appears that in effect the Department was considering one trench box setup to be a LOT. This does not agree with the definition of a LOT that is clearly set forth in the contract specifications. Obviously one trench box setup is much less (in length) than the distance from structure to structure or 500 feet. As a result of these instructions from the Department concerning the frequency of density tests for pipe backfill, the number of tests actually performed by Armadillo was in excess of 3,900 or 3 times more than planned.

The additional density testing had a significant adverse effect on production. Instead of directly proceeding with the next lift of backfill within the trench box after the preceding lift was placed and compacted it was necessary for Armadillo to stop the backfilling work and perform a density test. This was repeated after each lift. While the density test was being performed no productive backfilling work could be performed. The pipe laying crew and machinery were idle until the density test was completed. This delay after

every lift within every trench box setup instead of one delay per lift per LOT as required by the specifications greatly slowed production and delayed completion of the pipe laying work and the project.

Entitlement

The contract specification requirements that are most applicable to this issue are as follows:

Specification 125-8, <u>Backfilling</u>, Paragraph 125-8.1, <u>General Requirements for</u> <u>Structures and Pipe</u>, Subparagraph 125-8.1.1, <u>General</u>. "Backfill in the Dry whenever normal dewatering equipment and methods can accomplish the needed dewatering. A LOT is defined as one lift of backfill material placement, not to exceed 500 feet (150 m) in length or a single run of pipe connecting two successive structures, whichever is less. Backfill around structures, and on both the sides of the pipe compacted separately, will be considered as separate LOTs. For multiple phase backfill, a LOT shall not extend beyond the limits of the phase." See a copy of this specification behind **Tab 6**.

Specification 125-9, <u>Acceptance Program</u>, Paragraph 125-9.3, <u>Additional Requirements</u>, Subparagraph 125-9.3.1, <u>Frequency</u>. "Conduct QC maximum density sampling and testing at a minimum frequency of one test per soil type. The Verification test will be at a minimum of one test per soil type: Table – Test Name: Density. Quality Control: **One per LOT**." See a copy of this specification behind **Tab 7**.

Specification 120-10, <u>Acceptance Program</u>, Paragraph 120-10.1.4, <u>Quality</u> <u>Control Tests</u>, Subparagraph 120-10.1.4.2, <u>Density Testing Requirements</u>. "Ensure compliance to the requirements of 120-10.2 by Nuclear Density testing in accordance with FM 1-T 238...Perform these tests at a minimum frequency of **one test per LOT**." See a copy of this specification behind **Tab 8**.

Specification 120-10, <u>Acceptance Program</u>, Paragraph 120-10.3, <u>Additional Requirements</u>, Subparagraph 120-10.3.1, <u>Frequency</u>. "Conduct QC sampling and testing at a minimum frequency listed in the table below. The Engineer will perform Verification sampling and tests at a minimum frequency listed in the table below. Table – Test Name: Density. **Quality Control: One per Lot**. Verification: One per four Lots and the first lift not affected by water." See a copy of this specification behind **Tab 9**.

It is Armadillo's (and Better Roads') opinion that a reasonable interpretation of the specifications is that one density test will be required per lift per LOT for purposes of Quality Control. A LOT is clearly defined as one lift of backfill not to exceed 500 feet in length or a single run of pipe connecting two successive structures, whichever is less. It

is Armadillo's and Better Roads' opinion that it would be completely unreasonable for the contractors to assume at bid time that the Department would interpret these specifications to require one density test per lift per trench box setup. Perhaps the Department did not interpret the specifications this way. Perhaps the Department simply decided that it wanted to change the specifications. Whatever the reason for the Department's decision, the result was a significantly higher number of density tests and a much slower rate of pipe installation.

Armadillo and Better Roads recognize that the Department has the right to alter the specifications. However, if altering the specifications results in additional cost or additional construction time for the contractor then the Department is required to modify the contract and compensate the contractor accordingly, including issuing a time extension and compensation for any delays to completion of the project.

For the information of the Board, Better Roads would like to point out that the Department has changed the specifications for density testing for pipe backfill for contracts entered into after the project that is the subject of this hearing. The following paragraph has been added to Subparagraph 125-8.1.1, <u>General</u>:

"When placing backfill within a trench box each lift of backfill is considered a LOT. Placement of backfill within trench box limits will be considered a complete operation before trench box is moved for next backfill operation. When the trench box is moved for next backfill operation this will start new LOTs for each lift."

See a copy of this new specification behind **Tab 10**.

Obviously if this specification had been included in the contract documents for Better Roads' project the bid price for the work would have been significantly higher.

Relief that Better Roads and Armadillo Underground Are Seeking

As stated in the introduction portion of this position paper, Better Roads and Armadillo are seeking additional compensation and a time extension for the impacts of the increased frequency of density testing for pipe backfill that the Department required. Better Roads and Armadillo would like for the Disputes Review Board to issue a recommendation regarding entitlement for the following items of relief being sought by the contractors:

- 1. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe as a result of having to perform much more density testing during the backfilling operation. This includes compensation for the cost of dewatering for a much longer period of time than expected.
- 2. Additional compensation for the cost of the additional density tests.

- 3. Better Roads markup on any additional compensation that Armadillo is entitled to.
- 4. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance. This also includes compensation for the indirect impacts of delay.
- 5. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of the additional density testing. Installation of the stormdrain pipe was a controlling item of work.
- 6. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive Disincentive for A + B, of the specifications.

EXPLANATION – DIFFERING SITE CONDITION ISSUE (ROCK IN THE PIPE TRENCH EXCAVATION)

Overview

Armadillo encountered a significant amount of rock while excavating for installation of drainage pipe. It is Armadillo's and Better Roads' position that the rock was a differing site condition. The rock could not have been expected based upon the information furnished to bidders in the plans and specifications and could not have been expected based upon an examination of the site before bidding.

Armadillo incurred a significant amount of additional cost as a result of having to break, excavate, and remove the rock from the pipe trench. The rock also greatly slowed pipe installation production. It is Armadillo's and Better Roads' position that the contractors are entitled to additional compensation and additional contract time as a result of the extra work and the delay caused by this differing site condition.

It is not clear to Better Roads and Armadillo what the Department's present position is in regard to this issue. When Armadillo and Better Roads first gave notice of the differing site condition and gave notice that the contractors would expect a change order (December 3, 2004), KCCS responded by informing Better Roads that the Department would not compensate the contractors for the rock and would not grant a time extension because there is a note in the contract drawings that advises bidders that "All costs of

rock excavation shall be included in the appropriate items of work contained in the contract."

Facts

Armadillo Underground encountered a significant amount of rock within the pipe trench excavation while installing the 1350mm and 1200 mm drainage pipe and drainage structures between approximately Station 73+00 and Station 79+75 on the west side of US 41. There were no soil borings, there was no specific geotechnical data, nor was there any other specific information in the plans or specifications in the area of this pipe work based upon which a bidder could identify and quantify rock in the pipe trenches.

The rock was located above the elevation of the bottom of the pipe trench. Therefore it was necessary for Armadillo to break and excavate the rock. Armadillo estimates that the total quantity of rock excavated was approximately 1,570 c.y. over approximately 675 lineal feet of pipe trench. The rock was up to 4 feet thick. It was not possible to blast the rock because the traveling public, surrounding business and local utilities would have been adversely affected. It was necessary for Armadillo to mobilize rock hammers to break the rock.

As a result of having to break, excavate, and remove and replace rock instead of excavating the non-rock material that was expected, pipe-laying production was slowed significantly. Armadillo was impacted by the rock for a period of approximately 4 months.

Entitlement

The soil borings for the project did not show the presence of rock. There was no other geotechnical data provided in the plans or specifications that specifically identified rock in the area where the drainage pipe was to be installed. The presence of rock in the proposed pipe trench could not have been identified by a site visit prior to the bid.

