$S \ E \ C \ T \ I \ O \ N \quad 9 \ 0 \ 5 \ -- \ P \ R \ O \ P \ O \ S \ A \ L \quad (CONTINUED)$

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for <u>five percent (5%) of total bid</u> and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDI	ENDUM NO.	1	DATED	4/16/2	010	ADDENDUM NO.	DA	TED	
ADDI	ENDUM NO		DATED			ADDENDUM NO.	DA	TED	
Number 1	Wage Rates,	replace sar Isheets, rep	es same; Add NT me; 907-504-4, i blace same; Ame	replaces	(Mus Resp	AL ADDENDA:1 st agree with total adden ectfully Submitted, E	da issued prior	to opening of	Èbids)
							Contractor		
					BY				
					_		Signature		
					TITI	E			
					ADD	DRESS			
					CITY	Y, STATE, ZIP			
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(To be fil	lled in if a corp	oration)							
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The follo	wing is my (ou	ır) itemize	d proposal.			STD 0026 01/077) / 1/	05924204	Loudordala	County/ico)
Revised 0	9/21/2005					STP-0026-01(077) / 10	10034301	Lauueruale	County(ies)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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SECTION 905 - PROPOSAL,

PROPOSAL BID SHEETS,

COMBINATION BID PROPOSAL,

CERTIFICATION OF PERFORMANCE - PRIOR FEDERAL-AID CONTRACTS, CERTIFICATION REGADING NON-COLLUSION, DEBARMENT AND SUSPENSION, SECTION 902 - CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORMS, OCR-485.

(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET OF SECTION 905 AS ADDENDA)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3060

CODE: (SP)

DATE: 04/12/2010

SUBJECT: Tack Coat Pay Item

Bidders are advised that the Summary of Quantities sheets in Plans may or may not have pay item 907-407-A, Asphalt for Tack Coat, listed as a pay item. Regardless of whether the plans sheets indicate a pay item for tack coat, tack coat will be included on the bid sheets and paid for as a separate pay item on this project.

General Decision Number: MS100188 03/12/2010 MS188 Superseded General Decision Number: MS20080188 State: Mississippi Construction Type: Highway County: Lauderdale County in Mississippi. HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges). Modification Number Publication Date 03/12/2010 0 * ELEC0917-003 12/01/2009 Rates Fringes ELECTRICIAN.....\$ 22.25 8.29 _____ SUMS2008-106 09/04/2008 Rates Fringes CARPENTER, Including Form Work...\$ 10.62 0.67 CEMENT MASON/CONCRETE FINISHER...\$ 10.67 0.78 IRONWORKER, REINFORCING.....\$ 10.38 0.00 LABORER: Common or General.....\$ 8.00 0.00 LABORER: Pipelayer.....\$ 9.68 0.00 OPERATOR: Backhoe/Excavator....\$ 11.45 0.00 OPERATOR: Broom.....\$ 10.17 0.00 OPERATOR: Bulldozer.....\$ 11.17 0.00 OPERATOR: Crane.....\$ 14.57 0.00 OPERATOR: Grader/Blade.....\$ 11.00 0.00 OPERATOR: Loader.....\$ 10.15 0.00 OPERATOR: Mechanic.....\$ 12.04 0.00 OPERATOR: Oiler.....\$ 12.33 0.48 OPERATOR: Roller.....\$ 9.31 0.00

OPERATOR: Scraper.....\$ 10.00

0.00

OPERATOR: Tractor.....\$ 7.25 0.00 OPERATOR: Asphalt Paver and Asphalt Spreader.....\$ 10.00 0.00 0.00 TRUCK DRIVER.....\$ 9.63 _____ WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental. _____ Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)). _____ In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing. _____ _ _ WAGE DETERMINATION APPEALS PROCESS 1.) Has there been an initial decision in he matter? This can be: * an existing published wage determination a survey underlying a wage determination a Wage and Hour Division letter setting forth a position on a wage determination matter a conformance (additional classification and rate) ruling On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed. With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of

http://www.wdol.gov/wdol/scafiles/davisbacon/ms188.dvb

Construction Wage Determinations. Write to: Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to: Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue. 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to: Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-504-4

CODE: (SP)

DATE: 04/14/2010

SUBJECT: Ultra-Thin and Thin Portland Cement Concrete Pavement

Section 907-504, Thin Portland Cement Concrete Pavement, is hereby added to and made a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-504 - THIN PORTLAND CEMENT CONCRETE PAVEMENT

<u>907-504.01--Description</u>. This work consists of ultra-thin and thin pavement composed of Portland cement concrete, without steel reinforcement, constructed in accordance with these specifications and in reasonably close conformity with the lines, grades, thicknesses, and cross sections shown on the plans or established by the Engineer.

Ultra-thin pavements are defined as pavements less than four inches in thickness.

Thin pavements are defined as pavements greater than or equal to four inches in thickness.