It would not have been reasonable for the Department to expect all bidders to make soil borings or to excavate test holes at the planned location of the drainage pipe before the bid. The location of the pipe was adjacent to a busy highway. In order to perform deep underground soils investigation it would have been necessary for bidders to have all underground utilities located, to obtain permission to work within the right-of-way, and to make arrangements for temporary maintenance of traffic where traffic would be impacted. Rather, in the opinion of Better Roads and Armadillo, it was the responsibility of the Department to determine during the design phase of the project the nature of the soils to be encountered during installation of the new drainage pipe and structures, and if

the material to be encountered was rock, to include specific information in the bidding documents concerning location, thickness, elevation, and hardness of the rock.

The Department has previously cited a note on a Roadway Soils Survey Drawing, Drawing Sheet No. 86, as the reason for denying entitlement to a differing site condition change order for the rock encountered by Armadillo Underground. This note is:

"It has been the experience of the Department, with projects within this general geographical area, that although preliminary borings did not indicate a constant presence of rock, rock was encountered while performing underground installations. Therefore, the contractor should consider the increased cost of all underground work activities while preparing his bid. All cost of rock excavation shall be included in the appropriate items of work contained within the contract. No extra compensation or time extension will be allowed for additional work directly associated with the splitting, excavation, crushing, disposal, replacement of displaced volume of extracted rock with fill material or special handling of rock."

See a copy of this note behind **Tab 11**.

It is Better Roads' and Armadillo's opinion that this note does not negate the Department's responsibility under the contract to compensate Armadillo and Better Roads for the additional cost incurred, and for the delay incurred, as a result of the extra work caused by having to deal with the rock in the pipe trench.

- 1. In the absence of specific boring information or other specific geotechnical information it was not possible for a bidder to determine from this general note whether rock would or would not be encountered, or if encountered, at what location it would be encountered, at what elevation it would be encountered, how thick the rock would be, how hard the rock would be, or what the quantity of rock within the pipe trench would be. Without being able to quantify the rock and ascertain the difficulty of removing the rock there was no way for a bidder to estimate the cost of removing the rock, including its impact on pipe production, and to include this cost in its bid. If the successful bidder put a large contingency in its bid for rock and then no rock was encountered, this would be a windfall profit for the contractor and an unnecessary cost to the Department for which no benefit would have been received.
- 2. If the Department's designer felt that there was rock in the pipe trench area then the designer should have included specific information about this rock in the plans and specs and not just a general note. Standard practice would be for the designer to have soil borings performed during the design phase. By not taking borings in the area of the pipe trench, and by not providing specific information about rock that a bidder could quantify, a reasonable interpretation of the plans and

specifications would be that no rock was to be expected, or that if rock was encountered the Department would issue a change order accordingly.

3. This general note cited by the Department does not specifically address installation of drainage pipe and structures. The heading above this note is "<u>Embankment and Subgrade Material</u>". Again, if the Department expected the contractor to encounter rock during installation of the new drainage system, then the Department should have provided specific information and data in the utility installation portion of the contract from which the contractor would have been able to estimate the additional cost of dealing with the rock and not just a general note in the roadway drawings concerning past experience "in this general geographical area".

Since there was no specific information or data in the plans or specifications that would have allowed Better Roads and Armadillo to locate, identify, and quantify the rock that was actually encountered by Armadillo during pipe installation, it is Better Roads' and Armadillo's position that the rock was a differing site condition. It is the contractors' opinion that Better Roads and Armadillo are entitled to compensation for additional cost incurred and are entitled to a time extension for delays according to Section 4, <u>Alteration of Plans or of Character of Work</u>, including Article 4-3.7, <u>Differing Site Conditions</u>.

Relief that Better Roads and Armadillo Underground Are Seeking

As stated in the introduction portion of this position paper, Better Roads and Armadillo are seeking additional compensation and a time extension for the impacts of this differing site condition (rock within the pipe trench). Better Roads and Armadillo would like for the Disputes Review Board to issue a recommendation regarding entitlement for the following items of relief being sought by the contractors:

- 1. Additional compensation for Armadillo Underground for the additional crew time required to excavate the rock.
- 2. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe and structures as a result of lost productivity due to having to excavate the rock. This includes compensation for the cost of dewatering for a much longer period of time than expected due to the low productivity during pipe installation.
- 3. Additional compensation for the additional cost of removing the rock from the job site.
- 4. Better Roads markup on any additional compensation that Armadillo is entitled to.
- 5. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the

contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance.

- 6. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of encountering rock in the pipe trench excavation. Installation of the stormdrain pipe was a controlling item of work.
- 7. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive Disincentive for A + B, of the specifications.

EXPLANATION – MORE GROUNDWATER (AND MORE DEWATERING) THAN EXPECTED IN CERTAIN PORTIONS OF THE PIPE INSTALLATION OPERATION

Overview

Based upon the plans and specifications, and based upon prior experience, Armadillo expected the volume of dewatering (for pipe installation) to be no more than 10,000,000 gallons per day. However, at times the actual volume exceeded 20,000,000 gallons per day. Not only did this result in more dewatering work, but the amount of water encountered adversely impacted pipe installation production. This additional water and additional dewatering work delayed completion of the pipe installation, and because pipe installation was a controlling item of work, delayed completion of the project.

It is Better Roads' and Armadillo's position that the extraordinarily high volume of water encountered in some areas could not have been anticipated at the time of the bid. Therefore this is a differing site condition and the contractors should be compensated for the additional costs incurred and should be granted a time extension for the delay caused by the higher than anticipated volume of groundwater.

Facts

For pipe installation most of the job site was dewatered using wellpoint systems. However in certain areas of the pipe installation work where the amount of water from the dewatering operation exceeded 20,000,000 gallons per day wellpoints alone would not take care of the groundwater. It was necessary to use other means in addition to wellpointing. Also, in some areas of pipe installation the volume of water was so great

that the water could not be completely controlled at all and this had a significant adverse impact on pipe laying and backfilling operations.

During the period that the excess water was being pumped on site the Department did not provide Armadillo with a copy of the permit requirements. Instead the Department and KCCS directed the means and methods of dewatering and threatened to shut down the operation if Armadillo did not follow the Department's instructions.

Entitlement

There was no information in the plans and specifications that would alert bidders to the fact that an extraordinary amount of dewatering would be required at some locations where pipe was to be installed. It is the experience of Armadillo that the maximum volume of water allowed by the South Florida Water Management District is 10,000,000 gallons per day under the provisions of a Short Term Dewatering Permit. There was nothing in the plans or specifications of the project to advise bidders that anything other than the usual Short Term Dewatering Permit would be required for this project. Therefore, based upon the lack of information about a special permit, and based upon prior experience, Armadillo expected to handle no more than 10,000,000 gallons of water per day. It is Better Roads' and Armadillo's position that this was a reasonable interpretation of the requirements of the contract.

Since the greater-than-usual volume of water encountered by Armadillo in certain areas was not indicated in the plans and specifications, could not have been anticipated based upon prior experience, and could not be determined from an inspection of the job site prior to the bid, it is Better Roads' and Armadillo's position that the extraordinary volume of water actually encountered was a differing site condition. It is the contractors' opinion that Better Roads and Armadillo are entitled to compensation for additional cost incurred and entitled to a time extension for delays according to Section 4, <u>Alteration of Plans or of Character of Work</u>, including Article 4-3.7, <u>Differing Site Conditions</u>.

Relief that Better Roads and Armadillo Underground Are Seeking

As stated in the introduction portion of this position paper, Better Roads and Armadillo are seeking additional compensation and a time extension for the impacts of this differing site condition (unusually high volume of water encountered during pipe installation). Better Roads and Armadillo would like for the Disputes Review Board to issue a recommendation regarding entitlement for the following items of relief being sought by the contractors:

- 1. Additional compensation for Armadillo Underground for the additional crew time required to install the stormdrain pipe and structures as a result of encountering an unusually high volume of groundwater.
- 2. Additional compensation for the additional dewatering work.
- 3. Better Roads markup on any additional compensation that Armadillo is entitled to.

- 4. Compensation for the impacts of delay, Better Roads. This includes compensation for additional direct cost incurred for additional maintenance of traffic work, additional erosion control work if not covered by unit prices in the contract, additional maintenance of signalization and lighting, and additional project supervision, all for the extended period of performance.
- 5. A time extension for the delay to completion of the project that resulted from the additional time necessary to install the stormdrain pipe as a result of encountering more groundwater than expected. Installation of the stormdrain pipe was a controlling item of work.
- 6. A time extension for the required completion date for purposes of determining the incentive bonus that the contractor is entitled to for early completion according to Article 8-13.1, Incentive Disincentive for A + B, of the specifications.

<u>CHRONOLOGY OF DOCUMENTS AND EVENTS PERTINENT TO THE</u> <u>ISSUES BEING CONSIDERED BY THE DISPUTES REVIEW BOARD AT THIS</u> <u>HEARING</u>

11/5/04 Letter from Armadillo Underground to Better Roads. In reviewing the progress on US 41 it is apparent that several factors are preventing Armadillo Underground from reaching our production goals, the most significant of which is the frequency of density testing required by the supplemental specifications. (Armadillo suggested a substitution of backfill materials as a possible solution to the problem. See letter for complete details.) **Tab 12**.

11/9/04 Letter from Better Roads to FDOT. Better Roads furnished Armadillo's November 5, 2004 letter regarding pipe trench backfill to FDOT. Better Roads requested that FDOT respond. **Tab 13**.

11/15/04 Letter from Armadillo Underground to Better Roads. In reviewing our progress on the US 41 project it is apparent that we are experiencing significant delays as a result of the inspections being conducted on the job. (See letter for details). **Tab 14**.

11/15/04 Letter from Better Roads to KCCS. Better Roads furnished Armadillo's November 15, 2004 letter regarding pipe installation to KCCS. Better Roads requested that KCCS respond. **Tab 15**.

11/18/04 Letter from KCCS to Better Roads. Re: Pipe Backfill Procedures. The Department has considered your subcontractors requests for relief from the Specifications governing pipe backfill methods and material. Unfortunately we cannot waive the requirements for lift thickness or lot length as requested in their letter dated November 15th. Likewise, the request to use unwrapped No. 57 stone infiltrated with sand in lieu of obtaining density in lifts as requested in their letter dated November 5th is also denied. **Tab 16**.

12/3/04 Letter from KCCS to Better Roads. Re: Density Testing for Pipe Backfill. Following the discussions of yesterday's project meeting I was able to discuss the requirements for density testing with Mr. Dan Bush of the FDOT District Materials Office. Mr. Bush confirmed that KCCS's interpretation is correct. The density tests only cover that material that has been placed. When additional pipe and backfill takes place that is another lot and requires another test. This letter is to serve notice to your subcontractor that we will continue to enforce the specification in the same manner that we have been to date. **Tab 17**.

12/3/04 Letter from Armadillo Underground to Better Roads: Re: We have been performing additional work for each test above and beyond those test required by the Contract Plans and Specifications. Please be advised that we will be submitting a Change Order for the impact of the additional testing. **Tab 18**

12/6/04 Letter from Better Roads to KCCS:Re: Intent to claim for additional testing (see letter for details). Tab19

12/7/04 Letter from KCCS to Better Roads: Re: Response to intent to claim for extra density test. The Department will not participate in any extra cost associated with this item. (see letter for details). **Tab 20**

1/7/04 Letter from Better Roads to KCCS: Re: Our continuous notice of claim for additional time and monies for the additional density testing. (see letter for details). **Tab 21**

12/3/04 Letter from Armadillo to Better Roads: Re: Intent to submit a change order for impassable rock removal (see letter for details) **Tab 22**

12/6/04Letter from Better Roads to KCCS:Re:Intent to claim on behalf of Armadillo Underground forImpassable Rock. Tab 23

12/7/04 KCCS to Better Roads: Re: Letter of rejection for the intent to claim of the Impassable Rock. KCCS references plan note on sheet 86. (see letter for details) **Tab 24**

12/22/04 Letter from Armadillo Underground to Better Roads Re: In response to your letter of December 8th, we have examined the note on Plan Sheet #86, and take exception to the interpretation provided by the Engineer. (see letter for details) **Tab 25**

1/7/05 Letter from Better Roads to KCCS: Re: Continuous letter of our intent to claim due to impassable rock. **Tab 26**

6/2/05 Letter from Armadillo Underground to Better Roads: Re: Letter of explanation of the impacts to the progress of the project along with preliminary costs and time delays. (see letter for details) **Tab 27**

8/1/05 Letter from Better Roads to KCCS: Re: Preliminary cost break down for the additional work due to additional density tests, excessive rock removal and excessive dewatering. (see letter for details) **Tab 28**

9/27/05 Letter from KCCS to Better Roads: Re: This letter is to confirm that we have received your preliminary cost information dated 8/1/05.... Once we agree to the time extension and monies due, you will be required to have an officer of your company certify the information (see letter for details) **Tab 29**

10/18/05E-mailed from KCCS to Better Roads:Re: Emailedreceived 10/18/05 with Engineers Estimate attached.Tab 30

10/26/05 Letter from Armadillo Underground to Better Roads: Re: In response to the proposal that was presented to us at our meeting on October 17, 2005, I have reviewed the content with the Principles of Armadillo Underground and they have found the Department's off to be satisfactory. **Tab 31**

10/31/05 Letter from Better Roads to KCCS: Re: Pursuant to you letter of September 27, 2005 (letter no: 254) and the Engineers Estimate of cost submitted to this office on October 18, 2005 and further discussions concerning home office overhead and burden we are in agreement with the information provided to us on the above referenced claim. Please forward us the final paper work for signature. **Tab 32** 11/3/05 Letter from KCCS to Better Roads: Re: We have met several times in order to negotiate your claim on behalf of Armadillo. Due to the amount and nature of this claim, we will be submitting this matter to the Dispute

Review Board. Please provide our office with a list of all issues that you wish the board to consider. **Tab 33**

11/7/05 Letter from Better Roads to KCCS: Re: We are requesting clarification on KCCS's letter of 11/3/05 and there further explanation of why they are submitting this matter to the DRB. (see letter for details) **Tab 34**

12/2/05 Letter from Better Roads to Mr. John Nutbrown: Request for a Dispute Review Board Hearing on the aforementioned issues. **Tab 35**

CONCLUSION

Better Roads and Armadillo Underground respectfully request that the Disputes Review Board consider the matters that have been brought before the Board and issue a recommendation for entitlement to a contract modification (additional compensation and additional contract time) for the various impacts of change order work performed by Better Roads and Armadillo related to the installation of drainage pipe on this project. The three changes to the work that impacted Better Roads and Armadillo that we are bringing before the Board at this time are:

The Department directed Armadillo to perform significantly more density 1. testing than required by the contract specifications during backfilling of the drainage pipe. The Department did not issue a change order and did not give Better Roads and Armadillo an explanation of why the change was necessary. It appears that the Department made a decision to apply a specification that is in use in contracts that were issued by the Department after the contract for Better Roads' project was issued. This more recent specification, which is not a part of Better Roads' contract, requires significantly more density testing for backfill material than the specification that is included in Better Roads' contract. It is Better Roads' position that the Department has the right to make this change to the specifications because the change was within the scope of the contract. However, the contract is clear that if the Department alters the contract, and if the change results in additional cost or additional time of performance, then the Department is obligated to issue a supplemental agreement and modify the contract. The Department has not yet done this.