<u>907-504.02--Materials</u>. Materials shall meet the applicable requirements of Division 700 and the following Subsections:

Portland Cement	701.01 and 701.02
Blended Cement	
Fine Aggregate	703.01 and 703.02
Coarse Aggregate	703.01 and 703.03
Curing Materials	
Admixtures	
Water	
Calcium Chloride	
Fly Ash	
Ground Granulated Blast Furnace Slag (GGBFS)	

<u>907-504.02.1--Composition of Concrete</u>. Chemical admixtures of either Types MR, F, or G, with Types A or D as required, in accordance with Subsection 713.02 shall be used in the concrete mixture.

If fly ash or GGBFS are used as a replacement for Portland cement in accordance with the maximum values allowed in Subsection 701.02, then chemical admixtures of Types C or E in accordance with Subsection 713.02 or calcium chloride in accordance with Subsection 714.02 may be used. The maximum amount of calcium chloride which may be used is 1.0% by weight of the total cementitious materials.

Each different combination of admixtures shall be considered a different mixture design, each requiring separate review and approval.

Synthetic structural fibers meeting the requirements of 907-711, shall be used in the concrete mixture added at the rate required on the Department's Approved Products List for the specific synthetic structural fiber used.

<u>907-504.02.1.1--Portland Cement Concrete Mixture Design.</u> The concrete mixture design shall be submitted by the Contractor to the Engineer for approval prior to production in accordance with the submittal requirements of the Department's *Concrete Field Manual* and in accordance with the requirements for Laboratory Trial batches in Subsection 804.02.10.1.2, with the exception that the mixture shall meet the requirements of the "Master Proportion Table for Portland Cement Concrete Design" listed in Table 1 of this Subsection.

 Table 1

 MASTER PROPORTION TABLE FOR PORTLAND CEMENT CONCRETE DESIGN

Design Property	Requirements
Coarse Aggregate Size No.	
For Ultra-thin Pavements	67
For Thin Pavements	57
Maximum Water / Cementitious	
Ratio*	0.40
Maximum Slump, inches	4**
Total Air Content, %	3 - 6
Minimum Compressive Strength, psi	
For Opening to Traffic	2500 in 18
	hours
For Acceptance	3500

- * The replacement limits of Portland cement by weight by other cementitious materials (such as fly ash, GGBFS, metakaolin, silica fume, or others) shall be in accordance with the values in Subsection 701.02. Other hydraulic cements may be used in accordance with the specifications listed in Section 701.
- ** The slump may be increased up to 6 inches with an approved Type MR mid-range water reducer or up to 8 inches with an approved Type F or G high range water reducer, in accordance with Subsection 713.02. Minus slump requirements shall meet those set forth in Table 3 of AASHTO Designation: M157 specification.

Additionally, prior to production the Contractor shall field verify production of the mixture in accordance with Subsection 907-504.02.1.3 and submit this documentation with the proportioning information required in Subsection 907-504.02.1.2.

If the maturity method is used to estimate the compressive strength for early opening to traffic, the Contractor shall also submit strength/maturity documentation developed in accordance with

Subsection 907-504.02.2.5.2 for the mixture prior to production of concrete.

<u>**907-504.02.1.2--Proportioning of Concrete Mixture Design.</u>** Proportioning of Portland cement concrete shall meet the requirements of Subsection 804.02.10.1.2.</u>

<u>907-504.02.1.3--Field Verification of Concrete Mixture Design</u>. The Contractor shall furnish the Engineer documentation indicating that the mixture meets requirements in Table 1 within the tolerances specified in the field verification requirements of Subsection 804.02.10.3. This documentation must indicate that the mixture achieves the requirements in Table 1 for:

- the compressive strengths required for acceptance within 28 days; and
- the compressive strengths required for early opening to traffic within the time specified by the Engineer.

Because the mixture is being field verified by the Contractor prior to submittal of the mixture for review, the requirement in Subsection 804.02.10.3 that the mixture be proven to meet the field verification requirements within three attempts does not apply.

<u>907-504.02.2--Basis of Acceptance.</u> The Contractor shall furnish the concrete necessary for test specimens. Department personnel meeting the certification requirements of Subsection 804.02.9 shall be responsible for all concrete testing in accordance with the tests required in Subsection 804, Table 5: DEPARTMENT'S MINIMUM REQUIREMENTS FOR QUALITY ASSURANCE, Section B: Plastic Concrete. These tests shall be performed on the first load delivered and placed each day and then a minimum of once for each subsequent 50 cubic yards delivered and placed per day.

<u>907-504.02.2.1--Slump.</u> Slump of plastic concrete shall meet the requirements of Table 1: MASTER PROPORTION TABLE FOR PORTLAND CEMENT CONCRETE DESIGN. A check test shall be made on another portion of the sample before rejection of any load.

<u>907-504.02.2.-Air.</u> Total air content of concrete shall be within the specified range for the class of concrete listed in Table 1: MASTER PROPORTION TABLE FOR PORTLAND CEMENT CONCRETE DESIGN. A check test shall be made on another portion of the sample before rejection of any load.