2. Armadillo encountered rock in the pipe trench that could not have been anticipated based upon the information in the bidding documents and based upon

a site visit prior to the bid. The rock was a differing site condition. Better Roads and Armadillo gave notice to the Department when the differing site condition was first encountered. The Department did not investigate the differing site condition and issue instructions accordingly as it should have done. Rather, without any investigation, the Department directed Better Roads and Armadillo to continue with the pipe work as designed. The Department also informed Better

Roads and Armadillo that the contractors would be expected to perform the work for the original price included in the contract. It is Better Roads' and Armadillo's position that according to Section 4 of the specifications the Department should have investigated and acknowledged the differing site condition, should have acknowledged the impacts of the differing site condition, and should have issued a supplemental agreement accordingly. The Department has not yet done this. In certain areas of the project Armadillo encountered a significantly higher 3. volume of water in the pipe trench than should have been expected based upon the information in the bidding documents and based upon a site visit prior to the bid. The additional volume of water that it was necessary to pump out of the ground and out of the pipe trench was a differing site condition. This differing site condition increased the cost of the work and the time of performance. Accordingly, the Department should issue a supplemental agreement to compensate Better Roads and Armadillo Underground for the extra work and the delay and should issue a time extension to the contract. The Department has not yet done this.

Better Roads and Armadillo submitted a preliminary estimate of additional cost to the Department for the change order work described above in August 2005. The Department's project administrator, KCCS, Inc., prepared an Engineer's Estimate of Cost for the extra work and delay as well as an estimate of the number of days of delay. Better Roads and Armadillo and the Department spent approximately three months negotiating this change order. In October 2005 an agreement was reached, both as to additional compensation and as to additional contract time. It was Better Roads' and Armadillo's understanding that the Department would prepare a supplemental agreement and that if the terms and conditions of the supplemental agreement as drafted by the Department were acceptable to Better Roads and Armadillo, then Better Roads would execute the supplemental agreement.

However, for reasons unknown to Better Roads and not reasonably explained by the Department, no supplemental agreement was issued. Rather, the Department informed Better Roads and Armadillo that the Department had made a decision that the matter should be referred to the Disputes Review Board for a recommendation. The letter from KCCS notifying Better Roads of this decision included "Due to the amount and nature of this claim, we will be submitting this matter to the Dispute Review Board". It is Better Roads' position that there is no provision in the contract to support the Department's decision to submit this matter to the Dispute Review Board "due to the amount and nature of this claim". Better Roads and Armadillo negotiated a change order in good faith and were led to believe that an agreement had been reached and that the contract

would be modified by a supplemental agreement. There was no dispute among the Department and Better Roads and Armadillo once an agreement had been reached for additional compensation and additional contract time. Therefore Better Roads knows of no reason why the Department should be insisting that matters already agreed upon should be referred to the Dispute Review Board. However, if the Department will not issue a supplemental agreement to formalize the agreement reached among Better Roads,

Armadillo, and the Department, then Better Roads has no choice other than to ask the Disputes Review Board to consider the contractors' entitlement to relief for the impacts of the change orders described in this Position Paper.

POSITION STATEMENT AS FURNISHED BY SUB-CONTRACTOR

The purpose of this paper is to outline the reasons that Armadillo Underground is entitled to additional compensation and time on the US-41 project. Our claim is for costs and time extensions resulting from conditions and circumstances which differed from those described in the project plans and specifications. There are three areas where the differences were substantial and resulted in impacts. Those areas were the density testing frequency, the amount of rock encountered and the volume of water encountered.

1. **Density Testing:**

- a. <u>Project Specifications</u>: The project specifications required the job to be inspected to FDOT Standard Specifications for Road and Bridge Construction, 2000 edition, as modified by the Supplemental Terms and Conditions. The Supplemental Terms and Conditions modified the 2000 edition to the requirements of the 2004 edition, which requires backfilling and compaction to be executed in accordance with Section 125-8, and defines the acceptance criteria in section 125-9. For the purposes of defining the number of tests to be taken, the term "LOT" is defined in Section 125-8.1.1. "A LOT is defined as one lift of backfill material placement, not to exceed 500 feet in length, or a single run of pipe connecting two successive structures, whichever is less.". Section 125-9.3 defines the frequency of density testing as one test per LOT. (See Attachment 1)
- b. Jobsite Conditions: During construction, FDOT revised its specifications for frequency of density testing. Although the new specification did not apply to this project, the project was inspected pursuant to the requirements of the current Supplemental Specifications which were enacted in July of 2005. These state "When placing backfill within a trench box each lift of backfill is considered a LOT. Placement of backfill within trench box limits will be considered a complete operation before trench box is moved for next backfill operation. When the trench box is moved for next backfill operation this will start new LOTS for each lift."

(See Attachment 2) An example of the impacts due to the increased testing is the run between structures S-228 and S-229, which was a 252.8 foot run. The depth and diameter of pipe dictate that there would be 36 density tests to be taken per the job specifications on this particular run. In practice, there were 179 tests taken. This is by no means the most extreme example of the testing performed on the job. Rather, it is a representative example. It was brought to the attention of the CEI firm that

the testing being performed was in extreme excess of that described in the plans and specifications. The CEI firm made the decision to continue with the testing pursuant to the newer specification despite the fact that it was not applicable.

c. <u>Explanation of Entitlement</u>: Density testing on the project was conducted to different standards than the job specifications. It appears that the people responsible for the density testing attended courses which taught inspection to a different standard than those on this project. As such, it is our firm belief that the project was held to standards that did not exist when the work was bid or awarded. Given the constant interruptions to our work which were dictated by the testing imposed on the project, Armadillo Underground was unable to maintain any significant levels of production. It was expected that it would be difficult to explain the differences between how the project specifications were written and how the job was actually constructed and inspected. We were fortunate to find that the State had issued an update to the Supplemental Terms and Conditions in July of 2005 which clarified the standards that this job was held to during construction

Attachments 1 and 2 relate to this issue

2. Severe Rock Encountered

- a. <u>Project Specifications</u>: In reviewing the project plans, the General Notes and Pay Item Notes have no reference to rock being included in the cost of excavation.(See Attachments 3 and 4)
- The soil borings for the project did not show the presence of rock. Nonetheless, on the Roadway Soils Survey page there is a generic note which states that "It has been the experience of the Department, with projects constructed within this general geographical area, that although preliminary borings did not indicate a constant presence of rock, rock was encountered while performing underground installations. Therefore, the contactor should consider the increased cost of all underground work activities while preparing his bid. All cost of rock excavation shall be

included in the appropriate items of work contained within the contract. No extra compensation or time extension will be allowed for additional work directly associated with the splitting, excavation, crushing, disposal, replacement of displaced volume of extracted rock with fill material or special handling of rock.". This statement is on Plan Page 86 (See Attachment 5) Neither the general notes in the plans, nor any location in the plans, contained such an indication for the contractor.

- b. <u>Jobsite Conditions</u>: On the west side of US-41 from approximate station 73+00 to approximate station 79+75, significant rock was encountered. The rock that was encountered was in continuous layers and required the mobilization of rock hammers to break and remove. The total amount of rock removed from the job was in excess of 1570 cubic yards.
- c. Explanation of Entitlement: When reviewing the General Notes and Plan Notes there are no references to the presence of rock being a factor in the work or being included in the cost of the work. The note on Page 86 was understood to apply only to the Roadway portion of the job, and not the balance of the job because it was located in the Roadway / Soils section of the plan, not the General Notes or Pay Item notes. After requesting payment for rock removal, the note on Page 86 was brought to our attention. We reviewed the note, and could not understand how it quantified the amount of rock that we should have included in our bid. Furthermore, it is our understanding that a similar note was included in the project plans for project FIN # 195693-1-52-01 on drawing sheet no. 19, and rock conditions were encountered. It is also our understanding that on this similar project a claim for entitlement was found to have merit and was paid thru SA # 1/4999-3. We believe that the State has set a precedent by paying for rock excavation under similar circumstances.

Attachments 3, 4 and 5 relate to this issue

3. Volume of Water Encountered

a. <u>Project Specifications</u>: The project specifications did not contain the dewatering permit which would be used to determine what would be considered a reasonable volume to dewater. In the experience of Armadillo Underground, the maximum volume allowable by South Florida Water Management District (SFWMD) on a Short Term Dewatering Permit is 10 million gallons per day, so this volume was considered to be reasonable. The soil borings on the plan were examined and found to show primarily sand and trace rock, shell and organics. Based on this information and our knowledge of dewatering systems, it was foreseeable that the amount considered reasonable would support the needs of the project.

- b. <u>Jobsite Conditions</u>: Most of the jobsite was dewatered using wellpoint systems which worked successfully while the soils matched what was shown on the plans. When the conditions changed, the volume of water to be pumped became uncontrollable with the wellpoint system, exceeding 20 million gallons per day. This is far in excess of what we considered to be reasonable, and was certainly not foreseeable.
- During the period that the excess water was being pumped on site, Armadillo Underground was not provided with a copy of the relevant permitting or the requirements so that they could be met. Rather, the inspection staff and FDOT personnel directed means and methods as to how the dewatering equipment was to be configured, operated and discharged, under threat of shut-down.
- c. <u>Explanation of Entitlement</u>: Our justification of entitlement has several aspects. What was encountered was not reasonable when the volume pumped is compared against the typical Short Term Dewatering Permit pumping volumes, and was not foreseeable given the unexpected geological conditions which were not represented on the plans and specifications.
- Finally, the inspection staff directed means and methods on the dewatering, to comply with requirements that were unknown to Armadillo Underground. This resulted in increased costs and delays to the project.

As the job has progressed we have tried to discuss each of these issues with the Engineer and have been told each time that our claims were denied. It appeared during the project that the Management on the job was focused on denying the existence of any changes in the work, apparently in the interest of controlling costs. This prevented the changes from being managed by the State using the change order process, and controlling the impacts

to all parties involved in the project. Instead, the issues were not addressed by the **State** when brought to their attention, and it was left to the Contractor to attempt to resolve the issues and complete the work. This resulted in negative impacts to all parties involved or affected by the project, from the State to the Motoring Public and greatly escalates the costs to complete the project.

It has been our experience that when the focus is removed from the work and is shifted to other agendas, control of cost and schedule is lost. We believe that this management philosophy is responsible for the industry wide escalation of costs far in excess of the recent increases in materials and labor.

DEPARTMENTS POSITION STATEMENT

I. Background

Better Roads, Inc. (herein referred to as Better Roads) submitted a claim for \$1,810,171.83 and 87 days on behalf of themselves and their underground subcontractor, Armadillo Underground, Inc. (herein referred to as Armadillo) based upon delays and costs associated with the installation of the storm water drainage system.

The claim is comprised of several components as outlined below:

A. Armadillo

- 1. Loss of Production
 - a. Excessive Densities
 - b. Excessive Rock Encountered
- 2. Additional Dewatering
- 3. Additional Bedding Stone
- A. Better Roads
 - 1. Hauling and Dumping of Rock
 - 2. Indirect Impacts
 - 3. Lost Incentive

The primary reason for this claim is that it is the contractor's argument that excessive rock was encountered during the installation of the storm drainage system, resulting in delays, loss of production, and increased labor, material, and equipment costs. The components of the claim outlined above are summarized in further detail in our analysis as follows:

Page Two

II. Analysis

A. 1. a. Excessive Densities:

It is the contractor's contention that because of the difficulty in installing the drainage system caused by rock and excessive dewatering efforts, that they were only able to achieve a minimal production rate of approximately 32 feet per day. As such, each day's operation confined them to one trench box's length to install and backfill that portion of pipe. The contractor's understanding of the specifications was that the density testing requirements for each LOT went from structure to structure or 500 feet whichever was less. Upon notification that the contractor's position was that excessive densities were being taken, a meeting was held between KCCS, the Department, BRI, and Armadillo. The contractor's position is based upon their interpretation of Specification # 125-8.1, which states that "a LOT is 1 lift of backfill material, not to exceed 500 feet in length or a single run of pipe connecting 2 successive structures, whichever is less." The result of the meeting was that the Department's representative, Mr. Dan Bush held the

position that the amount of tests being taken, were not excessive and were necessary to document the compaction of the areas inside of the trench box, in accordance with Specification 125-8.1, maintaining that that each movement of the trench box constituted a new operation and thus a new LOT. This resulted in more density testing than what the contractor had estimated.

Analysis – The contractor is not entitled to additional compensation for the testing requirements as it is clear that with each movement of the trench box, that an entirely new backfilling operation is established. The specifications do not dictate the means and methods to the contractor, and it is not the responsibility of the Department to dictate the length of pipe run for each backfilling operation. It is the requirement of the specification to ensure that tests are performed during each backfilling operation, and it is clear that each backfilling operation constitutes its own separate LOT. The contractor could have opened a longer run of trench through the use of multiple trench boxes, or could have postponed backfilling operations until longer runs of pipe were installed.

A.1.b. Excessive Rock Encountered:

It is our understanding that the contractor's position on the issue of excessive rock is as follows: Contract time is established using standard production rates, and at the lower end of the spectrum for these rates, the Department has established 100' per day for pipe installation involving depths exceeding 5' and for when dewatering is required. The contractor's actual production rates were much lower, and they attribute this to excessive rock. The argument they provide for seeing this as an unforeseen condition is that there were no soil borings taken along the roadway. The only soil borings that were taken on the project were in the area of the retention pond, and those did not show the presence of rock.

Page Three

Analysis – Despite the arguments stated above, the contractor does acknowledge the plan note on Sheet 86 which states:

"It has been the experience of the Department, with projects constructed within this general geographical area, that although preliminary borings did not indicate a constant presence of rock, rock was encountered while performing underground installations. Therefore, the contractor should consider the increased cost of all underground work activities while preparing his bid. All cost of rock excavation shall be included in the appropriate items of work contained within the contract. No extra compensation or time extension will be allowed for additional work directly associated with the splitting, excavation, crushing, disposal, replacement of the displaced volume of extracted rock with fill material or special handling of rock."

This plan note appears in the soil boring data sheets.

A.2. Additional Dewatering:

The contractor has included his costs for equipment, materials, and operating costs for pumps and other dewatering equipment associated with the loss of production. These costs are based upon the costs to perform the dewatering for the number of days over and above that which were accounted for in their schedule.

Analysis – It follows from the argument above, that compensation for this item would be dependent upon the resolution on the time issues for the delays associated with the density testing and encountering the rock. As our analysis above shows, there is no entitlement due for those items. Likewise, as the cost of dewatering is associated with the performing the work, no entitlement is due for this item. However, if it is later determined that the contractor is due compensation for the items listed above, then it follows that they would also be entitled to the costs associated with the additional dewatering.

A.3. Additional Bedding Stone:

The contractor is claiming for the material cost for bedding stone as a result of encountering what they believe to be excessive water in the pipe trenches. They base their argument on the fact that the removal of the rock layer during the pipe installation resulted in an artesian condition making it difficult if not impossible to properly dry the pipe trench. To resolve this issue, the contractor used bedding stone per the specifications to provide for a firm and unyielding pipe bed so that he could install the pipe. Their position is that because of the existence of the rock layer caused this condition, they see this as a subsequent unforeseen condition, and are requesting payment for the bedding stone.

Analysis – There is no basis for this portion of the claim based upon the fact that the design of the storm drainage system showed elevations of the pipe to be very deep throughout most of the project. Regardless of the presence of rock, extensive dewatering efforts should have been anticipated. Furthermore, the plans show the water table to vary between 1.00 m and 2.07 m. Therefore, no entitlement is due.

Page Four

B.1 Hauling and Dumping of Rock:

The prime contractor, Better Roads, hauled and dumped the majority of the rock encountered by their subcontractor, Armadillo. They are claiming for the costs associated with hauling and dumping.

Analysis – It is agreed that Better Roads hauled and dumped the majority of the rock removed by Armadillo. However, referring again to the plan note on Sheet 86, payment for the cost of hauling and dumping the rock is determined by whether or not it is deemed that the rock constitutes an unforeseen condition. As indicated in the plans, it was

reasonable to expect that rock would be encountered during the installation of the drainage system, and therefore no entitlement is due.