<u>907-504.02.2.3--Yield.</u> Perform a yield check in accordance each 400 cubic yards in accordance with AASTHO Designation: T121. If the yield of the concrete mixture design is more than plus or minus 3% of the designed volume, the mixture shall be adjusted by a Class III Certified Technician representing the Contractor to yield the correct volume plus or minus 3%.

<u>907-504.02.2.4--Temperature.</u> For mixtures containing fly ash or GGBFS in accordance with the requirements in 907-504.02.1, the maximum plastic concrete acceptance temperature shall be 95°F. Plastic concrete containing fly ash or GGBFS in accordance with the requirements in 907-504.02.1 with a plastic concrete acceptance temperature exceeding 95°F shall be rejected and not used in Department work. For all other mixtures the maximum plastic concrete acceptance

temperature shall be 90°F. Plastic concrete for all other mixtures with a plastic concrete acceptance temperature more than 90°F shall be rejected and not used in Department work.

Plastic concrete with an acceptance temperature less than the minimum temperature in Subsection 804.03.16.1 shall be rejected and not used in Department work.

907-504.02.2.5--Compressive Strength.

<u>907-504.02.2.5.1--Strength Testing for Acceptance.</u> Compressive strength cylinders cast for acceptance of the pavement shall meet the minimum acceptance strength requirement listed in Table 1. These cylinders shall be standard cured in accordance with the requirements in AASHTO Designation: T23, Section 10.1 and its subsequent paragraphs.

907-504.02.2.5.2--Strength Testing for Opening to Traffic.

Use of Cylinders. In addition to compressive strength testing for acceptance of the pavement, compressive strength testing shall be performed to accommodate traffic movements. Compressive strength cylinders cast for early opening of the pavement to traffic shall meet the minimum opening to traffic strength requirement listed in Table 1. These cylinders shall be field cured next to the pavement until time of test specified by the Engineer in accordance with the requirements in AASHTO Designation: T23, Section 10.2 and its subsequent paragraphs.

Use of Maturity Method. In lieu of using concrete strength cylinders to determine when concrete pavement can be opened to traffic, if the Contractor has previously developed the strength/maturity relationship for the mix, an approved maturity meter may be used to determine concrete strengths. A maturity meter probe shall be inserted into the last concrete placed that represents the pavement area to be tested. The maximum amount of concrete which may be represented by a maturity meter probe is 50 cubic yards. The pavement may be opened to traffic when maturity meter reading indicates that the required in place strength is obtained.

Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T325. Validation of the maturity curves shall be made at least once for every 500 cubic yards produced of each concrete mixture used. Validation of the maturity curve shall be considered acceptable when the results of compressive strength tests are within 10% of the predicted value determined by the maturity curve. If the 10% requirement is not met, a new maturity curve shall be developed.

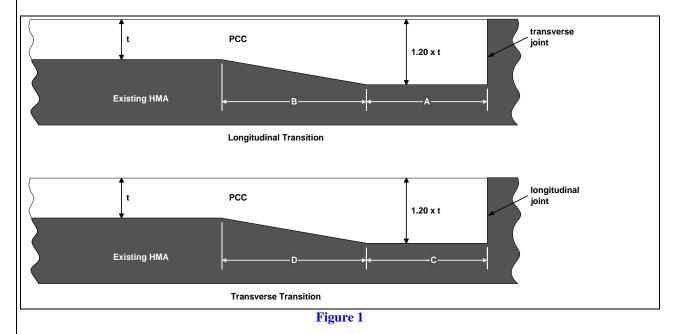
Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment. Training and maintaining a list of approved maturity technicians shall be the responsibility of the Mississippi Concrete Industries Association.

<u>907-504.03--Construction Requirements</u>. Prior to the removal of any existing pavement, the Contractor shall submit a Work Plan to the Engineer for approval. The Contractor shall submit this plan to the Engineer a minimum of 14 days prior to the removal of the existing pavement. This plan shall include, but not be limited to, the following:

- the proposed procedures for concrete placement, screeding, consolidation, finishing and surface texturing, curing method, and jointing;
- a list or description of the equipment proposed for use to accomplish the proposed procedures including the quantities of each piece of equipment;
- a list or description of the materials, such as curing materials or corrugated strips used during joint installation, proposed for use to accomplish the proposed procedures including the quantities of each material; and
- a scale drawing of the areas of work with the locations of all joints.

<u>907-504.03.1--Removal of Existing Pavement.</u> Existing HMA pavement to be removed and replaced with thin or ultra-thin concrete pavement shall be removed by milling per Section 406. Prior to the milling operation, saw cuts shall be made to the neat lines, grades and depths, and in the locations shown on the drawings.