B.2. Indirect Impacts:

Better Roads is claiming for indirect impacts associated with the delay regarding the loss of production experienced by Armadillo.

Analysis – The contractor is not due compensation for indirect impacts as other phases of the work were taking place concurrently with the pipe installation. Better Roads has not provided us with information showing how any delays associated with the pipe installation impacted their critical path. Other phases of the work (including lighting and signals) are still not completed, and this work is independent of the completion of the storm drainage system. Therefore, no entitlement is recommended for indirect impacts.

B.3. Loss of Incentive:

Better Roads is claiming for lost incentive equal to the number of days of lost production encountered by Armadillo.

Analysis – Again, as other work is still ongoing that is independent of the storm drainage, and as such work is not complete, and since we have not yet final accepted the project, there can be no consideration for lost incentive given at this time.

CONTRACTORS REBUTTAL TO DEPARTMENTS POSITION

REBUTTAL - GENERAL

Based upon our review of the Department's position paper, it appears to Better Roads and Armadillo Underground that it is currently the position of the Department that the contractors are not entitled to any compensation and/or time extensions for any of the three issues that Better Roads and Armadillo are bringing before the Disputes Review Board at the upcoming hearing. This is completely inconsistent with events that preceded the November 3, 2005 decision by the Department that the three issues must be submitted to the Disputes Review Board for a hearing for entitlement.

For approximately three months Better Roads and Armadillo discussed and negotiated entitlement and quantum with the Department for issues related to the drainage work. On October 31, 2005 Better Roads advised the Department that Better Roads and Armadillo agreed to accept the most recent settlement offer proposed by the Department.

1. See the September 27, 2005 letter from KCCS to Better Roads re: Claim for Negotiations for Delay. A copy of this letter is behind Tab 29 in the position paper submitted to the Board by Better Roads on January 6, 2006. This KCCS letter includes "We have met on several occasions to discuss this claim in detail *and negotiate a settlement*. We are proceeding to do an Engineer's Estimate *for*

costs associated with the delay your company has experienced. We expect to have the Engineer's Estimate finalized within 14 days from this date. Once we agree to the time extension and monies due, you will be required to have an officer of your company certify the information." (Italics added for emphasis)

- 2. See behind Tab 30 in Better Roads' position paper a copy of an Engineer's estimate furnished to Better Roads on October 18, 2005. This estimate indicates that it is the position of the Department that Better Roads is entitled to additional compensation in the amount of \$927,122.61 and to a time extension of 86 days. (Note The compensation amount was increased as a result of further discussions after October 18, 2005.)
- 3. See behind Tab 31 in Better Roads' position paper a copy of an October 26, 2005 letter from Armadillo Underground to Better Roads confirming that the contractors and the Department have agreed to a change order in the amount of \$1,164,086.68.
- 4. See behind Tab 32 in Better Roads' position paper a copy of Better Roads' October 31, 2005 letter to KCCS advising the Department that Better Roads and Armadillo are in agreement with the most recent settlement offer proposed by the Department.

Better Roads and Armadillo negotiated with the Department in good faith in an effort to reach agreement on a supplemental agreement. It was Better Roads' and Armadillo's belief at the time of the negotiations that the Department was also negotiating in good

faith. However, the only conclusion that can be reached now, based upon the Department's present position that there is no entitlement for any of the issues previously negotiated, is that the Department either negotiated in bad faith in August, September and October, or that the Department is acting in bad faith at this time and wishes to turn a previously negotiated settlement into a dispute in order to inconvenience or injure Better Roads and Armadillo Underground.

<u>REBUTTAL – DETAILED</u>

The following is Better Roads' detailed and specific rebuttal to the various positions and statements included in the Department's position paper. The headings in bold are the headings used by the Department in its position paper. The order of Better Roads' rebuttal follows the order of the Department's position paper.

I. Background

Department position – Better Roads submitted a claim for \$1,810,171.83 and 87 days on behalf of themselves and their underground subcontractor, Armadillo Underground, based upon delays and costs associated with the installation of the stormwater drainage system.

Better Roads rebuttal – Better Roads has not submitted a formal claim to the Department. On August 1, 2005 Better Roads submitted a breakdown of additional costs to the Department. This cost breakdown was referred to in the cover letter as "Claim for additional compensation" and the heading on the first page of the cost breakdown was "Delay Claim, Cost Data". However, in the August 1, 2005 cover letter to the Department Better Roads made it clear that what was being submitted was "preliminary cost information". The Department is aware that the August 1, 2005 was not a formal claim. The cost information submitted with the August 1, 2005 letter was used as a starting point for negotiations for a change order.

Department position – The primary reason for this claim is that it is the contractor's argument that excessive rock was encountered during the installation of the stormdrain system, resulting in delays, loss of production, and increased labor, material, and equipment costs.

Better Roads rebuttal – Better Roads would not characterize the rock differing site condition as the "primary reason for this claim". All three of the issues that are listed in Better Roads' position paper (the issues that Better Roads is bringing before the Board at the upcoming hearing) had a significant impact on Armadillo Underground and Better Roads.

II. Analysis, A.1.a. Excessive Densities

Department position – "The contractor's position is based upon their interpretation of Specification No. 125-8.1 which states that "A LOT is one lift of backfill material, not to exceed 500 feet in length or a single run of pipe connecting two successive structures, whichever is less." The result of the meeting was that the Department's representative, Mr. Dan Bush, held the position that the amount of tests being taken were not excessive and were necessary to document the compaction of the areas outside the trench box, in accordance with Specification 125-8.1, maintaining that each movement of the trench box constituted a new operation and thus a new LOT."

Better Roads rebuttal – Obviously Better Roads does not agree with the Department's interpretation of Specification 125-8.1.1. as stated in its position paper. It appears to Better Roads that the Department's present interpretation of Specification 125-8.1.1 is based upon a revised specification included in Section 125, <u>Excavation for Structures and Pipe</u>, in contracts that were issued some time after the present contract was entered into. The revised specification (revised in 2004 or 2005) reads "When placing backfill within a trench box each lift of backfill is considered a LOT. Placement of backfill within trench box limits will be considered a complete operation before trench box is moved for next backfill operation. When the trench box is moved for next backfill operation this will start new LOTs for each lift."

The last sentence in Specification 125-8.1.1, as included in Better Roads' contract, is "For multiple phase backfill, a LOT shall not extend beyond the limits of the phase". The only way that the specification in Better Roads' contract could be interpreted in the manner that the Department is apparently now interpreting it is to assume that a "phase" is one trench box length. It is Better Roads' position that this interpretation (a phase is one trench box length) is not one that a bidder could reasonably have been expected to make. One trench box length is not normally referred to as a "phase" in common construction practice. Furthermore it should be noted that when the Department revised this specification to require that when backfill is being placed within a trench box each lift of backfill is considered a LOT the Department did not describe this as a "phase". It is Better Roads' position that this revised specification is an entirely new specification and is not a clarification of the word "phase" as used in Specification 125-8.1.1 in Better Roads' contract.

II. Analysis, A.1.a., Excessive Densities (Analysis)

Department position – "The contractor is not entitled to additional compensation for the testing requirements as it is clear that with each movement of the trench box that an entirely new backfilling operation is established."

Better Roads rebuttal. Better Roads does not agree with this position. It is definitely not clear in the contract, and is not clear in normal practice, that each movement of the trench box begins an entirely new backfilling operation. This interpretation goes against a reasonable interpretation of the requirements for density testing on any backfilling operation on a FDOT project. If the nature or classification of the backfill material does not change, and if the method of compaction and the compaction effort does not change, then the backfilling in successive movements of the trench box does not constitute an "entirely new backfilling operation". Furthermore, Specification 125-8.1.1 does not refer to "new backfilling operation". Specification 125-8.1.1 refers to "LOT", and LOT is specifically defined.

II. Analysis, A.1.b., Excessive Rock Encountered

Department position – "The argument they provide for seeing this as an unforeseen condition is that there were no soil borings taken along the roadway. The only soil borings that were taken on the project were in the area of the retention pond, and those did not show the presence of rock".