Additionally, areas where traffic is expected to cross the transition from the HMA pavement to the thin or ultra-thin concrete pavement and vice versa shall meet the grades and depths shown in Figure 1. For areas where the flow of traffic is longitudinal with respect to the pavement, the transition areas shall meet the requirements for a Longitudinal Transition shown in Figure 1. For areas where the flow of traffic is transverse with respect to the pavement, the transition areas shall meet the requirements for a Transverse Transition shown in Figure 1. Saw cuts and milling shall meet the requirements of this Subsection to the required neat lines, grades, and depths required in Figure 1.



Dimension A in Figure 1 shall be no less than the transverse joint spacing required for the thickness, t, of the thin or ultra-thin concrete pavement per Table 2. Dimension B shall be either 0, 1, or 2 times the transverse joint spacing required for the thickness, t, of the thin or ultra-thin concrete pavement per Table 2.

Dimension C in Figure 1 shall be no less than the longitudinal joint spacing required for the

thickness, t, of the thin or ultra-thin concrete pavement per Table 2. Dimension D shall be either 0, 1, or 2 times the longitudinal joint spacing required for the thickness, t, of the thin or ultra-thin concrete pavement per Table 2.

If there is sufficient thickness of the existing HMA as determined by the Engineer, with approval by the Engineer and at no additional expense to the Department the Contractor may remove more than t from the entire area to be replaced with thin or ultra-thin concrete pavement. Additionally, if the Contractor elects to remove 1.20 x t or more over the entire area to be replaced with thin or ultra-thin concrete pavement, this shall be in lieu of Dimension B and Dimension D.

<u>907-504.03.2--Preparation of Grade</u>. The foundation upon which the concrete pavement is to be placed shall be prepared within the tolerances set out in Subsection 321.03.

<u>907-504.03.3--Setting Forms.</u> The requirements for setting forms shall meet the requirements of Subsection 501.03.8 and its subsequent paragraphs.

<u>907-504.03.4--Base Preparation</u>. Prior to placement of concrete, the milled HMA surface shall be thoroughly swept to remove all loose HMA material or dirt particles so as to ensure development of proper bond between the concrete inlay and the existing HMA surface. Additionally, the base shall meet the requirements of Subsection 501.03.9 and it subsequent paragraphs.

<u>907-504.03.5--Placing, Spreading, and Finishing</u>. Concrete pavement shall be formed and constructed to the neat lines, grades, cross section, and thicknesses shown on the drawings. Concrete shall be placed and spread in an approved manner so as to distribute the concrete uniformly without segregation. Additional placement requirements are provided in Subsection 501.03.13 and its subsequent paragraphs.

Final finishing of the concrete pavement surface shall be in accordance with Subsection 501.03.17 and its subsequent paragraphs.

Under no circumstances shall water be used as a finishing aid or worked into the concrete surface. This includes water added by fogging, spraying, and/or pouring.

The surface of the concrete pavement shall be transverse tined in accordance with Subsection 501.03.18.4.

<u>907-504.03.6--Joints.</u> All joints shall be created by sawing using equipment meeting the requirements of Subsection 907-504.03.7.2. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to support the weight of the saw. The spacing and depth of all of joints shall meet the requirements of "Joint Spacing Requirements for Various Pavement Thicknesses" shown in Table 2. The maximum width of the joint shall be 0.125 inch.

Minimum Pavement Thickness	Maximum Joint Spacing Requirement	Minimum Joint Depth (installation timing)		
(in)	(Transverse x Longitudinal)	(within 2 hours of finishing)	(more than 2 hours after finishing)	
3	3 ft x 3 ft	1 in	1 in	
4	4 ft x 4 ft	1 in	1 in	
5	5 ft x 6 ft	1 in	1-1/4 in	
6	<mark>5</mark> ft x <mark>6</mark> ft	1 in	1-1/2 in	

 Table 2

 JOINT SPACING REQUIREMENTS FOR VARIOUS PAVEMENT THICKNESSES

Because the use of "early entry" dry cut saws is required, corrugated plastic filler strips shall be used at the intersection of all saw cuts, and at locations where the wheels of the early entry saw cross a previously cut joint, to prevent future spalling at the corners of the intersection. The joints shall not be sealed but shall be cleaned of all deleterious material after sawing by using compressed air. Air compressors used to clean the joints shall meet the requirements of Subsection 413.03.1. Pavement thickness and other details shall be as specified in the plans or contract documents.

907-504.03.6.1--Timing of Sawing. The Contractor shall inspect the concrete within 90 minutes after the completion of curing at each location to determine if the concrete is sufficiently hardened to support the weight of the saw. If the concrete has not sufficiently hardened to support the weight of the saw, the Contractor shall inspect the concrete at least every 30 minutes after each subsequent inspection to determine if the concrete is sufficiently hardened to support the weight of the saw. Sawing shall not begin or shall be discontinued if there is any raveling of the joints or marring of the surface of the concrete during installation of the joints. If sawing is discontinued due to the concrete not being able to support the weight of the saw or due to raveling of joints, the Contractor shall inspect the concrete at least every 30 minutes to determine if the concrete has sufficiently hardened. FHWA Publication No. HIF-07-004 (Integrated Materials and Construction Practices for Concrete Pavement: A State-of-the-Practice Manual) shall be used as a guide for determining the timing of joint installation. Information about this Publication may be found at the following web site:

http://www.fhwa.dot.gov/pavement/pub_listing.cfm.