Better Roads rebuttal – The contract drawings include boring logs for six soil borings made in the area of the retention pond. All of the soil in these six borings is classified as sand. There is no indication of a rock formation in any of the six borings. Additionally, there is extensive soil survey information shown on the roadway cross section drawings. The soil in the area where Armadillo encountered rock in the pipe trench is all classified

as sand on these drawings. Additionally, there was no other geotechnical data of any kind provided in the plans or specifications that identified rock to be excavated. Further, the presence of rock in the proposed pipe trench could not have been identified during a site visit. For all of these reasons this was a differing site condition. Despite the Department's reference to a note in the drawings warning of that rock had previously been encountered "within this general geographical area", there was no way for a bidder to make a reasonable determination that rock would be encountered, and if encountered,

where it would be encountered, how hard the rock would be, how thick the rock would be, or at what elevation the rock would be encountered.

The Department does not specifically state in its position paper that Better Roads and Armadillo are not entitled to relief for having encountered rock in the pipe trench. However, Better Roads is assuming that this is the position of the Department based upon the Department having cited the note on Drawing Sheet No. 86.

II. Analysis, A.2., Additional Dewatering

Department position – "The contractor has included his costs for equipment, materials, and operating costs for pumps and other dewatering equipment associated with the loss of production. These costs are based upon the costs to perform the dewatering for the number of days over and above what were accounted for in their schedule".

Better Roads rebuttal – The Department's position does not accurately describe the relief that Better Roads and Armadillo are seeking for this issue. Better Roads and Armadillo are asking for compensation for:

- 1. As a result of encountering more groundwater in certain areas than was expected, more time than expected was required to install the storm drain system. The higher volume of groundwater to be removed adversely impacted pipe laying production, thus delaying completion of the work. This decrease in production increased the total cost of installing the new storm drain system. One element of cost associated with this longer-than-expected time to install the storm drain system was the cost of dewatering for more days than expected.
- 2. In addition to having to perform dewatering work for more days than expected because the excessive ground water slowed pipe installation production, there was a higher volume of groundwater per day to remove than expected. That is, the daily dewatering effort was more extensive and more costly than expected.

Please see pages 15 and 16 of Better Roads' position paper for the specific list of items of relief that Better Roads and Armadillo are seeking for the groundwater issue.

II. Analysis, A.2., Additional Dewatering (Analysis)

Department position – "It follows from the argument above that compensation for this item would be dependent upon the resolution of the time issues for the delays associated with the density testing and encountering the rock."

Better Roads rebuttal – Better Roads and Armadillo do not agree that entitlement to relief for the issue of encountering more groundwater than could have reasonably been expected is dependent upon Better Roads and Armadillo demonstrating entitlement for the issue of having to perform more density testing than required by the specifications and for the issue of having to perform more work as a result of having encountered the rock differing site condition. All three of these issues (additional density testing, rock in the pipe trench excavation, more groundwater than expected) adversely impacted pipe laying production, and while it is true that the impacts of the individual issues may be difficult to separate, it is Better Roads' and Armadillo's position that entitlement for each issue is a separate matter.

II. Analysis, Additional Bedding Stone

Department position – "The contractor is claiming for material cost for bedding stone as a result of encountering what they believe to be excessive water in the pipe trenches."

Better Roads rebuttal – Again, there is no claim at this time. It is a fact that the matter of compensation for the additional cost of furnishing and installing bedding stone was one of the items that was included in the negotiations between the contractors and the Department during the period August – October 2005. However, since the Board will not be considering quantum at this hearing Better Roads did not request that the Board consider whether Better Roads and Armadillo are entitled to compensation for the impacts of an excessive amount of groundwater (whether the excessive groundwater was caused by the presence of a layer of unexpected rock or was caused by something other than the layer of rock), then it is Better Roads' position that the additional cost of bedding stone should be considered as one element of additional cost when the Department and the contractors are negotiating quantum.

II. Analysis, Additional Bedding Stone (Analysis)

Department position – "There is no basis for this portion of the claim based upon the fact that the design of the storm drainage system showed elevations of the pipe to be very deep throughout most of the project. Regardless of the presence of rock, extensive dewatering efforts should have been anticipated. Furthermore, the plans show the water table to vary between 1.00 m and 2.07 m. Therefore no entitlement is due.

Better Roads rebuttal – Better Roads and Armadillo are not disputing the fact that the contractors should have expected to have to dewater to install the new storm drainage

system. The contractors did expect to dewater, using reasonable means and methods. However, it is the position of Armadillo Underground that the volume of water actually encountered could not have been anticipated. At times Armadillo Underground removed more than 20,000,000 gallons of groundwater per day. It is Armadillo's position that this much volume could not have been anticipated.

II. Analysis, B.1., Hauling and Dumping of Rock (Analysis)

Department position – "It is agreed that Better Roads hauled and dumped the majority of the rock removed by Armadillo. However, referring again to the plan note on Sheet 86, payment for the cost of hauling and dumping the rock is determined by whether or not it is deemed that the rock constitutes an unforeseen condition. As indicated in the plans, it was reasonable to expect that rock would be encountered during the installation of the drainage system, and therefore no entitlement is due."

Better Roads rebuttal – Better Roads disagrees that it would have been reasonable for Better Roads and Armadillo to expect that rock would be encountered, that it would have been reasonable for Better Roads and Armadillo to attempt to quantify the amount of rock that would be encountered and the difficulty of removing that rock, and that it would have been reasonable for Better Roads and Armadillo to have included a significant amount of cost in the bid for removal of rock. There was no information in the bidding documents that would have allowed Better Roads and Armadillo to anticipate the significant amount of rock that was actually encountered during pipe installation. The general disclaimer note in the drawings does not negate the differing site condition clause of the contract. If the Department itself was reasonably certain that rock would be encountered, then the Department should have done one of two things (or both). Either the Department should have made borings in areas where the Department expected rock to be encountered and should have included these borings in the bidding documents so the bidders could estimate the cost of rock excavation and include this cost is their bids. Or, the Department should have included a unit price line item and an estimated quantity in the bid form for excavation of rock. The Department did neither. The only logical conclusion is that the Department itself did not anticipate that any significant amount of rock would be encountered. Better Roads and Armadillo were correct in not including a contingency in their bid price for rock excavation, but instead relying on the differing site condition clause to protect the contractors if rock was encountered. It is the opinion of Better Roads and Armadillo that neither did the Department want bidders to include a contingency it their bids that would have covered the cost of removing the extensive amount of rock that Armadillo actually excavated. It is the opinion of Better Roads and Armadillo that the Department expected bidders to rely on the differing site condition clause if rock was encountered.

II. Analysis, B.2., Indirect Impacts (Analysis)

Department position – "The contractor is not due compensation for indirect impacts as other phases of the work were taking place concurrently with the pipe installation. Better

Roads has not provided us with information showing how any delays associated with the pipe installation impacted the critical path... Therefore, no entitlement is recommended for indirect impacts."

Better Roads rebuttal – The fact that "other phases of the work were taking place concurrently with the pipe installation" has nothing to do with whether or not Better Roads is entitled to a time extension. The criteria for entitlement to a time extension is included in the contract. The primary contract provisions that are applicable are:

1. The Contractor shall be entitled to a time extension only to the extent that the performance of any portion of the additional work is a controlling work item and the performance of such controlling work item actually delays completion of the project due to no fault of the Contractor.

2. The Department may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid.

It is the position of Better Roads and Armadillo that:

1. Installation of the drainage work that was impacted by the change in the backfilling density testing specifications, by the rock differing site condition, and by the unforeseen amount of groundwater encountered was definitely a controlling item of work.

2. There is no provision in the contract that states that if the contractor was able to work on some other phase of the project at the time that there was a delay to a controlling item of work then the contractor is not entitled to a time extension.