For successful installation of joints, the Contractor may need to inspect the concrete at more frequent time intervals than those listed above and with the understanding that concrete placed later in the day may be sufficiently hard for joint installation prior to concrete placed earlier in the day. If joints are not installed in a sufficient amount of time such that concrete cracks at locations other than the installed joints, the Contractor shall repair the pavement to the satisfaction of the Engineer.

907-504.03.7--Equipment.

<u>907-504.03.7.1--Concrete Production and Transportation.</u> Equipment and processes used for concrete production shall meet the requirements of Subsection 804.02.11 with automatic systems for recording batch weights and compensating for the moisture in the fine aggregate. Additionally, the requirements of AASHTO Designation: M157, Sections 8, 9, 10, and 11 shall be followed. Following AASHTO Designation: M157, Section 11.7, on arrival to the job site of a mixer truck, a maximum of 1½ gallons of water per cubic yard shall be allowed to be added to bring the slump within the required limits; water shall not be added at a later time. Batch ticket information shall meet the requirements of Subsection 804.02.12.3.

<u>907-504.03.7.1.1--Limitations of Mixing.</u> Except in emergencies, no concrete shall be mixed or placed when the natural light will be insufficient for finishing. In case of an emergency, the Engineer may permit finishing during periods of insufficient light provided adequate and approved lighting is furnished by the Contractor.

Concrete shall not be placed on a frozen foundation, nor shall frozen aggregate be used in the concrete.

<u>907-504.03.7.1.2--Cold or Hot Weather Concreting.</u> During periods of cold or expected cold weather, the limitations for beginning a concrete pour and the limitations for temperature control of the mixture and its components shall be in accordance with the provisions of Subsection 804.03.16.1.

During periods of hot weather or arid atmospheric conditions the provisions of Subsection 804.03.16.2 shall be applicable.

<u>907-504.03.7.2--Concrete Saw</u>. The concrete pavement joints shall be cut utilizing only an "early entry" dry cut saw, approved by the Engineer. Other type saws may be used for other sawing applications, provided the saw meets the requirements of Subsection 501.03.6.1. Proper, approved sawing equipment and sufficient labor shall be present on the site prior to each day's placement of concrete. Placement shall not commence until said equipment and labor are on site.

<u>907-504.03.7.3--Other Equipment.</u> Other equipment and tools necessary for handling materials and performing all parts of the work shall be approved by the Engineer as to design, capacity, and mechanical condition, and meeting the requirements of Subsections 501.03.5, 501.03.6, and 501.03.20.1, and their subsequent paragraphs.

<u>907-504.03.7.4--Prohibited Equipment.</u> The following equipment shall not be used or allowed on the project: bull floats or equipment used to dispense water, including fogging, spraying, and/or pouring. Water dispensing equipment attached to mixer trucks is not included in this list of prohibited equipment provided this equipment is only used to dispense water into a mixer truck in accordance with Subsection 907-504.03.7.1.</u>

<u>907-504.03.8--Surface Test.</u> It is the intent of these specifications that the finished surface will have good riding qualities.

Any membrane curing damaged during the surface testing operation shall be repaired by the Contractor at no additional expense to the Department.

Any corrective work to the pavement surface necessitated to ensure that the applicable surface test limits are not exceeded shall be in accordance of Subsection 907-504.03.8.3.

<u>907-504.03.8.1--Projects Containing More Than 10,000 SY.</u> Profiles of the pavement surface will be established, evaluated and the pavement surface corrected, as necessary, so that the final surface variances shall not exceed a profile index of 65 inches per mile per segment. Shoulders, tapers, and areas in horizontal curves having a radius of less than 1000 feet at the centerline and within the superelevation transition of such curves are excluded from a test with the profilograph.

Determination of the profile index will be in accordance with test methods established by the Department.

A California profilograph meeting the requirements as set out in Section 401 shall be furnished and operated by the Contractor under supervision of the Engineer to provide recorded data to establish the profile index and identify locations requiring correction. Surface profile shall be obtained in the wheel path of each travel lane.

For the purpose of determining pavement smoothness and contract price adjustment for rideability, the pavement will be subdivided into sections of 528 feet. Where a segment less than 528 feet occurs at the end of a section, it will be combined with the preceding 528-foot segment for calculation of the profile index.

A profile index will be determined for each segment as inches per mile in excess of the "Zero" blanking band which is simply referred to as the "Profile Index". From the profilogram of each segment, the scallops above and below the "Zero" blanking band are totaled in tenths of an inch. The totaled count of tenths is converted to inches per mile to establish a smoothness profile index for that segment.

In addition to the above requirements for the profile index, all areas represented by high points having deviations in excess of 0.4 inch in 25 feet shall be removed by the Contractor utilizing grinding methods and equipment specified. Deviations in excess of 0.4 inch will be determined from the profilogram in accordance with Department test methods.

After correcting individual deviations in excess of 0.4 inch in 25 feet, corrective action shall be made to reduce the profile index to 65 inches per mile per segment or less.

On those segments where corrections are made, the pavement will be surface tested again to verify that corrections have produced a profile index of 65 inches per mile per segment or less.

<u>907-504.03.8.2--Projects Containing Less Than Or Equal To 10,000 SY.</u> Each continuous full or partial lane width of concrete pavement shall have a uniform surface and be in reasonably close conformity with the line, grade, and cross section shown on the drawings.

After a continuous full or partial lane width of concrete pavement is completed, the surface of the plastic concrete shall be tested for uniformity using a Contractor furnished and operated 10-foot straightedge. There shall be no deviations from the straightedge greater than 0.25 inch in 10 feet in either the longitudinal or the transverse directions. Pavement not in compliance with the requirement shall be corrected.

Additionally, individual bumps or depressions in the pavement surface exceeding 0.40 inch, when measured from a chord length of 25 feet shall be corrected.

<u>907-504.03.8.3--Corrective Work for Smoothness.</u> Corrective work shall be done at no additional cost to the Department. Corrective work shall consist of diamond grinding in accordance with Subsection 501.03.19.1 and its subsequent paragraphs. Concrete removal by grinding shall be limited such that the thickness of the pavement after grinding shall not be less than plan thickness minus 0.25 inch. Final pavement thicknesses, after any surface corrections, which are thinner than plan thickness minus 0.25 inch shall subject the area represented by such deviation to the provisions of Subsection 907-504.05.2.

All areas which are corrected shall be retested to ensure conformance to the applicable surface test requirements.

No reestablishment of transverse tining shall be required after surface corrections are made by diamond grinding.

All corrective work to ensure compliance with the applicable surface test requirements shall be completed prior to determining pavement thickness.

The Contractor shall be responsible for all traffic control associated with the testing and/or correction of the concrete pavement.

<u>**907-504.03.9--Curing and Protection.</u>** Curing and protection of the pavement shall be in accordance with Subsection 501.03.20 and its subsequent paragraphs with the exception listed in Subsection 907-504.03.9.1.</u>

Additionally, the amount of time between discharge of concrete at any location and the completion of the method of curing of that same location shall not exceed 45 minutes.

<u>907-504.03.9.1--White Pigmented Membrane.</u> Curing compound shall be applied per Subsections 501.03.20.1 and at a rate of one gallon to not more than 125 square feet. If the time period between floating and texturing of the concrete exceeds 30 minutes, the concrete shall be kept damp by fogging with a monomolecular film type evaporative retarder to prevent rapid evaporation of the surface. As a rule of thumb, the color of a pavement covered with the required amount of curing compound should be indistinguishable from a sheet of commercially available standard "letter" size white copier paper placed on top of it when viewed from a distance of about five (5) feet away horizontally if standing on the same grade as the pavement.

<u>907-504.03.10--Removing Forms.</u> Removal of forms shall be in accordance with Subsection 501.03.21.

<u>907-504.03.11--Opening to Traffic.</u> The Engineer will decide when the pavement may be opened to traffic. No traffic will be allowed on the completed pavement until the concrete has attained a compressive strength of 2500 psi. Prior to opening to traffic, the pavement shall be cleaned.

<u>907-504.03.12-Pavement Thickness Determination.</u> For the purpose of determining pavement thickness, the pavement will be subdivided into separate sections of 1000 linear feet in each traffic lane excluding turn-outs and ramps, extending from one end of the pavement to the other end. The last section in each traffic lane will be the length remaining unless the length of that section is less than 500 feet. If the length of the last section is less than 500 feet, include it with the previous section for determination of thickness.

One core will be taken at random by the Department from each section. The thickness of the sections will be determined as provided for in Subsection 907-504.05.1. Based on the thickness of each section, an adjusted unit price as provided in Subsection 907-504.05 and its subsequent paragraphs will be paid for each section represented.

Holes remaining in the pavement after coring shall be completely filled by the Contractor, at not additional cost to the Department, with concrete of the same quality as used to construct the pavement.

<u>907-504.04--Method of Measurement.</u> Concrete pavement will be measured by the square yard complete in place and accepted. The width for measurement will be the plan width, including widening where called for, or as otherwise authorized in writing by the Engineer. The length will be measured horizontally in accordance with Section 109.

Payment for removal of existing HMA pavement, required to be removed and replaced with concrete pavement, is addressed under Pay Items 406-A, Cold Milling of Bituminous Pavement, All Depths and 503-C, Saw Cut (Equal to depth of concrete pavement), and shall include saw cutting, milling, and all handwork necessary to ensure removal of HMA to the neat saw cut lines.

907-504.05--Basis of Payment.