II. Analysis, B.2., Indirect Impacts (Analysis)

Department position – "Other phases of the work (including lighting and signals) are still not completed, and this work is independent of the completion of the storm drainage system. Therefore, no entitlement is recommended for indirect impacts."

Better Roads rebuttal – Late-stage phases of the work such as lighting and signalization are <u>not</u> necessarily independent of the storm drainage system work that was performed earlier in the project. Completion of lighting and signalization work was dependent upon completion of roadway work, and completion of roadway work was dependent upon completion of underground drainage work. It is not logical to take the position that Better Roads is not entitled to a time extension for delays to a controlling item of work (drainage) just because the drainage work was not the last item of work to be completed on the project.

II. Analysis, B.3., Loss of Incentive (Analysis)

Department position – Again, as other work is still ongoing that is independent of the storm drainage, and as such work is not complete, and since we have not yet final accepted the project, there can be no consideration for lost incentive given at this time.

Better Roads rebuttal - Please reference Specification 8-13.1, <u>Incentive – Disincentive for</u> A + B. Better Roads would like to clarify that its position is as follows:

1. To the extent that Better Roads may be entitled to time extensions that would modify the date by which the project must be completed in order to earn an incentive bonus, Better Roads will expect the required completion date to be modified accordingly.

2. For purposes of the disincentive provisions of Specification 8-13.1 Better Roads will expect the required contract completion date to be extended by the number of days of time extensions that Better Roads is entitled to under the terms of the contract. This includes time extensions for changes, for weather, or for any other reasons for which Better Roads is entitled to additional contract time according to the specifications.

DEPARTMENTS REBUTTAL TO CONTRACTOR POSITION

In accordance with DRB procedure 5.9, the purpose of this letter is to rebut statements made in Better Roads' position paper dated January 6, 2006.

1. Page 2 of Better Roads' position paper states "KCCS, on behalf of the Department, prepared an Engineer's Estimate for the additional compensation and the additional contract time the Better Roads and Armadillo were entitled to and an agreement was reached in late October 2005."

Rebuttal: It is true that KCCS performed an Engineer's Estimate. However, the engineer's estimate is based upon costs incurred by Armadillo and Better Roads and does not guarantee entitlement. Per CPAM procedure 7.3, an Engineer's Estimate is required to be performed "regardless of fault." The Engineer's Estimate is not to be considered to be an offer for payment. An offer of payment is subject to the recommendation of the Entitlement Analysis and Department approval. Although there was agreement between KCCS and Better Roads with regard to the Engineer's Estimate, the Entitlement Analysis sustains that no entitlement is due for the reasons explained in both the Entitlement Analysis and our position paper. In addition, the Department had never approved or given any indication of their agreement with the Engineer's Estimate.

2. Page 15 of Better Roads' position paper states "During the period that the excess water was being pumped on site the Department did not provide Armadillo with a copy of the permit requirements. Instead the Department and KCCS directed the means and methods of dewatering and threatened to shut down the operation if Armadillo did not follow the Department's instructions."

Rebuttal: It is not the responsibility of the Department to provide copies of permit requirements to the contractor. All permits pertinent to the project are provided with the contract bid documents. In addition, Standard Specification 7-2.2 states in part, "In carrying out the work in the Contract, when under the jurisdiction of any environmental regulatory agency, comply with all regulations issued by such agencies and with all general, special, and particular conditions relating to construction activities of all permits issued to the Department as though such conditions were issued to the Contractor." Furthermore, neither the Department nor KCCS direct the means and methods of dewatering. The method of dewatering including pumps, hoses, wellpoints, etc., and the location of such devices were at the sole discretion of the contractor. KCCS' responsibility is to enforce the specifications as it relates to proper placement of RCP which includes ensuring a proper pipe bedding, and a dry, firm, and unyielding trench in which the pipe is to be placed.

BOARDS FINDINGS

 <u>Excessive Densities</u>: Armadillo/Better Roads' (ABR) interpretation of the specifications in effect at the time of bid; that density testing requirements for each LOT went from structure to structure or 500 feet whichever was less. No mention was made as to requirements changing when using a Trench Box or "Mule"

Support:

A. There was nothing in the specification notifying ABR to expect that placement of backfill within trench box limits will be considered a separate LOT each time the trench box was moved, the specifications were silent.

B. The term "Phase" in the specifications is typically understood to mean MOT phasing and not generally understood to mean each movement of the trench box constituted a new phase. This is contrary to the Department's assertion.

C. Language in the in the specifications has been revised since the start of this project to set out the method which was required of ABR on this project clearly making it known the contractor on this project was not aware of these revisions requiring numerous extra density tests..

D. Testimony indicated ABR's QC Plan (QCQ2000) was consistent with its interpretation of the specifications and the Department approved same.

E. Armadillo's statement that the Department could have done random testing to insure conformance to the specified density requirements outside of the original trench box location is consistent with its interpretation.

2. <u>Excessive Rock</u>: Armadillo/Better Roads' (ABR) position that significant rock was encountered and could not have been expected based upon the information furnished to bidders in the plans and specifications.

Support:

A. Plan Sheet No. 86 indicates two (2) stratums of soil sand, shell, organics and trace rock. Synonyms for "trace" are touch, bit, smidgen, tinge, and dash; all of which indicate only insignificant amounts to be expected.

B. ABR's testimony was that the stratum's correlated with the borings taken along the roadway and that of all borings ended well above the invert elevations show in the plans. Only two (2) went to or below the pipe invert elevation and that no borings were taken from Station 73+00 to 79+75 (West side of US 41).

C. ABR and the DEPARTMENT agree that the amount of rock encountered was significant.

D. The Board believes that the plan note appearing on the soil boring data sheets (Plan Sheet No. 86) stating "It has been the experience of the Department, with projects constructed within this general geographical area, that although preliminary borings did not indicate a constant presence of rock, rock was encountered while performing underground installations. Therefore the contractor should consider the increased cost of all underground work activities while preparing his bid. All cost of rock excavation shall be included in the appropriate items of work contained within the contract. No extra compensation or time extension will be allowed for additional work directly associated with the splitting, excavation, crushing, disposal, replacement of the displaced volume of extracted rock with fill material or special handling of rock.", does not absolve the DEPARTMENT from doing a sound, comprehensive prebid design investigation to quantify the locations, thickness, elevations, and hardness of rock.

E. We do not believe the above note contractually shifts the burden of risk to ABR and therefore the presence of significant amounts of rock is an **unforeseen condition**.

F. Testimony by ABR stated that in some cases significant amounts of rock were encountered within a few feet of soil boring locations shown in the plans.

3. <u>Additional De-watering</u>: Armadillo/Better Roads' (ABB) position that the project suffered an unusually high volume of water, which required and is therefore, entitled.

Support:

A. The Department and ABR stated that the permits included in the contracted were generic and Better Roads had to acquire from the South Florida Water Management District a Short Term Dewatering Permit. This standard permit allows a maximum volume of 10,000,000 gallons per day.

B. However, ABR stated that at times, the volume of water exceeded 20 to 30,000,000 gallons per day and since the water could not be held on site it was discharged into a navigable waterway (Imperial River) the Department was the responsible permitee, as per Contract specifications.

C. Due to the fact only that only one party can obtain a site specific permit the Department requested Better Roads obtain the second permit alleviating further delay. Even this method caused delay and the completion of the stormdrainage was further delayed.

BOARDS RECOMMENDATION

Based upon the information provided in the position papers and testimonyThe Board recommends the Contractor is **ENTITLED** to additional money and time relating to the items as presented.

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

Please remember that a response to the Dispute Review Board and the other party of your acceptance or rejection of this recommendation is required within 15 calendar days. Failure to respond constitutes an acceptance of this recommendation by both parties.

I Certify that I have participated in all the meetings and hearing of this Dispute Review Board regarding this issue and concur with the findings and recommendations

Respectfully Submitted

Dispute Review Board James T. Guyer DRB Member Keith Richardson DRB Member John W. Nutbrown DRB Chairman