<u>907-504.05.1--General.</u> Concrete pavement will be paid for at the contract unit price per square yard, adjusted when applicable for sections of pavement found deficient in thickness by more than 0.25 inch and not more than 0.50 inch, which shall be full compensation for concrete pavement placement, fiber reinforcement, finishing and curing, concrete volume, saw cutting of joints, and for all labor, equipment, tools, materials, all traffic control, and incidentals necessary for the construction of the concrete pavement.

In calculating the thickness of the pavement, measurements which are in excess of the plan thickness by more than 0.25 inch will be considered as the plan thickness plus 0.25 inch. Additionally, measurements which are less than the plan thickness by more than 0.50 inch,

excluding exploratory cores, will be considered as the plan thickness minus 0.50 inch. When the measured thickness of a core is less than the plan thickness by more than 0.50 inch, the actual thickness of the pavement in this area will be determined by taking exploratory cores at not less than 10 foot intervals parallel to the centerline in each direction from the affected location until in each direction a core is found which is not deficient by more than 0.50 inch.

Areas found deficient in thickness by more than 0.50 inch will be evaluated by the Engineer; and if in the judgment of the Engineer, the deficient areas warrant removal, they shall be removed and replaced with pavement of the thickness shown on the plans without cost to the Department. If the Engineer determines that the deficient areas do not warrant removal, the pavement may be left in place with no payment to the Contractor, or may be removed and replaced at the Contractor's option. Exploratory cores for deficient thickness will not be used in averages for areas for adjusted unit price.

Each area or section of pavement removed shall be at least 10 feet in length and at least the full width of the lane involved. When it is necessary to remove and replace a section of pavement, any remaining portion of the slab adjacent to the joints that is less than 6 feet in length shall also be removed and replaced. The new surface shall be textured as specified in the contract.

Concrete that fails to develop a 28-day compressive strength of 3500 psi shall be removed and replaced, or accepted at a reduced price, if an Engineering study indicates that the concrete is satisfactory to remain in place.

Payment will be made under:

907-504-A:"	'Fiber Reinforced Concrete Pavement
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- per square yard

<u>907-504.05.2--Price Adjustments for Thickness.</u> When the average pavement thickness, determined in accordance with Subsection 907-504.03.12, is deficient by more than 0.25 inch but not more than 0.50 inch, payment will be made at an adjusted price as specified in the following table:

Thickness Deficiency Inches	Proportional Part of Contract Price Allowed
0.00 to 0.25	100 percent
0.26 to 0.50	75 percent
>0.50	Remove and Replace At No Additional Cost to the Department or Receive No Payment

CONCRETE PAVEMENT DEFICIENCY

Any applicable price adjustment due to thickness deficiency applies to the full width of the deficient lane or shoulder.

Section 905 Proposal (Sheet 2 - 1)

Milling and overlaying approximately 5 miles of SR 19 from just north of SR 494 to just north of Lauderdale / Collinsville Road, known as Federal Aid Project No. STP-0026-01(077) / 105834301, in the County of Lauderdale, State of Mississippi.

I (We) agree to complete the entire project within the specified contract time.

*** SPECIAL NOTICE TO BIDDERS *** BIDS WILL NOT BE CONSIDERED UNLESS BOTH UNIT PRICES AND ITEM TOTALS ARE ENTERED. BIDS WILL NOT BE CONSIDERED UNLESS THE BID CERTIFICATION LOCATED AT THE END OF THE BID SHEETS IS SIGNED ***BID SCHEDULE***

Line Item Code			dj Quantity Units Description	Unit Price		Item Amount			
No.		Code				Dollar	Ct	Dollar	Ct
					Roadway Items				
0010	202-B076		1,604	Linear Feet	Removal of Traffic Stripe				
0020	202-B136		3	Each	Removal of Guard Rail Terminal End Section				
0030	310-B003	(GT)	50	Ton	Size I Stabilizer Aggregate, Coarse				
0040 Chang	406-A001 ged 04/16/2010		199,319	Square Yard	Cold Milling of Bituminous Pavement, All Depths				
0050 Chang	406-A003 ged 04/16/2010		879	Ton	Cold Milling of Bituminous Pavement, All Depths				
0060	423-A001		13	Mile	Rumble Strips, Ground In				
0070	503-C003		2,712	Linear Feet	Saw Cut, 6-inch				
0080	606-D012		2	Each	Guard Rail, Bridge End Section, Type I, Rub Rail and Block-out Hardware Only				

Section 905	
Proposal (Sheet 2 - 2))

STP-0026-01(077) / 105834301 Lauderdale County

Line No.	Item Code	Adj Quantity Code		Units	Description	Unit Price		Bid Amount
0090	606-E002		3	Each	Guard Rail, Terminal End Section, Flared			
0100	618-A001		1	Lump Sum	Maintenance of Traffic	XXXXXXXX	xxx	
0110	619-A1002		9	Mile	Temporary Traffic Stripe, Continuous White			
0120	619-A2002		8	Mile	Temporary Traffic Stripe, Continuous Yellow			
0130	619-A3006		20	Mile	Temporary Traffic Stripe, Skip White			
0140	619-A4006		4	Mile	Temporary Traffic Stripe, Skip Yellow			
0150	619-A5001		38,739	Linear Feet	Temporary Traffic Stripe, Detail			
0160	619-A6001		2,836	Linear Feet	Temporary Traffic Stripe, Legend			
0170	619-A6002		2,034	Square Feet	Temporary Traffic Stripe, Legend			
0180	619-D1001		24	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet			
0190	619-D2001		882	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More			
0200	619-G4001		36	Linear Feet	Barricades, Type III, Single Faced			

Section 905	
Proposal (Sheet 2 - 3))

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount
0210	619-G4005		24	Linear Feet	Barricades, Type III, Double Faced		
0220	627-J001		875	Each	Two-Way Clear Reflective High Performance Raised Markers		
0230	627-K001		1,215	Each	Red-Clear Reflective High Performance Raised Markers		
0240	627-L001		1,105	Each	Two-Way Yellow Reflective High Performance Raised Markers		
0250	628-I002		180	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Skip White		
0260	628-J002		712	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous White		
0270	628-M002		1,722	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous Yellow		
0280	628-O001		1,534	Linear Feet	High Performance Cold Plastic Detail Stripe, White		
0290	628-P001		1,536	Square Feet	High Performance Cold Plastic Legend, White		
0300	628-P002		600	Linear Feet	High Performance Cold Plastic Legend, White		
0310	630-F001		3	Each	Delineators, Guard Rail, White		
0320	630-F002		6	Each	Delineators, Guard Rail, Yellow		

Section 905
Proposal (Sheet 2 - 4)

STP-0026-01(077) / 105834301
Lauderdale County

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price Bi		Bid Amoun	3id Amount	
0330	907-304-A001	(GY)	11,500	Cubic Yard	Granular Material, LVM, Class 5, Group C					
0335 Adde	907-407-A001 d 04/16/2010	(A2)	15,500	Gallon	Asphalt for Tack Coat					
0340	907-504-A001	(C)	1,056	Square Yard	6" Fiber Reinforced Concrete Pavement					
0350	907-626-A003		11	Mile	6" Thermoplastic Traffic Stripe, Skip White					
0360	907-626-C004		9	Mile	6" Thermoplastic Edge Stripe, Continuous White					
0370	907-626-D003		2	Mile	6" Thermoplastic Traffic Stripe, Skip Yellow					
0380	907-626-E004		3	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow					
0390	907-626-F004		6	Mile	6" Thermoplastic Edge Stripe, Continuous Yellow					
0400	907-626-G004		15,591	Linear Feet	Thermoplastic Detail Stripe, White					
0410	907-626-G005		23,149	Linear Feet	Thermoplastic Detail Stripe, Yellow					
0420	907-626-H004		2,836	Linear Feet	Thermoplastic Legend, White					
0430	907-626-H005		1,034	Square Feet	Thermoplastic Legend, White					
					ALTERNATE GROUP AA NUMBER 1	ا ــــــــــــــــــــــــــــــــــــ		I		

Section Proposa	905 l (Sheet 2 - 5)					STI	P-0026	5-01(077) / 1058343 Lauderdale Cour	
Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0440 Chang	907-403-A006 ged 04/16/2010	(BA1)	24,881	Ton	Hot Mix Asphalt, MT, 12.5-mm mixture				
					ALTERNATE GROUP AA NUMBER 2	•			
0450 Chang	907-403-M002 ged 04/16/2010	2 (BA1)	24,881	Ton	Warm Mix Asphalt, MT, 12.5-mm mixture				

STP-0026-01(077) / 105834301 erdale County

Section 905 Proposal (Sheet 2 - 6)

*** BID CERTIFICATION ***

TOTAL BID......

*** DBE/WBE SECTION ***

Complete item nos. 1, 2, and/or 3 as appropriate. See Notice to Bidders addressing Disadvantaged Business Enterprises in Highway Construction.

- 1. I/We agree that no less than ______ percent shall be expended with small business concerns owned and controlled by socially and economically disadvantaged individuals (DBE and WBE).
- 2. Classification of Bidder: Small Business (DBE)______ Small Business (WBE)_____

3. A joint venture with a Small Business (DBE/WBE):

*** SIGNATURE STATEMENT ***

BIDDER ACKNOWLEDGES THAT HE/SHE HAS CHECKED ALL ITEMS IN THIS PROPOSAL FOR ACCURACY AND CERTIFIED THAT THE FIGURES SHOWN THEREIN CONSTITUTE THEIR OFFICIAL BID.

BIDDER'S SIGNATURE

BIDDER'S COMPANY

BIDDER'S FEDERAL TAX ID NUMBER

(Date Printed 04/15/10 12:06 am) (Addendum No. 1)